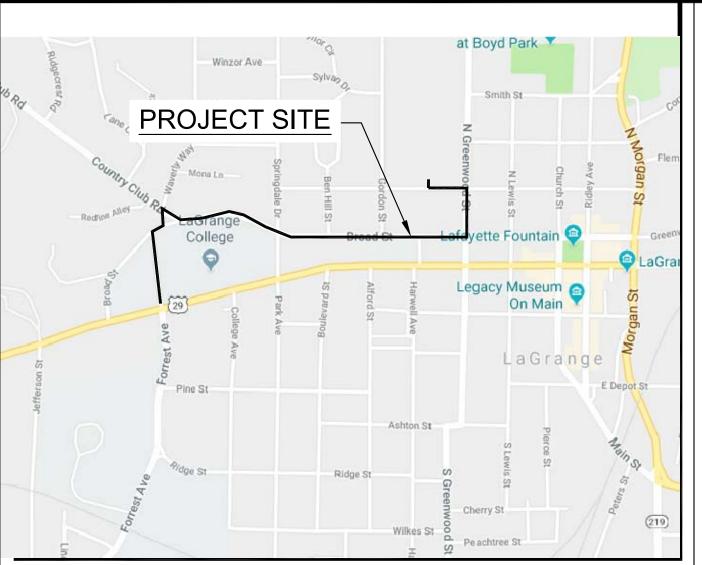
CITY OF LAGRANGE, GEORGIA



VICINITY MAP

LAND LOT: 109, 110, 115 - 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 109,110, & 115 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 2.0 ACRES, NO DISTURBANCE IS PROPOSED WITHIN THE STATE 25' STREAM BUFFER SETBACK.

NARRATIVE

THIS PROJECT IS A LINEAR SIDE PATH TRAIL BEGINING AT THE NORTHWEST CORNER OF VERNON WAY AND PANTHER WAY, ALIGNING THROUGH CITY EASEMENT AND CITY OWNED PROPERTY, FOLLOWING THE RIGHT OF WAY AND CITY EASMENT ALONG BROAD STREET AND N. GREENWOOD ST, AND ENDS AT THE NORTH SIDE OF W. HARALSON STREET AT THE EXISTING LAGRANGE THREAD TRAIL.

THE PROJECT LENGTH IS APPROXIMATELY 4915 LF OF CONCRETE TRAIL. 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

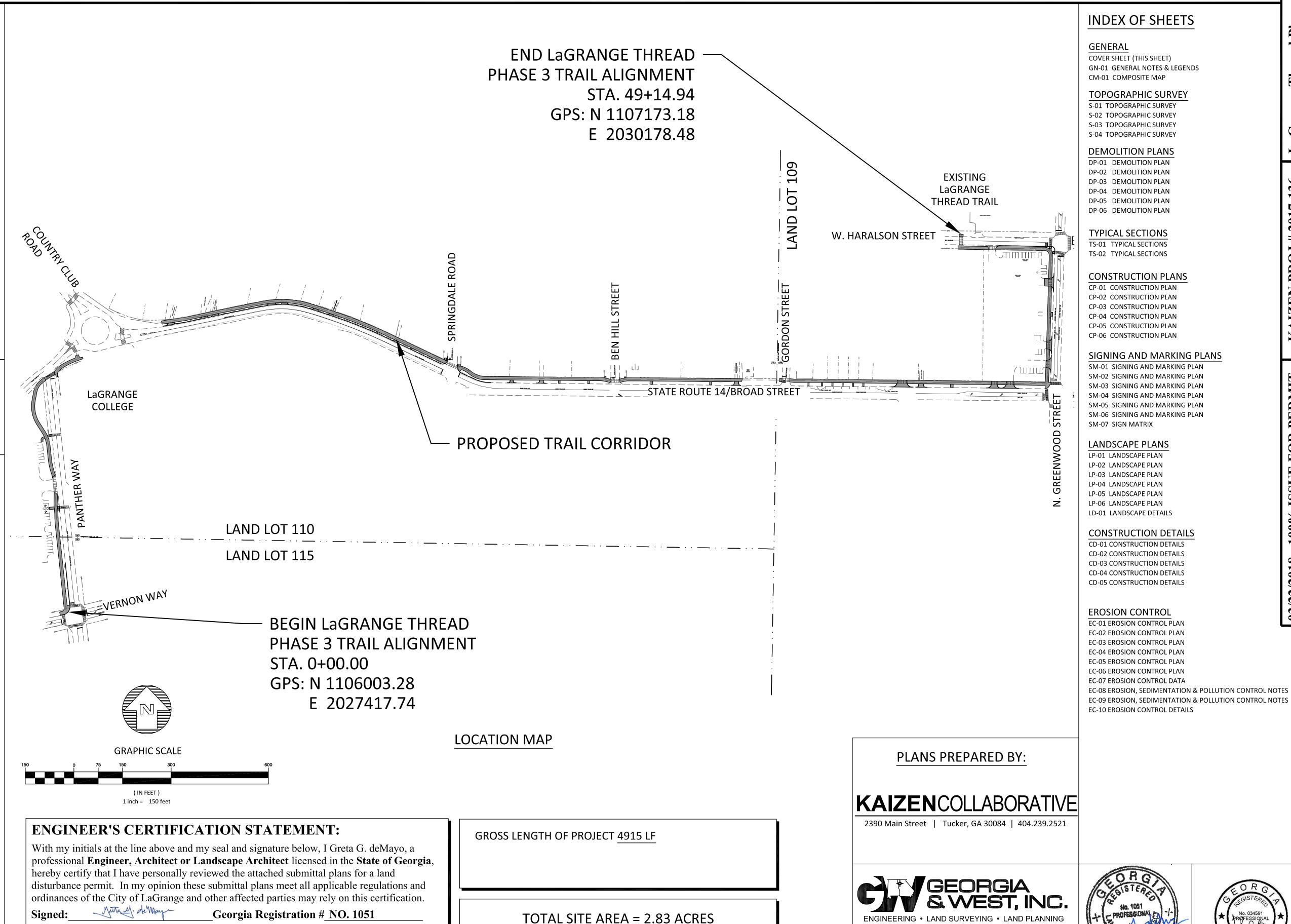
CONSTRUCTION MANAGEMENT

Date: MARCH 22, 2018

PATH FOUNDATION

JONATHAN McCAIG - 24 HOUR CONTACT GA GSWCC LEVEL 1 CERTIFICATION # 58893 EXP. 08/21/2018

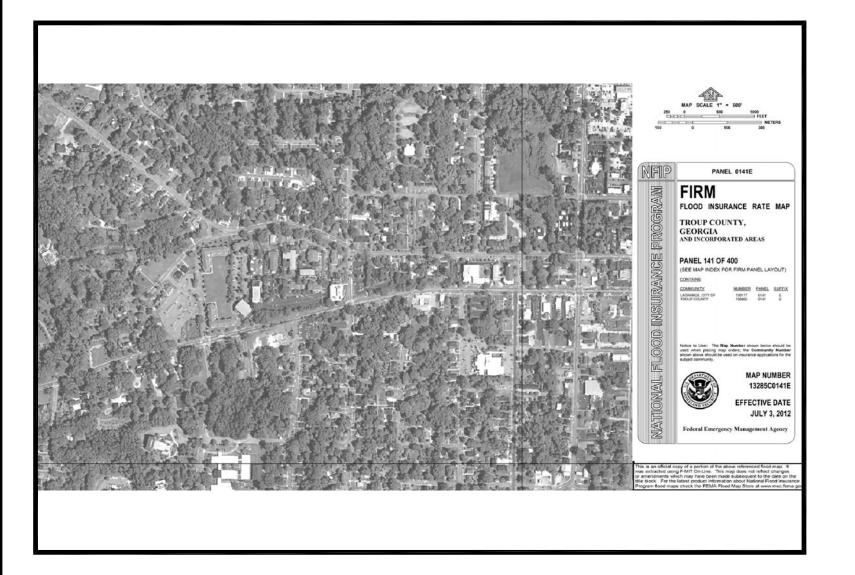
office 404-875-7284 x5 cell 404-433-1900



DISTURBED AREA = 2.0 ACRES

CARROLLTON, GA. 30117

E-MAIL: mailbox@georgiaandwest.com



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

SITE DATA

TOTAL SITE AREA = 2.83 ACRES DISTURBED AREA = 2.0 ACRES

NPDES FEE = 2.0 ACRES X \$80.00 STATE AMOUNT = \$80.00 CITY AMOUNT = \$80.00

LAND LOTS: 109, 110, 115 - DISTRICT 6

CONTACTS

24-HOUR CONTACTS:

PATH FOUNDATION JONATHAN McCAIG - 24 HOUR CONTACT GA GSWCC LEVEL 1 CERTIFICATION # 58893 EXP. 08/21/2018

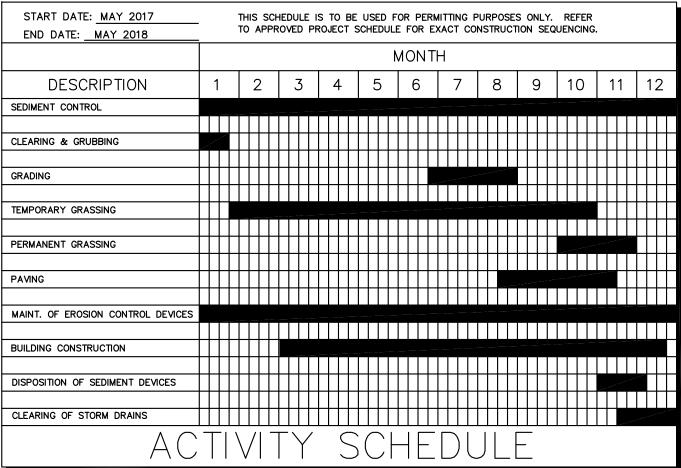
office 404-875-7284 x5

cell 404-433-1900

EROSION & SEDIMENT CONTROL

- l. 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)



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.**
- 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
- 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.

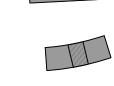
CONSTRUCTION NOTES

- 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



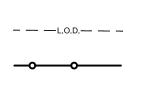
PROPOSED TRAIL AND CENTERLINE



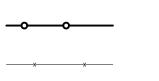
PROPOSED CROSSWALK

PROPOSED FENCELINE

BRIDGE CROSSINGS

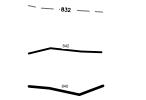


PROPOSED LIMITS OF DIASTURBANCE



EXISTING FENCELINE PROPOSED DEMOLITION ITEM

PROPOSED STRUCTURAL SLAB



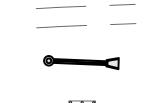
EXISTING CONTOUR ELEVATION

PROPOSED MINOR CONTOUR



PROPOSED MAJOR CONTOUR

EXISTING GRAVEL DRIVE



PROPOSED PIPE AND CULVERT



EXISTING SPOT ELEVATION

PROPOSED BOLLARDS



UTILITY POLE

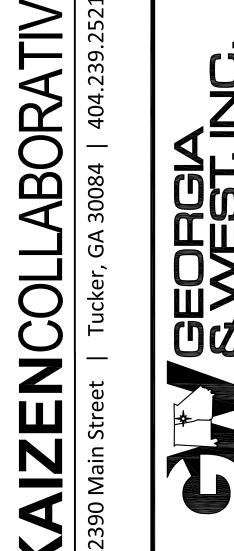
LAND LOT LINE

PROPERTY LINE

SHEET MATCHLINE

			LEGEND		
<u>_</u>	1033 CATCH BASIN	₩ ⊠	WATER VALVE	—SF—	SILT FENCE
△	1034 CATCH BASIN 1019A DROP INLET	GV	GAS VALVE	—тр—	TREE PROTECTION FENCE
0	1011A JUNCTION BOX	یج	HANDICAPPED PARKING	⊸ ⊸	CHAIN LINK FENCE
	1019A TYPE E CURB INLET		TRAFFIC FLOW	_xx_	EXISTING FENCE
	1125 HEADWALL	—UGP—	UNDERGROUND POWER OVERHEAD POWER		EXISTING CONTOUR
\Rightarrow	DRAINAGE SLOPE	—ugc—	UNDERGROUND CABLE	— ₁₀₀ —	PROPOSED CONTOUR
S	SEWER MANHOLE	—т—	OVERHEAD TELEPHONE		EXISTING CURB & GUTTER
\mathcal{A}	EXISTING FIRE HYDRANT	—FOC—	FIBER OPTIC CABLE		
	PROPOSED FIRE HYDRANT	w	WATER		PROPOSED CURB & GUTTER
		—SS— —FM—	SANITARY SEWER FORCE MAIN	x 1010	EXISTING SPOT ELEVATION
Ď.	LAMP POST		GAS	Ø 1010	PROPOSED SPOT ELEVATION
-(1)	GUY POLE	I	STORM DRAIN	الماني ا	THO OSLD SPOT ELEVATION

STORM DRAIN



REVISION	DATE	DESCRIPTION
		Τ
KAIZEN PF	ROJECT#	2017 - 136
PROJECT	MANAGER	GGD
1		ANGE THREAD
		PHASE 3
	LaG	GRANGE, GA
		, o,

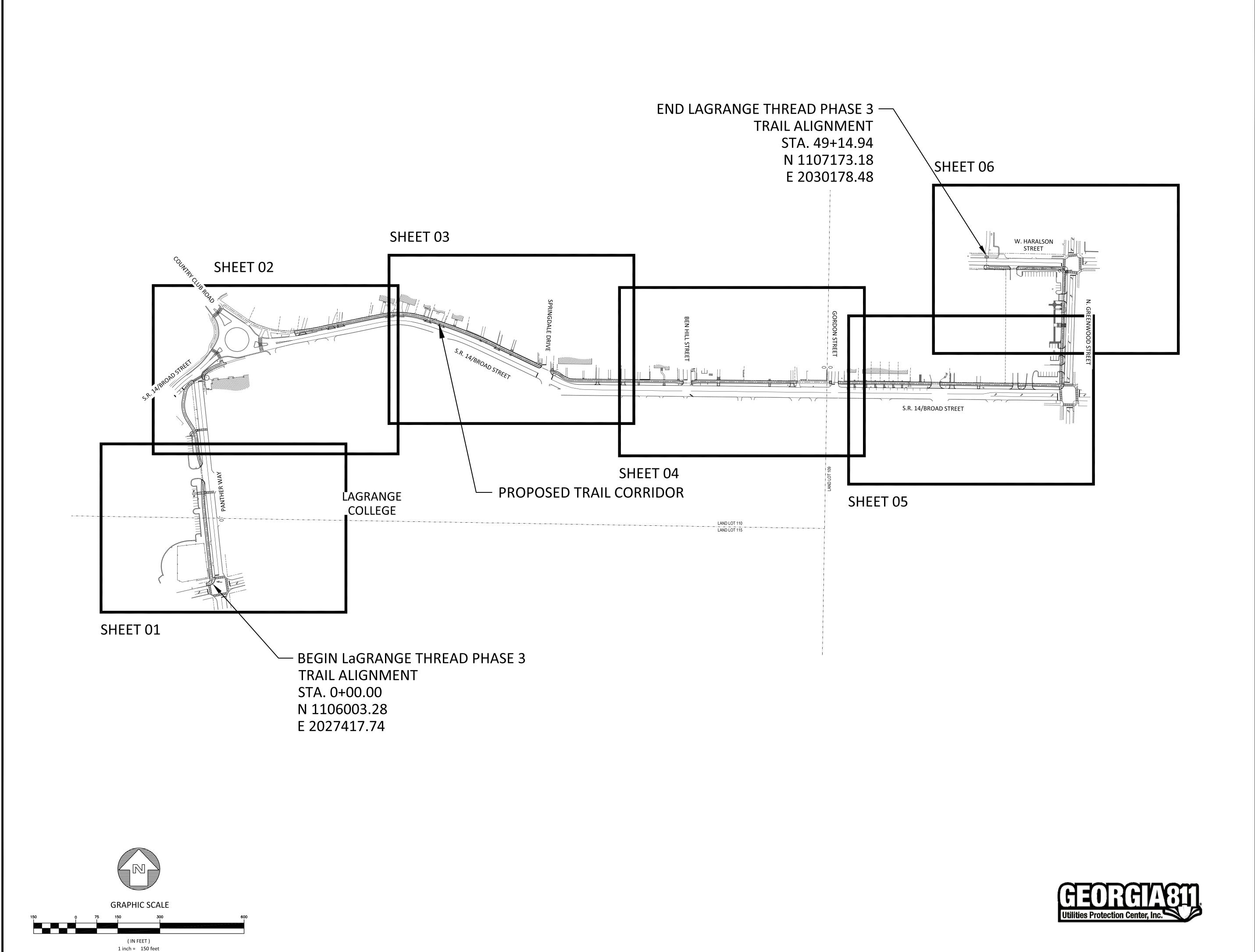


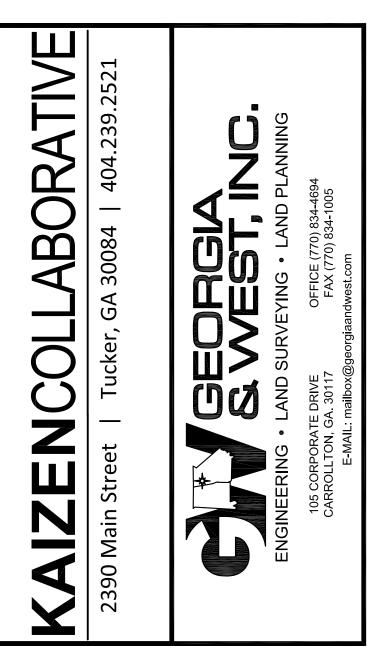
GENERAL NOTES

DATE: | MARCH 22, 2018

SHEET NAME:

GN-01



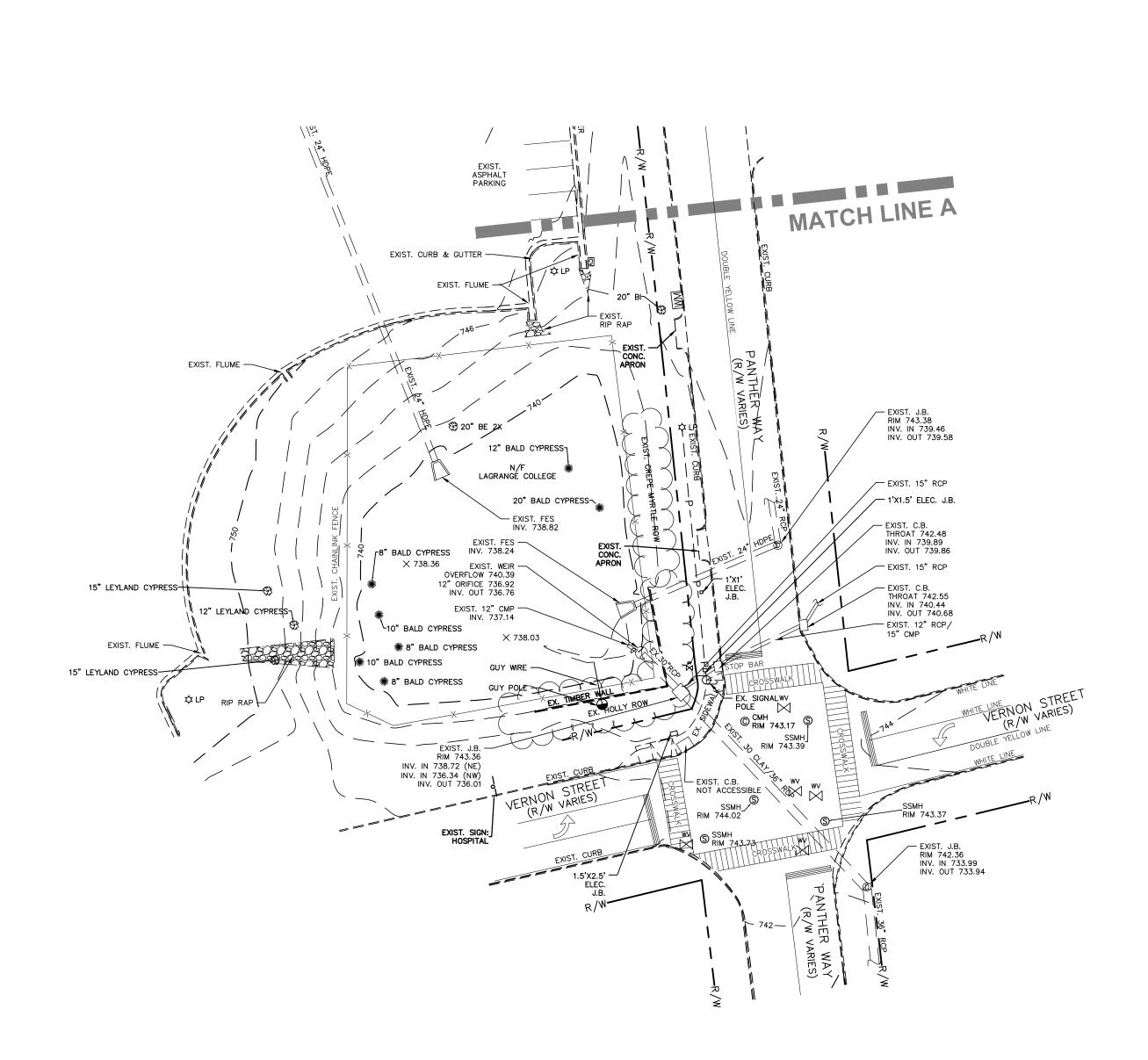


REVISION	DATE	DESCRIPTION
KAIZEN PR	ROJECT#	2017 - 136
PROJECT MANAGER		GGD
		VICE TUDE VD



COM	POSI	TE M	IAP

SCALE:	1"=150'
DATE:	MARCH 22, 2018
SHEET NAME:	CM-01



1033 CATCH BASIN 1034 CATCH BASIN 1019A DROP INLET 1011A JUNCTION BOX 1019A TYPE E CURB INLET 1125 HEADWALL DRAINAGE SLOPE SEWER MANHOLE EXISTING FIRE HYDRANT LAMP POST	—UGP———————————————————————————————————	LEGEND OVERGROUND DOWNSPOUT WATER VALVE GAS VALVE HANDICAPPED PARKING TRAFFIC FLOW UNDERGROUND POWER OVERHEAD POWER UNDERGROUND TELEPHONE OVERHEAD TELEPHONE WATER SANITARY SEWER FORCE MAIN	—SB— —TP— —O—O— —X—X— —P/L— —100— —100— —————————————————————————	SEDIMENT BARRIER TREE PROTECTION FENCE CHAIN LINK FENCE EXISTING FENCE PROPERTY LINE EXISTING CONTOUR PROPOSED CONTOUR EXISTING CURB & GUTTER PROPOSED CURB & GUTTER EXISTING SPOT ELEVATION PROPOSED SPOT ELEVATION EXISTING WATER METER PROPOSED WATER METER
PROPOSED FIRE HYDRANT LAMP POST GUY POLE		WATER	· WM	EXISTING WATER METER

		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=sycmore	BE=boxelder	C=cedar	HB=hackberry	CW=cottonwood
UK= unk hardwood	DW=dogwood	PE=pear	BI=birch	MG=magnolia	BG=black gum

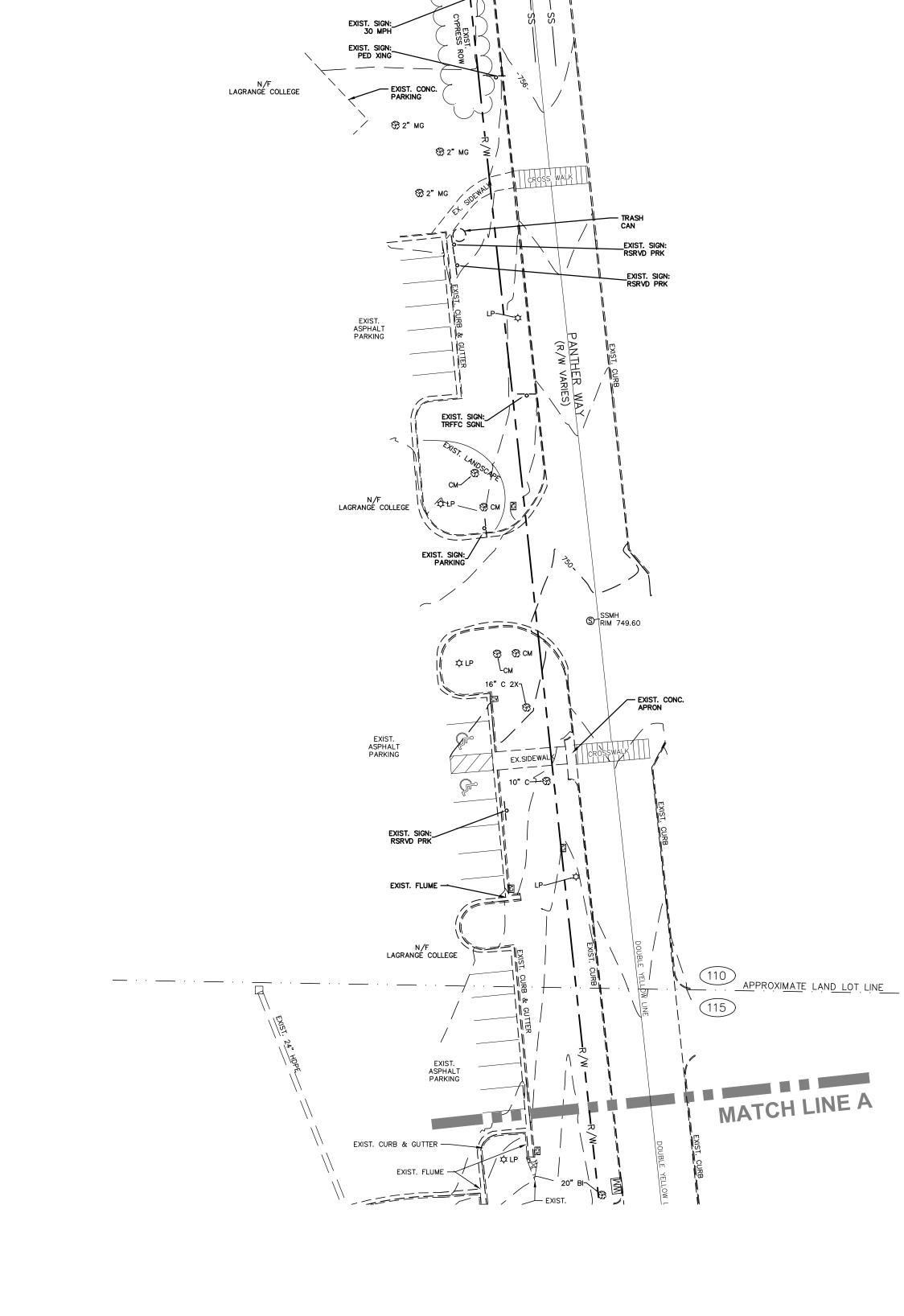
GRAPHIC SCALE (IN FEET) 1 inch = 30 ft.

THE F.I.R.M. PANEL 13285C0141E _____DATE 09/19/2007 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.

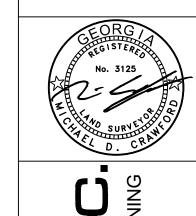


Know what's DCIOW. Call before you dig.

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



MATCH LINE B



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.

> \odot THREAD PHASE SURVEY TOPOGRAPHIC LAGRANGE

S-01

N/F ANN FISHER TRUST D.B. 1110 PG. 206 I NE EXIST. C.B. – THROAT 771.18 INV. IN 766.56 INV. OUT 766.16 EXIST. C.B. – THROAT 771.44 INV. IN 767.38 INV. OUT 767.11 C — EXIST. G.I. GRATE 758.42 INV. IN 756.82 (E) INV.IN 756.78 (S) INV. OUT 756.74 N/F LAGRANGE COLLEGE THE F.I.R.M. PANEL 13285C0141E _____DATE_09/19/2007 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 FURTHER TOPOGRAPHIC DATA PRANMACE. INTO CONSIDERATION EXISTING TOPOGRAPHIC DATA, DRAINAGE AREAS AND FIRM PANELS. THERE MAY BE OTHER INTERPRETATIONS THAT DIFFER FROM THOSE SHOWN. MATCH LINE B N/F PATRICIA D DEVANE D.B. 1018 PG. 289 N/F JAMES T DEVANE D.B. 161 PG. 184 Know what's below. Call before you dig. N/F HELEN W PIERCE D.B. 1266 PG. 569 WARNING: THIS PLAN SHEET IS NOT THE OFFICIAL CONTRACT DOCUMENT UNLESS APPROVED BY THE APPROPRIATE GOVERNMENTAL AGENCIES. N/F LAGRANGE LIVING LLC D.B. 1454 PG. 841 ALL UTILITIES SHOWN ARE APPROXIMATE. UTILITY LOCATIONS OBTAINED FROM UTILITIES WARNING: UTILITIES LOCATIONS ARE APPROXIMATE. BEWARE OF HIDDEN UTILITIES NOT SHOWN. CONTACT APPROPRIATE UTILITY COMPANIES PRIOR TO EXCAVATION. PROTECTION CENTER, INC. BEWARE OF N/F NINA D MALLORY D.B. 505 PG. 715 UNDERGROUND UTILITIES NOT SHOWN. 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. LEGEND 1033 CATCH BASIN EX. 6" CLAY
PIPE EXPOSED
INSIDE BFP BOX
(DEST. UNK.) OVERGROUND DOWNSPOUT ---SB--- SEDIMENT BARRIER . _____ 1034 CATCH BASIN WATER VALVE —TP— TREE PROTECTION FENCE WEAVER 'G. 408 ☐ 1019A DROP INLET \odot -O--O- CHAIN LINK FENCE GAS VALVE 1011A JUNCTION BOX -X-X- EXISTING FENCE THREAD PHASE —P/L— PROPERTY LINE HANDICAPPED PARKING 1019A TYPE E CURB INLET —100— EXISTING CONTOUR
—100— PROPOSED CONTOUR TRAFFIC FLOW 1125 HEADWALL -UGP- UNDERGROUND POWER EXISTING CURB & GUTTER → DRAINAGE SLOPE T.B.M. ELEV.=802.45 — TOP OPERATING NUT ——P— OVERHEAD POWER PROPOSED CURB & GUTTER S SEWER MANHOLE -UGT- UNDERGROUND TELEPHONE x 1010 EXISTING SPOT ELEVATION

+ 1010 PROPOSED SPOT ELEVATION ----T---- OVERHEAD TELEPHONE PROPOSED FIRE HYDRANT

CALAMP POST

GUY POLE

CO. UTILITY POLE

OVERHEAD TELEPHO

WATER

—SS.— SANITARY SEWER

—FM.— FORCE MAIN

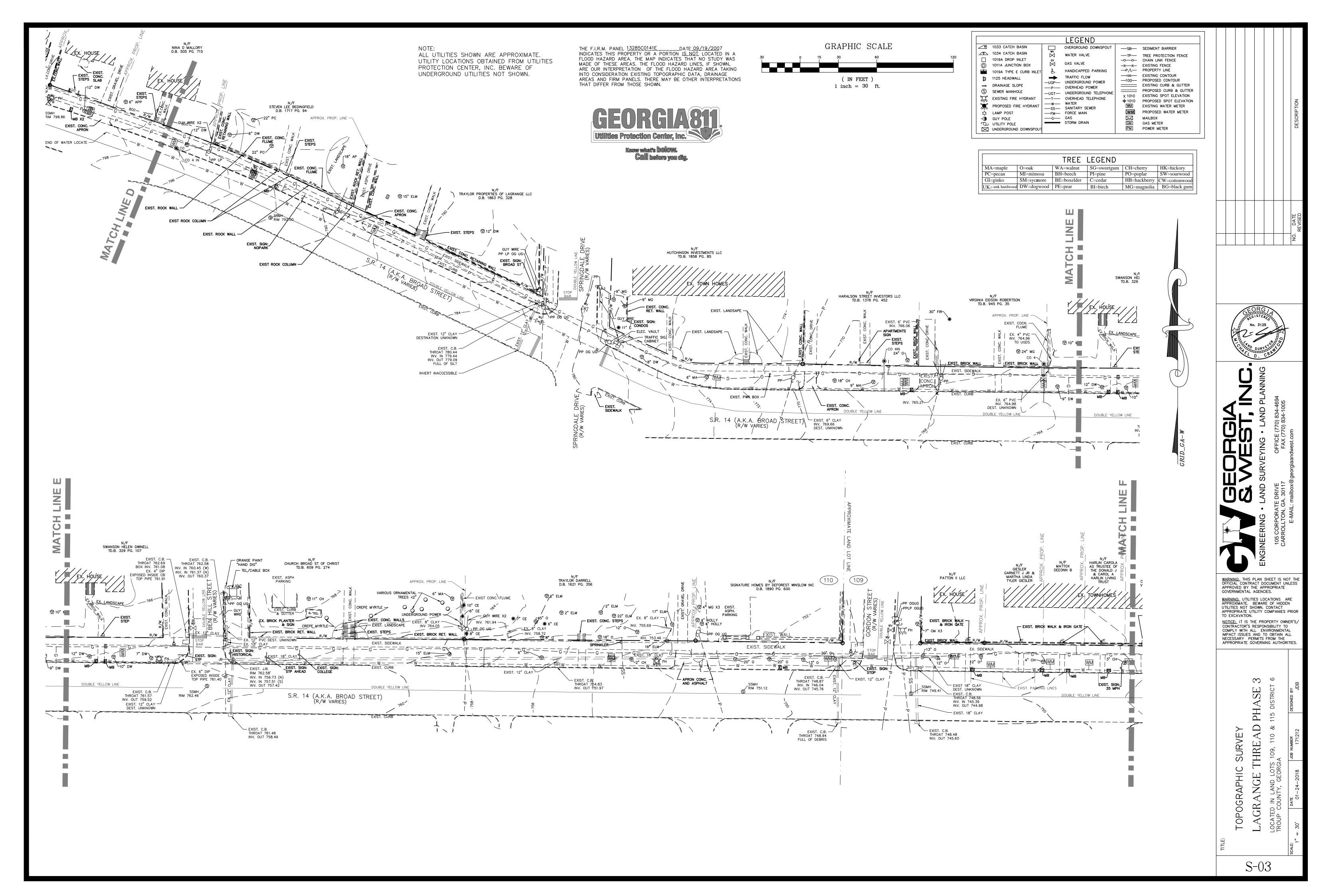
—G.— GAS

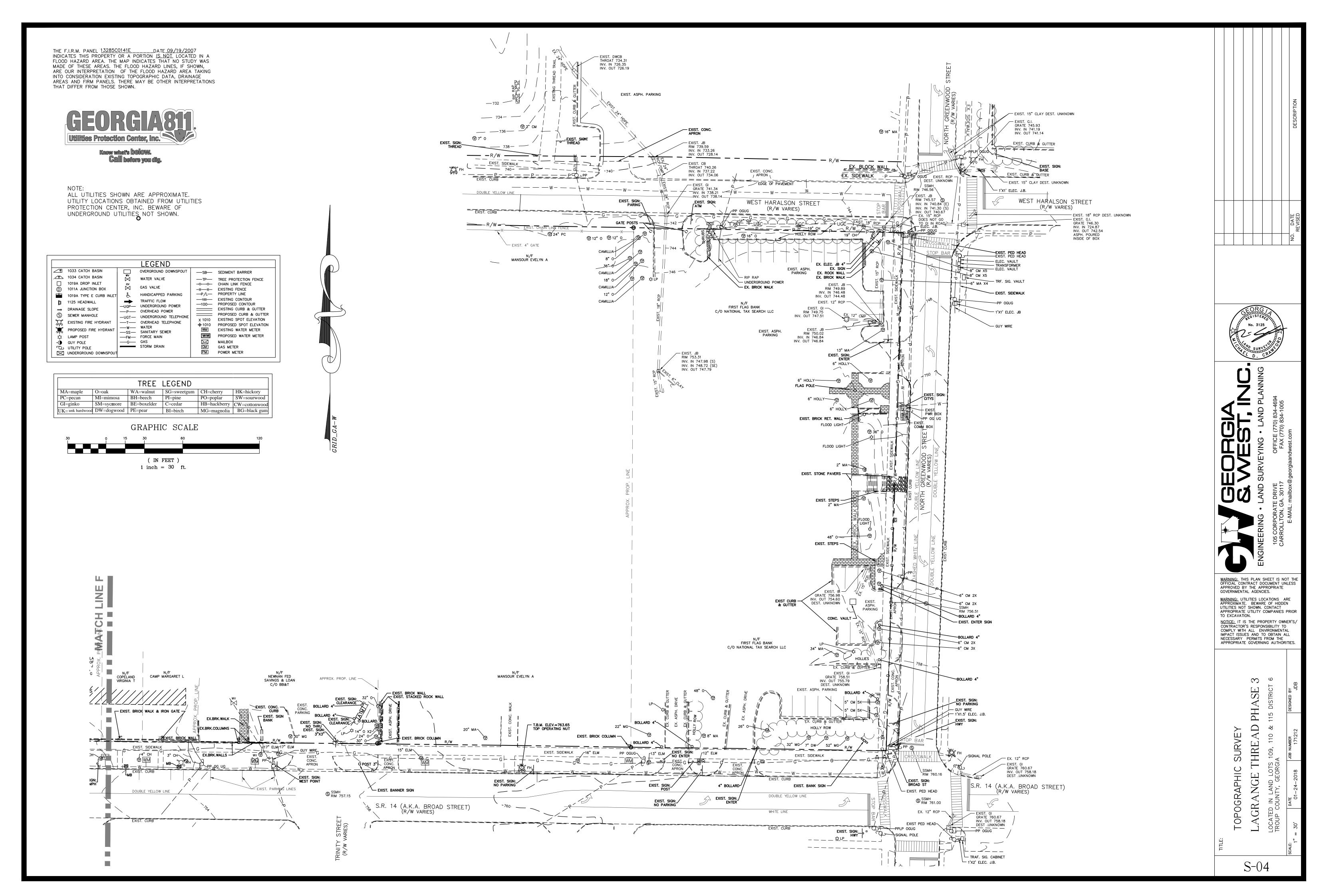
STORM DRAIN WM EXISTING WATER METER WM PROPOSED WATER METER MAILBOX

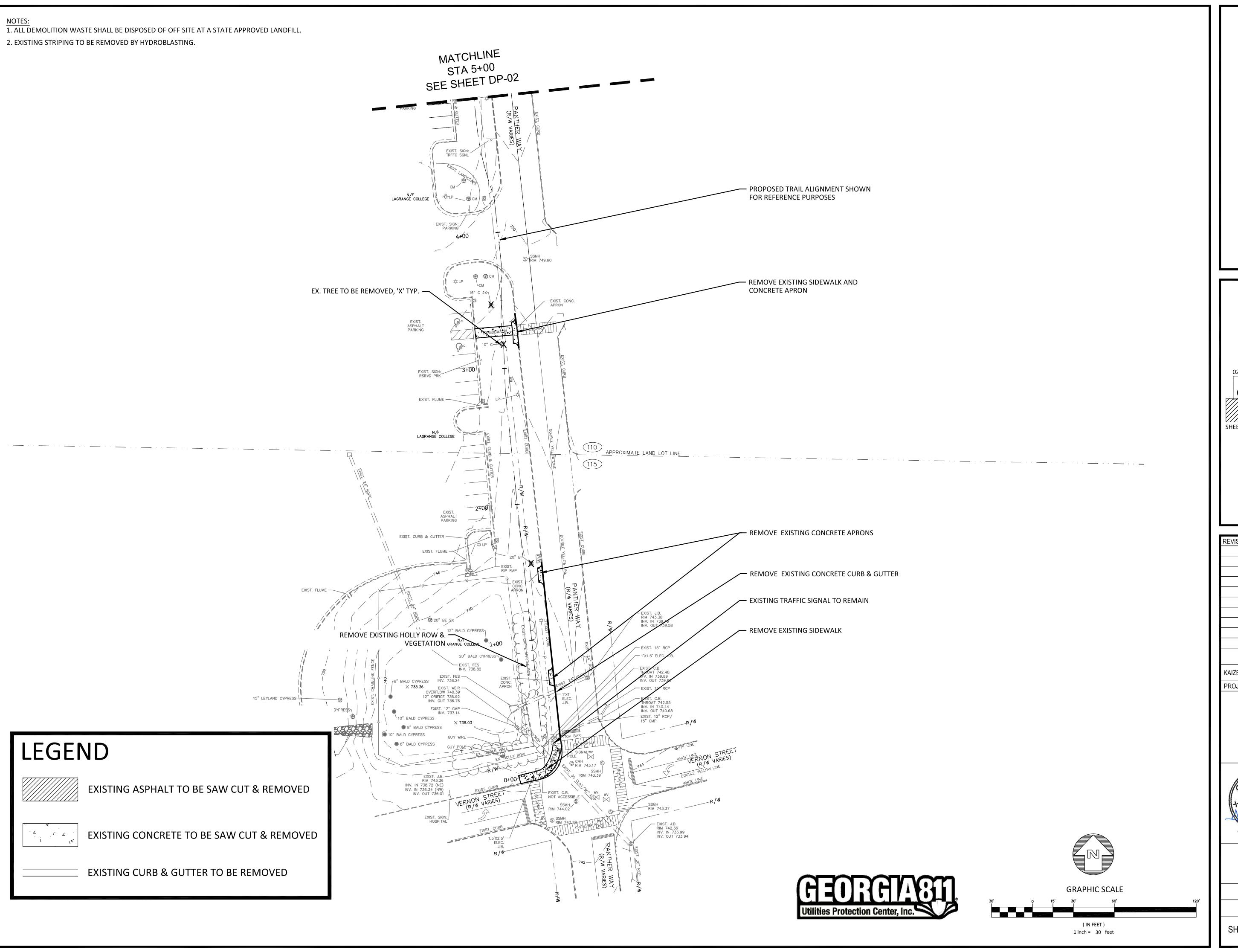
GM GAS METER

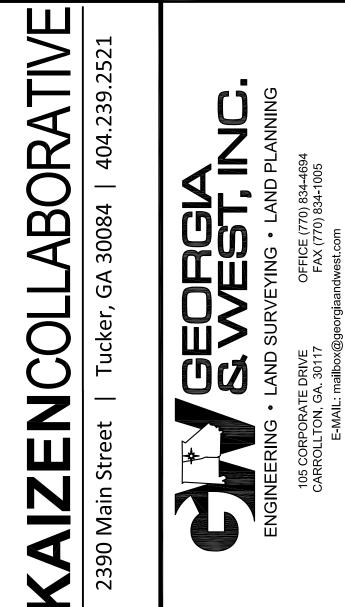
PM POWER METER UTILITY POLE
UNDERGROUND DOWNSPOUT IST. 18" CLAY MATCH LAGRANGE TREE LEGEND OPOGRAPHIC MA=maple O=oak WA=walnut SG=sweetgum CH=cherry HK=hickory
PC=pecan MI=mimosa BH=beech PI=pine PO=poplar SW=sourwood
GI=ginko SM=sycmore BE=boxelder C=cedar HB=hackberry CW=cottonwood
UK=unk hardwood DW=dogwood PE=pear BI=birch MG=magnolia BG=black gum Zm 0 (IN FEET) 1 inch = 30 ft.S-02

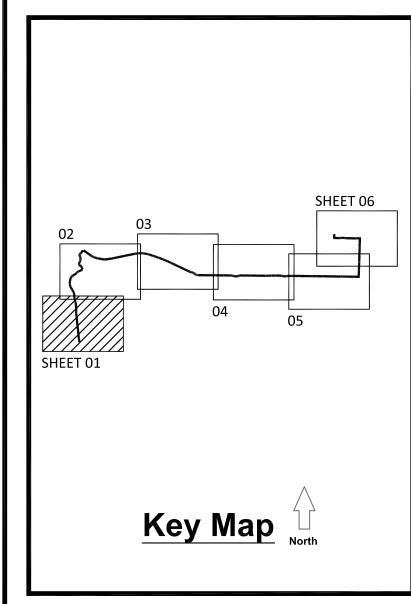
O:\PROJECT FOLDERS\2017\171212_KAIZEN LAGRANGE THREAD PHASE 3-COLLEGE\DWG\171212_BASEMAP.dwg, 3/22/2018 5:09:45 PM









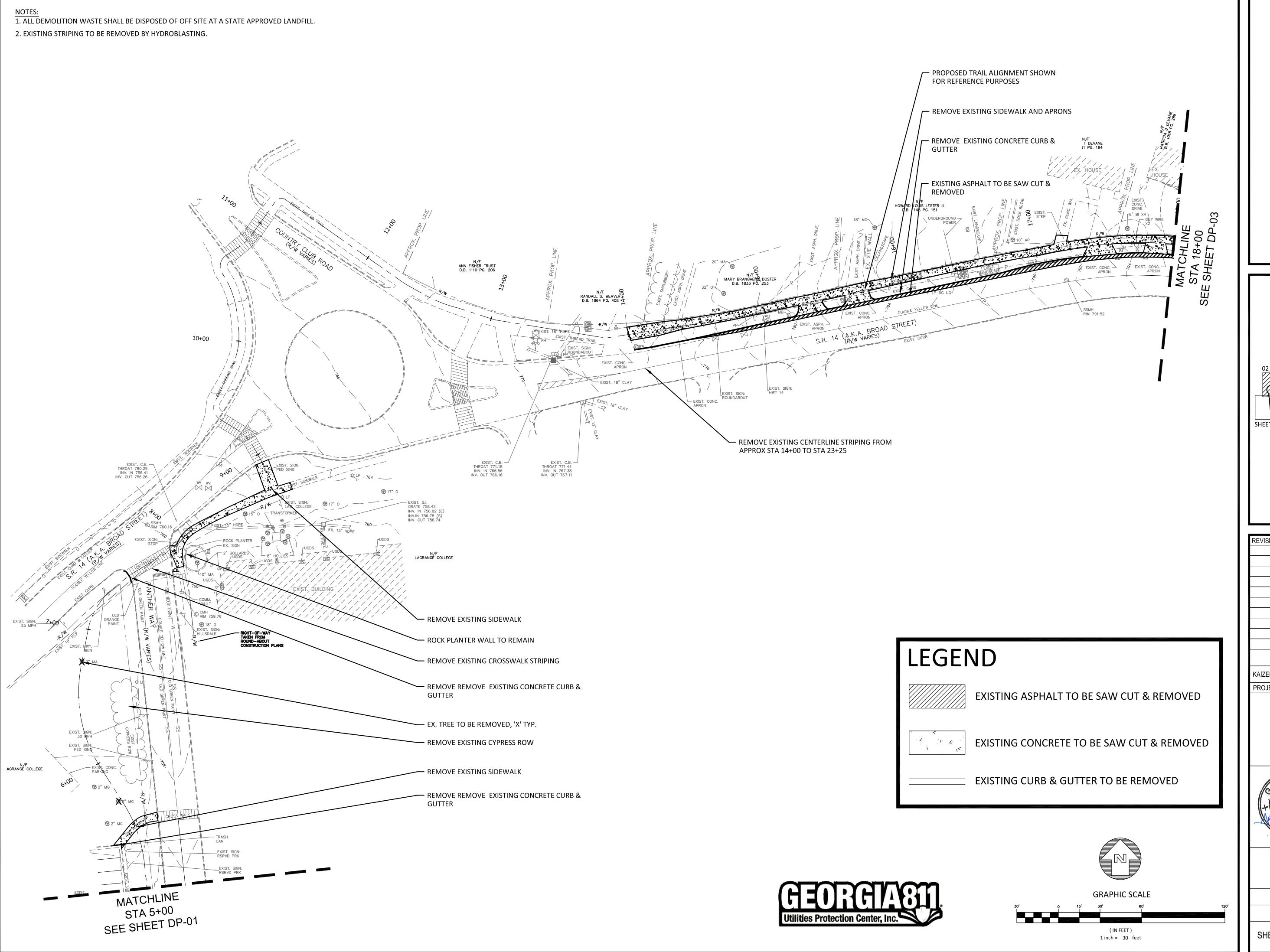


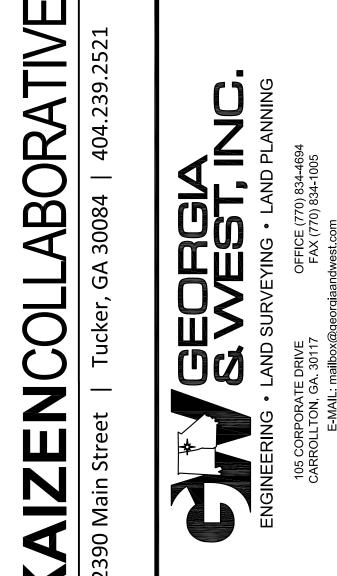
REVISION	DATE	DESCRIPTION
KAIZEN PF	ROJECT#	2017 - 136
PROJECT	MANAGER	GGD

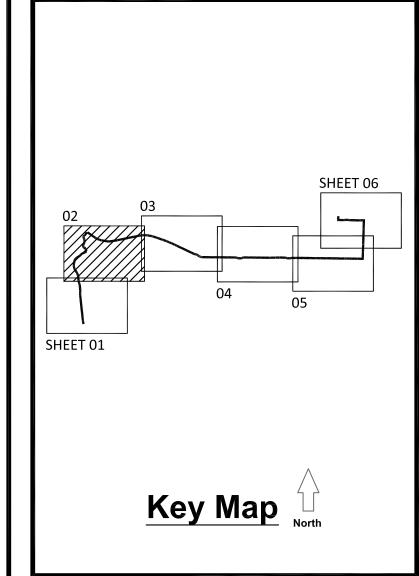


DEMOLITION PLAN	

	SCALE:	1"=30'
	DATE:	MARCH 22, 2018
	SHEET NAME:	DP-01



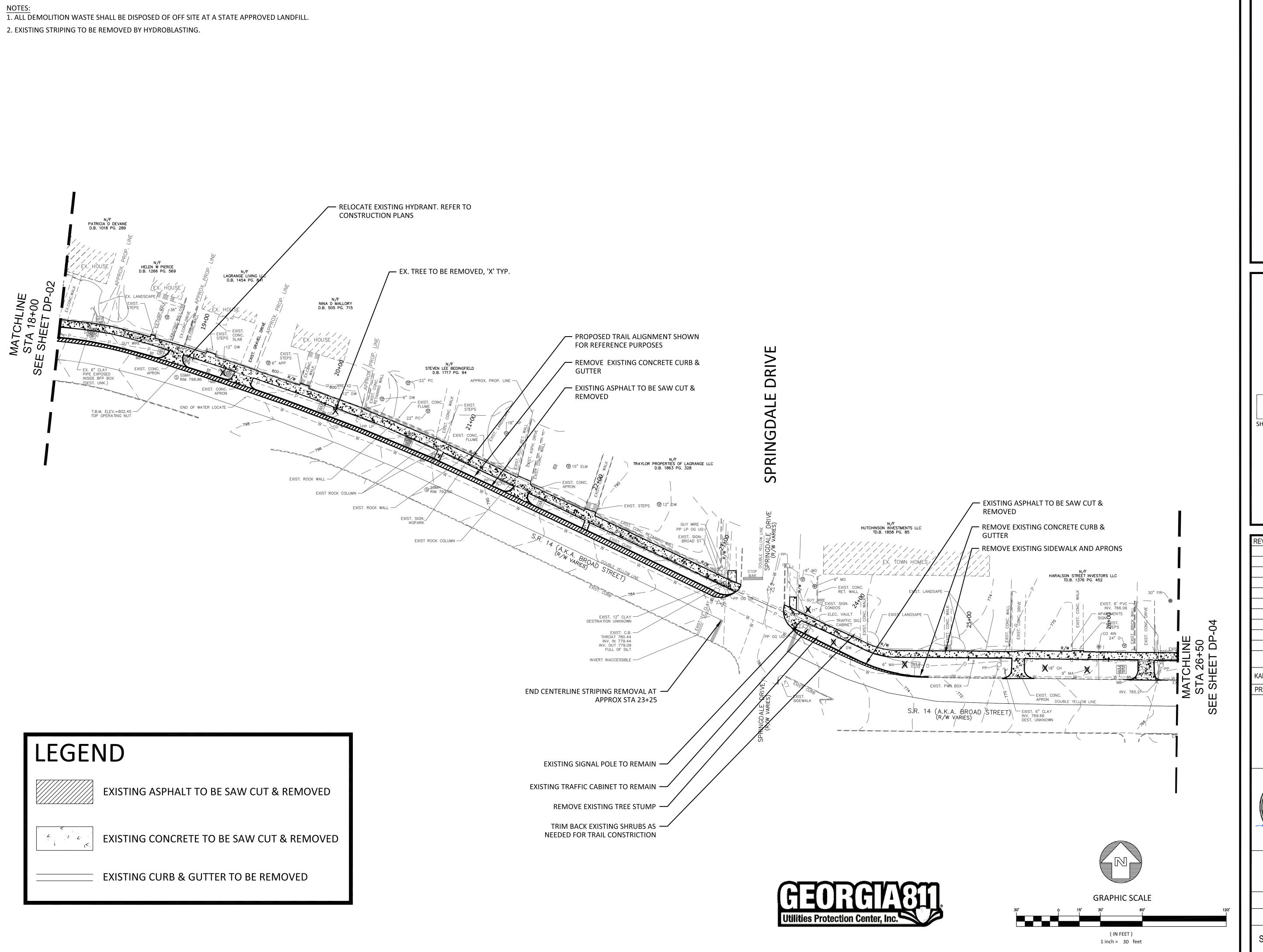




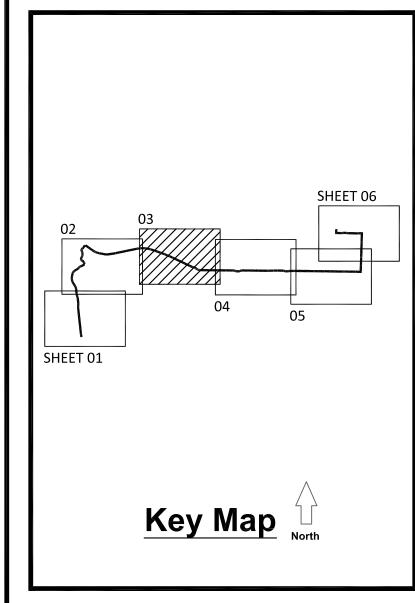
55,46161	D 4 T F	DECODIDE
REVISION	DATE	DESCRIPTION
KAIZEN PF	ROJECT#	2017 - 136
PROJECT	MANAGER	GGD
	- OD/	ANCE TUDEAD



ı	SCALE:	1"=30'
ı	DATE:	MARCH 22, 2018
	SHEET NAME:	DP-02





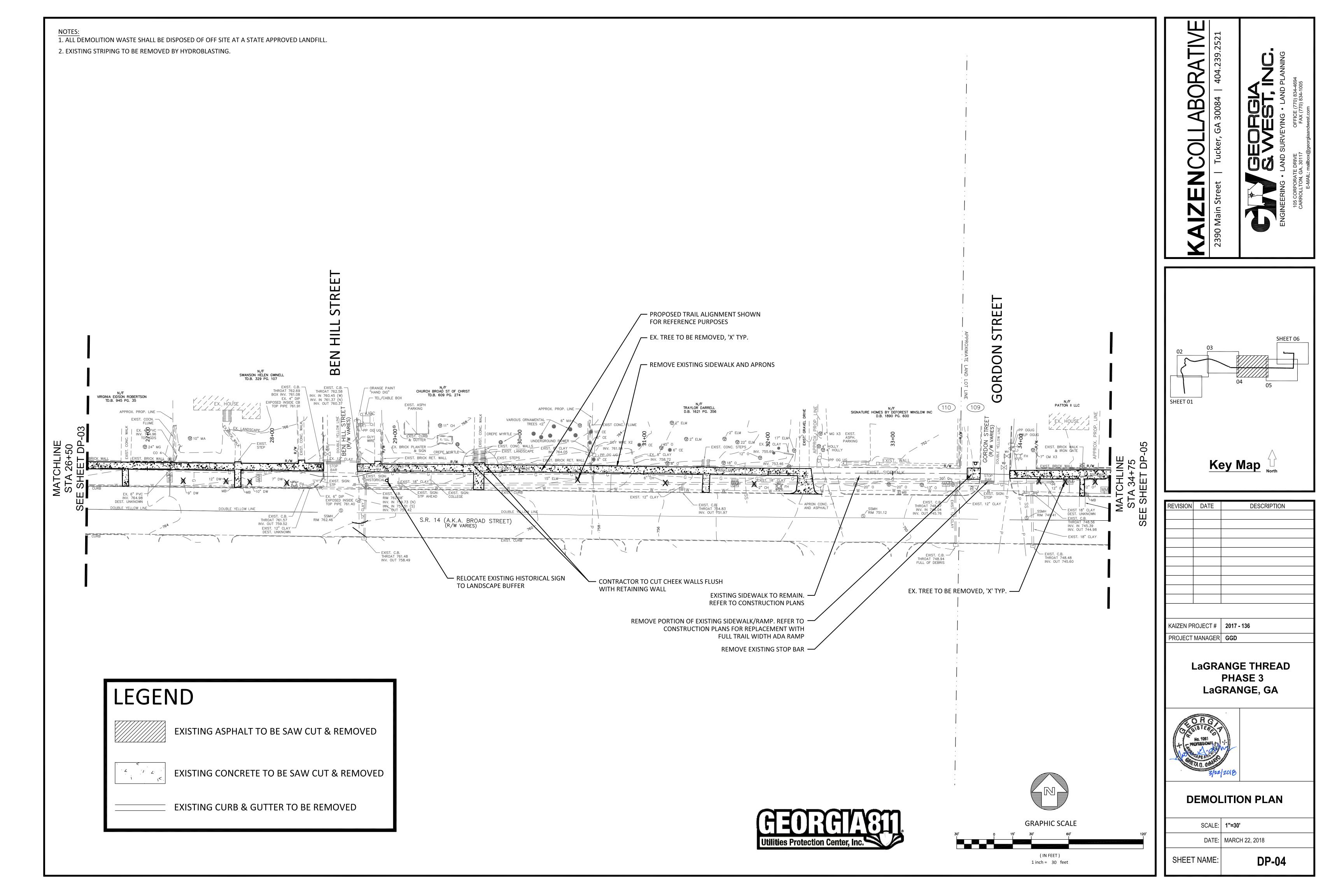


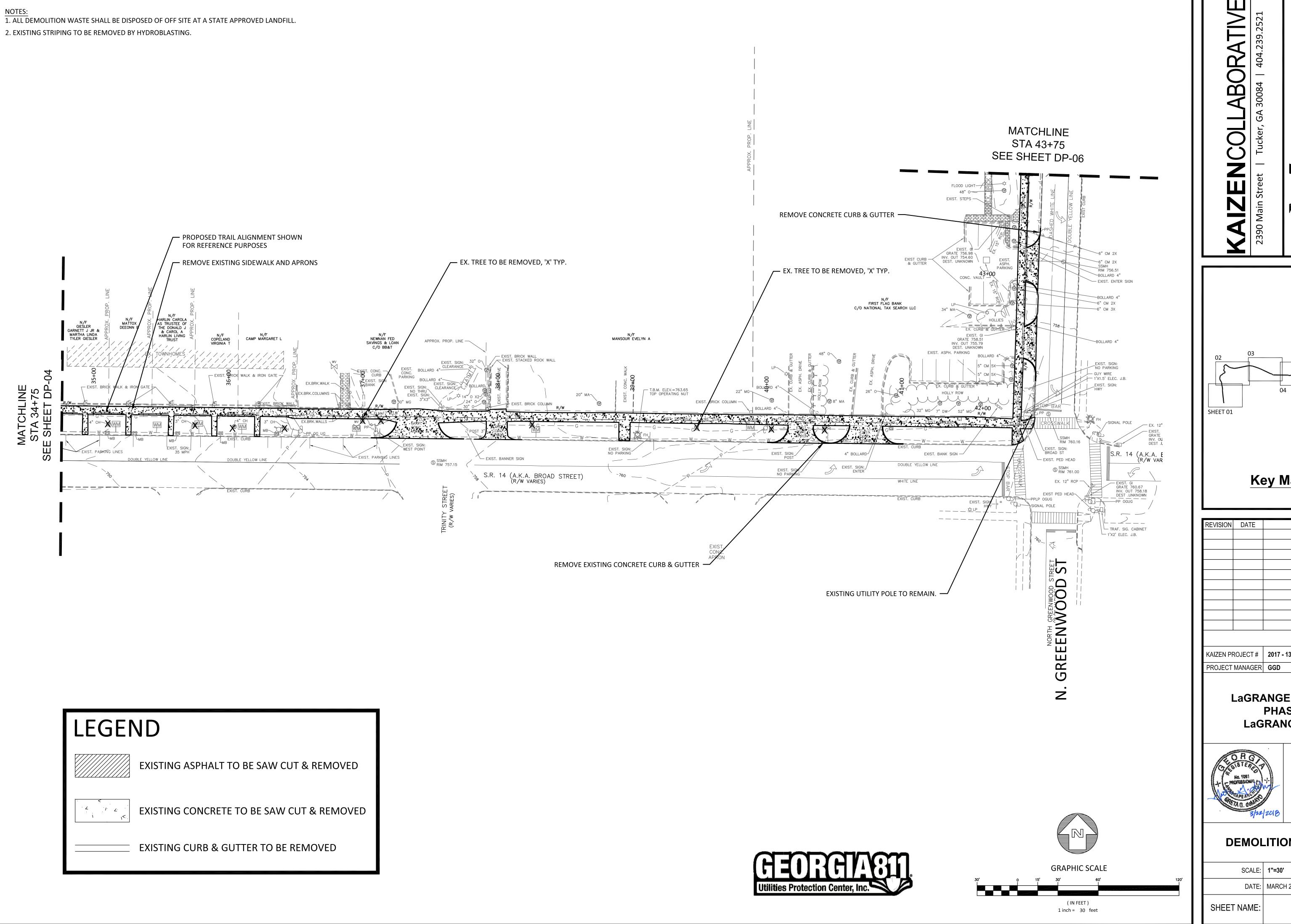
	REVISION	DATE	DESCRIPTION
	KAIZEN PROJECT # PROJECT MANAGER		2017 - 136
			GGD
	LaGRANGE THREAD		

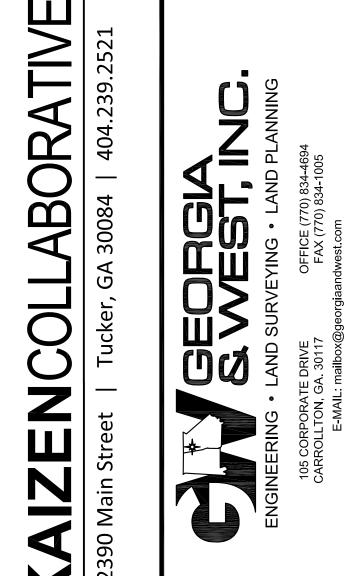


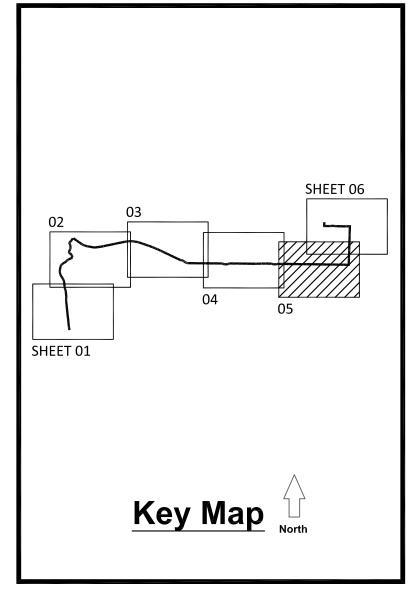
DEMOLITION PLAN	

SCALE:	1"=30'
DATE:	MARCH 22, 2018
SHEET NAME:	DP-03





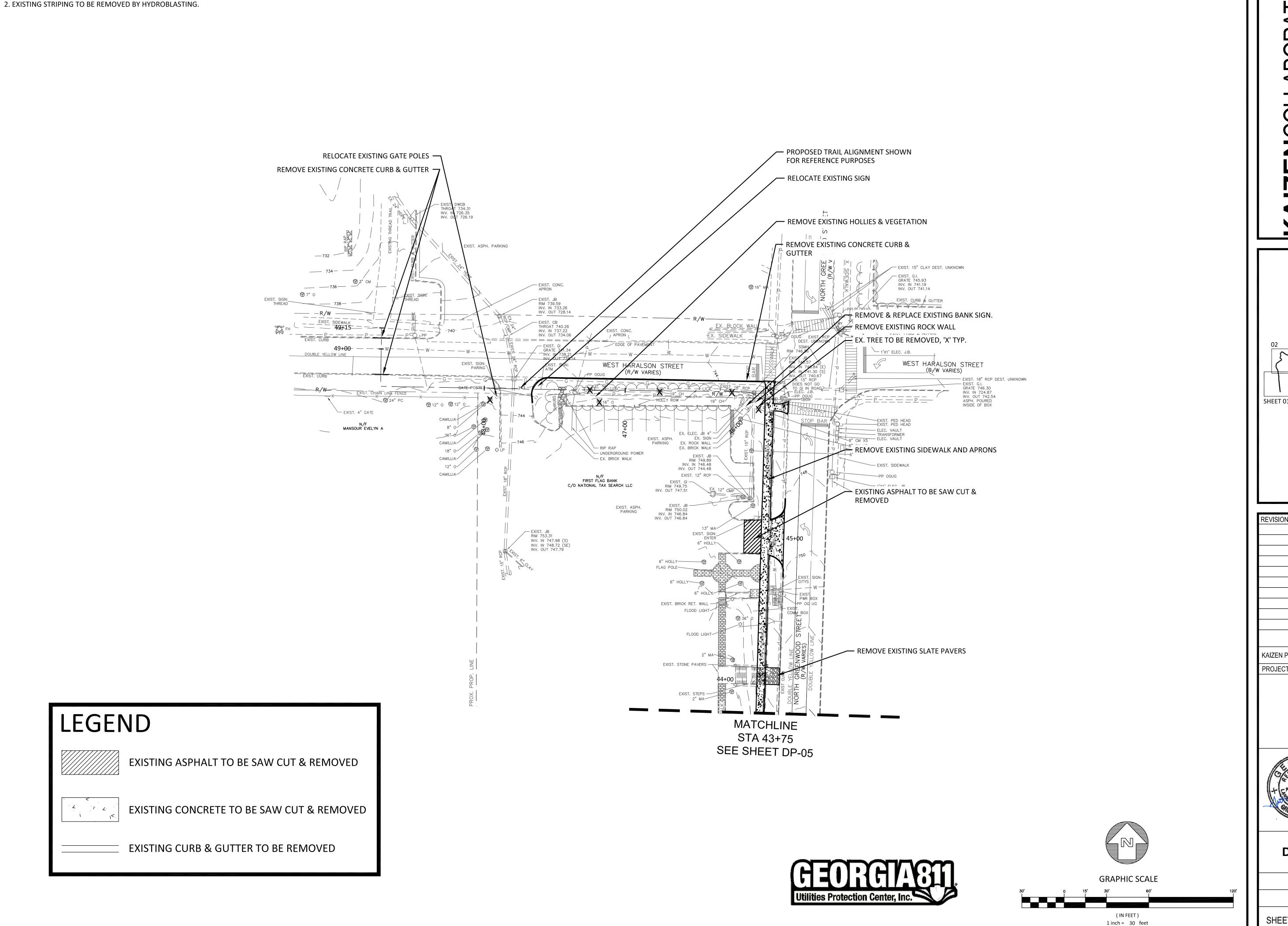




REVISION	DATE	DESCRIPTION
KAIZEN PF	ROJECT#	2017 - 136
PROJECT	MANAGER	GGD
	'	

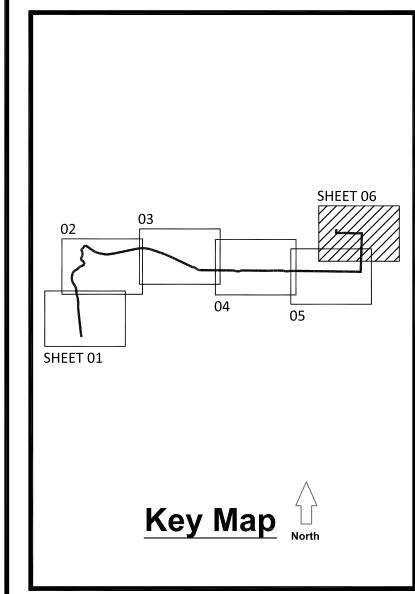
DEMOLITION PLAN

SCALE:	1"=30'
DATE:	MARCH 22, 2018
SHEET NAME:	DP-05



1. ALL DEMOLITION WASTE SHALL BE DISPOSED OF OFF SITE AT A STATE APPROVED LANDFILL.

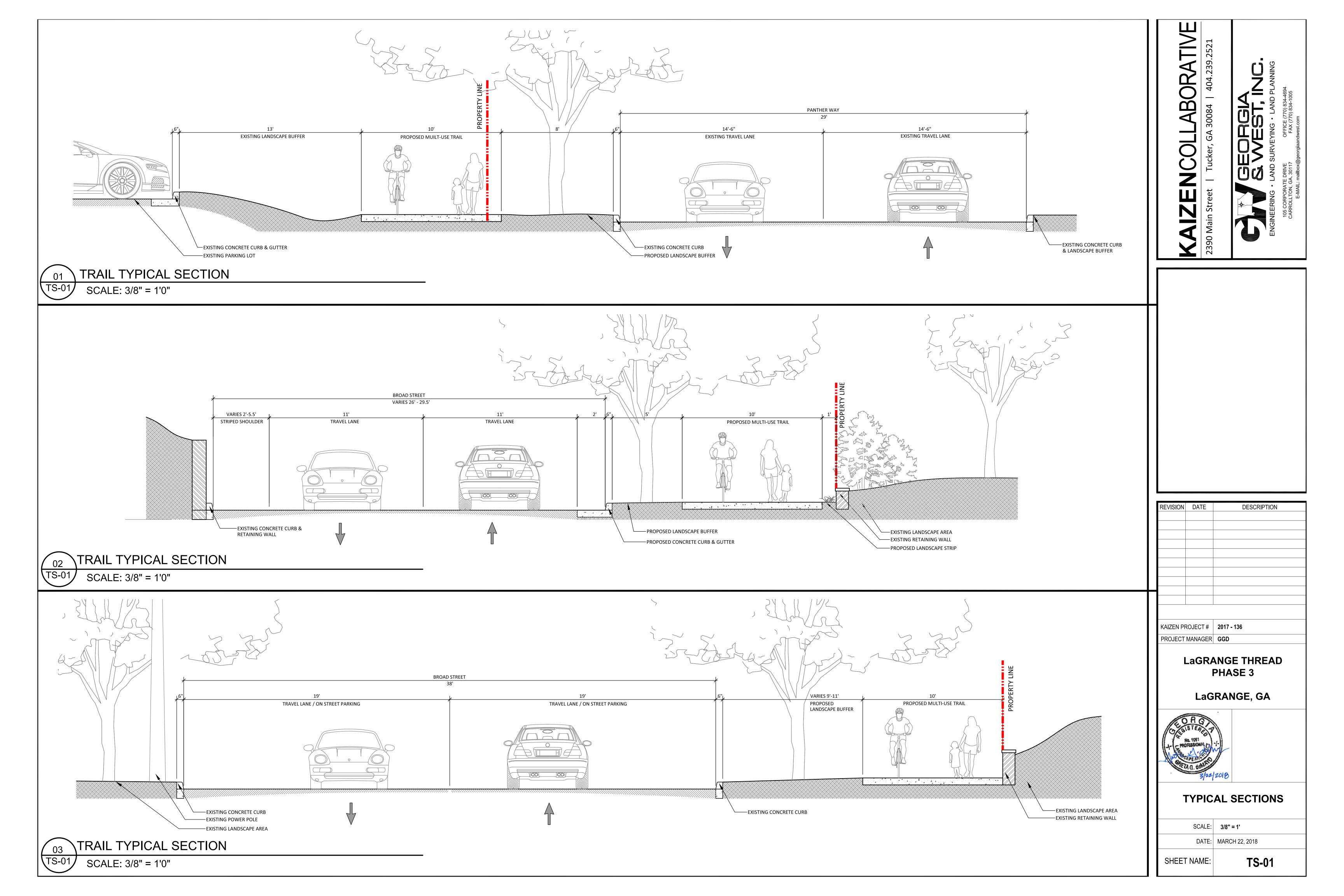


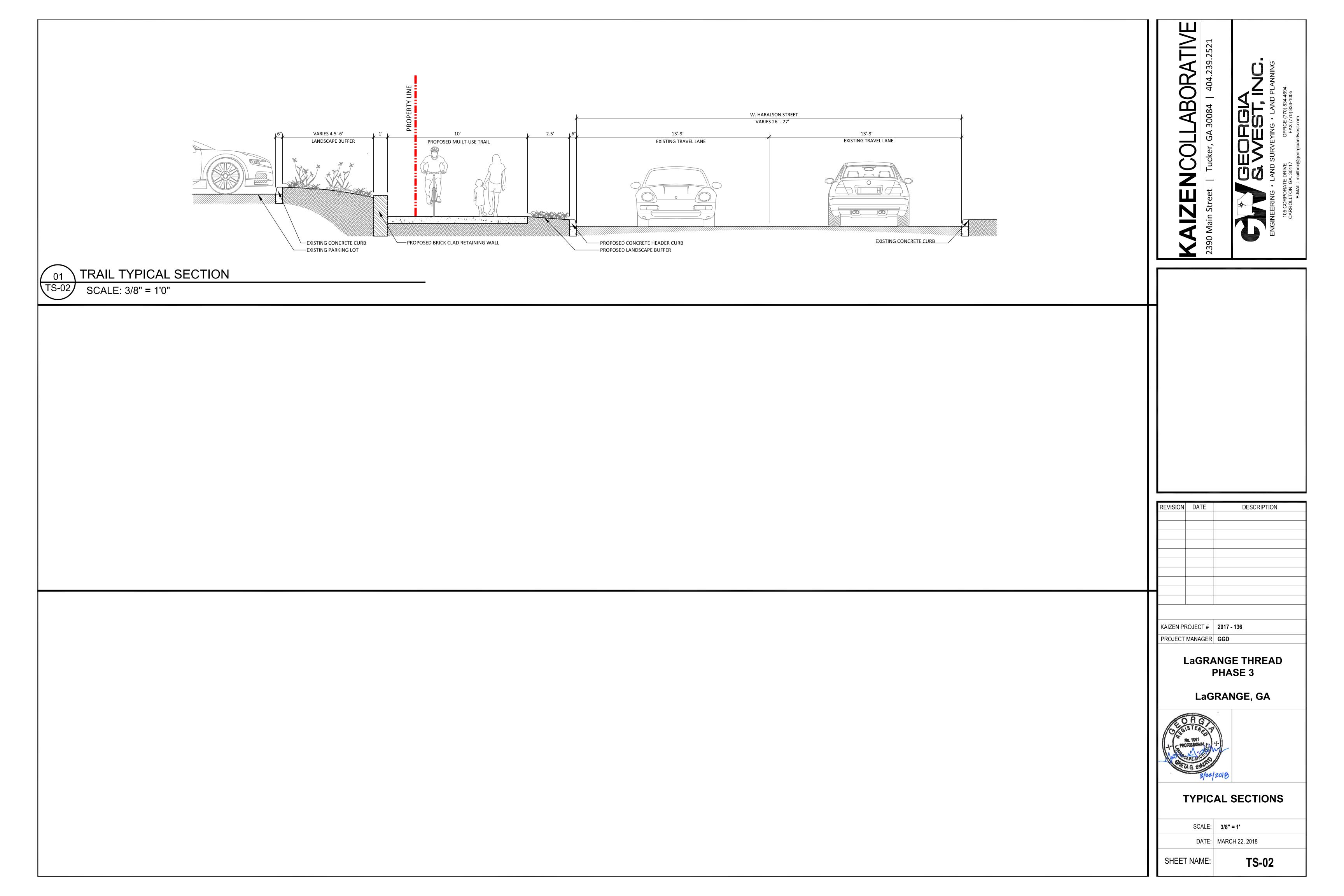


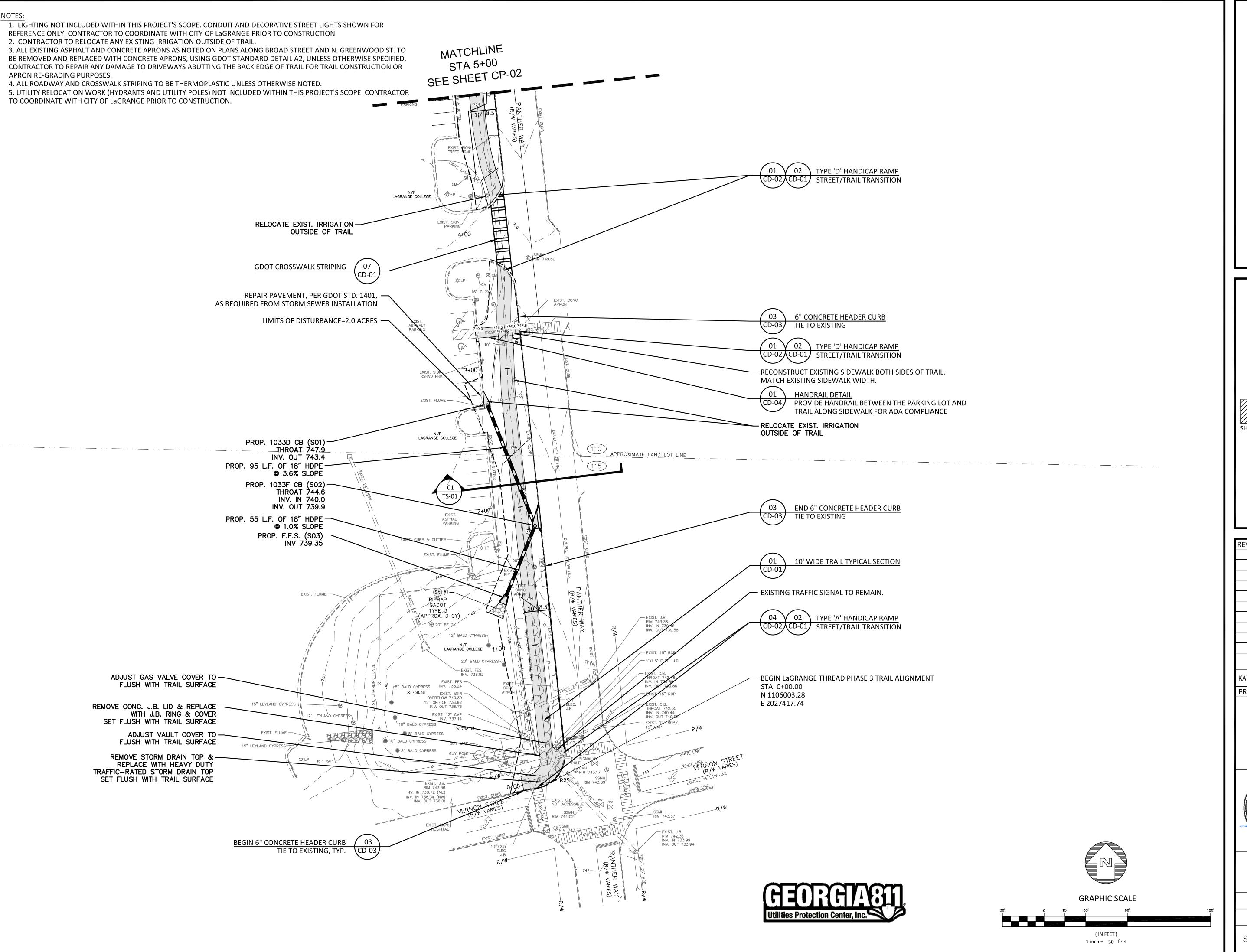
REVISION	DATE	DESCRIPTION
	•	
KAIZEN PF	ROJECT#	2017 - 136
PROJECT	MANAGER	GGD



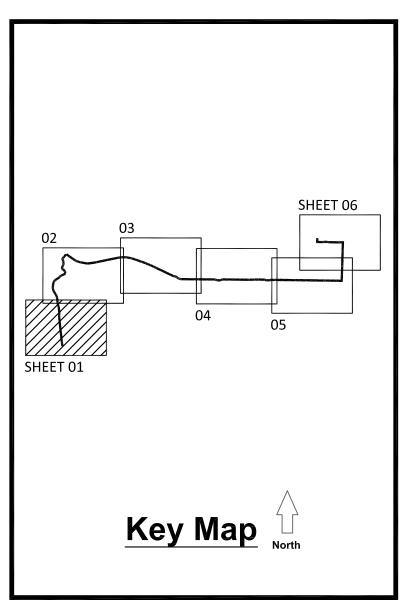
SCALE:	1"=30'
DATE:	MARCH 22, 2018
SHEET NAME:	DP-06









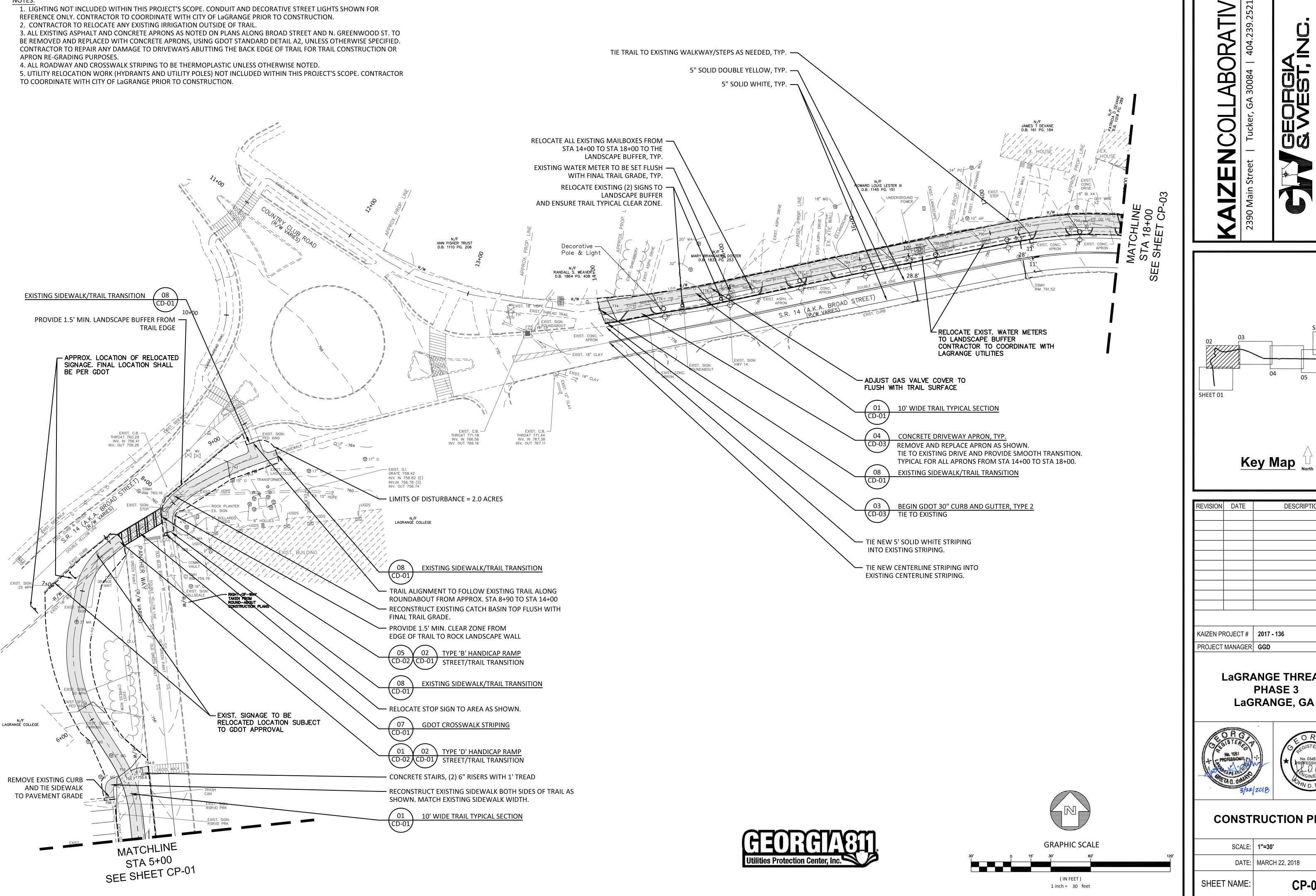


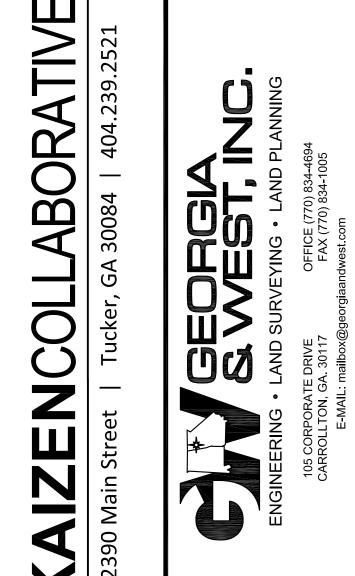
2017 - 136
GGD

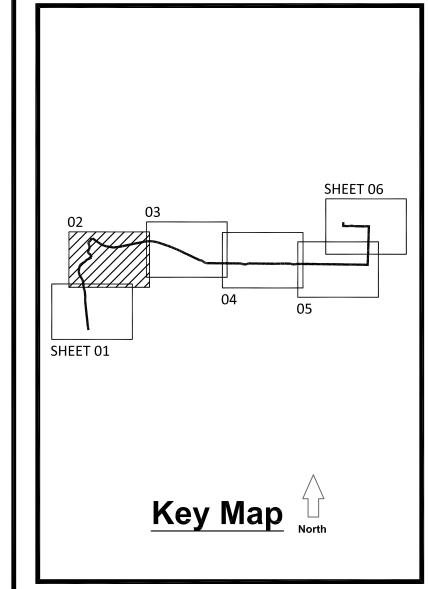


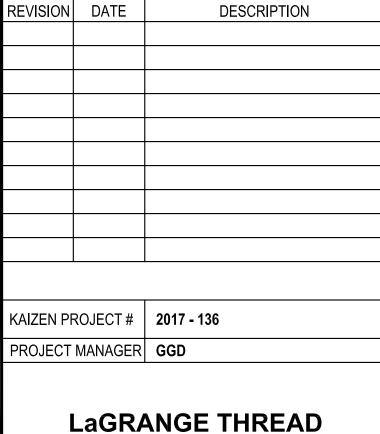


SCAL	E:	1"=30'
DAT	E:	MARCH 22, 2018
SHEET NAME		CP-01





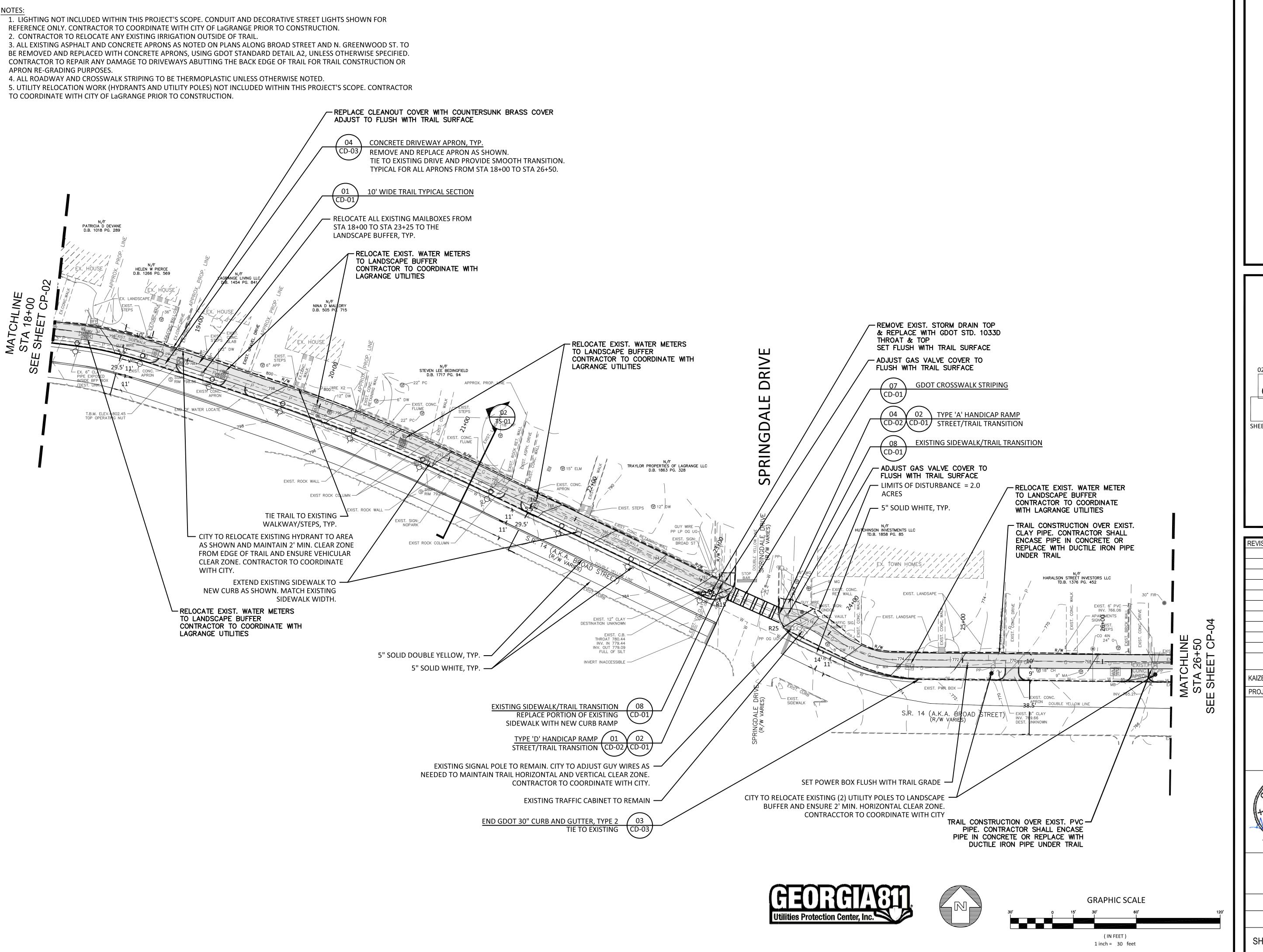




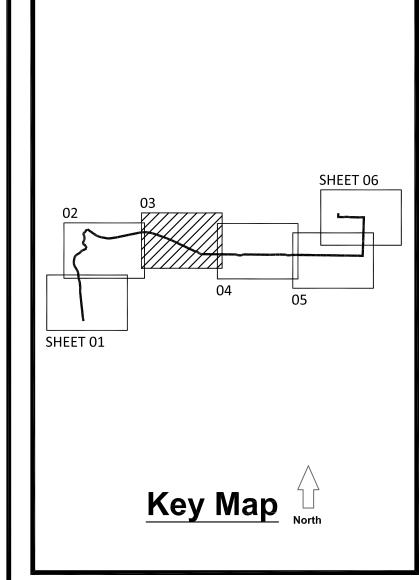


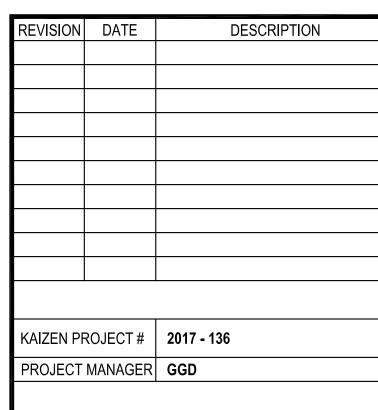


	SCALE:	1"=30'
r	DATE:	MARCH 22, 2018
	SHEET NAME:	CP-02

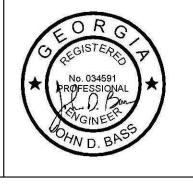




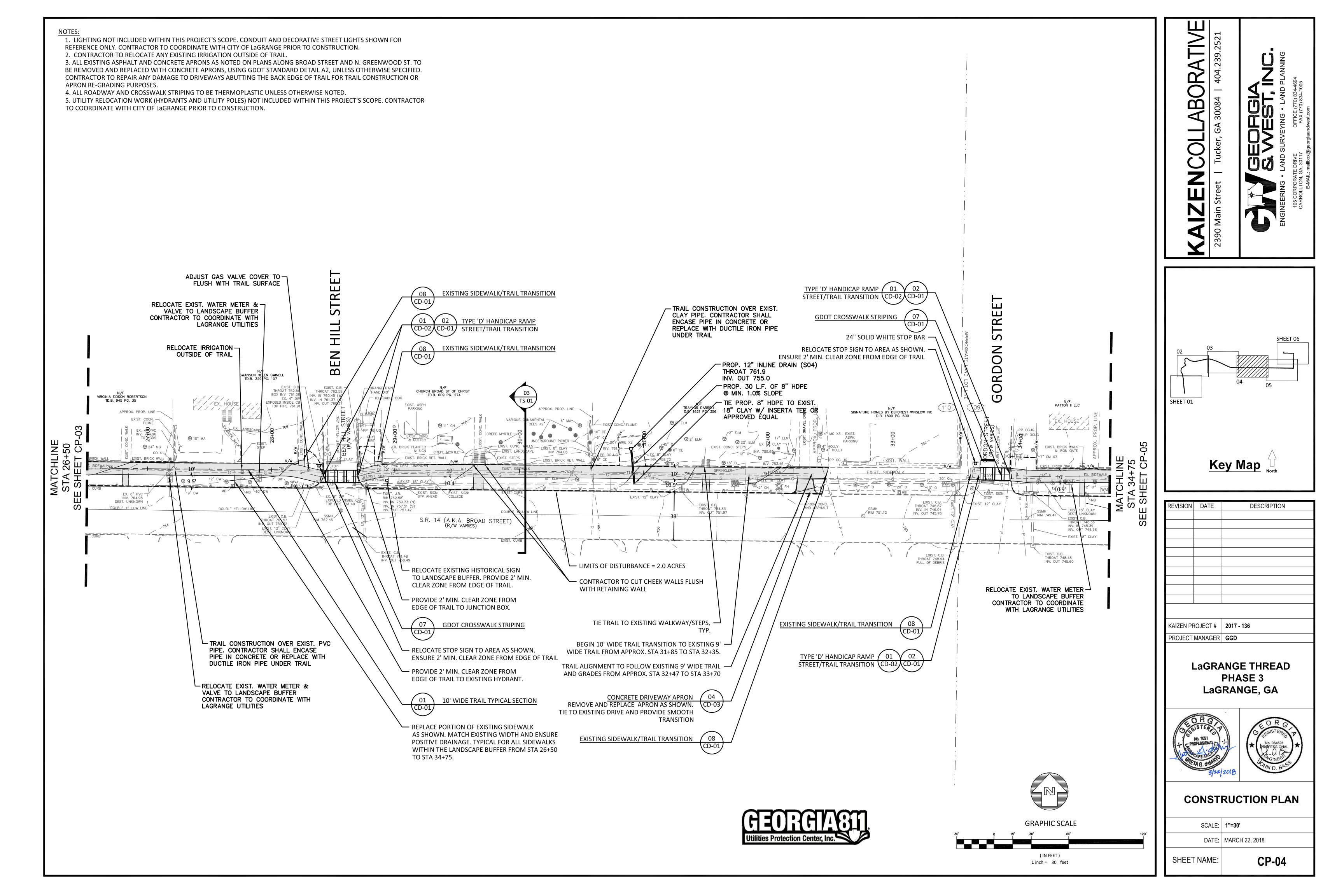


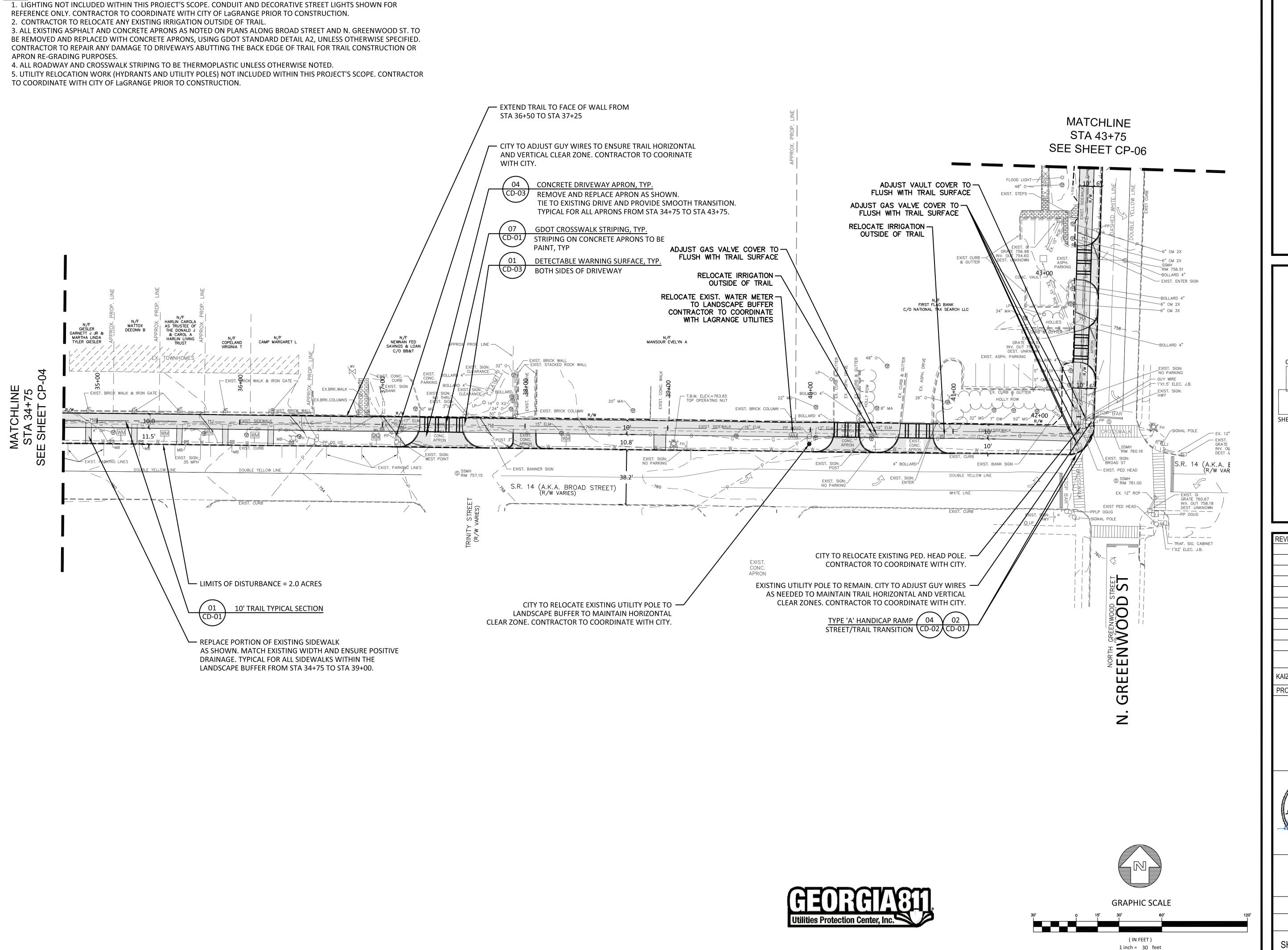


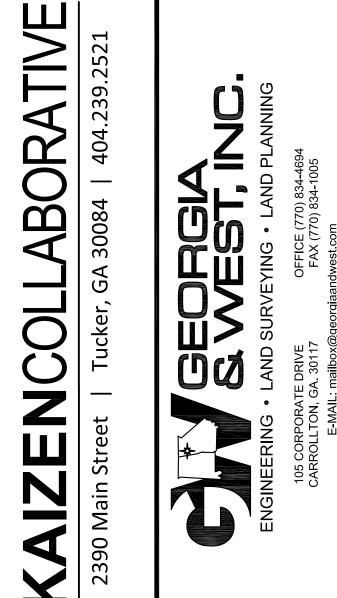


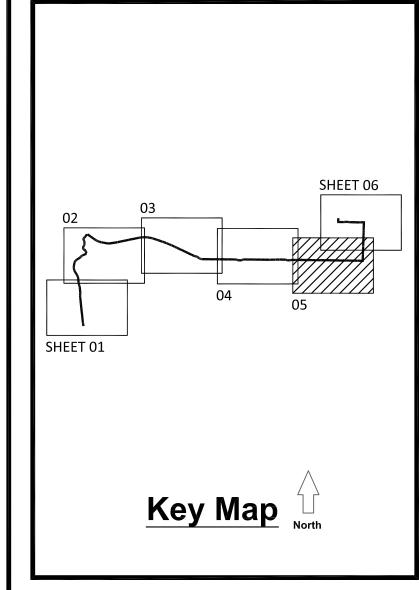


	SCALE:	1"=30'
	DATE:	MARCH 22, 2018
	SHEET NAME:	CP-03



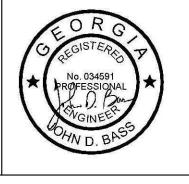




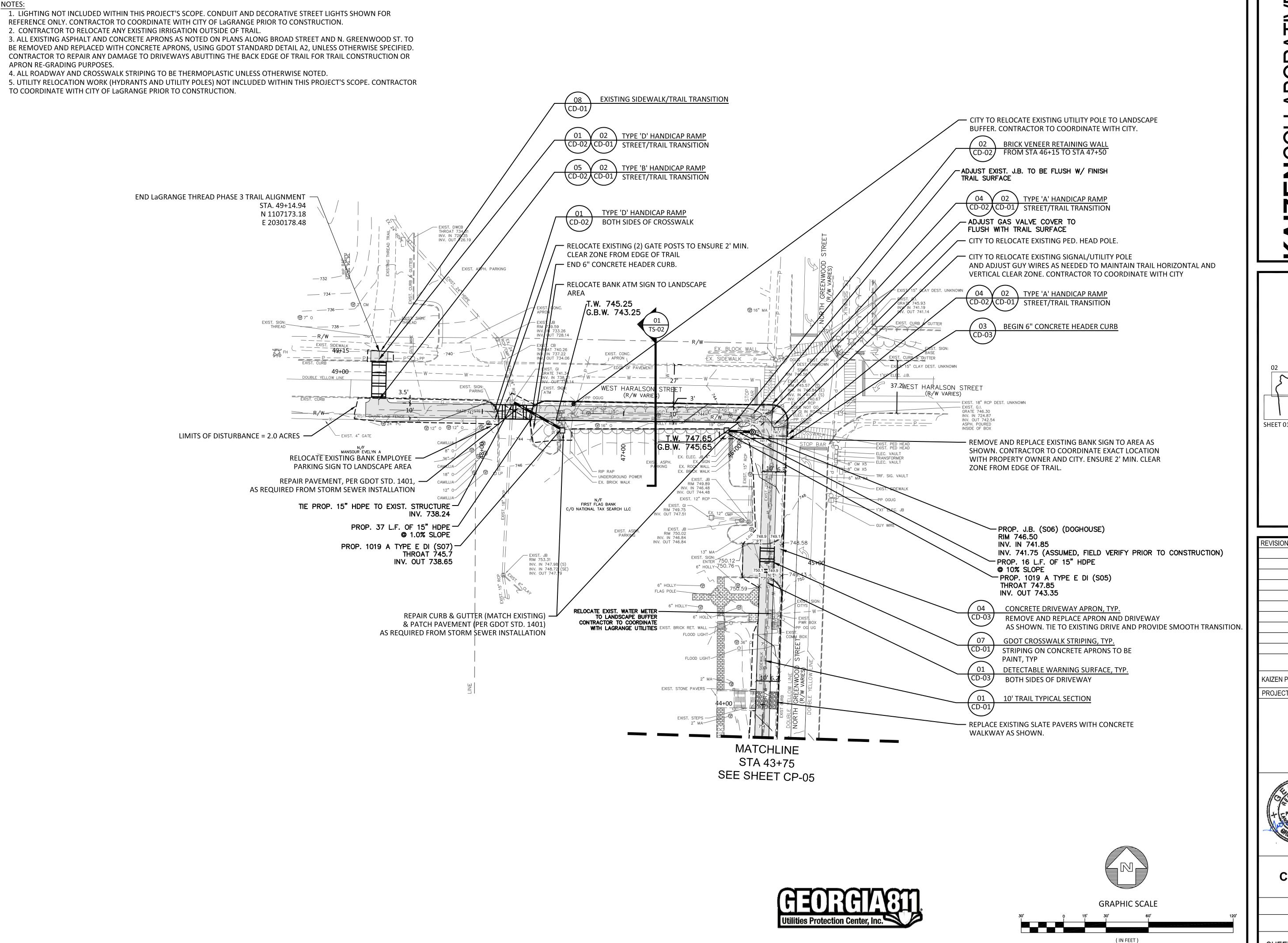


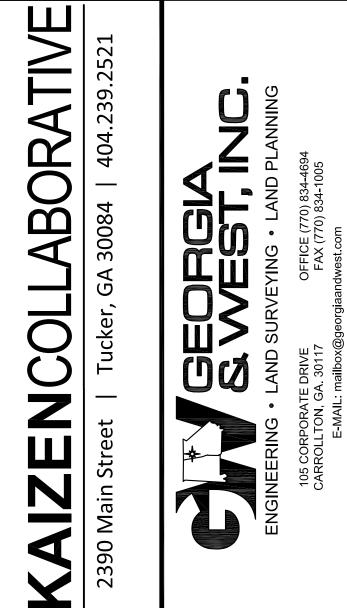
REVISION	DATE	DESCRIPTION	
KAIZEN PROJECT#		2017 - 136	
PROJECT MANAGER		GGD	
L CDANCE TUDEAD			

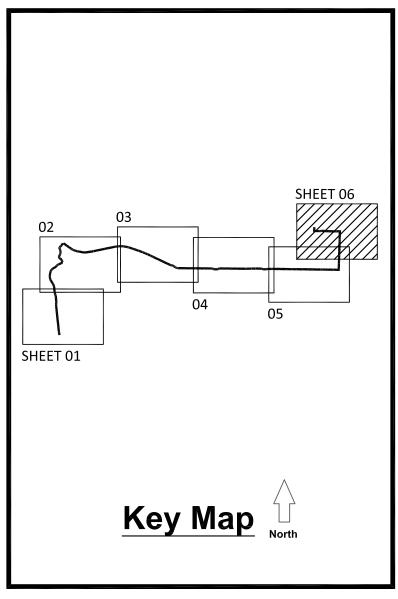




SCALE:	1"=30'
DATE:	MARCH 22, 2018
SHEET NAME:	CP-05







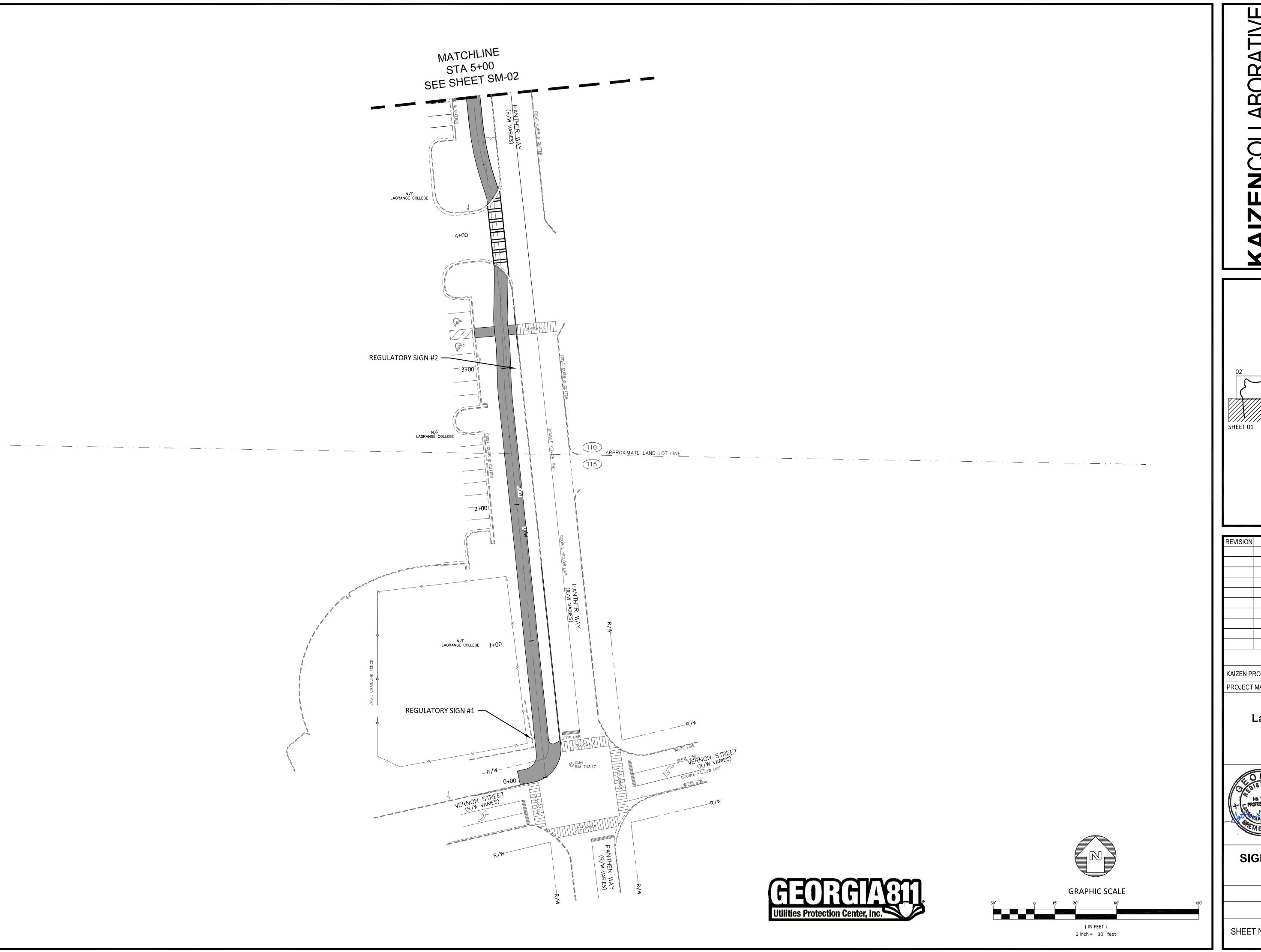
REVISION	DATE	DESCRIPTION
KAIZEN PI	ROJECT#	2017 - 136
PROJECT	MANAGER	GGD

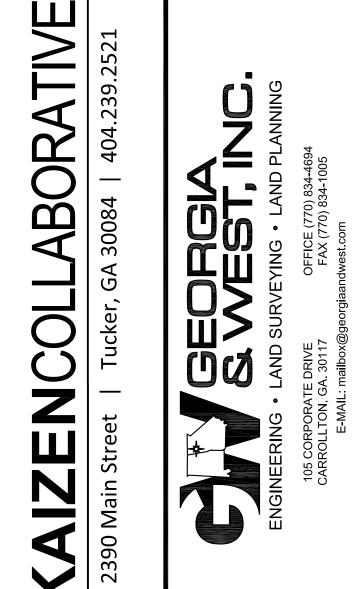


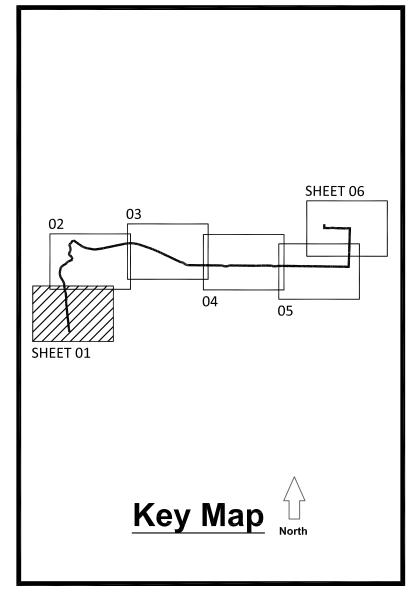
1 inch = 30 feet



SCALE:	1"=30'
DATE:	MARCH 22, 2018
SHEET NAME:	CP-06



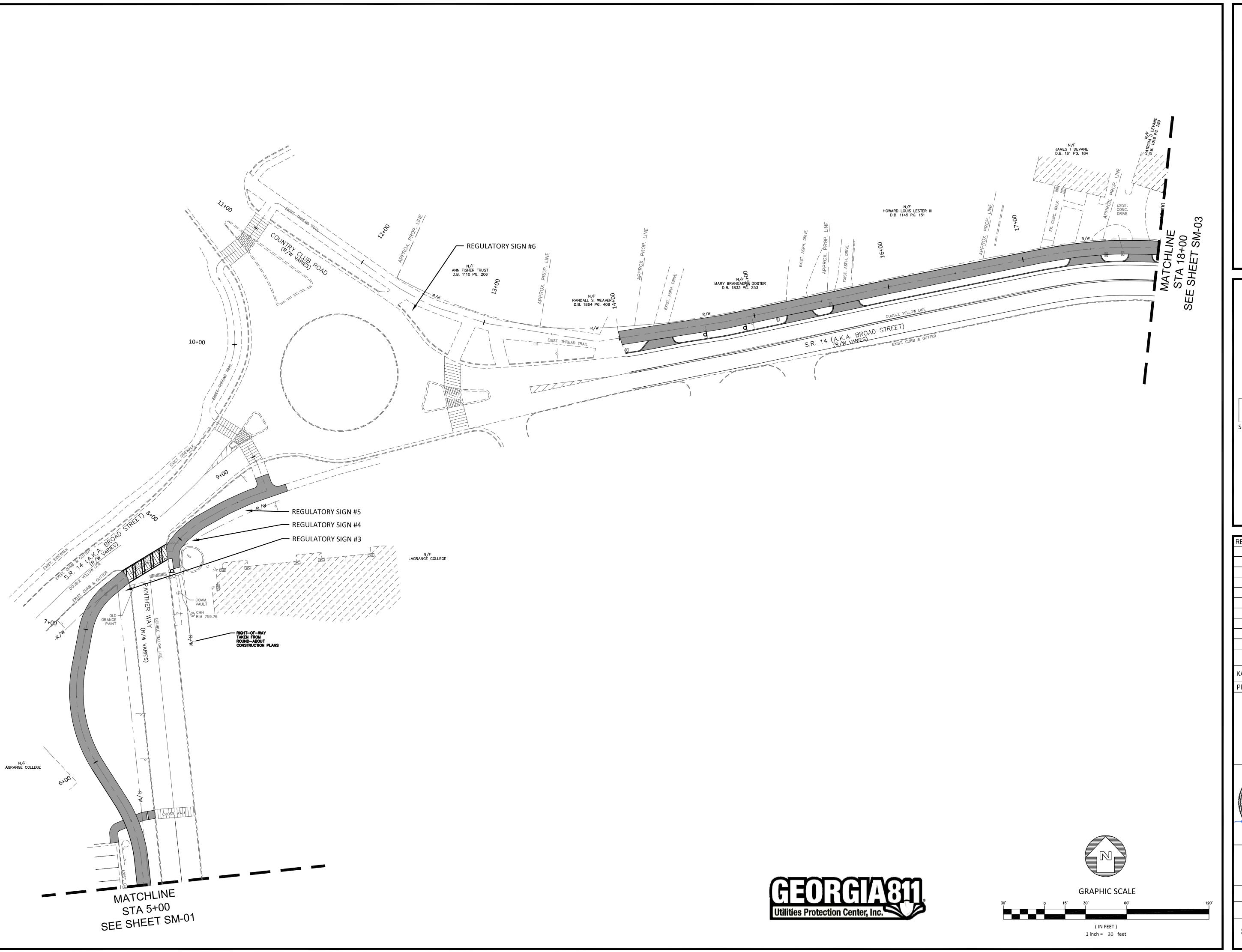


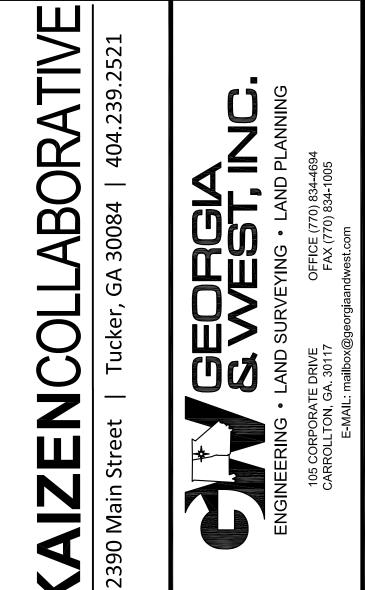


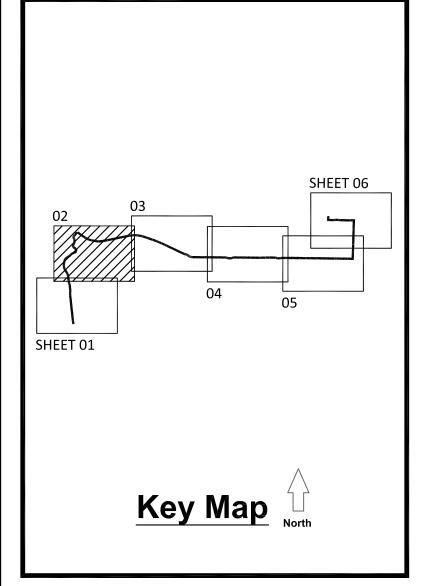
REVISION	DATE	DESCRIPTION
KAIZEN PI	ROJECT#	2017 - 136
PROJECT	MANAGER	GGD
	aGR/	NGF THREAD



	SCALE:	1"=30'
	DATE:	MARCH 22, 2018
	SHEET NAME:	SM-01





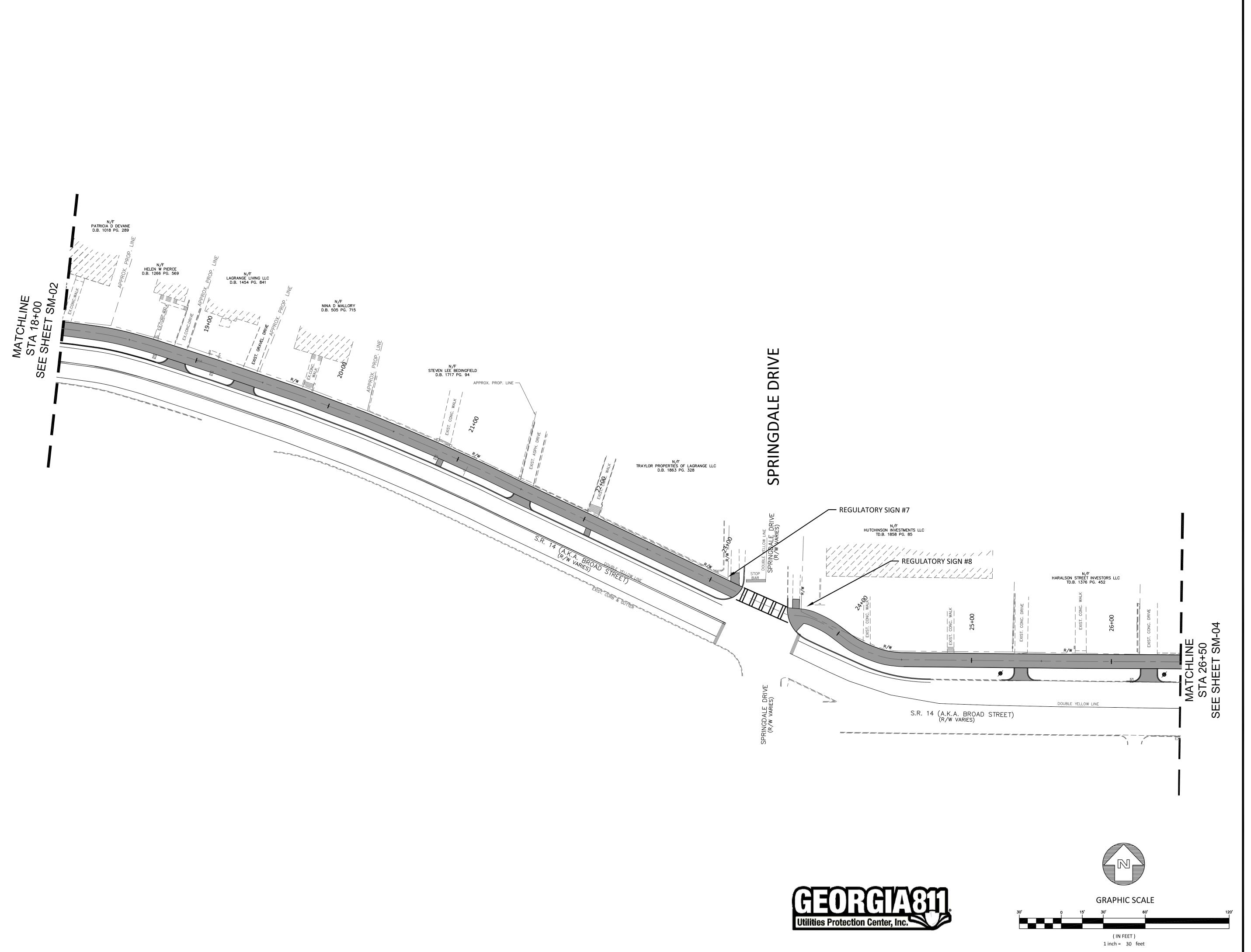


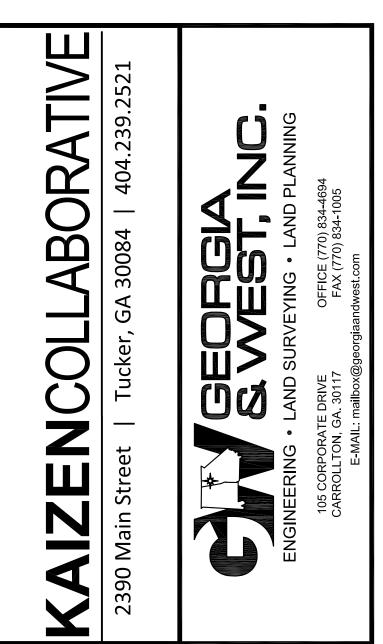
	DATE	DESCRIPTION
KAIZEN PF	ROJECT#	2017 - 136
DDO IECT	MANAGER	GGD

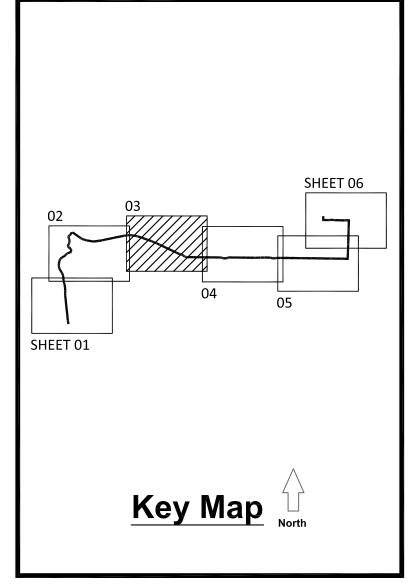




DATE: MARCH 22, 2018
SHEET NAME: SM-02



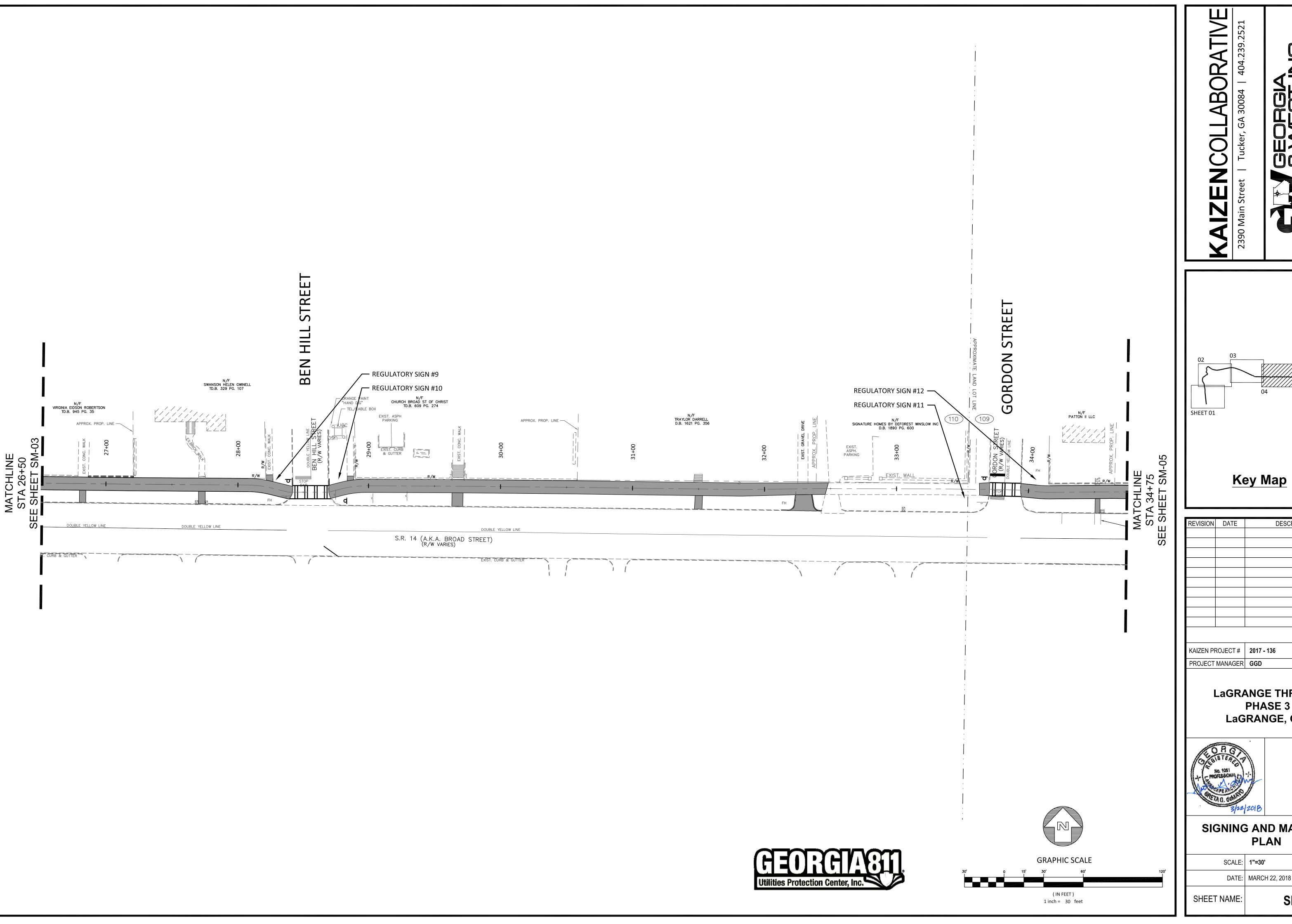


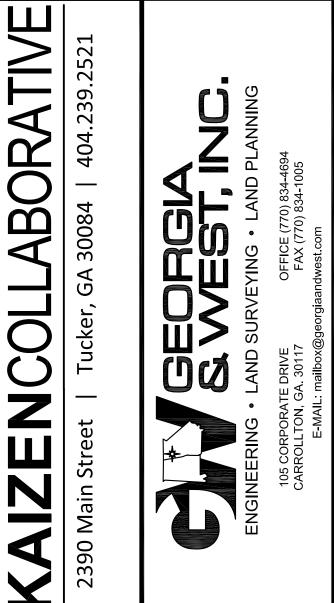


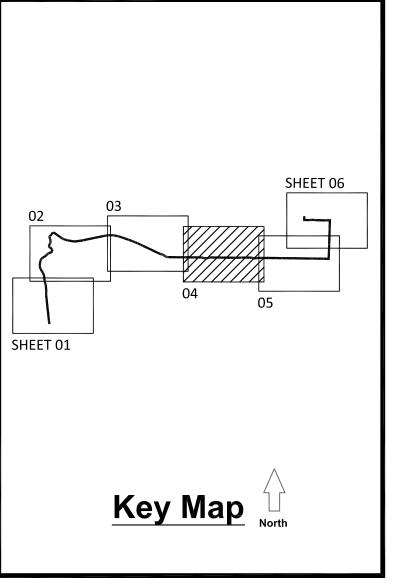
36
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	SHEET NAME:	SM-03
	DATE:	MARCH 22, 2018
	SCALE:	1"=30'

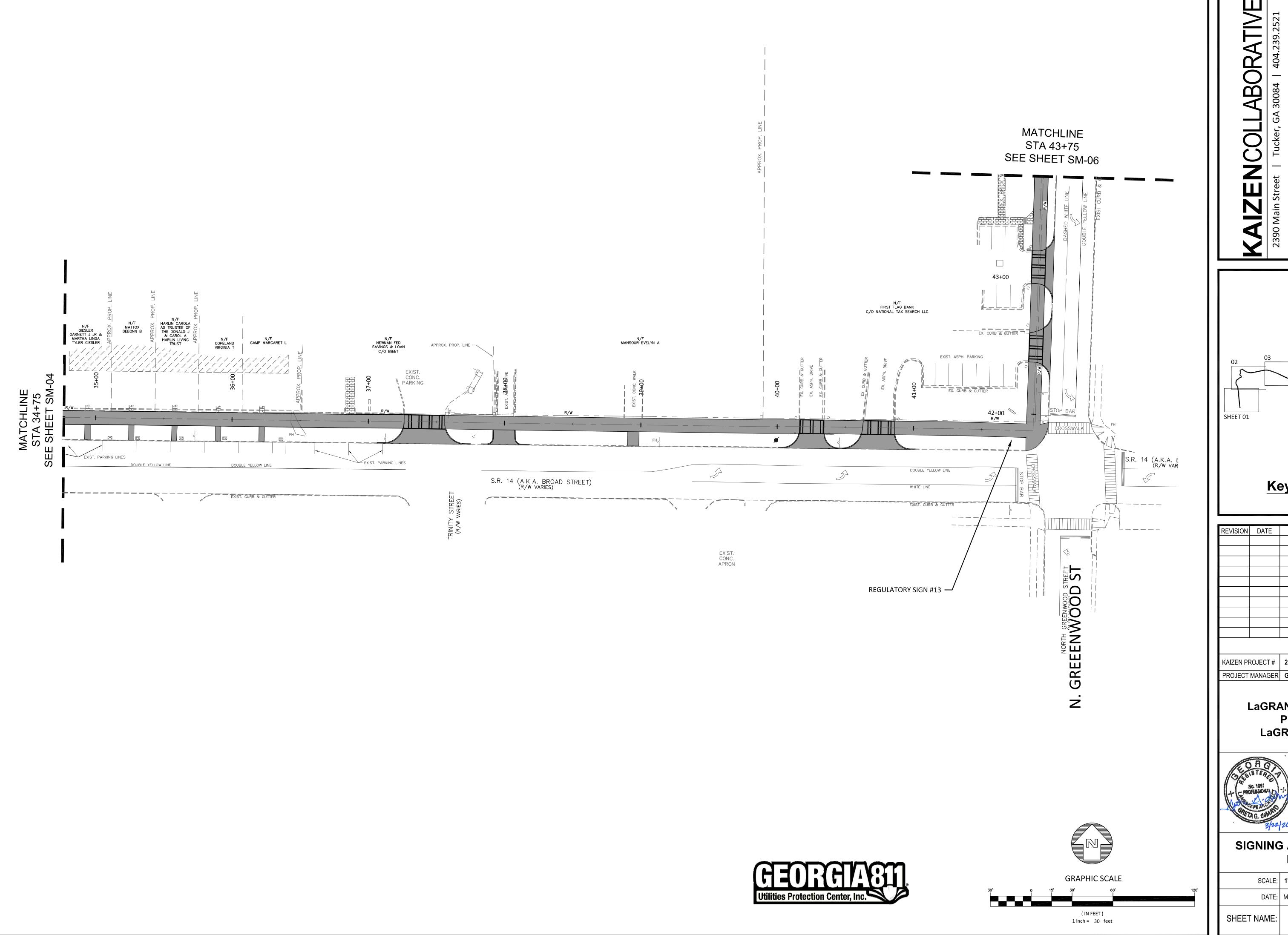


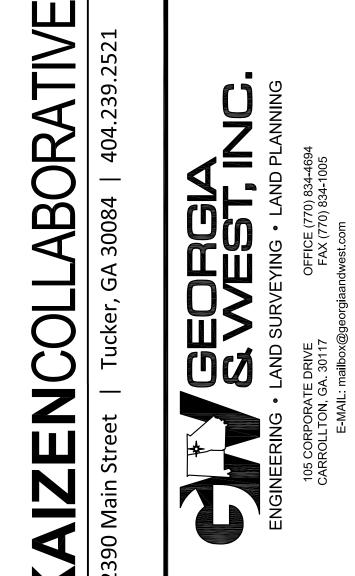


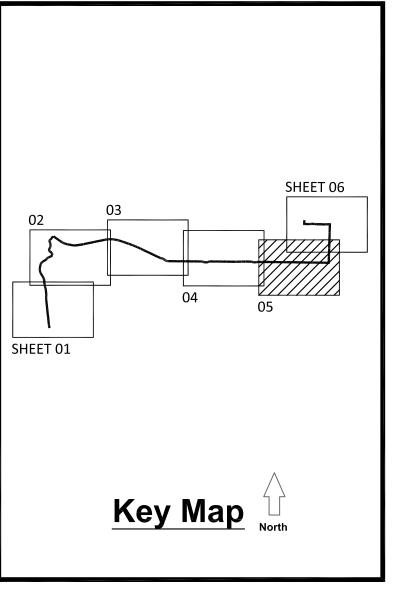


REVISION	DATE	DESCRIPTION	
KAIZEN PROJECT#		2017 - 136	
PROJECT	MANAGER	GGD	
	LaGRANGE THREAD		

Sł	HEET NAME:	SM-04
	DATE:	MARCH 22, 2018
	SCALE:	1"=30'



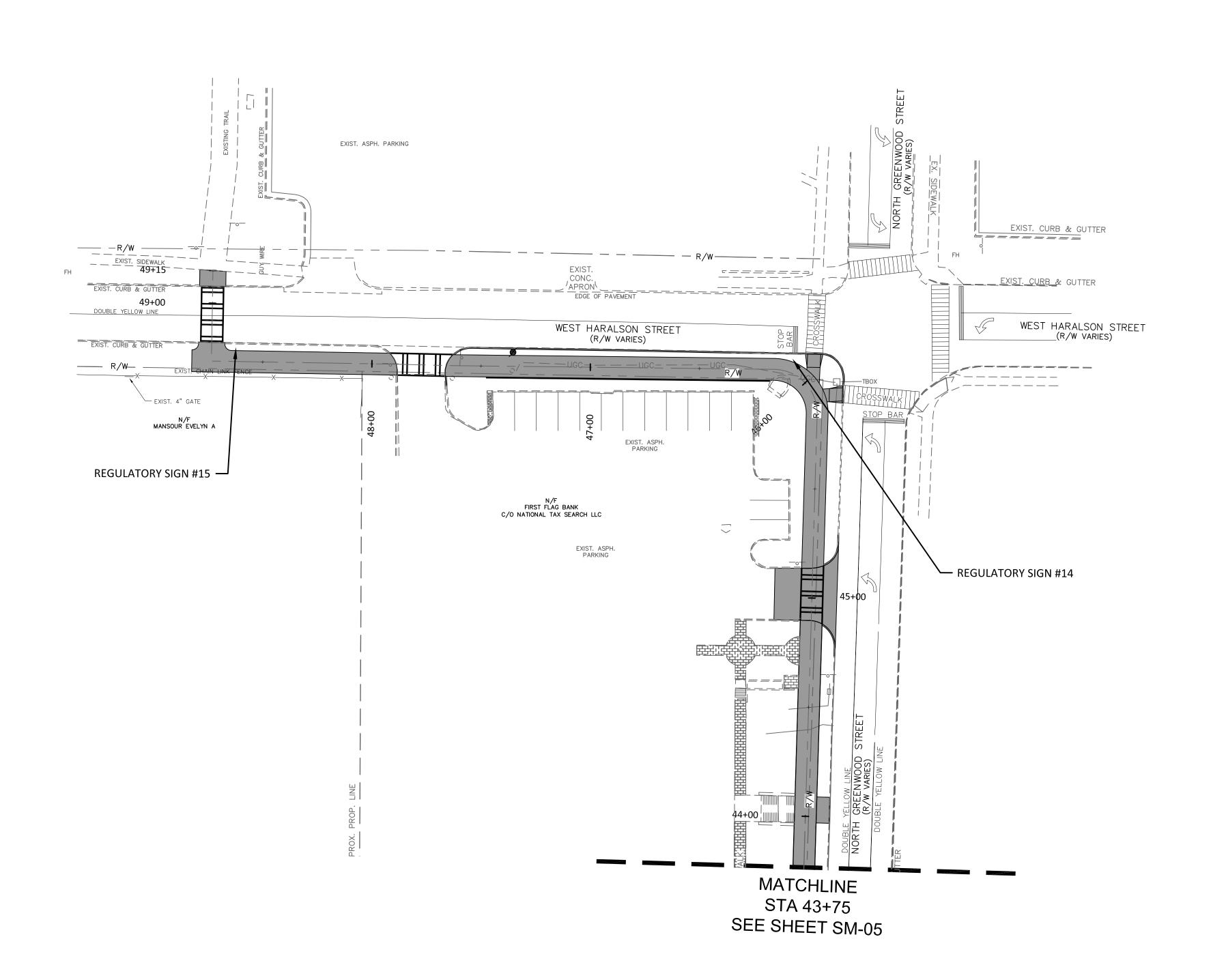




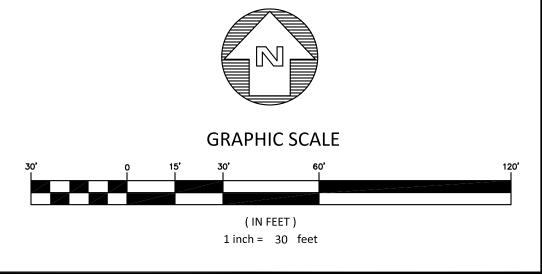
REVISION	DATE	DESCRIPTION
1121101011	5, 112	DEGGKII HOK
KAIZEN PI	ROJECT#	2017 - 136
PROJECT	MANAGER	GGD
.		ANCE TUDEAD

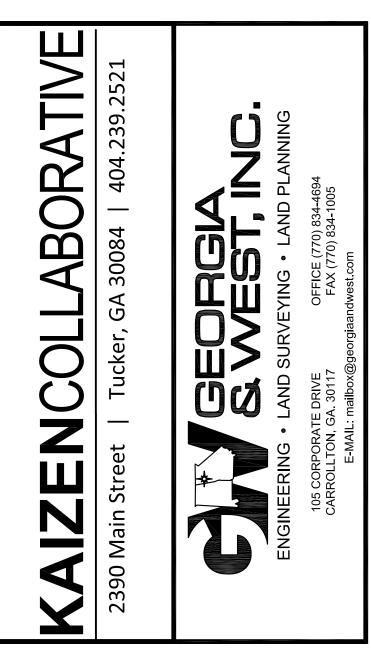


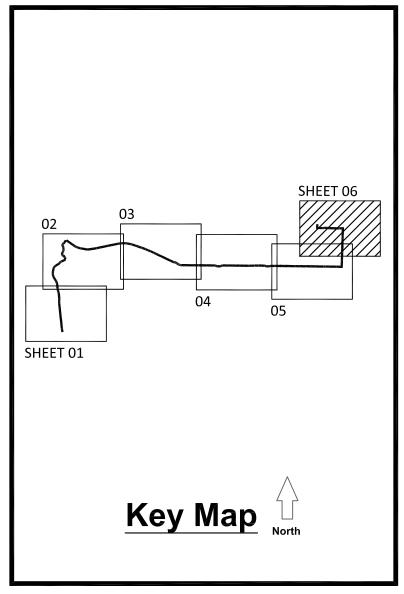
SCALE:	1"=30'
DATE:	MARCH 22, 2018
SHEET NAME:	SM-05







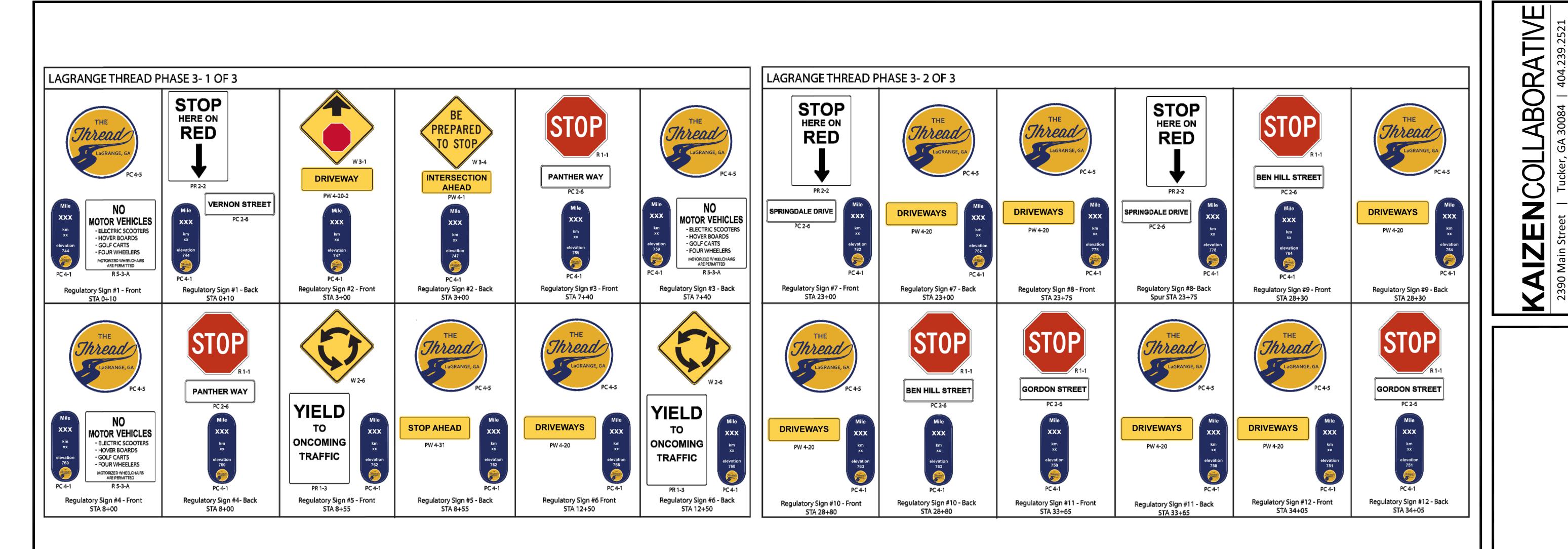


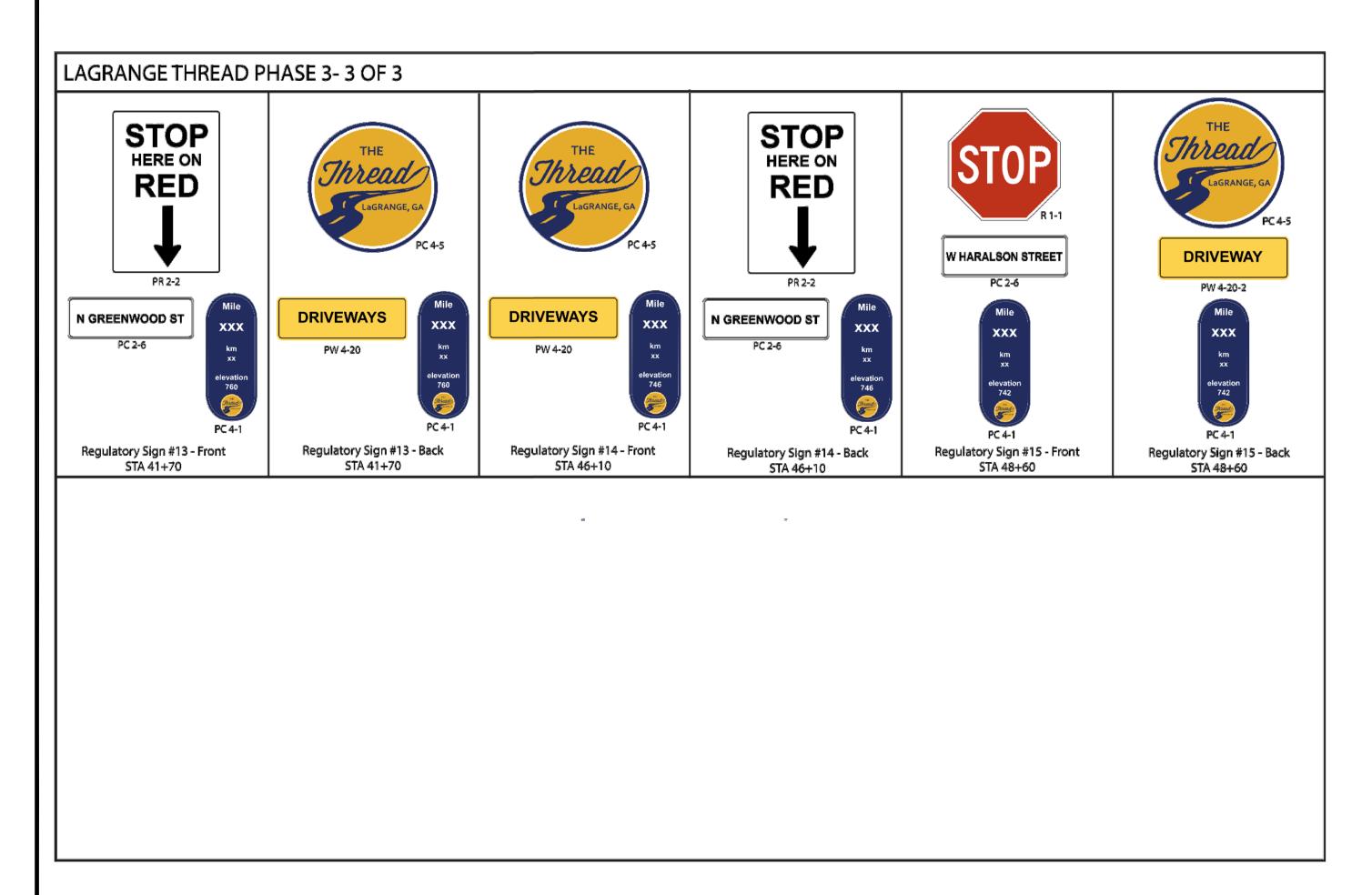


KAIZEN PROJECT # 2017 - 136	
PROJECT MANAGER GGD	

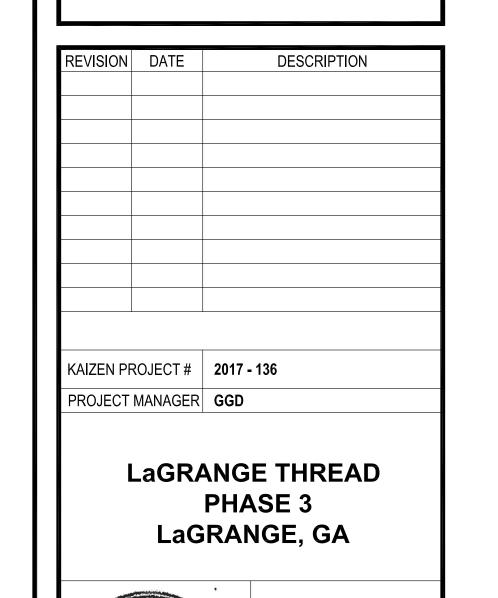


SCALE:	1"=30'
DATE:	MARCH 22, 2018
SHEET NAME:	SM-06





NOTE: ALL SIGNS TO BE FABRICATED USING DIRECT PRINTING PROCESS. ALL SIGNS TO HAVE BLACK BACK.



SECTION SURVEYING . LAND SURVEYING . LAND PLANNING

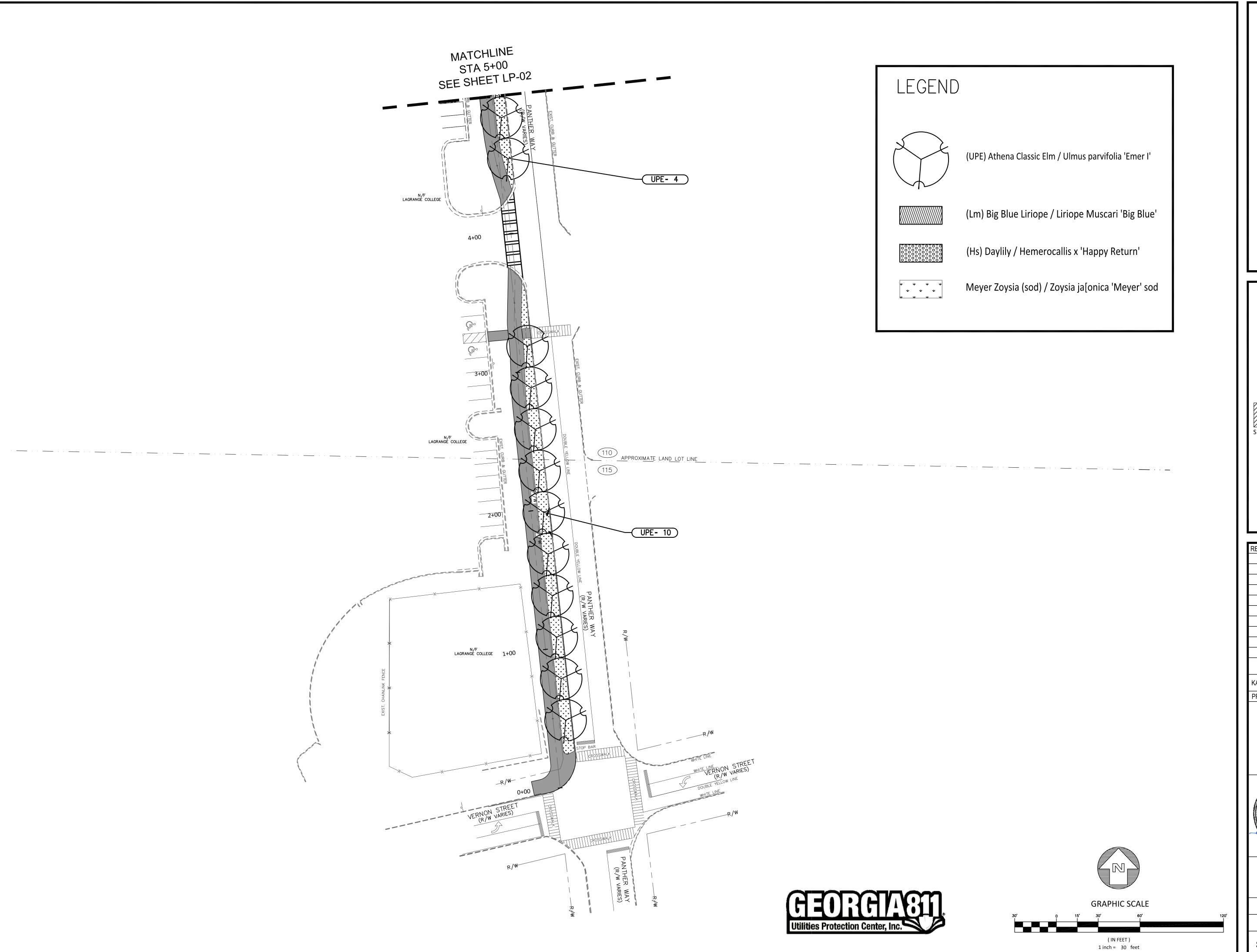
SIGN MATRIX

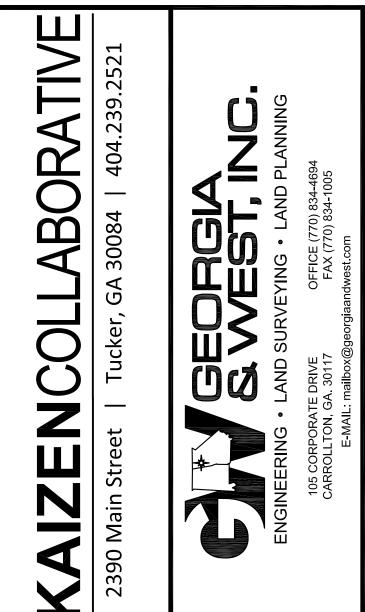
DATE: MARCH 22, 2018

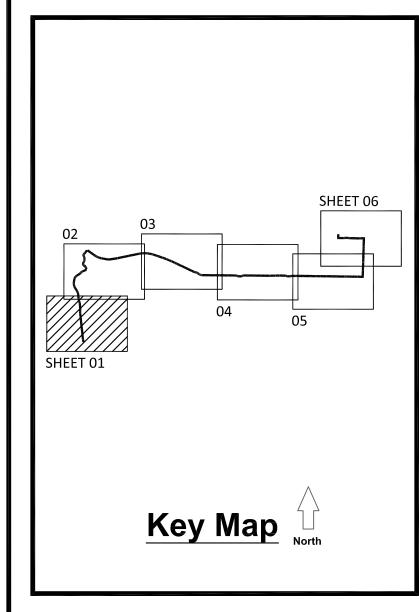
SCALE: NTS

SHEET NAME:

SM-07





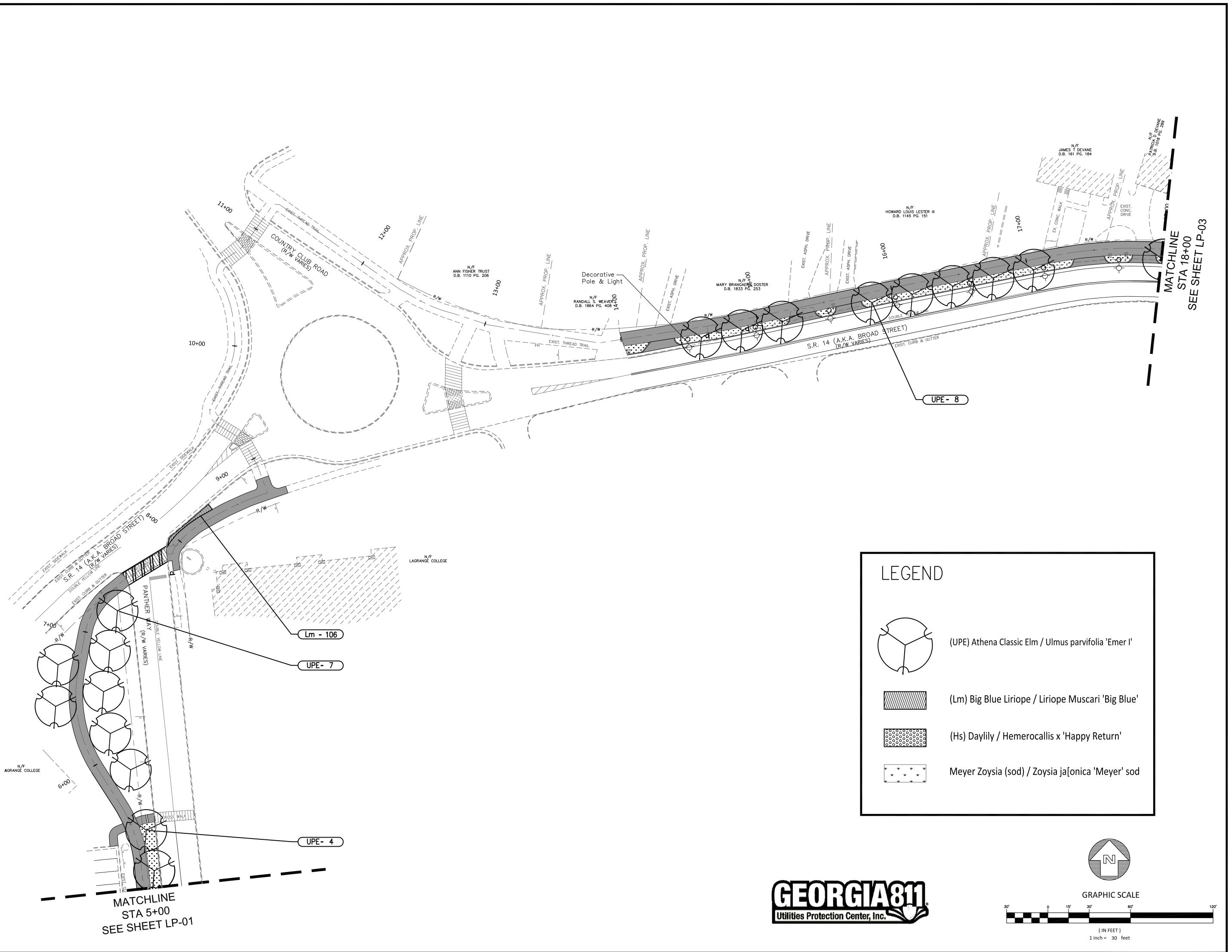


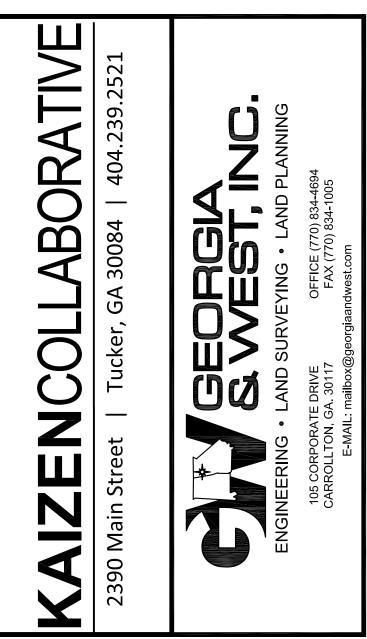
DJECT#	2017 - 136
IANAGER	GGD

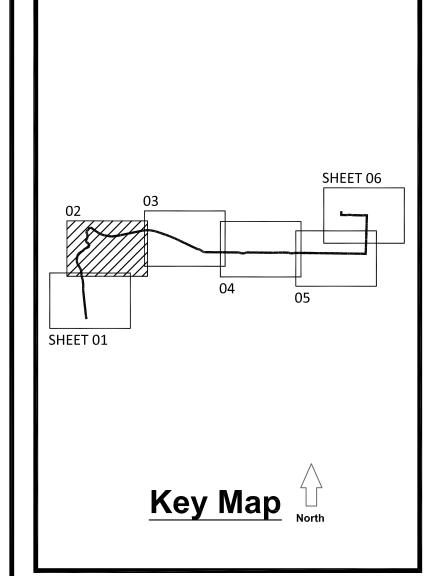


LANDSCAPE PLAN	1
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	SCALE:	1"=30'
	DATE:	MARCH 22, 2018
	SHEET NAME:	LP-01







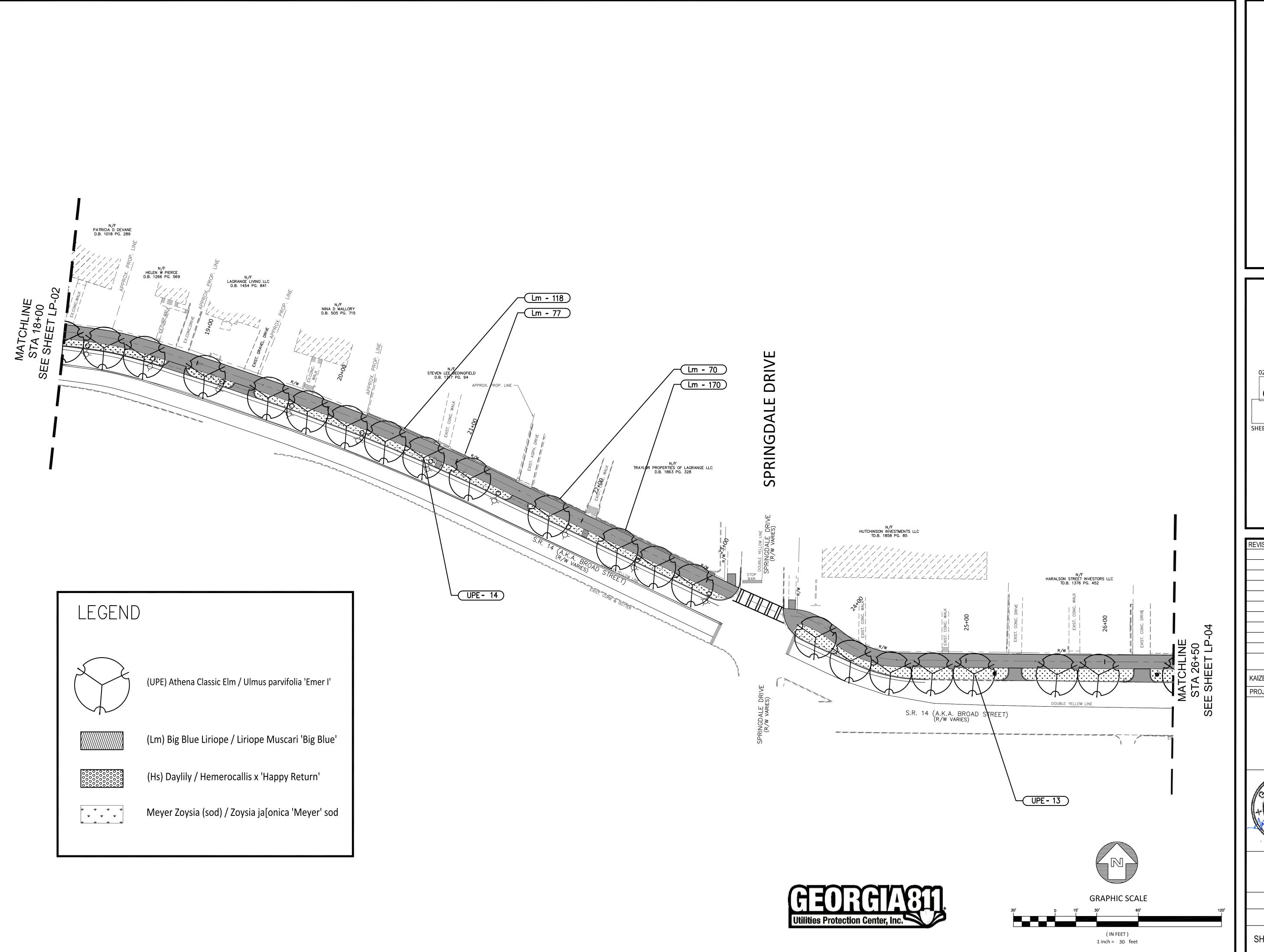
REVISION	DATE	DESCRIPTION
KAIZEN PR	ROJECT#	2017 - 136
PROJECT	MANAGER	GGD
	 LaGR/	ANGE THREAD
1		

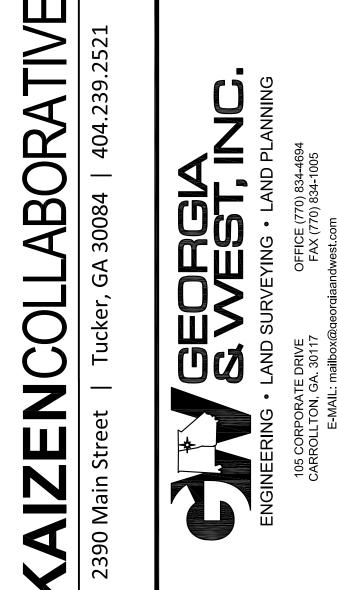
PHASE 3

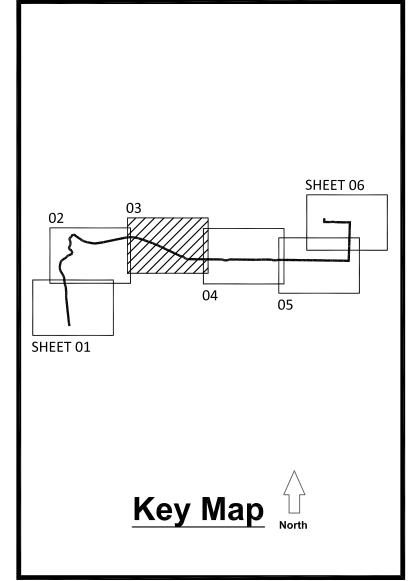
LaGRANGE, GA



LAND	SCAPE PLAN
SCALE:	1"=30'
DATE:	MARCH 22, 2018
SHEET NAME:	LP-02





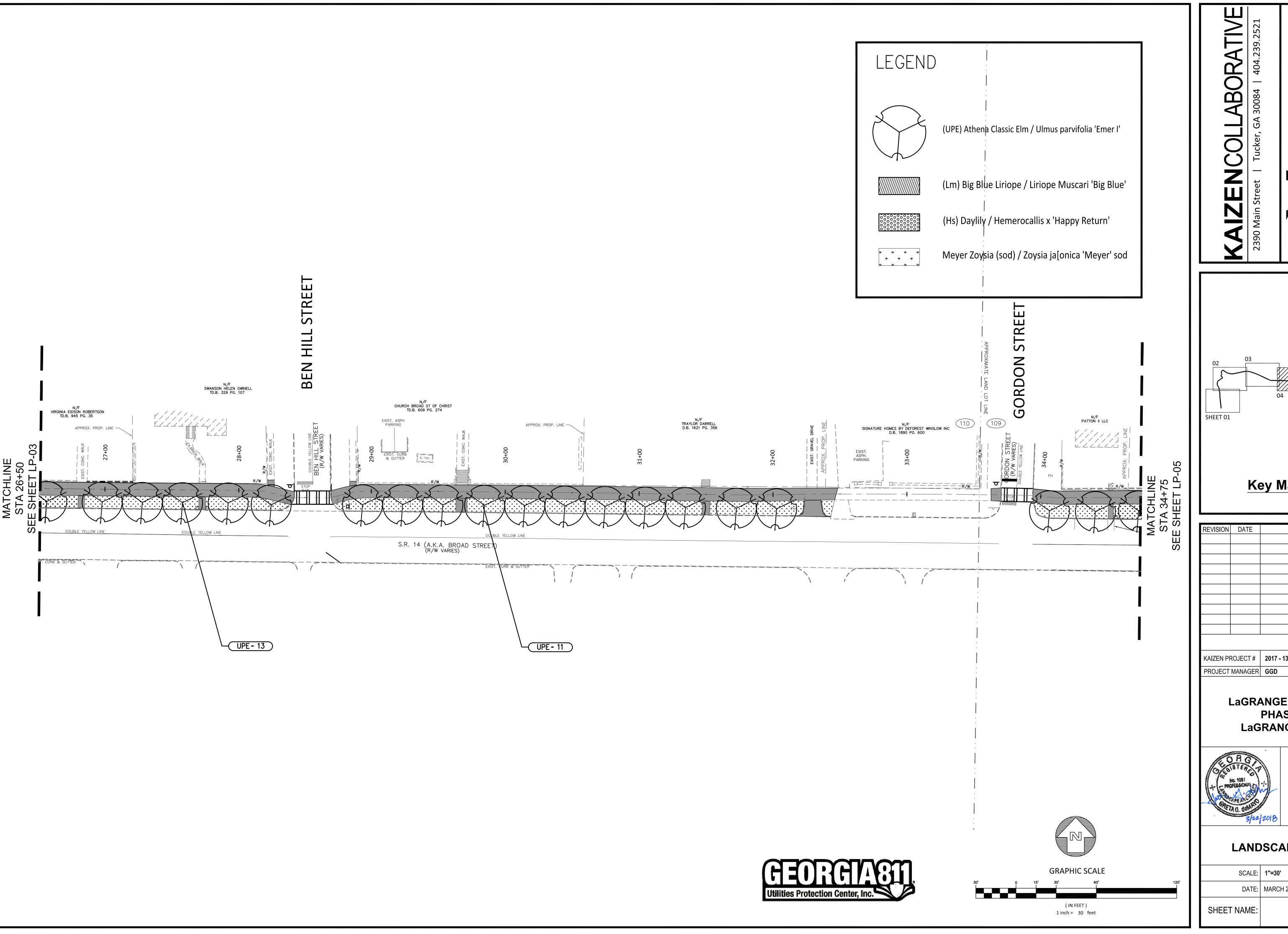


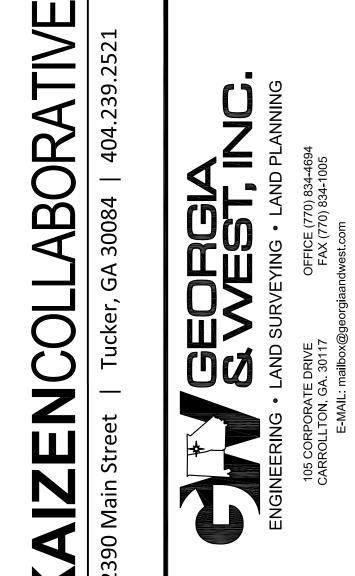
REVISION	DATE	DESCRIPTION
KAIZEN PI	ROJECT#	2017 - 136
PROJECT	MANAGER	GGD
		ANGE THREAD

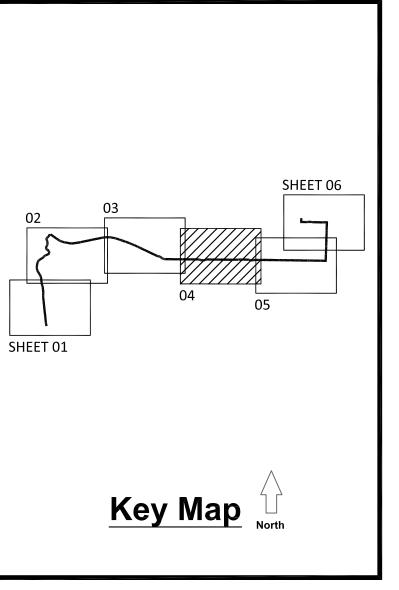


LANDSCAPE PLAN	
----------------	--

	SCALE:	1"=30'
r	DATE:	MARCH 22, 2018
	SHEET NAME:	LP-03



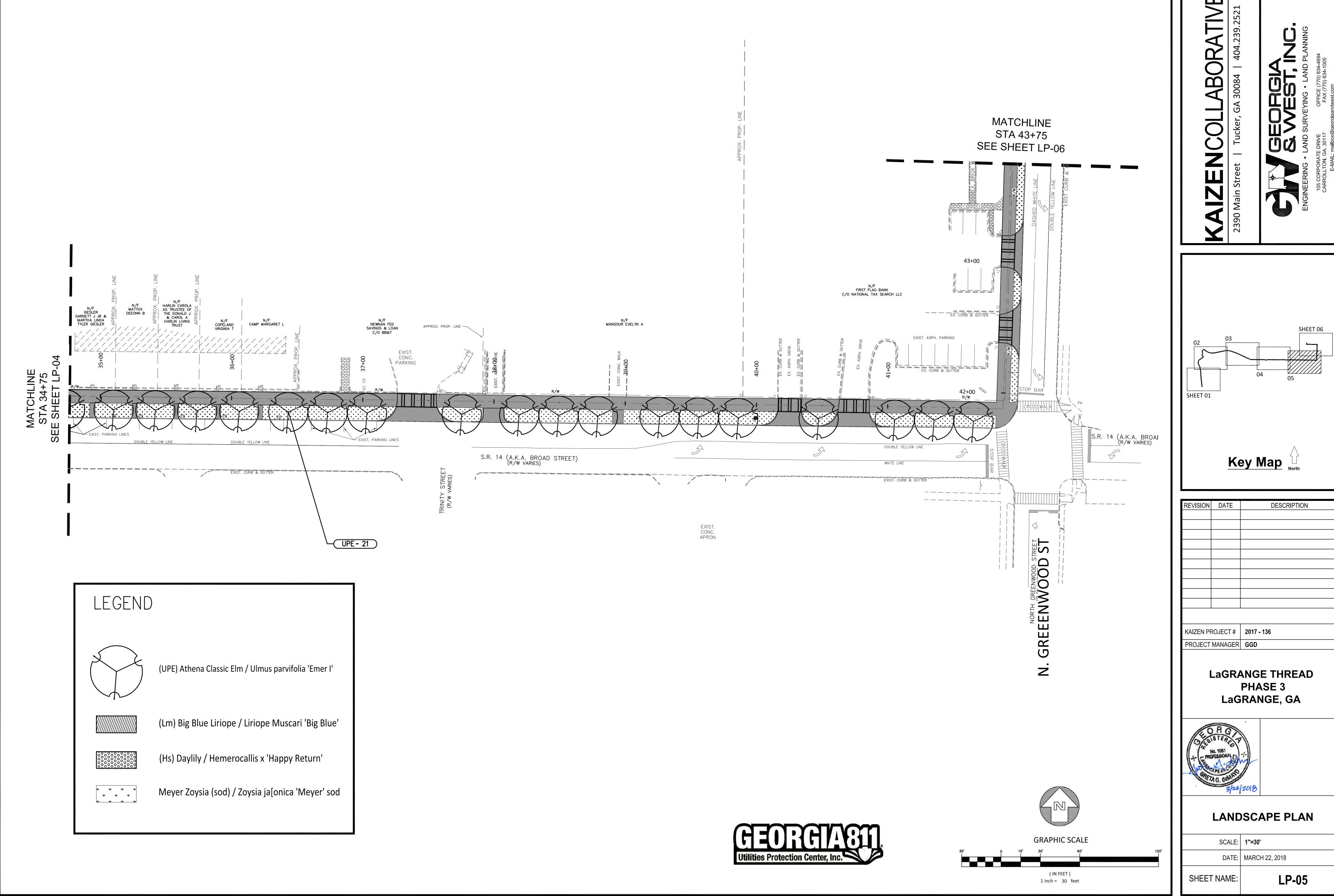


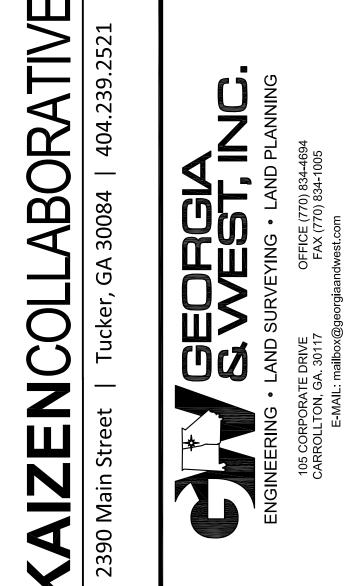


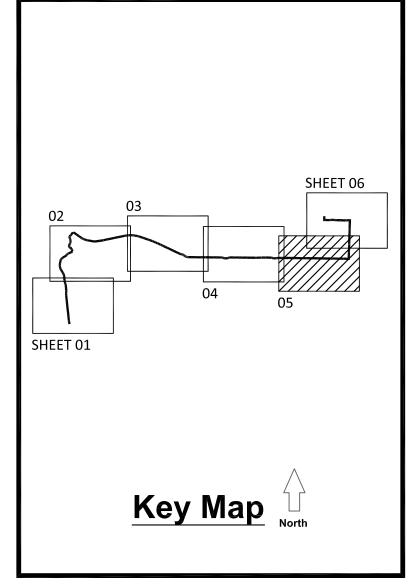
REVISION	DATE	DESCRIPTION
KAIZEN PF	ROJECT#	2017 - 136
PROJECT	MANAGER	GGD
	aCP/	ANGE THREAD

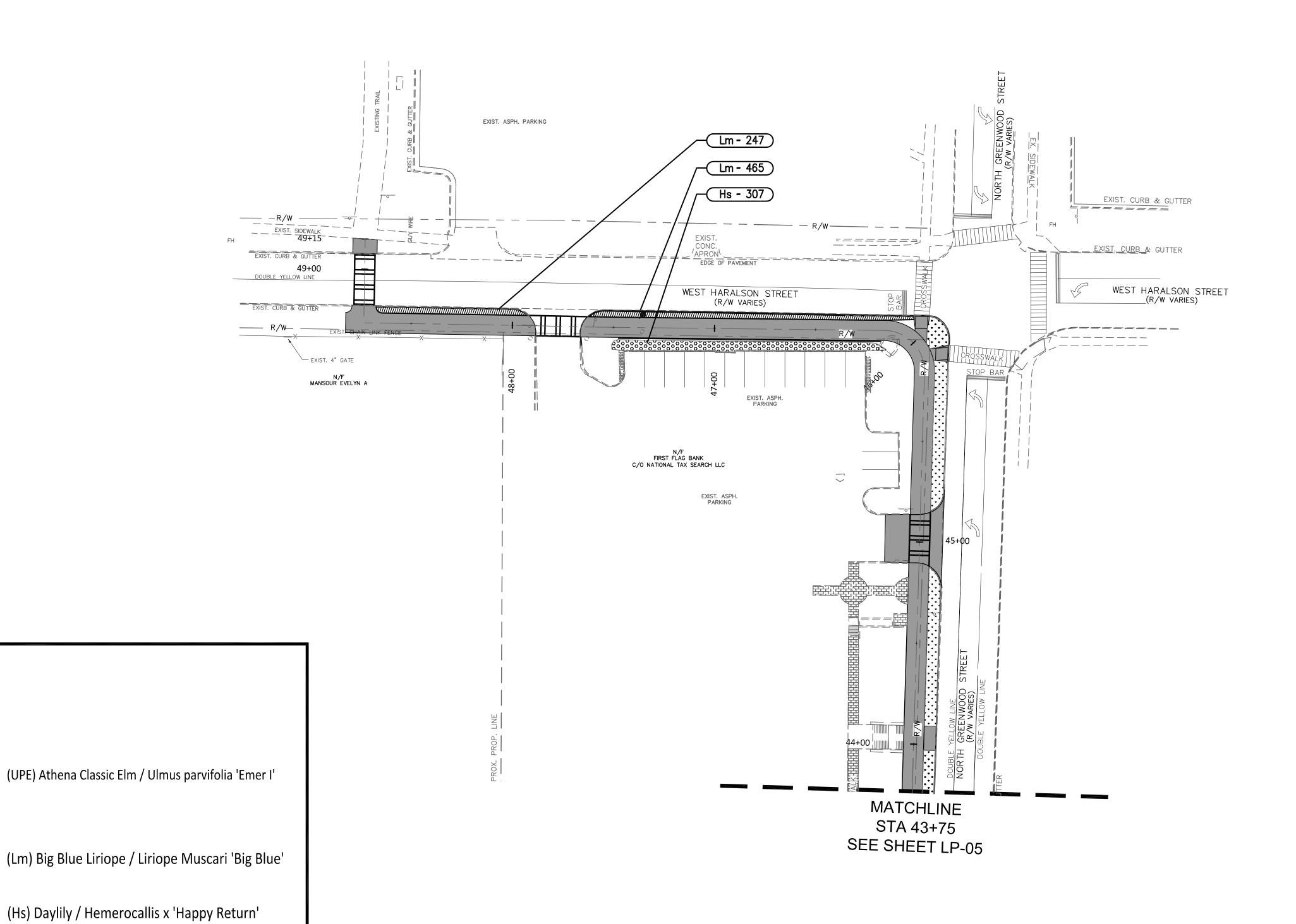
LANDSCAPE PLAN	
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SCALE:	1"=30'
DATE:	MARCH 22, 2018
SHEET NAME:	LP-04







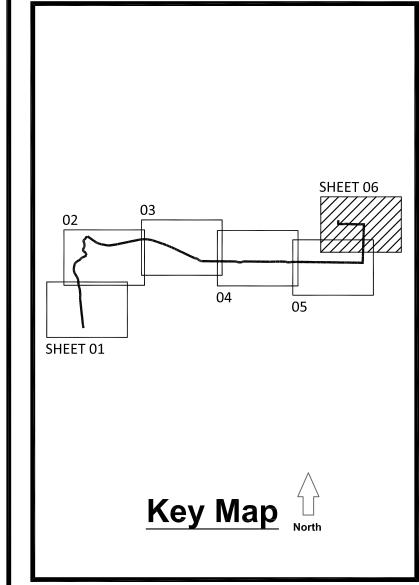


LEGEND

* * * * *

Meyer Zoysia (sod) / Zoysia ja[onica 'Meyer' sod





REVISION	DATE	DESCRIPTION
KAIZEN PF	ROJECT#	2017 - 136
PROJECT	MANAGER	GGD
		ANCE TUDEAD





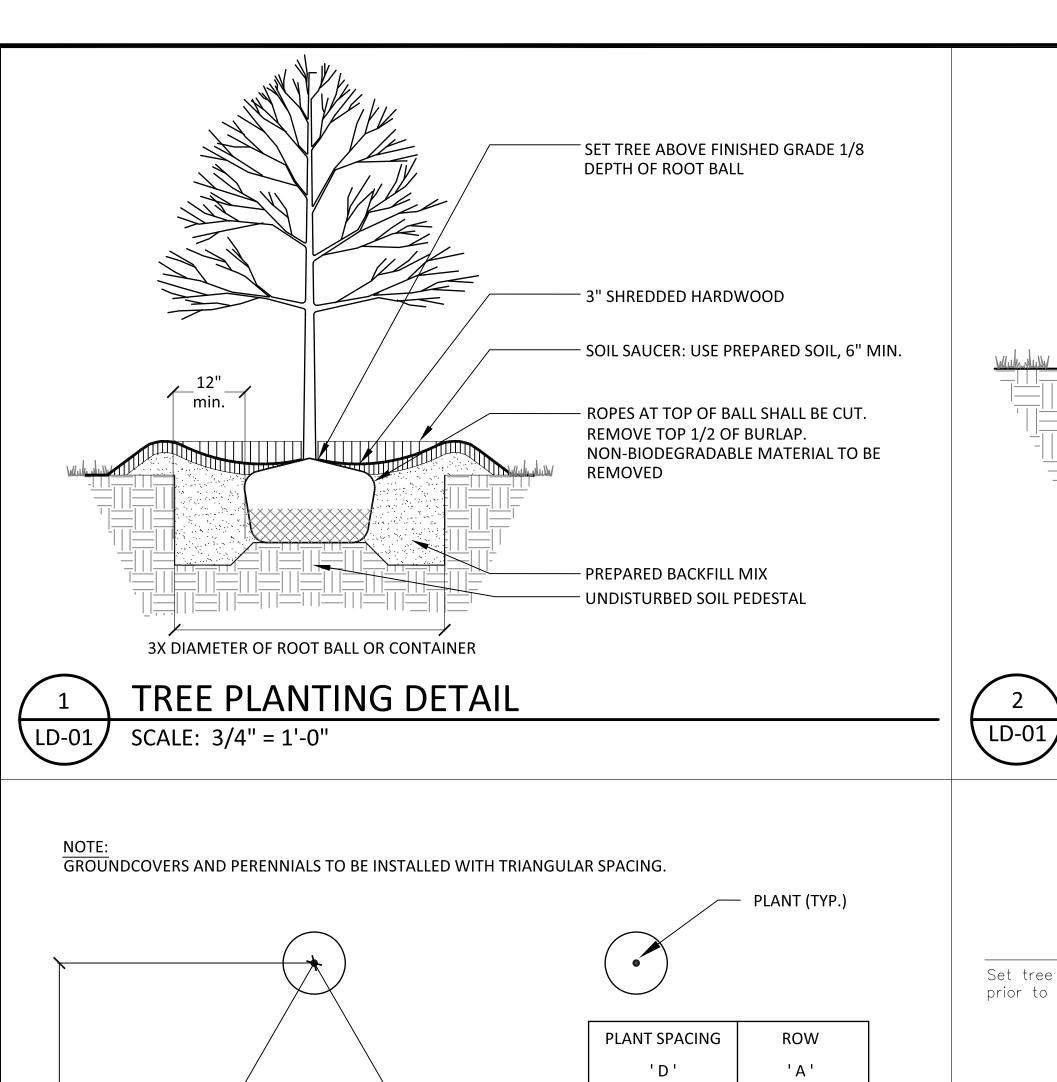
GRAPHIC SCALE

(IN FEET) 1 inch = 30 feet

LANDSCAPE PLAN

SCALE:	1"=30'
DATE:	MARCH 22, 2018
SHEET NAME:	LP-06





8" O.C.

10" O.C.

12" O.C.

24" O.C.

36" O.C.

48" O.C.

7.00" O.C.

8.5" O.C.

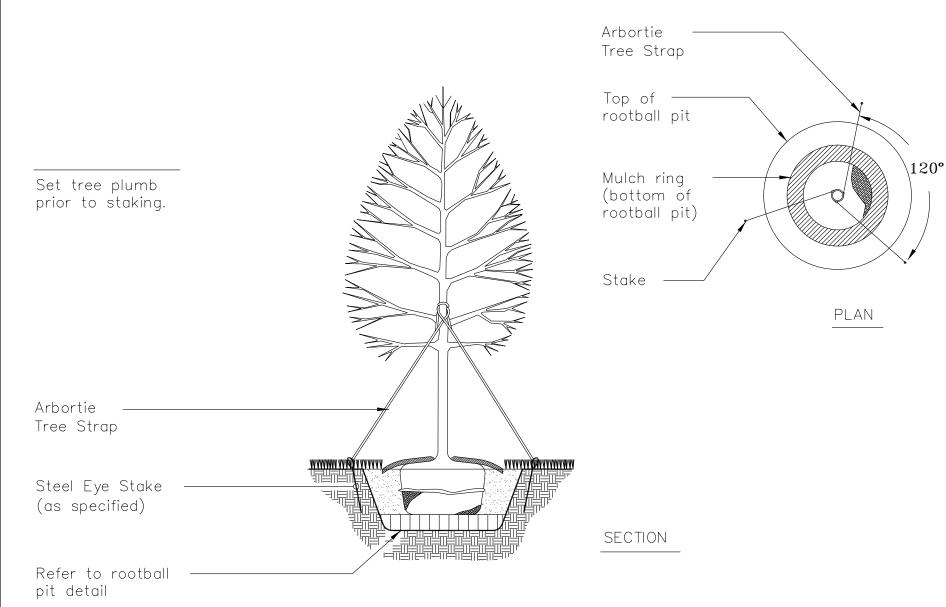
10.5" O.C.

15.5" O.C.

21.0" O.C.

30.0" O.C.

31.5" O.C.



TYPICAL TREE STAKING DETAIL

3X DIAMETER OF ROOT BALL OR CONTAINER

SCALE: 1" = 1'-0"

SHRUB PLANTING DETAIL

NOTE:

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

_3" SHREDDED HARDWOOD MULCH

-ROPES AT TOP OF BALL SHALL BE CUT.

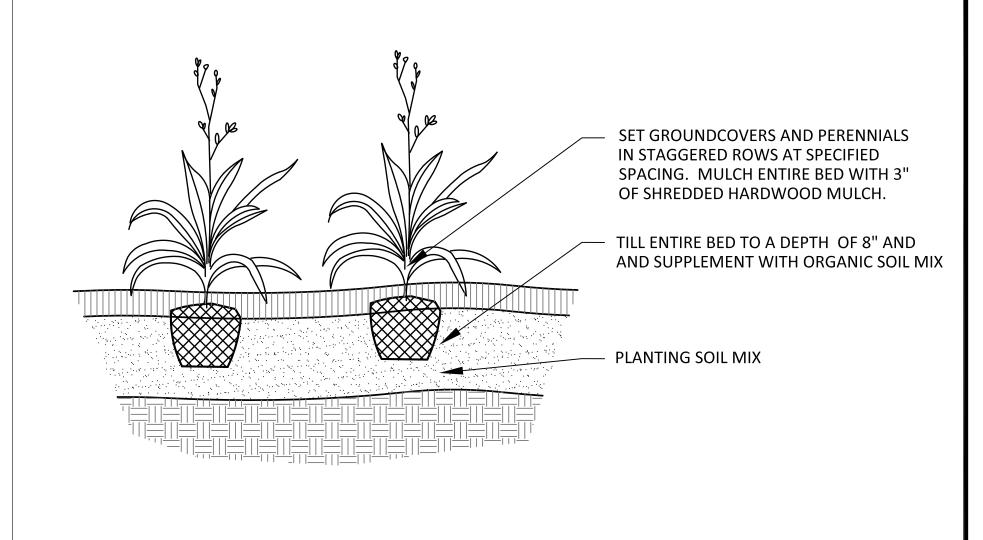
NON-BIODEGRADABLE MATERIAL TO

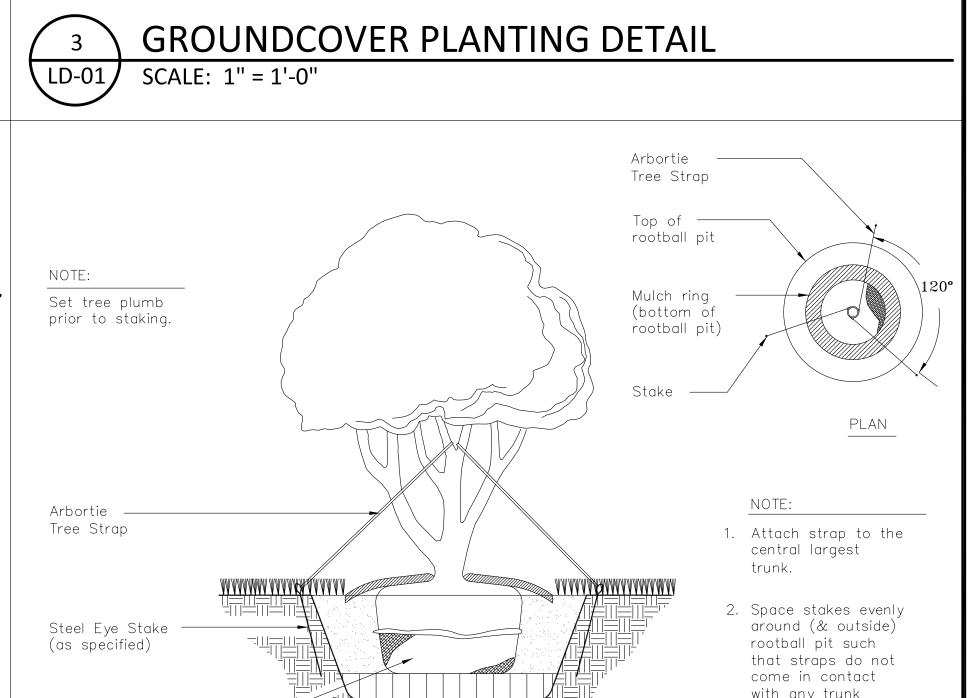
REMOVE TOP 1/2 OF BURLAP.

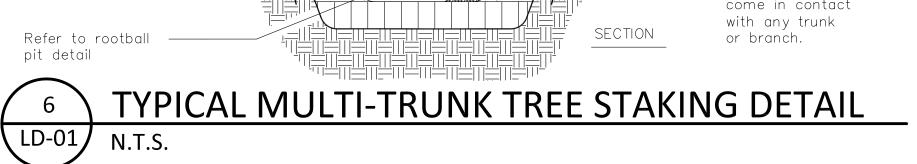
- PREPARED BACKFILL MIXTURE

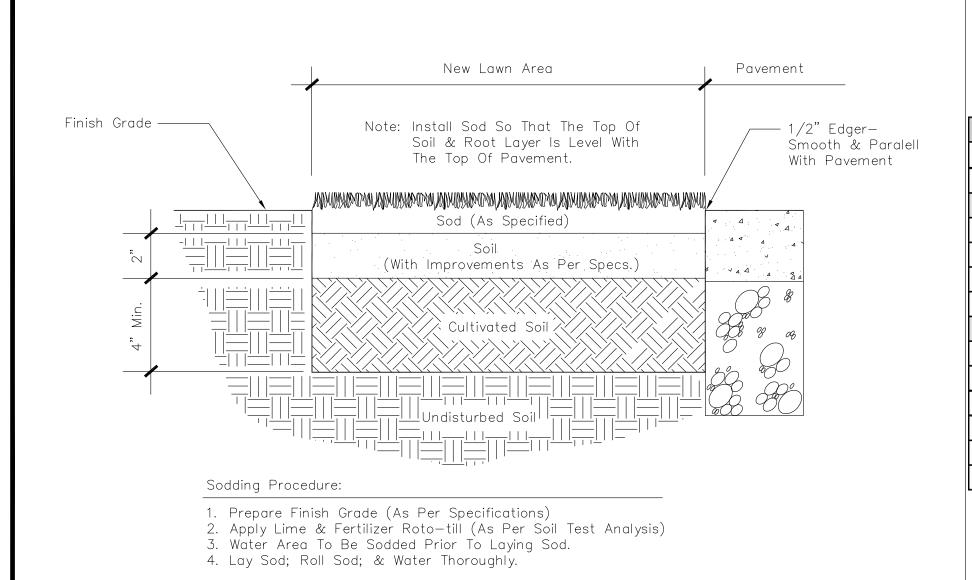
– UNDISTURBED SOIL PEDESTAL

BE REMOVED









PLANT SPACING DIAGRAM

TYPICAL SODDING DETAIL

LD-01

LD-01/ N.T.S.

SCALE: NTS

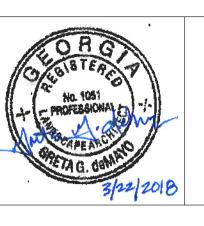
KEY	QTY	KEY	BOTANICAL NAME	COMMON NAME	HEIGHT	SPREAD	CALIPER	ROOT	REMARKS
			TREES						
JPE	88	UPE	Ulmus parvifolia 'Emer I'	Athena Classic Elm	10'		3"	B&B	Stong central leader
Sub	88		•	•			•	•	•
			GROUNDCOVERS						
Hs	307	Hs	Hemerocallis x 'Happy Return'	Happy Return Daylily		18"		1 gal.	Full, Vigorous, Reblooming variety only
Lm	1,253	Lm	Liriope muscari 'Big Blue'	Big Blue Liriope		12"		1 gal.	Full, Vigorous
Sub	1,560		•	•	· · ·			•	•
			TURFGRASSES					SY	Weed free
	2521 SY		Zoysia japonica 'Meyer' sod	Meyer Zoysia (sod)					•
					•	•			
			MULCH					Bale	Clean, Debris Free
	132			Pine Straw				1	

LD-01 N.T.S.

REVISION	DATE	DESCRIPTIO
KAIZEN PR	OJECT#	2017 - 136
PROJECT N	MANAGER	GGD

ABORATIVE A 30084 | 404.239.2521

Lagrange Thread PHASE 3 LaGRANGE, GA

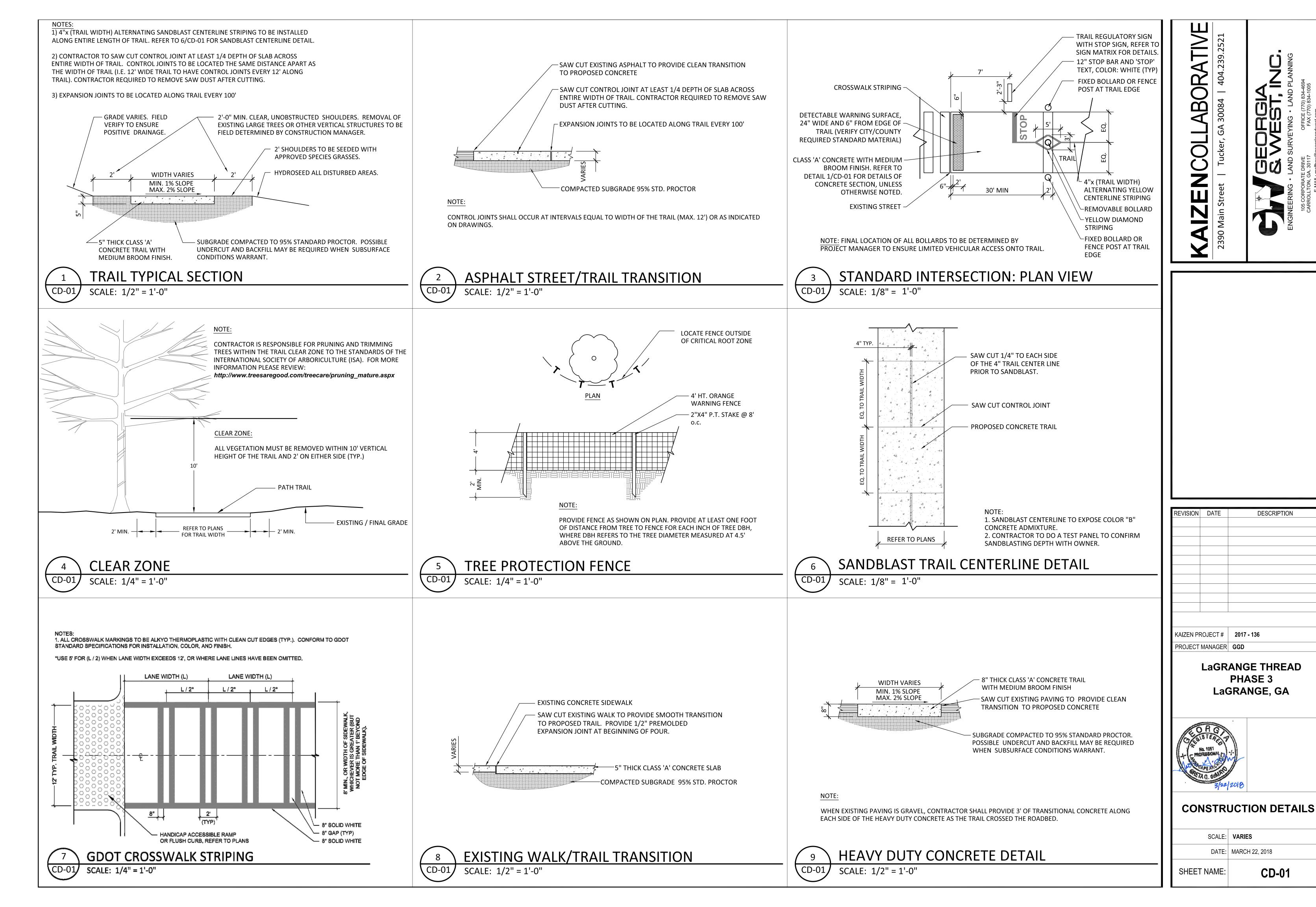


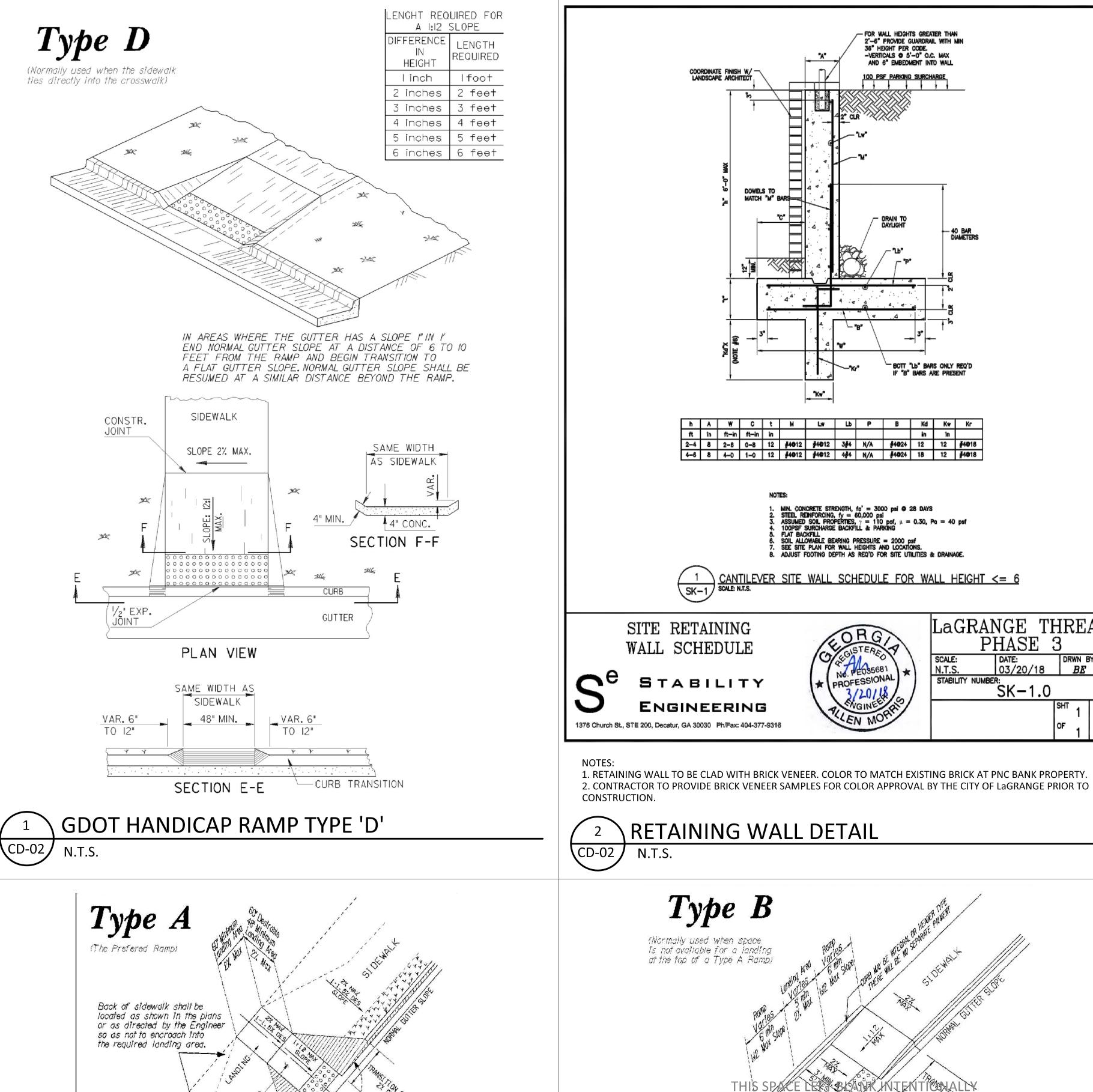
LANDSCAPE DETAILS

SCALE: 1"=30' DATE: MARCH 22, 2018

SHEET NAME: LD-01

PLANT SCHEDULE





LENGHT REQUIRED FOR A 1:10 SLOPE

DIFFERENCE LENGTH

3 inches 2'-6"

4 inches 3'-4"

5 inches 4'-2"

6 Inches 5 feet

HEIGHT

Linch

2 inches

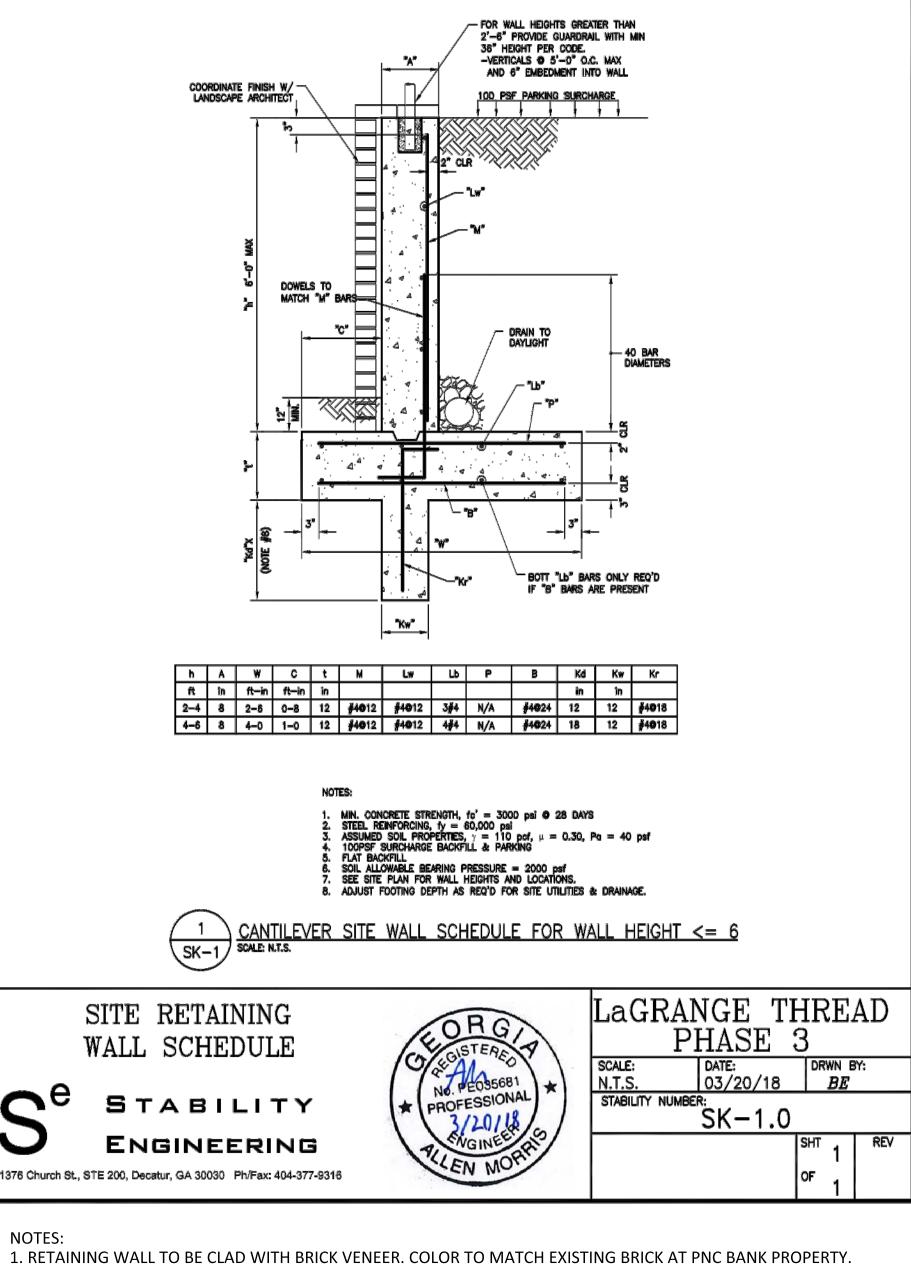
N.T.S.

REQUIRED

10 inches

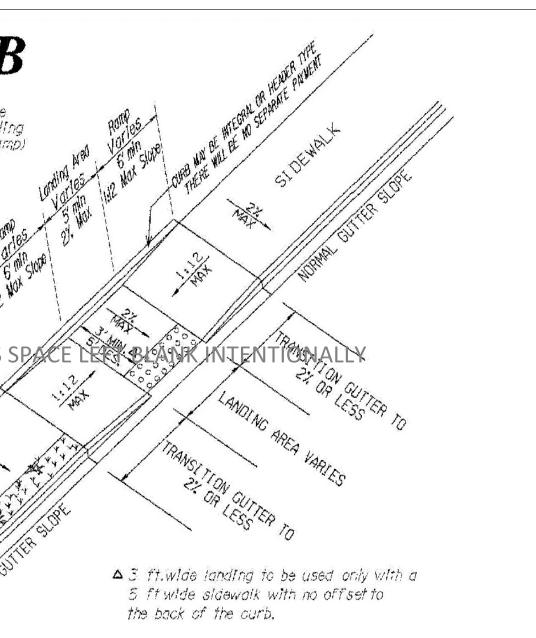
1'-8"

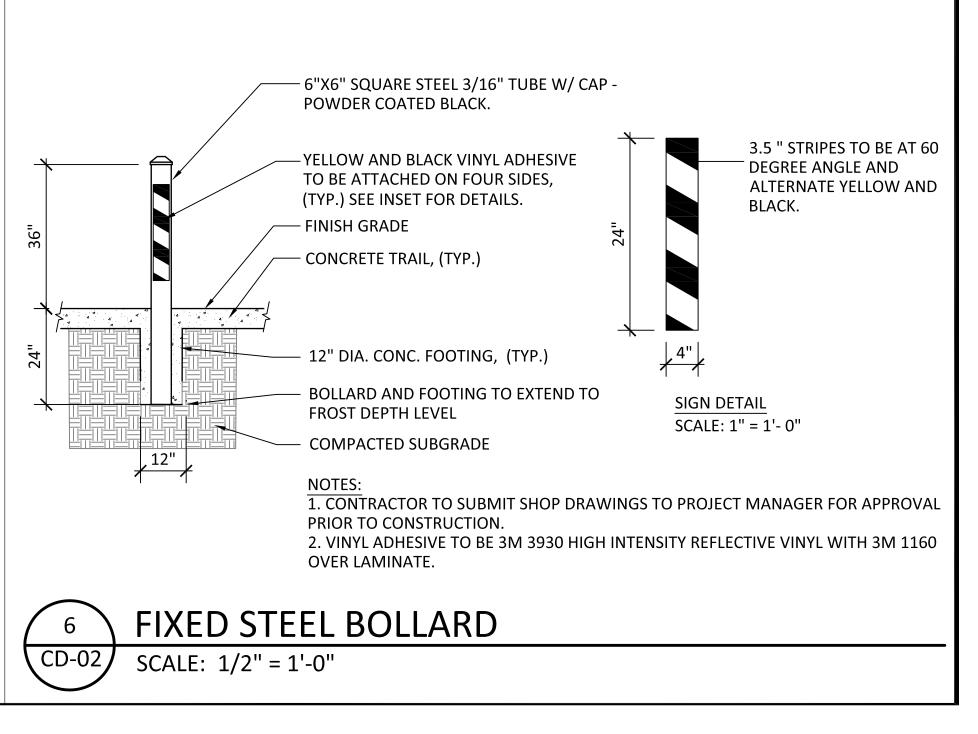
GDOT HANDICAP RAMP TYPE 'A'



GDOT HANDICAP RAMP TYPE 'B'

CD-02 / N.T.S.





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5"X5" SQUARE STEEL 3/16" TUBE WITH CAP-

-1" FROM BASE OF CAP, PROVIDE A 7/8" HOLE TO SLIDE PIN

YELLOW AND BLACK VINYL ADHESIVE TO BE ATTACHED ON FOUR

DEGREE ANGLE AND

BLACK.

VINYL ADHESIVE DETAIL

SCALE: 1" = 1'- 0"

2. ALL METAL TO BE POWDER COATED BLACK UNLESS OTHERWISE SPECIFIED.

POWDER COATED BLACK.

INTO FOR BOLLARD REMOVAL.

SIDES, (TYP.). SEE INSET FOR DETAILS.

- 1" HOLE PUNCHED IN DOORPLATE FOR LOCKING PIN THROUGH BOLLARD

- RECESSED HINGE W/ 1/4" FLAT PLATE

DOOR FLAP/ 2" ANGLE SURROUND

3/16"X6"X6" STEEL PIPE SLEEVE -

12" DIA. CONC. FOOTING, (TYP.)

COMPACTED SUBGRADE, (TYP.)

12"X12" #57 STONE, TAMPED TO

FLUSH MOUNT IN CONCRETE

CONCRETE TRAIL, (TYP.)

POWDER COATED BLACK.

PRIOR TO CONSTRUCTION

REMOVABLE DOOR PLATE BOLLARD

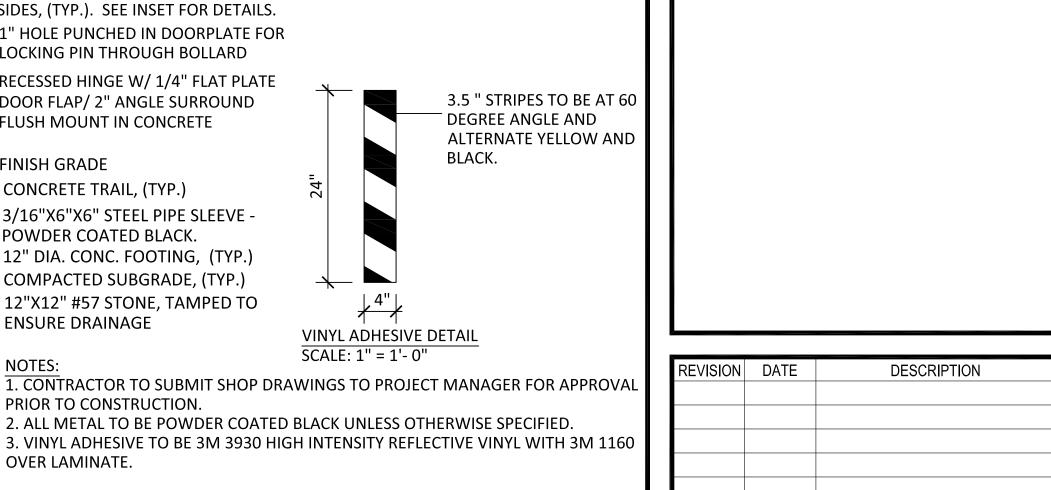
ENSURE DRAINAGE

- FINISH GRADE

18"

CD-02

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

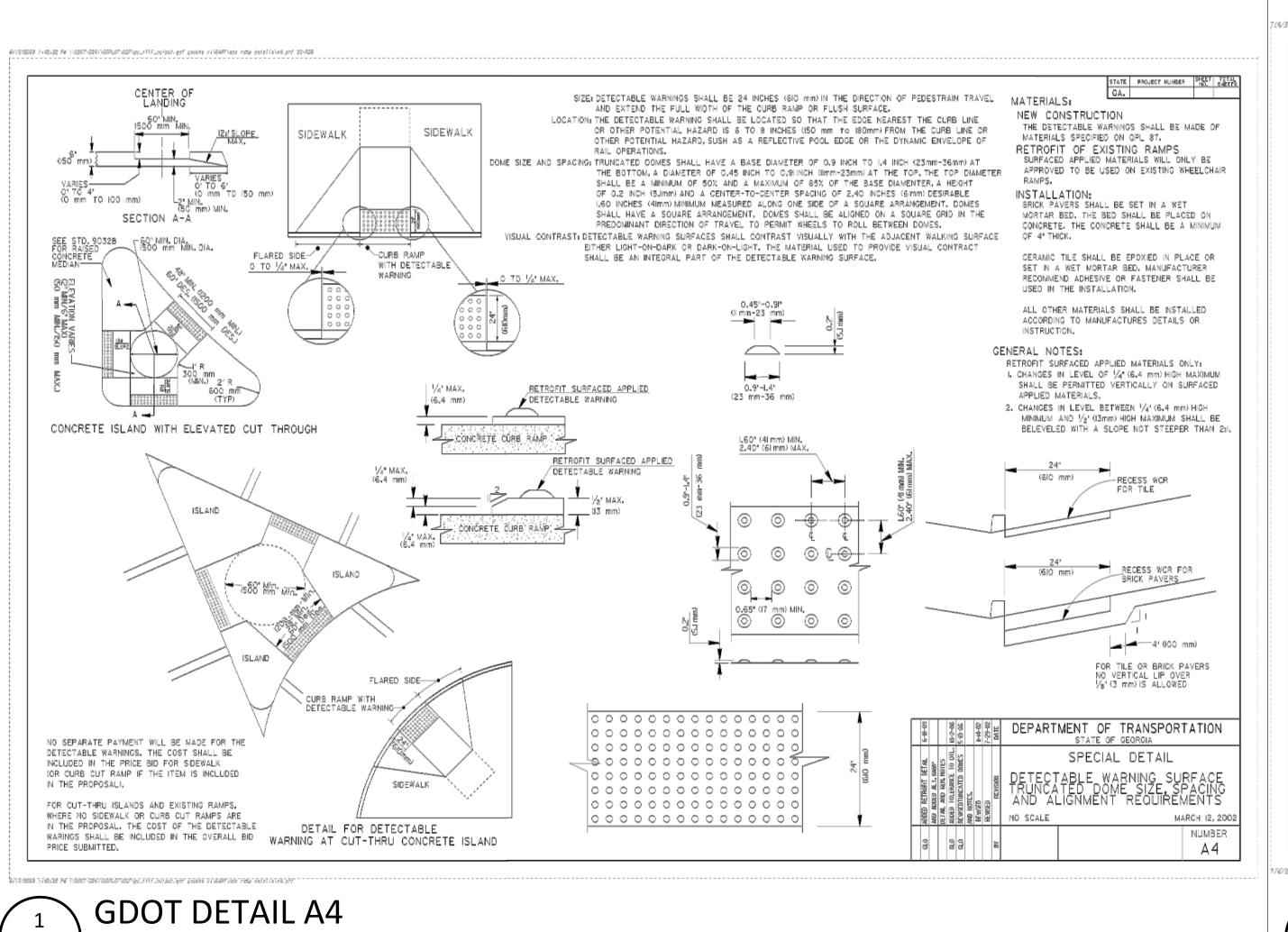


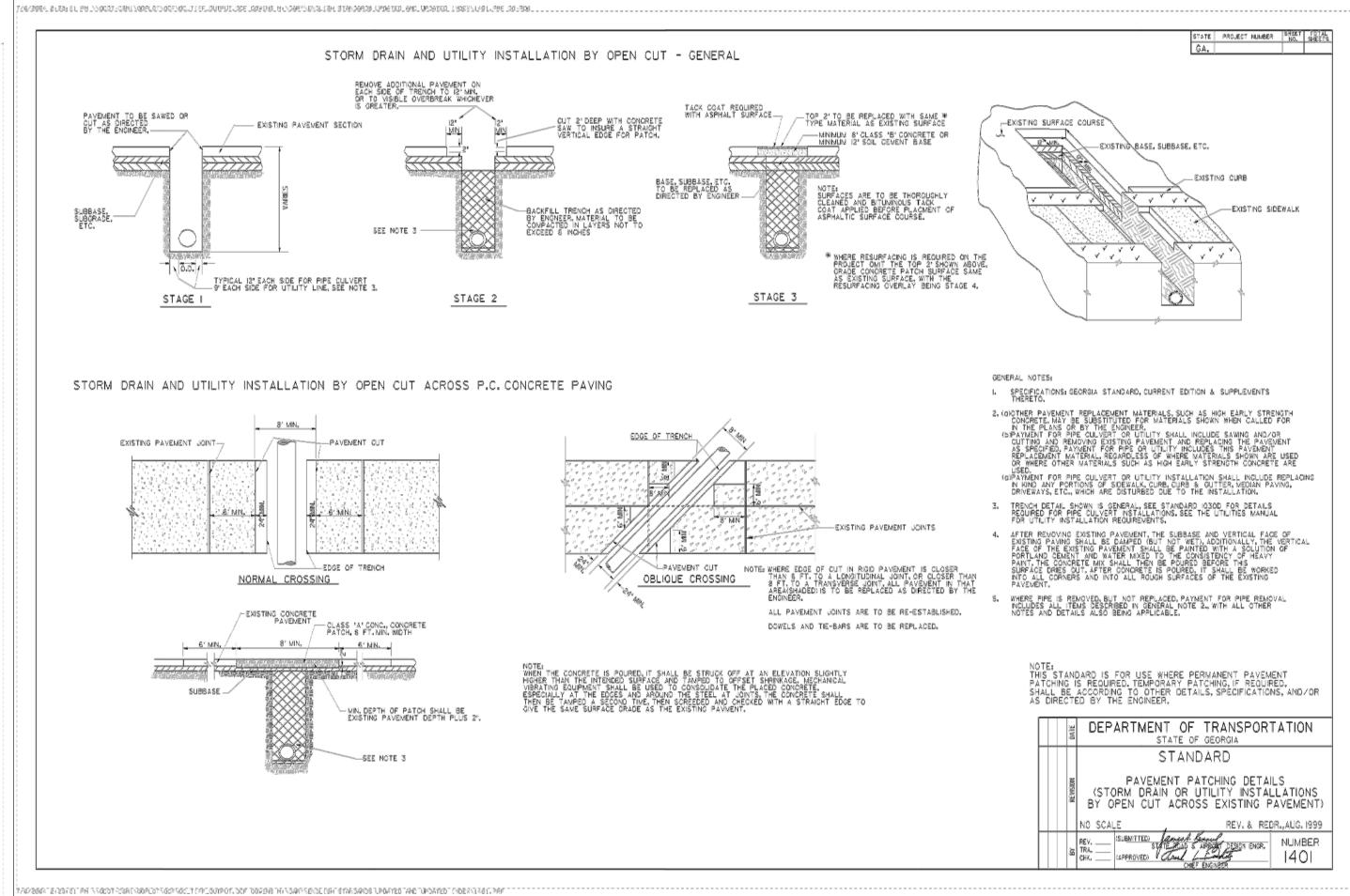
KAIZEN PROJECT # 2017 - 136 PROJECT MANAGER | GGD LaGRANGE **THREAD PHASE 3** LaGRANGE, GA **CONSTRUCTION DETAILS** SCALE: VARIES

DATE: MARCH 22, 2018

SHEET NAME:

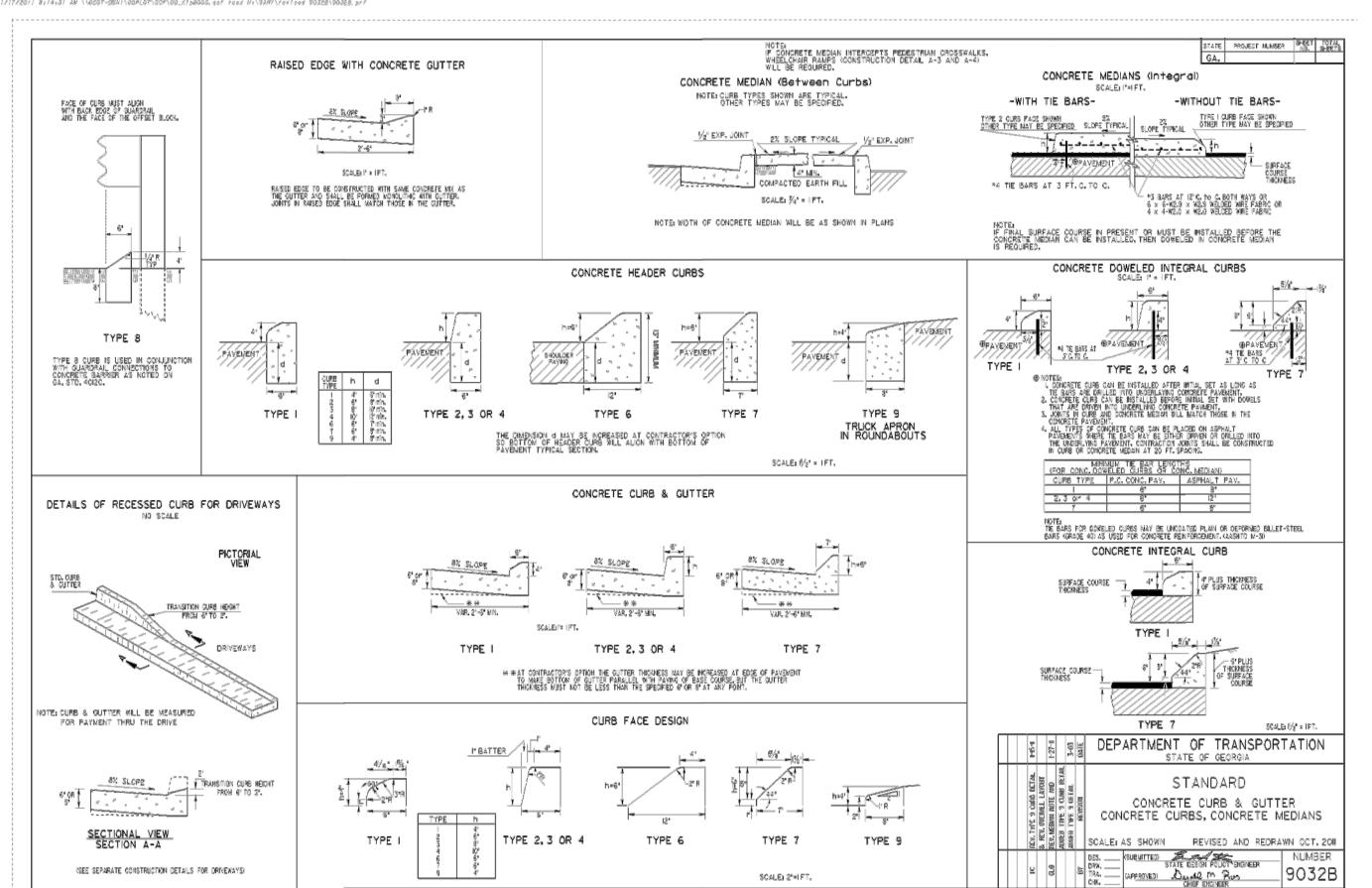
CD-02





CD-03 N.T.S.

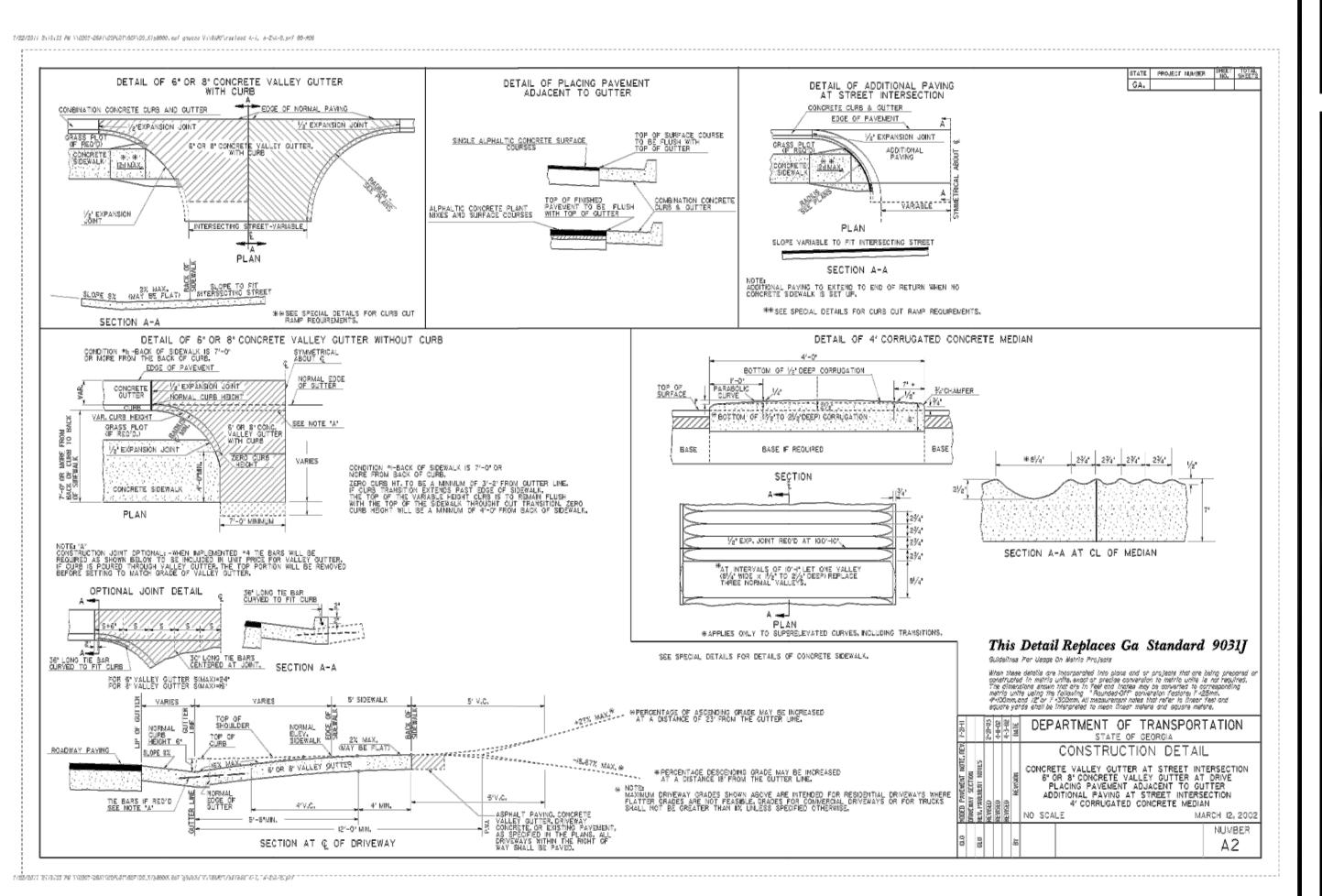
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GDOT DETAIL 9032B CD-03 N.T.S.

GDOT DETAIL 1401 N.T.S.

CD-03

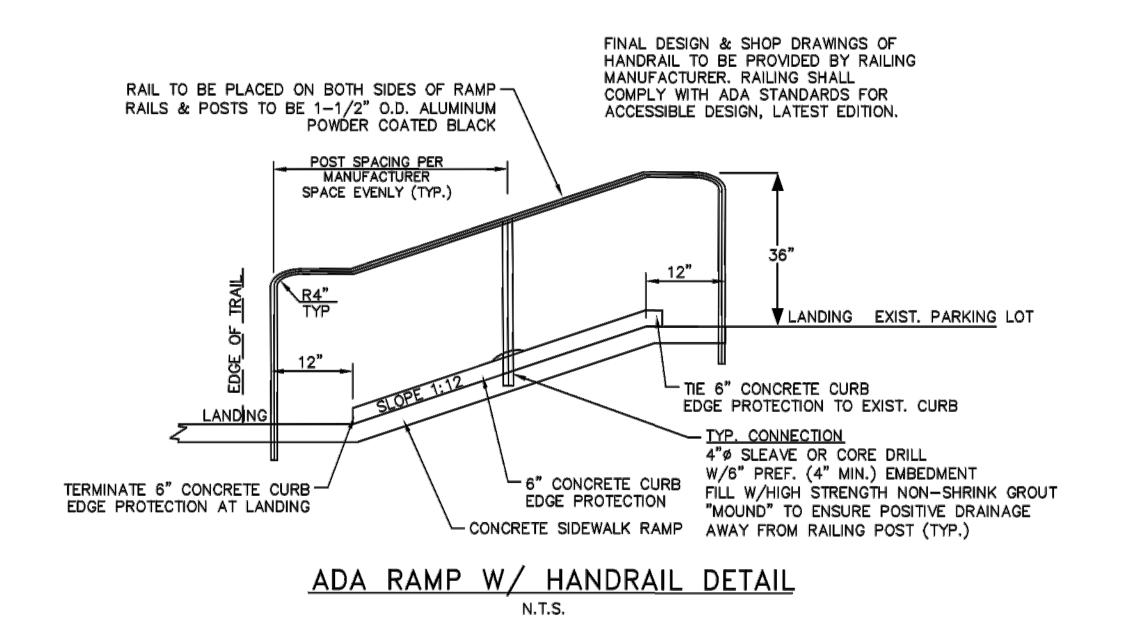


GDOT DETAIL A2 CD-03 N.T.S.

KAIZEN PROJECT # 2017 - 136 PROJECT MANAGER | **GGD LaGRANGE THREAD** PHASE 3 LaGRANGE, GA **CONSTRUCTION DETAILS** SCALE: VARIES DATE: | MARCH 22, 2018 SHEET NAME: **CD-03**

DESCRIPTION

REVISION DATE



HANDRAIL DETAIL (CD-04) N.T.S.

CATCH BASIN 4-7"4 FOR 4" OR 6"HT. 3-7" FOR 45-6" HT.CURB 1-5" FOR S"HT.CURB C.O FOR 10"HT. CATCH BASIN (WITH PROTRUDED BACK)
(FOR USE WITH LARGE LONGITUDINAL PIPE OR RECESSED BOX) 2'-5"+FOR 8" HT CURB, 0'-0" FOR 10" HT CURB, Wi+18"MIN. S - ₩3 BARS @ 3"-LENGTH= 2"-10 1/2" 5-43 BARS @ 3" LENGTH=4-0" ____ NOTE: DETAILS NOT SHOWN MERE WILL BE SIMILAR TO THESE AT FAR LEFT FOR NORMAL CATCH BASIN-O'O' FOR 10" HT CURB A LONG (TIE) DEC SLOPE TO BASIN SLOPE SLOPE CASTING DETAILS S/4" BATTER NOTE:
RECESSED BOX TO BE USED ONLY WHERE
SPECIFIED IN THE PLANS
LONGIT. PIPE OR UNDERGOROUND
OBSTRUCTION TYPICAL. (PAYMENT FOR CATCH BASIN INCLUDES ALL QUANTITIES BETWEEN THESE LINES EXCEPT ADDITIONAL DEPTH - UNLESS NOTED OTHERWISE.) PLAN VIEW LONGIT, PIPE (OVER 24"TYR) SEC. D-D TE 4" 6" 8" OR 10" HT. CURB PAVMIT SONORETE PAVM'T, DEPTH 1 30. 9: 3 3 8"± DIAM. CONC. PEDESTAL ELEVATION SCALE : 2"= 1" top slab may be cast in place or precast, if slab is cast in place, builder's paper is to be placed SECTION A'- A' SECTION A'-A' (FOR LARGE LONGITUDINAL PIPE) BETWEEN THE CATCH BASIN & TOP SLAB SECTION I-1 DETAIL OF TOP REINFORCED CONCRETE SLAB NOTE: NORMAL SLOPE OF CONCRETE APRON TO SE INCREASED BY 4" TO S" WHERE "H" PERMITS AND LONGITUDINAL PIPE IS LOWERED FOR OTHER REASONS. W+ 12"(MIN.) 8'-2"

**SØ DIAGONAL BARS

**S BARS AT 8" O.C. 1

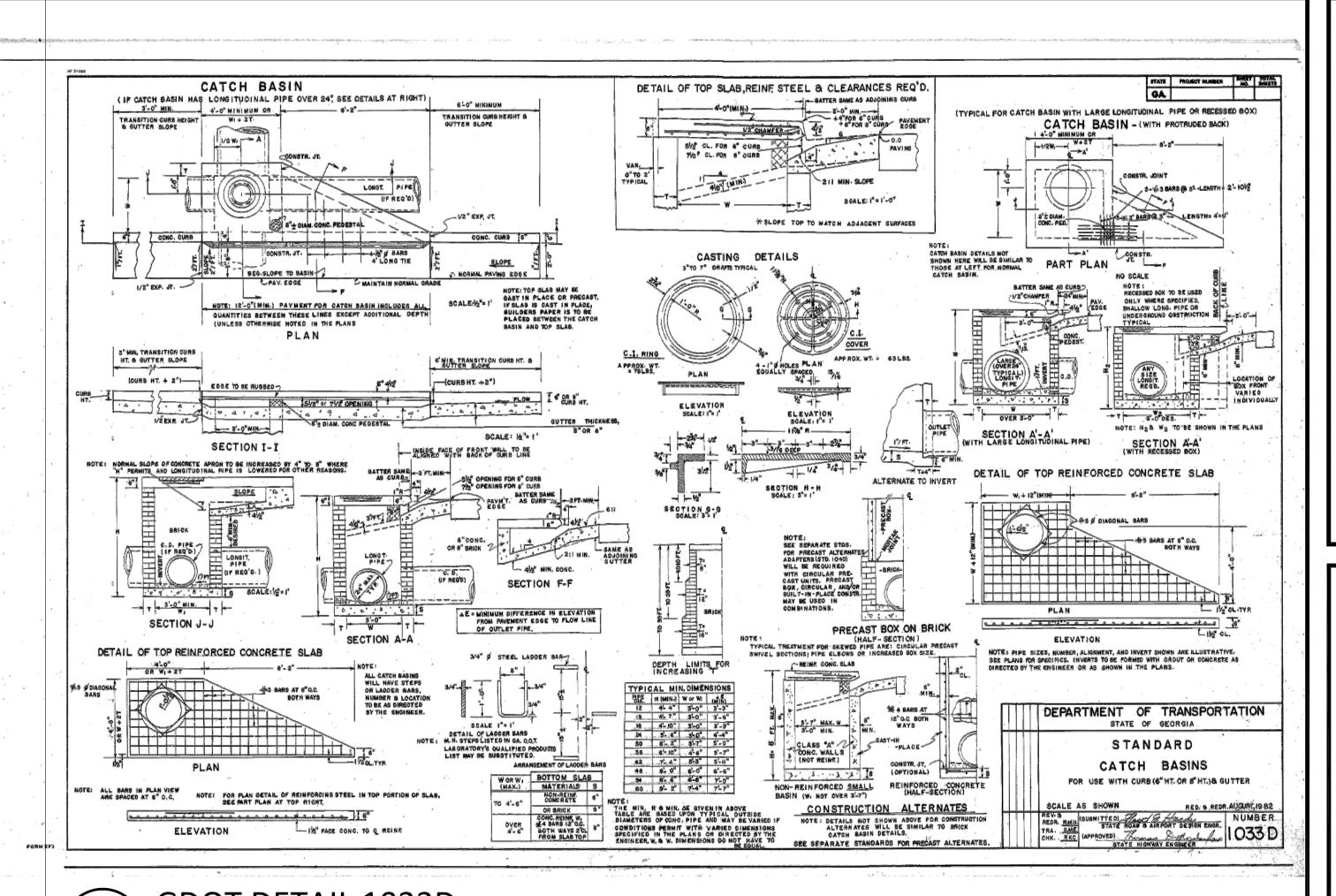
1/2" CL Wr+ 12"(MIN.) 8"-2" SECTION H-H SCALE: 3"= |" To BARS AT 6"O.C. BOTH WAYS SECTION F-F ELEVATION 7 - 5 WO T DEPTH LIMITS FOR SECTION J-J PRECAST BOX ON BRICK (HALF SECTION 0VER 4'-6" TYPICAL MAX. DIMENSIONS
PIPE H
QIA. (MIN)
12 4-4" S-0" 3-1"
15 4-7" S-0" 3-1"
18 4-10" 3-0" 3-7"
24 5-6" 3-0" 4-2"
50 6-2" 3-7" 4-10"
56 6-10" 4-6" 5-5"
42 7-4" 5-3" 5-9"
48 8-0" 8-0" 6-8" 5-9"
54 8-6" 5-5" 6-6"
50 9-8" 7-4" 7-5" ALTERNATE TO INVERT DETAIL OF TOP REINFORCED CONCRETE SLAB PIPE SIZES, NUMBER, ALIGNMENT, IS INVERTS SHOWN ARE ILLUSTRATIVE.
SEE PLANS FOR SPECIFICS. INVERTS TO BE FORMED WITH GROUT OR
CONCRETE AS DIRECTED BY THE ENGINEER OR AS SHOWN IN THE PLANS. A. REINF, CONC.SLAB SEE SEPARATE STANDARDS FOR PRECAST ALTERNATES, HS & MAGONAL BARS SS BARS AT 6" O.C. BOTH WAYS DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA 8" 3'-7"MAX.W 8" SCALE: I": I' 1-1/2" 55.77 STANDARD NOTE: M.H. STEPS LISTED IN GA. O. O.T. LABORATORY'S QUALIFIED PRODUCTS LIST CATCH BASINS FOR USE WITH HEADER OR INTEGRAL CURBS HOTE: THE MIN. H & MIN, AE GIVEN IN THE ABOVE TABLE ARE BASED UPON TYPICAL GUTSIDE DIAMETERS OF COMO. PIPE AND MAY BE VARIED, IF CONDITIONS PERMIT WITH THE VARIED DIMENSIONS SPECIFIED IN THE PLANS OR AS DIRECTED BY THE ENGINEER, W & WIDMENSIONS DO NOT HAVE TO BE EQUAL. REINFORCED CONCRETE ALL' CATCH BASINS WILL HAVE STEPS OR LADDER BARS, NUMBER & LOCATION TO 4, 6, 8" 8 10" HEIGHTS BE AS DIRECTED BY THE ENGINEER ELEVATION 1/2" FACE CONC. TO Q REINF. DETAIL OF LADDER BARS REV. A REDR. AUGUST, 1982

REV. A REV. A REDR. AUGUST, 1982

REV. A REDR. AUGUST, 1982

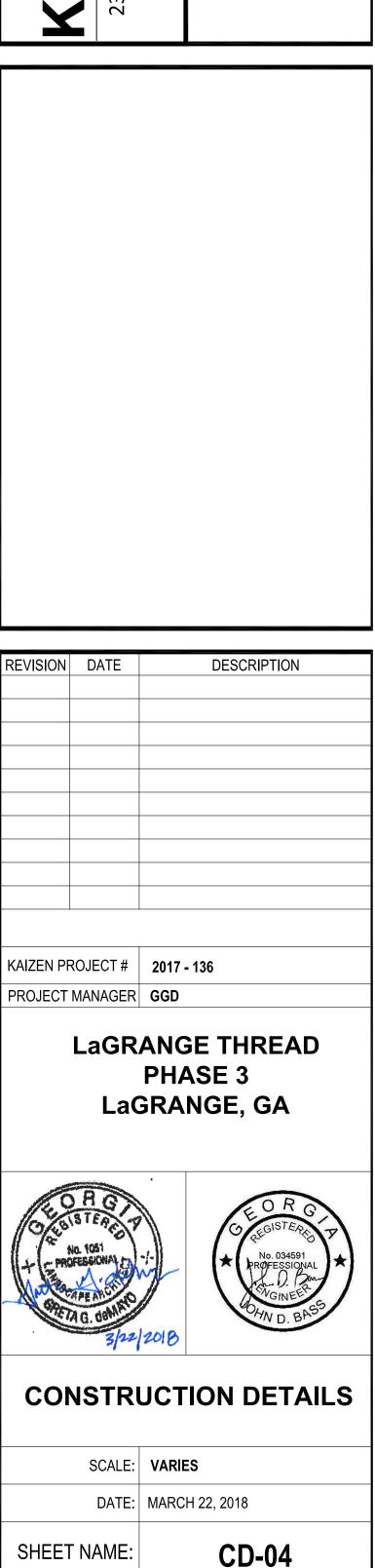
REV. A REV. A REV. AUGUST, 1982

REV. A BASINS WILL BE SIMILAR TO THOSE SHOWN FOR BRICK CATCH BASINS. AE - MINIMUM DIFFERENCE IN ELEVATION FROM PAVEMENT EORS TO FLOW LINE OF OUTLET PIPE.



GDOT DETAIL 1033D CD-04 N.T.S.

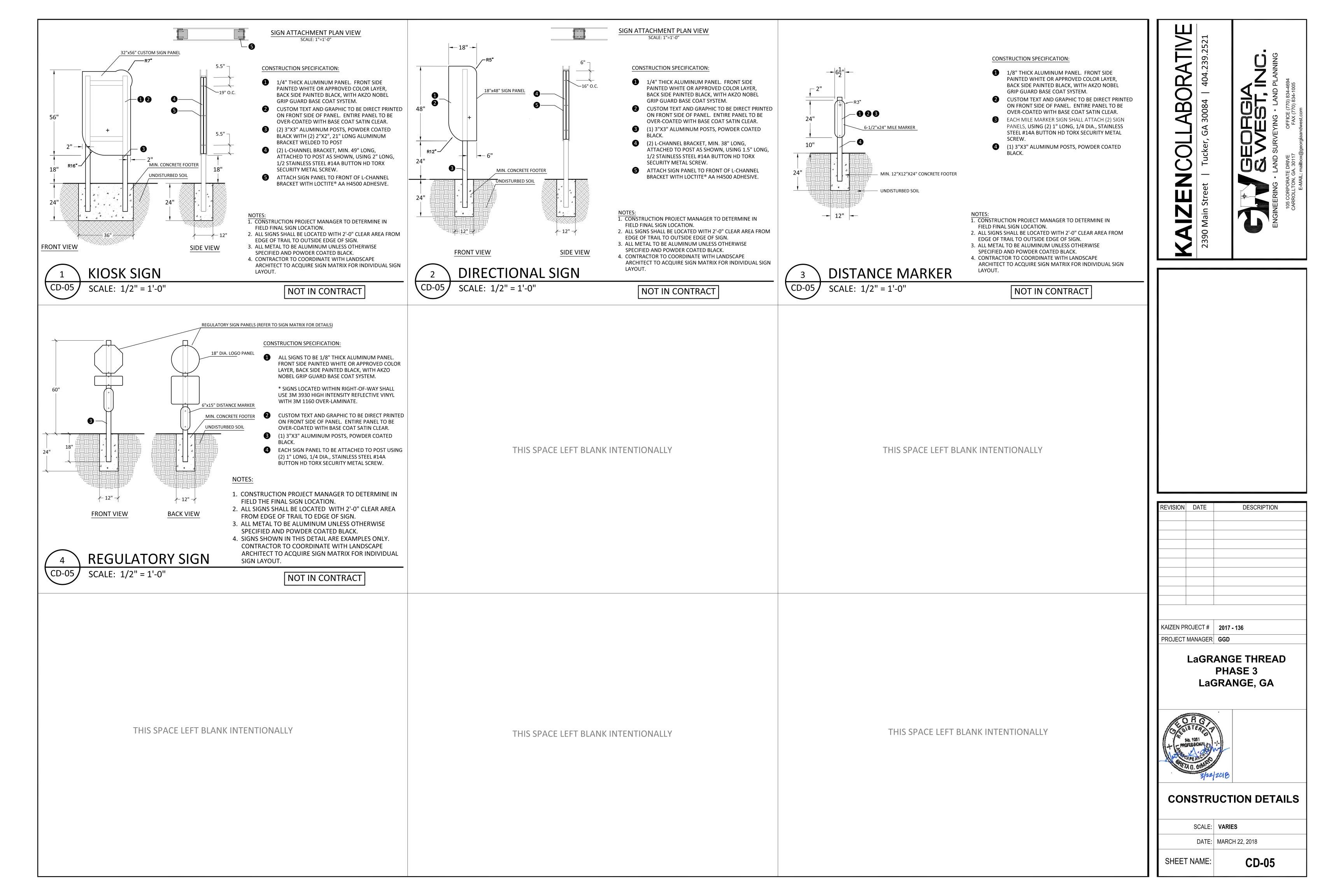
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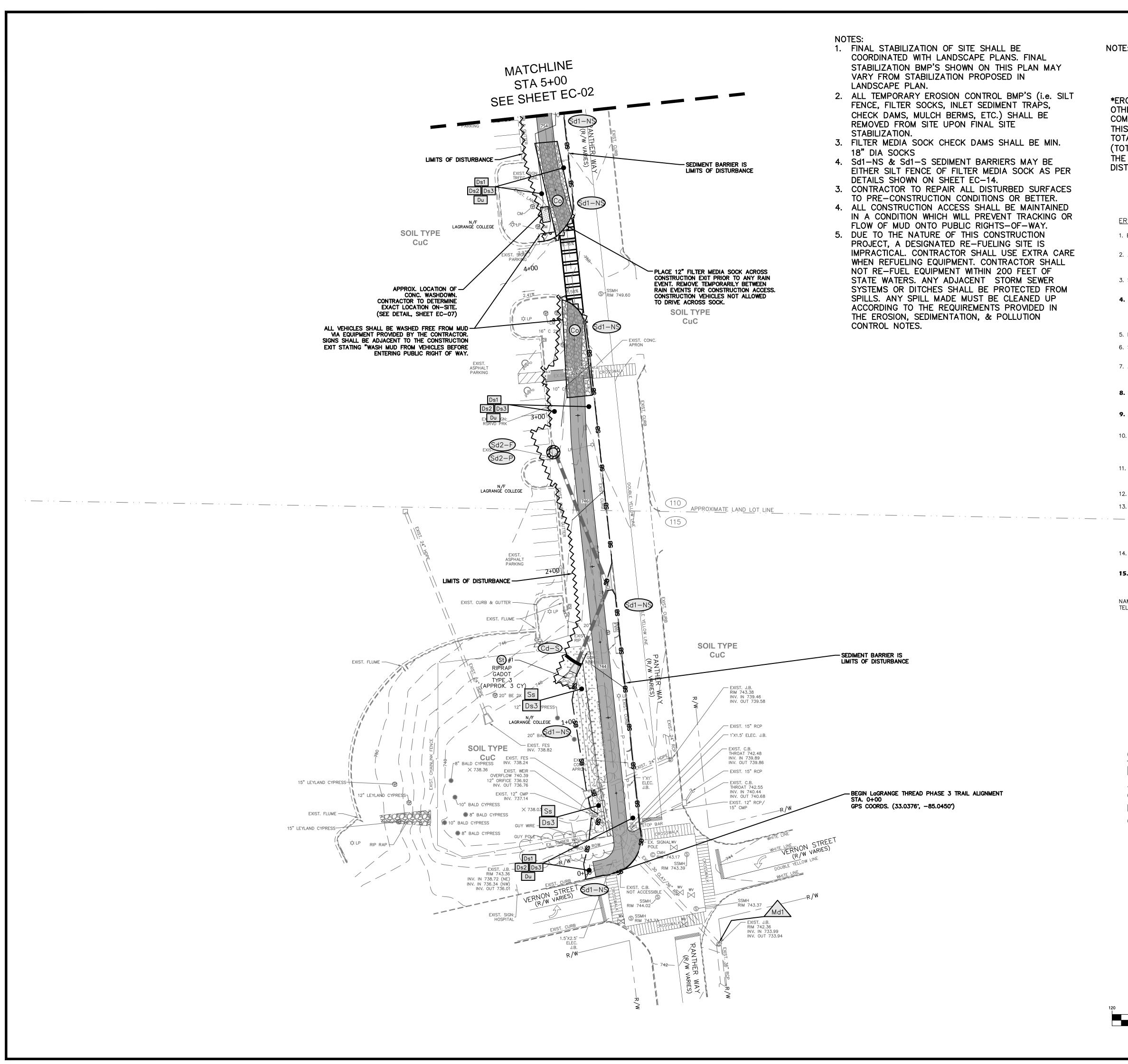


9

CD-04

GDOT DETAIL 1033F





NOTE: SEE CONSTRUCTION PLAN SHEETS (CP SERIES) FOR DETAILED STORM DRAINAGE AND PIPING INFORMATION

*EROSION CONTROL DATA & DETAILS IS CONTINUED ON OTHER ASSOCIATED, AND FOLLOWING SHEETS. SEE COMPLETE SET OF CONSTRUCTION PLANS FOR REVIEW. THIS SITE IS NOT WITHIN 200' (FEET) OF STATE WATERS TOTAL SITE AREA 2.83 ACRES (TOTAL SITE AREA INCLUDES A WIDTH OF 25' ALONG

(TOTAL SITE AREA INCLUDES A WIDTH OF 25' ALONG THE CENTERLINE OF THE TRAIL)
DISTURBED AREA 2.0 ACRES

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
- 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.

 7. ALL PIPE OUTLETS ARE TO BE COVERED WITH #50 RIPRAP FOR A MINIMUM DISTANCE OF SIX (6) TIMES THE DIAMETER OF THE PIPE SEE
- MINIMUM DISTANCE OF SIX (6) TIMES THE DIAMETER OF THE PIPE. SEE OUTLET PROTECTION TABLE FOR DIMENSIONS OF RIPRAP FOR INDIVIDUAL OUTLETS.

 8. 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.

 9. ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GRATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.
- 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 VIOLATIONAL
- 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:

NAME: <u>Jonathan McCaig</u> TELEPHONE #: <u>404-433-1900</u>

PRIMARY PERMITTEE:
CITY OF LaGRANGE, TROUP COUNTY,
GEORGIA
ATTN: MEG KELSEY
200 RIDLEY AVENUE
LaGRANGE, GA 30240
706-883-2016



Know what's below. Call before you dig.

CONSTRUCTION MANAGEMENT

PATH FOUNDATION

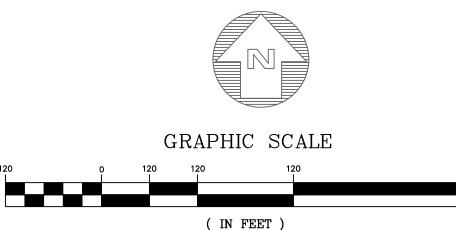
JONATHAN McCAIG - 24 HOUR CONTACT
GA GSWCC LEVEL 1 CERTIFICATION # 58893

EXP. 08/21/2018

office 404-875-7284 x5

cell 404-433-1900

THE F.I.R.M. PANEL 13285C0141E 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.



1 inch = 30 ft



REVISION DATE DESCRIPTION

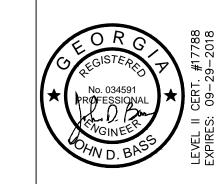
KAIZEN PROJECT # 2017 - 136

PROJECT MANAGER GGD

Key Map |

SHEET 01

LaGRANGE THREAD
PHASE 3
LaGRANGE, GA

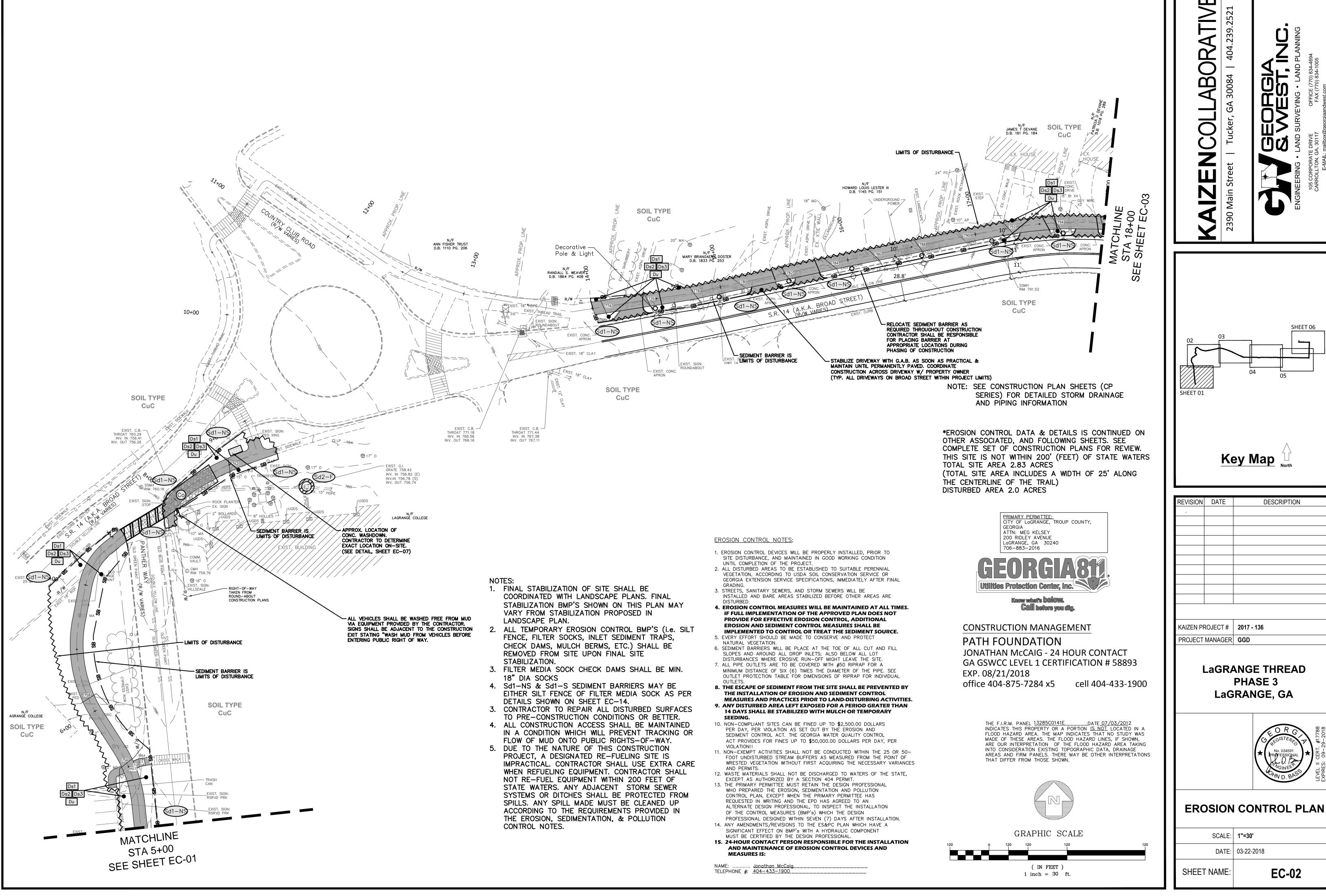


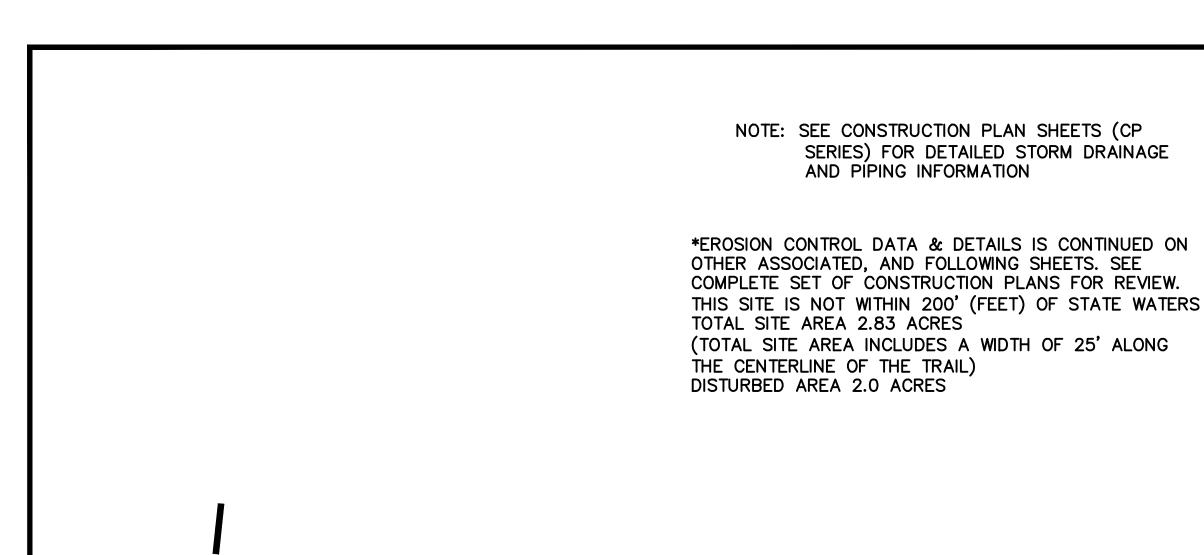
EROSION CONTROL PLAN

SCALE: **1"=30'**DATE: 03-22-2018

SHEET NAME:

EC-01





N/F LAGRANGE LIVING LLC D.B. 1454 PG. 841

N/F NINA D MALLORY D.B. 505 PG. 715

- LIMITS OF DISTURBANCE

PATRICIA D DEVANE D.B. 1018 PG. 289

HELEN W PIERCE D.B. 1266 PG. 569

1. FINAL STABILIZATION OF SITE SHALL BE COORDINATED WITH LANDSCAPE PLANS. FINAL STABILIZATION BMP'S SHOWN ON THIS PLAN MAY VARY FROM STABILIZATION PROPOSED IN LANDSCAPE PLAN.

- 2. ALL TEMPORARY EROSION CONTROL BMP'S (i.e. SILT FENCE, FILTER SOCKS, INLET SEDIMENT TRAPS, CHECK DAMS, MULCH BERMS, ETC.) SHALL BE REMOVED FROM SITE UPON FINAL SITE STABILIZATION.
- 3. FILTER MEDIA SOCK CHECK DAMS SHALL BE MIN. 18" DIA SOCKS
- 4. Sd1-NS & Sd1-S SEDIMENT BARRIERS MAY BE EITHER SILT FENCE OF FILTER MEDIA SOCK AS PER DETAILS SHOWN ON SHEET EC-14.
- 3. CONTRACTOR TO REPAIR ALL DISTURBED SURFACES TO PRE-CONSTRUCTION CONDITIONS OR BETTER.
- 4. ALL CONSTRUCTION ACCESS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY.
- 5. DUE TO THE NATURE OF THIS CONSTRUCTION PROJECT, A DESIGNATED RE-FUELING SITE IS IMPRACTICAL. CONTRACTOR SHALL USE EXTRA CARE WHEN REFUELING EQUIPMENT. CONTRACTOR SHALL NOT RE-FUEL EQUIPMENT WITHIN 200 FEET OF STATE WATERS. ANY ADJACENT STORM SEWER SYSTEMS OR DITCHES SHALL BE PROTECTED FROM SPILLS. ANY SPILL MADE MUST BE CLEANED UP ACCORDING TO THE REQUIREMENTS PROVIDED IN THE EROSION, SEDIMENTATION, & POLLUTION CONTROL NOTES.

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
- 3. STREETS, SANITARY SEWERS, AND STORM SEWERS WILL BE INSTALLED AND BARE AREAS STABILIZED BEFORE OTHER AREAS ARE
- 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
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- 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
- 12. WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.
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- 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

PRIMARY PERMITTEE: CITY OF Lagrange, TROUP COUNTY, GEORGIA ATTN: MEG KELSEY 200 RIDLEY AVENUE LaGRANGE, GA 30240 706-883-2016



Know what's below. Call before you dig.

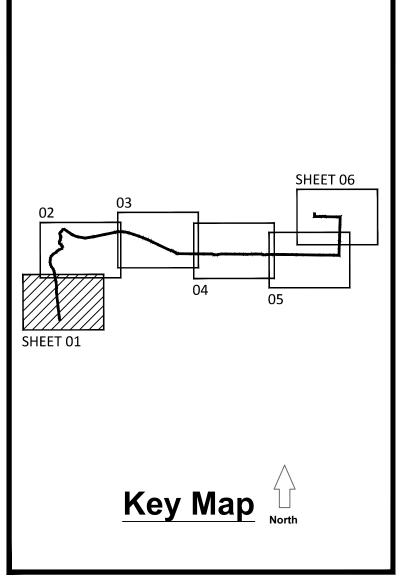
CONSTRUCTION MANAGEMENT

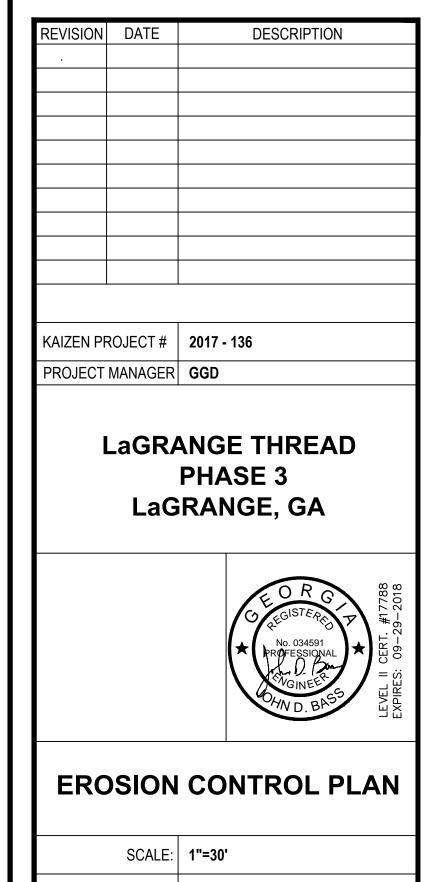
PATH FOUNDATION JONATHAN McCAIG - 24 HOUR CONTACT GA GSWCC LEVEL 1 CERTIFICATION # 58893 EXP. 08/21/2018

office 404-875-7284 x5 cell 404-433-1900

> THE F.I.R.M. PANEL 13285C0141E __DATE_<u>07/03/201</u>2 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.

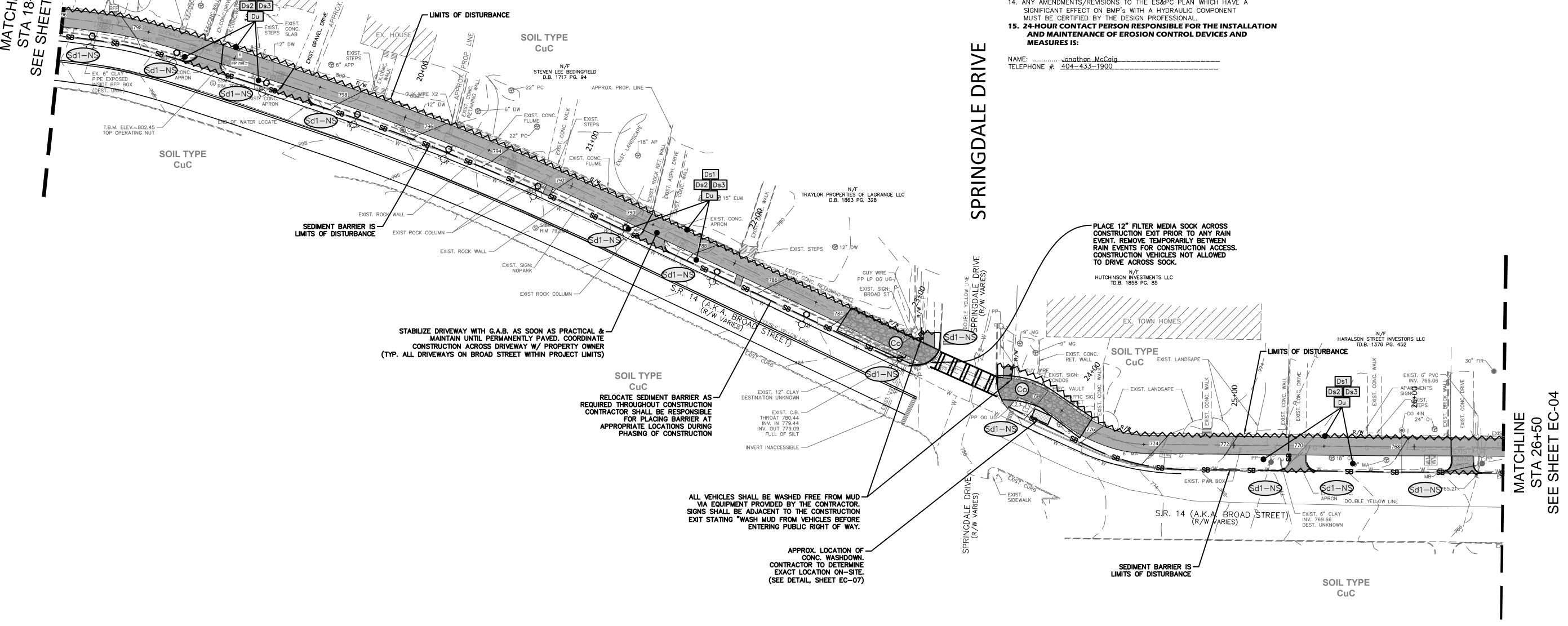






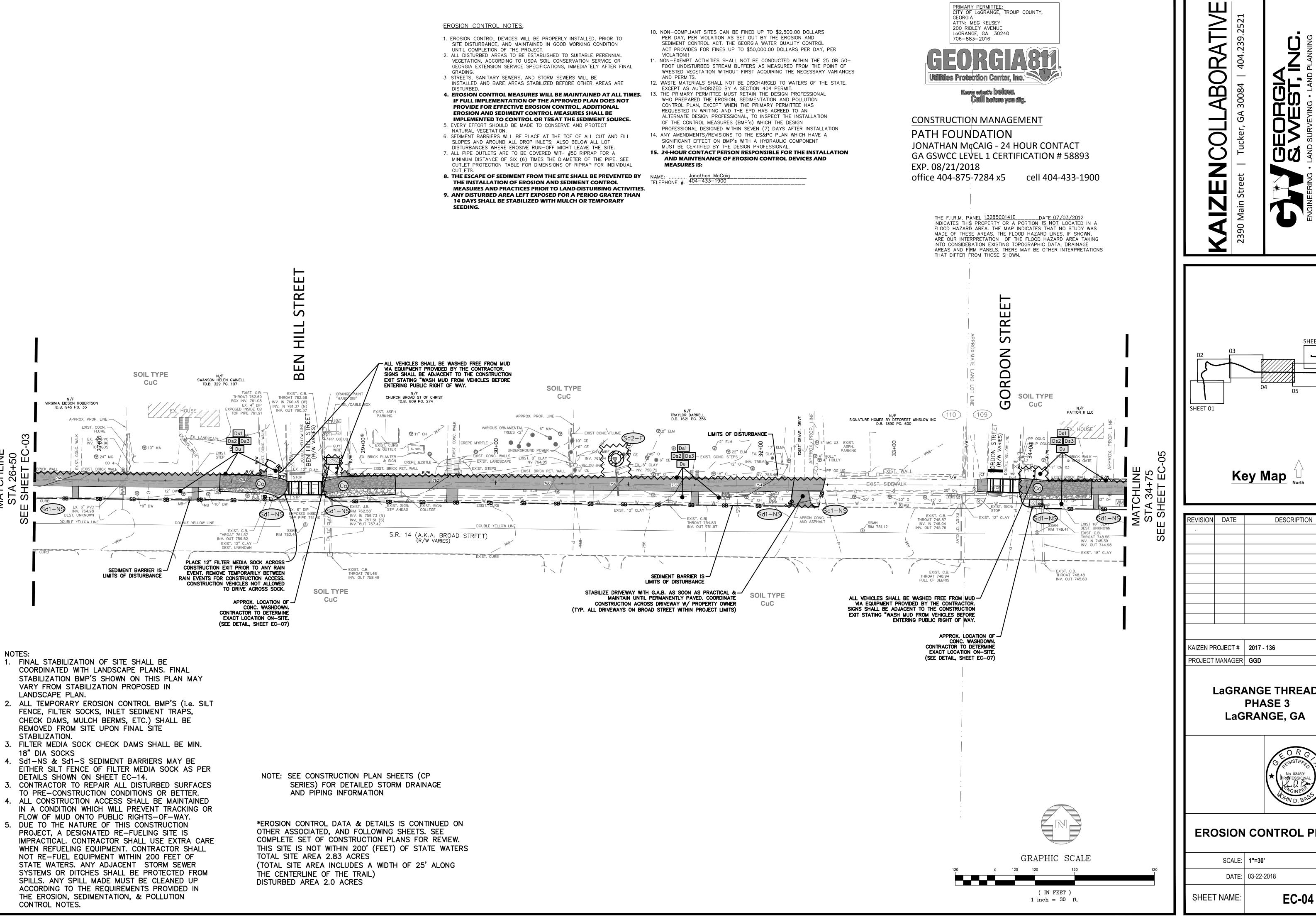
DATE: 03-22-2018

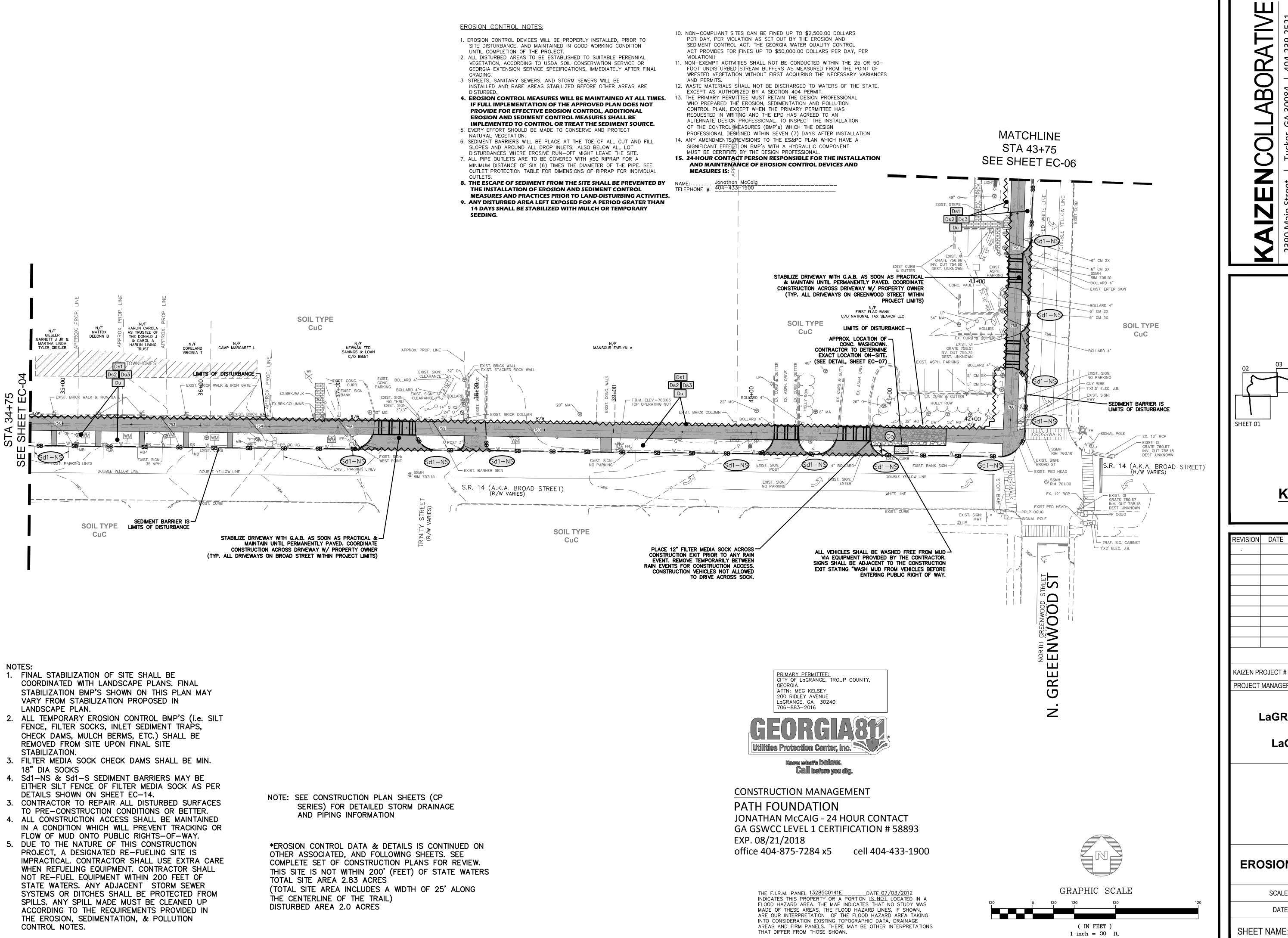
EC-03



GRAPHIC SCALE

(IN FEET)





AIZENCOLLABORATIVE

2390 Main Street | Tucker, GA 30084 | 404.239.2521

2390 Main Street | Tucker, GA 30084 | 404.239.2521

CARROLLON, GA 30117 PARK (770) 834-4694

CARROLLTON, GA. 30117 FAX (770) 834-1005

SHEET 06

O2

O3

O4

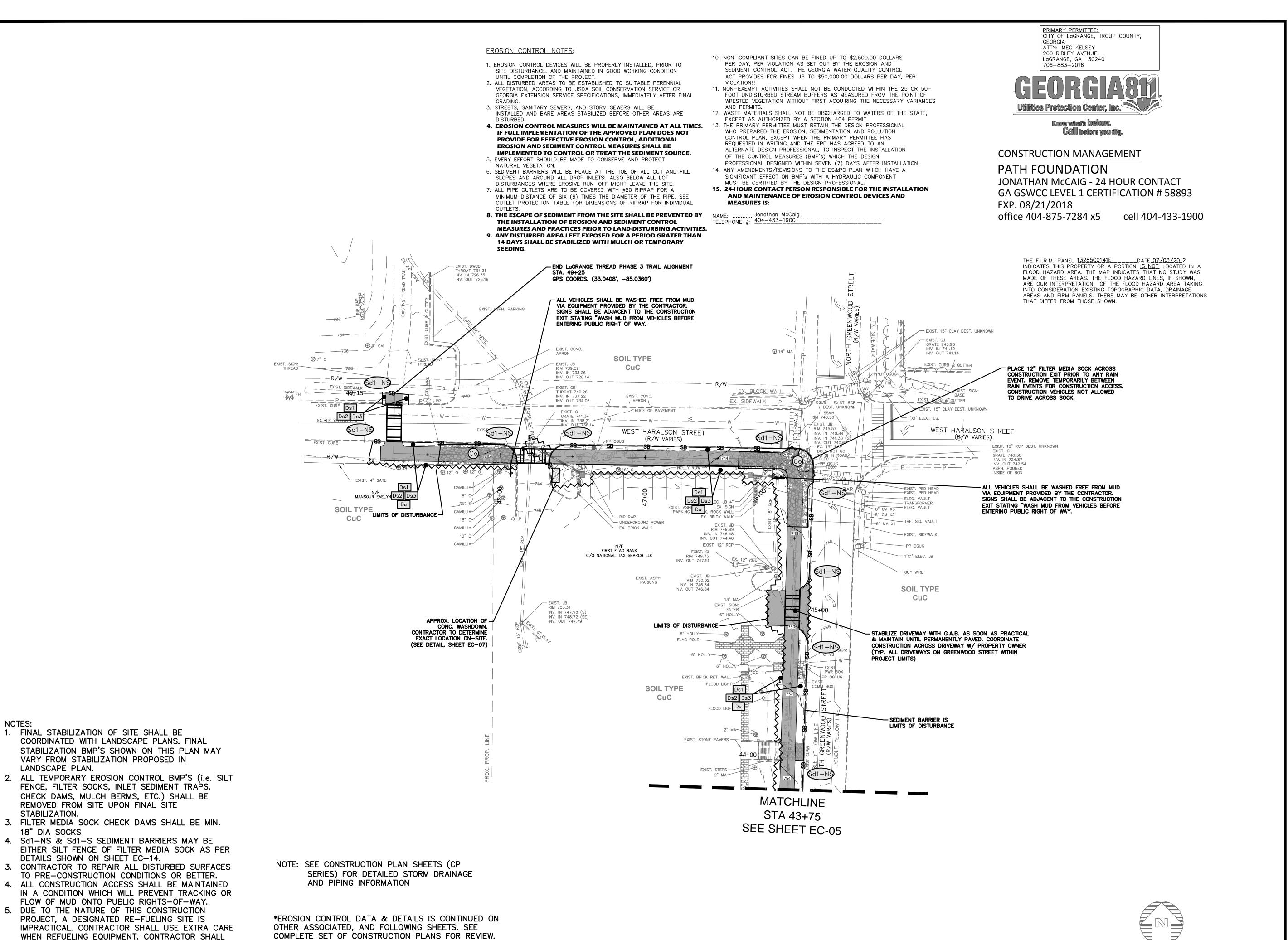
O5

SHEET 06

North

REVISION	DATE	DESCRIPTION
KAIZEN PF	ROJECT#	2017 - 136
PROJECT	MANAGER	GGD
		PHASE 3 RANGE, GA
		LEVEL II CERT. #17788 EXPIRES: 09-29-2018
ERC	OSION	CONTROL PLAN
	SCALE:	1"=30'
1	00, 122.	

EC-05



1. FINAL STABILIZATION OF SITE SHALL BE

LANDSCAPE PLAN.

STABILIZATION.

18" DIA SOCKS

CONTROL NOTES.

VARY FROM STABILIZATION PROPOSED IN

REMOVED FROM SITE UPON FINAL SITE

DETAILS SHOWN ON SHEET EC-14.

NOT RE-FUEL EQUIPMENT WITHIN 200 FEET OF

STATE WATERS. ANY ADJACENT STORM SEWER

SPILLS. ANY SPILL MADE MUST BE CLEANED UP

ACCORDING TO THE REQUIREMENTS PROVIDED IN

THE EROSION, SEDIMENTATION, & POLLUTION

SYSTEMS OR DITCHES SHALL BE PROTECTED FROM

THIS SITE IS NOT WITHIN 200' (FEET) OF STATE WATERS

(TOTAL SITE AREA INCLUDES A WIDTH OF 25' ALONG

TOTAL SITE AREA 2.83 ACRES

THE CENTERLINE OF THE TRAIL)

DISTURBED AREA 2.0 ACRES

O:\PROJECT FOLDERS\2017\171212_KAIZEN LAGRANGE THREAD PHASE 3-COLLEGE\DWG\171212_X-CONST.dwg, 3/22/2018 5:06:40 P

SHEET NAME:

GRAPHIC SCALE

(IN FEET)

1 inch = 30 ft.

 $\mathbf{\tilde{Q}}$

SHEET 01

REVISION DATE

KAIZEN PROJECT # | 2017 - 136

LaGRANGE THREAD

PHASE 3

LaGRANGE, GA

EROSION CONTROL PLAN

EC-06

SCALE: 1"=30'

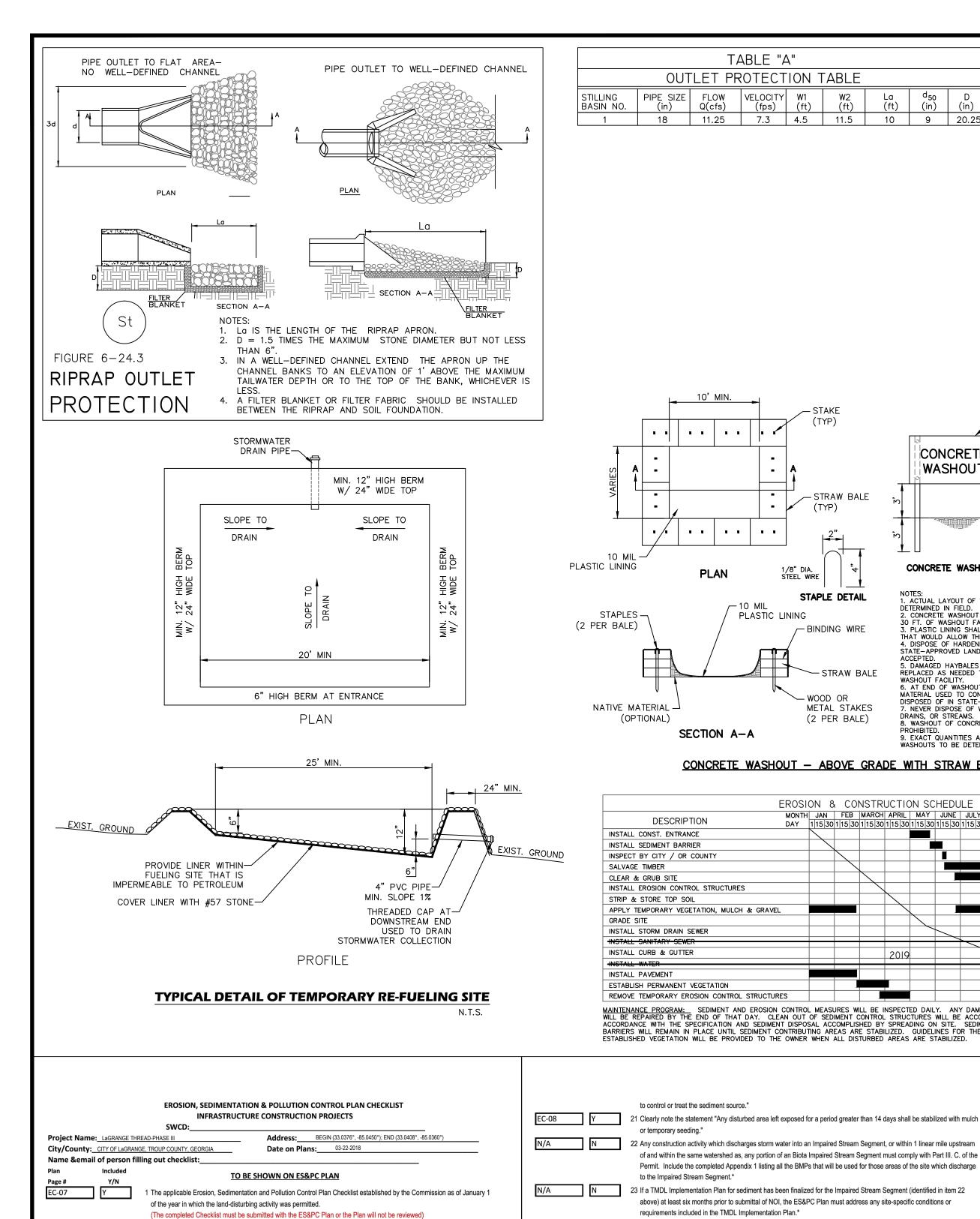
DATE: 03-22-2018

PROJECT MANAGER | **GGD**

SHEET 06

Key Map North

DESCRIPTION



2 Level II certification number issued by the Commission, signature and seal of the certified design professional.

4 Provide the name, address and phone number of primary permittee.

8 Description of the nature of construction activity.

wetlands, marshlands, etc. which may be affected.

sampling as stated on page 26 of permit as applicable.*

hydraulic component must be certified by the design professional."*

sediment control measures and practices prior to land disturbing activities."

EC-08 Y 20 Clearly note statement that "Erosion control measures will be maintained at all times. If full implementation of the approved

Plan as stated on page 15 of the permit.

within 7 days after installation."

section 404 permit."*

EC-08-EC-09

C-01-EC-06

5 Note total and disturbed acreage of the project or phase under construction.

(Signature, seal and Level II number must be on each sheet pertaining to ES&PC Plan or the Plan will not be reviewed)

3 The name and phone number of the 24-hour local contact responsible for erosion, sedimentation and pollution controls.

6 Provide the GPS locations of the beginning and end of the Infrastructure project. Give the Latitude and Longitude in

7 Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions.

9 Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary.

10 Identify the project receiving waters and describe all sensitive adjacent areas including streams, lakes, residential areas,

11 Design professional's certification statement and signature that the site was visited prior to development of the ES&PC

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 page 15 of the permit.*

13 Design professional certification statement and signature that the permittee's ES&PC Plan provides for representative

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 in accordance with part IV.A.5.

15 Clearly note the statement that "Non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed stream

from the Jurisdictional Determination Line without first acquiring the necessary variances and permits."

16 Provide a description of any buffer encroachments and indicate whether a buffer variance is required.

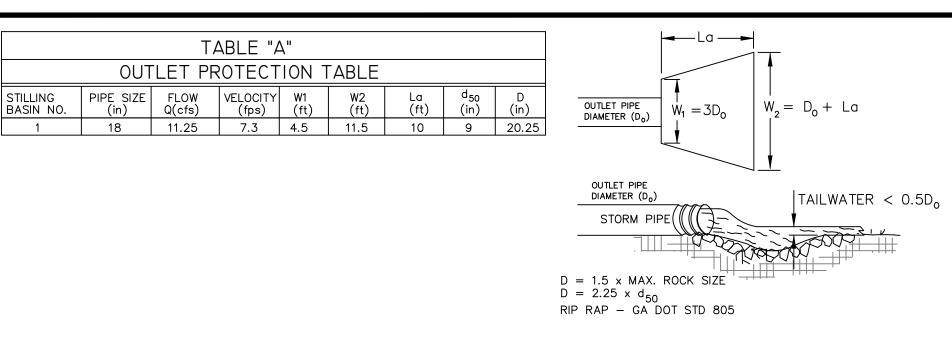
buffers as measured from the point of wrested vegetation or within 25-feet of the coastal marshland buffer as measured

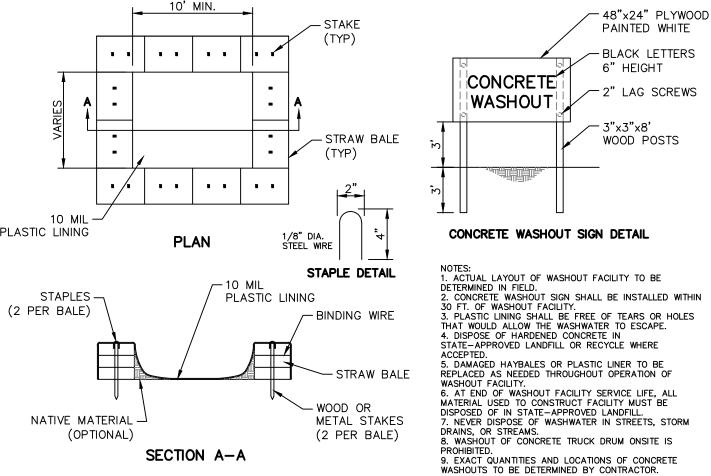
7 Clearly note the statement that "Amendments/revisions to the ES&PC Plan which have a significant effect on BMPs with a

18 Clearly note the statement that "Waste materials shall not be discharged to waters of the State, except as authorized by a

Plan does not provide for effective erosion control, additional erosion and sediment control measures shall be implemented

19 Clearly note statement that "The escape of sediment from the site shall be prevented by the installation of erosion and





CONCRETE WASHOUT - ABOVE GRADE WITH STRAW BALES

DESCRIPTION DA	 JAN 1 15 30		MARCH					AUG	SEPT 1 15 30	0CT	NOV	1 15
INSTALL CONST. ENTRANCE	1,10,00	1 10 00	111000	1/10/00	1/10/00	111000	111000	111000	111000	1/10/00	1/10/00	1/10/
INSTALL SEDIMENT BARRIER										2	018	
INSPECT BY CITY / OR COUNTY		$\overline{}$								- 1	010	
SALVAGE TIMBER												
CLEAR & GRUB SITE												
INSTALL EROSION CONTROL STRUCTURES												
STRIP & STORE TOP SOIL				$\overline{}$					ļ			
APPLY TEMPORARY VEGETATION, MULCH & GRAVEL												
GRADE SITE												
INSTALL STORM DRAIN SEWER												
INSTALL SANITARY SEWER												
INSTALL CURB & GUTTER				2019								
INSTALL WATER												
INSTALL PAVEMENT												
ESTABLISH PERMANENT VEGETATION												
REMOVE TEMPORARY EROSION CONTROL STRUCTURES												

of and within the same watershed as, any portion of an Biota Impaired Stream Segment must comply with Part III. C. of the

above) at least six months prior to submittal of NOI, the ES&PC Plan must address any site-specific conditions or

24 BMPs for concrete washdown of tools, concrete mixer chutes, hoppers and the rear of the vehicles. Washout of the drum

26 Description of the measures that will be installed during the construction process to control pollutants in storm water that

28 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

34 Delineate all sampling locations, perennial and intermittent streams and other water bodies into which storm water is

35 A description of appropriate controls and measures that will be implemented at the construction site including: (1) initial

BMPs. For construction sites where there will be no mass grading and the initial perimeter control BMPs,

37 Existing and proposed contour lines with contour lines drawn at an interval in accordance with the following:

discharged also provide a summary chart of the justification and analysis for the representative sampling as applicable.*

sediment storage requirements and perimeter control BMPs, (2) intermediate grading and drainage BMPs, and (3) final

38 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

39 Use of alternative BMP for application to the Equivalent BMP List. Please refer to Appendix A-2 of the Manual for

40 Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to State waters and any additional buffers

Commission). Please refer to the Alternative BMP Guidance Document found at www.gaswcc.org.

required by the Local Issuing Authority. Clearly note and delineate all areas of impact.

41 Delineation of on-site wetlands and all State waters located on and within 200 feet of the project site.

intermediate grading and drainage BMPs, and final BMPs are the same, the plan may combine all of the BMPs into a single

27 Description of the practices that will be used to reduce the pollutants in storm water discharges.*

29 Provide complete requirements of inspections and record keeping by the primary permittee.*

32 Description of analytical methods to be used to collect and analyze the samples from each location.*

30 Provide complete requirements of sampling frequency and reporting of sampling results.*

31 Provide complete details for retention of records as per Part IV.F. of the permit.*

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

Erosion & Sediment Control in Georgia 2016 Edition.*

33 Appendix B rationale for NTU values at all outfall sampling points where applicable.*

requirements included in the TMDL Implementation Plan.*

25 Provide BMPs for the remediation of all petroleum spills and leaks.

will occur after construction operations have been completed.*

at the construction site is prohibited.

activities, temporary and final stabilization)

36 Graphic scale and North arrow.

Rivervi DRAINAGE BASIN / CONTRIBUTING DRAINAGE BASIN 2 TOTAL AREAT 4.3 ACRES DISTURBED ARES: 1.5 ACRES LA GRANGI DRAINAGE BASIN / CONTRIBUTIN DRAINAGE BASIN 1 TOTAL AREA: 0.5 ACRE DISTURBED ARES: 0.5 ACRE DRAINAGE/CONTRIBUTING DRAINAGE BASIN MAP

SCALE: 1" = 2000'

								SOI	L SERIES	INTERP	PRETATIONS					
		ESTIMATED SOIL PROPERTIES									LIMITATION OF SOILS FOR URBAN USES					
MAP SYMBOL	SOIL SERIES	PERMEABILITY F	REACTION	SHRINK- SWELL POTENTIAL		CONCRETE	WATER	TH TO: BEDROCK (ln.)	FLOOD FRE- QUENCY	HYDRO- GROUP	SEPTIC TANK ABSORPTION FIELDS	SEWAGE LAGOON AREAS	SHALLOW EXCAVATIONS	DWELLINGS 'w/basement #w/o basement	SMALL COMMERCIAL BUILDINGS	LOCAL ROADS AND STREETS
CuC	CECIL	0.6-0.2	4.5-5.5	Low	Mod.	Mod.	>6.0	>60	None	В	0-8%:M;pk 8-15%:M;pk,s 15+%:S;s	0-2%:M;p 2-7%:M;p,s 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 4-18%:M;s 8+%:S;s	0-8%:M;b 0-15%:M;b,s 15+%:S;s

SAMPLING INFORMATION									
MONITORING SITE	LOCATION OF DRAINAGE POINT	NAME OF RECEIVING WATER	SAMPLING TYPE (OUTFALL OR REVIEVING WATER)	TOTAL DRAINAGE AREA (ACRES)		WARM OR COLD WATER STREAM			CONSTRUCTION ACTIVITY
Md1	EC-01	TRIBUTARY OF BLUE JOHN CREEK	OUTFALL	31.0	0.5	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.

MONITORING LOCATION Md1 WILL BE REPRESENTATIVE MONITORING LOCATION FOR CONTRIBUTION DRAINAGE BASIN 2.0

SEDIMENT STORAGE TABLE									
DESCRIPTION	TOTAL DRAINAGE AREA (ACRES)	DIST AREA (ACRES)	REQUIRED STORAGE (CY)	TOTAL STORAGE PROVIDED (CY)	SEDI AVG. DIST FROM TOE OF SLOPE (FT)	MENT BAR LENGTH OF SILT FENCE (LF)	TOTAL VOLUME (CY)		
1.0	0.5	0.5	33.5	103.7	2	800	103.7		
2.0	4.3	1.50	288.1	324.2	2	2500	324.2		

SEDIMENT BASIN EXEMPTION NOTE:

42 Delineation and acreage of contributing drainage basins on the project site.

Identify/Delineate all storm water discharge points.

47 The limits of disturbance for each phase of construction.

46 Soil series for the project site and their delineation.

43 Delineate on-site drainage and off-site watersheds using USGS 1" :2000' topographical sheets.

44 An estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are

45 Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion.

48 Provide a minimum of 67 cubic yards of sediment storage per acre drained using a temporary sediment basin,

the surface are not feasable, a written justification explaining this decision must be included in the plan.

Sediment Control in Georgia. Use uniform coding symbols from the Manual, Chapter 6, with legend.

EC-01-EC-06 Y 49 Location of Best Management Practices that are consistent with and no less stringent than the Manual for Erosion and

EC-01-EC-06 Y 51 Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting dates and

*If using this checklist for a project that is less than 1 acre and not part of a common development

the Manual for Erosion and Sediment Control in Georgia.

will take place and for the appropriate geographic region of Georgia.

but within 200 ft of a perennial stream the * checklist items would be N/A.

retrofitted detention pond, and/or excavated inlet sediment traps for each common drainage location. Sediment storage

achieved. A written justification explaining the decision to use equivalent controls when a sediment basin is not attainable

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

50 Provide detailed drawings for all structural practices. Specifications must, at a minimum, meet the guidelines set forth in

seeding, fertilizer, lime and mulching rates. Vegetative plan shall be site specific for appropriate time of year that seeding

Effective January 1, 2018

utilize outlet structures that withdraw water from the surface, unless infeasible. If outlet structures that withdraw water from

volume must be in place prior to and during all land disturbance activities until final stabilization of the site has been

must be included in the plan for each common drainage location in which a sediment basin is not provided. A written

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.

<u>DEFINITION</u>
Controlling surface and air movement of dust on construction sites, roads, and demolition sites.
CONDITIONS
his 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 Ds4 - 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 42 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 iences, 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 45 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.

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

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

DUST CONTROL ON DISTURBED AREAS



 $\mathbf{\Omega}$

SHEET NAME

DATE: 03-22-2018

EC-07

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

24-HOUR CONTACT

Jonathan McCaig 404-433-1900

GENERAL NOTES:

. 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.

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-

- FRODIBLE 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. THIS SITE TO BE DEVELOPED INTO LINEAR PARK CONSISTING OF A CONCRETE MULTI-USE TRAIL WITH LANDSCAPING. THE TOTAL SITE AREA: 2.83 ACRES (TOTAL SITE AREA INCLUDES A WIDTH OF 25' ALONG THE

CENTERLINE OF THE TRAIL). THE TOTAL DISTURBED AREA: 2.0 ACRES.

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

CLEARING PHASE - PHASE 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 LIMITS 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.

THE CONSTRUCTION EXIT, CONSISTING OF A MINIMUM PAD SIZE OF 20 FEET BY 50 FEET WITH A MINIMUM OF 6" THICK STONE, SHALL BE PLACED AS SHOWN ON THE PLAN. THE STONE SIZE SHOULD CONSIST OF COURSE AGGREGATE BETWEEN $1\frac{1}{2}$ % $3\frac{1}{2}$ In DIAMETER AND OVERLAID ON A GEOTEXTILE UNDERLINER. THE GEOTEXTILE UNDERLINER SHALL MEET THE REQUIREMENTS OF AASHTO M288-96, SECTION 7.3 SEPARATION

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.

. 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.

03-22-2018 LEVEL II CERTIFIED DESIGN PROFESSIONAL CERTIFICATION #17788

AFTER INSTALLATION OF INITIAL EROSION CONTROL MEASURES THE SITE

THE PROJECT DESIGN PROFESSIONAL APPROVES THE INSTALLATION OF

AFTER APPROVAL OF THE INITIAL EROSION CONTROL INSTALLATION, THE

CONTRACTOR MAY PROCEED WITH CLEARING AND GRUBBING ACTIVITIES

TO BE INSTALLED. THE CONTRACTOR SHALL CONSTRUCT TEMPORARY

THE DESIGN PROFESSIONAL WHO PREPARED THE EROSION CONTROL

STORAGE AND PERIMETER CONTROL BMP'S WITHIN SEVEN DAYS AFTER

INSTALLATION. ONCE THE INITIAL SEDIMENT STORAGE AND PERIMETER

PLANS WILL INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT

CONTROL BMP'S ARE IN PLACE, THEN CLEARING/GRUBBING/MASS

'HE CONTRACTOR CAN UTILIZE CLEARED TREES AS BARRIER BRUSH

SEDIMENT CONTROL IN AREAS SHOWN ON PLAN WHERE INITIAL GRADING

NO BURN OR BURY PITS SHALL BE PERMITTED ON THE CONSTRUCTION

ADDITIONAL SILT BARRIERS MUST BE PLACED AS SHOWN ON THE PLAN

AS ACCESS IS OBTAINED DURING CLEARING. NO GRADING SHALL TAKE

CONSTRUCTED AS SHOWN ON THE CLEARING PHASE EROSION CONTROL

ALL ITEMS IN THIS SECTION OF THE SPECIFICATIONS SHALL MEET THE

THE GEORGIA D.O.T. STANDARD SPECIFICATIONS FOR ROADS AND

ALL DISTURBED AREAS LEFT MULCHED AFTER 30 DAYS SHALL BE

SEDIMENT AND EROSION CONTROL MEASURES SHOULD BE CHECKED

AFTER FACH RAIN EVENT. FACH DEVICE IS TO BE MAINTAINED OR

REPLACED IF SEDIMENT ACCUMULATION HAS REACHED THE REQUIRED

CLEANOUT ELEVATION OF THE DEVICE. ADDITIONAL DEVICES MUST BE

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

TRACKED FROM VEHICLE ONTO PUBLIC ROADWAY OR INTO STORM DRAIN

CONTRACTOR SHALL INSPECT CONTROL MEASURES AT THE END OF EACH

FULL IMPLEMENTATION OF THE PLAN DOES NOT PROVIDE FOR EFFECTIVE

WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.

EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL

MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE

FAILURE TO INSTALL, OPERATE, OR MAINTAIN ALL EROSION CONTROL

MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE

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.

JOB UNTIL SUCH MEASURES ARE CORRECTED BACK TO THE EROSION

SEDIMENT SOURCE AS DIRECTED BY THE DESIGN ENGINEER.

EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF

CONDITIONS DEMAND. ALL MATERIALS SPILLED, DROPPED, WASHED, OR

AREAS WITHIN 14 DAYS OF LAND DISTURBANCE.

STABILIZED WITH TEMPORARY VEGETATION.

INSTALLED IF NECESSARY.

CONTROL PLANS.

MUST BE REMOVED IMMEDIATELY.

REQUIREMENTS AS SET FORTH IN SECTION 161, 162, 163, AND 164 OF

MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED

PLACE UNTIL SILT BARRIER INSTALLATION AND SEDIMENT PONDS ARE

SITE WITHOUT WRITTEN PERMISSION BY THE OWNER AND/OR THE

PHASE PLAN TO CONTROL EROSION AND STORMWATER RUNOFF.

SEDIMENT PONDS AND DIVERSION DIKES AS SHOWN ON THE CLEARING

WHERE INITIAL SEDIMENT STORAGE AND PERIMETER CONTROL BMP'S NEED

CONTRACTOR SHALL SCHEDULE AN INSPECTION BY THE PROJECT DESIGN

PROFESSIONAL. NO OTHER CONSTRUCTION ACTIVITIES SHALL OCCUR UNTIL

DESIGN PROFESSIONAL'S CERTIFICATION:

(1) "I CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENTATION AND

COMPREHENSIVE SYSTEM OF BEST MANAGEMENT PRACTICES REQUIRED BY

"MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" (MANUAL)

PUBLISHED BY THE STATE SOIL AND WATER CONSERVATION COMMISSION

RECEIVING WATER(S) OR THE SAMPLING OF THE STORM WATER OUTFALLS

(2) I CERTIFY UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED

AFTER A SITE VISIT TO THE LOCATIONS DESCRIBED HEREIN BY MYSELF

(3) I CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENTATION AND

PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES

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

IN THE TURBIDITY OF A SPECIFIC IDENTIFIED UN-SAMPLED RECEIVING

PURSUANCE TO RULE 180-6.09 OF THE GEORGIA STATE BOARD OF

REGISTRATION FOR PROFESSIONAL ENGINEERS AND SURVEYORS, THE

KNOWN TO THE ENGINEER AND IS NOT A GUARANTEE OR WARRANTY,

EITHER EXPRESSED OR IMPLIED.

JOHN D. BASS, PE GA NO. 34591

GRADING CAN BEGIN.

ENGINEER OF RECORD.

ACTIVITIES WILL NOT OCCUR

TERM "CERTIFY" OR "CERTIFICATION" RELATING TO ENGINEERING SERVICES

SHALL MEAN A SIGNED STATEMENT BASED ON FACTS AND KNOWLEDGE

SAMPLED RECEIVING WATER WILL BE REPRESENTATIVE OF THE INCREASE

POLLUTION CONTROL PLAN PROVIDES FOR THE MONITORING OF: (A) ALL

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.

SHOWN ON THE USGS TOPOGRAPHIC MAP AND ALL OTHER FIELD VERIFIED

AND THAT THE DESIGNED SYSTEM OF BEST MANAGEMENT PRACTICES AND

PÓLLUTION CONTROL PLAN PROVIDES FOR AN APPROPRIATE AND

THE GEORGIA WATER QUALITY CONTROL ACT AND THE DOCUMENT

AS OF JANUARY 1 OF THE YEAR IN WHICH THE L AND-DISTURBING

ACTIVITY WAS PERMITTED, PROVIDES FOR THE SAMPLING OF THE

SAMPLING METHODS IS EXPECTED TO MEET THE REQUIREMENTS

CONTAINED IN THE GENERAL NPDES PERMIT NO. GAR 100002."

OR MY AUTHORIZED AGENT, UNDER MY SUPERVISION.

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 EARTHWORK OPERATIONS IN THE VICINITY OF STREAM BUFFERS SHALL BE CAREFULLY CONTROLLED TO AVOID DUMPING OR SLOUGHING INTO THE DEVICES DEEMED NECESSARY BY THE SITE INSPECTION.

PROTECTION IS ESTABLISHED.

GRADING PHASE - PHASE 2

<u>EROSION CONTROL NOTES:</u>

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.

THE FOLLOWING EROSION CONTROL MEASURES SHALL BE IMPLEMENTED

DURING CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN CAREFUL

AND THEREFORE LIMITED DURATIONS, BEFORE PERMANENT EROSION

SCHEDULING AND PERFORMANCE TO ENSURE THAT LAND STRIPPED OF

ITS NATURAL GROUND COVER IS EXPOSED ONLY IN SMALL QUANTITIES,

DURING THE PRELIMINARY GRADING PHASE OF CONSTRUCTION.

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

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.

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."

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 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 1/3 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 RECLURE 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

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:**

IT WILL NOT ENTER THE INLETS AGAIN.

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

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

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

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

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

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.

WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.

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

DAMAGED DEVICES DUE TO ANY CONSTRUCTION ACTIVITY BY OTHERS. ONCE FINAL STABILIZATION IS ACHIEVED, THE CONTRACTOR SHALL

EROSION CONTROL MEASURES INCLUDING REPLACING OR REPAIRING ANY REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND DISPOSE OF THEM UNLESS NOTED DIFFERENTLY ON PLANS. ONCE TEMPORARY

THIS PLAN HAS BEEN PREPARED TO MEET THE REQUIREMENTS UNDER THE

PERMIT COVERAGE

UNDER PART I.C.3.:

WATER ACT.

OTHER THAN CONSTRUCTION WHERE:

STATE OF GEORGIA, DEPARTMENT OF NATURAL RESOURCES, ENVIRONMENTAL

A. ALL DISCHARGES OF STORM WATER ASSOCIATED WITH INFRASTRUCTURE

CONSTRUCTION PROJECTS THAT WILL RESULT IN LAND DISTURBANCE

(HENCEFORTH REFERRED TO AS EXISTING STORM WATER DISCHARGES

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

WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES), EXCEPT FOR

STORM WATER ASSOCIATED WITH INFRASTRUCTURE CONSTRUCTION

ACRES AND CONSIST SOLELY OF ROUTINE MAINTENANCE FOR THE

MAINTAIN BEST MANAGEMENT PRACTICES, INCLUDING SOUND

THE ORIGINAL LINE AND GRADE AND THE HYDRAULIC CAPACITY, AS

APPLICABLE. THE PERMITTEE SHALL, AS A MINIMUM, IMPLEMENT AND

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)

AS OF JANUARY 1 OF THE YEAR IN WHICH THE LAND-DISTURBING

EXEMPTION THE PROJECT MUST COMPLY WITH THE FOLLOWING

HAVE A DURATION OF LESS THAN 90 CALENDAR DAYS; AND

ACTIVITY IS BEING CONDUCTED. IN ORDER TO BE ELIGIBLE FOR THIS

THE PROJECT SHALL BE STABILIZED BY THE END OF EACH DAY WITH

D. COVERAGE UNDER THIS PERMIT IS NOT REQUIRED FOR DISCHARGE OF

RAILWAY SAFETY ACT, THE INTERSTATE COMMERCE COMMISSION

PRACTICES, INCLUDING SOUND CONSERVATION AND ENGINEERING

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

INTEGRAL PART OF THE CONSTRUCTION ACTIVITY:

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

ARE NOT AUTHORIZED BY THIS PERMIT:

WATER DISCHARGES) OF THIS PERMIT;

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

LOCATION:

WATER FISHERIES): AND

PRACTICES TO PREVENT AND MINIMIZE EROSION AND RESULTANT

TERMINATION ACT AND WHICH CONSIST SOLELY OF ROUTINE

PUBLISHED BY THE STATE SOIL AND WATER CONSERVATION COMMISSION

CONDITIONS: (1) NO MASS GRADING SHALL OCCUR ON THE PROJECT. (2)

TEMPORARY OR PERMANENT STABILIZATION AND (3) THE PROJECT SHALL

STORMWATER ASSOCIATED WITH RAILROAD CONSTRUCTION PROJECTS AND

EMERGENCY RE-CONSTRUCTION CONDUCTED PURSUANT TO THE FEDERAL

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

SEDIMENTATION CONSISTENT WITH THE REQUIREMENTS OF THE FEDERAL

RAILWAY SAFETY ACT AND APPLICABLE REQUIREMENTS OF THE CLEAN

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

A. THE INDUSTRIAL SOURCE OR ACTIVITY OTHER THAN CONSTRUCTION IS

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

CONSTRUCTION ARE OCCURRING ARE COVERED BY A DIFFERENT NPDES

AND THE DISCHARGES ARE IN COMPLIANCE WITH A DIFFERENT NPDES

THE FOLLOWING STORM WATER DISCHARGES FROM CONSTRUCTION SITES

A. STORM WATER DISCHARGES ASSOCIATED WITH AN INDUSTRIAL ACTIVITY

B. DISCHARGES THAT ARE MIXED WITH SOURCES OF NON-STORM WATER

THAT ORIGINATE FROM THE SITE AFTER CONSTRUCTION ACTIVITIES HAVE

BEEN COMPLETED AND THE SITE HAS UNDERGONE FINAL STABILIZATION;

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

C. STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY THAT

ARE SUBJECT TO AN EXISTING NPDES INDIVIDUAL OR GENERAL PERMIT.

EXISTING PERMIT EXPIRES PROVIDED THE EXISTING PERMIT DID NOT

DIRECTOR (FPD) HAS DETERMINED TO BE OR MAY REASONABLY BE

ESTABLISH NUMERIC LIMITATIONS FOR SUCH DISCHARGES; AND

D. STORM WATER DISCHARGES FROM CONSTRUCTION SITES THAT THE

RULES AND REGULATIONS FOR WATER QUALITY CONTROL, CHAPTER

SUCH DISCHARGES MAY BE AUTHORIZED UNDER THIS PERMIT AFTER AN

EXPECTED TO BE CONTRIBUTING TO A VIOLATION OF A WATER QUALITY

THIS PERMIT REQUIRES THE MONITORING OF NEPHELOMETRIC TURBIDITY IN

FOLLOWING PROCEDURES CONSTITUTE EPD'S GUIDELINES FOR SAMPLING

(1) A USGS TOPOGRAPHIC MAP, A TOPOGRAPHIC MAP OR A DRAWING

THE INFRASTRUCTURE CONSTRUCTION; (A) THE LOCATION OF ALL

SHOWN ON A USGS TOPOGRAPHIC MAP, AND ALL OTHER PERENNIAL

STORMWATER OUTFALL. WHEN THE PERMITTEE HAS CHOSEN TO USE A

ON THE USGS TOPOGRAPHIC MAP, THE LOCATION OF THE RECEIVING

WATER(S) MUST BE HAND-DRAWN ON THE USGS TOPOGRAPHIC MAP

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

CONTROL/QUALITY ASSURANCE PROCEDURES. THIS NARRATIVE MUST

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

RECEIVING WATER(S) (I.E., TROUT STREAM OR SUPPORTING WARM

(4). ANY ADDITIONAL INFORMATION EPD DETERMINES NECESSARY TO BE

PERMITTEE OF THE INFORMATION NECESSARY AND THE TIME LINE FOR

PART OF THE PLAN. EPD WILL PROVIDE WRITTEN NOTICE TO THE

THE SIZE OF THE SURFACE WATER DRAINAGE AREA, AND THE TYPE OF

TO COLLECT AND ANALYZE THE SAMPLES INCLUDING QUALITY

INCLUDE PRECISE SAMPLING METHODOLOGY FOR EACH SAMPLING

(3). WHEN THE PERMITTEE HAS DETERMINED THAT SOME OR ALL

FROM WHERE THE STORM WATER(S) ENTERS THE RECEIVING WATER(S)

USGS TOPOGRAPHIC MAP AND THE RECEIVING WATER(S) IS NOT SHOWN

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

(REFERRED TO AS A TOPOGRAPHIC MAP) THAT IS A SCALE FOLIAL TO

ÒR MORE DETAILED THAN A 1:24000 MÁP SHOWING THE LOCATION OF

PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES AS

a. SAMPLING REQUIREMENTS SHALL INCLUDE THE FOLLOWING:

GENERAL PERMIT OR INDIVIDUAL PERMIT AUTHORIZING SUCH DISCHARGES

THE AREAS OF THE SITE WHERE INDUSTRIAL ACTIVITY OTHER THAN

LOCATED ON THE SAME SITE AS THE CONSTRUCTION ACTIVITY AND IS AN

C. COVERAGE UNDER THIS PERMIT IS NOT REQUIRED FOR DISCHARGES OF

PROJECTS THAT RESULT IN LAND DISTURBANCE OF LESS THAN FIVE (5)

ORIGINAL PURPOSE OF THE FACILITY THAT IS PERFORMED TO MAINTAIN

EFFECTIVE DATE OF THIS PERMIT, (HENCEFORTH REFERRED TO AS STORM

FROM CONSTRUCTION ACTIVITIES) EXCEPT FOR DISCHARGES IDENTIFIED

AND CONTINUING AFTER, THE EFFECTIVE DATE OF THIS PERMIT,

EQUAL TO OR GREATER THAN ONE (1) ACRE OCCURRING ON OR BEFORE,

PROTECTION DIVISION (EPD), GENERAL PERMIT NO. 10002 FOR

CONSTRUCTION ACTIVITY FOR INFRASTRUCTURE.

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

DISCHARGES IDENTIFIED UNDER PART I.C.3.

ALL SAMPLING SHALL BE COLLECTED BY "GRAB SAMPLES" AND THE AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ANALYSIS OF THESE SAMPLES MUST BE CONDUCTED IN ACCORDANCE WITH ELIMINATION SYSTEM (NPDES), STORMWATER DISCHARGES ASSOCIATED 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

> (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.

. 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 COMPLIANCE WITH THIS PERMIT SHALL BE REPRESENTATIVE OF 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 INFRASTRUCTUR 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

(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:

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

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.

(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 ÀM TO 5:00 PM, EXCLÚDING ALL NON-WORKING FEDERAL HOLIDAYS,

PERMITTEE) THAT OCCURS AFTER ALL CLEARING AND GRUBBING REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR MONITORING AFTER THE FIRST SAMPLING EVENT OR AFTER ALL MASS GRADING OPERATIONS HAVE BEEN COMPLETED IN THE DRAINAGE AREA OF THE

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 FACH 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

OCCURRING ON OR BEFORE THE EFFECTIVE DATE OF THIS PERMIT, THAT HAVE MET THE SAMPLING REQUIRED BY (A) ABOVE SHALL

THAT BMPS ARE PROPERLY DESIGNED, INSTALLED AND MAINTAINED

OF (A) AND (B) ABOVE BY COLLECTING TURBIDITY SAMPLES FROM ANY RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS $\mathbf{\Omega}$ \triangleleft

REVISION DATE DESCRIPTION KAIZEN PROJECT # | **2017 - 136**

PROJECT MANAGER | **GGD**

LaGRANGE THREAD PHASE 3 LaGRANGE, GA



EROSION, SEDIMENTATION & POLLUTION CONTROL NOTES

SCALE: | 1"=30'

DATE: 03-22-2018

SHEET NAME

RETENTION OF RECORDS:

THE PRIMARY PERMITTEE SHALL RETAIN THE FOLLOWING RECORDS AT THE CONSTRUCTION SITE OR THE RECORDS SHALL BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI:

a. A COPY OF ALL NOTICES OF INTENT SUBMITTED TO EPD; b. A COPY OF THE EROSION, SEDIMENTATION AND POLLUTION

CONTROL PLAN REQUIRED BY 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 q. 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

MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED

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.

FOR ADDITIONAL INFORMATION.

THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACK OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. CONTRACTOR SHALL INSPECT CONTROL MEASURES AT THE END OF EACH

EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF

JOB UNTIL SUCH MEASURES ARE CORRECTED BACK TO THE EROSION THE SITE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE OF ALL

EROSION CONTROL MEASURES ARE REMOVED, THEN THE NOTICE OF TERMINATION CAN BE FILED.

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 d SAMPLING FREQUENCY.

(a) THE ACCUMULATION OF THE MINIMUM AMOUNT OF RAINFALL FOR THE RECEIVING WATER(S) OR OUTFALLS IN ACCORDANCE WITH THIS PERMIT. THE

(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

(3). SAMPLING BY THE PERMITTEE SHALL OCCUR FOR THE FOLLOWING

WHEN CONSTRUCTION ACTIVITY IS BEING CONDUCTED BY THE PRIMARY OPERATION'S 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 DURING NORMAL BUSINESS HOURS* THAT OCCURS EITHER 90 DAYS

LOCATION SELECTED AS THE REPRESENTATIVE SAMPLING LOCATION,

(d). EXISTING CONSTRUCTION ACTIVITIES, I.E., THOSE THAT ARE 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

FOR MONITORING AT ANY TIME OF THE DAY OR WEEK.

O:\PROJECT FOLDERS\2017\171212_KAIZEN LAGRANGE THREAD PHASE 3-COLLEGE\DWG\171212_X-CONST.dwg, 3/22/2018 5:07:01 P

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, TROUP COUNTY, GEORGIA as Primary Permittee will oversee site construction located within the Property situated in Land lots 109, 110, 115 of District 6, CITY OF LaGRANGE, TROUP COUNTY, GEORGIA. The magnitude of the entire development contains 2.83 acres.

Property 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.

Stormwater runoff from this development will be controlled through various best management practices installed as shown on the Erosion Control Plan.

<u>Survey Information</u>

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: NAVD88

TBM: Top F.H. operating nut Elev. 802.45 Flood Insurance Rate Map, Panel 13285C0141E, Dated 07/03/2012, show the site to be in Zone X (areas

Runoff Coefficient

* Weighted pre-construction CN curve number: 65 * Weighted post-construction CN curve number: 65

determined to be outside the 0.2% annual chance floodplain).

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 -Excavation of the foundation
- -Grading and excavation for utilities
- -Preparation for final planting and seeding -Completion of on-site stabilization

Sequence of Major Activities

See Construction Schedule

Name of Receiving Waters

TRIBUTARY OF BLUE JOHN CREEK & JACKSON CREEK

CONTROLS

Erosion and Sediment Controls

All perimeter silt fences and 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 temporary or permanently cease is precluded by snow cover or other adverse weather conditions, stabilization measures shall be initiated as soon as practicable."

"Where construction activity will resume on a portion of the site within 21 days from when activities ceased, (e.g. the total time period that construction activity is temporarily ceased is less than 21 days) then stabilization measures do not have to be initiated on that portion of the site by the 14th day after construction activity temporarily ceased."

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

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

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

<u>Waste Materials</u>

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.

<u>Hazardous Wastes</u>

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

<u>Sanitary Wastes</u>

SPCC plan.

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 Authority 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. See SErosion Control Plan Sheets for construction exit location and details. 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.

- 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.

<u>INSPECTIONS</u>

- 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; (b) all locations at the primary permittee's site where vehicles enter or exit the site for evidence of off-site sediment tracking; and (c) measure raintall once each twenty—four hour period at the site. These inspections must be conducted until a Notice of Termination is submitted.
- 2. Certified personnel (provided by the primary permittee) shall inspect the following at least once every fourteen (14) calendar days and within 24 hours of the end of a storm that is 0.5 inches rainfall or greater (unless such storm ends after 5:00 PM on any Friday or on any non-working Saturday, non-working Sunday or any non—working Federal holiday in which case the inspection shall be completed by the end of the next business day and/or working day, whichever occurs first): (a) disturbed areas of the primary permittee's construction site that have not undergone final stabilization; (b) areas used by the primary permittee for storage of materials that are exposed to precipitation that have not undergone final stabilization; 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, the premittee must comply with Part IV.D.4.a.(3). These inspections must be conducted until a Notice of Termination is submitted.
- 3. 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 received by EPD) the areas of the site that have undergone final stabilization. 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).
- 4. 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.
- 5. A report of each inspection that includes the name(s) of personnel making each inspection, the date(s) of each inspection, 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.(4) of the permit shall be made and retained at the site or be readily available at a designated alternate location until the entire site or that portion of a construction project that has been phased has undergone final stabilization and a Notice of Termination is submitted to EPD. Such reports shall identify any incidents of noncompliance. Where the report does not identify any incidents of non-compliance, the report shall contain a certification that the construction site is in compliance with the Erosion, Sedimentation and Pollution Control Plan and this permit. The report shall be signed in accordance with Part V.G. of this permit.

Daily, weekly, monthly and storm event inspection reports shall be prepared and maintained in accordance with the applicable NPDES 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

<u>Maintenance</u>

seeding growth.

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

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

Mulch or temporary grassing shall be applied to all exposed areas within 14 days of disturbance. Mulch can <u>Sampling Frequency</u> 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.

erosion and sedimentation control measures shall not be removed.

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, at least 70% of the soil surface is uniformly covered in permanent vegetation or equivalent permanent vegetation or equivalent permanent stabilization measures (such as the use of rip rap, gabions, permanent mulches or geotextiles) have been employed. Permanent vegetation shall consist of: planted trees, shrubs, perennial vines; a crop of perennial vegetation appropriate for the region, such that within the growing season a 70% coverage by perennial vegetation shall be achieved. Final stabilization applies to each phase of construction. Until this standard is satisfied and permanent control measures and facilities are operational, interim stabilization measures and temporary

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 833-8-92-001.

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, the value that was selected from Appendix B in Permit No. GAR 100002. The NTU is based upon the disturbed acreage of each monitoring site's drainage basin for the project site, the surface water drainage area of each monitoring site in square miles, and receiving water which supports warm water fisheries.

<u>Sample Type</u>

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 833-8-92-001' and guidance documents that may be prepared by EPD.

Per NPDES Permit, GAR 100002, 'Sample containers should be labeled prior to collecting the samples. Samples should be well mixed before transferring to a secondary container. Large mouth, well—cleaned and rinsed glass or plastic jars should be used for collecting samples. The jars should be cleansed thoroughly to avoid contamination. Manual, automatic or rising stage sampling may be utilized.

<u>Sampling Points</u>

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

Appendix B was used to determine the NTU units allowable and upstream and downstream sampling will be performed for this project.

- 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.

Storm water samples shall be taken for the following storm events:

- (a) For each area of the site that discharges to a receiving stream, the first rain event that reached or exceeds 0.5 inch and allows for monitoring during normal business hours (Monday through Friday, 8:00 AM to 5:00 PM and Saturday 8:00 AM to 5:00 PM 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 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 sampling location, whichever comes first;
- c) At the times 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 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.

<u>Reporting</u>

A monthly summary of the monitoring results shall be sent to CITY OF LaGRANGE, TROUP COUNTY, GEORGIA and Georgia Environmental Protection Division by the 15th of each month.

- * The name, exact place, and time or sampling or measurements; * The name(s) of the individual(s) who performed the sampling and measurements;
- * The date(s) analyses were performed:

This report summary shall include:

- * 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. 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 2640 Shurling Drive Macon, GA 31211-3576

ATTN:	CITY OF LaGRANGE, TROUP ATTN: MEG KELSEY 200 RIDLEY AVENUE LaGRANGE, GA 30240 706—883—2016	COUNTY, GEORGIA	ATTN:	Inspector Company Address Address Phone	
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COMPLIANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS

<u>(478) 751–6612</u>

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.

"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." 03-22-2018 BASS, PE GA NO. 34591 II CERTIFIED DESIGN PROFESSIONAL CERT. #17788

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 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 ______

CERTIFICATION

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.

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REVISION	DATE	DESCRIPTION
KAIZEN PI	ROJECT#	2017 - 136
PROJECT	MANAGER	GGD

LaGRANGE THREAD PHASE 3 LaGRANGE, GA



EROSION, SEDIMENTATION & POLLUTION CONTROL **NOTES**

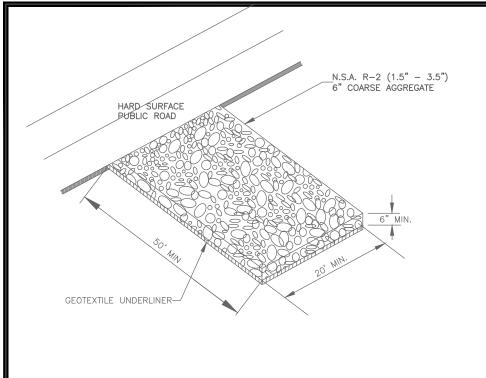
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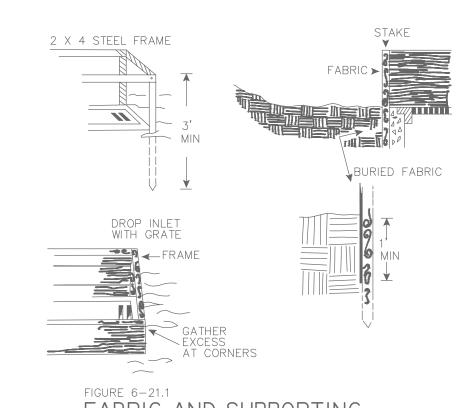
DATE: 03-22-2018

SHEET NAME

EC-09

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8" CONCRETE BLOCK

Sd2-P

WRAPPED IN FILTER FABRIC

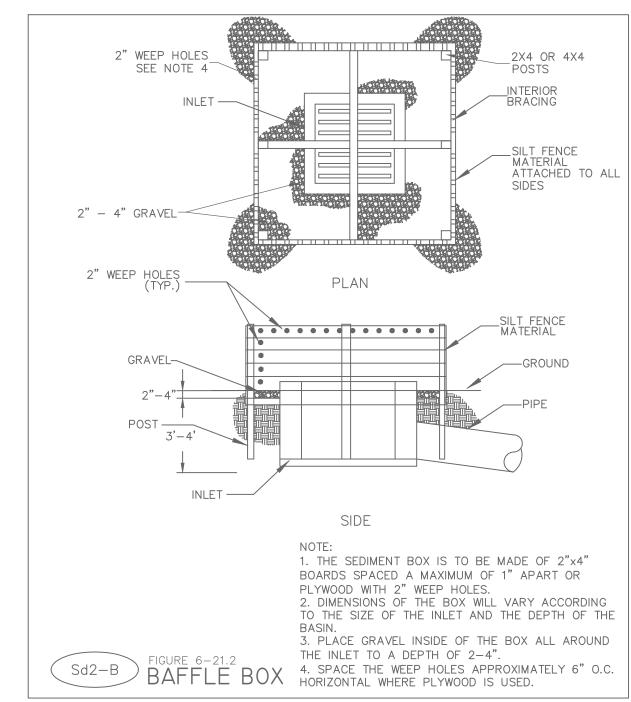
INSTALL FILTER AFTER ANY ASPHALT

INFORMATION OBTAINED FROM FIGURE 6-21.5

CURB INLET FILTER

"PIGS IN BLANKET"

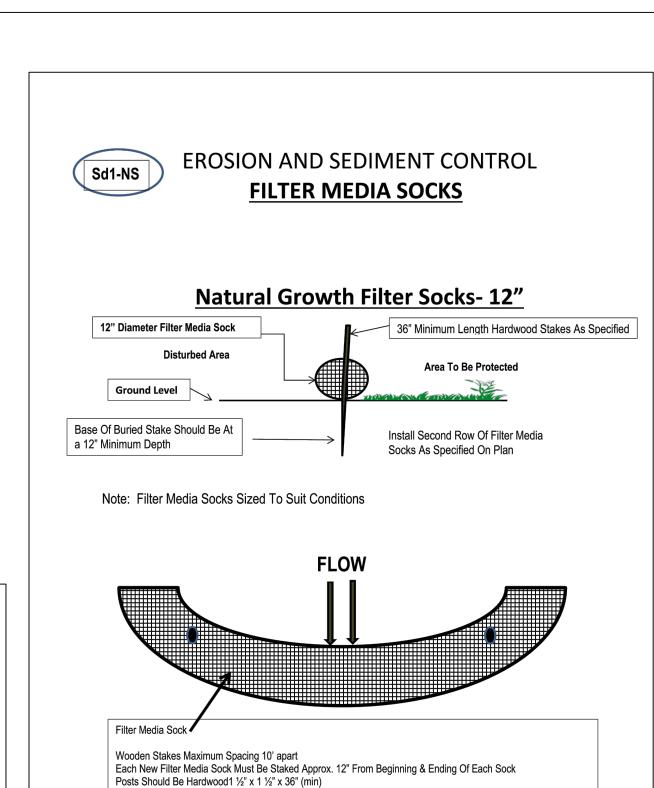
PAVEMENT INSTALLATION.

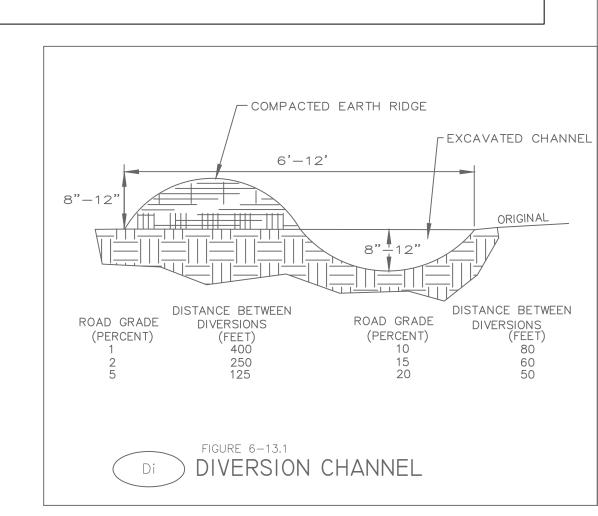


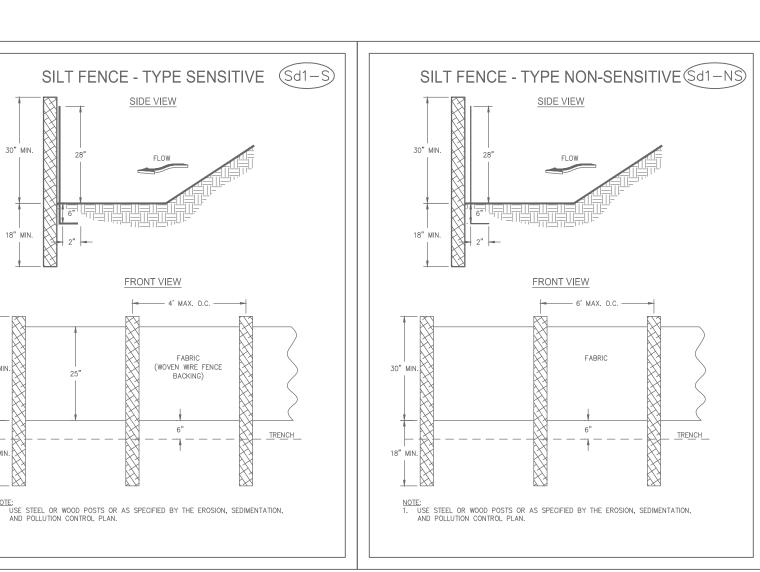
FOR MORE THAN 14 DAYS.

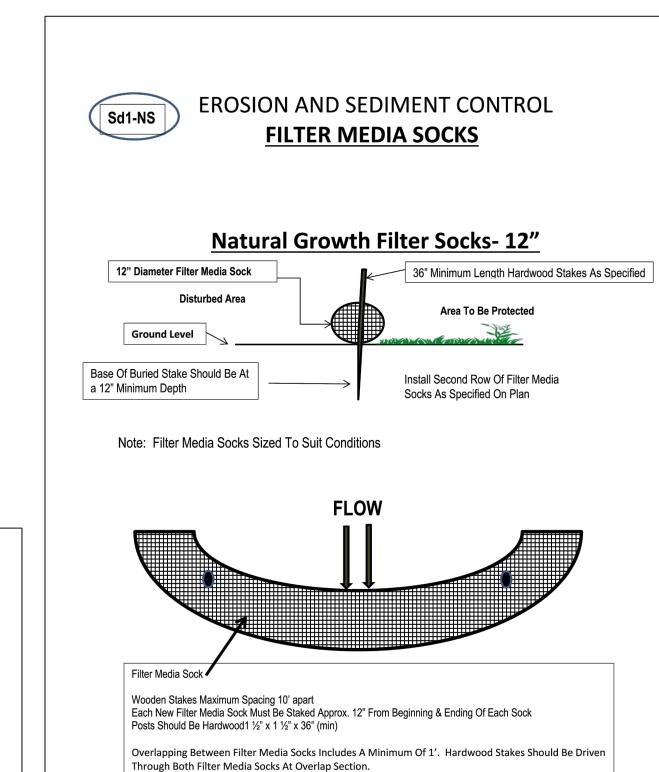
REFER TO TABLE 6-5.1,2,3,& 4 FOR COMPLETE VEGETATIVE CHARTS AND FERTILIZER REQUIREMENTS.

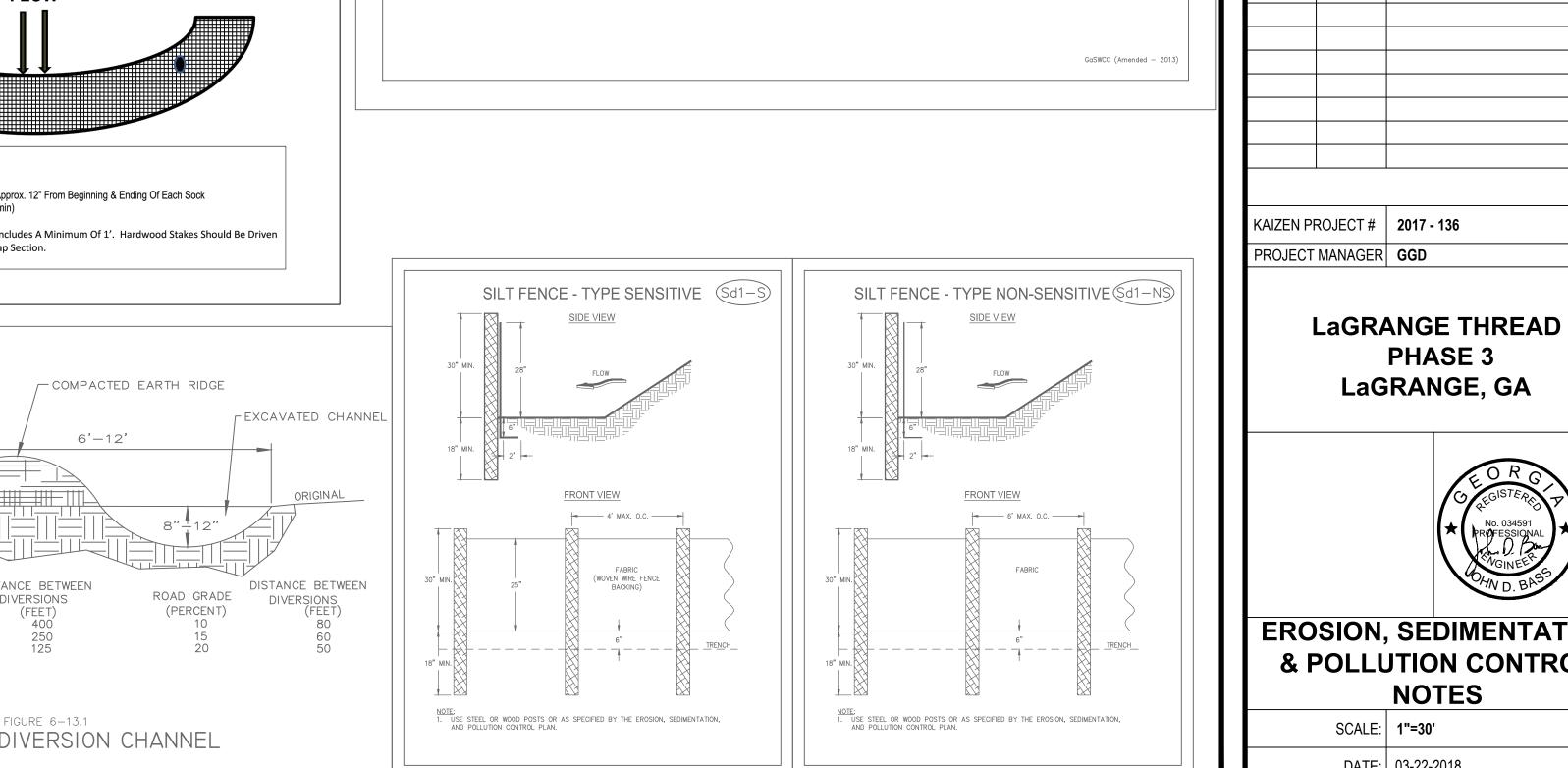
Sd1-S

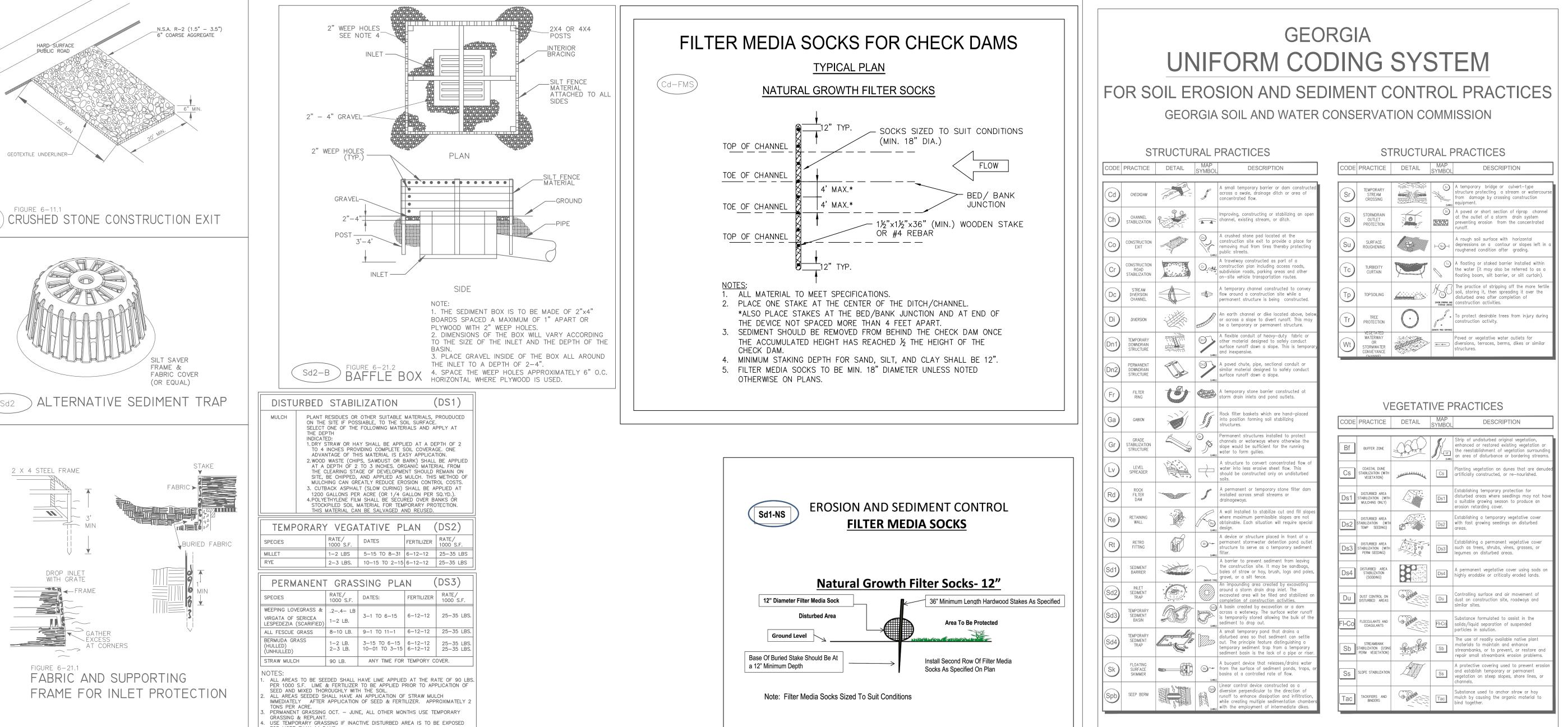












REVISION DATE

DESCRIPTION

ORGIA MEST, IN

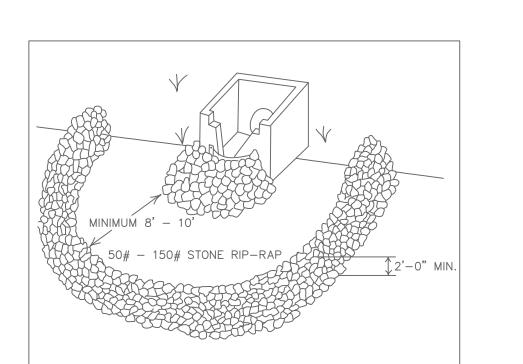
ABO

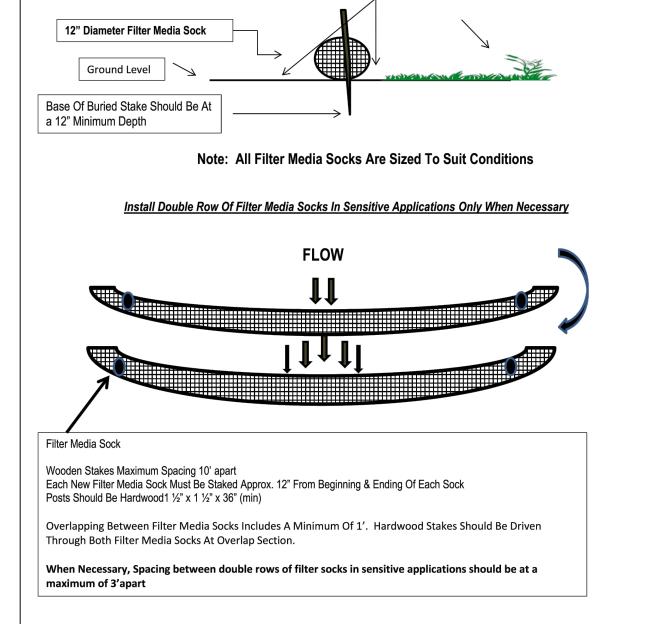
EROSION, SEDIMENTATION & POLLUTION CONTROL **NOTES**

PHASE 3

SCALE: 1"=30' DATE: 03-22-2018

SHEET NAME: **EC-10**





EROSION AND SEDIMENT CONTROL

Natural Growth Filter Socks- 12"

Single Row Of Filter Media Socks In Sensitive Applications

Area To Be Protected

FILTER MEDIA SOCKS