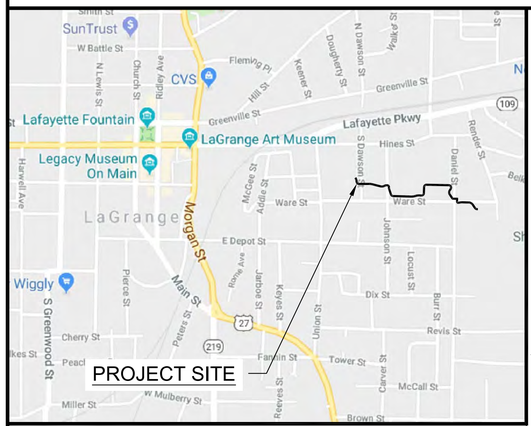
LAGRANGE THREAD PHASE 5 - CALUMET TO DANIEL ST.

C I T Y O F L a G R A N G E , G E O R G I A



VICINITY MAP
N.T.S.

LAND LOTS: 117, 118 - 6TH DISTRICT

ALL WORK TO BE DONE IN ACCORDANCE WITH:
- 2013 STANDARD SPECIFICATIONS AND 2016 SUPPLEMENTAL SPECIFICATIONS OF THE GEORGIA DEPARTMENT OF TRANSPORTATION
- 2010 AMERICANS WITH DISABILITIES ACT (ADA) STANDARDS FOR ACCESSIBLE DESIGN
- ARCHITECTURAL BARRIERS ACT (ABA) ACCESSIBILITY STANDARDS

SURVEY AND COORDINATE DATA

HORIZ. DATUM - GA. STATE PLANE COORDINATE SYSTEM
VERT. DATUM - NAVD 1988
COORDINATE ZONE - GEORGIA WEST
PROJECT UNITS - ENGLISH

PROJECT DESCRIPTION

THE PROJECT FALLS WITHIN LAND LOTS 117 & 118 IN DISTRICT 6.
THE SITE IS OWNED BY CITY OF LAGRANGE.
THIS PROJECT WILL NOT REQUIRE ANY ZONING BUFFERS.
THIS IS A TRAIL PROJECT WHICH IS BEING BUILT ON CITY EASEMENT AND CITY PROPERTY - THEREFORE THE PROPOSED USE OF THE PROJECT IS CONSISTENT WITH ZONING.
THE LIMITS OF DISTURBANCE IS APPROXIMATELY 1.4 ACRES, NO DISTURBANCE IS PROPOSED WITHIN THE STATE 25' STREAM BUFFER SETBACK.

NARRATIVE

THIS PROJECT IS A LINEAR SIDEPATH AND GREENWAY TRAIL, BEGINNING AT THE SOUTHEAST AREA OF CALUMET PARK, ALIGNING THROUGH CITY EASEMENT AND CITY RIGHT-OF-WAY, AND TERMINATING AT THE EXISTING LAGRANGE THREAD PHASE 2 TRAILHEAD ALONG WARE STREET

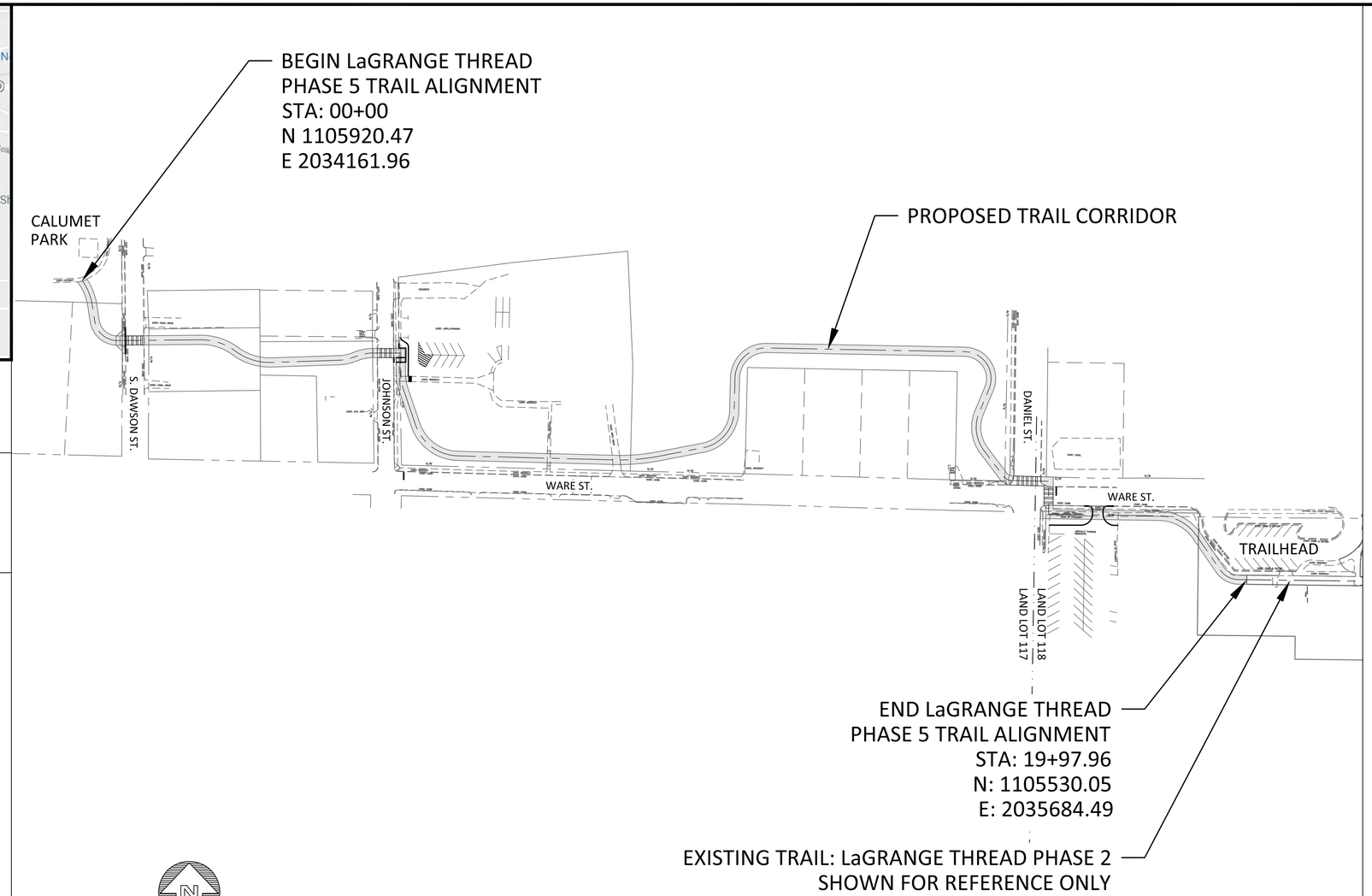
THE PROJECT LENGTH IS APPROXIMATELY 1,998 LF OF CONCRETE TRAIL, TRAIL AMENITIES, & SIGNAGE. ADDITIONAL WORK ASSOCIATED WITH THE PROJECT INCLUDES MINOR DEMOLITION AND CLEARING, EROSION CONTROL, AND GRADING.

OWNER/DEVELOPER (PRIMARY PERMITTEE)

CITY OF LAGRANGE
MEG KELSEY, CITY MANAGER
200 RIDLEY AVENUE
LAGRANGE, GA 30240
706-883-2016

CONSTRUCTION MANAGEMENT

PATH FOUNDATION
JONATHAN McCAIG - 24 HOUR CONTACT
GA GSWCC LEVEL 1 CERTIFICATION # 58893
EXP. 08/17/2021
office 404-875-7284 x5 cell 404-433-1900



GRAPHIC SCALE
80 0 40 80 160 320
(IN FEET)
1 inch = 80 feet

GEORGIA811
www.Georgia811.com
Know what's below. Call before you dig.

ENGINEER'S CERTIFICATION STATEMENT:

With my initials at the line above and my seal and signature below, I Greta G. deMayo, a professional **Engineer, Architect or Landscape Architect** licensed in the **State of Georgia**, hereby certify that I have personally reviewed the attached submittal plans for a land disturbance permit. In my opinion these submittal plans meet all applicable regulations and ordinances of the City of LaGrange and other affected parties may rely on this certification.

Signed: _____ **Georgia Registration #** NO. 1051

Date: MAY 10, 2019

GROSS LENGTH OF PROJECT: 1,998 LF

TOTAL SITE AREA = 1.15 ACRES
DISTURBED AREA = 1.4 ACRES

INDEX OF SHEETS

GENERAL
COVER SHEET (THIS SHEET)
GN-01 GENERAL NOTES

TOPOGRAPHIC SURVEY
S-01 TOPOGRAPHIC SURVEY
S-02 TOPOGRAPHIC SURVEY

TYPICAL SECTIONS
TS-01 TYPICAL SECTIONS
TS-02 TYPICAL SECTIONS
TS-03 TYPICAL SECTIONS

CONSTRUCTION PLANS
CP-01 CONSTRUCTION PLAN
CP-02 CONSTRUCTION PLAN
CP-03 STORM SEWER PROFILES

SIGNING AND MARKING PLANS
SM-01 SIGNING AND MARKING PLAN
SM-02 SIGNING AND MARKING PLAN
SM-03 SIGNING AND MARKING DETAILS

LANDSCAPE PLANS
LP-01 LANDSCAPE PLAN
LP-02 LANDSCAPE PLAN
LD-01 LANDSCAPE DETAILS
LD-02 LANDSCAPE NOTES

CONSTRUCTION DETAILS
CD-01 CONSTRUCTION DETAILS
CD-02 CONSTRUCTION DETAILS
CD-03 CONSTRUCTION DETAILS
CD-04 CONSTRUCTION DETAILS
CD-05 CONSTRUCTION DETAILS
CD-06 CONSTRUCTION DETAILS

EROSION CONTROL PLANS
EC-01 EROSION CONTROL PLAN
EC-02 EROSION CONTROL PLAN
ED-01 EROSION CONTROL DATA
ED-02 EROSION CONTROL DETAILS
EN-01 EROSION, SEDIMENTATION & POLLUTION CONTROL NOTES
EN-02 EROSION, SEDIMENTATION & POLLUTION CONTROL NOTES

PLANS PREPARED BY:

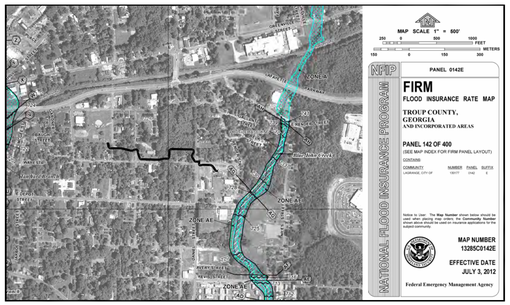
KAIZENCOLLABORATIVE
2390 Main Street | Tucker, GA 30084 | 404.239.2521

GEORGIA & WEST, INC.
ENGINEERING • LAND SURVEYING • LAND PLANNING
105 CORPORATE DRIVE
CARROLLTON, GA. 30117
OFFICE (770) 834-4694
FAX (770) 834-1005
E-MAIL: mailbox@georgiaandwest.com

GEORGIA REGISTERED No. 1051 PROFESSIONAL ENGINEER GRETA G. deMAYO 5/10/2019

GEORGIA REGISTERED No. 034691 PROFESSIONAL ENGINEER JOHN D. BASS

LaGrange Thread Phase 5 - Calumet to Daniel St.
KAIZEN PROJ # 2019-174
05/10/2019 - 100% ISSUE FOR PERMIT



NOTE: NONE OF THE DISTURBED AREA IS WITHIN THE FEMA 100 YEAR FLOOD HAZARD ZONE.

SITE DATA

TOTAL SITE AREA = 1.15 ACRES
DISTURBED AREA = 1.4 ACRES

NPDES FEE = 1.4 ACRES X $80.00
STATE AMOUNT = $56.00
CITY AMOUNT = $56.00

LAND LOTS: 117, 118 - DISTRICT 6

CONTACTS

24-HOUR CONTACTS:

PATH FOUNDATION
JONATHAN McCAIG - 24 HOUR CONTACT
GA GSWCC LEVEL 1 CERTIFICATION # 58893
EXP. 08/17/2021
office 404-875-7284 x5 cell 404-433-1900

EROSION & SEDIMENT CONTROL

1. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND DISTURBANCE ACTIVITIES.

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

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

4. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES WILL BE INSTALLED IF DEEMED NECESSARY BY THE ON-SITE INSPECTOR.

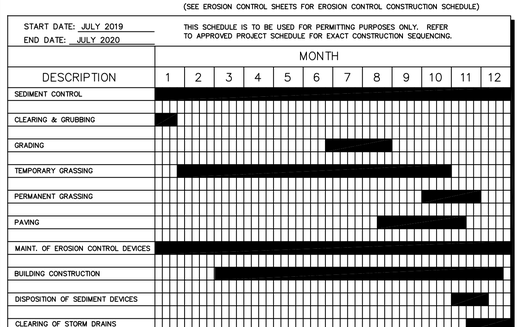
5. EROSION AND SEDIMENT MEASURES AND PRACTICES TO BE INSPECTED DAILY.

6. ALL INSPECTION, MONITORING, AND REPORTING SHALL BE PERFORMED AS REQUIRED BY NPDES PERMIT AND BY PROJECT EROSION, SEDIMENTATION, AND POLLUTION CONTROL NOTES.

(SEE EROSION CONTROL SHEETS FOR EROSION CONTROL CONSTRUCTION SCHEDULE)

START DATE: JULY 2019
END DATE: JULY 2020

THIS SCHEDULE IS TO BE USED FOR PERMITTING PURPOSES ONLY. REFER TO APPROVED PROJECT SCHEDULE FOR EXACT CONSTRUCTION SEQUENCING.



ACTIVITY SCHEDULE

GENERAL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING DIMENSIONS SHOWN HEREON WITH THE ARCHITECTURAL DRAWINGS AND EXISTING BUILDINGS PRIOR TO ANY CONSTRUCTION AND SHALL PROMPTLY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.

2. PROPOSED CONTOURS AND SPOT ELEVATIONS REPRESENT FINAL GRADE. PROPOSED GRADE ELEVATIONS SHOWN WITHIN PAVED AREA REPRESENT TOP OF PAVEMENT ELEVATIONS. CONTRACTOR SHALL ALLOW FOR PAVEMENT THICKNESS, TOPSOIL, BASE COURSE, SLABS, ETC. WHEN GRADING TO SUBGRADE ELEVATIONS.

3. DIMENSIONS ARE TO BACK OF CURB, CENTER OF STRUCTURE AND CENTER LINE OF COLUMN LINE, UNLESS OTHERWISE NOTED. ANGLES SHOWN ON STORM AND SANITARY SEWER ARE TO CENTER OF PIPE, UNLESS OTHERWISE NOTED.

4. **CALL BEFORE YOU DIG 811.** THE LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING CONSTRUCTION. BEWARE OF HIDDEN UTILITIES NOT SHOWN. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING APPROPRIATE UTILITY COMPANIES PRIOR TO EXCAVATION. IF UNCHARTED UTILITIES ARE ENCOUNTERED DURING EXCAVATION OPERATIONS, THE CONTRACTOR SHALL NOTIFY THE PROJECT LANDSCAPE ARCHITECT IMMEDIATELY FOR INSTRUCTIONS. ANY DAMAGE OR INTERRUPTION OF EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REPAIRED PROMPTLY AT THE CONTRACTOR'S EXPENSE.

5. 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 DISTURBANCE SHALL BE DEMARCATED FOR THE DURATION OF THE CONSTRUCTION ACTIVITY. NO DISTURBANCE SHALL OCCUR OUTSIDE THE LIMITS INDICATED ON THE DRAWINGS WITHOUT APPROVAL IN WRITING FROM THE PROJECT LANDSCAPE ARCHITECT.

6. THROUGHOUT CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SUFFICIENT BARRICADES, LIGHTS, WARNING SIGNS, AND OTHER TRAFFIC CONTROL METHODS ADJACENT TO EXISTING ROADWAYS AND PARKING AREAS AS MAY BE REQUIRED FOR THE PROTECTION AND SAFETY OF THE PUBLIC. ALL TRAFFIC CONTROL MEASURES UTILIZED WITHIN PUBLIC RIGHT-OF-WAY SHALL COMPLY WITH MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), CURRENT EDITION.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT OF ALL CONSTRUCTION ELEMENTS, WITH SOME FIELD ADJUSTMENTS AS NECESSARY BY THE LANDSCAPE ARCHITECT. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSURING THAT TRAIL AND AMENITY CONSTRUCTION COMPLIES WITH AASHTO REQUIREMENTS, PARTICULARLY WITH RESPECT TO TRAIL CROSS-SLOPES AND GRADIENTS.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY AND PERMANENT GROUNDWATER CONTROL DURING CONSTRUCTION, AS WELL AS PROVISIONS FOR CONTROLLING SURFACE WATER RUN-OFF, IN ORDER TO PREVENT PONDING IN OPEN EXCAVATIONS AND POTENTIAL UNDERMINING OF PERMANENT CONSTRUCTION FEATURES.

9. EARTHWORK OPERATIONS AND SOIL COMPACTION SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND DRAWINGS. PRIOR TO POURING CONCRETE, EARTHWORK SHALL BE CLEAR OF DEBRIS AND MACHINE COMPACTED. CONSTRUCTION ACTIVITIES SHALL BE MONITORED BY A GEOTECHNICAL CONSULTING FIRM APPROVED BY THE OWNER TO VERIFY THAT EARTHWORK, WALL CONSTRUCTION, AND OTHER OPERATIONS CONFORM WITH THE CONTRACT DOCUMENTS. GEOTECHNICAL SERVICES SHALL BE AT THE COST OF THE CONTRACTOR.

10. THE TOPOGRAPHIC SURVEY INFORMATION HAS BEEN PROVIDED BY GEORGIA AND WEST INC., (770) 834-4694, AND IS REFERENCED TO THE GEORGIA STATE PLANE COORDINATE SYSTEM (WEST ZONE).

11. DEMOLITION DEBRIS SHALL BECOME PROPERTY OF THE CONTRACTOR AND WASTE SOILS, VEGETATION, AND OTHER DELETERIOUS MATERIALS SHALL BE HAULED OFF-SITE AND BE DISPOSED OF AT AN APPROVED LOCATION IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS. BURNING WILL NOT BE ALLOWED ON THIS PROJECT.

12. EROSION CONTROL MEASURES AND OTHER SITE ISSUES SHALL BE INSPECTED AS REQUIRED BY NPDES PERMITTING BY CONTRACTOR.

13. ON ALL AREAS WHERE ROADWAYS, CONCRETE TRAILS, RETAINING WALLS, OR OTHER STRUCTURES ARE TO BE CONSTRUCTED ON COMPACTED SUBGRADE, FOUNDATION SOILS SHALL BE REVIEWED AND APPROVED BY THE GEOTECHNICAL CONSULTING FIRM PRIOR TO THE PLACEMENT OF CONCRETE, AGGREGATE BASE, OR FILL MATERIALS.

14. CONSTRUCTION ACCESS POINTS ARE APPROXIMATE LOCATIONS AND MUST BE FIELD VERIFIED AND APPROVED BY CITY OF LAGRANGE.

15. ALL WORK TO BE DONE IN ACCORDANCE WITH THE 2013 STANDARD SPECIFICATIONS AND THE 2016 SUPPLEMENTAL SPECIFICATIONS OF THE GEORGIA DEPARTMENT OF TRANSPORTATION, THE 2010 AMERICANS WITH DISABILITY ACT (ADA) STANDARDS FOR ACCESSIBLE DESIGN, THE ARCHITECTURAL BARRIERS ACT (ABA) ACCESSIBILITY STANDARDS, AND AS MODIFIED BY CONTRACT DOCUMENTS.

16. ALL CONCRETE TO BE USED FOR THE CONSTRUCTION OF TRAILS TO BE CLASS 'A' CONCRETE.

17. CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH CITY OF LAGRANGE , GEORGIA AND WEST INC., PATH FOUNDATION, AND KAIZEN COLLABORATIVE PRIOR TO BEGINNING CONSTRUCTION.

18. NOTICE: IT IS THE OWNER'S RESPONSIBILITY TO COMPLY WITH ALL ENVIRONMENTAL IMPACT ISSUES AND TO OBTAIN ALL NECESSARY PERMITS FROM THE APPROPRIATE GOVERNING AUTHORITIES.

19. CONTRACTOR TO CONTACT KAIZEN COLLABORATIVE FOR ALL CONSTRUCTION STAKING CAD DATA.

TRAIL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING MINIMUM GRADES ALONG THE TRAIL. TRAIL LONGITUDINAL GRADES SHALL NOT EXCEED 5% PERCENT (EXEMPTION WHEN TRAIL FOLLOWS ROAD GRADE), WITH SHORT 200 FT MAXIMUM LENGTH AREAS OF UP TO 8.33% GRADE ALLOWED. (REF: GDOT PEDESTRIAN AND STREETSCAPE GUIDE, PAGE 83). TRAIL CROSS SLOPE SHALL BE MINIMUM 1%, MAXIMUM 2%.

2. THE LAYOUT OF THE TRAIL IS SHOWN IN RELATION TO THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL VERIFY THE LAYOUT WITH OWNER PRIOR TO CONSTRUCTION OF TRAIL.

3. THE CONTRACTOR IS RESPONSIBLE FOR CLEARING OR ALL UNDERSTORY VEGETATION WITHIN 10' FROM CENTERLINE OF TRAIL. CLEARING AREA MAY INCREASE WHERE INVASIVE PLANTS ARE LOCATED. CONTRACTOR SHALL CONFIRM VEGETATION TO BE CLEARED WITH LANDSCAPE ARCHITECT AND PROJECT ENGINEER PRIOR TO CLEARING.

4. ALL SIGNING & MARKING SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION.

5. ALL ROADWAY PAVEMENT MARKINGS SHALL BE THERMOPLASTIC AND MEET GDOT SPECIFICATIONS UNLESS SPECIFIED OTHERWISE BY CITY. TRAIL PAVEMENT MARKINGS TO BE PAINT, UNLESS SPECIFIED OTHERWISE BY CITY.

6. CONTRACTOR SHALL INSTALL RAISED PAVEMENT MARKERS PER GDOT STANDARD T-15A AND AS DIRECTED BY CITY.

CONSTRUCTION NOTES

1. TRAIL BACKFILL DIRT SHALL BE CLEAN, COHESIVE CLAY OR SANDY CLAY FREE OF DEBRIS, ORGANICS, DELETERIOUS MATERIAL AND ROCKS GREATER THAN 3" DIAMETER.

2. DESIRABLE GRADED SLOPES ARE TO BE 3:1 (H:V) OR FLATTER. MAX CUT OR FILL SLOPES SHALL BE 2:1 (H:V), UNLESS SPECIFICALLY NOTED.

3. EQUIPMENT AND MATERIALS SHALL BE STORED IN AREAS DESIGNATED BY THE OWNER. CONSTRUCTION AND STORAGE AREAS SHALL BE KEPT NEAT AND CLEAN. TREE SAVE AREAS SHALL NOT BE USED FOR STORAGE OR PARKING. EQUIPMENT AND MATERIAL SHALL NOT BE STORED WITHIN THE DRIP LINE OF TREES.

4. CONTRACTOR TO VERIFY THE ELEVATIONS OF ALL TIE-IN POINTS FOR INSTALLATION OF UTILITIES, CURB & GUTTER AND PAVING.

5. TRENCH BACKFILL MATERIAL SHALL BE COMPACTED TO NOT LESS THAN 95% OF THE OPTIMUM COMPACTION FOR ANY SOIL CLASSIFICATION AS DETERMINED BY THE STANDARD PROCTOR TEST AASHTO T-180 METHOD "A". THE TOP 2 FEET OF ALL AREAS TO RECEIVE PAVEMENT SHALL BE COMPACTED TO 100% STANDARD PROCTOR DENSITY. BACKFILL MATERIAL SHALL BE CLEAN AND FREE OF ROOTS, ROCK OR DELETERIOUS MATTER. CONTRACTOR SHALL CORRECT ANY DAMAGE TO CURBING OR PAVING CAUSED BY TRENCH SETTLEMENT WHICH OCCURS WITHIN 12 MONTHS OF PROJECT ACCEPTANCE.

6. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES BETWEEN PLAN AND FIELD CONDITIONS PROMPTLY UPON DISCOVERY.

7. ALL EXISTING ELECTRICAL BOXES, WATER METER BOXES, AND VALVE BOXES, WHICH ARE TO REMAIN SHALL BE SET FLUSH WITH THE TOP OF THE PROPOSED GRADE.

8. AREAS INTENDED TO SUPPORT PAVEMENT OR NEW FILL SHALL BE PROOF ROLLED IN THE PRESENCE OF THE GEOTECHNICAL ENGINEER TO LOCATE WEAK, SOFT OR EXCESSIVELY WET MATERIALS. AREAS WHICH PUMP WHILE PROOF ROLLED SHALL BE UNDERCUT AND BACK-FILLED AS DIRECTED BY GEOTECHNICAL ENGINEER.

9. CRUSHED STONE AGGREGATE IN PAVEMENT BASE SHALL CONFORM WITH SECTION 815 OF THE STATE OF GEORGIA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS. ALL ASPHALT MATERIAL AND PAVING OPERATIONS SHALL MEET APPLICABLE SPECIFICATIONS OF THE GEORGIA DEPARTMENT OF TRANSPORTATION.

10. ALL FILL AREAS MUST BE COMPACTED TO A MINIMUM 95% STANDARD PROCTOR. THE TOP 2 FEET OF ALL AREAS TO RECEIVE PAVEMENT SHALL BE COMPACTED TO 100% STANDARD PROCTOR DENSITY. A REPORT FROM A GEOTECHNICAL ENGINEER WILL BE REQUIRED FOR ALL FILL AREAS WITHIN THE RIGHT-OF-WAY.

11. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE ACROSS DISTURBED AREA AND INTO DRAINAGE FEATURES.

CONSTRUCTION LEGEND

- PROPOSED TRAIL AND CENTERLINE
- PROPOSED STRUCTURAL SLAB BRIDGE CROSSINGS
- PROPOSED CROSSWALK
- L.O.D. — PROPOSED LIMITS OF DIASTURBANCE
- PROPOSED FENCELINE
- EXISTING FENCELINE
- PROPOSED DEMOLITION ITEM
- 832 — EXISTING CONTOUR ELEVATION
- 830 — PROPOSED MINOR CONTOUR
- 835 — PROPOSED MAJOR CONTOUR
- EXISTING GRAVEL DRIVE
- PROPOSED PIPE AND CULVERT
- PROPOSED BOLLARDS
- 832.41 — EXISTING SPOT ELEVATION
- MATCHLINE STA 7+00 SEE SHEET CP-06 — SHEET MATCHLINE
- PROPERTY LINE
- LAND LOT LINE

LEGEND

1033 CATCH BASIN	WV WATER VALVE	SF SILT FENCE
1034 CATCH BASIN	GV GAS VALVE	TP TREE PROTECTION FENCE
1019A DROP INLET	HANDICAPPED PARKING	CHAIN LINK FENCE
1011A JUNCTION BOX	TRAFFIC FLOW	X EXISTING FENCE
1019A TYPE E CURB INLET	UGP UNDERGROUND POWER	100 EXISTING CONTOUR
1125 HEADWALL	P OVERHEAD POWER	100 PROPOSED CONTOUR
DRAINAGE SLOPE	UGC UNDERGROUND CABLE	EXISTING CURB & GUTTER
SEWER MANHOLE	T OVERHEAD TELEPHONE	PROPOSED CURB & GUTTER
EXISTING FIRE HYDRANT	FOC FIBER OPTIC CABLE	x 1010 EXISTING SPOT ELEVATION
PROPOSED FIRE HYDRANT	W WATER	1010 PROPOSED SPOT ELEVATION
LAMP POST	SS SANITARY SEWER	
GUY POLE	FM FORCE MAIN	
UTILITY POLE	G GAS	
	STORM DRAIN	

KAIZENCOLLABORATIVE
2390 MAIN STREET | TUCKER, GEORGIA 30084 | 404.239.2521

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E-MAIL: mailbox@georgiaandwest.com

	DATE	DESCRIPTION

PROJECT #	2019 - 174
PROJECT MANAGER	GGD

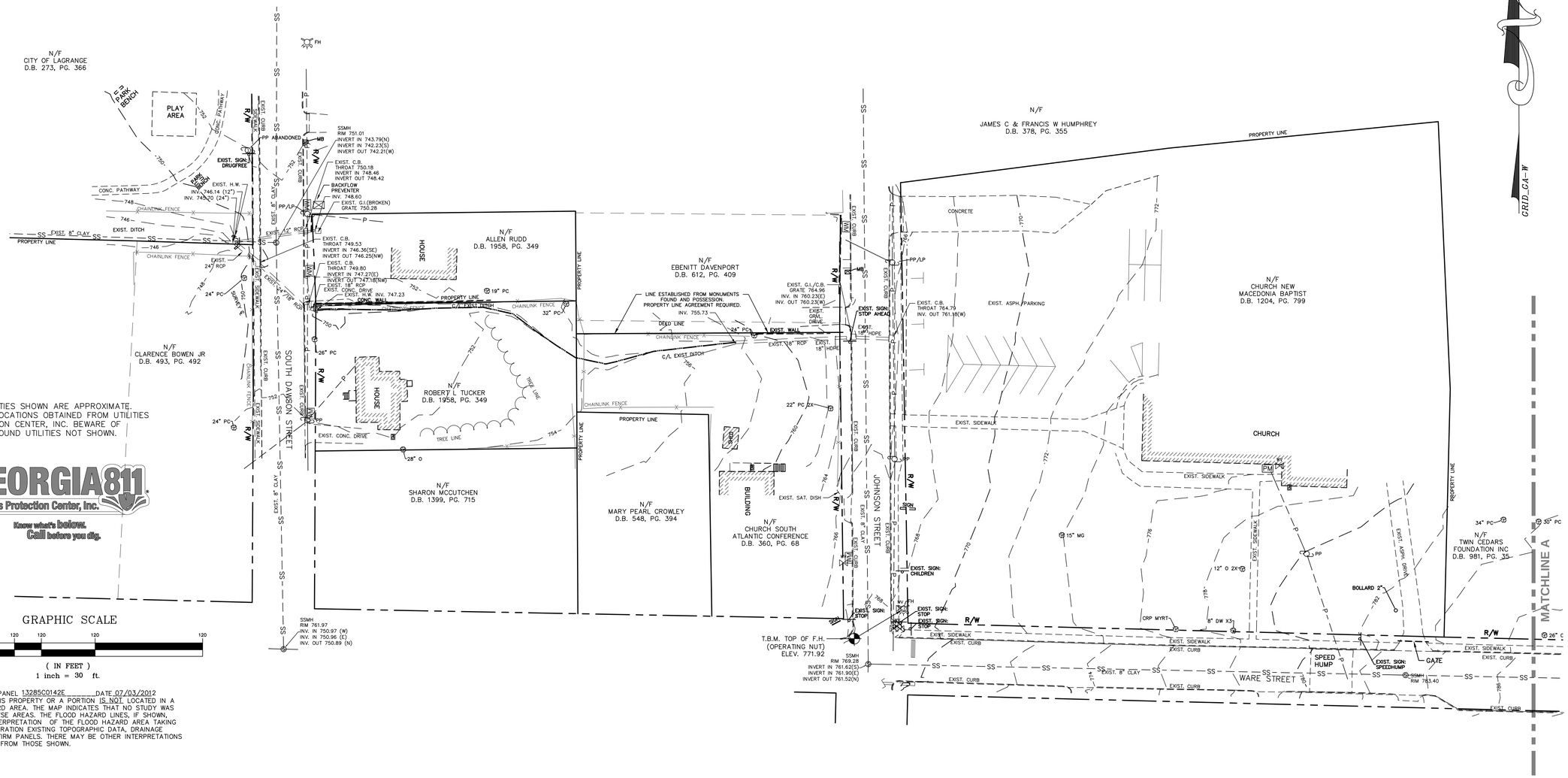
LaGRANGE THREAD PHASE 5
CALUMET TO DANIEL ST
LaGRANGE, GA

GEORGIA REGISTERED No. 1261 PROFESSIONAL LANDSCAPE ARCHITECT ANNETA G. deMATHO 5/10/2019

GEORGIA REGISTERED No. 034591 PROFESSIONAL ENGINEER JOHN D. BASS

GENERAL NOTES

SCALE	
DATE	MAY 10, 2019
SHEET #	**GN-01**



GRAPHIC SCALE

120 0 120 120 120 120

(IN FEET)
1 inch = 30 ft.

THE F.I.R.M. PANEL 13285C0142E DATE 07/03/2012 INDICATES THIS PROPERTY OR A PORTION IS NOT LOCATED IN A FLOOD HAZARD AREA. THE MAP INDICATES THAT NO STUDY WAS MADE OF THESE AREAS. THE FLOOD HAZARD LINES, IF SHOWN, ARE OUR INTERPRETATION OF THE FLOOD HAZARD AREA TAKING INTO CONSIDERATION EXISTING TOPOGRAPHIC DATA, DRAINAGE AREAS AND FIRM PANELS. THERE MAY BE OTHER INTERPRETATIONS THAT DIFFER FROM THOSE SHOWN.

TREES 24" DBH OR LARGER AND STREET TREES ONLY SHOWN ON SURVEY

TREE LEGEND

MA=maple	O=oak	WA=walnut	SG=sweetgum	CH=cherry	HK=hickory
PC=pecan	MI=mimosa	BH=beech	PI=pine	PO=poplar	SW=sourwood
GI=ginko	SM=sycamore	BE=boxelder	C=cedar	HB=hackberry	CW=cottonwood
UK= unk hardwood	DW=dogwood	PE=pear	BI=birch	MG=magnolia	BG=black gum

LEGEND

1033 CATCH BASIN	OVERGROUND DOWNSPOUT	SEDIMENT BARRIER
1034 CATCH BASIN	WATER VALVE	TREE PROTECTION FENCE
1019A DROP INLET	GAS VALVE	CHAIN LINK FENCE
1011A JUNCTION BOX	HANDICAPPED PARKING	EXISTING FENCE
1019A TYPE E CURB INLET	TRAFFIC FLOW	PROPERTY LINE
1125 HEADWALL	UNDERGROUND POWER	EXISTING CONTOUR
DRAINAGE SLOPE	OVERHEAD POWER	PROPOSED CONTOUR
SEWER MANHOLE	UNDERGROUND TELEPHONE	EXISTING CURB & GUTTER
EXISTING FIRE HYDRANT	OVERHEAD TELEPHONE	PROPOSED CURB & GUTTER
PROPOSED FIRE HYDRANT	WATER	EXISTING SPOT ELEVATION
LAMP POST	SANITARY SEWER	PROPOSED SPOT ELEVATION
GUY POLE	FORCE MAIN	EXISTING WATER METER
UTILITY POLE	GAS	IRRIGATION CONTROL VALVE
UNDERGROUND DOWNSPOUT	STORM DRAIN	MAILBOX
		GAS METER
		POWER METER

NO.	DATE REVISED	DESCRIPTION

GEORGIA REGISTERED No. 3125 LAND SURVEYOR MICHAEL BRADLEY CRAWFORD

GEORGIA & WEST, INC.
ENGINEERING • LAND SURVEYING • LAND PLANNING
105 CORPORATE DRIVE
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E-MAIL: mailbox@georgiaandwest.com

WARNING: THIS PLAN SHEET IS NOT THE OFFICIAL CONTRACT DOCUMENT UNLESS APPROVED BY THE APPROPRIATE GOVERNMENTAL AGENCIES.

WARNING: UTILITIES LOCATIONS ARE APPROXIMATE. BEWARE OF HIDDEN UTILITIES NOT SHOWN. CONTACT APPROPRIATE UTILITY COMPANIES PRIOR TO EXCAVATION.

NOTICE: IT IS THE PROPERTY OWNER'S/ CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH ALL ENVIRONMENTAL IMPACT ISSUES AND TO OBTAIN ALL NECESSARY PERMITS FROM THE APPROPRIATE GOVERNING AUTHORITIES.

TITLE:
TOPOGRAPHIC SURVEY
LaGRANGE THREAD
CALUMET TO DANIEL STREET

LOCATED IN LAND LOT 108 DISTRICT 6
TROUP COUNTY, GEORGIA

SCALE:	DATE	JOB NUMBER	DESIGNED BY
1" = 30'	03-11-2019	190106	

S-01

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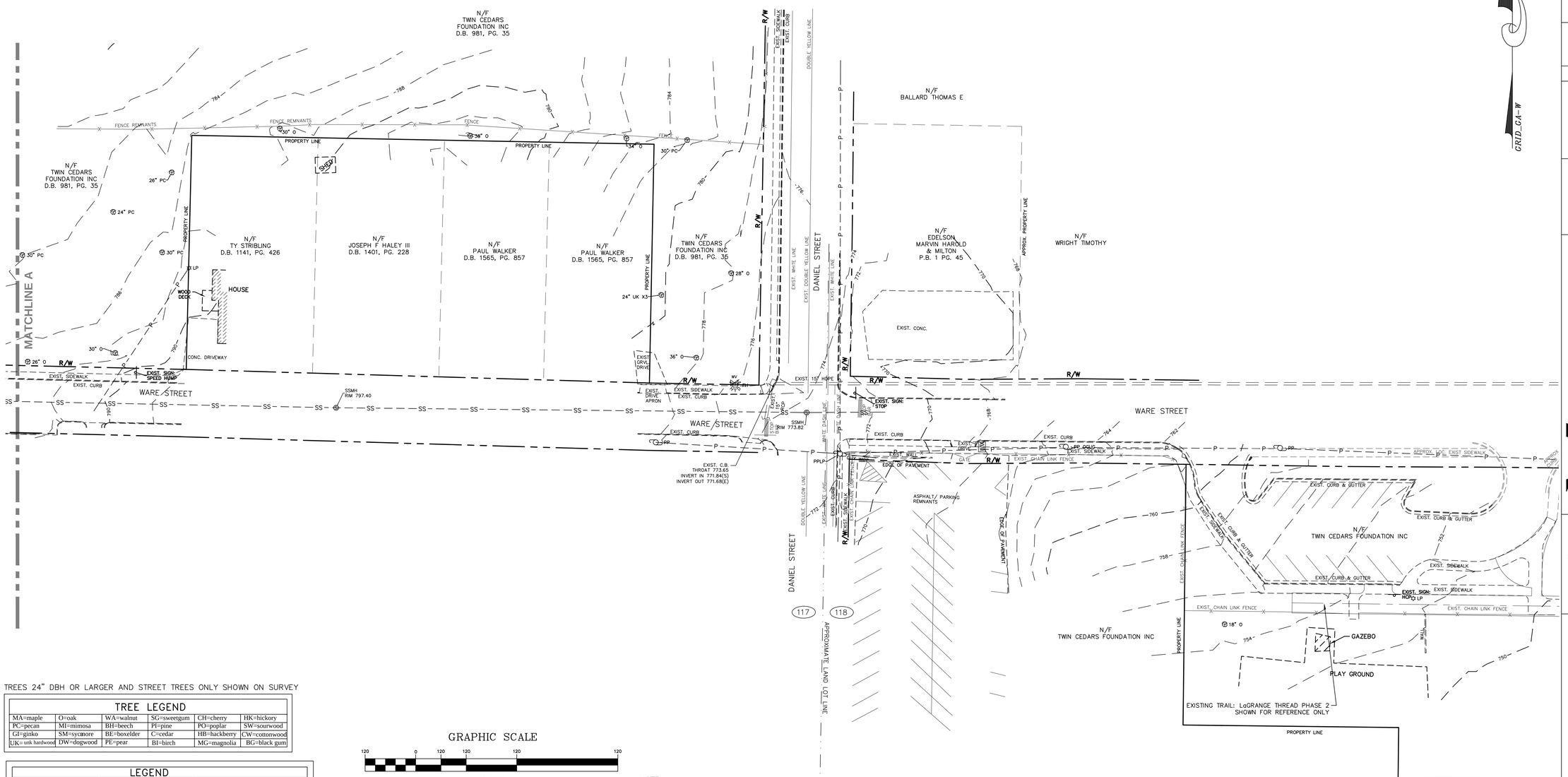

TREES 24" DBH OR LARGER AND STREET TREES ONLY SHOWN ON SURVEY

TREE LEGEND

MA=maple	O=oak	WA=walnut	SG=sweetgum	CH=cherry	HK=hickory
PC=pecan	MI=mimosa	BH=beech	PI=pine	PO=poplar	SW=sourwood
GI=ginko	SM=sycamore	BE=boxelder	C=cedar	HB=hackberry	CW=cottonwood
UK= unk hardwood	DW=dogwood	PE=pear	BI=birch	MG=magnolia	BG=black gum

LEGEND

1033 CATCH BASIN	OVERGROUND DOWNSPOUT	SEDIMENT BARRIER
1034 CATCH BASIN	WATER VALVE	TREE PROTECTION FENCE
1019A DROP INLET	GAS VALVE	CHAIN LINK FENCE
1011A JUNCTION BOX	HANDICAPPED PARKING	EXISTING FENCE
1019A TYPE E CURB INLET	TRAFFIC FLOW	PROPERTY LINE
1125 HEADWALL	UNDERGROUND POWER	EXISTING CONTOUR
DRAINAGE SLOPE	OVERHEAD POWER	PROPOSED CONTOUR
SEWER MANHOLE	UNDERGROUND TELEPHONE	EXISTING CURB & GUTTER
EXISTING FIRE HYDRANT	OVERHEAD TELEPHONE	PROPOSED CURB & GUTTER
PROPOSED FIRE HYDRANT	WATER	EXISTING SPOT ELEVATION
LAMP POST	SANITARY SEWER	PROPOSED SPOT ELEVATION
GUY POLE	FORCE MAIN	EXISTING WATER METER
UTILITY POLE	GAS	IRRIGATION CONTROL VALVE
UNDERGROUND DOWNSPOUT	STORM DRAIN	MAILBOX
		GAS METER
		POWER METER

GRAPHIC SCALE

120 0 120 120 120

(IN FEET)
1 inch = 30 ft.

THE F.I.R.M. PANEL 13285C0142E DATE 07/03/2012 INDICATES THIS PROPERTY OR A PORTION IS NOT LOCATED IN A FLOOD HAZARD AREA. THE MAP INDICATES THAT NO STUDY WAS MADE OF THESE AREAS. THE FLOOD HAZARD LINES, IF SHOWN, ARE OUR INTERPRETATION OF THE FLOOD HAZARD AREA TAKING INTO CONSIDERATION EXISTING TOPOGRAPHIC DATA, DRAINAGE AREAS AND FIRM PANELS. THERE MAY BE OTHER INTERPRETATIONS THAT DIFFER FROM THOSE SHOWN.

NOTE:
ALL UTILITIES SHOWN ARE APPROXIMATE. UTILITY LOCATIONS OBTAINED FROM UTILITIES PROTECTION CENTER, INC. BEWARE OF UNDERGROUND UTILITIES NOT SHOWN.

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GRID_CA-W

NO.	DATE REVISED	DESCRIPTION

GEORGIA REGISTERED No. 3125 LAND SURVEYOR MICHAEL D. CRAWFORD

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105 CORPORATE DRIVE
CARROLLTON, GA. 30117
OFFICE (770) 834-4694
FAX (770) 834-1005
E-MAIL: mailbox@georgiaandwest.com

WARNING: THIS PLAN SHEET IS NOT THE OFFICIAL CONTRACT DOCUMENT UNLESS APPROVED BY THE APPROPRIATE GOVERNMENTAL AGENCIES.

WARNING: UTILITIES LOCATIONS ARE APPROXIMATE. BEWARE OF HIDDEN UTILITIES NOT SHOWN. CONTACT APPROPRIATE UTILITY COMPANIES PRIOR TO EXCAVATION.

NOTICE: IT IS THE PROPERTY OWNER'S/ CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH ALL ENVIRONMENTAL IMPACT ISSUES AND TO OBTAIN ALL NECESSARY PERMITS FROM THE APPROPRIATE GOVERNING AUTHORITIES.

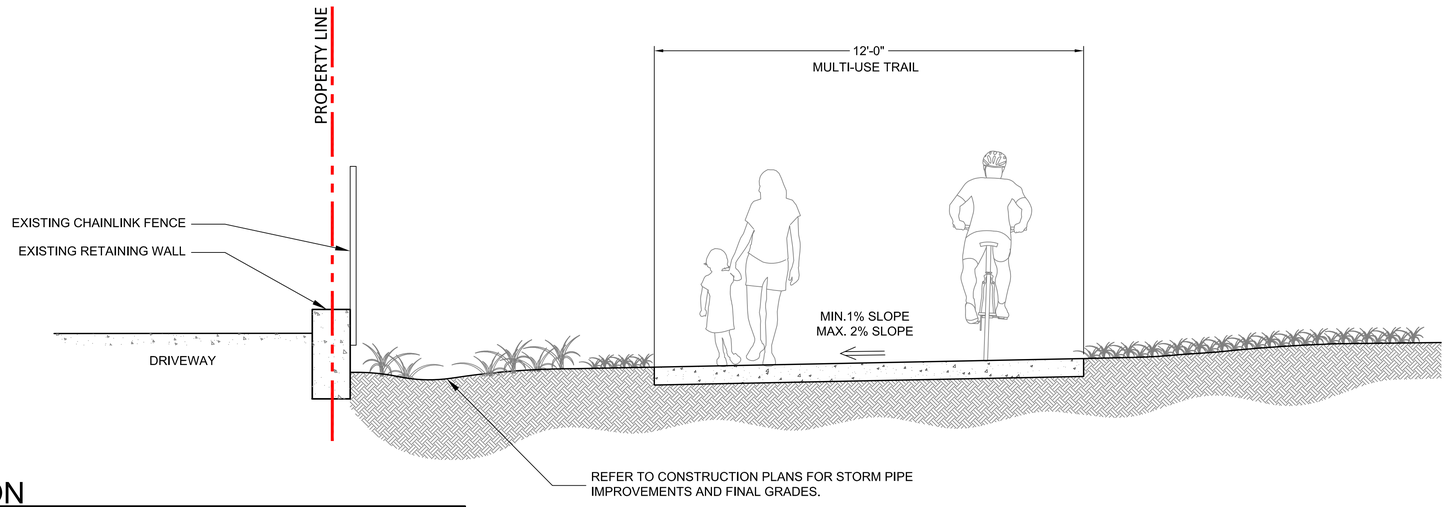
TITLE:
TOPOGRAPHIC SURVEY
LaGRANGE THREAD
CALUMET TO DANIEL STREET

LOCATED IN LAND LOTS 108 DISTRICT 6
TROUP COUNTY, GEORGIA

SCALE:	DATE	JOB NUMBER	DESIGNED BY
1" = 30'	03-11-2019	190106	

S-02

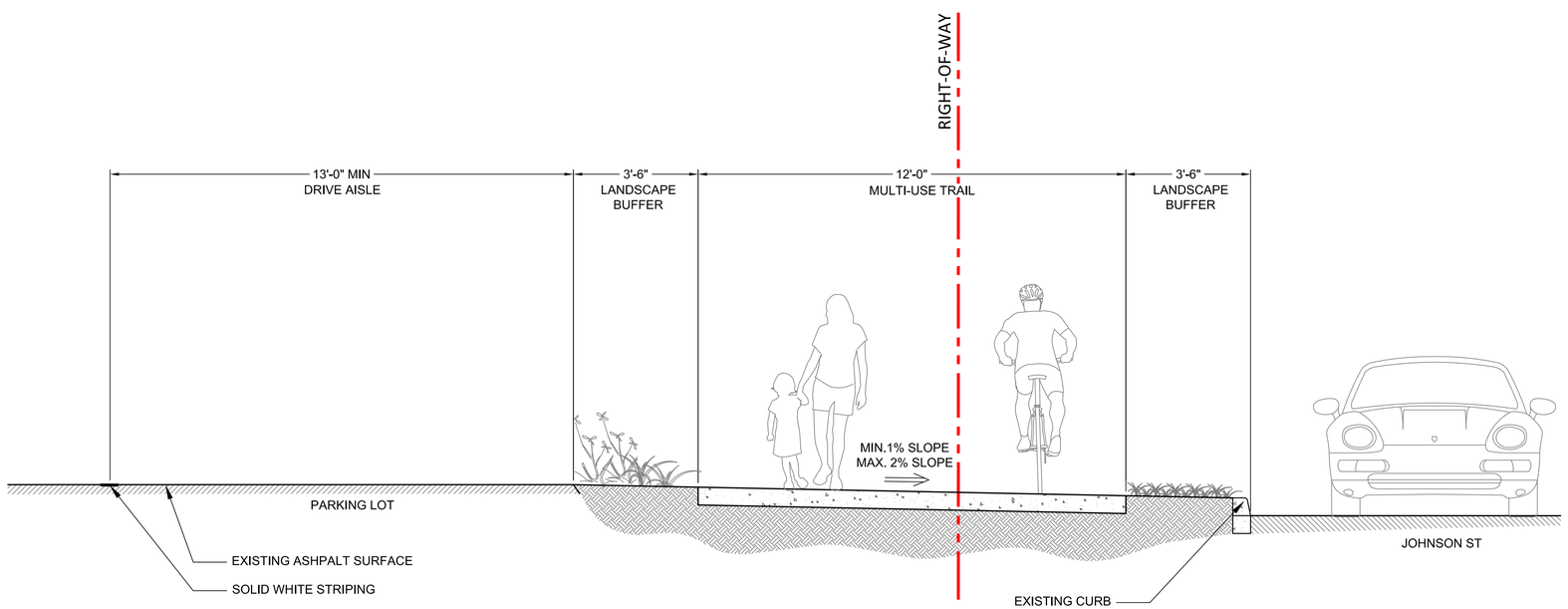
O:\PROJECT FOLDERS\2019\190106_LAGRANGE THREAD-UNION ST TO DANIEL ST\DWG\190106_BASEMAP.dwg, 5/10/2019 9:21:29 AM



1
TS-01

SITE SECTION

SCALE: 1/2" = 1'-0"



2
TS-01

SITE SECTION

SCALE: 1/2" = 1'-0"

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FAX (770) 834-1005
E-MAIL: mailbox@georgiaandwest.com

	DATE	DESCRIPTION

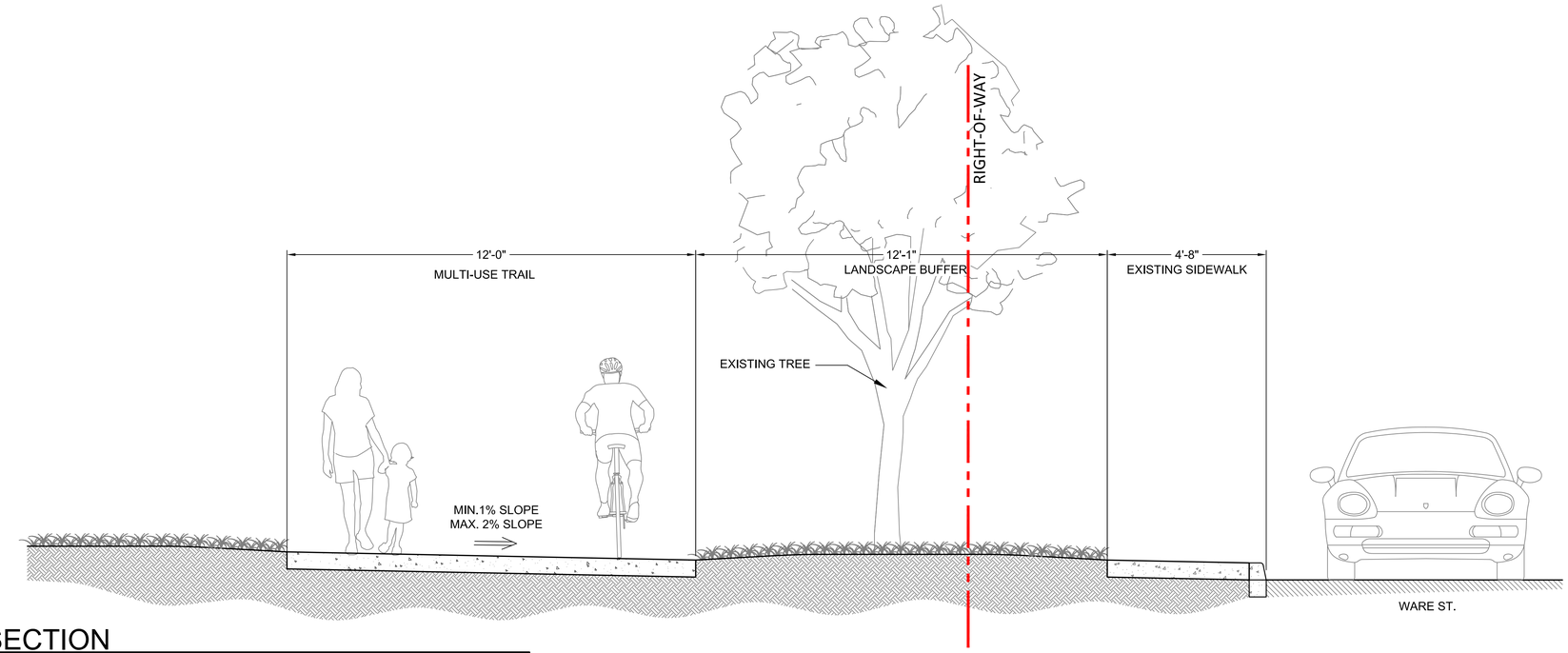
PROJECT #	2019 - 174
PROJECT MANAGER	GGD

LaGRANGE THREAD
PHASE 5
CALUMET TO DANIEL ST
LaGRANGE, GA

GEORGIA REGISTERED No. 1051 PROFESSIONAL LANDSCAPE ARCHITECT GRETA G. GERARD
5/10/2019

TYPICAL SECTIONS

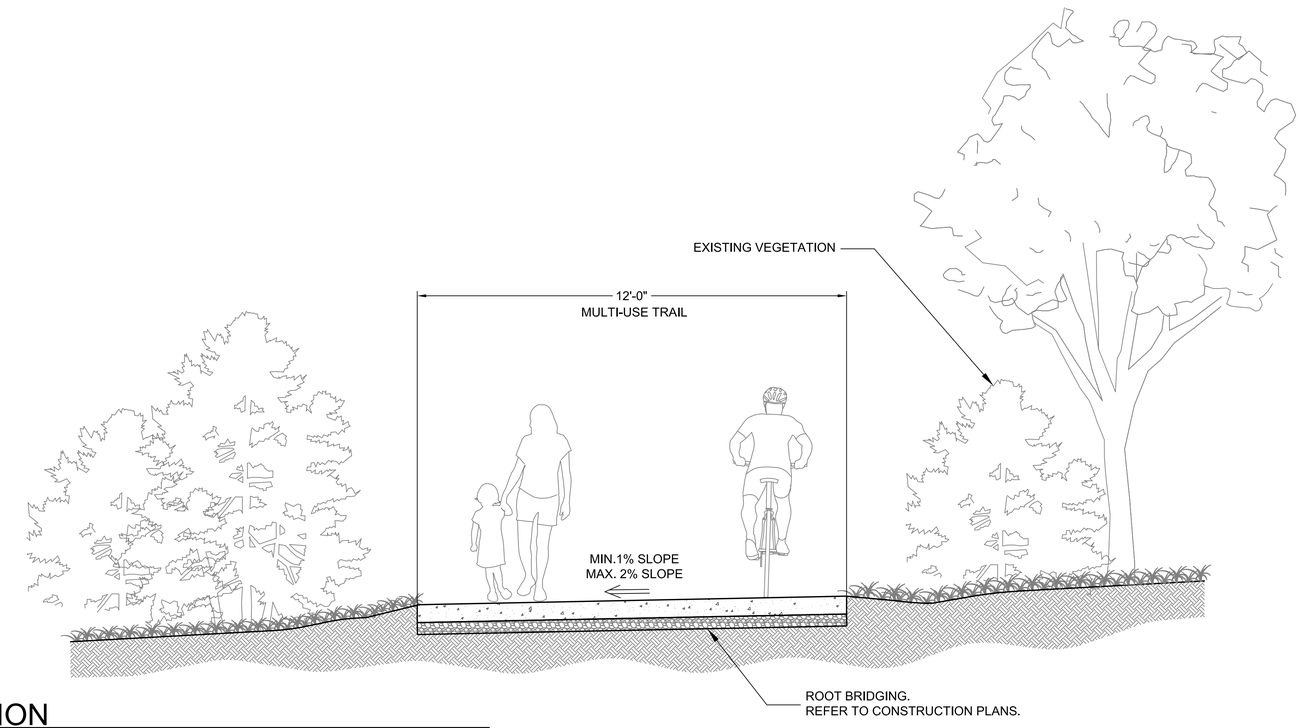
SCALE	AS SHOWN
DATE	MAY 10, 2019
SHEET #	**TS-01**



1
TS-02

SITE SECTION

SCALE: 1/2" = 1'-0"



2
TS-02

SITE SECTION

SCALE: 1/2" = 1'-0"

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	DATE	DESCRIPTION

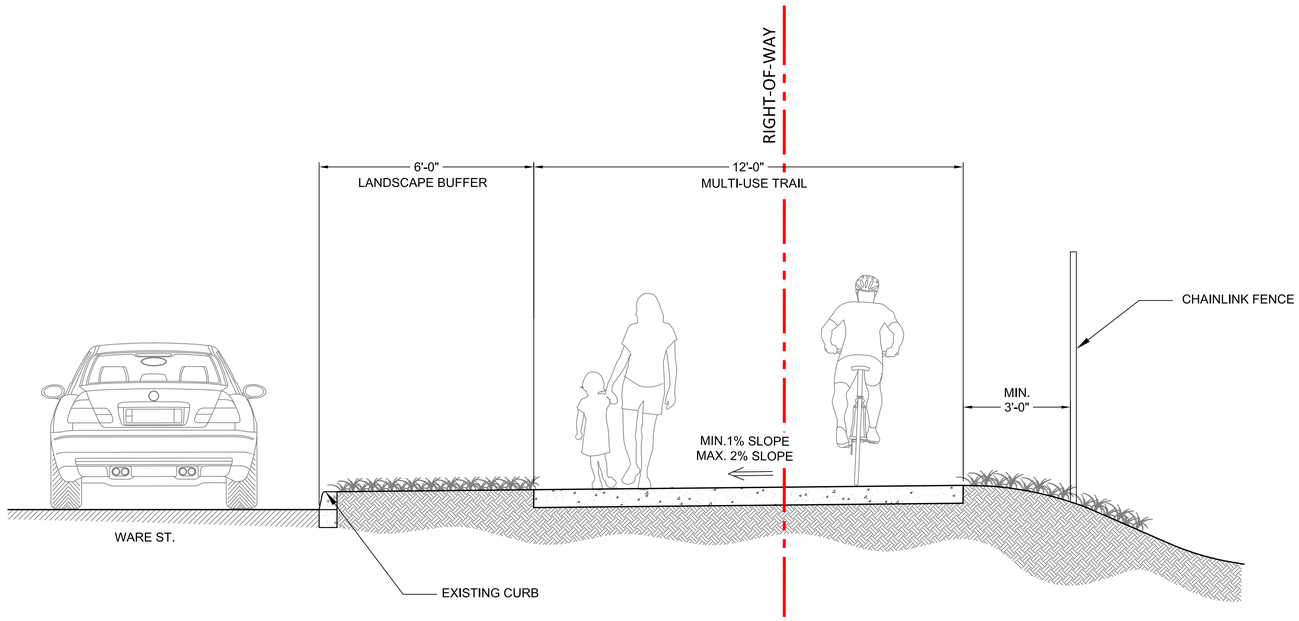
PROJECT #	2019 - 174
PROJECT MANAGER	GGD

LaGRANGE THREAD
PHASE 5
CALUMET TO DANIEL ST
LaGRANGE, GA

GEORGIA REGISTERED No. 1051 PROFESSIONAL LANDSCAPE ARCHITECT GRETA G. GONARD
5/10/2019

TYPICAL SECTIONS

SCALE	AS SHOWN
DATE	MAY 10, 2019
SHEET #	**TS-02**



1
TS-03

SITE SECTION

SCALE: 1/2" = 1'-0"

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FAX (770) 834-1005
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	DATE	DESCRIPTION

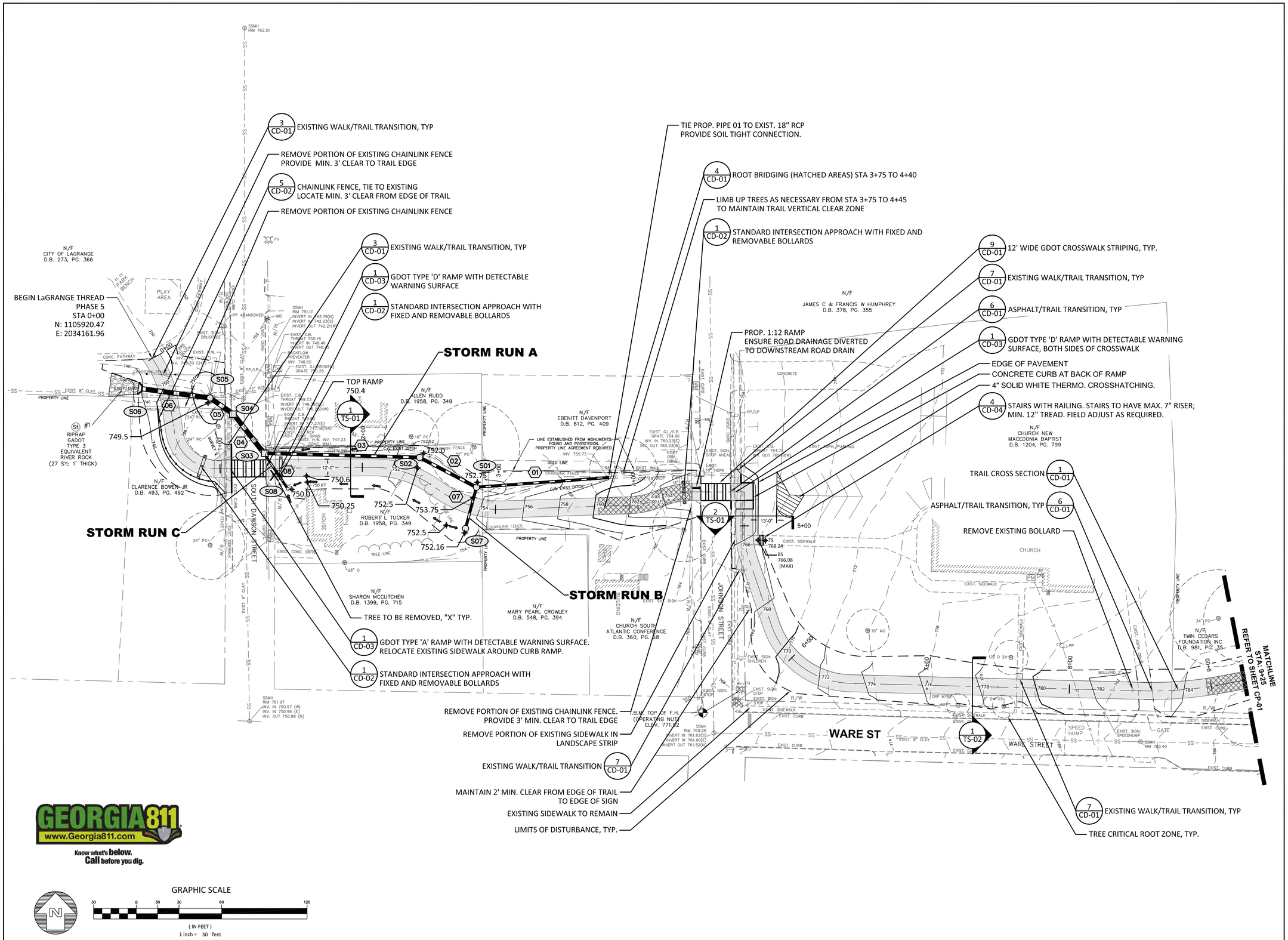
PROJECT #	2019 - 174
PROJECT MANAGER	GGD

LaGRANGE THREAD
PHASE 5
CALUMET TO DANIEL ST
LaGRANGE, GA

GEORGIA REGISTERED No. 1051 PROFESSIONAL LANDSCAPE ARCHITECT GRETA G. GERARDO
5/10/2019

TYPICAL SECTIONS

SCALE	AS SHOWN
DATE	MAY 10, 2019
SHEET #	**TS-03**



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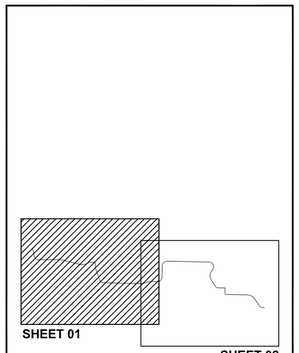


KEY MAP

	DATE	DESCRIPTION

PROJECT #	2019 - 174
PROJECT MANAGER	GGD

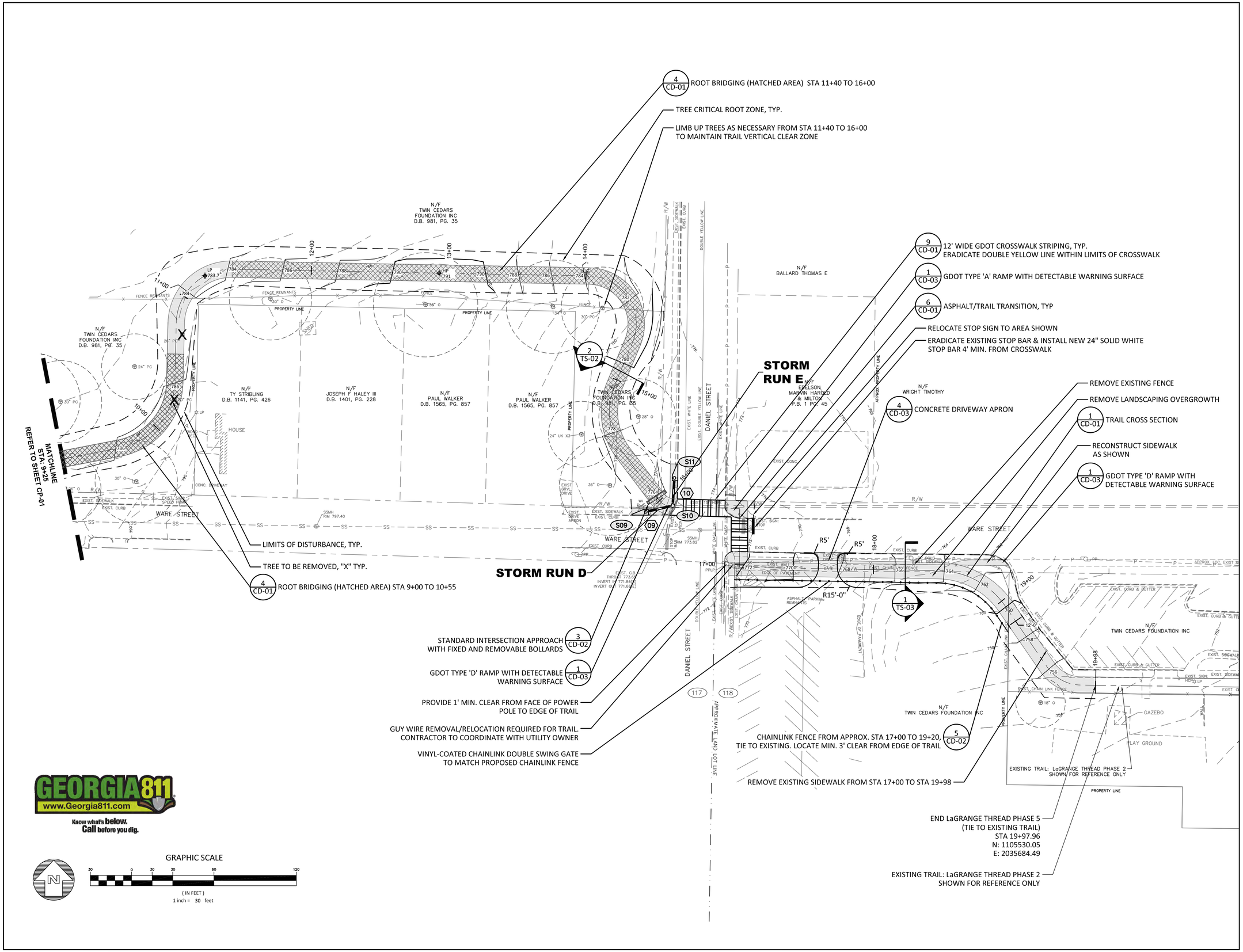
LaGRANGE THREAD PHASE 5
CALUMET TO DANIEL ST
LaGRANGE, GA

GEORGIA REGISTERED No. 1251 PROFESSIONAL LANDSCAPE ARCHITECT — SHETA G. deMARO — 5/10/2019

GEORGIA REGISTERED No. 034591 PROFESSIONAL ENGINEER — JOHN D. BASS

CONSTRUCTION PLAN

SCALE	1"=30'-0"
DATE	MAY 10, 2019
SHEET #	**CP-01**



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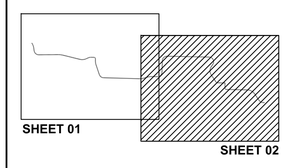


KEY MAP

	DATE	DESCRIPTION

PROJECT #	2019 - 174
PROJECT MANAGER	GGD

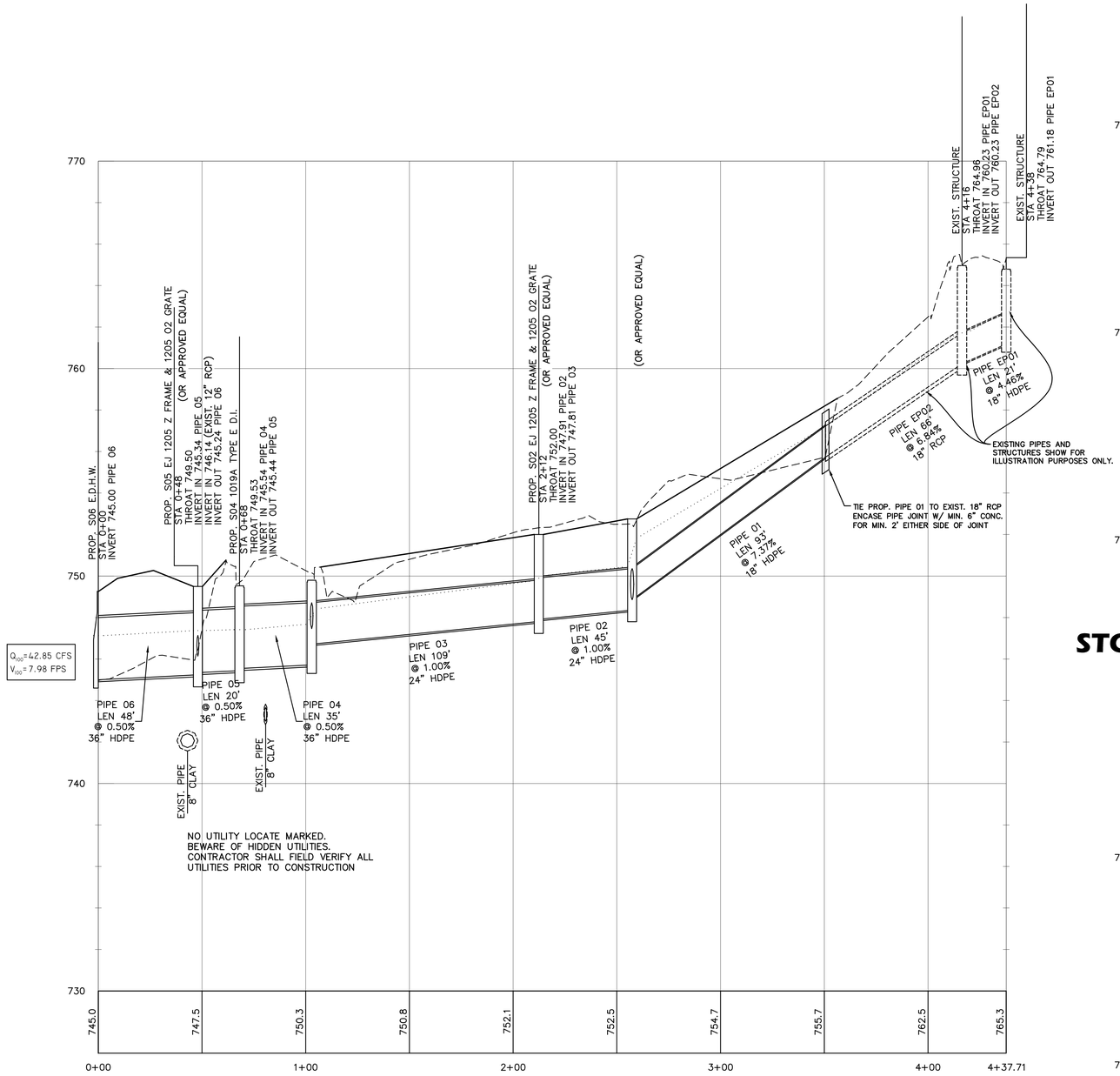
LaGRANGE THREAD PHASE 5
CALUMET TO DANIEL ST
LaGRANGE, GA

GEORGIA REGISTERED No. 1051 PROFESSIONAL LANDSCAPE ARCHITECT SHEETA G. deMARO 5/10/2019

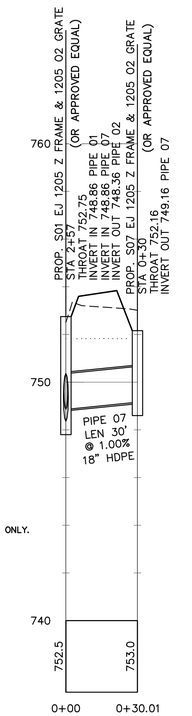
GEORGIA REGISTERED No. 034591 PROFESSIONAL ENGINEER JOHN D. BASS

CONSTRUCTION PLAN

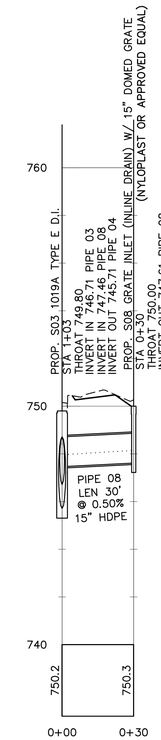
SCALE	1"=30'-0"
DATE	MAY 10, 2019
SHEET #	CP-02



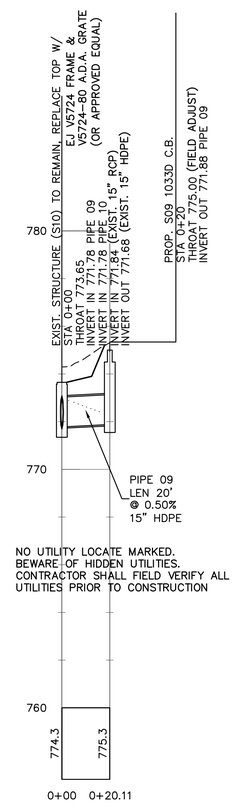
STORM RUN A



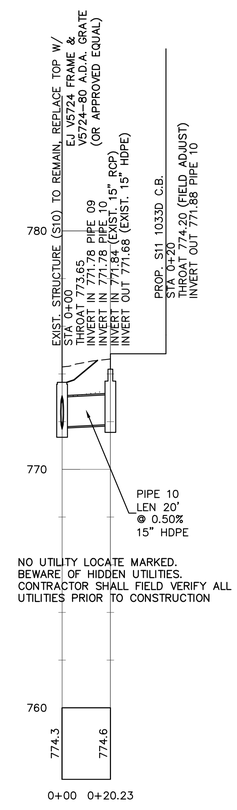
STORM RUN B



STORM RUN C



STORM RUN D



STORM RUN E

GEORGIA811 Utilities Protection Center, Inc.
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SCALE:
VERT: 1" = 3'
HORZ: 1" = 30'

GRAPHIC SCALE
120 0 120 120 120 120
(IN FEET)
1 inch = 30 ft.

PRIMARY PERMITTEE:
CITY OF LaGRANGE
ATTN: MEG KELSEY
200 RIDLEY AVENUE
LaGRANGE, GA 30240
706-883-2016
mkelsey@lagrangega.org

100 YR. STORM EVENT
HYDRAULIC GRADE LINE

CONSTRUCTION MANAGEMENT
PATH FOUNDATION
JONATHAN McCAIG - 24 HOUR CONTACT
GA GSWCC LEVEL 1 CERTIFICATION # 58893
EXP. 08/17/2021
office 404-875-7284 x5 cell 404-433-1900

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	DATE	DESCRIPTION

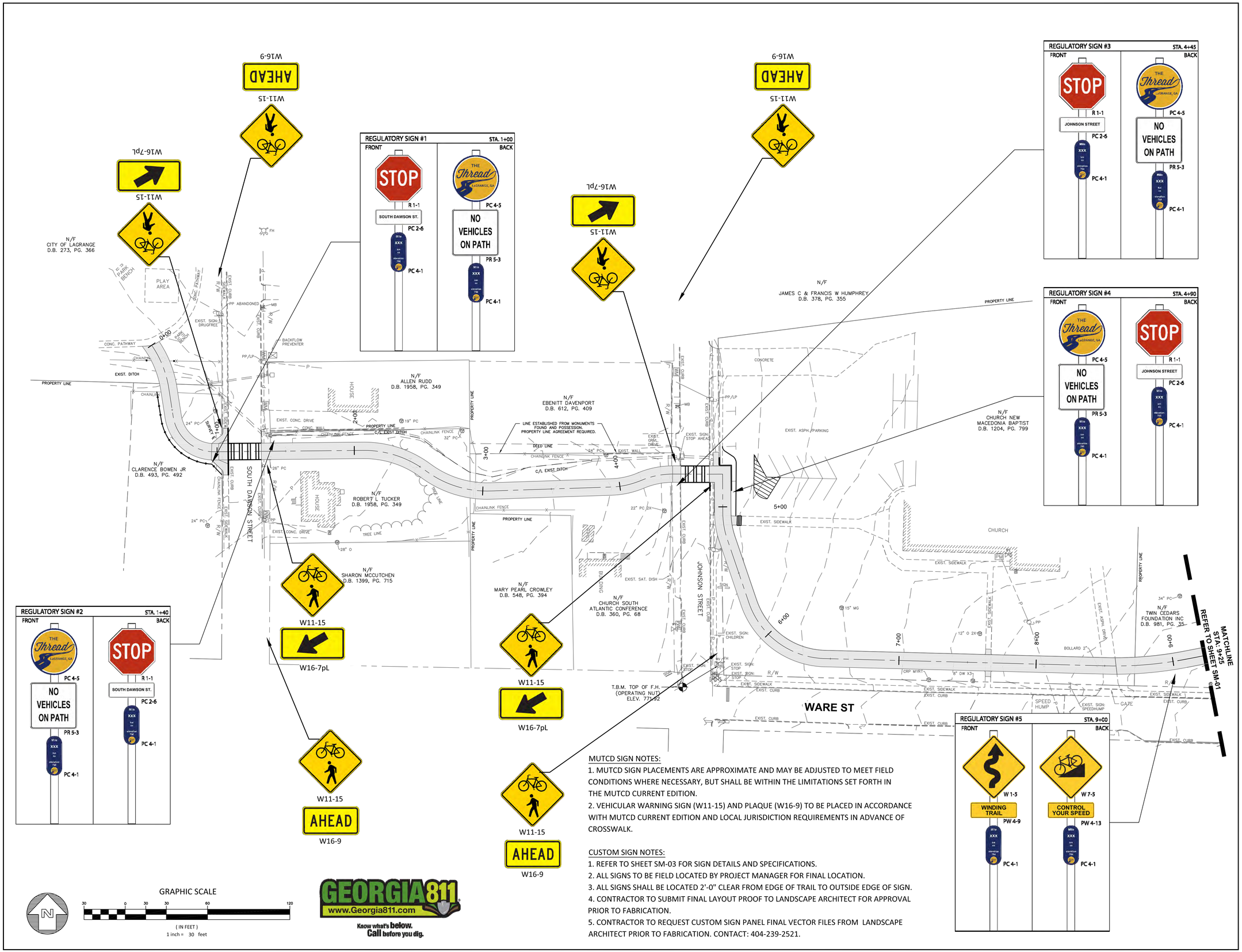
PROJECT #	2019 - 174
PROJECT MANAGER	GGD

LaGRANGE THREAD
PHASE 5
CALUMET TO DANIEL ST
LaGRANGE, GA

GEORGIA REGISTERED No. 034591 PROFESSIONAL ENGINEER JOHN D. BASS

STORM SEWER PROFILES

SCALE	AS SHOWN
DATE	MAY 10, 2019
SHEET #	CP-03



MUTCD SIGN NOTES:

1. MUTCD SIGN PLACEMENTS ARE APPROXIMATE AND MAY BE ADJUSTED TO MEET FIELD CONDITIONS WHERE NECESSARY, BUT SHALL BE WITHIN THE LIMITATIONS SET FORTH IN THE MUTCD CURRENT EDITION.
2. VEHICULAR WARNING SIGN (W11-15) AND PLAQUE (W16-9) TO BE PLACED IN ACCORDANCE WITH MUTCD CURRENT EDITION AND LOCAL JURISDICTION REQUIREMENTS IN ADVANCE OF CROSSWALK.

CUSTOM SIGN NOTES:

1. REFER TO SHEET SM-03 FOR SIGN DETAILS AND SPECIFICATIONS.
2. ALL SIGNS TO BE FIELD LOCATED BY PROJECT MANAGER FOR FINAL LOCATION.
3. ALL SIGNS SHALL BE LOCATED 2'-0" CLEAR FROM EDGE OF TRAIL TO OUTSIDE EDGE OF SIGN.
4. CONTRACTOR TO SUBMIT FINAL LAYOUT PROOF TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO FABRICATION.
5. CONTRACTOR TO REQUEST CUSTOM SIGN PANEL FINAL VECTOR FILES FROM LANDSCAPE ARCHITECT PRIOR TO FABRICATION. CONTACT: 404-239-2521.

GRAPHIC SCALE

30 0 30 30 60 120

(IN FEET)
1 inch = 30 feet

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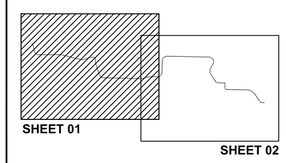


KEY MAP

	DATE	DESCRIPTION

PROJECT #	2019 - 174
PROJECT MANAGER	GGD

LaGRANGE THREAD PHASE 5
CALUMET TO DANIEL ST
LaGRANGE, GA

GEORGIA REGISTERED No. 1261 PROFESSIONAL LANDSCAPE ARCHITECT
CRETA G. deMAYO
5/10/2019

SIGNING & MARKING PLAN

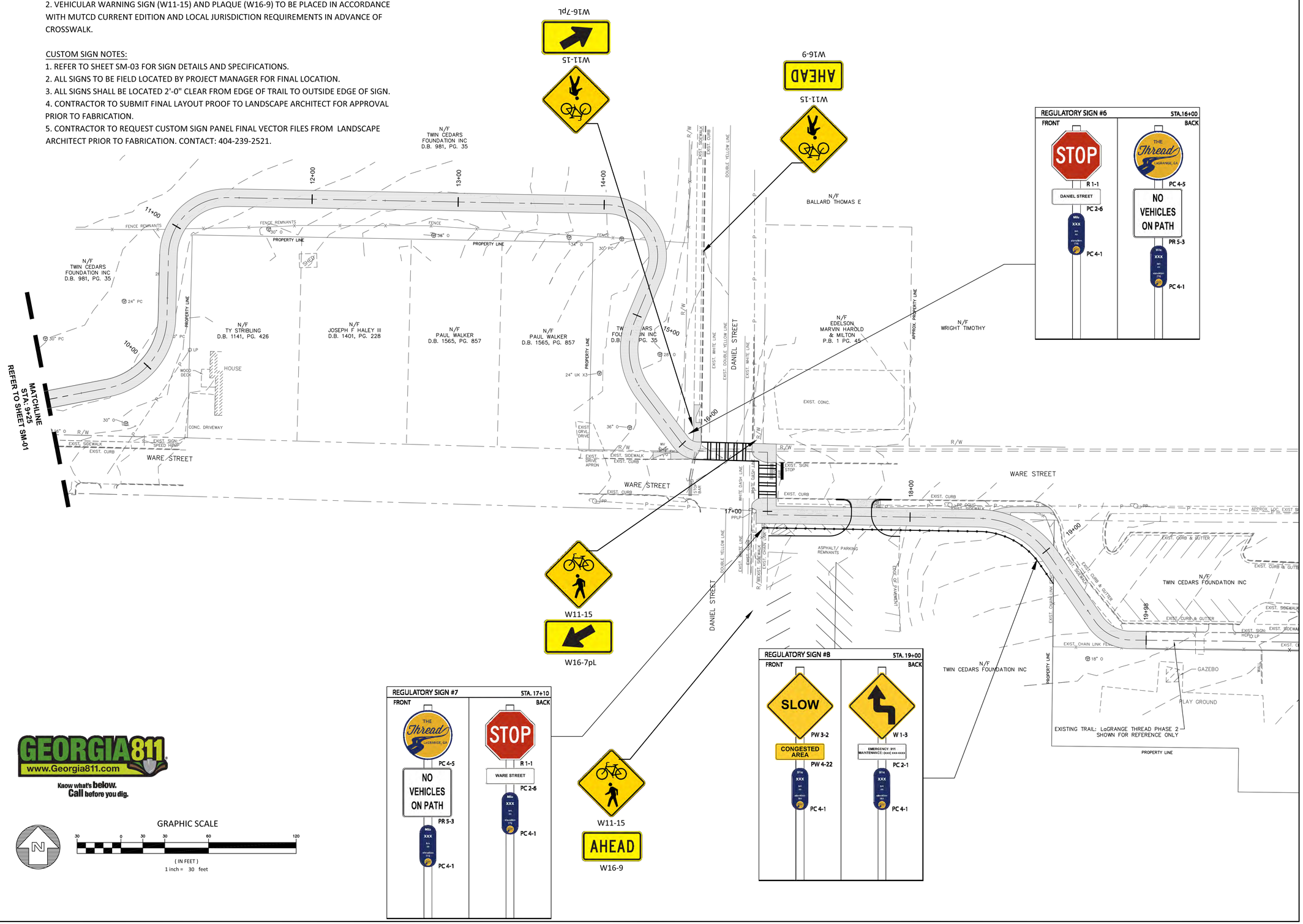
SCALE	1"=30'-0"
DATE	MAY 10, 2019
SHEET #	**SM-01**

MUTCD SIGN NOTES:

1. MUTCD SIGN PLACEMENTS ARE APPROXIMATE AND MAY BE ADJUSTED TO MEET FIELD CONDITIONS WHERE NECESSARY, BUT SHALL BE WITHIN THE LIMITATIONS SET FORTH IN THE MUTCD CURRENT EDITION.
2. VEHICULAR WARNING SIGN (W11-15) AND PLAQUE (W16-9) TO BE PLACED IN ACCORDANCE WITH MUTCD CURRENT EDITION AND LOCAL JURISDICTION REQUIREMENTS IN ADVANCE OF CROSSWALK.

CUSTOM SIGN NOTES:

1. REFER TO SHEET SM-03 FOR SIGN DETAILS AND SPECIFICATIONS.
2. ALL SIGNS TO BE FIELD LOCATED BY PROJECT MANAGER FOR FINAL LOCATION.
3. ALL SIGNS SHALL BE LOCATED 2'-0" CLEAR FROM EDGE OF TRAIL TO OUTSIDE EDGE OF SIGN.
4. CONTRACTOR TO SUBMIT FINAL LAYOUT PROOF TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO FABRICATION.
5. CONTRACTOR TO REQUEST CUSTOM SIGN PANEL FINAL VECTOR FILES FROM LANDSCAPE ARCHITECT PRIOR TO FABRICATION. CONTACT: 404-239-2521.



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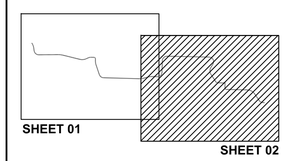


KEY MAP

	DATE	DESCRIPTION

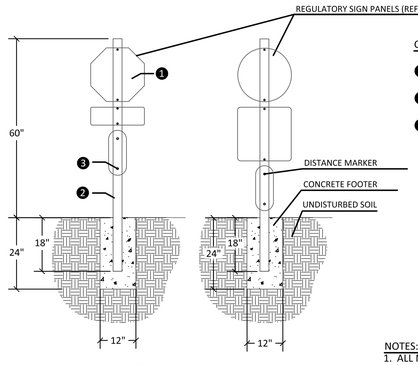
PROJECT #	2019 - 174
PROJECT MANAGER	GGD

LaGRANGE THREAD PHASE 5
CALUMET TO DANIEL ST
LaGRANGE, GA

GEORGIA REGISTERED No. 1081 PROFESSIONAL LANDSCAPE ARCHITECT
MARIETA G. DEMARIO
5/10/2019

SIGNING & MARKING PLAN

SCALE	1"=30'-0"
DATE	MAY 10, 2019
SHEET #	**SM-02**



CONSTRUCTION KEY:

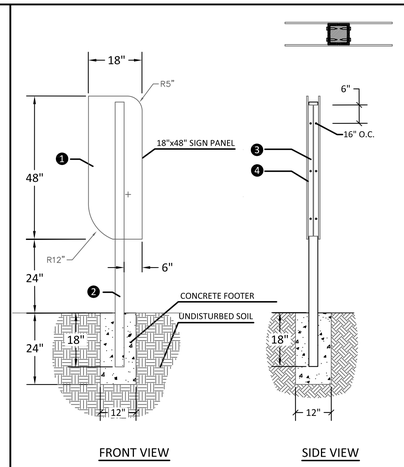
1. ALL SIGNS TO BE 1/8" THICK ALUMINUM PANEL.
2. (1) 3"X3" ALUMINUM POST, POWDER COATED BLACK.
3. EACH SIGN PANEL TO BE ATTACHED TO POST USING (2) 1" LONG, 1/4 DIA., STAINLESS STEEL #14A BUTTON HD TORX SECURITY METAL SCREW.

NOTES:
1. ALL METAL TO BE ALUMINUM POWDER COATED BLACK UNLESS OTHERWISE SPECIFIED.
2. ALL SIGNS TO CONFORM TO PATH FOUNDATION SPECIFICATIONS. REFER TO 5/SM-03.

NOT IN CONTRACT

1 SM-03 REGULATORY SIGN

SCALE: 1/2" = 1'-0"



CONSTRUCTION KEY:

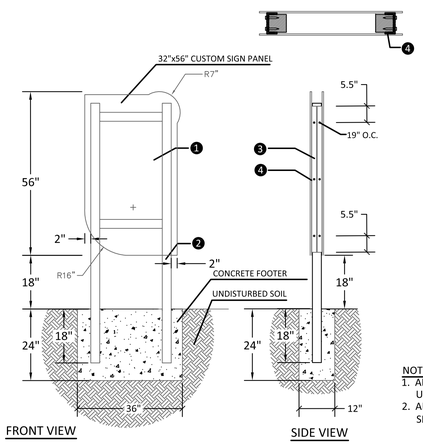
1. 1/4" THICK ALUMINUM PANEL.
2. (1) 3"X3" ALUMINUM POST, POWDER COATED BLACK.
3. (2) L-CHANNEL BRACKET, MIN. 38" LONG, ATTACHED TO POST AS SHOWN, USING 1.5" LONG, 1/2 STAINLESS STEEL #14A BUTTON HD TORX SECURITY METAL SCREW.
4. ATTACH SIGN PANEL TO FRONT OF L-CHANNEL BRACKET WITH LOCTITE® AA H4500 ADHESIVE.

NOTES:
1. ALL METAL TO BE ALUMINUM POWDER COATED BLACK UNLESS OTHERWISE SPECIFIED.
2. ALL SIGNS TO CONFORM TO PATH FOUNDATION SPECIFICATIONS. REFER TO 5/SM-03.

NOT IN CONTRACT

2 SM-03 DIRECTIONAL SIGN

SCALE: 1/2" = 1'-0"



CONSTRUCTION KEY:

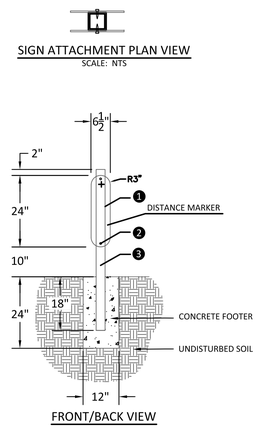
1. 1/4" THICK ALUMINUM PANEL.
2. (2) 3"X3" ALUMINUM POSTS, POWDER COATED BLACK WITH (2) 2"X2", 21" LONG ALUMINUM BRACKET WELDED TO POST
3. (2) L-CHANNEL BRACKET, MIN. 49" LONG, ATTACHED TO POST AS SHOWN, USING 2" LONG, 1/2 STAINLESS STEEL #14A BUTTON HD TORX SECURITY METAL SCREW.
4. ATTACH SIGN PANEL TO FRONT OF L-CHANNEL BRACKET WITH LOCTITE® AA H4500 ADHESIVE.

NOTES:
1. ALL METAL TO BE ALUMINUM POWDER COATED BLACK UNLESS OTHERWISE SPECIFIED.
2. ALL SIGNS TO CONFORM TO PATH FOUNDATION SPECIFICATIONS. REFER TO 5/SM-03.

NOT IN CONTRACT

3 SM-03 KIOSK SIGN

SCALE: 1/2" = 1'-0"



CONSTRUCTION KEY:

1. 1/8" THICK ALUMINUM PANEL.
2. (2) DISTANCE MARKER SIGN PANELS ATTACHED TO POST USING (2) 1" LONG, 1/4 DIA., STAINLESS STEEL #14A BUTTON HD TORX SECURITY METAL SCREW.
3. (1) 3"X3" ALUMINUM POST, POWDER COATED BLACK.

NOT IN CONTRACT

NOTES:
1. ALL METAL TO BE ALUMINUM POWDER COATED BLACK UNLESS OTHERWISE SPECIFIED.
2. ALL SIGNS TO CONFORM TO PATH FOUNDATION SPECIFICATIONS. REFER TO 5/SM-03.
3. SIGN PANEL DIMENSIONS SHOWN FOR STAND-ALONE DISTANCE MARKER ONLY. REFER TO SIGNING AND MARKING PLANS FOR DETAILS

4 SM-03 DISTANCE MARKER

SCALE: 1/2" = 1'-0"

PATH FOUNDATION SIGN SPECIFICATIONS

1. ALUMINUM SIGN BLANKS SHOULD MEET REQUIREMENTS OF GEORGIA DOT SECTION 912--SIGN BLANKS AND PANELS. ALL SIGNS TO BE MADE WITH AT LEAST 0.125-INCH THICK ALUMINUM USING METAL THAT MEETS THE REQUIREMENTS OF ASTM B 209 (B 209M), ALLOY 6061-T-6 OR 5052-H38.

2. SIGNS LOCATED WITHIN RIGHT-OF-WAY SHALL USE RETROREFLECTIVE VINYL WITH AT LEAST 10-YEAR LIFE EXPECTANCY AND FOLLOW THE FEDERAL HIGHWAY ADMINISTRATION (FHA) MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) SPECIFICATIONS. PLEASE SEE THE FOLLOWING TABLE FOR RECOMMENDED PRODUCTS FOR RETROREFLECTIVE VINYL SIGNS WITHIN THE RIGHT-OF-WAY:

RETRO REFLECTIVE VINYL

PRODUCT NAME	LIFE EXPECTANCY
3M™ High Intensity Reflective Sheeting	10YR
ORALITE® 5800 High Intensity Grade Reflective Sheeting	10YR
OTHER PRODUCTS MUST BE APPROVED BY PATH PROJECT MANAGEMENT BEFORE USE	AT LEAST 10YR

ALL REFLECTIVE SIGNS MUST INCLUDE ANTI-GRAFFITI LAMINATE OF AT LEAST 10-YEAR LIFE EXPECTANCY. PLEASE SEE THE FOLLOWING TABLE FOR RECOMMENDED PRODUCTS FOR ANTI-GRAFFITI LAMINATE:

ANTI-GRAFFITI FILMS:

PRODUCT NAME	LIFE EXPECTANCY
3M™ Protective Overlay Film Series 1160	10YR
OTHER PRODUCTS MUST BE APPROVED BY PATH PROJECT MANAGEMENT BEFORE USE	AT LEAST 10YR

3. ALL SIGNS MUST HAVE AT LEAST 10-YEAR LIFE EXPECTANCY, INCLUDING ANY CUSTOM TEXT AND GRAPHICS ON SIGNS. IF SIGN INCLUDES CUSTOM TEXT AND GRAPHICS ON ONLY ONE FACE, THEN THE BACK PANEL MUST BE BLACK WITH AT LEAST 10-YEAR LIFE EXPECTANCY. PLEASE SEE THE FOLLOWING TABLE FOR RECOMMENDED PRODUCTS FOR CUSTOM TEXT AND GRAPHICS:

CUSTOM TEXT AND GRAPHICS:

PRODUCT NAME	LIFE EXPECTANCY
Direct Print to Aluminum with Grip Gard BC System with satin, anti-graffiti clear-coat	10YR
OTHER PRODUCTS MUST BE APPROVED BY PATH PROJECT MANAGEMENT BEFORE USE	AT LEAST 10YR

4. ALL SIGNS MUST BE PRINTED WITH NAME BRAND INKS FROM THE PRINTING EQUIPMENT MANUFACTURER FOR THE PRINTER USED TO CREATE THE SIGN.

5. ON STANDARD SIGNS, THE BLACK BORDER IS INSET 3/8" FROM EACH EDGE. THE THICKNESS OF THE BLACK BORDER IS ALSO ¼", OR 18 POINT. SIGNS AT OR LARGER THAN 24" X 36" MAY COME FROM THE ARCHITECTURAL FIRM WITH LARGER BORDERS. THESE BORDERS MUST BE CONSISTENT ON ALL FOUR EDGES AND MATCH STANDARD DIE CUT CURVES ON THE CORNERS.

6. PATH GREEN IS 85 - 20 - 69 - 4 IN CMYK VALUES.
YELLOW ON PATH SIGNS IS 0 - 15 - 100 - 0.
OTHER COLORS WILL BE DETERMINED FROM THE VECTOR FILES IN THE SIGN MATRIX.

SIGN MANUFACTURERS:

1. Henry Graphics - Cody Gibson 404-443-4787
cgibson@henrygraphics.com
www.henrygraphics.comQ

2. Option Signs - Dan Reynolds 770-569-5871
dreynolds@optionsigns.com
www.optionsigns.com

3. Capital Signs - Philip Panos 770-564-8582
philip@capitalsigns.com
www.capitalsigns.com

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	DATE	DESCRIPTION

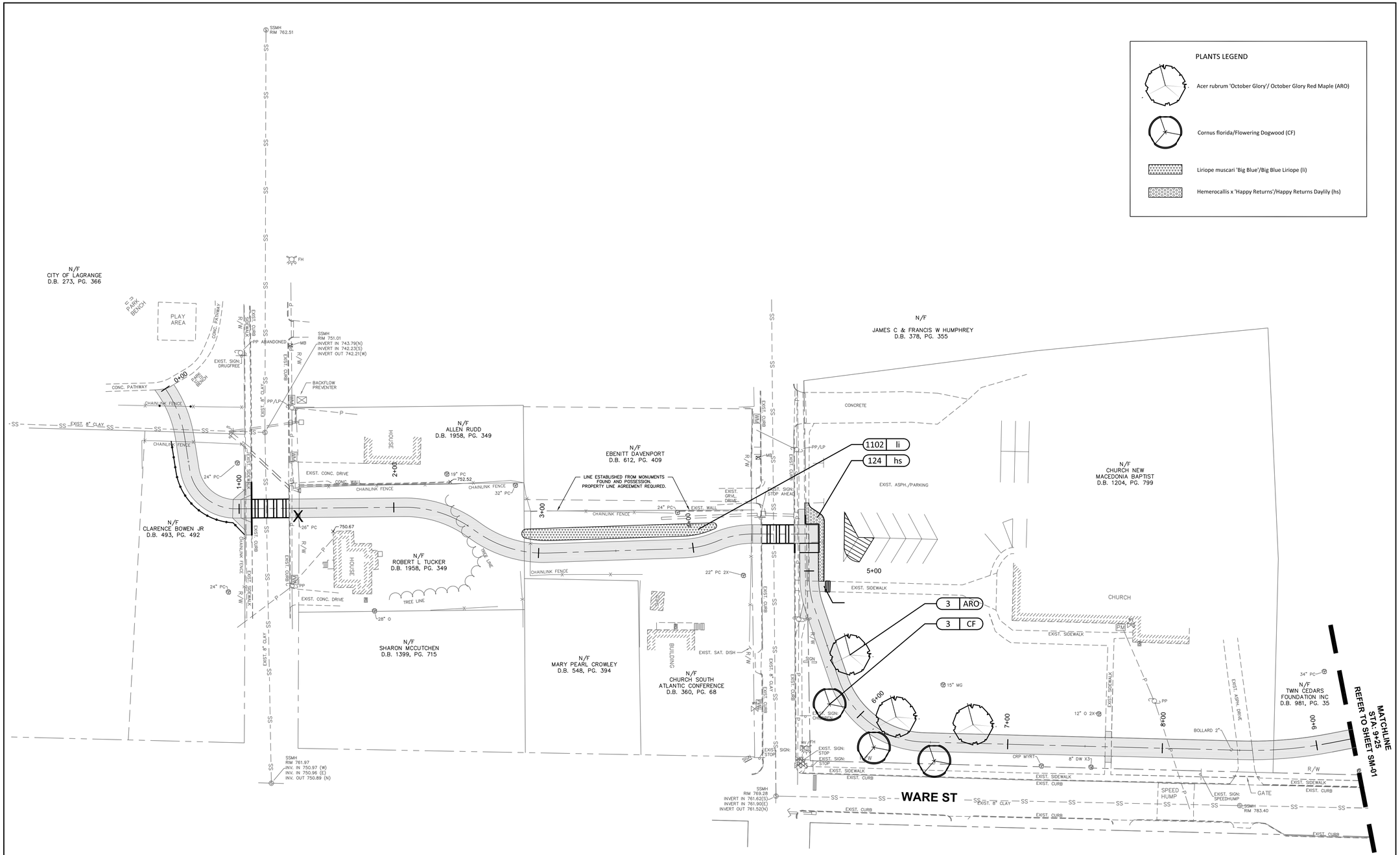
PROJECT #	2019 - 174
PROJECT MANAGER	GGD

LaGRANGE THREAD PHASE 5
CALUMET TO DANIEL ST
LaGRANGE, GA

GEORGIA REGISTERED No. 1251 PROFESSIONAL LANDSCAPE ARCHITECT GRETA G. GEMRIG
5/10/2019

SIGNING & MARKING DETAILS

SCALE	AS SHOWN
DATE	MAY 10, 2019
SHEET #	**SM-03**



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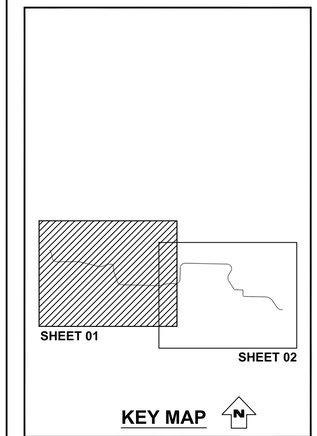


	DATE	DESCRIPTION

PROJECT #	2019 - 174
PROJECT MANAGER	GGD

LaGRANGE THREAD PHASE 5
CALUMET TO DANIEL ST
LaGRANGE, GA

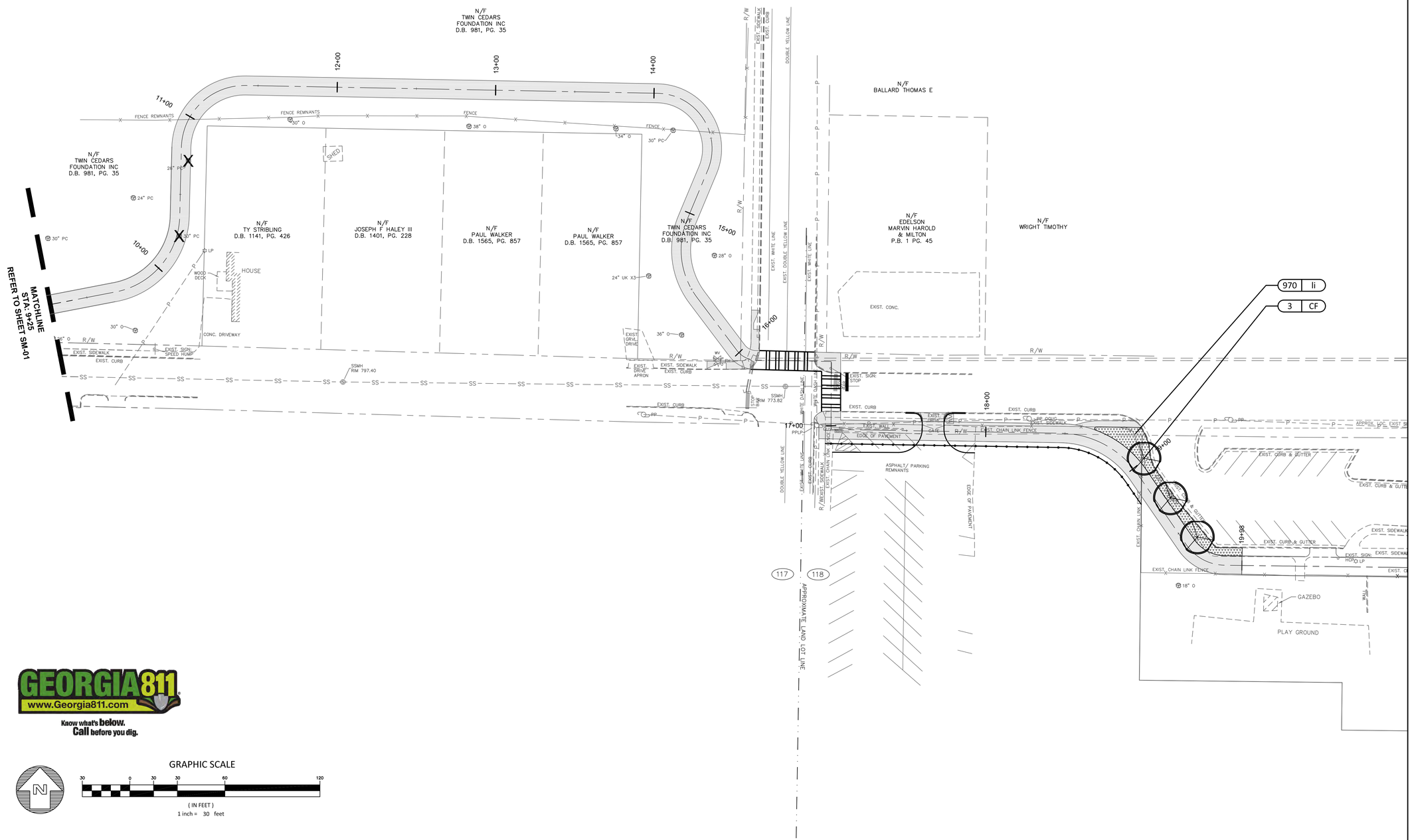
GEORGIA REGISTERED No. 1281 PROFESSIONAL LANDSCAPE ARCHITECT RETA G. deMAIO
5/10/2019

LANDSCAPE PLAN

SCALE	1"=30'-0"
DATE	MAY 10, 2019
SHEET #	**LP-01**

PLANTS LEGEND

- Acer rubrum 'October Glory'/ October Glory Red Maple (ARO)
- Cornus florida/Flowering Dogwood (CF)
- Liriope muscari 'Big Blue'/Big Blue Liriope (li)
- Hemerocallis x 'Happy Returns'/Happy Returns Daylily (hs)



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GRAPHIC SCALE

30 0 30 30 60 120

(IN FEET)
1 inch = 30 feet

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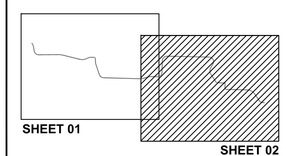


KEY MAP

	DATE	DESCRIPTION

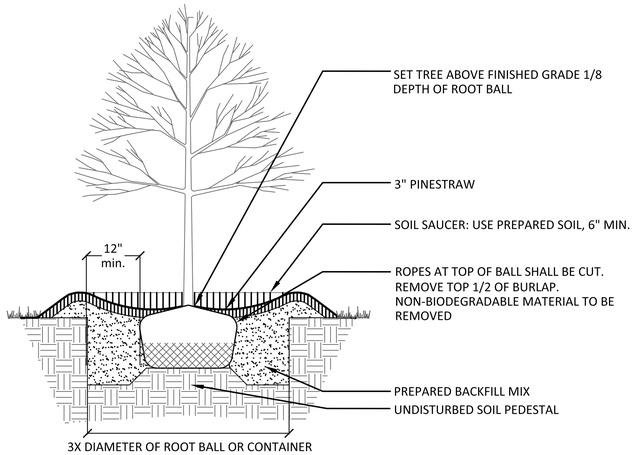
PROJECT #	2019 - 174
PROJECT MANAGER	GGD

LaGRANGE THREAD
PHASE 5
CALUMET TO DANIEL ST
LaGRANGE, GA

GEORGIA REGISTERED No. 1051 PROFESSIONAL LANDSCAPE ARCHITECT GRETA G. DEMARO 5/10/2019

LANDSCAPE PLAN

SCALE	1"=30'-0"
DATE	MAY 10, 2019
SHEET #	**LP-02**



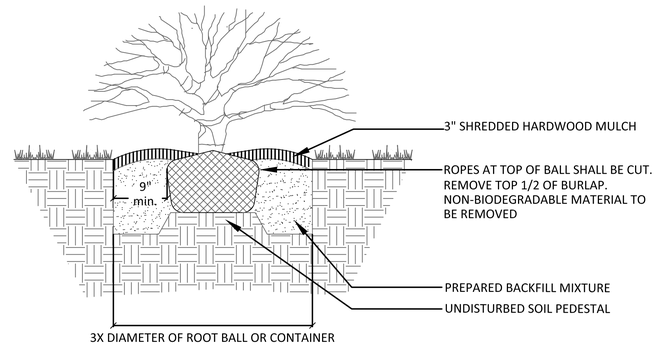
1 LD-01

TREE PLANTING DETAIL

SCALE: 3/4" = 1'-0"

NOTE:

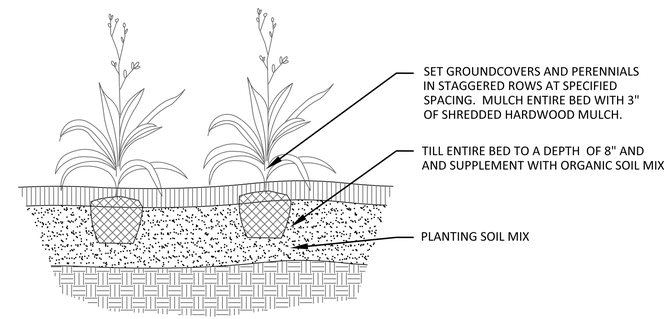
FOR CONTAINER GROWN SHRUBS CUT BOUND ROOTS VERTICALY 3 TIMES TO PROMOTE PROPER ROOT GROWTH



2 LD-01

SHRUB PLANTING DETAIL

SCALE: 1" = 1'-0"

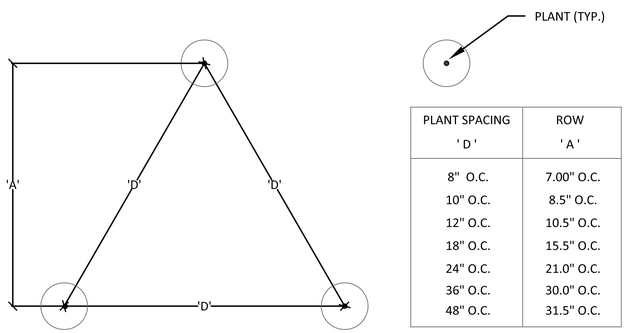


3 LD-01

GROUNDCOVER PLANTING DETAIL

SCALE: 1" = 1'-0"

NOTE:
GROUNDCOVERS AND PERENNIALS TO BE INSTALLED WITH TRIANGULAR SPACING.

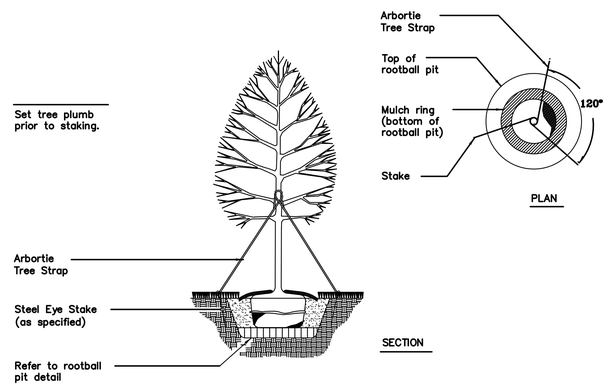


PLANT SPACING ' D '	ROW ' A '
8" O.C.	7.00" O.C.
10" O.C.	8.5" O.C.
12" O.C.	10.5" O.C.
18" O.C.	15.5" O.C.
24" O.C.	21.0" O.C.
36" O.C.	30.0" O.C.
48" O.C.	31.5" O.C.

4 LD-01

PLANT SPACING DIAGRAM

SCALE: NTS



5 LD-01

TYPICAL TREE STAKING DETAIL

SCALE: N.T.S.

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PLANT LIST

		TREES					
ARO	3	Acer rubrum 'October Glory'	October Glory Red Maple	3" cal.	As shown	B&B	Straight Trunk, Well Branched, Strong Central Leader
CF	6	Cornus florida	Flowering Dogwood	3" cal.	As shown	B&B	Straight Trunk, Well Branched, Strong Central Leader
		GROUNDCOVERS					
li	2074	Liriope muscari 'Big Blue'	Big Blue Liriope	1 gal.	12" o.c.		Full, Vigorous
hs	124	Hemerocallis x 'Happy Returns'	Happy Returns Daylily	1 gal.	18" o.c.		Full, Vigorous, Reblooming variety only
		MULCH					
			Pine Straw			Bale	Clean, Debris Free

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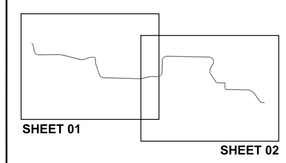

KEY MAP

	DATE	DESCRIPTION

PROJECT #	2019 - 174
PROJECT MANAGER	GGD

LaGRANGE THREAD
PHASE 5
CALUMET TO DANIEL ST
LaGRANGE, GA

GEORGIA REGISTERED No. 1081 PROFESSIONAL LANDSCAPE ARCHITECT GREG G. deMAYO 5/10/2019

LANDSCAPE DETAILS

SCALE	AS SHOWN
DATE	MAY 10, 2019
SHEET #	**LD-01**

GENERAL PLANTING NOTES

1. ALL PLANTS MUST BE HEALTHY, VIGOROUS MATERIAL, FREE OF PESTS & DISEASES.

2. ALL PLANTS MUST BE CONTAINER-GROWN, BALLED & BURLAPPED (B&B), OR OTHERWISE AS INDICATED IN THE PLANT LIST.

3. ALL TREES MUST BE STRAIGHT TRUNKED, FULL-HEADED & MEET ALL REQUIREMENTS SPECIFIED.

4. ALL PLANTS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT & THE OWNER BEFORE, DURING & AFTER INSTALLATION UNTIL THE DATE OF FINAL ACCEPTANCE.

5. ALL TREES OVER 8' HT MUST BE GUYED OR STAKED, UNLESS DETERMINED OTHERWISE BY OWNER. ARBORTIE, ARBORGUY, OR APPROVED EQUAL BLACK GUYING (POLYPROPYLENE MATERIAL) AND STAKING SYSTEM INSTALLED PER MANUFACTURER SPECIFICATIONS.

6. ALL PLANTS & PLANTING AREAS MUST BE COMPLETELY MULCHED AS PER SPECIFICATIONS. ALL PROPOSED TREES TO HAVE MINIMUM 6' DIAMETER MULCHED RING. ALL MULCH TO BE 3" SETTLED DEPTH OF CLEAN PINESTRAW, UNLESS INDICATED OTHERWISE.

7. PRIOR TO CONSTRUCTION, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES & SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF THE WORK. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY & ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT OF THE LANDSCAPE CONSTRUCTION.

8. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS BEFORE PRICING THE WORK. PLANT SYMBOLS ON THE LANDSCAPE PLAN SUPERCEDE QUANTITIES SHOWN IN THE PLANT LIST. IN SIZE GRADING B&B TREES, CALIPER SHALL TAKE PRECEDENT OVER HEIGHT. IN SIZE GRADING MULTI-STEM TREES, HEIGHT SHALL TAKE PRECEDENCE OVER CALIPER. THE LANDSCAPE CONTRACTOR MUST CONTACT THE LANDSCAPE ARCHITECT IF, THEY ENCOUNTER ON SITE, EXISTING CONDITIONS SIGNIFICANTLY DIFFERENT FROM THE PLAN.

9. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL PLANTING (INCLUDING, BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, FERTILIZING, ETC.) OF PLANTING AREAS & LAWNS UNTIL THE WORK IS ACCEPTED IN TOTAL BY THE LANDSCAPE ARCHITECT & THE OWNER.

10. ANY PLANT MATERIAL WHICH DIES, TURNS BROWN OR DEFOLIATES (PRIOR TO FINAL ACCEPTANCE OF THE WORK) SHALL BE PROMPTLY REMOVED FROM THE SITE & REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, SIZE AND MEETING ALL PLANT LIST SPECIFICATIONS.

11. THE LANDSCAPE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE (1) YEAR BEGINNING AT THE DATE OF FINAL ACCEPTANCE. THE LANDSCAPE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS BEFORE OR AT THE END OF THE GUARANTEE PERIOD (AS PER DIRECTION OF THE OWNER).

12. THE LANDSCAPE CONTRACTOR AGREES TO PERFORM ALL LANDSCAPE MAINTENANCE (INCLUDING WATERING) THROUGHOUT THE ONE YEAR GUARANTEE PERIOD UNLESS OTHERWISE DETERMINED.

13. AFTER BEING DUG AT THE NURSERY SOURCE, ALL TREES IN LEAF SHALL BE ACCLIMATED FOR TWO (2) WEEKS UNDER A MIST SYSTEM PRIOR TO INSTALLATION.

14. STANDARDS SET FORTH IN 'AMERICAN STANDARDS FOR NURSERY STOCK' REPRESENT GUIDELINE SPECIFICATIONS ONLY AND CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL. ALL PLANT MATERIAL SHALL BE GRADE 'A' OR BETTER.

15. ALL DISTURBED AREAS TO BE SODDED WITH BERMUDA UNLESS OTHERWISE NOTED. TEMPORARY GRASS TO BE A COMBINATION OF ANNUAL RYE AND FESCUE SEED. ALL SOD AREAS ARE TO BE FERTILIZED AND OVERSEEDED AT TIME OF INSTALLATION. ALL AREAS DESIGNATED FOR SOD MUST BE FINE GRADED. LEVEL ANY UNDULATIONS OR IRREGULARITIES, WHILE MAINTAINING POSITIVE DRAINAGE. HANDRAKE AND SMOOTH, REMOVING ALL ROCKS LARGER THAN 1" FROM THE SURFACE. USE METAL SCREEN OR WOODEN DRAG ON LARGER SURFACES. CONTACT THE LANDSCAPE ARCHITECT FOR AN INSPECTION OF THE FINE GRADED SURFACE, PRIOR TO ANY SOD INSTALLATION.

16. ALL BERMS ARE TO BE CONSTRUCTED OF CLEAN, FRIABLE, WELL DRAINED, TOPSOIL.

17. FOR ALL PROPOSED PLANTING AREA, LANDSCAPE CONTRACTOR TO REMOVE EXISTING VEGETATION, TILL AND ADD TOPSOIL AND FERTILIZER PRIOR TO INSTALLATION. CONTRACTOR SHALL REMOVE ALL PAVEMENT, GRAVEL SUB-BASE AND CONSTRUCTION DEBRIS. REMOVE COMPACTED SOIL, AND ADD 24" OF TOPSOIL; OR AMEND THE TOP 24" OF EXISTING SOIL TO MEET SPECIFICATIONS, UNLESS NOTED OTHERWISE.

18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE REMOVAL OF ALL BINDING CORDS AND ROPES/STRAPPING FROM THE TRUNKS OF ALL SHADE AND ORNAMENTAL TREES IMMEDIATELY AFTER PLANTING. IDENTIFICATION TAGS AND RIBBONS SHALL BE REMOVED FROM ALL PLANT MATERIAL AT THE TIME OF PLANTING. TREE BASKETS SHALL BE CUT FROM THE TOP 1/4 OF THE ROOT BALL PRIOR TO PLANTING.

19. ALL AREAS DISTURBED BY CONSTRUCTION ARE TO BE RE-SET TO FINAL GRADE AND VEGETATED PER CONSTRUCTION PLANS.

20. UNLESS OTHERWISE NOTED BY THE LANDSCAPE ARCHITECT, MEDIUM SPREADING SHRUBS SHALL BE PLANTED NO CLOSER THAN 30" TO ANY ADJOINING WALL OR PAVED AREA. LARGE SPREADING SHRUBS SHALL BE PLANTED NO CLOSER THAN 36" TO ANY ADJOINING WALL OR PAVED AREA.

21. THE PLANTING SOIL FOR SHRUBS WILL CONSIST OF 33% GROUND PINE BARK HUMUS, WELL-MIXED WITH 67% OF IMPROVED SOIL; WHICH IS, EXCAVATED SOIL WITH ROCKS, CLUMPS, AND DEBRIS GREATER THAN 2" IN DIAMETER REMOVED. NO ADDITIONAL SOIL AMMENDMENTS ARE REQUIRED FOR TREES. GROUNDCOVER AND PERENNIAL BEDS SHALL BE PREPARED AND AMENDED ACCORDING TO SPECIFICATIONS.

22. MINIMUM (9) SQ. FT. PLANTING AREA PROVIDED FOR EACH TREE.

23. SEEDING RATE FOR BERMUDA SEED ON DISTURBED AREAS IS 1.5 LBS PER 1000 SQUARE FEET.

24. ALL PARKING ISLANDS AND LANDSCAPE BEDS ARE REQUIRED TO HAVE A GRANULAR PRE-EMERGENT HERBICIDE APPLIED TO AID WITH WEED CONTROL.

BUILDERS NOTES:

BY THIS AGREEMENT WITH THE OWNER, THE LANDSCAPE ARCHITECT HAS UNDERTAKEN A LIMITED SCOPE OF PROFESSIONAL SERVICES. THE CONSTRUCTION DOCUMENTS PROVIDED BY THE LIMITED SERVICES SHALL BE TERMED "BUILDERS PLANS" IN RECOGNITION OF THE SOPHISTICATION OF THE LANDSCAPE CONTRACTOR. CONSTRUCTION WILL REQUIRE THAT THE LANDSCAPE CONTRATOR ADAPT THE "BUILDER'S PLANS" TO THE FIELD CONDITIONS ENCOUNTERED AND MAKE LOGICAL ADJUSTMENTS IN FIT, FORM, DIMENSIONS AND QUANTITY THAT ARE TREATED ONLY GENERALLY BY THE "BUILDERS PLANS." IN THE EVENT THAT CLARIFICATION IS NEEDED FOR ANY DRAWING CONTAINED IN THIS SET, IT SHALL BE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO BRING IT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT. THE GENERAL CONTRACTOR AND HIS/HER SUBCONTRACTORS SHALL CONSTRUCT THIS PROJECT IN COMPLIANCE WITH ANY AND ALL APPLICABLE CODES.

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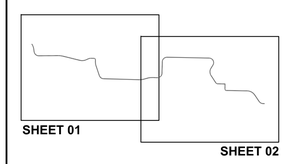


KEY MAP

	DATE	DESCRIPTION

PROJECT #	2019 - 174
PROJECT MANAGER	GGD

LaGRANGE THREAD
PHASE 5
CALUMET TO DANIEL ST
LaGRANGE, GA

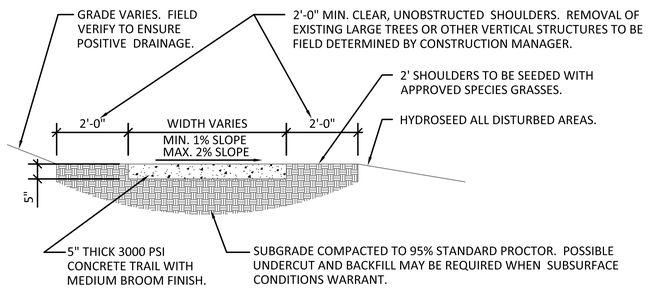
LANDSCAPE NOTES

SCALE	AS SHOWN
DATE	MAY 10, 2019
SHEET #	**LD-02**

NOTES:
1) 4"x (TRAIL WIDTH) ALTERNATING YELLOW CENTERLINE STRIPING TO BE INSTALLED ALONG ENTIRE LENGTH OF TRAIL CENTERLINE.

2) CONTRACTOR TO SAW CUT CONTROL JOINT AT LEAST 1/4 DEPTH OF SLAB ACROSS ENTIRE WIDTH OF TRAIL. CONTROL JOINTS TO BE LOCATED THE SAME DISTANCE APART AS THE WIDTH OF TRAIL (I.E. 12' WIDE TRAIL TO HAVE CONTROL JOINTS EVERY 12' ALONG TRAIL). CONTRACTOR REQUIRED TO REMOVE SAW DUST AFTER CUTTING.

3) EXPANSION JOINTS TO BE LOCATED ALONG TRAIL MIN. EVERY 100' IN PLACE OF CONTROL JOINT.



1 / CD-01 **TRAIL CROSS SECTION**
SCALE: 1/2" = 1'-0"

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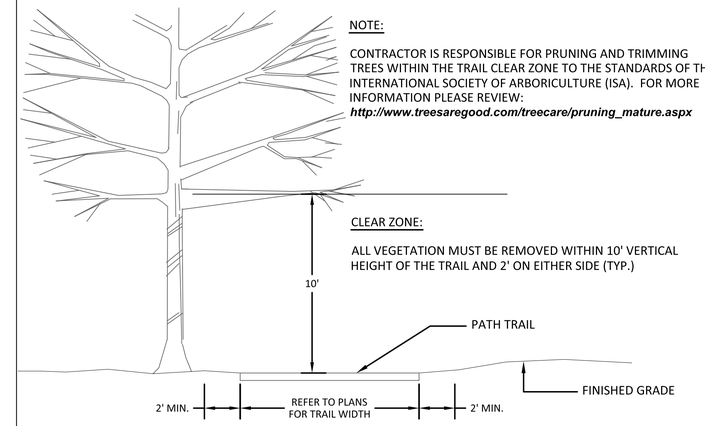


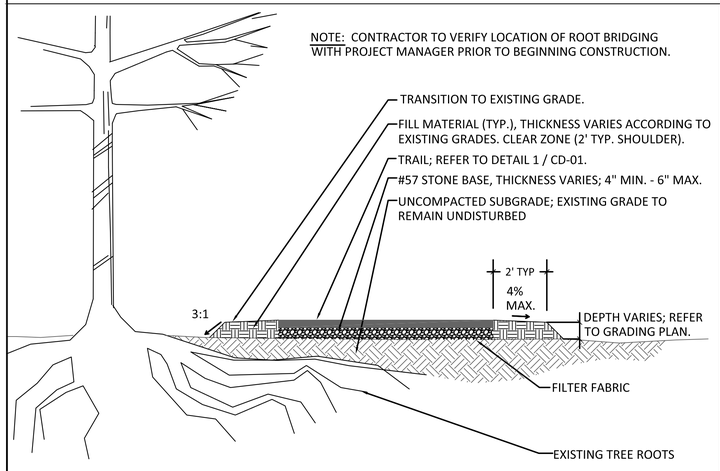
NOTE:

CONTRACTOR IS RESPONSIBLE FOR PRUNING AND TRIMMING TREES WITHIN THE TRAIL CLEAR ZONE TO THE STANDARDS OF THE INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA). FOR MORE INFORMATION PLEASE REVIEW:
http://www.treesaregood.com/treecare/pruning_mature.aspx

CLEAR ZONE:

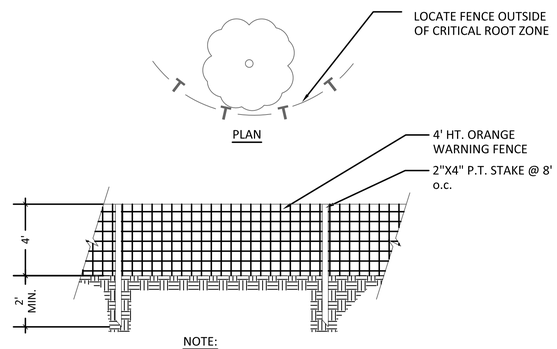
ALL VEGETATION MUST BE REMOVED WITHIN 10' VERTICAL HEIGHT OF THE TRAIL AND 2' ON EITHER SIDE (TYP.)

3 / CD-01 **CLEAR ZONE**
SCALE: 1/4" = 1'-0"



NOTE: CONTRACTOR TO VERIFY LOCATION OF ROOT BRIDGING WITH PROJECT MANAGER PRIOR TO BEGINNING CONSTRUCTION.

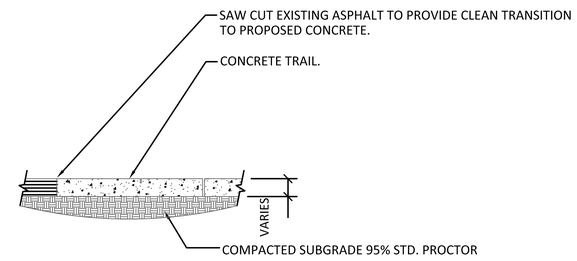
4 / CD-01 **ROOT BRIDGING**
SCALE: 1/4" = 1'-0"



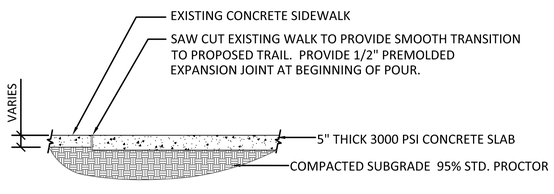
NOTE:

PROVIDE FENCE AS SHOWN ON PLAN. PROVIDE AT LEAST ONE FOOT OF DISTANCE FROM TREE TO FENCE FOR EACH INCH OF TREE DBH, WHERE DBH REFERS TO THE TREE DIAMETER MEASURED AT 4.5' ABOVE THE GROUND.

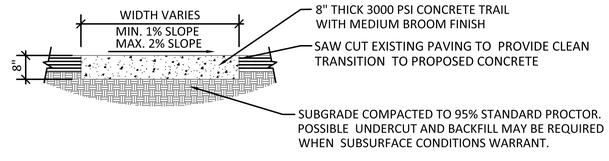
5 / CD-01 **TREE PROTECTION FENCE**
SCALE: 1/4" = 1'-0"



6 / CD-01 **ASPHALT STREET/TRAIL TRANSITION**
SCALE: 1/2" = 1'-0"



7 / CD-01 **EXISTING WALK/TRAIL TRANSITION**
SCALE: 1/2" = 1'-0"



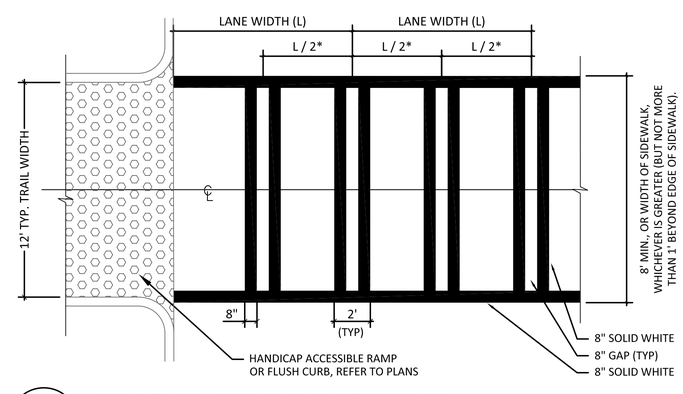
NOTE:

WHEN EXISTING PAVING IS GRAVEL, CONTRACTOR SHALL PROVIDE 3' OF TRANSITIONAL CONCRETE ALONG EACH SIDE OF THE HEAVY DUTY CONCRETE AS THE TRAIL CROSSED THE ROADBED.

8 / CD-01 **HEAVY DUTY CONCRETE DETAIL**
SCALE: 1/2" = 1'-0"

NOTES:
1. ALL CROSSWALK MARKINGS TO BE ALKYO THERMOPLASTIC WITH CLEAN CUT EDGES (TYP.). CONFORM TO GDOT STANDARD SPECIFICATIONS FOR INSTALLATION, COLOR, AND FINISH.

*USE 5' FOR (L / 2) WHEN LANE WIDTH EXCEEDS 12', OR WHERE LANE LINES HAVE BEEN OMITTED.



9 / CD-01 **GDOT CROSSWALK STRIPING**
SCALE: 1/4" = 1'-0"

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E-MAIL: mailbox@georgiaandwest.com

	DATE	DESCRIPTION

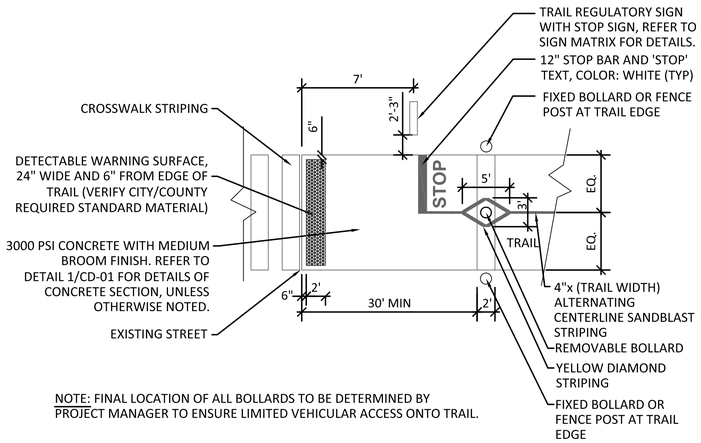
PROJECT #	2019 - 174
PROJECT MANAGER	GGD

LaGRANGE THREAD PHASE 5
CALUMET TO DANIEL ST
LaGRANGE, GA

GEORGIA REGISTERED No. 1081 PROFESSIONAL LANDSCAPE ARCHITECT GERETA G. deMAYO 5/10/2019

CONSTRUCTION DETAILS

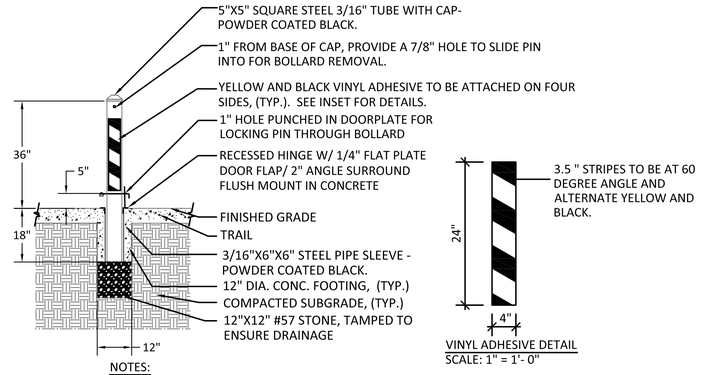
SCALE	VARIES
DATE	MAY 10, 2019
SHEET #	**CD-01**



NOTE: FINAL LOCATION OF ALL BOLLARDS TO BE DETERMINED BY PROJECT MANAGER TO ENSURE LIMITED VEHICULAR ACCESS ONTO TRAIL.

1 / CD-02 STANDARD INTERSECTION: PLAN VIEW

SCALE: 1/8" = 1'-0"

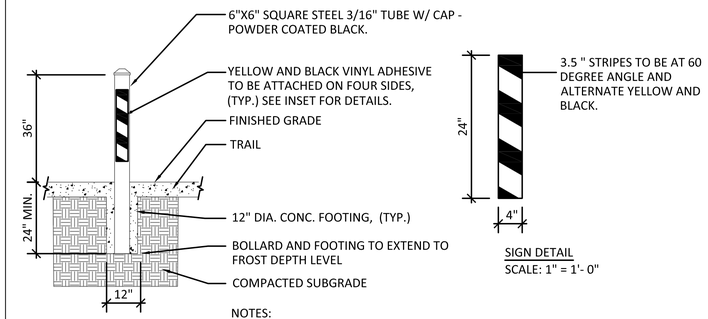


VINYL ADHESIVE DETAIL
SCALE: 1" = 1'- 0"

NOTES:
1. CONTRACTOR TO SUBMIT SHOP DRAWINGS TO PROJECT MANAGER FOR APPROVAL PRIOR TO CONSTRUCTION.
2. ALL METAL TO BE POWDER COATED BLACK UNLESS OTHERWISE SPECIFIED.
3. VINYL ADHESIVE TO BE 3M 3930 HIGH INTENSITY REFLECTIVE VINYL WITH 3M 1160 OVER LAMINATE.
4. ALL BOLLARDS TO BE FIELD LOCATED BY PROJECT MANAGER.

2 / CD-02 REMOVABLE DOOR PLATE BOLLARD

SCALE: 1/2" = 1'-0"

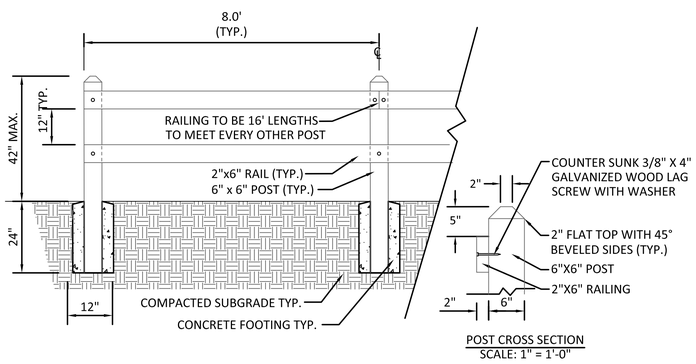


SIGN DETAIL
SCALE: 1" = 1'- 0"

NOTES:
1. CONTRACTOR TO SUBMIT SHOP DRAWINGS TO PROJECT MANAGER FOR APPROVAL PRIOR TO CONSTRUCTION.
2. VINYL ADHESIVE TO BE 3M 3930 HIGH INTENSITY REFLECTIVE VINYL WITH 3M 1160 OVER LAMINATE.
3. ALL BOLLARDS TO BE FIELD LOCATED BY PROJECT MANAGER

3 / CD-02 FIXED BOLLARD

SCALE: 1/2" = 1'-0"

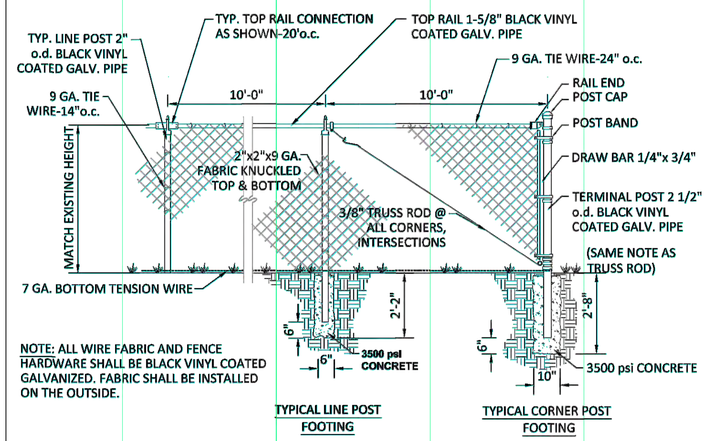


POST CROSS SECTION
SCALE: 1" = 1'-0"

NOTES:
1. FENCE TO BE CONSTRUCTED WITH PRESSURE TREATED WOOD.
2. RAILING TO MEET FLUSH WITH OUTSIDE EDGE OF LAST POST.
3. REFER TO CONSTRUCTION PLANS FOR FENCE LOCATIONS.

4 / CD-02 2 PANEL WOOD FENCE

SCALE: 1/2" = 1'-0"



NOTE: ALL WIRE FABRIC AND FENCE HARDWARE SHALL BE BLACK VINYL COATED GALVANIZED. FABRIC SHALL BE INSTALLED ON THE OUTSIDE.

5 / CD-02 BLACK VINYL-COATED CHAINLINK FENCING

N.T.S.

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	DATE	DESCRIPTION

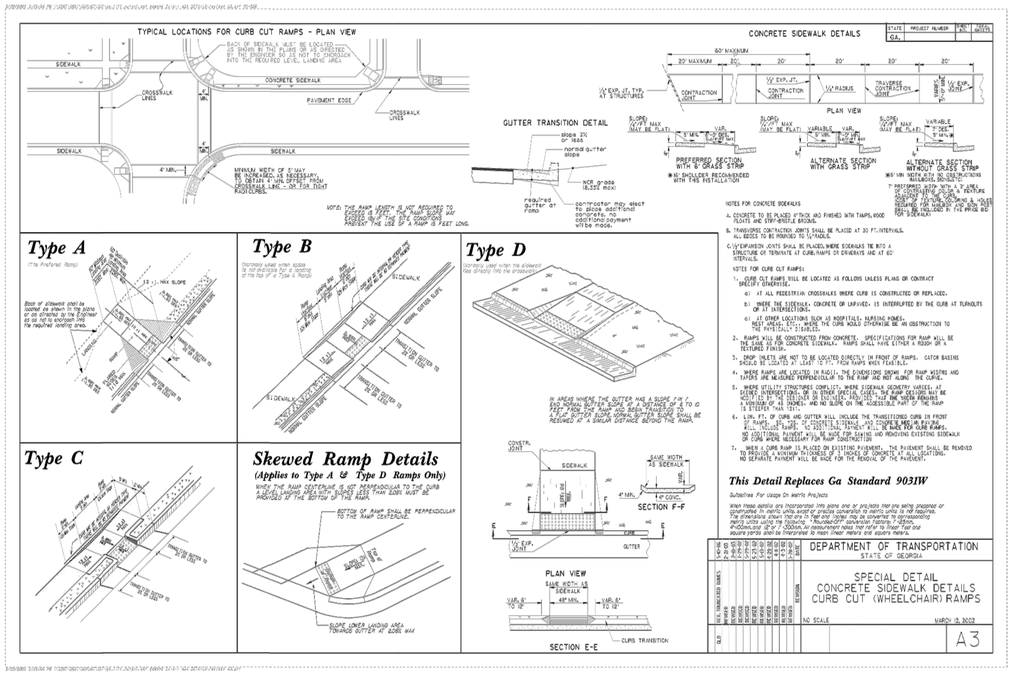
PROJECT #	2019 - 174
PROJECT MANAGER	GGD

LaGRANGE THREAD PHASE 5
CALUMET TO DANIEL ST
LaGRANGE, GA

GEORGIA REGISTERED No. 1251 PROFESSIONAL LANDSCAPE ARCHITECT GRETA G. GRIMES
5/10/2019

CONSTRUCTION DETAILS

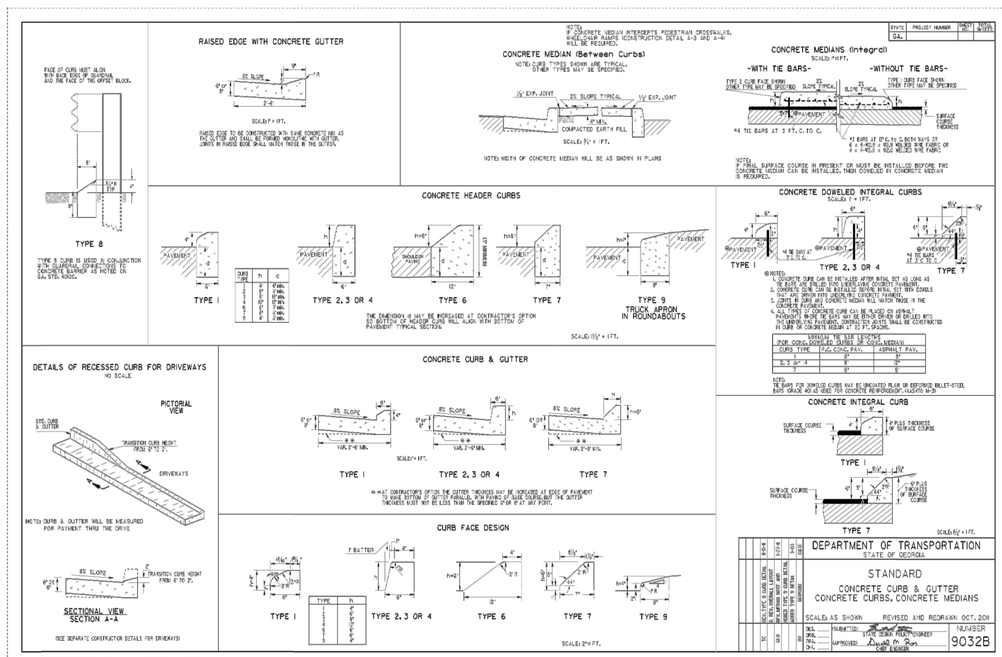
SCALE	VARIES
DATE	MAY 10, 2019
SHEET #	**CD-02**



1 CD-03

GDOT ADA RAMPS

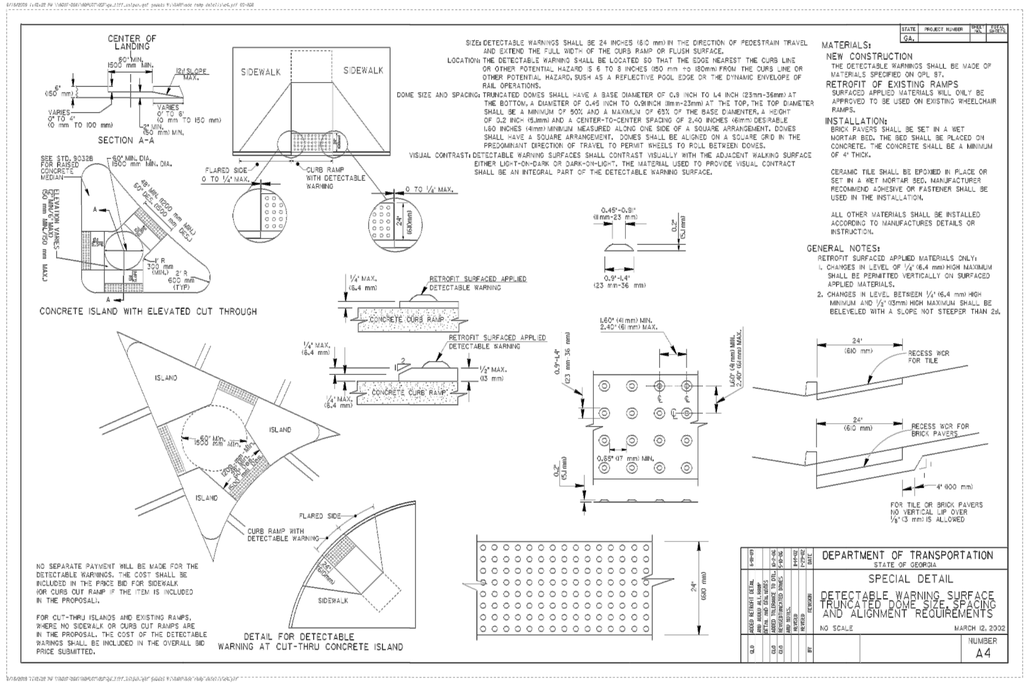
N.T.S.



2 CD-03

GDOT STD. CURB & GUTTER

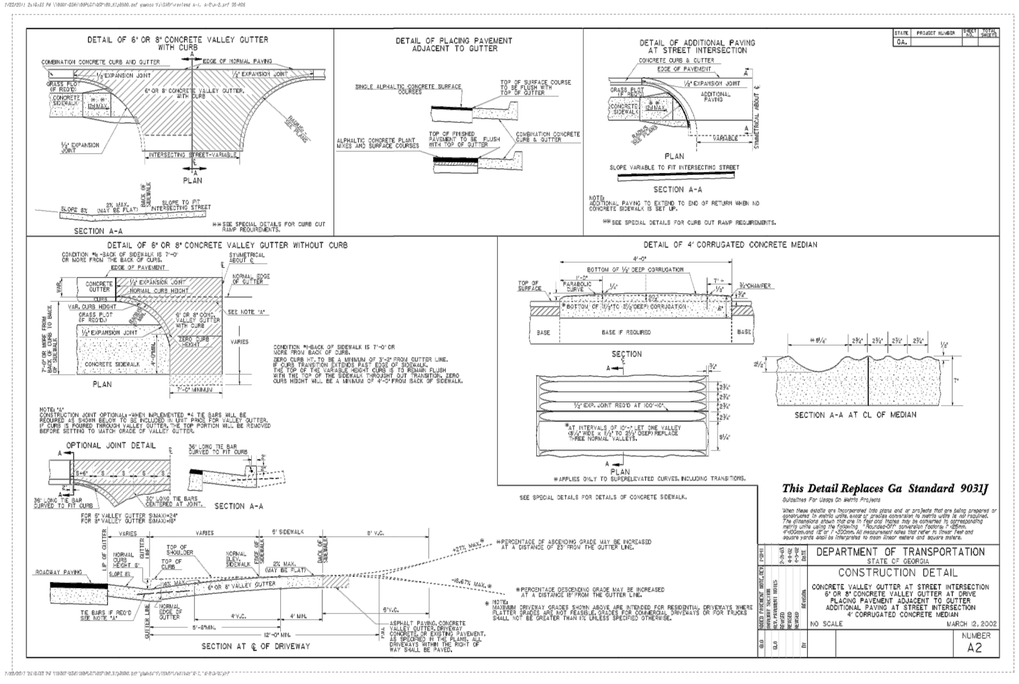
N.T.S.



3 CD-03

GDOT DETECTABLE WARNING SURFACE

N.T.S.



4 CD-03

GDOT CONCRETE VALLEY GUTTER

N.T.S.

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	DATE	DESCRIPTION

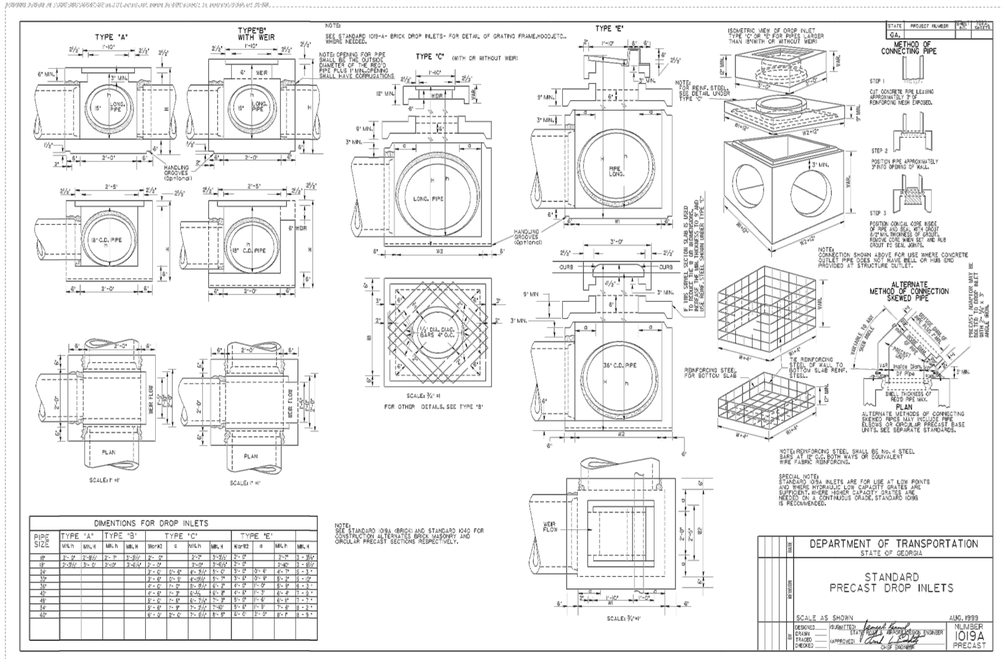
PROJECT #	2019 - 174
PROJECT MANAGER	GGD

LaGRANGE THREAD
PHASE 5
CALUMET TO DANIEL ST
LaGRANGE, GA

GEORGIA REGISTERED No. 1051 PROFESSIONAL ENGINEER GRETA G. GEMMO 5/10/2019

CONSTRUCTION DETAILS

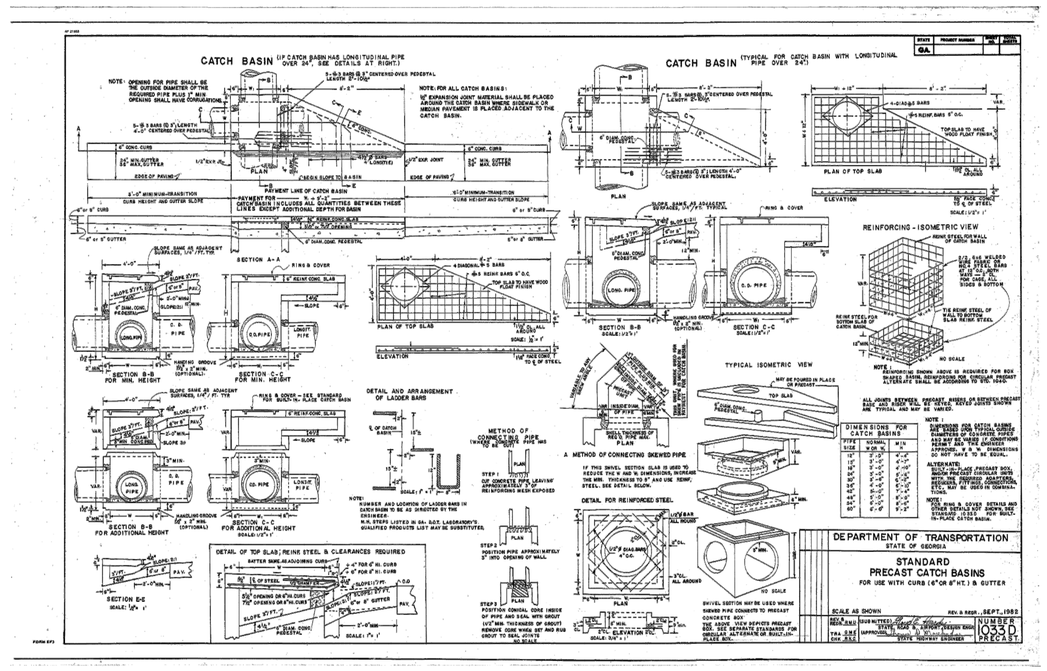
SCALE	VARIES
DATE	MAY 10, 2019
SHEET #	**CD-03**



1 CD-04

GDOT STD. PRECAST DROP INLETS

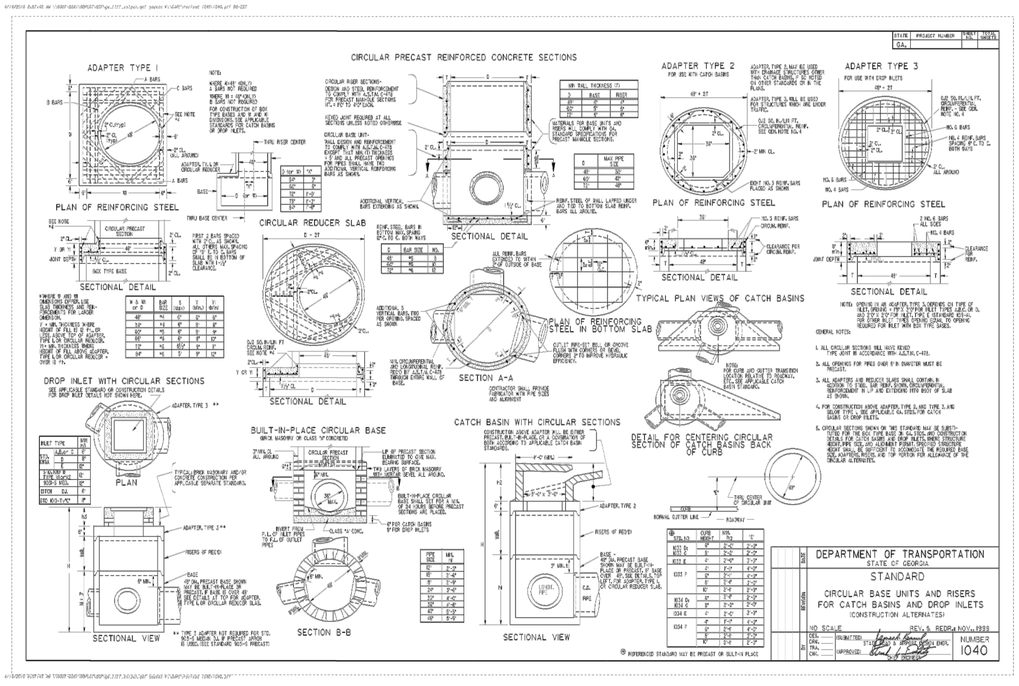
N.T.S.



2 CD-04

GDOT STD. PRECAST CATCH BASINS

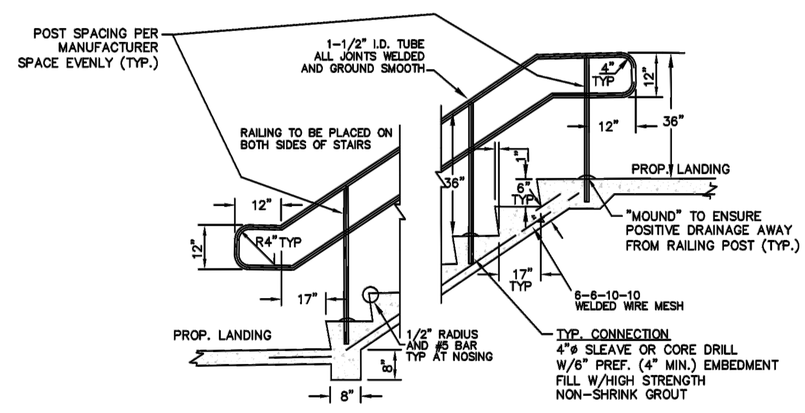
N.T.S.



3 CD-04

GDOT STD. BASE UNITS AND RISERS

N.T.S.



FINAL DESIGN & SHOP DRAWINGS OF HANDRAIL TO BE PROVIDED BY RAILING MANUFACTURER. RAILING SHALL COMPLY WITH ADA STANDARDS FOR ACCESSIBLE DESIGN, LATEST EDITION.

SEE PLAN FOR RISER & TREAD DIMENSIONS
FIELD VERIFY STAIRCASE RISER & TREAD DIMENSIONS PRIOR TO CONSTRUCTION

RAILS & POSTS TO BE 1-1/2" I.D. PIPE (POWDER COATED BLACK)

4 CD-04

STAIRS WITH RAILING

N.T.S.

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	DATE	DESCRIPTION

PROJECT #	2019 - 174
PROJECT MANAGER	GGD

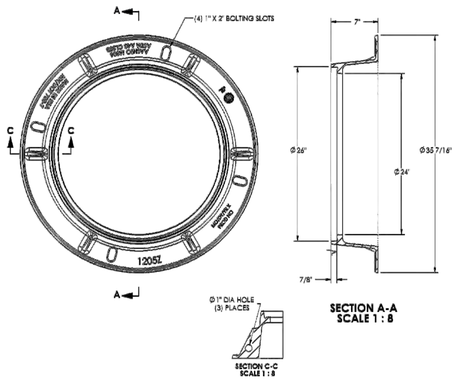
LaGRANGE THREAD
PHASE 5
CALUMET TO DANIEL ST
LaGRANGE, GA

GEORGIA REGISTERED No. 1081 PROFESSIONAL ENGINEER KRETA G. GEMMO 5/10/2019

CONSTRUCTION DETAILS

SCALE	VARIES
DATE	MAY 10, 2019
SHEET #	**CD-04**

1205Z Frame



Product Number
00120511
Design Features
-Materials
Gray Iron (CL35B)
-Design Load
Heavy Duty
-Open Area
n/a
-Coating
Undipped
-✓ Designates Machined Surface

Certification
-ASTM A48
-AASHTO M306
-
-Country of Origin: USA
Estimated Weight
118.0 lbs.

Drawing Revision
7/1/2008 Designer: BBB
4/17/2017 Revised By: MAH

Disclaimer
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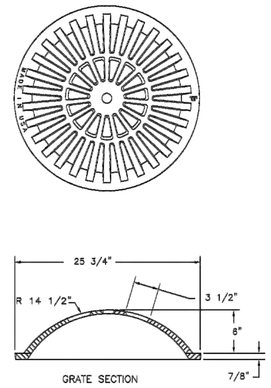
1 / CD-05 **26 INCH FRAME**

N.T.S.

1205 O2 Grate



Product Number
00120545
Design Features
-Materials
Gray Iron (CL35B)
-Design Load
Heavy Duty
-Open Area
185 sq.in
-Coating
Undipped
-✓ Designates Machined Surface

Certification
- ASTM A48
- AASHTO M306
-
-Country of Origin: USA

Drawing Revision
05/12/2008 Designer: DEW
01/08/2014 Revised By: DAE

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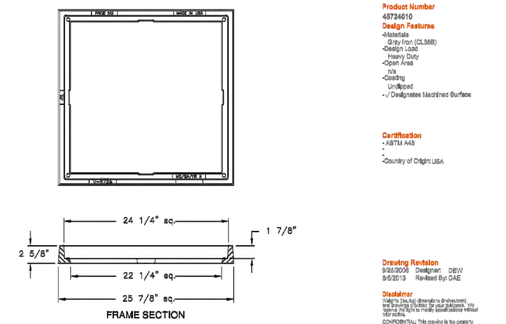
2 / CD-05 **26 INCH DOME GRATE**

N.T.S.

V5724 Frame



Product Number
46724010
Design Features
-Materials
Gray Iron (CL35B)
-Design Load
Heavy Duty
-Open Area
n/a
-Coating
Undipped
-✓ Designates Machined Surface

Certification
- ASTM A48
-
-Country of Origin: USA

Drawing Revision
9/25/2008 Designer: DEW
9/5/2013 Revised By: DAE

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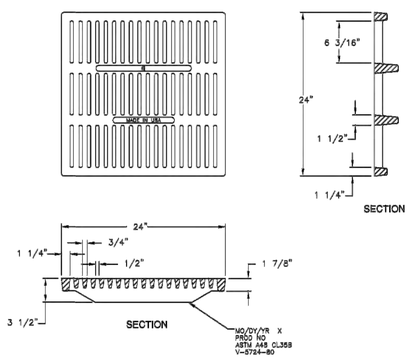
3 / CD-05 **24 INCH ADA FRAME**

N.T.S.

V5724-80 Grate



Product Number
46724803
Design Features
-Materials
Gray Iron (CL35B)
-Design Load
Heavy Duty
-Open Area
184 sq.in
-Coating
Undipped
-✓ Designates Machined Surface

Certification
- ASTM A48
- ADA
-Country of Origin: USA

Drawing Revision
08/20/2008 Designer: BBB
3/13/2014 Revised By: MAH

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4 / CD-05 **24 INCH ADA GRATE**

N.T.S.

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	DATE	DESCRIPTION

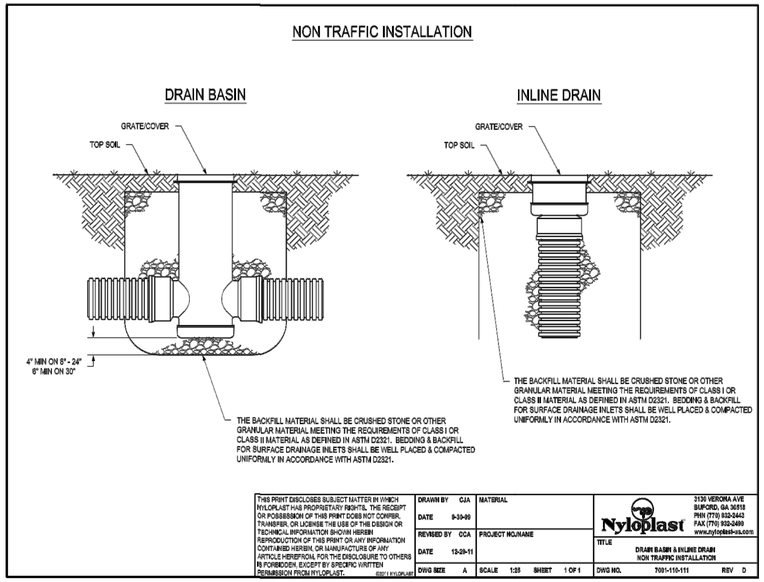
PROJECT #	2019 - 174
PROJECT MANAGER	GGD

LaGRANGE THREAD
PHASE 5
CALUMET TO DANIEL ST
LaGRANGE, GA

GEORGIA REGISTERED No. 1081 PROFESSIONAL ENGINEER GRETA G. DEMARO
5/10/2019

CONSTRUCTION DETAILS

SCALE	VARIES
DATE	MAY 10, 2019
SHEET #	**CD-05**

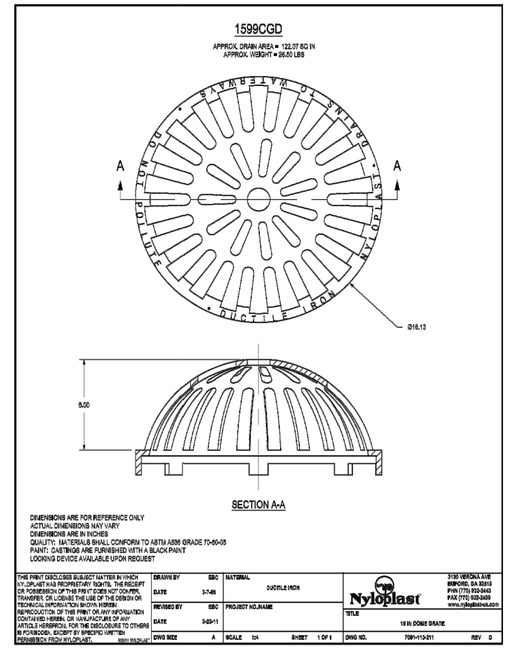


NYLOPLAST OR APPROVED EQUAL

1 / CD-06

DRAIN BASIN & INLINE DRAIN ASSEMBLY

N.T.S.

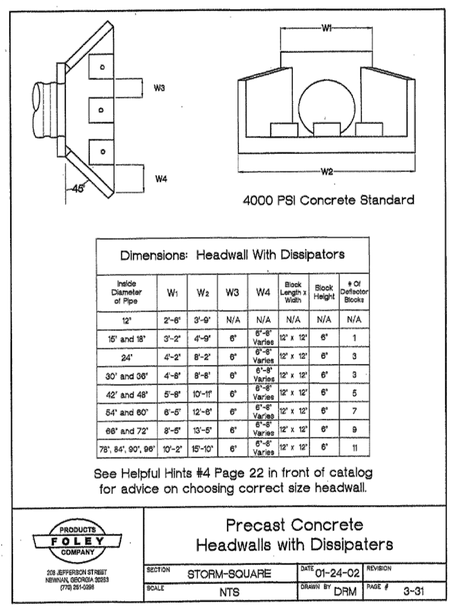


NYLOPLAST OR APPROVED EQUAL

2 / CD-06

15 INCH DOME GRATE

N.T.S.



FOLEY PRODUCTS OR APPROVED EQUAL

3 / CD-06

PRECAST CONCRETE HEADWALL

N.T.S.

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	DATE	DESCRIPTION

PROJECT #	2019 - 174
PROJECT MANAGER	GGD

LaGRANGE THREAD
PHASE 5
CALUMET TO DANIEL ST
LaGRANGE, GA

GEORGIA REGISTERED No. 1081 PROFESSIONAL ENGINEER
5/10/2019

CONSTRUCTION DETAILS

SCALE	VARIES
DATE	MAY 10, 2019
SHEET #	**CD-06**

EROSION CONTROL NOTES:

1. EROSION CONTROL DEVICES WILL BE PROPERLY INSTALLED, PRIOR TO SITE DISTURBANCE, AND MAINTAINED IN GOOD WORKING CONDITION UNTIL COMPLETION OF THE PROJECT.
2. ALL DISTURBED AREAS TO BE ESTABLISHED TO SUITABLE PERENNIAL VEGETATION, ACCORDING TO USDA SOIL CONSERVATION SERVICE OR GEORGIA EXTENSION SERVICE SPECIFICATIONS, IMMEDIATELY AFTER FINAL GRADING.
3. STREETS, SANITARY SEWERS, AND STORM SEWERS WILL BE INSTALLED AND BARE AREAS STABILIZED BEFORE OTHER AREAS ARE DISTURBED.
4. **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.**
5. EVERY EFFORT SHOULD BE MADE TO CONSERVE AND PROTECT NATURAL VEGETATION.
6. SEDIMENT BARRIERS WILL BE PLACE AT THE TOE OF ALL CUT AND FILL SLOPES AND AROUND ALL DROP INLETS; ALSO BELOW ALL LOT DISTURBANCES WHERE EROSIVE RUN-OFF MIGHT LEAVE THE SITE.
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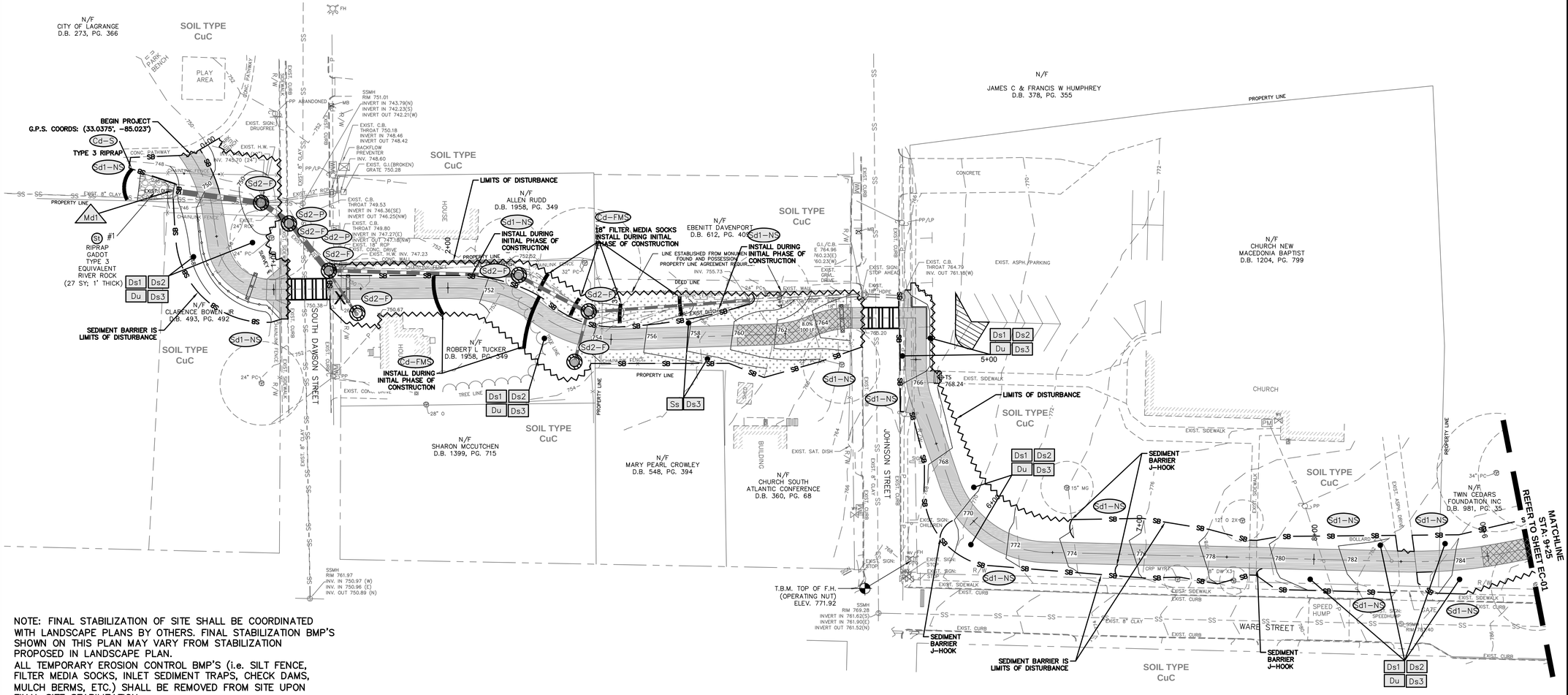
10. NON-COMPLIANT SITES CAN BE FINED UP TO $2,500.00 DOLLARS PER DAY, PER VIOLATION AS SET OUT BY THE EROSION AND SEDIMENT CONTROL ACT. THE GEORGIA WATER QUALITY CONTROL ACT PROVIDES FOR FINES UP TO $50,000.00 DOLLARS PER DAY, PER VIOLATION!!
11. NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.
12. WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.
13. THE PRIMARY PERMITTEE MUST RETAIN THE DESIGN PROFESSIONAL WHO PREPARED THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, EXCEPT WHEN THE PRIMARY PERMITTEE HAS REQUESTED IN WRITING AND THE EPD HAS AGREED TO AN ALTERNATE DESIGN PROFESSIONAL, TO INSPECT THE INSTALLATION OF THE CONTROL MEASURES (BMP's) WHICH THE DESIGN PROFESSIONAL DESIGNED WITHIN SEVEN (7) DAYS AFTER INSTALLATION.
14. ANY 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.
15. **24-HOUR CONTACT PERSON RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF EROSION CONTROL DEVICES AND MEASURES IS:**

PATH FOUNDATION
NAME: ..... ATTN: JONATHAN McCAIG
TELEPHONE #: 404-433-1900



NOTE: FINAL STABILIZATION OF SITE SHALL BE COORDINATED WITH LANDSCAPE PLANS BY OTHERS. FINAL STABILIZATION BMP'S SHOWN ON THIS PLAN MAY VARY FROM STABILIZATION PROPOSED IN LANDSCAPE PLAN.
ALL TEMPORARY EROSION CONTROL BMP'S (i.e. SILT FENCE, FILTER MEDIA SOCKS, INLET SEDIMENT TRAPS, CHECK DAMS, MULCH BERMS, ETC.) SHALL BE REMOVED FROM SITE UPON FINAL SITE STABILIZATION.

THE F.I.R.M. PANEL 13285C0142E DATE 07/03/2012 INDICATES THIS PROPERTY OR A PORTION IS NOT LOCATED IN A FLOOD HAZARD AREA. THE MAP INDICATES THAT NO STUDY WAS MADE OF THESE AREAS. THE FLOOD HAZARD LINES, IF SHOWN, ARE OUR INTERPRETATION OF THE FLOOD HAZARD AREA TAKING INTO CONSIDERATION EXISTING TOPOGRAPHIC DATA, DRAINAGE AREAS AND FIRM PANELS. THERE MAY BE OTHER INTERPRETATIONS THAT DIFFER FROM THOSE SHOWN.

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GRAPHIC SCALE
120 0 120 120 120 120
(IN FEET)
1 inch = 30 ft.

NOTE:
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TOTAL SITE AREA 1.15 ACRES
(TOTAL SITE AREA INCLUDES A WIDTH OF 25' ALONG THE CENTERLINE OF THE TRAIL FOR THE LENGTH OF THE PROJECT)
DISTURBED AREA 1.4 ACRES

NOTE: THIS PLAN PROPOSES NO MASS GRADING. INITIAL PERIMETER CONTROL BMPs, INTERMEDIATE GRADING AND DRAINAGE BMPs, AND FINAL BMPs REMAIN UNCHANGED FOR THE DURATION OF THE PROJECT AND ARE ALL SHOWN ON THIS SINGLE PHASE PLAN.

PRIMARY PERMITTEE:
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mkelsey@lagrangega.org

CONSTRUCTION MANAGEMENT
PATH FOUNDATION
JONATHAN McCAIG - 24 HOUR CONTACT
GA GSWCC LEVEL 1 CERTIFICATION # 58893
EXP. 08/17/2021
office 404-875-7284 x5 cell 404-433-1900

NOTES:
1. RE-FUELING TO BE DONE BY MOBILE FUELING VEHICLE. NO REFUELING SHALL BE DONE WITHIN 200 FEET OF STATE WATERS REQUIRING A BUFFER AND AS FAR AWAY FROM STORM DRAINS AS PRACTICAL. ANY SPILLS SHALL BE PROPERLY CLEANED UP IMMEDIATELY.
2. DUE TO THE NATURE OF THIS CONSTRUCTION PROJECT, CONSTRUCTION EXITS ARE NOT SPECIFICALLY LOCATED ON THE PLAN, CONTRACTOR SHALL MAKE EVERY EFFORT TO MINIMIZE TRACKING OF MUD, DIRT, OR ROCK ONTO THE ROADWAY. THIS MAY REQUIRE THE USE OF A PORTABLE WASHOUT AREA AT THE CONTRACTORS EXPENSE.
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5. ANY AND ALL WORK OUTSIDE THE RIGHT OF WAY SHALL REQUIRE PERMISSION FROM THE PROPERTY OWNER PRIOR TO CONSTRUCTION.
6. CONTRACTOR TO REPAIR ALL DISTURBED SURFACES TO PRE-CONSTRUCTION CONDITIONS OR BETTER.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING EROSION CONTROL BMP'S THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL NOTIFY DESIGN PROFESSIONAL OF ANY CHANGES TO THE PLAN THAT ARE NECESSARY DURING CONSTRUCTION.

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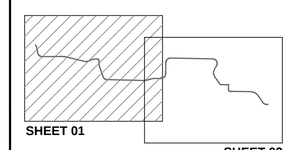

KEY MAP

DATE	DESCRIPTION

PROJECT #	2019 - 174
PROJECT MANAGER	GGD

LaGRANGE THREAD PHASE 5
CALUMET TO DANIEL ST
LaGRANGE, GA

GEORGIA REGISTERED PROFESSIONAL ENGINEER No. 034591 JOHN D. BASS
LEVEL II CERT. #17788
EXPIRES: 09-28-2021

EROSION CONTROL PLAN

SCALE	1"=30'
DATE	MAY 10, 2019
SHEET #	**EC-01**

O:\PROJECT FOLDERS\2019\190106_LAGRANGE THREAD-UNION ST TO DANIEL ST\DWG\190106_X-CONST.dwg, 5/10/2019 2:24:0

EROSION CONTROL NOTES:

1. EROSION CONTROL DEVICES WILL BE PROPERLY INSTALLED, PRIOR TO SITE DISTURBANCE, AND MAINTAINED IN GOOD WORKING CONDITION UNTIL COMPLETION OF THE PROJECT.
2. ALL DISTURBED AREAS TO BE ESTABLISHED TO SUITABLE PERENNIAL VEGETATION, ACCORDING TO USDA SOIL CONSERVATION SERVICE OR GEORGIA EXTENSION SERVICE SPECIFICATIONS, IMMEDIATELY AFTER FINAL GRADING.
3. STREETS, SANITARY SEWERS, AND STORM SEWERS WILL BE INSTALLED AND BARE AREAS STABILIZED BEFORE OTHER AREAS ARE DISTURBED.
4. **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.**
5. EVERY EFFORT SHOULD BE MADE TO CONSERVE AND PROTECT NATURAL VEGETATION.
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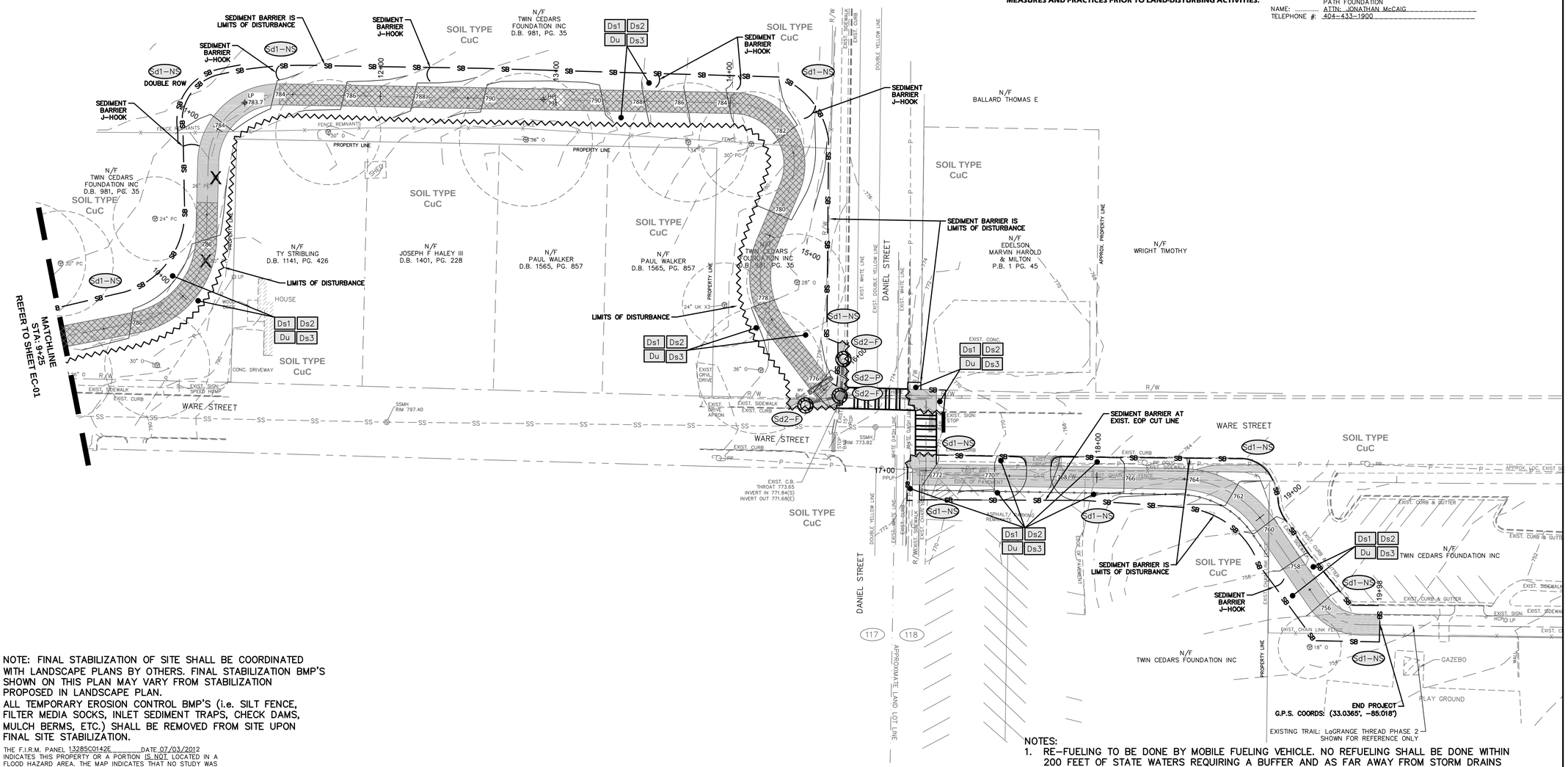

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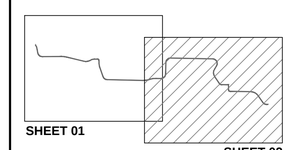


KEY MAP

	DATE	DESCRIPTION

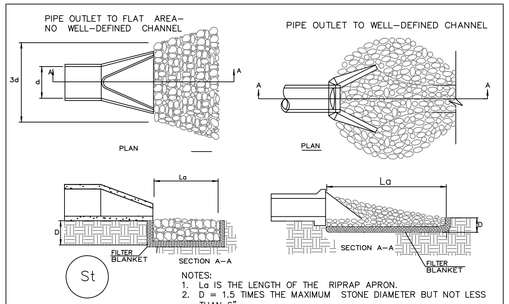
PROJECT #	2019 - 174
PROJECT MANAGER	GGD

LaGRANGE THREAD PHASE 5
CALUMET TO DANIEL ST
LaGRANGE, GA

GEORGIA REGISTERED No. 034591 PROFESSIONAL ENGINEER JOHN D. BASS
LEVEL II CERT. #17788
EXPIRES: 09-29-2021

EROSION CONTROL PLAN

SCALE	1"=30'
DATE	MAY 10, 2019
SHEET #	**EC-02**

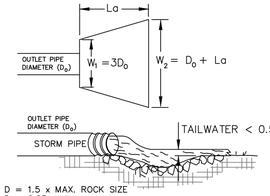


NOTES:
1. La IS THE LENGTH OF THE RIPRAP APRON.
2. D = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6".
3. IN A WELL–DEFINED CHANNEL EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 1' ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK, WHICHEVER IS LESS.
4. A FILTER BLANKET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

FIGURE 6–24.3
RIPRAP OUTLET PROTECTION

TABLE "A"
OUTLET PROTECTION TABLE

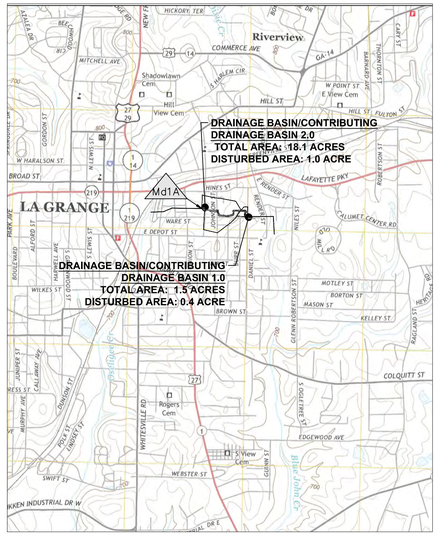
STILLING BASIN NO.	PIPE SIZE (in)	FLOW Q(cfs)	VELOCITY (fps)	W1 (ft)	W2 (ft)	La (ft)	d_{50} (in)	D (in)
1	36	42.85	7.98	9	23	20	9	20.25



D = 1.5 x MAX. ROCK SIZE
D = 2.25 x d_{50}
RIP RAP – GA DOT STD 805

SEDIMENT BASIN EXEMPTION NOTE:

DUE TO THE TYPE OF DEVELOPMENT PROPOSED IN THIS PROJECT AND THE SITE CONDITIONS UPON WHICH THE DEVELOPMENT WILL BE BUILT, NO SEDIMENT STORAGE STRUCTURES ARE PROPOSED. GIVEN THE MINIMAL DISTURBANCE NECESSARY TO CONSTRUCT THE TRAIL, THE ADJACENT PROPERTIES AND ENVIRONMENT WOULD BE NEGATIVELY AFFECTED (ADDITIONAL CLEARING, GRADING, AND OTHER LAND DISTURBING ACTIVITIES) BY THE INSTALLATION OF SEDIMENT STORAGE STRUCTURES FOR A NEGLIGIBLE BENEFIT. PERIMETER CONTROL, INLET SEDIMENT TRAPS, AND CHECK DAMS ARE UTILIZED THROUGHOUT THE SITE IN A EFFORT TO CONTROL EROSION. THE MEASURES SHOWN IN THIS PLAN SHOULD BE SUFFICIENT TO MANAGE EROSION, SEDIMENTATION, AND POLLUTION CONTROL WITHIN THE PROJECT SITE. 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.



DRAINAGE/CONTRIBUTING DRAINAGE BASIN MAP
SCALE: 1" = 2000'

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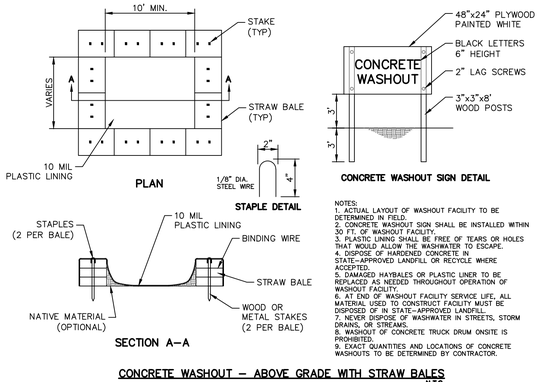
SOIL SERIES INTERPRETATIONS

MAP SYMBOL	SOIL SERIES	ESTIMATED SOIL PROPERTIES: PERMEABILITY (in./Hrs.)	SOIL REACTION (pH)	SHRINK-SWELL POTENTIAL	CORROSIVITY: STEEL	CORROSIVITY: CONCRETE	DEPTH TO: WATER TABLE (Ft.)	DEPTH TO: BEDROCK (In.)	FLOOD FREQUENCY	HYDRO-GROUP	LIMITATION OF SOILS FOR URBAN USES: SEPTIC TANK ABSORPTION FIELDS	SEWAGE LAGOON AREAS	SHALLOW EXCAVATIONS	DWELLINGS w/o basement	DWELLINGS w/ basement	SMALL COMMERCIAL BUILDINGS	LOCAL ROADS AND STREETS
CeB, CeC, CuC	CECIL	0.6-0.2	4.5-5.5	Low	Mod.	Mod.	>6.0	>60	None	B	0-8%:M;pk 8-15%:M;pk;s 15+%:S;s	0-2%:M;p 2-7%:M;s,p 7+%:S;s	0-8%:M;cl 8-15%:M;cl;s 15+%:S;s	0-8%:L 8-15%:M;s 15+%:S;s	0-4%:L 4-15%:M;s 8+%:S;s	0-8%:M;b 0-15%:M;b,s 15+%:S;s	



NOTES:
1. ACTUAL LAYOUT OF WASHOUT FACILITY TO BE DETERMINED IN FIELD.
2. CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT. OF WASHOUT FACILITY.
3. PLASTIC LINING SHALL BE FREE OF TEARS OR HOLES THAT WOULD ALLOW THE WASHWATER TO ESCAPE.
4. DISPOSE OF HARDENED CONCRETE IN STATE–APPROVED LANDFILL OR RECYCLE WHERE ACCEPTED.
5. DAMAGED HAYBALES OR PLASTIC LINER TO BE REPLACED AS NEEDED THROUGHOUT OPERATION OF WASHOUT FACILITY.
6. AT END OF WASHOUT FACILITY SERVICE LIFE, ALL MATERIAL USED TO CONSTRUCT FACILITY MUST BE DISPOSED OF IN STATE–APPROVED LANDFILL.
7. NEVER DISPOSE OF WASHWATER IN STREETS, STORM DRAINS, OR STREAMS.
8. WASHOUT OF CONCRETE TRUCK DRUM ONSITE IS PROHIBITED.
9. EXACT QUANTITIES AND LOCATIONS OF CONCRETE WASHOUTS TO BE DETERMINED BY CONTRACTOR.

CONCRETE WASHOUT – ABOVE GRADE WITH STRAW BALES
N.T.S.

SAMPLING INFORMATION									
MONITORING SITE	LOCATION OF DRAINAGE POINT	NAME OF RECEIVING WATER	SAMPLING TYPE (OUTFALL OR RECEIVING WATER)	TOTAL DRAINAGE AREA (SQUARE MILES)	DIST AREA (ACRES)	WARM OR COLD WATER STREAM	APPENDIX B NTU VALUE*	ALLOWABLE NTU INCREASE	CONSTRUCTION ACTIVITY
Md1**	SEE SHEET EC-01	N/A	OUTFALL	0.0283	1.0	WARM	75	N/A	TRAIL CONSTRUCTION

* NTU LIMIT TAKEN FROM GENERAL PERMIT GAR100002
SAMPLES TO BE TAKEN BY "GRAB SAMPLES" OR OTHER APPROVED METHOD.
SAMPLES TO BE ANALYZED BY HACH OR OTHER APPROVED METHOD.

**SEE DRAINAGE/CONTRIBUTING DRAINAGE BASIN MAP, THIS SHEET, FOR MONITORING SITE LOCATIONS. SHOULD THE SAMPLING PROFESSIONAL BELIEVE THE SAMPLING RESULTS ARE NOT REPRESENTATIVE OF THE SITE AND THAT OFFSITE DEVELOPMENTS ARE CONTRIBUTING TO AN INCREASE IN THE NTU LEVEL THE SAMPLING PROFESSIONAL SHALL CONTACT THE EROSION CONTROL DESIGN ENGINEER FOR NEW SAMPLING LOCATIONS.

CONTRIBUTING DRAINAGE BASINS				
DESCRIPTION	TOTAL DRAINAGE AREA (ACRES)	DIST AREA (ACRES)	EXIST. RUNOFF COEFFICIENT (C)	POST-DEVELOPMENT RUNOFF COEFFICIENT (C)
1.0	1.5	0.4	0.50	0.50
2.0	18.1	1.0	0.50	0.50

SEDIMENT STORAGE TABLE													
					SEDIMENT BARRIER			CHECK DAMS			INLET SEDIMENT TRAP		
DESCRIPTION	TOTAL DRAINAGE AREA (ACRES)	DIST AREA (ACRES)	REQUIRED STORAGE (CY)	TOTAL STORAGE PROVIDED (CY)	AVG. DIST FROM TOE OF SLOPE (FT)	LENGTH OF SILT FENCE (LF)	TOTAL VOLUME (CY)	L.F. OF APPROX. 4% DITCH	STORAGE PER DEVICE (CY)	# OF DEVICES	TOTAL VOLUME (CY)	STORAGE PER DEVICE (CY)	# OF DEVICES	TOTAL VOLUME (CY)
1.0	1.5	0.4	100.5	112.3	5	900	108.3	N/A	N/A	N/A	N/A	4	1	4
2.0	18.1	1.0	1212.7	125.2	2	1600	103.7	150	2.25	6	13.5	4	2	8

DEFINITION

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

CONDITIONS

This practice is applicable to areas subject to surface and air movement of dust where on and off-site damage may occur without treatment.

METHOD AND MATERIALS

A. TEMPORARY METHODS

Mulches. See standard Ds1 - Disturbed Area Stabilization (With Mulching Only). Synthetic resins may be used instead of asphalt to bind mulch material. Refer to standard Tb-Tackifiers and Binders. Resins such as Curasol or Terratack should be used according to manufacturers recommendations.

Vegetative Cover. See standard Ds2 - Disturbed Area Stabilization (With Temporary Seeding).

Spray-on Adhesives. These are used on mineral soils (not effective on muck soils). Keep traffic off these areas. Refer to standard Tb-Tackifiers and Binders.

Tillage. This practice is designed to roughen and bring clods to the surface. It is an emergency measure which should be used before wind erosion starts. Begin plowing on windward side of site. Chisel-type plows spaced about 12 inches apart, spring-toothed harrows, and similar plows are examples of equipment which may produce the desired effect.

Irrigation. This is generally done as an emergency treatment. Site is sprinkled with water until the surface is wet. Repeat as needed.

Barriers. Solid board fences, snow fences, burlap fences, crate walls, bales of hay and similar material can be used to control air currents and soil blowing. Barriers placed at right angles to prevailing currents at intervals of about 15 times their height are effective in controlling wind erosion.

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

B. PERMANENT METHODS

Permanent Vegetation. See standard Ds3 -Disturbed Area Stabilization (With Permanent Vegetation). Existing trees and large shrubs may afford valuable protection if left in place.

Topsoiling. This entails covering the surface with less erosive soil material. See standard Tp - Topsoiling.

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

Du DUST CONTROL ON DISTURBED AREAS

EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST
INFRASTRUCTURE CONSTRUCTION PROJECTS

SWCD: _____

Project Name: LaGRANGE THREAD PHASE 5 Address: G.P.S. COORDS: BEGIN (33.0375°, –85.023°) END (33.0365°, –85.018°)
City/County: CITY OF LaGRANGE, TROUP COUNTY, GEORGIA Date on Plans: MAY 10, 2019
Name & email of person filling out checklist: LUKE WOJCIK; LWOJCIK@GEORGIAANDWEST.COM

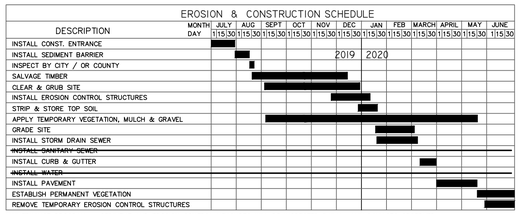
TO BE SHOWN ON ES&PC PLAN

Plan Page #	Included Y/N	
EC-01	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)
ALL	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)
EC-SERIES	Y	3 The name and phone number of the 24-hour local contact responsible for erosion, sedimentation and pollution controls.
EC-SERIES	Y	4 Provide the name, address, email address, and phone number of primary permittee.
EC-SERIES	Y	5 Note total and disturbed acreage of the project or phase under construction.
EC-SERIES	Y	6 Provide the GPS locations of the beginning and end of the Infrastructure project. Give the Latitude and Longitude in decimal degrees.
ALL	Y	7 Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions.
EN-01-EN-02	Y	8 Description of the nature of construction activity.
ED-01	Y	9 Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary.
EN-01	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.
EN-01	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.
EN-01	Y	12 Design professional's certification statement and signature that the permittee's ES&PC Plan provides for an appropriate and comprehensive system of BMPs and sampling to meet permit requirements as stated on Part IV page 20 of the permit.*
EN-01	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.*
EN-02	Y	14 Clearly note the statement that "The design professional who prepared the ES&PC Plan is to inspect the installation of the initial sediment storage requirements, perimeter control BMPs, and sediment basins within 7 days after installation." in accordance with Part IV.A.5 page 28 of the permit *
EN-01	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."
EC-SERIES	Y	16 Provide a description of any buffer encroachments and indicate whether a buffer variance is required.
EN-01	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."*
EN-02	Y	18 Clearly note the statement that "Waste materials shall not be discharged to waters of the State, except as authorized by a Section 404 permit."*
EN-01	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."
EN-01	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."
EN-01	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."
N/A	N	22 Any construction activity which discharges storm water into an Impaired Stream Segment, or within 1 linear mile upstream of and within the same watershed as, any portion of an Biota Impaired Stream Segment must comply with Part III. C. of the permit. Include the completed Appendix 1 listing all the BMPs that will be used for those areas of the site which discharge to the Impaired Stream Segment.*
N/A	N	23 If a TMDL Implementation Plan for sediment has been finalized for the Impaired Stream Segment (identified in item 22 above) at least six months prior to submittal of NOI, the ES&PC Plan must address any site-specific conditions or requirements included in the TMDL Implementation Plan.*
EC-SERIES ED-01	Y	24 BMPs for concrete washdown of tools, concrete mixer chutes, hoppers and the rear of the vehicles. Washout of the drum at the construction site is prohibited.*
EC-SERIES	Y	25 Provide BMPs for the remediation of all petroleum spills and leaks.
EN-01	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.*
EN-02	Y	27 Description of practices to provide cover for building materials and building products on site.*
EN-01-EN-02	Y	28 Description of the practices that will be used to reduce the pollutants in storm water discharges.*
ED-01	Y	29 Description and chart or timeline of the intended sequence of major activities which disturb soils for the major portions of the site (i.e., initial perimeter and sediment storage BMPs, clearing and grubbing activities, excavation activities, utility activities, temporary and final stabilization).
EN-01-EN-02	Y	30 Provide complete requirements of inspections and record keeping by the primary permittee.*
EN-01-EN-02	Y	31 Provide complete requirements of sampling frequency and reporting of sampling results.*
EN-01	Y	32 Provide complete details for retention of records as per Part IV.F. of the permit.*
EN-01-EN-02	Y	33 Description of analytical methods to be used to collect and analyze the samples from each location.*
N/A	N	34 Appendix B rationale for NTU values at all outfall sampling points where applicable.*
ED-01	Y	35 Delineate all sampling locations, perennial and intermittent streams and other water bodies into which storm water is discharged also provide a summary chart of the justification and analysis for the representative sampling as applicable.*
EN-01	Y	36 A description of appropriate controls and measures that will be implemented at the construction site including: (1) initial sediment storage requirements and perimeter control BMPs, (2) intermediate grading and drainage BMPs, and (3) final BMPs. For construction sites where there will be no mass grading and the initial perimeter control BMPs, intermediate grading and drainage BMPs, and final BMPs are the same, the Plan may combine all of the BMPs into a single phase.*
ALL	Y	37 Graphic scale and North arrow.
EC-SERIES	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
SEE ATTACHED	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 EPD or the Georgia Soil and Water Conservation Commission). Please refer to the Alternative BMP Guidance Document found at www.gaswcc.org.
EC-SERIES ED-02	Y	40 Use of alternative BMP for application to the Equivalent BMP List. Please refer to Appendix A-2 of the Manual for Erosion & Sediment Control in Georgia 2016 Edition.*
EC-SERIES	Y	41 Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to State waters and any additional buffers required by the Local Issuing Authority. Clearly note and delineate all areas of impact.
N/A	N	42 Delineation of on-site wetlands and all State waters located on and within 200 feet of the project site.
ED-01	Y	43 Delineation and acreage of contributing drainage basins on the project site.
ED-01	Y	44 Delineate on-site drainage and off-site watersheds using USGS 1" :2000' topographical sheets.
ED-01	Y	45 An estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are completed.
N/A	N	46 Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion. Identify/Delineate all storm water discharge points.
EC-SERIES	Y	47 Soil series for the project site and their delineation.
EC-SERIES	Y	48 The limits of disturbance for each phase of construction.
ED-01	N	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.
EC-SERIES	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.
ED-06	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.
EC-SERIES ED-02	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, 2019

EROSION & CONSTRUCTION SCHEDULE



MAINTENANCE PROGRAM: SEDIMENT AND EROSION CONTROL MEASURES WILL BE INSPECTED DAILY. ANY DAMAGES OBSERVED WILL BE REPAIRED BY THE END OF THAT DAY. CLEAN OUT OF SEDIMENT CONTROL STRUCTURES WILL BE ACCOMPLISHED IN ACCORDANCE WITH THE SPECIFICATION AND SEDIMENT DISPOSAL ACCOMPLISHED BY SPREADING ON SITE. SEDIMENT BASINS AND BARRIERS WILL REMAIN IN PLACE UNTIL SEDIMENT CONTRIBUTING AREAS ARE STABILIZED. GUIDELINES FOR THE MAINTENANCE OF ESTABLISHED VEGETATION WILL BE PROVIDED TO THE OWNER WHEN ALL DISTURBED AREAS ARE STABILIZED.

	DATE	DESCRIPTION

PROJECT #	2019 - 174
PROJECT MANAGER	GGD

LaGRANGE THREAD PHASE 5
CALUMET TO DANIEL ST
LaGRANGE, GA

GEORGIA REGISTERED No. 034591 PROFESSIONAL ENGINEER JOHN D. BASS
LEVEL II CERT. #17788
EXPIRES: 09-29-2021

EROSION CONTROL DATA

SCALE	1"=30'
DATE	MAY 10, 2019
SHEET #	**ED-01**

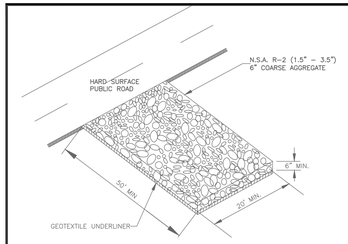
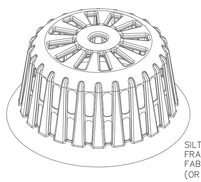
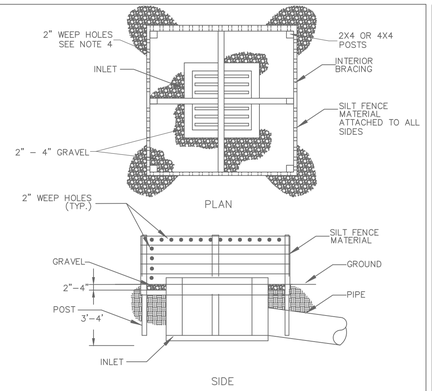


FIGURE 6–11.1
Co CRUSHED STONE CONSTRUCTION EXIT



Sd2 ALTERNATIVE SEDIMENT TRAP



NOTE:
1. THE SEDIMENT BOX IS TO BE MADE OF 2"x4" BOARDS SPACED A MAXIMUM OF 1" APART OR PLYWOOD WITH 2" WEEP HOLES.
2. DIMENSIONS OF THE BOX WILL VARY ACCORDING TO THE SIZE OF THE INLET AND THE DEPTH OF THE BASIN.
3. PLACE GRAVEL INSIDE OF THE BOX ALL AROUND THE INLET TO A DEPTH OF 2–4".
4. SPACE THE WEEP HOLES APPROXIMATELY 6" O.C. HORIZONTAL WHERE PLYWOOD IS USED.

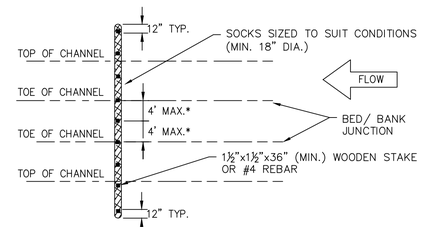
Sd2–B FIGURE 6–21.2
BAFFLE BOX

FILTER MEDIA SOCKS FOR CHECK DAMS

Cd–FMS

TYPICAL PLAN

NATURAL GROWTH FILTER SOCKS



NOTES:
1. ALL MATERIAL TO MEET SPECIFICATIONS.
2. PLACE ONE STAKE AT THE CENTER OF THE DITCH/CHANNEL.
*ALSO PLACE STAKES AT THE BED/BANK JUNCTION AND AT END OF THE DEVICE NOT SPACED MORE THAN 4 FEET APART.
3. SEDIMENT SHOULD BE REMOVED FROM BEHIND THE CHECK DAM ONCE THE ACCUMULATED HEIGHT HAS REACHED ½ THE HEIGHT OF THE CHECK DAM.
4. MINIMUM STAKING DEPTH FOR SAND, SILT, AND CLAY SHALL BE 12".
5. FILTER MEDIA SOCKS TO BE MIN. 18" DIAMETER UNLESS NOTED OTHERWISE ON PLANS.

GEORGIA UNIFORM CODING SYSTEM

FOR SOIL EROSION AND SEDIMENT CONTROL PRACTICES

GEORGIA SOIL AND WATER CONSERVATION COMMISSION

STRUCTURAL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Cd	CHECKDAM			A small temporary barrier or dam constructed across a swale, drainage ditch or area of concentrated flow.
Ch	CHANNEL STABILIZATION			Improving, constructing or stabilizing an open channel, existing stream, or ditch.
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.
Cr	CONSTRUCTION ROAD STABILIZATION			A travelway constructed as part of a construction plan including access roads, subdivision roads, parking areas and other on-site vehicle transportation routes.
Dc	STREAM DIVERSION CHANNEL			A temporary channel constructed to convey flow around a construction site while a permanent structure is being constructed.
Di	DIVERSION			An earth channel or dike located above, below or across a slope to divert runoff. This may be a temporary or permanent structure.
Dn1	TEMPORARY DOWNDRAIN STRUCTURE			A flexible conduit of heavy-duty fabric or other material designed to safely conduct surface runoff down a slope. This is temporary and inexpensive.
Dn2	PERMANENT DOWNDRAIN STRUCTURE			A paved chute, pipe, sectional conduit or similar material designed to safely conduct surface runoff down a slope.
Fr	FILTER RING			A temporary stone barrier constructed at storm drain inlets and pond outlets.
Ga	GABION			Rock filter baskets which are hand-placed into position forming soil stabilizing structures.
Gr	GRADE STABILIZATION STRUCTURE			Permanent structures installed to protect channels or waterways where otherwise the slope would be sufficient for the running water to form gullies.
Lv	LEVEL SPREADER			A structure to convert concentrated flow of water into less erosive sheet flow. This should be constructed only on undisturbed soils.
Rd	ROCK FILTER DAM			A permanent or temporary stone filter dam installed across small streams or drainageways.
Re	RETAINING WALL			A wall installed to stabilize cut and fill slopes where maximum permissible slopes are not obtainable. Each situation will require special design.
Rt	RETRO FITTING			A device or structure placed in front of a permanent stormwater detention pond outlet structure to serve as a temporary sediment filter.
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 and stabilized on completion of construction activities.
Sd3	TEMPORARY SEDIMENT BASIN			A basin created by excavation or a dam across a waterway. The surface water runoff is temporarily stored allowing the bulk of the sediment to drop out.
Sd4	TEMPORARY SEDIMENT TRAP			A small temporary pond that drains a disturbed area so that sediment can settle out. The principle feature distinguishing a temporary sediment trap from a temporary sediment basin is the lack of a pipe or riser.
Sk	FLOATING SURFACE SKIMMER			A buoyant device that releases/drains water from the surface of sediment ponds, traps, or basins at a controlled rate of flow.
Spb	SEEP BERM			Linear control device constructed as a diversion perpendicular to the direction of runoff to enhance dissipation and infiltration, while creating multiple sedimentation chambers with the employment of intermediate dikes.

STRUCTURAL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Sr	TEMPORARY STREAM CROSSING			A temporary bridge or culvert-type structure protecting a stream or watercourse from damage by crossing construction equipment.
St	STORMDRAIN OUTLET PROTECTION			A paved or short section of riprap channel at the outlet of a storm drain system preventing erosion from the concentrated runoff.
Su	SURFACE ROUGHENING			A rough soil surface with horizontal depressions on a contour or slopes left in a roughened condition after grading.
Tc	TURBIDITY CURTAIN			A floating or staked barrier installed within the water (It may also be referred to as a floating boom, silt barrier, or silt curtain).
Tp	TOPSOILING			The practice of stripping off the more fertile soil, storing it, then spreading it over the disturbed area after completion of construction activities.
Tr	TREE PROTECTION			To protect desirable trees from injury during construction activity.
Wt	VEGETATED WATERWAY OR STORMWATER CONVEYANCE CHANNEL			Paved or vegetative water outlets for diversions, terraces, berms, dikes or similar structures.

VEGETATIVE PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
BF	BUFFER ZONE			Strip of undisturbed original vegetation, enhanced or restored existing vegetation or the reestablishment of vegetation surrounding an area of disturbance or bordering streams.
Cs	COASTAL DUNE STABILIZATION (WITH VEGETATION)			Planting vegetation on dunes that are denuded artificially constructed, or re-nourished.
Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)			Establishing temporary protection for disturbed areas where seedings may not have a suitable growing season to produce an erosion retarding cover.
Ds2	DISTURBED AREA STABILIZATION (WITH TEMP. SEEDING)			Establishing a temporary vegetative cover with fast growing seedings on disturbed areas.
Ds3	DISTURBED AREA STABILIZATION (WITH PERM. SEEDING)			Establishing a permanent vegetative cover such as trees, shrubs, vines, grasses, or legumes on disturbed areas.
Ds4	DISTURBED AREA STABILIZATION (SODDING)			A permanent vegetative cover using sods on highly erodable or critically eroded lands.
Du	DUST CONTROL ON DISTURBED AREAS			Controlling surface and air movement of dust on construction site, roadways and similar sites.
FlCo	FLOCCULANTS AND COAGULANTS			Substance formulated to assist in the solids/liquid separation of suspended particles in solution.
Sb	STREAMBANK STABILIZATION (USING FORM VEGETATION)			The use of readily available native plant materials to maintain and enhance streambanks, or to prevent, or restore and repair small streambank erosion problems.
Ss	SLOPE STABILIZATION			A protective covering used to prevent erosion and establish temporary or permanent vegetation on steep slopes, shore lines, or channels.
Tac	TACKIFIERS AND BINDERS			Substance used to anchor straw or hay mulch by causing the organic material to bind together.

GaSWCC (Amended – 2013)

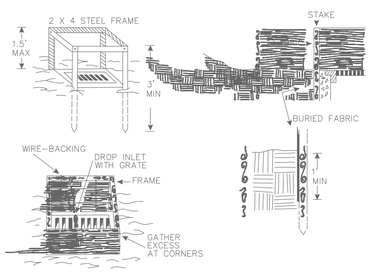


FIGURE 6–21.1
Sd2–F FABRIC AND SUPPORTING FRAME FOR INLET PROTECTION

DISTURBED STABILIZATION (DS1)

MULCH	PLANT RESIDUES OR OTHER SUITABLE MATERIALS, PROUDUCED ON THE SITE IF POSSIBLE, TO THE SOIL SURFACE. SELECT ONE OF THE FOLLOWING MATERIALS AND APPLY AT THE DEPTH INDICATED: 1. DRY STRAW OR HAY SHALL BE APPLIED AT A DEPTH OF 2 TO 4 INCHES PROVIDING COMPLETE SOIL COVERAGE, ONE ADVANTAGE OF THIS MATERIAL IS EASY APPLICATION. 2. WOOD WASTE (CHIPS, SAWDUST OR BARK) SHALL BE APPLIED AT A DEPTH OF 2 TO 3 INCHES. ORGANIC MATERIAL FROM THE CLEARING STAGE OF DEVELOPMENT SHOULD REMAIN ON SITE, BE CHIPPED, AND APPLIED AS MULCH. THIS METHOD OF MULCHING CAN GREATLY REDUCE EROSION CONTROL COSTS. 3. CUTBACK ASPHALT (SLOW CURING) SHALL BE APPLIED AT 1200 GALLONS PER ACRE (OR 1/4 GALLON PER SQ.YD.). 4. POLYETHYLENE FILM SHALL BE SECURED OVER BANKS OR STOCKPILED SOIL MATERIAL FOR TEMPORARY PROTECTION. THIS MATERIAL CAN BE SALVAGED AND REUSED.

TEMPORARY VEGATIVE PLAN (DS2)

SPECIES	RATE/ 1000 S.F.	DATES	FERTILIZER	RATE/ 1000 S.F.
MILLET	1–2 LBS	5–15 TO 8–31	6–12–12	25–35 LBS
RYE	2–3 LBS.	10–15 TO 2–15	6–12–12	25–35 LBS

PERMANENT GRASSING PLAN (DS3)

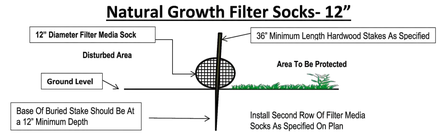
SPECIES	RATE/ 1000 S.F.	DATES:	FERTILIZER	RATE/ 1000 S.F.
WEEPING LOVEGRASS & MRGATA OF SERICEA LESPEDEZIA (SCARIFIED)	.2–.4– LB 1–2 LB.	3–1 TO 6–15	6–12–12	25–35 LBS.
ALL FESCUE GRASS	8–10 LB.	9–1 TO 11–1	6–12–12	25–35 LBS.
BERMUDA GRASS (HULLED) (UNHULLED)	1–2 LB. 2–3 LB.	3–15 TO 6–15 10–01 TO 3–15	6–12–12 6–12–12	25–35 LBS. 25–35 LBS.
STRAW MULCH	90 LB.	ANY TIME FOR TEMPORY COVER.		

NOTES:
1. ALL AREAS TO BE SEEDED SHALL HAVE LIME APPLIED AT THE RATE OF 90 LBS. PER 1000 S.F. LIME & FERTILIZER TO BE APPLIED PRIOR TO APPLICATION OF SEED AND MIXED THOROUGHLY WITH THE SOIL.
2. ALL AREAS SEEDED SHALL HAVE AN APPLICATION OF STRAW MULCH IMMEDIATELY AFTER APPLICATION OF SEED & FERTILIZER. APPROXIMATELY 2 TONS PER ACRE.
3. PERMANENT GRASSING OCT. – JUNE, ALL OTHER MONTHS USE TEMPORARY GRASSING & REPLANT.
4. USE TEMPORARY GRASSING IF INACTIVE DISTURBED AREA IS TO BE EXPOSED FOR MORE THAN 14 DAYS.
5. REFER TO TABLE 6–5.1,2,3,& 4 FOR COMPLETE VEGETATIVE CHARTS AND FERTILIZER REQUIREMENTS.

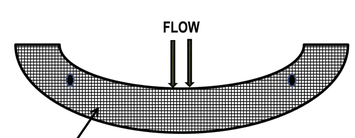
Sd1–NS

EROSION AND SEDIMENT CONTROL
FILTER MEDIA SOCKS

Natural Growth Filter Socks- 12"



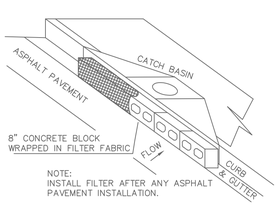
Note: Filter Media Socks Sized To Suit Conditions



Filter Media Sock

Wooden Stakes Maximum Spacing 10' apart
Each New Filter Media Sock Must Be Staked Approx. 12' From Beginning & Ending Of Each Sock
Posts Should Be Hardwood1 ½" x 1 ½" x 36" (min)

Overlapping Between Filter Media Socks Includes A Minimum Of 1'. Hardwood Stakes Should Be Driven Through Both Filter Media Socks At Overlap Section.



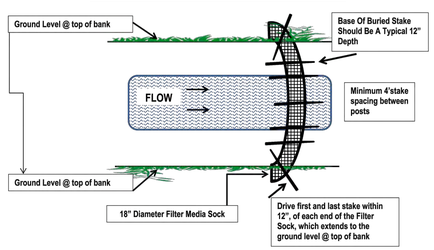
NOTE:
INSTALL FILTER AFTER ANY ASPHALT PAVEMENT INSTALLATION.

INFORMATION OBTAINED FROM FIGURE 6–21.5

Sd2–P CURB INLET FILTER
"PIGS IN BLANKET"

Cd

EROSION AND SEDIMENT CONTROL
CHECK DAM
Typical Installation Plan
Natural Growth Filter Socks- 18"



Note: Filter Media Socks Should Be Sized To Suit Conditions

Natural Growth Filter Socks will be installed across the ditch extending to the outside tops of each bank and securely staked at each end of the filter sock.

Wooden Hardwood Stakes 1 ½" x 1 ½" x 36" (min) are driven through the Filter Sock with a maximum spacing of 4' between each stake.

Should overlapping be required within the installation due to the conditions of the channel, it would include A Minimum overlap of 1'. Hardwood Stakes Should Be Driven Through Both Filter Media Socks At Overlap Section.

Filter socks should be monitored after storm events and once sediment reaches ½ the height of the Filter Sock, that sediment should be removed for the continued maximum effectiveness of the Filter Sock.

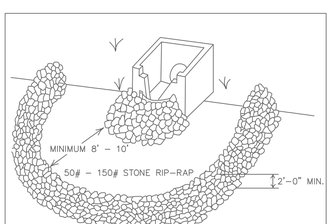
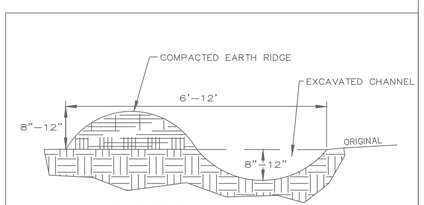
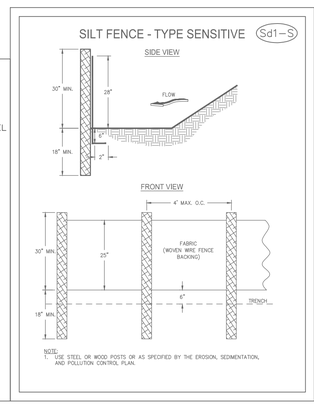


FIGURE 6–15.1
Fr STONE FILTER RING

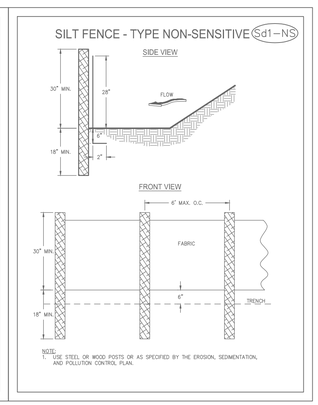


ROAD GRADE (PERCENT)	DISTANCE BETWEEN DIVERSIONS (FEET)	ROAD GRADE (PERCENT)	DISTANCE BETWEEN DIVERSIONS (FEET)
1	400	10	80
2	250	15	60
5	125	20	50

FIGURE 6–13.1
Di DIVERSION CHANNEL



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



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

KAIZENCOLLABORATIVE
2390 MAIN STREET | TUCKER, GEORGIA 30084 | 404.239.2521

GEORGIA & WEST, INC.
ENGINEERING • LAND SURVEYING • LAND PLANNING
105 CORPORATE DRIVE
CARROLLTON, GA 30117
OFFICE (770) 834-4694
FAX (770) 834-1005
E-MAIL: mailbox@georgiaandwest.com

	DATE	DESCRIPTION

PROJECT #	2019 - 174
PROJECT MANAGER	GGD

LaGRANGE THREAD PHASE 5
CALUMET TO DANIEL ST
LaGRANGE, GA

GEORGIA REGISTERED PROFESSIONAL ENGINEER No. 034591 JOHN D. BASS
LEVEL II CERT. #17788
EXPIRES: 09–28–2021

EROSION CONTROL DETAILS

SCALE	1"=30'
DATE	MAY 10, 2019
SHEET #	**ED-02**

DEVELOPMENT REFERENCE:

DESIGN PROFESSIONAL: GEORGIA AND WEST, INC.
105 CORPORATE DRIVE
CARROLLTON, GA 30117
PHONE: (770) 834-4694

24-HOUR CONTACT
JONATHAN McCAIG
404-433-1900

GENERAL NOTES:

1. NO ACTIVITIES SHALL BE CONDUCTED WITHIN THE 25- OR 50-FOOT STREAM BUFFER ALONG THE BANKS OF ALL STATE WATERS WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.

2. EACH SECONDARY PERMITTEE WILL BE PROVIDED WITH A COPY OF THE EROSION CONTROL PLANS OR PORTIONS OF THE PLAN APPLICABLE TO THEIR SITE AND EACH SECONDARY PERMITTEE SHALL SIGN THE PLAN OR PORTION OF THE PLAN APPLICABLE TO THEIR SITE.

3. ANY AMENDMENT TO THE EROSION CONTROL PLANS WHICH HAVE A SIGNIFICANT EFFECT ON BMP'S WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.

4. AFTER CONSTRUCTION, EROSION AND SEDIMENTATION WILL BE MANAGED BY STABILIZED AREA CONSISTING OF PAVED TRAIL, GRASSING, LANDSCAPING, AND OUTLET PROTECTION AT ALL STORM WATER OUTFALLS.

5. MINIMIZING WIND EROSION AND CONTROLLING DUST WILL BE ACCOMPLISHED BY ONE OR MORE OF THE FOLLOWING METHODS:
   A. COVERING 30% OR MORE OF THE SOIL SURFACE WITH NON-ERODIBLE MATERIAL.
   B. ROUGHENING THE SOIL TO PRODUCE RIDGES PERPENDICULAR TO THE PREVAILING WIND.
   C. FREQUENT WATERING OF EXCAVATION AND FILL AREAS.
   D. PROVIDING GRAVEL OR PAVING AT ENTRANCE/EXIT DRIVES.

6. THIS SITE IS TO BE DEVELOPED INTO A LINEAR PARK CONSISTING OF A CONCRETE MULTI-USE TRAIL WITH LANDSCAPING. THE TOTAL SITE AREA: 1.15 ACRES (TOTAL SITE AREA INCLUDES A WIDTH OF 50' ALONG THE CENTERLINE OF THE ROAD). THE TOTAL DISTURBED AREA: 1.4 ACRES.

7. PERIMETER SEDIMENT CONTROL STRUCTURES ARE SHOWN TO MINIMIZE EROSION & SEDIMENTATION

8. VEGETATION WILL BE INSTALLED ONSITE TO REDUCE THE POLLUTANTS IN STORM WATER DISCHARGES AFTER CONSTRUCTION IS COMPLETED.

DESIGN PROFESSIONAL'S CERTIFICATION:

(1) "I CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BEST MANAGEMENT PRACTICES REQUIRED BY THE GEORGIA WATER QUALITY CONTROL ACT AND THE DOCUMENT "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" (MANUAL) PUBLISHED BY THE STATE SOIL AND WATER CONSERVATION COMMISSION AS OF JANUARY 1 OF THE YEAR IN WHICH THE L AND-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 100002."

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

(3) I CERTIFY 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. GAR 100002, 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.

PURSUANCE TO RULE 180-6.09 OF THE GEORGIA STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND SURVEYORS, THE TERM "CERTIFY" OR "CERTIFICATION" RELATING TO ENGINEERING SERVICES SHALL MEAN A SIGNED STATEMENT BASED ON FACTS AND KNOWLEDGE KNOWN TO THE ENGINEER AND IS NOT A GUARANTEE OR WARRANTY, EITHER EXPRESSED OR IMPLIED.

[signature] MAY 10, 2019
JOHN D. BASS, PE GA NO. 34591 DATE
LEVEL II CERTIFIED DESIGN PROFESSIONAL CERTIFICATION #17788

EROSION CONTROL AND TREE PROTECTION MEASURES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION ACTIVITY AND MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.

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

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

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

CLEARING PHASE - PHASE I
EROSION CONTROL NOTES:

PRIOR TO THE LAND DISTURBING CONSTRUCTION, THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE AREA SITE DEVELOPMENT INSPECTOR.

THE CONTRACTOR SHALL OBSERVE THE PROJECT SEQUENCE SHOWN ON THE PLANS. THE CONTRACTOR SHALL MAINTAIN CAREFUL SCHEDULING AND PERFORMANCE TO ENSURE THAT LAND STRIPPED OF ITS NATURAL COVER IS EXPOSED ONLY IN SMALL QUANTITIES.

THE OWNER AGREES TO PROVIDE AND MAINTAIN OFF-STREET PARKING ON THE SUBJECT PROPERTY DURING THE ENTIRE CONSTRUCTION PERIOD.

NO STAGING AREAS, MATERIAL STORAGE, CONCRETE WASH OUT AREAS, OR DEBRIS BURN AND BURIAL HOLES SHALL BE LOCATED WITHIN 500 FEET OF DESIGNATED TREE PROTECTION AREAS.

A COPY OF THE EROSION SEDIMENT & POLLUTION CONTROL PLANS SHALL BE PRESENT ON THE SITE AT ALL TIMES.

THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND-DISTURBING ACTIVITIES.

PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE AND ALL STREAM BUFFERS SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, OR OTHER APPROPRATE 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 LIMIITS INDICATED ON THE APPROVED PLANS.

PRIOR TO ANY OTHER CONSTRUCTION, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT EACH POINT OF ENTRY TO OR EXIT FROM THE SITE OR ONTO ANY PUBLIC ROADWAY.

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

1. THE CONSTRUCTION EXIT, CONSISTING OF A MINIMUM PAD SIZE OF 20 FEET BY 50 FEET WITH A MINIMUM OF 6" THICK STONE, SHALL BE PLACED AS SHOWN ON THE PLAN. THE STONE SIZE SHOULD CONSIST OF COURSE AGGREGATE BETWEEN 1½" & 3½" IN DIAMETER AND OVERLAID ON A GEOTEXTILE UNDERLINER. THE GEOTEXTILE UNDERLINER SHALL MEET THE REQUIREMENTS OF AASHTO M288-96, SECTION 7.3 SEPARATION REQUIREMENTS.

2. IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION ENTRANCE/EXITS, ALL PERIMETER EROSION CONTROL AND STORMWATER MANAGEMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE CLEARING PHASE EROSION CONTROL PLAN.

4. INLET SEDIMENT PROTECTION MEASURES SHALL BE INSTALLED ON ALL EXISTING STORM STRUCTURES AS SHOWN ON THE PLAN. SEE SEPARATE DETAILS FOR SPECIFICS ON TYPE OF INLET PROTECTION SPECIFIED.

5. STONE CHECK DAMS SHALL BE INSTALLED IN AREAS OF CONCENTRATED FLOWS AS SHOWN ON THE PLAN.

6. TREE PROTECTION FENCING SHOULD BE INSTALLED PRIOR TO THE START OF ANY LAND DISTURBANCE ACTIVITY AND MAINTAINED UNTIL FINAL LANDSCAPE IS INSTALLED. THE TREE PROTECTION FENCING SHOULD BE INSPECTED DAILY. ANY FAILURES OF SAID FENCING SHOULD BE REPAIRED IMMEDIATELY.

AFTER INSTALLATION OF INITIAL EROSION CONTROL MEASURES THE SITE CONTRACTOR SHALL SCHEDULE AN INSPECTION BY THE PROJECT DESIGN PROFESSIONAL. NO OTHER CONSTRUCTION ACTIVITIES SHALL OCCUR UNTIL THE PROJECT DESIGN PROFESSIONAL APPROVES THE INSTALLATION OF SAID EROSION CONTROL MEASURES. IF UNFORESEEN CONDITIONS EXIST IN THE FIELD THAT WARRANT ADDITIONAL EROSION CONTROL MEASURES, THE CONTRACTOR MUST CONSTRUCT ANY ADDITIONAL EROSION CONTROL DEVICES DEEMED NECESSARY BY THE SITE INSPECTION.

AFTER APPROVAL OF THE INITIAL EROSION CONTROL INSTALLATION, THE CONTRACTOR MAY PROCEED WITH CLEARING AND GRUBBING ACTIVITIES WHERE INITIAL SEDIMENT STORAGE AND PERIMETER CONTROL BMP'S NEED TO BE INSTALLED. THE CONTRACTOR SHALL CONSTRUCT TEMPORARY SEDIMENT PONDS AND DIVERSION DIKES AS SHOWN ON THE CLEARING PHASE PLAN TO CONTROL EROSION AND STORMWATER RUNOFF.

THE DESIGN PROFESSIONAL WHO PREPARED THE EROSION CONTROL PLANS WILL INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE AND PERIMETER CONTROL BMP'S WITHIN SEVEN DAYS AFTER INSTALLATION. ONCE THE INITIAL SEDIMENT STORAGE AND PERIMETER CONTROL BMP'S ARE IN PLACE, THEN CLEARING/GRUBBING/MASS GRADING CAN BEGIN.

THE CONTRACTOR CAN UTILIZE CLEARED TREES AS BARRIER BRUSH SEDIMENT CONTROL IN AREAS SHOWN ON PLAN WHERE INITIAL GRADING ACTIVITIES WILL NOT OCCUR.

NO BURN OR BURY PITS SHALL BE PERMITTED ON THE CONSTRUCTION SITE WITHOUT WRITTEN PERMISSION BY THE OWNER AND/OR THE ENGINEER OF RECORD.

ADDITIONAL SILT BARRIERS MUST BE PLACED AS SHOWN ON THE PLAN AS ACCESS IS OBTAINED DURING CLEARING. NO GRADING SHALL TAKE PLACE UNTIL SILT BARRIER INSTALLATION AND SEDIMENT PONDS ARE CONSTRUCTED AS SHOWN ON THE CLEARING PHASE EROSION CONTROL PLAN.

ALL ITEMS IN THIS SECTION OF THE SPECIFICATIONS SHALL MEET THE REQUIREMENTS AS SET FORTH IN SECTION 161, 162, 163, AND 164 OF THE GEORGIA D.O.T. STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES.

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

ALL DISTURBED AREAS LEFT MULCHED AFTER 30 DAYS SHALL BE STABILIZED WITH TEMPORARY VEGETATION.

SEDIMENT AND EROSION CONTROL MEASURES SHOULD BE CHECKED AFTER EACH RAIN EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED THE REQUIRED CLEANOUT ELEVATION OF THE DEVICE. ADDITIONAL DEVICES MUST BE INSTALLED IF NECESSARY.

THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACK OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 1-3" OF STONE, AS CONDITIONS DEMAND. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLE ONTO PUBLIC ROADWAY OR INTO STORM DRAIN MUST BE REMOVED IMMEDIATELY.

CONTRACTOR SHALL INSPECT CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.

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

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 BACK TO THE EROSION CONTROL PLANS.

THE SITE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE OF ALL EROSION CONTROL MEASURES INCLUDING REPLACING OR REPAIRING ANY DAMAGED DEVICES DUE TO ANY CONSTRUCTION ACTIVITY BY OTHERS.

RETENTION OF RECORDS:

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 THE 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 MONITORING 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.(1)(c) OF THIS PERMIT.

2. COPIES OF ALL NOTICES OF INTENT, NOTICES OF TERMINATION, REPORTS, PLANS, MONITORING REPORTS, MONITORING INFORMATION, INCLUDING ALL CALIBRATION AND MAINTENANCE RECORDS AND ALL ORIGINAL STRIP CHART RECORDINGS FOR CONTINUOUS MONITORING INSTRUMENTATION, 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.

GRADING PHASE - PHASE 2
EROSION CONTROL NOTES:

THE FOLLOWING EROSION CONTROL MEASURES SHALL BE IMPLEMENTED DURING THE PRELIMINARY GRADING PHASE OF CONSTRUCTION.

DURING CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN CAREFUL SCHEDULING AND PERFORMANCE TO ENSURE THAT LAND STRIPPED OF ITS NATURAL GROUND COVER IS EXPOSED ONLY IN SMALL QUANTITIES, AND THEREFORE LIMITED DURATIONS, BEFORE PERMANENT EROSION PROTECTION IS ESTABLISHED.

EARTHWORK OPERATIONS IN THE VICINITY OF STREAM BUFFERS SHALL BE CAREFULLY CONTROLLED TO AVOID DUMPING OR SLOUGHING INTO THE BUFFER AREAS.

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

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

THE CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY BARRICADES WHILE ROADWAY FRONTAGE IMPROVEMENTS ARE BEING MADE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING BARRIERS AT THE TOE OF SLOPES UNDER CONSTRUCTION. THESE BARRIERS SHALL BE AS SHOWN IN THE PLANS. THESE BARRIERS MAY BE RELOCATED AND REUSED AFTER PERMANENT SLOPE STABILIZATION BECOMES FULLY ESTABLISHED. AS THEY ARE RELOCATED, ANY DEFECTIVE MATERIALS IN THE BARRIER SHALL BE REPLACED. IN ADDITION, ALL DEBRIS AND SILT AT THE PREVIOUS LOCATION SHALL BE REMOVED.

CUT AND FILL SLOPES ARE NOT TO EXCEED 2H:1V.

THE FOLLOWING EROSION CONTROL MEASURES SHALL BE IMPLEMENTED DURING THE PRELIMINARY GRADING PHASE OF CONSTRUCTION.

INLET SEDIMENT PROTECTION MEASURES SHALL BE INSTALLED ON ALL STORM STRUCTURES AS THEY ARE CONSTRUCTED. SEE PLAN VIEW FOR SPECIFIC TYPE AND SEPARATE DETAILS FOR ADDITIONAL INFORMATION ON TYPE OF INLET PROTECTION SPECIFIED.

STORM DRAIN OUTLET PROTECTION SHALL BE PLACED AT ALL OUTLET HEADWALLS AS SOON AS THE HEADWALL IS CONSTRUCTED. SEE SEPARATE DETAILS FOR ADDITIONAL INFORMATION.

STONE CHECK DAMS SHALL BE INSTALLED IN AREAS OF CONCENTRATED FLOWS AS SHOWN ON THE PLAN. SEE SEPARATE DETAIL FOR ADDITIONAL INFORMATION.

ALL DRAINAGE SWALES SHALL BE APPLIED WITH VEGETATIVE COVER AS SOON AS FINAL GRADE IS ACHIEVED.

ALL GRADED AREAS SHALL BE APPLIED WITH VEGETATIVE COVER AS SOON AS FINAL GRADE IS ACHIEVED.

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

ALL DISTURBED AREAS LEFT MULCHED AFTER 30 DAYS SHALL BE STABILIZED WITH TEMPORARY GRASSING.

AFTER PRELIMINARY GRADING ACTIVITIES, THE CONTRACTOR SHALL CONSTRUCT TEMPORARY SEDIMENT BASINS AND DIVERSION DIKES AS SHOWN ON PLAN. THE CONTRACTOR SHALL MAINTAIN THE SEDIMENT POND UNTIL PERMANENT GROUND COVER IS ESTABLISHED. SEDIMENT SHALL BE CLEANED OUT OF THE PONDS WHEN IT REACHES THE ⅓ DEPTH OF BASIN. SEE SEPARATE DETAILS FOR ADDITIONAL INFORMATION.

SEDIMENT AND EROSION CONTROL MEASURES SHOULD BE CHECKED AFTER EACH RAIN EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED THE REQUIRED CLEANOUT ELEVATION OF THE DEVICE. ADDITIONAL DEVICES MUST BE INSTALLED IF NECESSARY.

THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACK OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 1-3" OF STONE AS CONDITIONS DEMAND. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLE ONTO PUBLIC ROADWAY OR INTO STORM DRAIN MUST BE REMOVED IMMEDIATELY.

CONTRACTOR SHALL INSPECT CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.

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

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 BACK TO THE EROSION CONTROL PLANS.

THE SITE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE OF ALL EROSION CONTROL MEASURES INCLUDING REPLACING OR REPAIRING ANY DAMAGED DEVICES DUE TO ANY CONSTRUCTION ACTIVITY BY OTHERS.

FINAL PHASE - PHASE 3
EROSION CONTROL NOTES:

THE FOLLOWING EROSION CONTROL MEASURES SHALL BE IMPLEMENTED DURING THE FINAL EROSION CONTROL PHASE OF CONSTRUCTION.

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

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

ALL DISTURBED AREAS LEFT MULCHED AFTER 30 DAYS SHALL BE STABILIZED WITH TEMPORARY GRASSING.

THE CONTRACTOR SHALL MAINTAIN ALL SEDIMENT PONDS AND EROSION CONTROL MEASURES UNTIL PERMANENT GROUND OVER IS ESTABLISHED. SEDIMENT SHALL BE CLEANED OUT OF THE PONDS WHEN IT REACHES THE HALF WAY POINT ON THE RISER.

AFTER CURBING, GRADED AGGREGATE BASE, AND PAVEMENT HAS BEEN INSTALLED, ALL INLET SEDIMENT TRAPS ON SINGLE AND DOUBLE WING CATCH BASINS ALONG WITH ANY CURB INLETS SHALL BE REMOVED AND REPLACED WITH CURB FILTER INLET PROTECTION. SEE SEPARATE DETAIL FOR ADDITIONAL INFORMATION.

ALL ROADWAY AND PARKING SHOULDERS SHOULD BE APPLIED WITH VEGETATIVE COVER AS SOON AS FINAL GRADE IS ACHIEVED BEHIND CURBS.

SEDIMENT AND EROSION CONTROL MEASURES SHOULD BE CHECKED AFTER EACH RAIN EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED THE CLEANOUT ELEVATION OF THE DEVICE. ADDITIONAL DEVICES MUST BE INSTALLED IF NECESSARY.

THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACK OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 1-3" OF STONE AS CONDITIONS DEMAND. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLE ONTO PUBLIC ROADWAY OR INTO STORM DRAIN MUST BE REMOVED IMMEDIATELY.

CONTRACTOR SHALL INSPECT CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.

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

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 BACK TO THE EROSION CONTROL PLANS.

THE SITE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE OF ALL EROSION CONTROL MEASURES INCLUDING REPLACING OR REPAIRING ANY DAMAGED DEVICES DUE TO ANY CONSTRUCTION ACTIVITY BY OTHERS.

ONCE FINAL STABILIZATION IS ACHIEVED, THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND DISPOSE OF THEM UNLESS NOTED DIFFERENTLY ON PLANS. ONCE TEMPORARY EROSION CONTROL MEASURES ARE REMOVED, THEN THE NOTICE OF TERMINATION CAN BE FILED.

PERMIT COVERAGE:

THIS PLAN HAS BEEN PREPARED TO MEET THE REQUIREMENTS UNDER THE STATE OF GEORGIA, DEPARTMENT OF NATURAL RESOURCES, ENVIRONMENTAL PROTECTION DIVISION (EPD), GENERAL PERMIT NO. 100002 FOR AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES), STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY FOR INFRASTRUCTURE.

1. CONSTRUCTION ACTIVITIES (GAR 100002 PART 1.C.1)

   A. ALL DISCHARGES OF STORM WATER ASSOCIATED WITH INFRASTRUCTURE CONSTRUCTION PROJECTS THAT WILL RESULT IN LAND DISTURBANCE EQUAL TO OR GREATER THAN ONE (1) ACRE OCCURRING ON OR BEFORE, AND CONTINUING AFTER, THE EFFECTIVE DATE OF THIS PERMIT, (HENCEFORTH REFERRED TO AS EXISTING STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES) EXCEPT FOR DISCHARGES IDENTIFIED UNDER PART I.C.3.;
   B. ALL DISCHARGES OF STORM WATER ASSOCIATED WITH INFRASTRUCTURE CONSTRUCTION PROJECTS THAT WILL RESULT IN LAND DISTURBANCES EQUAL TO OR GREATER THAN ONE (1) ACRE OCCURRING AFTER THE EFFECTIVE DATE OF THIS PERMIT, (HENCEFORTH REFERRED TO AS STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES), EXCEPT FOR DISCHARGES IDENTIFIED UNDER PART I.C.3.;
   C. COVERAGE UNDER THIS PERMIT IS NOT REQUIRED FOR DISCHARGES OF STORM WATER ASSOCIATED WITH INFRASTRUCTURE CONSTRUCTION PROJECTS THAT RESULT IN LAND DISTURBANCE OF LESS THAN FIVE (5) ACRES AND CONSIST SOLELY OF ROUTINE MAINTENANCE FOR THE ORIGINAL PURPOSE OF THE FACILITY THAT IS PERFORMED TO MAINTAIN THE ORIGINAL LINE AND GRADE AND THE HYDRAULIC CAPACITY, AS APPLICABLE. THE PERMITTEE SHALL, AS A MINIMUM, IMPLEMENT AND MAINTAIN BEST MANAGEMENT PRACTICES, INCLUDING SOUND CONSERVATION AND ENGINEERING PRACTICES TO PREVENT AND MINIMIZE EROSION AND RESULTANT SEDIMENTATION, WHICH ARE CONSISTENT WITH, AND NO LESS STRINGENT THAN, THOSE PRACTICES CONTAINED IN THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA"(MANUAL) PUBLISHED BY THE STATE SOIL AND WATER CONSERVATION COMMISSION AS OF JANUARY 1 OF THE YEAR IN WHICH THE LAND-DISTURBING ACTIVITY IS BEING CONDUCTED. IN ORDER TO BE ELIGIBLE FOR THIS EXEMPTION THE PROJECT MUST COMPLY WITH THE FOLLOWING CONDITIONS: (1) NO MASS GRADING SHALL OCCUR ON THE PROJECT, (2) THE PROJECT SHALL BE STABILIZED BY THE END OF EACH DAY WITH TEMPORARY OR PERMANENT STABILIZATION AND (3) THE PROJECT SHALL HAVE A DURATION OF LESS THAN 90 CALENDAR DAYS; AND
   D. COVERAGE UNDER THIS PERMIT IS NOT REQUIRED FOR DISCHARGE OF STORMWATER ASSOCIATED WITH RAILROAD CONSTRUCTION PROJECTS AND EMERGENCY RE-CONSTRUCTION CONDUCTED PURSUANT TO THE FEDERAL RAILWAY SAFETY ACT, THE INTERSTATE COMMERCE COMMISSION TERMINATION ACT AND WHICH CONSIST SOLELY OF ROUTINE MAINTENANCE FOR THE ORIGINAL PURPOSE OF THE FACILITY THAT IS PERFORMED TO MAINTAIN THE ORIGINAL LINE AND GRADE AND THE HYDRAULIC CAPACITY, AS APPLICABLE. THE CONSTRUCTION ACTIVITY SHOULD, AT A MINIMUM, IMPLEMENT AND MAINTAIN BEST MANAGEMENT PRACTICES, INCLUDING SOUND CONSERVATION AND ENGINEERING PRACTICES TO PREVENT AND MINIMIZE EROSION AND RESULTANT SEDIMENTATION CONSISTENT WITH THE REQUIREMENTS OF THE FEDERAL RAILWAY SAFETY ACT AND APPLICABLE REQUIREMENTS OF THE CLEAN WATER ACT.

2. MIXED STORM WATER DISCHARGES (GAR 100002 PART 1.C.2)

   THIS PERMIT MAY ONLY AUTHORIZE A STORM WATER DISCHARGE FROM A CONSTRUCTION SITE OR CONSTRUCTION ACTIVITIES THAT IS MIXED WITH A STORM WATER DISCHARGE FROM AN INDUSTRIAL SOURCE OR ACTIVITY OTHER THAN CONSTRUCTION WHERE:
   A. THE INDUSTRIAL SOURCE OR ACTIVITY OTHER THAN CONSTRUCTION IS LOCATED ON THE SAME SITE AS THE CONSTRUCTION ACTIVITY AND IS AN INTEGRAL PART OF THE CONSTRUCTION ACTIVITY;
   B. THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES ARE OCCURRING ARE IN COMPLIANCE WITH THE TERMS OF THIS PERMIT; AND
   C. STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE AREAS OF THE SITE WHERE INDUSTRIAL ACTIVITY OTHER THAN CONSTRUCTION ARE OCCURRING ARE COVERED BY A DIFFERENT NPDES GENERAL PERMIT OR INDIVIDUAL PERMIT AUTHORIZING SUCH DISCHARGES AND THE DISCHARGES ARE IN COMPLIANCE WITH A DIFFERENT NPDES PERMIT.

3. LIMITATIONS ON COVERAGE (GAR 100002 PART 1.C.3)

   THE FOLLOWING STORM WATER DISCHARGES FROM CONSTRUCTION SITES ARE NOT AUTHORIZED BY THIS PERMIT:
   A. STORM WATER DISCHARGES ASSOCIATED WITH AN INDUSTRIAL ACTIVITY THAT ORIGINATE FROM THE SITE AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED AND THE SITE HAS UNDERGONE FINAL STABILIZATION;
   B. DISCHARGES THAT ARE MIXED WITH SOURCES OF NON-STORM WATER OTHER THAN DISCHARGES WHICH ARE IDENTIFIED IN PART III.A.2. OF THIS PERMIT AND WHICH ARE IN COMPLIANCE WITH PART IV.D.7. (NON-STORM WATER DISCHARGES) OF THIS PERMIT;
   C. STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY THAT ARE SUBJECT TO AN EXISTING NPDES INDIVIDUAL OR GENERAL PERMIT. SUCH DISCHARGES MAY BE AUTHORIZED UNDER THIS PERMIT AFTER AN EXISTING PERMIT EXPIRES PROVIDED THE EXISTING PERMIT DID NOT ESTABLISH NUMERIC LIMITATIONS FOR SUCH DISCHARGES; AND
   D. STORM WATER DISCHARGES FROM CONSTRUCTION SITES THAT THE DIRECTOR (EPD) HAS DETERMINED TO BE OR MAY REASONABLY BE EXPECTED TO BE CONTRIBUTING TO A VIOLATION OF A WATER QUALITY STANDARD.

4. COMPLIANCE WITH WATER QUALITY STANDARDS (GAR 100002 PART 1.C.4)

   NO DISCHARGES AUTHORIZED BY THIS PERMIT SHALL CAUSE VIOLATIONS OF GEORGIA'S IN-STREAM WATER QUALITY STANDARDS AS PROVIDED BY THE RULES AND REGULATIONS FOR WATER QUALITY CONTROL, CHAPTER 391-3-6-.03.

SAMPLING REQUIREMENTS (GAR 100002 PART IV.D.6)

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

a. SAMPLING REQUIREMENTS SHALL INCLUDE THE FOLLOWING:
(1) A USGS TOPOGRAPHIC MAP, A TOPOGRAPHIC MAP OR A DRAWING (REFERRED TO AS A TOPOGRAPHIC MAP) THAT IS A SCALE EQUAL TO OR MORE DETAILED THAN A 1:24000 MAP SHOWING THE LOCATION OF THE INFRASTRUCTURE CONSTRUCTION; (A) THE LOCATION OF ALL PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES AS SHOWN ON A USGS TOPOGRAPHIC MAP, AND ALL OTHER PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES LOCATED DURING MANDATORY FIELD VERIFICATION, INTO WHICH THE STORM WATER 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 STORM WATER(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 MONITORED, A RATIONALE MUST BE INCLUDED 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. 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 STORM WATER OUTFALLS USING THE FOLLOWING MINIMUM GUIDELINES:
(a). THE UPSTREAM SAMPLE FOR EACH RECEIVING WATER(S) MUST BE TAKEN IMMEDIATELY UPSTREAM OF THE CONFLUENCE OF THE FIRST STORM WATER DISCHARGE FROM THE PERMITTED ACTIVITY (I.E., THE DISCHARGE FARTHEST UPSTREAM AT THE SITE) BUT DOWNSTREAM OF ANY OTHER STORM WATER DISCHARGES NOT ASSOCIATED WITH THE PERMITTED ACTIVITY. WHERE APPROPRIATE, SEVERAL UPSTREAM SAMPLES FROM ACROSS THE RECEIVING WATER(S) MAY NEED TO BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY OF THESE SAMPLES USED FOR THE UPSTREAM TURBIDITY VALUE.
(b). THE DOWNSTREAM SAMPLE FOR EACH RECEIVING WATER(S) MUST BE TAKEN DOWNSTREAM OF THE CONFLUENCE OF THE LAST STORM WATER DISCHARGE FROM THE PERMITTED ACTIVITY (I.E., THE DISCHARGE FARTHEST DOWNSTREAM AT THE SITE) BUT UPSTREAM OF ANY OTHER STORM WATER DISCHARGE NOT ASSOCIATED WITH THE PERMITTED ACTIVITY. WHERE APPROPRIATE, SEVERAL DOWNSTREAM SAMPLES FROM ACROSS THE RECEIVING WATER(S) MAY NEED TO BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY OF THESE SAMPLES USED FOR THE DOWNSTREAM TURBIDITY VALUE.
(c). IDEALLY THE SAMPLES SHOULD BE TAKEN FROM THE HORIZONTAL AND VERTICAL CENTER OF THE RECEIVING WATER(S) OR THE STORM WATER OUTFALL CHANNEL(S).
(d). CARE SHOULD BE TAKEN TO AVOID STIRRING THE BOTTOM SEDIMENTS IN THE RECEIVING WATER(S) OR IN THE OUTFALL STORM WATER CHANNEL.
(e). THE SAMPLING CONTAINER SHOULD BE HELD SO THAT THE OPENING FACES UPSTREAM.
(f). THE SAMPLES SHOULD BE KEPT FREE FROM FLOATING DEBRIS.
(g). PERMITTEES DO NOT HAVE TO SAMPLE SHEETFLOW THAT FLOWS ONTO UNDISTURBED NATURAL AREAS OR AREAS STABILIZED BY THE PROJECT. FOR PURPOSES OF THIS SECTION, STABILIZED SHALL MEAN, FOR UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES AND AREAS LOCATED OUTSIDE THE WASTE DISPOSAL LIMITS OF A LANDFILL CELL THAT HAS BEEN CERTIFIED BY EPD FOR WASTE DISPOSAL, 100% OF THE SOIL SURFACE IS UNIFORMLY COVERED IN PERMANENT VEGETATION WITH A DENSITY OF 70% OR GREATER, OR EQUIVALENT PERMANENT STABILIZATION MEASURES (SUCH AS THE USE OF RIP RAP, GABIONS, PERMANENT MULCHES OR GEOTEXTILES) HAVE BEEN USED. PERMANENT VEGETATION SHALL CONSIST OF: PLANTED TREES, SHRUBS, PERENNIAL VINES; A CROP OF PERENNIAL VEGETATION APPROPRIATE FOR THE TIME OF YEAR AND REGION; OR 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. FINAL STABILIZATION APPLIES TO EACH PHASE OF CONSTRUCTION.
(h). ALL SAMPLING PURSUANT TO THIS PERMIT MUST BE DONE IN SUCH A WAY (INCLUDING GENERALLY ACCEPTED SAMPLING METHODS, LOCATIONS, TIMING, AND FREQUENCY) AS TO ACCURATELY REFLECT WHETHER STORM WATER RUNOFF FROM THE CONSTRUCTION SITE IS IN COMPLIANCE WITH THE STANDARD SET FORTH IN PARTS III.D.3. OR III.D.4., WHICHEVER IS APPLICABLE.

d. SAMPLING FREQUENCY.
(1). THE PRIMARY PERMITTEE MUST SAMPLE IN ACCORDANCE WITH THE PLAN AT LEAST ONCE FOR EACH RAINFALL EVENT DESCRIBED BELOW. FOR A QUALIFYING EVENT, SAMPLES MUST BE TAKEN WITHIN FORTY-FIVE (45) MINUTES OF:
(a) THE ACCUMULATION OF THE MINIMUM AMOUNT OF RAINFALL FOR THE QUALIFYING EVENT, IF THE STORM WATER DISCHARGE TO A MONITORED RECEIVING WATER OR FROM A MONITORED OUTFALL HAS BEGUN AT OR PRIOR TO THE ACCUMULATION, OR
(b) THE BEGINNING OF ANY STORM WATER DISCHARGE TO A MONITORED RECEIVING WATER OR FROM A MONITORED OUTFALL, IF THE DISCHARGE BEGINS AFTER THE ACCUMULATION OF THE MINIMUM AMOUNT OF RAINFALL FOR THE QUALIFYING EVENT.
(2). HOWEVER, WHERE MANUAL AND AUTOMATIC SAMPLING ARE IMPOSSIBLE (AS DEFINED IN THIS PERMIT), OR ARE BEYOND THE PERMITTEE'S CONTROL, THE PERMITTEE SHALL TAKE SAMPLES AS SOON AS POSSIBLE, BUT IN NO CASE MORE THAN TWELVE (12) HOURS AFTER THE BEGINNING OF THE STORM WATER DISCHARGE.
(3). SAMPLING BY THE PERMITTEE SHALL OCCUR FOR THE FOLLOWING EVENTS:
(a). FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING STREAM, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR MONITORING DURING NORMAL BUSINESS HOURS* (MONDAY THRU FRIDAY, 8:00 AM TO 5:00 PM AND SATURDAY 8:00 AM TO 5:00 PM, EXCLUDING ALL NON-WORKING FEDERAL HOLIDAYS, WHEN CONSTRUCTION ACTIVITY IS BEING CONDUCTED BY THE PRIMARY PERMITTEE) THAT OCCURS AFTER ALL CLEARING AND GRUBBING OPERATIONS HAVE BEEN COMPLETED 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 STREAM, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR MONITORING DURING NORMAL BUSINESS HOURS* THAT OCCURS EITHER 90 DAYS AFTER THE FIRST SAMPLING EVENT OR AFTER ALL MASS GRADING OPERATIONS HAVE BEEN COMPLETED 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 ARE FOUND TO BE PROPERLY DESIGNED, INSTALLED AND MAINTAINED, NO FURTHER ACTION IS REQUIRED. IF BMPS IN ANY AREA OF THE SITE THAT DISCHARGES TO A RECEIVING STREAM 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; AND
(d). 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 MONITORING AT ANY TIME OF THE DAY OR WEEK.

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	DATE	DESCRIPTION

PROJECT #	2019 - 174
PROJECT MANAGER	GGD

LaGRANGE THREAD
PHASE 5
CALUMET TO DANIEL ST
LaGRANGE, GA

GEORGIA REGISTERED No. 034591 PROFESSIONAL ENGINEER JOHN D. BASS
LEVEL II CERT. #17788
EXPIRES: 09-29-2021

EROSION, SEDIMENTATION & POLLUTION CONTROL NOTES

SCALE	1"=30'
DATE	MAY 10, 2019
SHEET #	**EN-01**

O:\PROJECT FOLDERS\2019\190106_LAGRANGE THREAD-UNION ST TO DANIEL ST\DWG\190106_X-CONST.dwg, 5/10/2019 2:24:4

EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN (ESPCP):

This plan was prepared as required by NPDES General Permit No. GAR 100002. These plan sheets and all requirements of the General Permit as well as Local, State, and Federal regulations or laws apply regardless of specific inclusion in this plan.

SITE DESCRIPTION
CITY OF LaGRANGE as Primary Permittee will oversee site construction located within the Property situated in Land lots 117, 118 of District 6, Troup County, Georgia. The magnitude of the entire development contains 1.4 acres.

Project to be developed as a linear park that will consist of a concrete multi-use trail with grassing and landscaping. No secondary perimttees are known to be needed for this project at this time.

Zoning
N/A

Survey Information
Boundary information: Obtained from field survey performed by Georgia & West, Inc.

Topographic information: Obtained from field survey performed by Georgia & West, Inc.

NGS Monument: OPUS
Vertical: NAVD 88
TBM: Top F.H. operating nut Elev.: 771.92

Flood Insurance Rate Map, Panel 13285C0142E, Dated 07/03/2012, shows the site to be in Zone X (no base flood elevations determined).

Runoff Coefficient
* Weighted pre-construction Runoff Coefficient (C): 0.50
* Weighted post-construction Runoff Coefficient (C): 0.50

Soil Types
The NRCS soil types are shown on the Erosion Control Plans.

Soil Disturbing Activities Include:
-Installing a stabilized construction exit, perimeter and other erosion and sediment controls
-Clearing and grubbing
-Grading and excavation for utilities & road subgrade
-Preparation for final planting and seeding
-Completion of on-site stabilization

Sequence of Major Activities
See Construction Schedule

Name of Receiving Waters
Tributary of Oseligee Creek and Blue John Creek

CONTROLS
Erosion and Sediment Controls

All construction exits shall be in place prior to any land disturbing activities.

Existing vegetation shall be left in place until such time that land disturbing activities are to take place upon that portion of the site. When construction activities have ceased in an area, that area shall be stabilized within 14 days. If the area is not yet to final grade, it shall be mulched. If the area is to final grade and will eventually contain site improvements such as the structures or sidewalks, it shall be temporary seeded. Areas brought to final grade that will remain pervious are to be permanently seeded. Allowable exceptions from the NPDES General Permit, GAR 100002, are noted below.

"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."

Please refer to Detail Sheets for the land disturbance construction schedule and temporary and permanent grassing schedules.

Storm water from this development will sheet flow into existing ditches and storm sewer systems and discharge into a Tributary of Oseligee Creek and Blue John Creek.

NON-STORM WATER DISCHARGES
All non-storm water discharges will be routed through on site BMPs and the storm water management system where possible. These discharges include flushing of water and fire lines, irrigation water, ground water, dewatering of pits or depressions within the construction site and rinse off water of non-toxic materials.

OTHER CONTROLS
NO WASTE WILL BE DISPOSED OF INTO STORM WATER INLETS OR WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.

Waste Materials
All waste materials will be collected and stored in a securely lidded metal dumpster. The dumpster will meet all solid waste management regulations. All trash and construction debris from the site will be deposited in the dumpster. The dumpster will be emptied a minimum of once per week or more often if necessary and trash will be hauled as required by local regulations. No construction waste will be buried onsite.

All personnel will be instructed on proper procedures for waste disposal. A notice stating these practices will be posted at the jobsite and the Contractor will be responsible for seeing that these procedures are followed.

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).

Hazardous Wastes
All hazardous waste materials will be disposed of in the manner specified by local, state, and /or federal regulations and by the manufacturer of such products. The job site superintendent, who will also be responsible for seeing that these practices are followed, will instruct site personnel in these practices. Material Safety Data Sheets (MSDS's) for each substance with hazardous properties that is used on the job site will be obtained and used for the proper management of potential wastes that may result from these products. A MSDS will be posted in the immediate area where such product is stored and/or used and another copy of each MSDS will be maintained in the ESPCP file at the job site construction trailer office. Each employee who must handle a substance with hazardous properties will be instructed on the use of MSDS sheets and the specific information in the applicable MSDS for the product he/she is using, particularly regarding spill control techniques.

The contractor will implement the Spill Prevention Control and Countermeasures (SPCC) Plan found within this ESPCP and will train all personnel in the proper cleanup and handling of spilled materials. No spilled hazardous materials or hazardous wastes will be allowed to come in contact with stormwater discharges. If such contact occurs, the stormwater discharge will be contained on site until appropriate measures in compliance with state and federal regulations are taken to dispose of such contaminated stormwater. It shall be the responsibility of the job site superintendent to properly train all personnel in the use of the SPCC plan.

Sanitary Wastes
A minimum of one portable sanitary unit will be provided for every ten (10) workers on the site. All sanitary waste will be collected from the portable units a minimum of one time per week by a licensed portable facility provider in complete compliance with local and state regulations.

All sanitary waste units will be located in one area where the likelihood of the unit contributing to storm water discharge is negligible. Additional containment BMP's must be implemented, such as gravel bags or specially designed plastic skid containers around the base, to prevent wastes from contributing to storm water discharges. The location of sanitary waste units must be identified on the Erosion Control Plan Grading Phase, by the contractor once the locations have been determined.

Sanitary Sewer will be provided by Municipal System at the completion of this project. No permanent waste disposal, sanitary sewer, or septic tanks shall be installed without obtaining all necessary approvals of local and/or state regulations.

Offsite Vehicle Tracking
A stabilized construction exit has been provided to help reduce vehicle tracking of sediment. The paved street adjacent to the site exit will be inspected daily for tracking of mud, dirt or rock. Dump trucks hauling material from the construction site will be covered with a tarpaulin.

INVENTORY FOR POLLUTION PREVENTION PLAN

The following materials are expected onsite during construction: Concrete products, asphalt, petroleum based fuels and lubricants for equipment, tar, metal building materials, lumber, sheet rock, floor coverings, electrical wire and fixtures, paints/stains/finishing treatments, paints, paint solvents, additives for soil stabilization, cleaning solvents, pesticides, fertilizers, herbicides, crushed stone, plastic and metal pipes.

SPILL PREVENTION

Practices such as good housekeeping, proper handling of hazardous products and proper spill control practices will be followed to reduce the risk of spills and spills from discharging into storm water runoff.

Good Housekeeping

1. Quantities of products stored onsite will be limited to the amount needed for the job.
2. Products and materials will be stored in a neat, orderly manner in appropriate containers protected from rainfall, where possible.
3. Products will be kept in their original containers with manufacturer labels legible and visible.
4. Product mixing, disposal and disposal of product containers will be according to the manufacturer's recommendations.
5. The Contractor will inspect such materials to ensure proper use, storage and disposal.

Product Specific Practices

Petroleum Based Products - Containers for products such as fuels, lubricants and tars will be inspected daily for leaks and spills. This includes on-site vehicle and machinery daily inspections and regular preventative maintenance of such equipment. Equipment maintenance areas will be located away from state water, natural drains and storm water drainage inlets. In addition, temporary fueling tanks shall have a secondary containment liner to prevent/minimize site contamination. Discharge of oils, fuels and lubricants is prohibited. Proper disposal methods will include collection in a suitable container and disposal as required by local and state regulations.

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, materials used with these products and product containers will be disposed of according to manufacturer's specifications and recommendations.

Concrete - NO concrete trucks will be allowed to wash out or discharge surplus concrete or drum wash water onsite. Wash areas for washdown of tools, concrete mixer chutes, hoppers and the rear of the vehicles, if used, will consist of an enclosed waste collection area that will contain the concrete wash until it hardens then disposed of into the onsite construction waste bin.

Fertilizer/Herbicides - These products will be applied at rates that do not exceed the manufacturer's specifications or above the guidelines set forth in the crop establishment or in the GSWCC Manual for Erosion and Sediment Control in Georgia. Any storage of these materials will be under roof in sealed containers.

Building Materials - No building or construction materials will be buried or disposed of onsite. All such material will be disposed of in proper waste disposal procedures.

Spill Cleanup and Control Practices

- Local, State and manufacturer's recommended methods for spill cleanup will be clearly posted and procedures will be made available to site personnel.
- Material and equipment necessary for spill cleanup will be kept in the material storage areas. Typical materials and equipment includes, but is not limited to , brooms, dustpans, mops, rags, gloves, goggles, cat litter, sand, sawdust and properly labeled plastic and metal waste containers.
- Spill prevention practices and procedures will be reviewed after a spill and adjusted as necessary to prevent future spills.
- All spills will be cleaned up immediately upon discovery. All spills will be reported as required by local, state and federal regulations.
- FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN ON SURFACE WATER), THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-426-2675.
- FOR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-426-2675.
- 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 onsite (this includes capacities of equipment) or if any one piece of equipment has a capacity greater than 660 gallons. The Contractor will need a Spill Prevention Containment and Countermeasures Plan prepared by that licensed professional.

INSPECTIONS

Primary Permittee

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 nonworking 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 shalf be made and retained at the site or be readily available at a designated alternate location until the entire site or that portion of a construction project that has been phased has undergone final stabilization and a Notice of Termination is submitted to EPD. Such reports shall be readily available by end of the second business day and/or working day and shall identify all incidents of best management practices that have 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.

A COPY OF THE REPORT(S) SHALL BE SENT TO THE OWNER/DEVELOPER, EPD AS REQUIRED BY THE PERMIT AND THE PROJECT INSPECTOR.

MAINTENANCE & INSPECTION OF EROSION & SEDIMENTATION CONTROLS

Maintenance

The following best management practice maintenance criteria are taken from the "Manual for Erosion and Sediment Control in Georgia", Sixth Edition.

Construction exits shall be maintained in a condition that will prevent tracking or flow of mud onto public rights-of-way. This may require periodic top dressing with 1.5 - 3.5 inch stone, as conditions demand, and repair and/or cleanout of any structures to trap sediment. All materials spilled, dropped, washed, or tracked from vehicles or site onto roadways or into storm drains must be removed immediately.

Retrofit structures shall be kept clear of trash and debris. This will require continuous monitoring and maintenance, which includes sediment removal when one-third of the sediment storage capacity has been lost.

Sediment shall be removed from sediment traps when the sediment has accumulated to one-half the height of the trap. Sediment shall be removed from curb inlet protection immediately. For excavated inlet sediment traps, sediment shall be removed when one-half of the sediment storage capacity has been lost to sediment accumulation.

Sediment shall not be washed into the inlet. It shall be removed from the sediment trap and disposed of and stabilized so that it will not enter the inlet, again.

When the contributing drainage area has been permanently stabilized, all materials and any sediment shall be removed, and either salvaged or disposed of properly. The disturbed area shall be brought to proper grade, then smoothed and compacted. Appropriately stabilize all disturbed areas around the inlet.

Repair all damages caused to temporary sediment basins by soil erosion or construction equipment at or before the end of each working day. Sediment shall be removed from the basin when it reaches the specified distance below the top of the riser. Sediment shall not enter adjacent streams or drainage ways during sediment removal or disposal. The sediment shall not be deposited downstream from the embankment, adjacent to a stream or floodplain.

Inspect riprap outlet structures after heavy rains to see if any erosion around or below the riprap has taken place or if stones have been dislodged. Immediately make all needed repairs to prevent further damage.

Roughened areas shall be seeded and mulched as soon as possible to obtain optimum seed germination and seeding growth.

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

Permanent vegetation shall be applied immediately to rough graded areas that will be undisturbed for longer than six months. This practice or sodding shall be applied immediately to all areas at final grade. Final Stabilization means that all soil disturbing activities at the site have been completed, and that for unpaved areas and areas not covered by permanent structures and areas located outside the waste disposal limits of a landfill cell that has been certified by the GA EPD for waste disposal, 100% of the soil surface is uniformlycovered 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. Permanent vegetation shall consist of, planted trees, shrubs, perennial vines; or a crop of perennial vegetation appropriate for the region, such that within the growing season a 70% coverage by perennial vegetation shall be achieved. Final stabilization applies to each phase of construction. For linear construction projects on land used for agricultural or silvicultural purposes, final stabilization may be accomplished by stabilizing the disturbed land for its agricultural or silvicultural use. Until this standard is satisfied and permanent control measures and facilities are operational, interim stabilization measures and temporary erosion and sedimentation control measures shall not be removed.

STORMWATER SAMPLING

SAMPLE ANALYSIS

Storm water samples are to be analyzed in accordance with methodology and test procedures established by 40 CFR Part 136 and the guidance document titled 'NPDES Storm Water Sampling Guidance Document, EPA 833-B-92-001.'

Storm water is to be sampled for nephelometric turbidity units (NTU) at the outfall location. A discharge of storm water runoff from disturbed areas where best management practices have not been properly designed, installed, and maintained shall constitute a separate violation for each day on which such condition results in the turbidity of the discharge exceeding 75 N.T.U.

Sampling Points

There will be 1 storm water sampling location, Md1. See Erosion Control Plan sheets for exact location. Per NPDES Permit GAR 100002, for construction activities, the Primary Permittee must complete all sampling.

- Care should be taken to avoid stirring the bottom sediments in the receiving water(s) or in the outfall storm water channel.
- The sampling container should be held so that the opening faces upstream.
- The samplings should be kept free from floating debris.
- The Primary Permittee does not have to sample sheet flow onto undisturbed natural areas or areas stabilized by the project.

Reporting

A monthly summary of the monitoring results shall be sent to CITY OF LaGRANGE and Georgia Environmental Protection Division by the 15th of each month.
This report summary shall include:

* The rainfall amount, date, exact place and time of sampling or measurements;
* The name(s) of the certified personnel who performed the sampling and measurements;
* The date(s) analyses were performed;
* The time(s) analyses were initiated;
* The name(s) of the individuals who performed the analyses;
* References and written procedures, when available, for the analytical techniques or methods used. A quality control/quality assurances program must be included in the written procedure;
* The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results.

*Results which exceed 1000 NTU shall be reported as "Exceeds 1000 NTU."
*Certification statement that sampling was conducted as per the Plan.

If no qualifying events occurred within a monthly monitoring period, a report must be submitted stating such. Addresses are provided below:

Governing Agency:

Georgia Environmental Protection Division West Central District Office (Macon)
2640 Shurling Drive
Macon, GA 31211-3576
(478) 751-6612

ATTN: CITY OF LaGRANGE
ATTN: MEG KELSEY
200 RIDLEY AVENUE
LaGRANGE, GA 30240
706-883-2016
mkelsey@lagrange.ga.org

COMPLIANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS

The contractor will obtain copies of any and all local and state regulations that are applicable to storm water management, erosion control, and pollution minimization at this job site and will comply fully with such regulations. The contractor will submit written evidence of such compliance if requested by the Owner or any agent of a regulatory body. The contractor will comply with all conditions of any and all local, state and federal agencies have governing authority, including the conditions related to maintaining the ESPCP and evidence of compliance with the ESPCP at the job site and allowing regulatory personnel access to the job site and to records in order to determine compliance.

CERTIFICATION

"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 an d Sediment Control in Georgia' (Manual) published by the state 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 meets the design requirements contained in the General NPDES Permit No. GAR 100002."

MAY 10, 2019
JOHN D. BASS, PE GA NO. 34591 DATE
LEVEL II CERTIFIED DESIGN PROFESSIONAL CERT. #17788
EXPIRES: 09-29-2021

THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN IS TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMP'S IN ACCORDANCE WITH PART IV.A.5. WITHIN 7 DAYS AFTER INSTALLATION. CONTRACTOR MUST CONTACT DESIGN PROFESSIONAL IMMEDIATELY ONCE BMP'S ARE INSTALLED.

DESIGN PROFESSIONAL 7-DAY VISIT CERTIFICATION

DATE OF INSPECTION _____

I Certify the site was / was not in compliance with the ES&PC Plan on the date of inspection.

_____
JOHN D. BASS, PE GA NO. 34591
LEVEL II CERTIFIED DESIGN PROFESSIONAL CERT. #17788

Inspection revealed the following discrepancies from the ES&PC Plan.

_____

_____

_____

These deficiencies must be addressed immediately and a re-inspection scheduled. Work shall not proceed on the site until Design Professional Certification is obtained.

KAIZENCOLLABORATIVE
2390 MAIN STREET | TUCKER, GEORGIA 30084 | 404.239.2521

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E-MAIL: mailbox@georgiaandwest.com

	DATE	DESCRIPTION

PROJECT #	2019 - 174
PROJECT MANAGER	GGD

LaGRANGE THREAD PHASE 5
CALUMET TO DANIEL ST
LaGRANGE, GA

GEORGIA REGISTERED No. 034591 PROFESSIONAL ENGINEER JOHN D. BASS
LEVEL II CERT. #17788
EXPIRES: 09-29-2021

EROSION, SEDIMENTATION & POLLUTION CONTROL NOTES

SCALE	1"=30'
DATE	MAY 10, 2019
SHEET #	**EN-02**