CITY OF ATLANTA DEPARTMENT OF WATERSHED MANAGEMENT OFFICE OF ENGINEERING SERVICES

CITY OF ATLANTA KEISHA LANCE BOTTOMS MAYOR



LOCATION MAP

PROJECT DESCRIPTION:

THIS PROJECT WILL PROVIDE FOR THE INTERNAL REPAIR OF DEFECTS IN THE EXISTING 54" LOWER PROCTOR CREEK GRAVITY SANITARY TRUNK SEWER BY THE USE OF A FIBER-REINFORCED POLYMER PRODUCT (QUAKEWRAP OR APPROVED EQUAL).

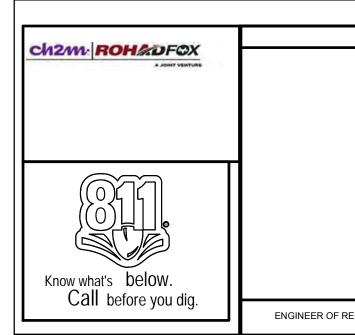
THE DEFECTS TO BE ADDRESSED IN THIS PROJECT HAVE BEEN IDENTIFIED FROM PREVIOUS, INTERNAL CCTV INSPECTIONS OF THE TRUNK SEWER. THESE INSPECTIONS WERE CONDUCTED IN 2004 BY THE CITY OF ATLANTA, AND IN 2017 FOR THE CITY OF ATLANTA BY AMTEC SURVEYING INC. THE DEFECTS IDENTIFIED INCLUDE DETERIORATED AND LEAKING JOINTS, LONGITUDINAL CRACKING AND RADIAL CRACKING.

THE PROJECT INCLUDES THE FOLLOWING WORK: BYPASS PUMPING OF EXISTING SEWER FLOWS; INTERNAL CLEANING OF APPROXIMATELY 13,670 LINEAR FEET OF 54" GRAVITY SANITARY SEWER; REMOVAL AND DISPOSAL OF DEBRIS REMOVED FROM THE SEWER; PRE- AND POST-REHABILITATION CCTV INSPECTION; INTERNAL LINING OF APPROXIMATELY 2,778 FEET OF 54" GRAVITY SEWER WITH FIBER REINFORCED POLYMER (FRP)-MANHOLE TO MANHOLE SEMI-STRUCTURAL REPAIR INTERNAL LINING OF APPROXIMATELY 345 FEET OF 54" GRAVITY SEWER WITH FIBER REINFORCED POLYMER (FRP)-MANHOLE TO MANHOLE (STRUCTURAL REPAIR); SEALING OF 54" LEAKING JOINT/POINT REPAIR WITH FIBER REINFORCED POLYMER (FRP) REPAIR, AT FORTY-FIVE (45) LOCATIONS (NON STRUCTURAL); EROSION AND SEDIMENTATION CONTROL; TRAFFIC CONTROL AS NECESSARY; ANY OTHER WORK NECESSARY TO PROVIDE THE OWNER WITH A COMPLETED PROJECT.

EROSION NOTE:

EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMP'S) WILL BE EMPLOYED AND ENFORCED PURSUANT TO AN EROSION AND SEDIMENT CONTROL PLAN PREPARED BY A GEORGIA SOIL AND WATER CONSERVATION COMMISSION LEVEL-2 DESIGN PROFESSIONAL PRIOR TO LAND-DISTURBING ACTIVITIES, THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE AREA EROSION CONTROL INSPECTOR. CALL (404) 546-1300 TO CONTACT THE INSPECTOR.

CONSTRUCTION PLANS FOR LOWER PROCTOR CREEK TRUNK SEWER REHABILITATION **OCTOBER 26, 2018**



DEPARTMENT OF WATERSHED MANAGEMENT KISHIA L. POWELL COMMISSIONER

SHT#	DWG #	TITLE
1	G-1000	COVER SHEET
2	G-2000	GENERAL NOTES
3	G-3000	OVERALL PROJECT AREA
4	C-300	PROJECT SUMMARY SHEET
5	C-301	PROJECT PLAN VIEW
6	C-302	PROJECT PLAN VIEW
7	C-303	PROJECT PLAN VIEW
8	C-304	PROJECT PLAN VIEW
9	C-305	EROSION AND SEDIMENT CONTROL PLAN
10	C-306	EROSION AND SEDIMENT CONTROL PLAN
11	C-307	EROSION AND SEDIMENT CONTROL PLAN
12	C-308	EROSION AND SEDIMENT CONTROL PLAN
13	C-309	EROSION AND SEDIMENT CONTROL PLAN
14	C-310	EROSION AND SEDIMENT CONTROL PLAN
15	C-311	EROSION AND SEDIMENT CONTROL PLAN
16	C-312	STANDARD DETAILS

	F	REVIS	SIONS	CITY OF ATLANTA						
	NO.	DATE	DESCRIPTION		DEPARTMENT OF WATERSHED MANAGEMENT OFFICE OF ENGINEERING SERVICES					
	LOWER PROCTO						OR SEWER REPAIRS			
				SURVEYOR	FIELD BOOKS	L.L. DIST.	COUNTY		SCALE	
DRAWN BY G. BBOQUIN DESIGNED BY C. NORRIS CHECKED BY A. BOYD T. KELLEY								DATE		
RECORD				PROJECT NUMBER 674854		Sheet : G-1000		1	SHEET OF 16	

GENERAL NOTES: 1. THIS PROJECT WILL PROVIDE FOR THE INTERNAL REPAIR OF DEFECTS IN THE EXISTING 54" GRAVITY SEWER LINE BY THE USE OF A FIBER REINFORCED POLYMER (FRP) PRODUCT (QUAKEWRAP) OR APPROVED EQUAL. THE PROJECT WILL ALSO REQUIRE BYPASS PUMPING OF THE EXISTING SEWER FLOWS AS NECESSARY TO COMPLETE THE WORK ALONG WITH SEWER CLEANING AND CCTV INSPECTION OF THE LINES AND ANY OTHER WORK NECESSARY TO PROVIDE THE OWNER WITH A COMPLETED PROJECT.

2 .THE DESIGN OF THE SPECIFIC REPAIR SHALL BE PROVIDED BY THE CONTRACTOR. THE SPECIFIC DESIGN FOR THE INDIVIDUAL FRP INTERNAL REPAIRS TO THE PIPELINE SHALL BE DESIGNED AND STAMPED BY AN ENGINEER REGISTERED IN THE STATE OF GEORGIA. THE DETAILED DESIGN CALCULATIONS AND DESIGN ASSUMPTIONS SHALL BE PROVIDED FOR EACH SPECIFIC REPAIR AND SHALL BE SUBMITTED FOR DOCUMENTATION.

3. THESE DRAWINGS ARE SCHEMATIC IN NATURE AND ARE INTENDED TO GENERALLY LOCATE THE MANHOLES AND SEWER LINES ALONG WITH POTENTIAL ACCESS ROUTES TO THE SEWER MANHOLES.

4. NO DETAILED SURVEY WAS OBTAINED FOR THIS PROJECT. THE DRAWINGS ARE SCHEMATIC IN NATURE INDICATING THE GENERAL LOCATION OF THE EXISTING SEWER LINE AND MANHOLES. MANHOLES AND SEWER LINES MAY NOT BE SHOWN IN THE ACTUAL LOCATION.

5. UTILITIES SHOWN (IF ANY) ARE APPROXIMATE. GEORGIA LAW REQUIRES THE CONTRACTOR TO NOTIFY THE UTILITIES PROTECTION CENTER MINIMUM 3 WORKING DAYS BUT NOT MORE THAN 10 DAYS BEFORE BEGINNING CONSTRUCTION. THIS NOTICE WILL REMAIN IN EFFECT FOR 30 WORKING DAYS FROM THE DATE UTILITIES PROTECTION CENTER IS NOTIFIED. IN THE ATLANTA AREA, THE CONTRACTOR IS TO CALL THE UTILITIES PROTECTION CENTER AT 770-623-4344.

6. NO EXCAVATIONS ARE ANTICIPATED FOR THIS PROJECT. ALL WORK IS TO BE COMPLETED FROM WITHIN EXISTING SEWER PIPELINES AND SEWER MANHOLES.

7. THE CONTRACTOR WILL BE REQUIRED TO POSITIVELY LOCATE EXISTING MANHOLES AND PROVIDE CLEARING AND ACCESS WORK TO MANHOLES AS REQUIRED TO COMPLETE THE WORK.

8. CONTRACTOR SHALL HAVE A CONFORMED SET OF PLANS AND SPECIFICATIONS ON THE JOB SITE DURING WORKING HOURS.

9. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE LATEST CITY OF ATLANTA STANDARDS.

10. SEWER DISTANCES SHOWN ON THE PROFILE DRAWINGS ARE FROM CENTER-TO-CENTER OF THE MANHOLE STRUCTURES AND ARE FOR LAYOUT PURPOSES ONLY. THE INVERTS SHOWN ARE THE THEORETICAL PIPE INVERTS AT THE CENTER OF THE STRUCTURE.

11. THE CONTRACTOR SHALL COORDINATE WORK WITH CITY OF ATLANTA. CONTRACTOR SHALL PROVIDE SUFFICIENT ADVANCE NOTICES OF PROPOSED WORK SCHEDULE AS DEFINED IN THE SPECIFICATIONS.

12. ALL AREAS DISTURBED AND DAMAGED BY THE CONTRACTOR, INCLUDING CURB AND GUTTER, AND TRENCH SETTLEMENT RELATED AREAS, SHALL BE RESTORED TO THE ORIGINAL CONDITIONS TO THE SATISFACTION OF THE CITY OF ATLANTA AND AT NO ADDITIONAL COST TO THE CITY.

13. CONTRACTOR SHALL INSTALL 6-FOOT HIGH TEMPORARY CHAIN LINK FENCE AROUND ALL WORK AREAS AND TO PROVIDE FOR TEMPORARY ENCLOSURE OF YARDS FOR SECURITY OF PETS, DOMESTIC ANIMALS, AND THE PROPERTY WHEN PERMANENT FENCES MUST BE REMOVED DUE TO CONSTRUCTION OF STORM OR SANITARY SEWER LINES.

14. CONTRACTOR SHALL CONSTRUCT AND MAINTAIN EROSION AND SEDIMENT CONTROL DEVICES IN ACCORDANCE WITH "THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA", LATEST EDITION.

15. THE CONTRACTOR SHALL REPLACE ALL FENCING DAMAGED BY CONSTRUCTION. FENCING SHALL BE REPLACED TO ORIGINAL SIZE, QUALITY AND CONDITION, AND TO THE APPROVAL OF THE CITY OF ATLANTA OR ITS AUTHORIZED REPRESENTATIVE.

16. PRIOR TO FINAL ACCEPTANCE OF WORK, CONTRACTOR SHALL PROVIDE "AS-BUILT" MARK-UP PLANS IN ACCORDANCE WITH PARAGRAPH GC-28.4 OF THE GENERAL CONDITIONS TO THE CITY OF ATLANTA ASSIGNED INSPECTOR FOR FINAL INSPECTION OF ALL NEWLY INSTALLED STORM AND SANITARY SEWERS AS WELL AS ELECTRONIC "AS-BUILT" TABLES PER SPECIFICATION SECTION 01720: RECORD DOCUMENTS. AFTER THE FINAL INSPECTION APPROVAL, CONTRACTOR SHALL PROVIDE "AS-BUILT" DRAWINGS TO THE OFFICE OF ENGINEERING SERVICES, UTILITY DESIGN GROUP, PROJECT DESIGN ENGINEER AND ELECTRONIC "AS-BUILT" TABLES TO THE CITY'S CONSENT DECREE PROGRAM DESIGN MANAGER.

17. CONTRACTOR SHALL OBTAIN NECESSARY PERMITS FROM THE CITY OF ATLANTA DEPARTMENT OF PUBLIC WORKS AND IF APPLICABLE, FROM THE GEORGIA DEPARTMENT OF TRANSPORTATION PRIOR TO ANY REQUIRED LANE CLOSURES.

18. CONTRACTOR SHALL INSTALL STEEL COVER PLATES TO PROTECT AREAS, INCLUDING DRIVEWAYS LEFT OPEN AT THE END OF EACH DAY'S WORK. CONTRACTOR SHALL MAINTAIN ACCESS TO DRIVEWAYS AND MAILBOXES AT ALL TIMES.

19. THE LENGTH OF PIPE FOR PAYMENT PURPOSE WILL BE CONSIDERED THE DISTANCE FROM THE CENTER OF MANHOLE TO CENTER OF MANHOLE, SUBTRACTED BY THE WIDTH OF THE MANHOLE.

20. CONTRACTOR SHALL ENTER UPON PRIVATE PROPERTY ONLY AFTER OBTAINING RIGHT OF ENTRY LETTER IN ACCORDANCE WITH PARAGRAPH GC-15 OF THE GENERAL CONDITIONS FROM THE CITY OF ATLANTA AND NOTIFYING HOMEOWNER IN ADVANCE.

21. ALL TRENCHING AND BACKFILL SHALL BE IN ACCORDANCE WITH SECTION 02200 EARTHWORK, SECTION 02730 SEWERS AND ACCESSORIES, AND CITY OF ATLANTA DETAILS. TEMPORARY TRENCH EXCAVATION SHALL AT ALL TIMES CONFORM TO THE SAFETY REQUIREMENTS OF OSHA.

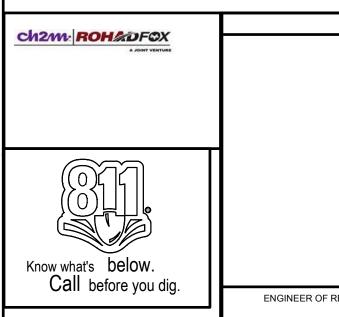
22. AT COMPLETION OF SEWER AND WATER CONSTRUCTION SET ALL MANHOLES, VALVE BOXES, METERS, AND APPURTENANCES FOR PROPER FINAL GRADE. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO THE ABOVE ITEMS UNTIL SYSTEM IS ACCEPTED BY THE CITY.

23. ALL NEW MANHOLES ARE PROJECTED. CONTRACTOR MUST VERIFY SEWER ELEVATIONS AT APPROPRIATE LOCATIONS THROUGH VACUUM EXCAVATION.

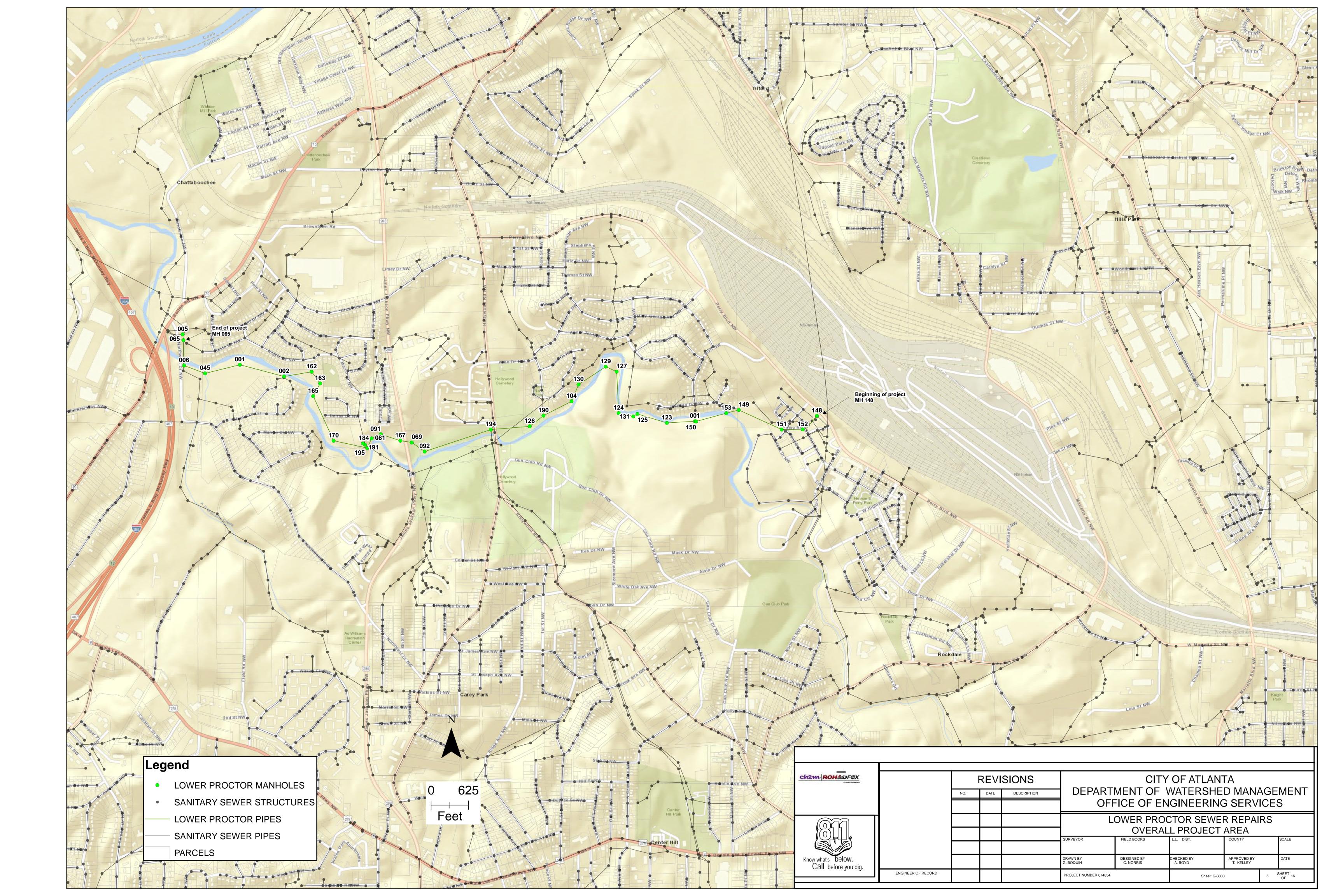
24. CONTRACTOR SHALL FIELD VERIFY ALL INVERT ELEVATIONS, ANGLES, AND SERVICE STATUS.

25. MANHOLES WITHIN PUBLIC RIGHT-OF-WAY TO BE ABANDONED IN PLACE IN ACCORDANCE WITH ATLANTA SPECIFICATIONS.

26. ALL MANHOLES LOCATED BELOW THE 100 YR FLOOD ELEVATION SHALL HAVE WATERTIGHT FRAME AND COVERS UNLESS SHOWN OTHERWISE.



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	I	REVI	SIONS	CITY OF ATLANTA DEPARTMENT OF WATERSHED MANAGEMENT						
	NO.	DATE	DESCRIPTION							
				OFFICE OF ENGINEERING SERVICES LOWER PROCTOR SEWER REPAIRS GENERAL NOTES					S	
					GENE	RAL NUTES				
				SURVEYOR	FIELD BOOKS	L.L. DIST.	COUNTY		SCALE	
				DRAWN BY G. BOQUIN DESIGNED BY C. NORRIS CHECKED BY A. BOYD T. KELLEY						
RECORD				PROJECT NUMBER 674854		Sheet: G-2000		2	SHEET OF 16	



Trunk/Outfall	SEWERSHED	SEWER GROUP	US MH ID	DS MH ID	US MH	DS MH	LENGTH (LF)	DEPTH (FT)	EXISTING DIAMETER (INCH)	Quakewrap Recommendations
	55602	2	22000414004	22020445204	110	450	220.0	110		RELINE with FRP, Semi-Structural ; Stagnant, murky water. Invert not visible. Heavy debris in the pipe. Mild
ower Proctor Creek Trunk	PRC03	3	23080414801	23080415201	148	152	329.6	14.0	54	corrosion upstream. Inspection in reverse order (from downstream to upstream)
ower Proctor Creek Trunk	PRC03	3	23080415201	23080415101	152	151	352.2	8.5	54	No Lining required; Heavy debris (boulders) at 23080415201. MSA at 120 ft.
ower Proctor Creek Trunk	PRC03	3	23080415101	23080414901	151	149	789.4	17.2	54	Reline with FRP/semi structural
ower Proctor Creek Trunk	PRC03	3	23080414901	23080415301	149	153	215.0	17.9	54	FRP Point repair at 129 , 210 ft; Stagnant, murky water (~2 ft)nvert not visible.Inspection in reverse order (from downstream to upstream). Heavy debris, MSA at 207 ft.
Lower Proctor Creek Trunk	PRC03	3	23080415301	23080415001	153	150	524.5	18.3	54	FRP Point repair at 187, seal joint at 463 ft; Stagnant, murky water (~ 2 ft). Heavy debris in the pipe
Lower Proctor Creek Trunk	PRC03	3	23080415001	23080400106	150	1	20.2	NA	54	NA
Lower Proctor Creek Trunk	PRC03	3	23080400106	23080412301	1	123	509.0	8.3	54	FRP Point repair 62, 72, seal leak at 413 ft; Invert Not visible.
ower Proctor Creek Trunk	PRC17 18E	3	23080412301	23080412501	123	125	514.6	8.3	54	FRP Point repair at 25 and 54 ft.
Lower Proctor Creek Trunk	PRC17 18E	3	23080412501	23080413101	125	131	81.1	NA		NA; Mild Corrosion
Lower Proctor Creek Trunk	PRC17 18E	3	23080413101	23080412401	131	124	250.1	9.7	54	NA
Lower Proctor Creek Trunk	PRC17 18E	3	23080412401	23080412701	124	127	715.4	18.6		Reline with FRP / semi-structural
			23000412401	23000412701	12-T	127	713.4	10.0	54	NA; ~ 2 ft of water in the pipe with high velocity. Invert not visible. Potential corrosion below the water
Lower Proctor Creek Trunk	PRC17_18E	3	23080412701	23080412901	127	129	200.9	18.1	54	line due to scour.
Lower Proctor Creek Trunk	PRC17_18E	3	23080412901	23080413001	129	130	544.5	16.5	54	FRP Point repair at 98, 238; Picture not clear, invert not visible beyond 450 ft. Mild corrosion noted at 500+ ft. at 4-5 o'clock.
Lower Proctor Creek Trunk	PRC17_18E	3	23080412901	23080410401	130	104	303.1	15.4	54	NA; Inspection in reverse order (from downstream to upstream). Mild corrosion noted after 250 ft.
Lower Proctor Creek Trunk	PRC17_18E	3	23080413001	23080410401	104	190	530.7	8.1	54	FRP Point repair at 205 and 446 ft. Survey abandoned at protruding tap at 531 ft; Invert Not Visible.
		3								
Lower Proctor Creek Trunk	PRC17_18E	3	23080419003	23080412601	190	126	290.1	NA	54	Reline with FRP / semi-structural; Video mislabeled as 23080419001 (US) Reline with FRP / semi-structural; Corroded from 4 o'clock to 8 o'clock (SAV/SAP). Leaks (inlcuding a couple
Lower Proctor Creek Trunk	PRC17_18E	3	23080412601	23080319403	126	194	653.0	7.9	54	of gushers) at multiple joints.
										FRP Point repair at 38 ft., seal joint at 54, 97, 150, 500, 545, 576, 820 ft. Point repair 630-640 ft., 940-955, 978- 986 ft; ~ 2 ft of water in the pipe with high velocity. Invert not visible. Potential corrosion below the water
Lower Proctor Creek Trunk	PRC17_18E	3	23080319403	990804092A06	194	092A	584.2	NA	54	line due to scour.
ower Proctor Creek Trunk	PRC17_18E	3	990804092A06	23080309201	192A	92	584.2	NA	54	FRP Repairs listed in segment above.
Lower Proctor Creek Trunk	PRC17_18E	3	23080309201	23080306901	92	69	264	13.66	54	FRP Point repair at 28 ft; ~ 2 ft of water in the pipe with high velocity. Invert not visible. Potential corrosion below the water line due to scour.
										FRP Point repair at 12, 116, 185 ft; ~ 2 ft of water in the pipe with high velocity. Invert not visible. Potential
Lower Proctor Creek Trunk	PRC17_18E	3	23080306901	23080316701	69	167	192.216	13.7	54	corrosion below the water line due to scour.
Lower Proctor Creek Trunk	PRC17_18E	3	23080316701	23080309101	167	91	344.4	9.59	54	Reline / structural; Continuous cracking along 12 o'clock.
Lower Proctor Creek Trunk	PRC17 18E	3	23080309101	23080308101	91	81	167.237	19.335	54	FRP Point repair at 12, 40 ft; ~ 2 ft of water in the pipe with high velocity. Invert not visible. Potential corrosion below the water line due to scour.
Lower Proctor Creek Trunk	PRC17_18L	3	23080309101	23080308101	81	195	178.526	17.515	54	Point Repair at 10.9 ft.
										FRP, Seal joint at 86, 468, point repair at 216 ft; ~ 2 ft of water in the pipe with high velocity. Invert not
Lower Proctor Creek Trunk	PRC17_18E	3	23080319503	23080317001	195	170	592.5	7.7	54	visible. Potential corrosion below the water line due to scour.
										FRP, Seal joints at 130, and 256 ft;~ 1 ft of water in the pipe with high velocity. Invert not visible.
Lower Proctor Creek Trunk	PRC17_18E	3	23080317001	23080316501	170	165	820.4	7.32	54	Scour/corrosion possible below water line.
	DDC17 105	2	2200024 (504	2200024 (2004	465	162	242.020	45.00	F 4	NA; ~ 1 ft of water in the pipe with high velocity. Invert not visible. Scour/corrosion possible below water
Lower Proctor Creek Trunk	PRC17_18E	3	23080316501	23080316301	165	163	242.828	15.22	54	line. FRP, Seal joint at 115, 154 ft; ~ 1 ft of water in the pipe with high velocity. Invert not visible. Scour/corrosio
Lower Proctor Creek Trunk	PRC17 18E	3	23080316301	23080316201	163	162	241.125	16.17	54	possible below water line.
Lower Proctor Creek Trunk	PRC17_18E	3	23080316201	23080300201	162	2	468.5	18.94	54	FRP, IPR- 2 locations, verify in field.
Lower Proctor Creek Trunk	PRC17_18E	3	23080300201	23080300101	2	1	764.7	20.24	54	FRP, IPR-4 Locations, Repair at 120' and 407' Seal Joints at 97' and 120'
Lower Proctor Creek Trunk	PRC17_18E	3	23080300101	13980404501	2	45	601.3	18.47		FRP, IPR-1 Location, Seal Joint at 42'
Lower Proctor Creek Trunk	PRC17_18E	3	13980404501	13980400601	45	6	374.9	8.9	54	FRP, IPR-2 Locations, Seal Joint at 6' and 28'
Lower Proctor Creek Trunk	PRC17 18E	3	13980400601	13980406501	6	65	423.9	19.2	54	FRP, IPR-1 Location, Seal Joint at 167'

Manhole	Work	US MH ID	Northing	Easting	DEPTH (FT)	EXISTING SEWER MAIN DIAMETER (INCH)
148	RETAIN	23080414801	1381234.253	2209931.84	14.0	54
152	RETAIN	23080415201	1381279.297	2209694.458	8.5	54
151	RETAIN	23080415101	1381004.724	2209342.246	17.2	54
149	RETAIN	23080414901	1381332.376	2208624.088	17.9	54
153	RETAIN	23080415301	1381279.297	2208415.776	18.3	54
150	RETAIN	23080415001	1381140.425	2207910.006	NA	54
1	RETAIN	23080400106	NA	NA	8.3	54
123	RETAIN	23080412301	1381114.799	2207420.542	8.3	54
125	RETAIN	23080412501	1381265.146	2206928.363	NA	54
	RETAIN					
131		23080413101	NA	NA	9.7	54
124	RETAIN	23080412401	1381279.235	2206613.718	18.6	54
127	RETAIN	23080412701	1381973.899	2206579.6	18.1	54
129	RETAIN	23080412901	1382056.905	2206396.663	16.5	54
130	RETAIN	23080413001	1381758.286	2205941.367	15.4	54
104	RETAIN	23080410401	1381478.255	2205825.365	8.1	54
190	RETAIN	23080419003	NA	NA	NA	54
126	RETAIN	23080412601	1381058.064	2205124.787	7.9	54
194	RETAIN	23080319403	NA	NA	NA	54
192A	RETAIN	990804092A06	NA	NA	NA	54
92	RETAIN	23080309201	1380636.346	2203365.109	13.66	54
69	RETAIN	23080306901	1380789.606	2203150.124	13.7	54
167	RETAIN	23080316701	1380817.197	2202959.899	9.59	54
91	RETAIN	23080309101	1380923.498	2202632.269	19.335	54
81	RETAIN	23080308101	1380857.63	2202478.117	17.515	54
195	RETAIN	23080319503	NA	NA	7.7	54
170	RETAIN	23080317001	1380817.369	2201842.422	7.32	54
165	RETAIN	23080316501	1381563.312	2201501.001	15.22	54
163	RETAIN	23080316301	1381776.882	2201616.558	16.17	54
162	RETAIN	23080316201	1381971.746	2201474.539	18.94	54
2	RETAIN	23080300201	1381892.725	2201012.724	20.24	54
2	RETAIN	23080300101	1382089.582	2200273.78	18.47	54
45 6	RETAIN RETAIN	13980404501 13980400601	1381944.773 1382075.741	2199690.207 2199338.913	8.9 19.2	54

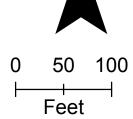
Know what's below.	
Call before you dig.	ENGINEER OF R

				-								
	F	REVI	SIONS	CITY OF ATLANTA DEPARTMENT OF WATERSHED MANAGEMENT								
	NO.	DATE	DESCRIPTION	DEPARTI	MENT OF V	VATERSHE	d Mana	٩GE	MENT			
				OFFICE OF ENGINEERING SERVICES LOWER PROCTOR SEWER REPAIRS								
					PROJECT SUMMARY SHEET							
				SURVEYOR	FIELD BOOKS	L.L. DIST.	COUNTY		SCALE			
				DRAWN BY G. BOQUIN	DESIGNED BY C. NORRIS	CHECKED BY A. BOYD	APPROVED BY T. KELLEY		DATE			
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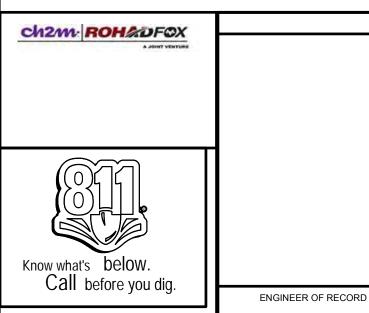
6. BYPASS PUMPING WILL BE REQUIRED IN ORDER TO COMPLETE THIS WORK. UPSTREAM OF THE TERRELL CREEK INTERCEPTOR, (MH 194) THE CITY OF ATLANTA HAS THE CAPABILITY TO REDUCE WASTEWATER FLOWS TO THE LOWER PROCTOR SEWER CREEK TRUNK SEWER.

SEE SPECIFICATIONS 7. THIS PROJECT WILL PROVIDE FOR THE INTERNAL REPAIR OF DEFECTS IN THE EXISTING 54" GRAVITY SEWER LINE BY THE USE OF A FIBER REINFORCED POLYMER (FRP) PRODUCT (QUAKEWRAP) OR APPROVED EQUAL. THE PROJECT WILL ALSO REQUIRE BYPASS PUMPING OF THE EXISTING SEWER FLOWS AS NECESSARY TO COMPLETE THE WORK ALONG WITH SEWER CLEANING AND CCTV INSPECTION OF THE LINES AND ANY OTHER WORK NECESSARY TO PROVIDE THE OWNER WITH A COMPLETED PROJECT.



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- ----- PROCTOR CREEK
- – - MATCHLINE



				ECT PLAN V			
		SURVEYOR	FIELD BOOKS	L.L. DIST.			SCALE
		DRAWN BY G. BOQUIN	DESIGNED BY C. NORRIS	CHECKED BY A. BOYD	APPROVED BY T. KELLEY		DATE
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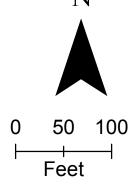


4. THE CITY HAS LIMITED PRIOR CCTV INSPECTION DATA FOR THESE LINE SEGMENTS THAT CAN BE PROVIDED FOR REVIEW.

5. THE FINAL DETERMINATION OF THE SPECIFIC LOCATION AND TYPES OF THE REPAIRS WILL BE DETERMINED BASED ON THE INSPECTION OF THE SEWER LINE AND CONVERSATIONS WITH THE CITY OF ATLANTA.

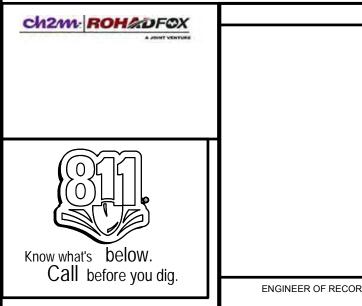
6. BYPASS PUMPING WILL BE REQUIRED IN ORDER TO COMPLETE THIS WORK. UPSTREAM OF THE TERRELL CREEK INTERCEPTOR, (MH 194) THE CITY OF ATLANTA HAS THE CAPABILITY TO REDUCE WASTEWATER FLOWS TO THE LOWER PROCTOR SEWER CREEK TRUNK SEWER.

SEE SPECIFICATIONS 7. THIS PROJECT WILL PROVIDE FOR THE INTERNAL REPAIR OF DEFECTS IN THE EXISTING 54" GRAVITY SEWER LINE BY THE USE OF A FIBER REINFORCED POLYMER (FRP) PRODUCT (QUAKEWRAP) OR APPROVED EQUAL. THE PROJECT WILL ALSO REQUIRE BYPASS PUMPING OF THE EXISTING SEWER FLOWS AS NECESSARY TO COMPLETE THE WORK ALONG WITH SEWER CLEANING AND CCTV INSPECTION OF THE LINES AND ANY OTHER WORK NECESSARY TO PROVIDE THE OWNER WITH A COMPLETED PROJECT. 8. THE DESIGN OF THE SPECIFIC REPAIR SHALL BE PROVIDED BY THE CONTRACTOR. THE SPECIFIC DESIGN FOR THE INDIVIDUAL FRP INTERNAL REPAIRS TO THE PIPELINE SHALL BE DESIGNED AND STAMPED BY AN ENGINEER REGISTERED IN THE STATE OF GEORGIA. THE DETAILED DESIGN CALCULATIONS AND DESIGN ASSUMPTIONS SHALL BE PROVIDED FOR EACH SPECIFIC REPAIR AND SHALL BE SUBMITTED FOR DOCUMENTATION.

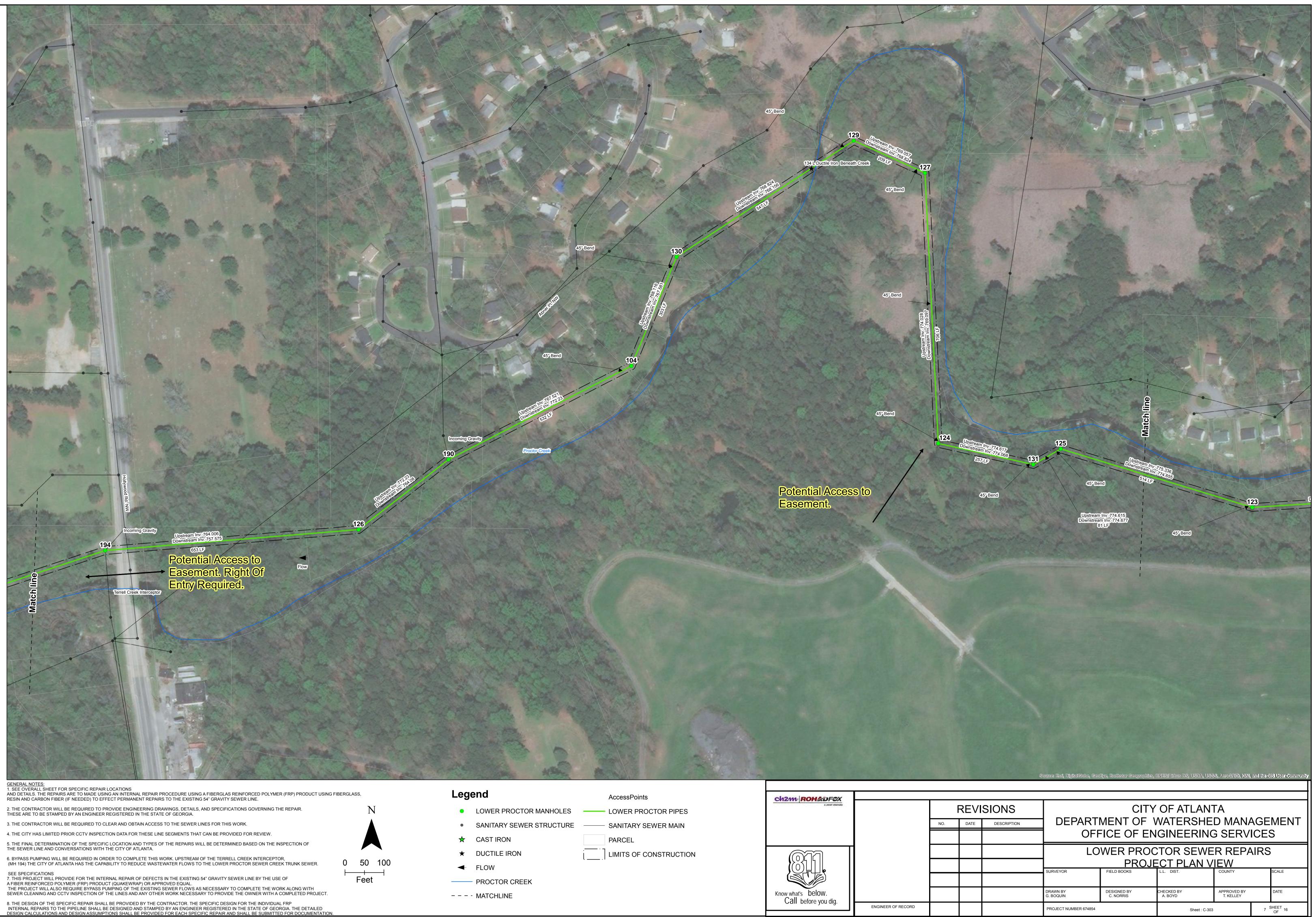


- 🛧 🛛 CAST IRON
- ★ DUCTILE IRON
- ----- PROCTOR CREEK
- – - MATCHLINE

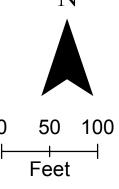
- PARCEL
- LIMITS OF CONSTRUCTION

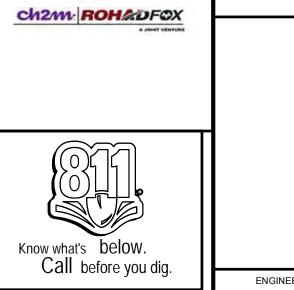


		OFF	OFFICE OF ENGINEERING SERVICES						
		LOWER PROCTOR SEWER REPAIRS							
		PROJECT PLAN VIEW					V		
F		SURVEYOR	FIELD BOOKS	L.L. DIST.	COUNTY		SCALE		
		DRAWN BY G. BOQUIN	DESIGNED BY C. NORRIS	CHECKED BY A. BOYD	APPROVED BY T. KELLEY		DATE		
CORD		PROJECT NUMBER 674854		Sheet : C-302		6 SHEET 16 OF 16			



RESIN AND CARBON FIBER (IF NEEDED) TO EFFECT PERMANENT REPAIRS TO THE EXISTING 54" GRAVITY SEWER LINE.







GENERAL NOTES: 1. SEE OVERALL SHEET FOR SPECIFIC REPAIR LOCATIONS AND DETAILS. THE REPAIRS ARE TO MADE USING AN INTERNAL REPAIR PROCEDURE USING A FIBERGLAS REINFORCED POLYMER (FRP) PRODUCT USING FIBERGLASS, RESIN AND CARBON FIBER (IF NEEDED) TO EFFECT PERMANENT REPAIRS TO THE EXISTING 54" GRAVITY SEWER LINE.

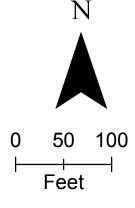
2. THE CONTRACTOR WILL BE REQUIRED TO PROVIDE ENGINEERING DRAWINGS, DETAILS, AND SPECIFICATIONS GOVERNING THE REPAIR. THESE ARE TO BE STAMPED BY AN ENGINEER REGISTERED IN THE STATE OF GEORGIA.

3. THE CONTRACTOR WILL BE REQUIRED TO CLEAR AND OBTAIN ACCESS TO THE SEWER LINES FOR THIS WORK.

- 4. THE CITY HAS LIMITED PRIOR CCTV INSPECTION DATA FOR THESE LINE SEGMENTS THAT CAN BE PROVIDED FOR REVIEW.
- 5. THE FINAL DETERMINATION OF THE SPECIFIC LOCATION AND TYPES OF THE REPAIRS WILL BE DETERMINED BASED ON THE INSPECTION OF THE SEWER LINE AND CONVERSATIONS WITH THE CITY OF ATLANTA.

6. BYPASS PUMPING WILL BE REQUIRED IN ORDER TO COMPLETE THIS WORK. UPSTREAM OF THE TERRELL CREEK INTERCEPTOR, (MH 194) THE CITY OF ATLANTA HAS THE CAPABILITY TO REDUCE WASTEWATER FLOWS TO THE LOWER PROCTOR SEWER CREEK TRUNK SEWER.

SEE SPECIFICATIONS 7. THIS PROJECT WILL PROVIDE FOR THE INTERNAL REPAIR OF DEFECTS IN THE EXISTING 54" GRAVITY SEWER LINE BY THE USE OF A FIBER REINFORCED POLYMER (FRP) PRODUCT (QUAKEWRAP) OR APPROVED EQUAL. THE PROJECT WILL ALSO REQUIRE BYPASS PUMPING OF THE EXISTING SEWER FLOWS AS NECESSARY TO COMPLETE THE WORK ALONG WITH SEWER CLEANING AND CCTV INSPECTION OF THE LINES AND ANY OTHER WORK NECESSARY TO PROVIDE THE OWNER WITH A COMPLETED PROJECT. 8. THE DESIGN OF THE SPECIFIC REPAIR SHALL BE PROVIDED BY THE CONTRACTOR. THE SPECIFIC DESIGN FOR THE INDIVIDUAL FRP INTERNAL REPAIRS TO THE PIPELINE SHALL BE DESIGNED AND STAMPED BY AN ENGINEER REGISTERED IN THE STATE OF GEORGIA. THE DETAILED DESIGN CALCULATIONS AND DESIGN ASSUMPTIONS SHALL BE PROVIDED FOR EACH SPECIFIC REPAIR AND SHALL BE SUBMITTED FOR DOCUMENTATION.



Legend

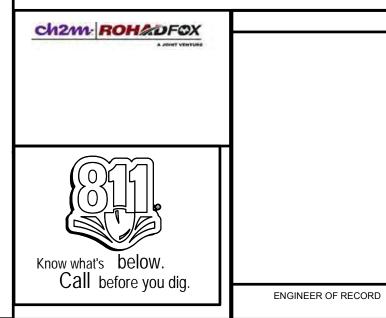
- LOWER PROCTOR MANHOLES
- SANITARY SEWER STRUCTURE
- 🛧 CAST IRON
- ★ DUCTILE IRON
- ----- PROCTOR CREEK
- – - MATCHLINE

AccessPoints

- ----- LOWER PROCTOR PIPES
- ——— SANITARY SEWER MAIN
 - PARCEL

_

LIMITS OF CONSTRUCTION



	F	REVI	SIONS							
	NO.	DATE	DESCRIPTION	DEPARTMENT OF WATERSHED MANAGEMENT OFFICE OF ENGINEERING SERVICES LOWER PROCTOR SEWER REPAIRS PROJECT PLAN VIEW						
				SURVEYOR	FIELD BOOKS	L.L. DIST.	COUNTY		SCALE	
				DRAWN BY G. BOQUIN	DESIGNED BY C. NORRIS	CHECKED BY A. BOYD	APPROVED BY T. KELLEY		DATE	
RD				PROJECT NUMBER 674854		Sheet : C-304			OF 16	

	ERTIFICATIONS	√ 19 3.
<u>DE</u> √ 11 1.	<u>SIGN PROFESSIONAL</u> I CERTIFY UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER A SITE VISIT TO THE LOCATIONS DESCRIBED HEREIN BY MYSELF OR MY AUTHORIZED AGENT, UNDER MY SUPERVISION.	√ 20 4 .
NA	ME: CHRISTOPHER S. HAMBLEN	
_	ORGIA REGISTERED ENGINEER NO: 038034	√ 21 5 .
	/EL II CERTIFIED DESIGN PROFESSIONAL NO: 0000069253	
	ROJECT INFORMATION	0
$\sqrt{4}$	PRIMARY PERMITTEE:	6.
<u> </u>	NAME: REGINALD CRAYTON COMPANY: CITY OF ATLANTA, DEPARTMENT OF WATERSHED MANAGEMENT ADDRESS: 72 MARIETTA STREET NW CITY/STATE/ZIP: ATLANTA, GA 30303 PHONE: (404) 798-5612	
2.	ENGINEER:	7.
	CH2M 6600 PEACHTREE DUNWOODY ROAD 400 EMBASSY ROW, SUITE 600 ATLANTA GA 30328	8.
√ 3 3.	24-HR CONTACT: REGINALD CRAYTON, (404) 798-5612	
	TOTAL PROJECT AREA: 6.4 ACRES	9.
	TOTAL DISTURBED AREA: 0.1 ACRES	10.
√ 6 5.	GPS LOCATIONS OF PROJECT(WGS84) BEGINNING OF PROJECT: (33.796778°, -084.451943°) END OF PROJECT: (33.800443°, -084.486886°)	10.
√ 8 6.	PROJECT DESCRIPTION THIS PROJECT WILL PROVIDE FOR THE INTERNAL REPAIR OF DEFECTS IN THE EXISTING 54" GRAVITY SEWER LINE THE USE OF A FIBER REINFORCED POLYMER (FRP) PRODUCT (QUAKEWRAP) OR APPROVED EQUAL. ALL WORK PERFORMED WILL BE THROUGH EXISTING MANHOLES WITHIN CITY EASEMENTS, WITH LIMITED LAND DISTURBANG THE PROJECT WILL ALSO REQUIRE BYPASS PUMPING OF THE EXISTING SEWER FLOWS AS NECESSARY TO COMP THE WORK ALONG WITH SEWER CLEANING AND CCTV INSPECTION OF THE LINES AND ANY OTHER WORK NECESS TO PROVIDE THE OWNER WITH A COMPLETED PROJECT.	CES. LETE
√ 10 7.	RECEIVING WATERS	12.
(, 10) 7.	• THE RECEIVING WATERS OF THIS PROJECT IS PROCTOR CREEK, WHICH IS PART OF THE UPPER	13.
	 CHATTAHOOCHEE WATERSHED (HUC-03130001). PROCTOR CREEK IS AN IMPARED STREAM SEGMENT AS DEFINED IN THE 2016 GEORGIA EPD 305(B)/303(D) LIS A TMDL IMPLEMENTATION PLAN FOR FECAL COLIFORM WAS DEVELOPED FOR PROCTOR CREEK IN 2003, REVI 2008. A TMDL IMPLEMENTATION PLAN FOR SEDIMENT HAS NOT BEEN DEVELOPED FOR PROCTOR CREEK. 	σT.
8.	BASE FLOOD INFORMATION	14.
	MAP NUMBER: 13121C PANEL NUMBER: 0236F, 0237F REVISED: SEPTEMBER 18, 2013	15.
<u>√ 46</u> _{9.}	SOILS TYPE AS PER NRCS WEB SOIL SURVEY, SOIL TYPES FOR THIS PROJECT ARE DELINEATED IN THE C SERIES SHEETS. SO TYPE LEGEND (WITH DESCRIPTIONS) IS PROVIDED ON SHEET C-305.	16. IIL
<u>√ 41</u> 10.	WETLANDS THE PRESENCE OF ON-SITE WETLANDS HAS BEEN INVESTIGATED AND IT WAS DETERMINED THERE ARE NO WETLANDS WITHIN THE PROJECT AREA.	17.
<u>√ 41</u> 11.	STATE WATERS STATE WATERS LOCATED ON AND WITHIN 200 FEET OF THE PROJECT SITE HAVE BEEN IDENTIFIED AND WILL BE PROTECTED BY ASSOCIATED STATE AND CITY PROTECTION REGULATIONS AND BUFFERS.	18.
<u>√ 44</u> 12.	RUNOFF COEFFICIENT OR PEAK DISCHARGE FLOWS OF THE SITE PRIOR TO AND AFTER CONSTRUCTION ACTIVITIE ARE COMPLETED SHALL STAY THE SAME. THE PROPOSED WORK DOES NOT ALTER THE HYDROLOGY OF THE SITE	19
<u>√ 48</u> ₁₃ .	WRITTEN JUSTIFICATION AGAINST SEDIMENT BASIN IMPLEMENTATION: THE TOPOGRAPHY OF THE SITE, AS WELL CONSTRUCTION TECHNIQUES, LIMITS THE LAND DISTURBANCE ACTIVITIES TO A NARROW AND NON-CONTINUOUS LINEAR AREAS. THIS ELIMINATES THE OPPORTUNITY TO USE A CENTRALIZED SEDIMENT STORAGE BMP TO	3
	ADEQUATELY TREAT SEDIMENT POLLUTION. TO MEET THE GOALS OF LIMITING SEDIMENT POLLUTION, THE SEDIM CONTROL PROGRAM WILL BE EXECUTED BY THE CONTRACTOR IN COORDINATION WITH LIMITING LAND DISTURBA AS SPECIFIED IN THIS PLAN SET AT ANY GIVEN TIME: BEFORE, DURING, AND AFTER CONSTRUCTION.	
<u>R</u> √ 15]1.	EQUIRED ES&CP NOTES (CITY OF ATLANTA REQUIRED NOTES INCLUDED AS SHOWN IN BOLD) NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFER AS MEASURED FROM THE POINT OF WRESTED VEGETATION OR WITHIN 25-FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.	RS 22.
√ 25 2. 2.	SPILL CLEANUP AND CONTROL PRACTICES 1. LOCAL, STATE AND MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTE	D 23.
	AND PROCEDURES WILL BE MADE TO SITE PERSONNEL. 2. 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	201
2	CONTAINERS. 3. 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. AL SPILLS WILL BE REPORTED AS REQUIRED BY LOCAL, STATE AND FEDERAL REGULATIONS. 4. FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN ON SURFACE WATER), THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-424-8802.	LL 25.
	 a. FOR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-424-8802. b. FOR OPHILLS OF FATER THAN SE ONLY ONE AND NO OUPEACE WATER IMPACTS. THE OFOROM FROM WILL DE 	- 26.
	 b. FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE GEORGIA EPD WILL BE CONTACTED WITHIN 24 HOURS. 	-
2.	 c. FOR SPILLS LESS THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE SPILL WILL BE CLEANED UF AND LOCAL AGENCIES WILL BE CONTACTED AS REQUIRED. 5 THE CONTRACTOR SHALL NOTIFY THE LICENSED PROFESSIONAL WHO PREPARED THIS PLAN IF MORE THAN 1,3 GALLONS OF PETROLEUM IS STORED ONSITE (THIS INCLUDES CAPACITIES OF EQUIPMENT) OR IF ANY ONE PIEC OF EQUIPMENT HAS A CAPACITY GREATER THAN 660 GALLONS. THE CONTRACTOR WILL NEED A SPILL PREVENT CONTAINMENT AND COUNTERMEASURES PLAN PREPARED BY THAT LICENSED PROFESSIONAL. 	20 E
		28.

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.

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. ANY DISTURBED AREAS REMAINING IDLE FOR 30 DAYS SHALL BE STABILIZED WITH PERMANENT VEGETATION.

PERIMETER EROSION AND SEDIMENT CONTROL DEVICES AND ORANGE BARRIER FENCE SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF SITE WORK AND REMAIN UNTIL COMPLETION OF WORK. CONTRACTOR IS RESPONSIBLE TO REPAIR OR REPLACE DAMAGED ITEMS. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AT LEAST WEEKLY, AFTER EACH RAIN, AND REPAIRED AS NECESSARY. ACCUMULATED SILT SHALL BE REMOVED AS SOON AS PRACTICAL, BUT NO LATER THAN WHEN FENCE IS HALF FULL.

ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IF DETERMINED **NECESSARY BY ON-SITE INSPECTION.**

SILT FENCE SHALL MEET THE REQUIREMENTS OF SECTION 171 - TYPE C TEMPORARY SILT FENCE, OF THE GEORGIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, 1993 EDITION, AND BE WIRE **REINFORCED**.

THE PROPERTY OWNER AND CONTRACTOR ARE EQUALLY RESPONSIBLE FOR ALL EROSION CONTROL **ACTIVITIES.**

- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN QUALIFIED PROFESSIONAL ADVICE WHEN QUESTIONS ARISE CONCERNING DESIGN AND EFFECTIVENESS OF EROSION CONTROL DEVICES, NOT THE CITY OF ATLANTA.
- ALL TEMPORARY AND PERMANENT SEEDING MUST BE PERFORMED AT THE APPROPRIATE SEASON. IN SUCH INSTANCES WHERE THE ESTABLISHMENT OF VEGETATION IS INOPPORTUNE DUE TO SEASON OR DROUGHT, DISTURBED AREAS SHALL BE TEMPORARILY STABILIZED USING 2"-4" OF MULCH (DS1). ADDITIONAL PLANTINGS WILL BE NECESSARY IF A SUFFICIENT STAND OF GRASS FAILS TO GROW.
- THE CITY'S DESIGNEE WILL VERIFY ADEQUATE COVER (100% COVER, 70% DENSITY) OF PERMANENT **STABILIZATION (DS3, DS4).**
- SILT FENCES SHALL NOT BE PLACED IN STREAM BUFFER OR FLOODPLAINS, UNLESS UTILIZED FOR THE CONSTRUCTION OF AN EXEMPT ACTIVITY (I.E. ROADWAY DRAINAGE STRUCTURES, SEWER/WATER CROSSINGS, OR DRAINAGE STRUCTURES) PER THE APPROVED PLANS. FOR SUCH DISTURBANCES WITHIN THE BUFFER, THE AREA SHALL BE IMMEDIATELY STABILIZED USING EROSION CONTROL MATTING AND/OR BLANKETS ONCE THE ACTIVITY IS COMPLETE.
- SUBCONTRACTORS INVOLVED WITH LAND DISTURBANCE ACTIVITIES SHALL MEET THE EDUCATION REQUIREMENTS (LEVEL 1) DESCRIBED IN O.C.G.A 12-7-19.
- EROSION CONTROL AND TREE PROTECTION MEASURES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION ACTIVITY AND SHALL BE MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
- SOIL DISTURBING ACTIVITIES WILL INCLUDE: PLACEMENT OF EROSION AND SEDIMENT CONTROL. DEMOLITION, SITE CLEARING AND GRUBBING, GRADING OPERATIONS, FACILITIES CONSTRUCTION, TRENCH EXCAVATION AND BACKFILL. AND SURFACE RESTORATION.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL EROSION CONTROL MEASURES INSTALLED IN GOOD WORKING ORDER FOR THE FULL DURATION OF THIS CONTRACT.
- EROSION. SEDIMENT AND POLLUTION CONTROL MEASURES SHALL BE PROVIDED AS SHOWN AND ARE THE MINIMUM REQUIRED. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IF DETERMINED NECESSARY BY ON-SITE INSPECTION. ADDITIONAL DEVICES MAY BE REQUIRED AS NECESSARY DURING CONSTRUCTION.
- CONTRACTOR SHALL INSTALL AND ADD TO EROSION CONTROL MEASURES AS DETERMINED BY THE ENGINEER, OWNER OR THE CITY.
- PROVISIONS TO PREVENT EROSION OF SOIL FROM THE SITE SHALL BE, AT A MINIMUM, IN CONFORMANCE WITH THE REQUIREMENTS OF THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, CURRENT EDITION. THIS DESIGN SHALL CONFORM TO AND ALL WORK WILL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THIS PUBLICATION.
- CONSTRUCTION EXITS (Co) SHALL BE REQUIRED AT ALL LOCATIONS USED FOR INGRESS/EGRESS FROM THE CONSTRUCTION AREA. CONSTRUCTION MATERIAL STORAGE AREAS WILL REQUIRE THE INSTALLATION OF A CONSTRUCTION EXIT TO REDUCE OR ELIMINATE THE TRANSPORT OF MUD FROM THE AREA. SILT FENCE SHALL ALSO BE INSTALLED TO PREVENT SEDIMENT FROM LEAVING THE MATERIAL STORAGE AREA. AFTER DEMOBILIZATION, THE MATERIAL STORAGE AREA SHALL BE SEEDED AND MULCHED, AND THE SILT FENCE SHALL REMAIN UNTIL THE AREA IS PERMANENTLY STABILIZED.
- CONSTRUCTION DEBRIS (INCLUDING CONCRETE WASHOUT) SHALL BE PROPERLY DISPOSED OF OFFSITE IN LICENSED LANDFILLS OR LOCATIONS THAT ARE APPROVED BY FEDERAL, STATE, AND LOCAL AUTHORITIES. WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.
- NO BURN OR BURY PITS SHALL BE PERMITTED ON THE SITE WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF THE SITE OWNER AND/OR THE ENGINEER OF RECORD.
- A TEMPORARY COVER OF HEAVY MULCH OR MULCH WITH TEMPORARY SEEDING SHALL BE PLACED ON ALL AREAS WHERE PERMANENT COVER CAN NOT BE ESTABLISHED IMMEDIATELY DUE TO SEASONAL LIMITATIONS.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT UNDER NO CIRCUMSTANCES ANY SEDIMENT, TRASH, OR DEBRIS BE ALLOWED ONTO ADJACENT PROPERTIES, PUBLIC LANDS, OR OUTSIDE OF THE CONSTRUCTION LIMITS.
- ALL EROSION CONTROL DEVICES, THAT ARE NOT DIRECTLY SPECIFIED AS TO INSTALLATION AND MATERIALS, SHALL MEET THE REQUIREMENTS OF THE GA. DEPT. OF TRANSPORTATION, SPECIFICATIONS FOR THE CONSTRUCTION OF ROADS AND BRIDGES, CURRENT EDITION, AND LATEST SUPPLEMENT IN EFFECT AT THE TIME OF BID OPENING OR THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA. CURRENT EDITION.
- ACCEPTANCE AND/OR SUBSEQUENT ACCEPTANCE OF THESE PLANS DOES NOT CONSTITUTE APPROVAL BY COA OF ANY LAND DISTURBING ACTIVITIES WITHIN WETLAND AREAS, JURISDICTIONAL WATERS OF THE STATE, AREAS OF THREATENED/ENDANGERED SPECIES, OR AREAS OF HISTORICAL SIGNIFICANCE. IT IS THE OWNER'S RESPONSIBILITY TO CONTACT THE APPROPRIATE REGULATORY AGENCY FOR ANY REQUIRED APPROVALS.
- A COPY OF THE APPROVED LAND DISTURBANCE PLAN AND PERMIT SHALL BE PRESENT ON THE SITE AT ALL TIMES.

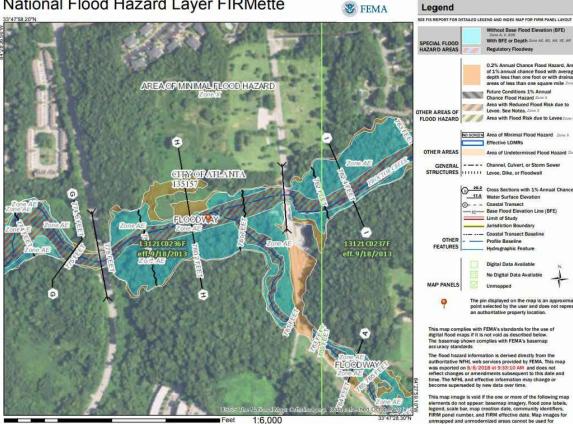
SOIL INFORMATION NOTES

1. SOILS INFORMATION IS FROM THE USDA NATURAL RESOURCES CONSERVATION SERVICE'S WEB SOIL SURVEY. SPATIAL EXTENTS OF SOIL LAYERS ARE SHOWN ON SHEETS C-308 AND C-309.

TO A DEPTH OF 80-INCHES.

MAP UNIT	MAP UNIT NAME	SLOPE (%)
SYMBOL	MAFONITNAME	3LOFL (70)
AaC	Altavista sandy loam	6-10
AgC	Appling-Hard Labor complex	6-10
BaA	Buncombe loamy sand	0-3
CaA	Cartecay-Toccoa complex	0-2
СрА	Congaree sandy loam	0-2
ReD	Rion sandy loam	10-15
ReE	Rion sandy loam	15-25
Ub	Urban land	N/A
UeE	Urban land-Ashlar-Rion complex	10-25
UfC2	Urban land-Cecil complex	2-10
UgE	Urban land-Grover-Mountain Park complex	10-25
UmC2	Urban land-Madison-Bethlehem complex	2-10
UrE	Urban land-Rion complex	10-25
W	Water	N/A

National Flood Hazard Layer FIRMette



National Flood Hazard Layer FIRMette



National Flood Hazard Layer FIRMette



FEMA FIRMETTE FLOOD INSURANCE MAPS NOTE: SCALE DEPICTED AS SHOWN DOES NOT REFLECT PRINTED SCALE.

Ch2m. ROHLOFOX	
677	
Know what's below. Call before you dig.	
-	ENGINEER OF RECORD

2. SOIL SERIES ARE GROUPINGS OF SIMILAR SOILS THAT WITH THE ALLOWABLE EXCEPTIONS FOR TEXTURE OF SURFACE LAYER OR THE UNDERLYING SUBSTRATUM, HAVE MAJOR HORIZONS THAT ARE SIMILAR IN COMPOSITION, THICKNESS, AND ARRANGEMENT IN THE PROFILE. THE SOIL PROFILE MAPPED IN THE SURVEY ONLY DESCRIBES THE HORIZONS UP





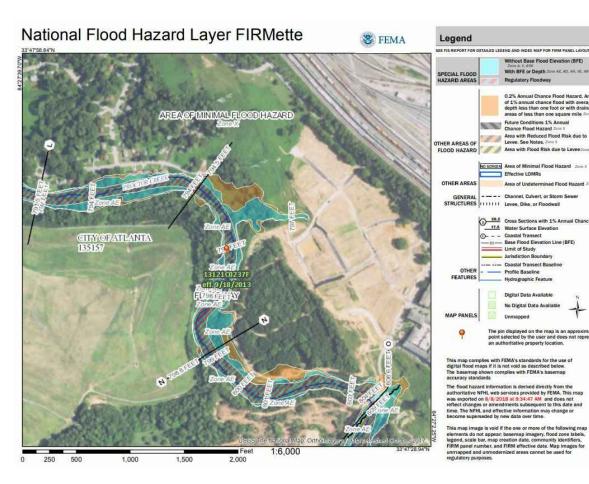




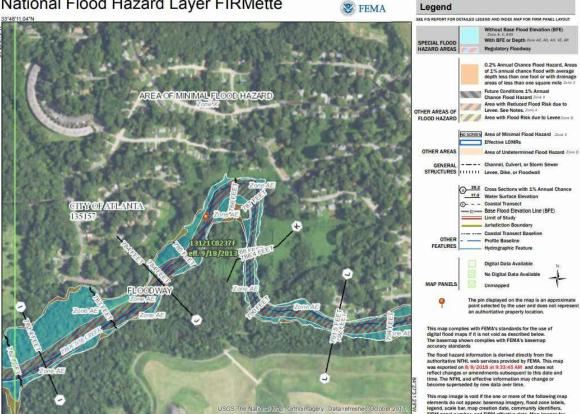


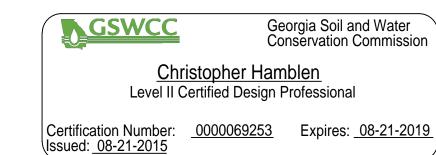
№ 28 ANTICIPATED CONSTRUCTION SCHEDULE

START:	TO BE DETERMINED										
COMPLETION:	TO BE DETERMINED										
^	СТІVІТҮ	MONTH									
A		1	2	3	4	5					
INITIAL PHASE BIV	1P'S										
CLEARING & GRUE											
TEMPORARY VEGE	ETATION										
INFRASTRUCTURE	REHABILITATION										
REMOVE TEMP. EF											
MAINTENANCE O	F BMPS										



National Flood Hazard Layer FIRMette





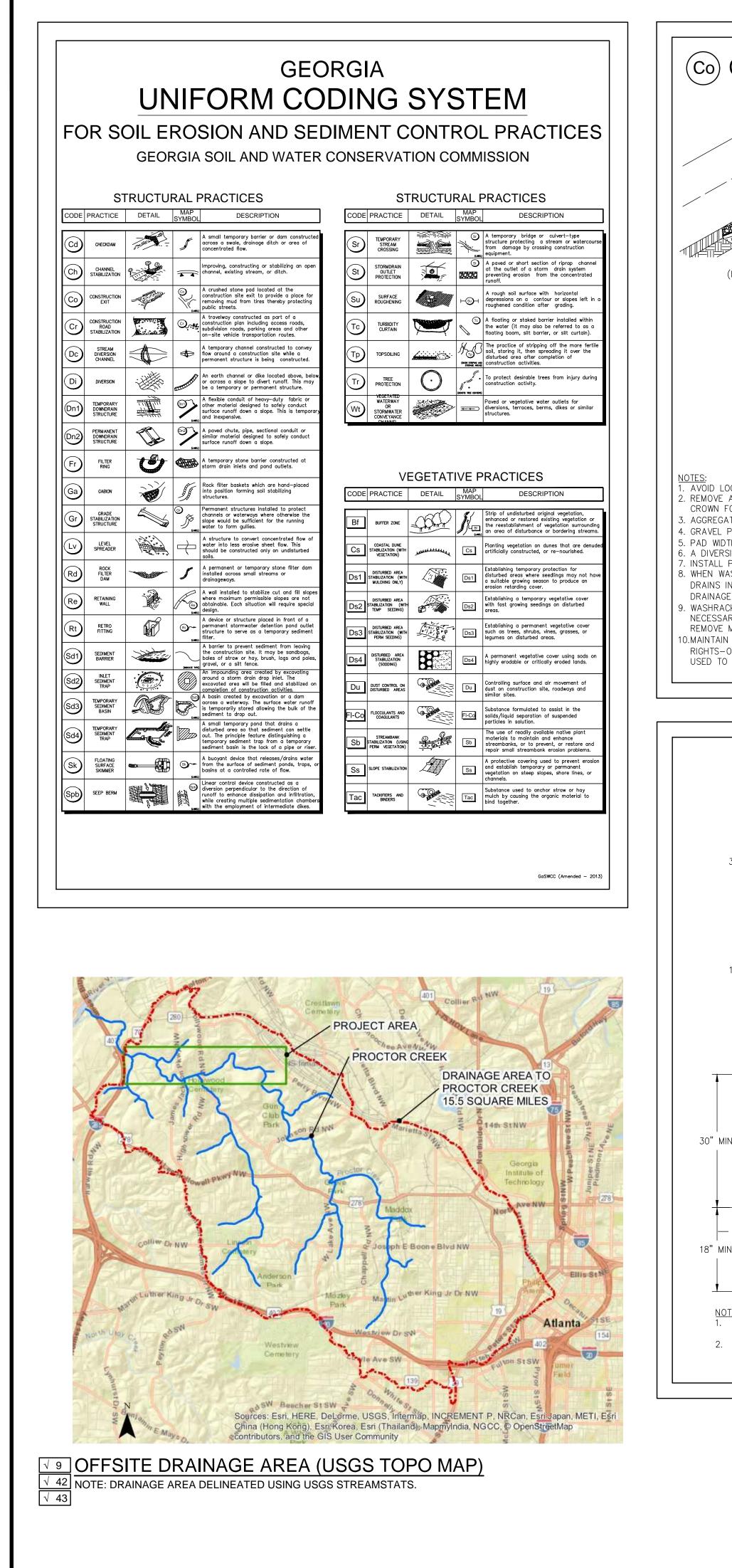
Area with Flood Risk due to Leveez

- - Coastal Transect

Digital Data Available No Digital Data Available

Unmapped

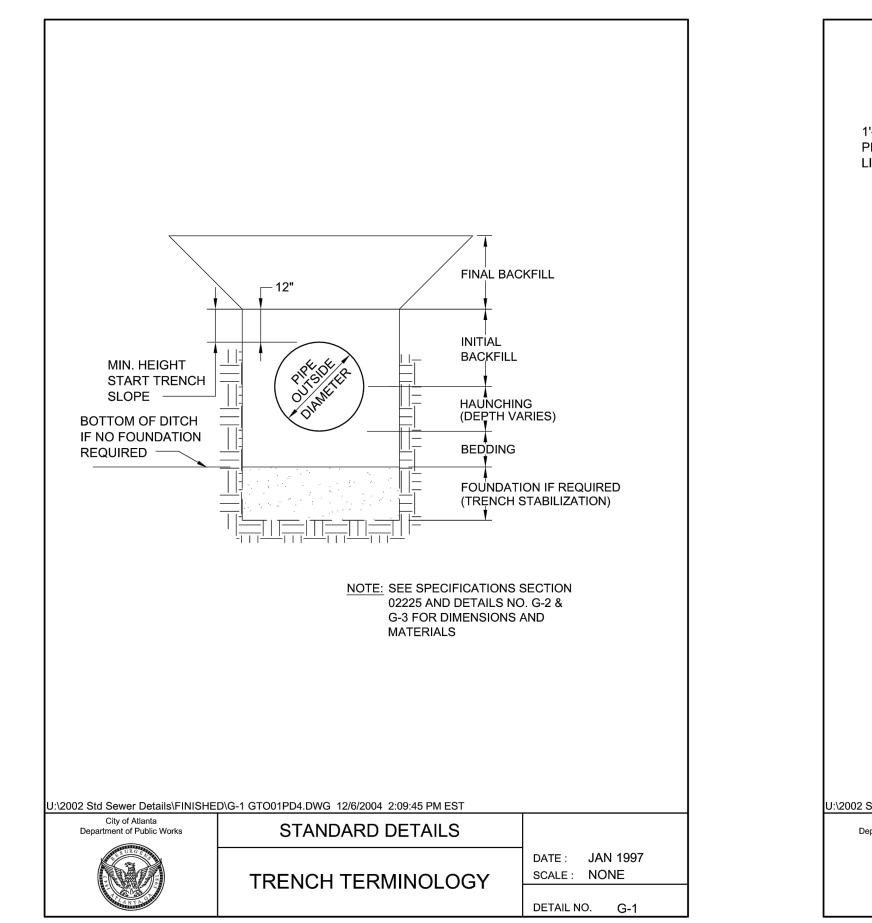
CITY OF ATLANTA REVISIONS DEPARTMENT OF WATERSHED MANAGEMENT NO. DATE DESCRIPTION OFFICE OF ENGINEERING SERVICES LOWER PROCTOR SEWER REPAIRS EROSION AND SEDIMENT CONTROL PLAN FIELD BOOKS DIST. COUNTY L.L. SCALE SURVEYOR NTS FULTON DATE CHECKED C HAMBLEN APPROVED BY DRAWN BY DESIGNED BY A KINSEY D CORBETT T KELLEY OCT 2018 SHEET PROJECT NUMBER: 674854 **SHEET:** C-305 **OF** 16

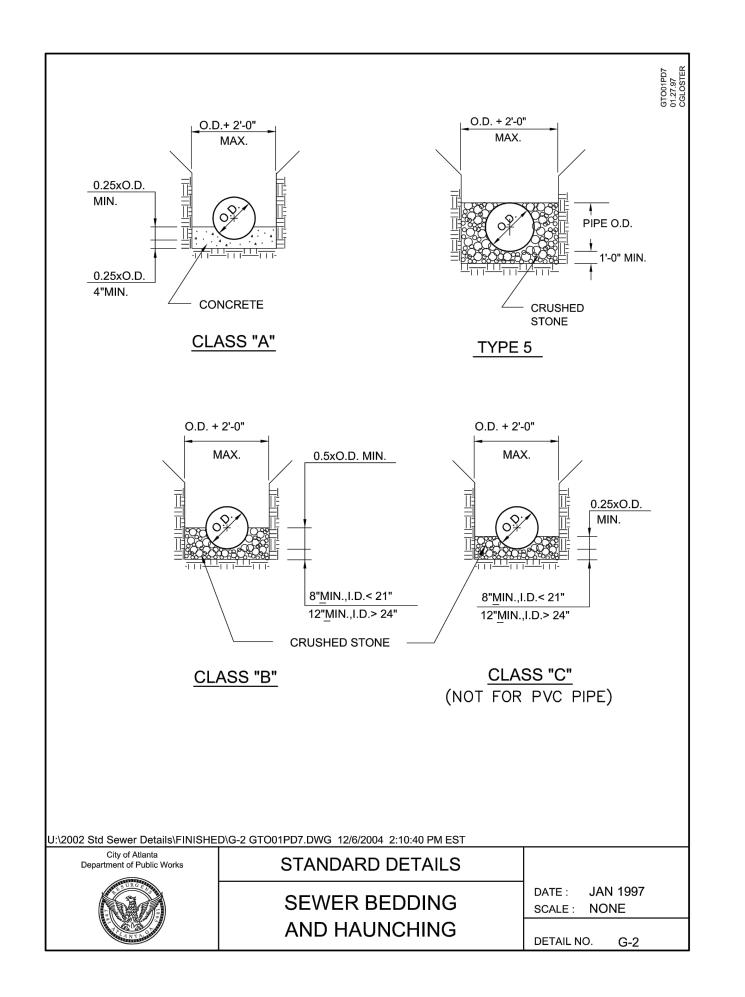


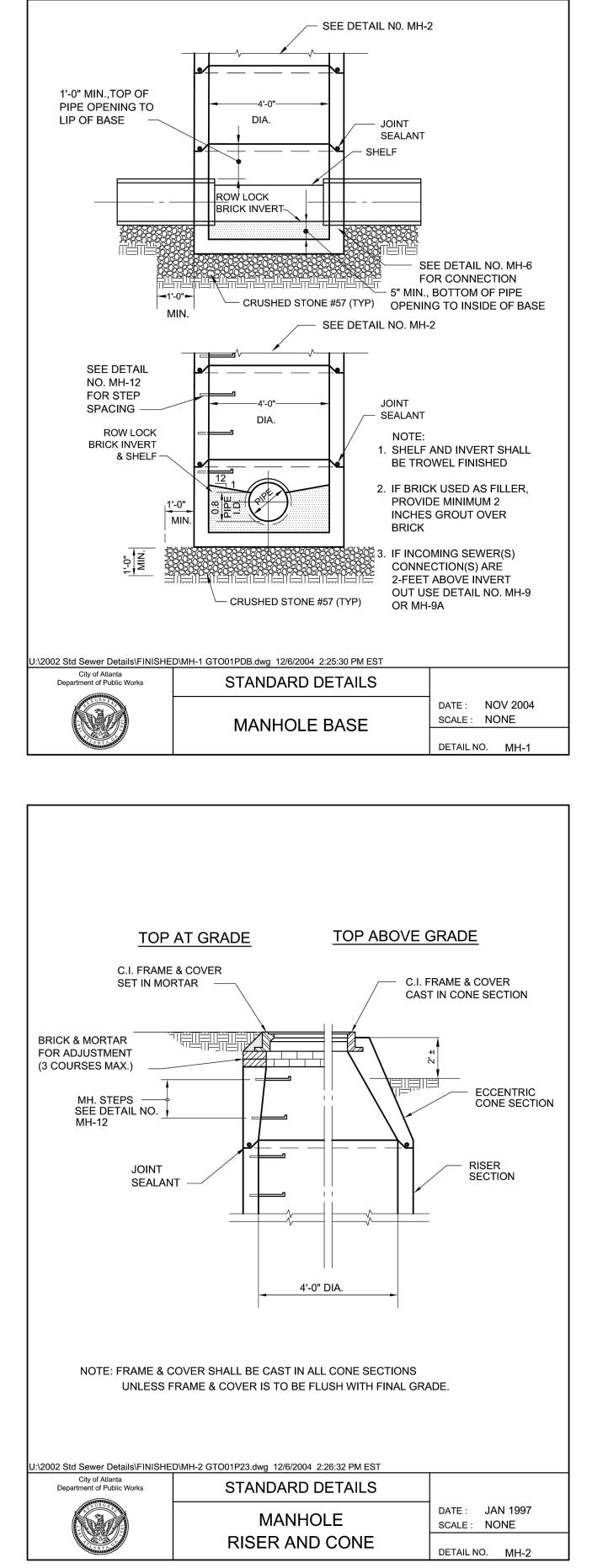
		EDIMENTATION & POI	LUTION CONTROL PLAN CHECKLI	ST	NONE	N/A	26 Description of the measures that will be installed	during the construction process to	control pollutants in storm	mwater that
	INF	RASTRUCTURE CONST			NONE		will occur after construction operations have be	• ·		
CRUSHED STONE CONSTRUCTION EXIT	SWCD: <u>Ful</u> Project Name: <u>Lower Proctor Creek Trunk Ser</u>	ton County - Region 1 wer Rehab. Add	ress: 72 Marietta Street NW, Atla	anta GA 30303	NONE		27 Description of the practices that will be used to r			
EXIT DIAGRAM	City/County: <u>Atlanta, GA</u>	Date	e on Plans: <u>August 2018</u>		C-305	γ	28 Description and chart or timeline of the intended the site (i.e., initial perimeter and sediment stora		-	
	Name & email of person filling out checkli Plan Included		ON ES&PC PLAN				activities, temporary and final stabilization).			
	Page # Y/N C-306 Y 1 The applicable Erd		ution Control Plan Checklist established by t	the Commission as of January 1	NONE NONE		29 Provide complete requirements of inspections a			
	of the year in whic	h the land-disturbing activity v	vas permitted.		NONE		30 Provide complete requirements of sampling free 31 Provide complete details for retention of records		esuis.	
FLOW			the ES&PC Plan or the Plan will not be rev nission, signature and seal of the certified de		NONE	N/A	32 Description of analytical methods to be used to	ollect and analyze the samples fro	m each location.*	
5_0		-	n each sheet pertaining to ES&PC Plan or t		NONE		33 Appendix B rationale for NTU values at all out			
FLOW			cal contact responsible for erosion, sedimer	ntation and pollution controls.	NONE	N/A	34 Delineate all sampling locations, perennial and discharged also provide a summary chart of the			
		address and phone number			NONE	N/A	35 A description of appropriate controls and measu			
(IF NEEDED)			end of the Infrastructure project. Give the L	atitude and Longitude in			sediment storage requirements and perimeter c BMPs. For construction sites where there will be			, and (3) final
	decimal degrees.						intermediate grading and drainage BMPs, and			MPs into a single
		an and the dates of any revis nature of construction activity.	ions made to the Plan including the entity w	no requested the revisions.	C-308, C-309	Y	phase.* 36 Graphic scale and North arrow.			
			rrounding areas. Include designation of sp	pecific phase, if necessary.	C-308, C-309	Y	37 Existing and proposed contour lines with contou		ordance with the following	g:
ENTRANCE ELEVATION			e all sensitive adjacent areas including strea	ams, lakes, residential areas,			Existing Contours USGS 1": 2000' Proposed Contours 1" : 400' Centerlin	opographical Sheets e Profile	-	
		nds, etc. which may be affecte al's certification statement and	d. signature that the site was visited prior to de	evelopment of the ES&PC	N/A	Ν	38 Use of alternative BMPs whose performance has		→ ent to or superior to conv	ventional BMPs
6" MIN.		bage 15 of the permit.					as certified by a Design Professional (unless dis Commission). Please refer to the Alternative Bl			ation
			signature that the permittee's ES&PC Plan p ing to meet permit requirements as stated or							
			ignature that the permittee's ES&PC Plan p		NONE	N/A	39 Use of alternative BMP for application to the Eq Erosion & Sediment Control in Georgia 2016 E		Appendix A-2 of the Manu	ualfor
DCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.		on page 26 of permit as appl			C-308, C-309	γ	40 Delineation of the applicable 25-foot or 50-foot			nal buffers
ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND OR POSITIVE DRAINAGE. TE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONE).		0	essional who prepared the ES&PC Plan is control BMPs, and sediment basins in acco		C-308, C-309	Y	required by the Local Issuing Authority. Clearly 41 Delineation of on-site wetlands and all State wa			
THE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5 -3.5 STONE). PAD SHALL HAVE A MINIMUM THICKNESS OF 6". TH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 20'.	within 7 days after	installation."*			C-306		42 Delineation and acreage of contributing drainag			
SION RIDGE SHOULD BE CONSTRUCTED WHEN GRADE TOWARD PAVED AREA IS GREATER THAN 2% PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES.			vities shall not be conducted within the 25 o egetation or within 25-feet of the coastal mar		C-306		43 Delineate on-site drainage and off-site watershe			
ASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT NTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN (DIVERT ALL SURFACE RUNOFF AND			t first acquiring the necessary variances an		C-305	Y	44 An estimate of the runoff coefficient or peak discl completed.	arge flow of the site prior to and a	fter construction activities a	are
E FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE). CKS AND/OR TIRE WASHERS MAY BE REQUIRED DEPENDING ON SCALE AND CIRCUMSTANCE. IF		-	nts and indicate whether a buffer variance i visions to the ES&PC Plan which have a sig		N/A	Ν	45 Storm-drain pipe and weir velocities with appro	priate outlet protection to accommo	date discharges without e	erosion.
RY, WASHRACK DESIGN MAY CONSIST OF ANY MATERIAL <u>SUITABLE</u> FOR TRUCK TRAFFIC THAT MUD AND DIRT.		ent must be certified by the de		,			Identify/Delineate all storm water discharge poir			
I AREA IN A WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES TRAP SEDIMENT.	NONE N/A 18 Clearly note the st section 404 permit		shall not be discharged to waters of the Stat	te, except as authorized by a	C-305 C-308, C-309		46 Soil series for the project site and their delineation 47 The limits of disturbance for each phase of constant			
IRAF SEDIMENT.	C-305 Y 19 Clearly note stater	nent that "The escape of sedir	nent from the site shall be prevented by the	installation of erosion and	C-305		48 Provide a minimum of 67 cubic yards of sedime		a temporary sediment bas	asin,
		easures and practices prior to					retrofitted detention pond, and/or excavated inle volume must be in place prior to and during all		-	-
			sures will be maintained at all times. If full in ol, additional erosion and sediment control i				achieved. A written justfication explaining the domust be included in the plan for each common of	•		
		ne sediment source."					justification as to why 67 cubic yards of storage	is not attainable must also be give	. Worksheets from the M	lanual must be
(Sd1-S) SILT FENCE - TYPE SENSITIVE	C-305 Y 21 Clearly note the st or temporary seed	·	eft exposed for a period greater than 14 da	ays shall be stabilized with mulch			included for structural BMPs and all calculations when using equivalent controls. When discharg			-
			water into an Impaired Stream Segment, o				utilize outlet structures that withdraw water from the surface are not feasable, a written justificatio	,		w water from
			n of an Biota Impaired Stream Segment mu g all the BMPs that will be used for those are		C-308, C-309	γ	49 Location of Best Management Practices that are			rosion and
	to the Impaired Str	-					Sediment Control in Georgia. Use uniform codi			
30" MIN. * FLOW			been finalized for the Impaired Stream Seg OI, the ES&PC Plan must address any site-		C-306, C-307	Y	50 Provide detailed drawings for all structural prac the Manual for Erosion and Sediment Control in	•	mum, meet the guidelines	s set tortn in
		ded in the TMDL Implementat			C-307	Υ	51 Provide vegetative plan, noting all temporary a seeding, fertilizer, lime and mulching rates. Veg			-
	NONE N/A 24 BMPs for concrete at the construction		mixer chutes, hoppers and the rear of the	venicies. Washoulor he drum			will take place and for the appropriate geograph	•	appropriate time of year	r that seeding
	C-305 Y 25 Provide BMPs for	the remediation of all petroleu	m spills and leaks.			اد	If using this checklist for a project that is less than 1	acre and not part of a common de	velopment	
18" MIN.						ł	out within 200 ft of a perennial stream the * checklist	items would be N/A.	Effective Janua	ary 1, 2018
FRONT VIEW										
◄ 4' MAX. O.C. ►	DISTURBED ARI	LAS								
	DEFINITION				•	IT IS AN E	THIS PRACTICE IS DESIGNED TO MERGENCY MEASURE WHICH SI	HOULD BE USED BEFC	RE WIND EROSI	ON STARTS.
	CONTROLLING SURFACE AND DEMOLITION SITES.	AIR MOVEMENT O	F DUST ON CONSTRUCTION	SITES, ROADS, AND			OWING ON WINDWARD SIDE OF PART, SPRING-TOOTHED HARRO			
FABRIC (WOVEN WIRE FENCE	CONDITIONS				•		NT WHICH MAY PRODUCE THE D DN. THIS IS GENERALLY DONE AS		ATMENT. SITE IS	S
* BACKING)	THIS PRACTICE IS APPLICABL	E TO AREAS SUB I			•		ED WITH WATER UNTIL THE SURF S. SOLID BOARD FENCES, SNOW			ALLS. BALES
	WHERE ON AND OFF-SITE DAI					OF HAY A	ND SIMILAR MATERIAL CAN BE U . BARRIERS PLACED AT RIGHT A	SED TO CONTROL AIF	CURRENTS AND	D SOIL
	METHOD AND MATERIALS				•	OF ABOU	T 15 TIMES THEIR HEIGHT ARE E CHLORIDE. APPLY AT RATE THA	FECTIVE IN CONTRO	LING WIND ERC	DSION.
6'' 6'' 6'' 1	A. TEMPORARY METHODS				•	RETREAT		I WILL REEF SURFAC		
v. X			3ED AREA STABILIZATION (V AD OF ASPHALT TO BIND ML	,	`		METHODS			
			ERS. RESINS SUCH AS CURA FACTURER'S RECOMMENDA		•	PERMANE	ENT VEGETATION: SEE STANDAR ENT VEGETATION). EXISTING TRE			`
	VEGETATIVE COVER. S TEMPORARY SEEDING		2 - DISTURBED AREA STABIL	LIZATION (WITH	•	TOPSOILI	ION IF LEFT IN PLACE. NG: THIS ENTAILS COVERING TH	E SURFACE WITH LES	S EROSIVE SOIL	MATERIAL.
T <u>ES:</u> USE STEEL OR WOOD POSTS OR AS SPECIFIED BY THE EROSION, SEDIMENTATION,	SPRAY-ON ADHESIVES	. THESE ARE USED	ON MINERAL SOILS (NOT E S. REFER TO STANDARD TB-		•		NDARD TP - TOPSOILING. OVER SURFACE WITH CRUSHED	STONE OR COARSE (GRAVEL. SEE ST	ANDARD
AND POLLUTION CONTROL PLAN. HEIGHT (*) IS TO BE SHOWN ON THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.	BINDERS.					CR-CONS	TRUCTION ROAD STABILIZATION			
		RO <u>H</u> &DFOX								
		A JOINT VENTURE		REVISIO	ONS		CITY	OF ATLANTA		
Georgia	a Soil and Water			NO. DATE D			EPARTMENT OF WA	ATERSHED M	IANAGEM	IENT
Conser	a Soil and Water vation Commission		ļ į			7	OFFICE OF ENG	INEERING SE	RVICES	
Christopher Hamble Level II Certified Design Profe			 				LOWER PROC	FOR SEWER	REPAIRS	
5	xpires: <u>08-21-2019</u>		†				EROSION AND SE			
Issued: <u>08-21-2015</u>			†			SUF	RVEYOR FIELD BOOKS	L.L. DIST.	COUNTY	SCALE
	Know wha	at's below.	1				WN BY DESIGNED BY DRBETT A KINSEY	CHECKED BY C HAMBLEN	APPROVED BY T KELLEY	DATE OCT 2018
		before you dig.	ENGINEER OF RECORD			PROJEC	T NUMBER: 674854	SHEET: C-306	10	SHEET OF 16

De1 DISTURBED AREA STABILIZATION MULCHING RATE		
Ds1 DISTORBED AREA STABILIZATION (WITH MULCHING ONLY) MULCHING RATE MULCHING RATE MULCHING RATE	Georgia Soil & Water Conservation Commission Manual for Erosion and Sediment Control in Georgia (amended 2014)	MULCHING 1. MULCH IS REQUIRED FOR ALL PERMANENT VEGETATION APPLICATIONS. MULCH APPLIED TO SEEDED AREAS SHALL
DEFINITION STRAW 2.0 TON/ACRE 2" - 4" HAY 2.5 TON/ACRE 2" - 4"	Table 6-4.1 - Plants, planting rates and planting dates for TEMPORARY COVER or COMPANION CROPS Major Land Resource Area (MLRA): Southern Piedmont (P), per Figure 6-4.1	ACHIEVE 75% SOIL COVER. SELECT THE MULCHING MATERIAL FROM THE FOLLOWING AND APPLY AS INDICATED: 2. DRY STRAW OR DRY HAY OF GOOD QUALITY AND FREE OF WEED SEEDS CAN BE USED. DRY STRAW SHALL BE APPLIED
APPLYING PLANT RESIDUES OR OTHER SUITABLE MATERIALS, PRODUCED WOOD WASTE: CHIPS, 2" - 3" ON THE SITE IF POSSIBLE, TO THE SOIL SURFACE. 2" - 3"	Broadcast Rates Planting Dates*	AT THE RATE OF 2 TONS PER ACRE. DRY HAY SHALL BE APPLIED AT A RATE OF 2 1/2 TONS PER ACRE. 3. WOOD CELLULOSE MULCH OR WOOD PULP FIBER SHALL BE USED WITH HYDRAULIC SEEDING. IT SHALL BE APPLIED AT
CONDITIONS SECURE W/ SOIL	per aere sq.ft.	THE RATE OF 500 POUNDS PER ACRE. DRYSTRAW OR DRY HAY SHALL BE APPLIED (AT THE RATE INDICATED ABOVE) AFTER HYDRAULIC SEEDING.
MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 14 DAYS OF DISTURBANCE. MULCH CAN BE USED	Lovegrass, weeping (Eragrosits curvula)	 ONE THOUSAND POUNDS OF WOOD CELLULOSE OR WOOD PULP FIBER, WHICH INCLUDES A TACKIFIER, SHALL BE USED WITH HYDRAULIC SEEDING ON SLOPES 3/4:1 OR STEEPER.
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.	alone 4 0.1 - X X - in mixtures 2 0.05 - X X -	 SERICEA LESPEDEZA HAY CONTAINING MATURE SEED SHALL BE APPLIED AT A RATE OF THREE TONS PER ACRE. PINE STRAW OR PINE BARK SHALL BE APPLIED AT A THICKNESS OF 3 INCHES FOR BEDDING PURPOSES. OTHER
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	Millet, browntop (Panicum faxciculatum) - X X - 137,000 seed per pound. Quick dense cover. Will provide too much competition in mixtures if seeded at	SUITABLE MATERIALS IN SUFFICIENT QUANTITY MAY BE USED WHERE ORNAMENTALS OR OTHER GROUND COVERS ARE PLANTED. THIS IS NOT APPROPRIATE FOR SEEDED AREAS.
GREATER THAN SIX MONTHS, PERMANENT VEGETATIVE TECHNIQUES SHALL BE EMPLOYED.	in mixtures 10 0.2 high rates. Millet, pearl (Pennesetum glaucum) 0 0 0	 WHEN USING TEMPORARY EROSION CONTROL BLANKETS OR BLOCK SOD, MULCH IS NOT REQUIRED. BITUMINOUS TREATED ROVING MAY BE APPLIED ON PLANTED AREAS ON SLOPES. IN DITCHES OR DRY WATERWAYS
SPECIFICATIONS	alone 50 1.1 - X X X - 88,000 seed per pound. Quick dense cover. May reach 5 feet in height. Not recommended for mixtures.	TO PREVENT EROSION. BITUMINOUS TREATED ROVING SHALL BE APPLIED WITHIN 24 HOURS AFTER AN AREA HAS BEEN PLANTED, APPLICATION RATES AND MATERIALS MUST MEET GEORGIA DEPARTMENT OF TRANSPORTATION
MULCHING WITHOUT SEEDING	Ryegrass, annual (Lolium temulentum) - - - - - X X X 227,000 seed per pound. Dense cover. Very competitive and is not used in mixtures.	SPECIFICATIONS. 9. WOOD CELLULOSE AND WOOD PULP FIBERS SHALL NOT CONTAIN GERMINATION OR GROWTH INHIBITING FACTORS.
THIS STANDARD APPLIES TO GRADES OR CLEARED AREAS WHERE SEEDINGS MAY NOT HAVE A SUITABLE GROWING SEASON TO PRODUCE AN EROSION RETARDANT COVER, BUT CAN BE STABILIZED WITH A MULCH COVER.	* 'X' are optimum dates; '-' are permissible but marginal dates	THEY SHALL BE EVENLY DISPERSED WHEN AGITATED IN WATER. THE FIBERS SHALL CONTAIN A DYE TO ALLOW VISUAL METERING AND AID IN UNIFORM APPLICATION DURING SEEDING.
SITE PREPARATION	DISTURBED AREA STABILIZATION	APPLYING MULCH
 GRADE TO PERMIT THE USE OF EQUIPMENT FOR APPLYING AND ANCHORING MULCH. INSTALL NEEDED EROSION CONTROL MEASURES AS REQUIRED SUCH AS DIKES, DIVERSIONS, BERMS, TERRACES AND SEDIMENT 	Ds3 DISTURBED AREA STABILIZATION (WITH PERMANENT SEEDING)	 STRAW OR HAY MULCH WILL BE SPREAD UNIFORMLY WITHIN 24 HOURS AFTER SEEDING AND/OR PLANTING. THE MULCH MAY BE SPREAD BY BLOWER-TYPE SPREADING EQUIPMENT, OTHER SPREADING EQUIPMENT OR BY HAND.
BARRIERS. 3. LOOSEN COMPACT SOIL TO A MINIMUM DEPTH OF 3 INCHES.	DEFINITION	MULCH SHALL BE APPLIED TO COVER 75% OF THE SOIL SURFACE. 2. WOOD CELLULOSE OR WOOD FIBER MULCH SHALL BE APPLIED UNIFORMLY WITH HYDRAULIC SEEDING EQUIPMENT.
	THE PLANTING OF PERENNIAL VEGETATION SUCH AS TREES, SHRUBS, VINES, GRASSES, OR LEGUMES ON EXPOSED AREAS F FINAL PERMANENT STABILIZATION. PERMANENT PERENNIAL VEGETATION SHALL BE USED TO ACHIEVE FINAL STABILIZATION.	FOR
SELECT ONE OF THE FOLLOWING MATERIALS AND APPLY AT THE DEPTH INDICATED: 1. DRY STRAW OR HAY SHALL BE APPLIED AT A DEPTH OF 2 TO 4 INCHES PROVIDING COMPLETE SOIL COVERAGE. ONE ADVANTAGE OF		 ANCHORING MOLOTH ANCHOR STRAW OR HAY MULCH IMMEDIATELY AFTER APPLICATION BY ONE OF THE FOLLOWING METHODS: EMULSIFIED ASPHALT CAN BE (A) SPRAYED UNIFORMLY ONTO THE MULCH AS IT IS EJECTED FROM THE BLOWER
THIS MATERIAL IS EASY APPLICATION. 2. WOOD WASTE (CHIPS, SAWDUST OR BARK) SHALL BE APPLIED AT A DEPTH OF 2 TO 3 INCHES. ORGANIC MATERIAL FROM THE	CONDITIONS	MACHINE OR (B) SPRAYED ON THE MULCH IMMEDIATELY FOLLOWING MULCH APPLICATION WHEN STRAW OR HAY IS SPREAD BY METHODS OTHER THAN SPECIAL BLOWER EQUIPMENT.
CLEARING STAGE OF DEVELOPMENT SHOULD REMAIN ON SITE, BE CHIPPED, AND APPLIED AS MULCH. THIS METHOD OF MULCHING CAN GREATLY REDUCE EROSION CONTROL COSTS.	PERMANENT PERENNIAL VEGETATION IS USED TO PROVIDE A PROTECTIVE COVER FOR EXPOSED AREAS INCLUDING CUTS, FILLS, DAMS, AND OTHER DENUDED AREAS.	3. THE COMBINATION OF ASPHALT EMULSION AND WATER SHALL CONSIST OF A HOMOGENEOUS MIXTURE
 CUTBACK ASPHALT (SLOW CURING) SHALL BE APPLIED AT 1200 GALLONS PER ACRE (OR 1/4 GALLON PER SQ.YD.). POLYETHYLENE FILM SHALL BE SECURED OVER BANKS OR STOCKPILED SOIL MATERIAL FOR TEMPORARY PROTECTION. THIS 	SPECIFICATIONS	SATISFACTORY FOR SPRAYING. THE MIXTURE SHALL CONSIST OF 100 GALLONS OF GRADE SS-1H OR CSS-1H EMULSIFIED ASPHALT AND 100 GALLONS OF WATER PER TON OF MULCH.
MATERIAL CAN BE SALVAGED AND REUSED.	GRADING AND SHAPING	 CARE SHALL BE TAKEN AT ALL TIMES TO PROTECT STATE WATERS, THE PUBLIC, ADJACENT PROPERTY, PAVEMENTS, CURBS, SIDEWALKS, AND ALL OTHER STRUCTURES FROM ASPHALT DISCOLORATION.
APPLYING MULCH WHEN MULCH IS USED WITHOUT SEEDING, MULCH SHALL BE APPLIED TO PROVIDE FULL COVERAGE OF THE EXPOSED AREA.	 GRADING AND SHAPING MAY NOT BE REQUIRED WHERE HYDRAULIC SEEDING AND FERTILIZING EQUIPMENT IS TO BE US VERTICAL BANKS SHALL BE SLOPED TO ENABLE PLANT ESTABLISHMENT. 	SPECIAL "PACKER DISK" OR DISK HARROW WITH THE DISKS SET STRAIGHT MAY BE USED. THE DISKS MAY BE SMOOTH
 DRY STRAW OR HAY MULCH AND WOOD CHIPS SHALL BE APPLIED UNIFORMLY BY HAND OR BY MECHANICALEQUIPMENT. IF THE AREA WILL EVENTUALLY BE COVERED WITH PERENNIAL VEGETATION, 20-30 POUNDS OF NITROGEN PER ACRE IN ADDITION TO 	WHEN CONVENTIONAL SEEDING AND FERTILIZING ARE TO BE DONE, GRADE AND SHAPE WHERE FEASIBLE AND PRACTIC SO THAT EQUIPMENT CAN BE USED SAFELY AND EFFICIENTLY DURING SEEDBED PREPARATION, SEEDING, MULCHING AN	DISKS SHALL BE DULL ENOUGH TO PRESS THE MULCH INTO THE GROUND WITHOUT CUTTING IT, LEAVING MUCH OF IT
THE NORMAL AMOUNT SHALL BE APPLIED TO OFFSET THE UPTAKE OF NITROGEN CAUSED BY THE DECOMPOSITION OF THE ORGANIC MULCHES.	MAINTENANCE OF THE VEGETATION. 3. CONCENTRATIONS OF WATER THAT WILL CAUSE EXCESSIVE SOIL EROSION SHALL BE DIVERTED TO A SAFE OUTLET.	IN AN ERECT POSITION. MULCH SHALL NOT BE PLOWED INTO THE SOIL. 6. SYNTHETIC TACKIFIERS OR BINDERS APPROVED BY GDOT SHALL BE APPLIED IN CONJUNCTION WITH OR IMMEDIATELY
 CUTBACK ASPHALT SHALL BE APPLIED UNIFORMLY. CARE SHOULD BE TAKEN IN AREAS OF PEDESTRIAN TRAFFIC DUE TO PROBLEMS OF 'TRACKING IN" OR DAMAGE TO SHOES, CLOTHING, ETC. 	DIVERSIONS AND OTHER TREATMENT PRACTICES SHALL CONFORM WITH THE APPROPRIATE STANDARDS AND SPECIFICATIONS.	AFTER THE MULCH IS SPREAD. SYNTHETIC TACKIFIERS SHALL BE MIXED AND APPLIED ACCORDING TO MANUFACTURER'S SPECIFICATIONS. REFER TO TB - TACKIFIERS AND BINDERS.
4. APPLY POLYETHYLENE FILM ON EXPOSED AREAS.	SEEDBED PREPARATION	 RYE OR WHEAT CAN BE INCLUDED WITH FALL AND WINTER PLANTINGS TO STABILIZE THE MULCH. THEY SHALL BE APPLIED AT A RATE OF ONE-QUARTER TO ONE HALF BUSHEL PER ACRE.
ANCHORING MULCH 1. STRAW OR HAY MULCH CAN BE PRESSED INTO THE SOIL WITH A DISK HARROW WITH THE DISK SET STRAIGHT OR WITH A	 SEEDBED PREPARATION MAY NOT BE REQUIRED WHERE HYDRAULIC SEEDING AND FERTILIZING EQUIPMENT IS TO BE USE WHEN CONVENTIONAL SEEDING IS TO BE USED, SEEDBED PREPARATION WILL BE DONE AS FOLLOWS: 	SED. 8. PLASTIC MESH OR NETTING WITH MESH NO LARGER THAN ONE INCH BY ONE INCH MAY BE NEEDED TO ANCHOR STRAW OR HAY MULCH ON UNSTABLE SOILS AND CONCENTRATED FLOW AREAS. THESE MATERIALS SHALL BE
SPECIAL "PACKER DISK." DISKS MAY BE SMOOTH OR SERRATED AND SHOULD BE 20 INCHES OR MORE IN DIAMETER AND 8 TO 12 INCHES APART. THE EDGES OF THE DISK SHOULD BE DULL ENOUGH NOT TO CUT THE MULCH BUT TO PRESS IT INTO THE	BROADCAST PLANTINGS	INSTALLED AND ANCHORED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
SOIL LEAVING MUCH OF IT IN AN ERECT POSITION. STRAW OR HAY MULCH SHALL BE ANCHORED IMMEDIATELY AFTER APPLICATION. STRAW OR HAY MULCH SPREAD WITH SPECIAL BLOWER-TYPE EQUIPMENT MAY BE ANCHORED WITH EMULSIFIED ASPHALT (GRADE	1. TILLAGE AT A MINIMUM, SHALL ADEQUATELY LOOSEN THE SOIL TO A DEPTH OF 4 TO 6 INCHES; ALLEVIATE COMPACTION; INCORPORATE LIME AND FERTILIZER; SMOOTH AND FIRM THE SOIL; ALLOW FOR THE PROPER PLACEMENT OF SEED,	; IRRIGATION • IRRIGATION SHALL BE APPLIED AT A RATE THAT WILL NOT CAUSE RUNOFF.
AE-5 OR SS-1). THE ASPHALT EMULSION SHALL BE SPRAYED ONTO THE MULCH AS IT IS EJECTED FROM THE MACHINE. USE 100 GALLONS OF EMULSIFIED ASPHALT AND 100 GALLONS OF WATER PER TON OF MULCH. TACKIFERS AND BINDERS CAN BE	SPRIGS, OR PLANTS; AND ALLOW FOR THE ANCHORING OF STRAW OR HAY MULCH IF A DISK IS TO BE USED. 2. TILLAGE MAY BE DONE WITH ANY SUITABLE EQUIPMENT.	
SUBSTITUTED FOR EMULSIFIED ASPHALT AND 100 GALLONS OF WATER FER TON OF MOLON. TACKIFERS AND BINDERS CAN BE SUBSTITUTED FOR EMULSIFIED ASPHALT. PLEASE REFER TO SPECIFICATION TB -TACKIFERS AND BINDERS. PLASTIC MESH OR NETTING WITH MESH NO LARGER THAN ONE INCH BY ONE INCH SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S	 TILLAGE SHOULD BE DONE ON THE CONTOUR WHERE FEASIBLE. ON SLOPES TOO STEEP FOR THE SAFE OPERATION OF TILLAGE EQUIPMENT, THE SOIL SURFACE SHALL BE PITTED OR 	Lime Application for PERMANENT COVER - DS3 Agricultural lime is required at the rate of one to two tons per acre unless soil tests indicate
SPECIFICATIONS.	TRENCHED ACROSS THE SLOPE WITH APPROPRIATE HAND TOOLS TO PROVIDE TWO PLACES 6 TO 8 INCHES APART IN WHICH SEED MAY LODGE AND GERMINATE. HYDRAULIC SEEDING MAY ALSO BE USED.	otherwise.
 NETTING OF THE APPROPRIATE SIZE SHALL BE USED TO ANCHOR WOOD WASTE. OPENINGS OF THE NETTING SHALL NOT BE LARGER THAN THE AVERAGE SIZE OF THE WOOD WASTE CHIPS. POLYETHYLENE FILM SHALL BE ANCHOR TRENCHED AT THE TOP AS WELL AS INCREMENTALLY AS NECESSARY. 		Georgia Soil & Water Conservation Commission
	 WHERE INDIVIDUAL PLANTS ARE TO BE SET, THE SOIL SHALL BE PREPARED BY EXCAVATING HOLES, OPENING FURROWS OR DIBBLE PLANTING. 	Manual for Erosion and Sediment Control in Georgia (amended 2000) Table 6-5.2 - Plants, planting rates and planting dates for PERMANENT COVER
Ds2 DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)	 FOR NURSERY STOCK PLANTS, HOLES SHALL BE LARGE ENOUGH TO ACCOMMODATE ROOTS WITHOUT CROWDING. WHERE PINE SEEDLINGS ARE TO BE PLANTED, SUBSOIL UNDER THE ROW 36 INCHES DEEP ON THE CONTOUR FOUR TO S 	Major Land Resource Area (MLRA): Southern Piedmont (P), per Figure 6-4.1 Broadcast Rates Planting Dates*
DEFINITION	MONTHS PRIOR TO PLANTING. SUBSOILING SHOULD BE DONE WHEN THE SOIL IS DRY, PREFERABLY IN AUGUST OR SEPTEMBER.	$\begin{array}{c c c c c c c c c c c c c c c c c c c $
THE ESTABLISHMENT OF TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDINGS FOR SEASONAL PROTECTION ON	PLANTING	Bermuda, common (Cynodon dactylon) - Hulled - X X - Interview Interview
DISTURBED OR DENUDED AREAS.	1. HYDRAULIC SEEDING MIX THE SEED (INNOCULATED IF NEEDED), FERTILIZER, AND WOOD CELLULOSE OR WOOD PULP FIBER MULCH WIT	with other perennials 6 0.1 6 6 6 6 6 6 7 <th7< th=""> 7 <th7< th=""> <th7< th=""> 7 <th7< th=""></th7<></th7<></th7<></th7<>
CONDITIONS	WATER AND APPLY IN A SLURRY UNIFORMLY OVER THE AREA TO BE TREATED. APPLY WITHIN ONE HOUR AFTER TI MIXTURE IS MADE.	with other perennials 6 0.1 Plant with Tall fescue. Fescue, tall (festuca arundinacea) 227,000 seed per pound. Use alone only on better sites. Not for droughty soils. Mix
TEMPORARY GRASSING, INSTEAD OF MULCH, CAN BE APPLIED TO ROUGH GRADED AREAS THAT WILL BE EXPOSED FOR LESS THAN SIX MONTHS. TEMPORARY VEGETATIVE MEASURES SHOULD BE COORDINATED WITH PERMANENT MEASURES TO ASSURE ECONOMICAL	2. CONVENTIONAL SEEDING SEEDING WILL BE DONE ON A FRESHLY PREPARED AND FIRMED SEEDBED. FOR BROADCAST PLANTING. USE A	alone 50 1.1 with other perennials 30 0.7 Lovegrass, weeping (Eragrosits curvula) - -
AND EFFECTIVE STABILIZATION. MOST TYPES OF TEMPORARY VEGETATION ARE IDEAL TO USE AS COMPANION CROPS UNTIL THE PERMANENT VEGETATION IS ESTABLISHED.	CULTIPACKER SEEDER, DRILL, ROTARY SEEDER, OTHER MECHANICAL SEEDER, OR HAND SEEDING TO DISTRIBUTE	alone 4 0.1 - X X - 1,500,000 seed per pound. May last for several years. Grows well with Sericea in mixtures 2 0.05 - X X - 1espedeza on road banks.
SPECIFICATIONS	THE SEED UNIFORMLY OVER THE AREA TO BE TREATED. COVER THE SEED LIGHTLY WITH 1/8 TO 1/4 INCH OF SOIL SMALL SEED AND 1/2 TO 1 INCH FOR LARGE SEED WHEN USING A CULTIPACKER OR OTHER SUITABLE EQUIPMENT.	FOR * 'X' are optimum dates; '-' are permissible but marginal dates
GRADING AND SHAPING	3. NO-TILL SEEDING NO-TILL SEEDING IS PERMISSIBLE INTO ANNUAL COVER CROPS WHEN PLANTING IS DONE FOLLOWING MATURITY O	
EXCESSIVE WATER RUN-OFF SHALL BE REDUCED BY PROPERLY DESIGNED AND INSTALLED EROSION CONTROL PRACTICES SUCH AS	THE COVER CROP OR IF THE TEMPORARY COVER STAND IS SPARSE ENOUGH TO ALLOW ADEQUATE GROWTH OF PERMANENT (PERENNIAL) SPECIES. NO-TILL SEEDING SHALL BE DONE WITH APPROPRIATE NO-TILL SEEDING	
CLOSED DRAINS, DITCHES, DIKES, DIVERSIONS, SEDIMENT BARRIERS AND OTHERS.	EQUIPMENT. THE SEED MUST BE UNIFORMLY DISTRIBUTED AND PLANTED AT THE PROPER DEPTH. 4. INDIVIDUAL PLANTS	
NO SHAPING OR GRADING IS REQUIRED IF SLOPES CAN BE STABILIZED BY HAND-SEEDED VEGETATION OR IF HYDRAULIC SEEDING EQUIPMENT IS TO BE USED.	SHRUBS, VINES AND SPRIGS MAY BE PLANTED WITH APPROPRIATE PLANTERS OR HAND TOOLS. PINE TREES SHAL BE PLANTED MANUALLY IN THE SUBSOIL FURROW. EACH PLANT SHALL BE SET IN A MANNER THAT WILL AVOID	
SEEDBED PREPARATION	CROWDING THE ROOTS. NURSERY STOCK PLANTS SHALL BE PLANTED AT THE SAME DEPTH OR SLIGHTLY DEEPER THAN THEY GREW AT THE NURSERY. THE TIPS OF VINES AND SPRIGS MUST BE AT OR SLIGHTLY ABOVE THE GROU	IND
WHEN A HYDRAULIC SEEDER IS USED, SEEDBED PREPARATION IS NOT REQUIRED. WHEN USING CONVENTIONAL OR HANDSEEDING,	SURFACE. WHERE INDIVIDUAL HOLES ARE DUG, FERTILIZER SHALL BE PLACED IN THE BOTTOM OF THE HOLE, TWO INCHES OF SOIL SHALL BE ADDED AND THE PLANT SHALL BE SET IN THE HOLE.	
SEEDBED PREPARATION IS NOT REQUIRED IF THE SOIL MATERIAL IS LOOSE AND NOT SEALED BY RAINFALL.		
WHEN SOIL HAS BEEN SEALED BY RAINFALL OR CONSISTS OF SMOOTH CUT SLOPES, THE SOIL SHALL BE PITTED, TRENCHED OR OTHERWISE SCARIFIED TO PROVIDE A PLACE FOR SEED TO LODGE AND GERMINATE.		
LIME AND FERTILIZER		
AGRICULTURAL LIME IS REQUIRED UNLESS SOIL TESTS INDICATE OTHERWISE. APPLY AGRICULTURAL LIME AT A RATE OF ONE TON PER		
ACRE. GRADED AREAS REQUIRE LIME APPLICATION. SOILS CAN BE TESTED TO DETERMINE IF FERTILIZER IS NEEDED. ON REASONABLY FERTILE SOILS OR SOIL MATERIAL, FERTILIZER IS NOT REQUIRED. FOR SOILS WITH VERY LOW FERTILITY, 500 TO 700 POUNDS OF		
10-10-10 FERTILIZER OR THE EQUIVALENT PER ACRE (12-16 LBS./1,000 SQ. FT.) SHALL BE APPLIED. FERTILIZER SHOULD BE APPLIED BEFORE LAND PREPARATION AND INCORPORATED WITH A DISK, RIPPER OR CHISEL.		
SEEDING		
SELECT A GRASS OR GRASS-LEGUME MIXTURE SUITABLE TO THE AREA AND SEASON OF THE YEAR. SEED SHALL BE APPLIED	ch2m. ROH&DFOX	
UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDRAULIC SEEDER (SLURRY INCLUDING SEED AND FERTILIZER). DRILL OR CULTIPACKER SEEDERS SHOULD NORMALLY PLACE SEED ONE-QUARTER TO ONE-HALF INCH	A JOINT VENTURE	REVISIONS CITY OF ATLANTA
DEEP. APPROPRIATE DEPTH OF PLANTING IS TEN TIMES THE SEED DIAMETER. SOIL SHOULD BE "RAKED" LIGHTLY TO COVER SEED WITH SOIL IF SEEDED BY HAND.	GSWCC Georgia Soil and Water Conservation Commission	NO. DATE DESCRIPTION DEPARTMENT OF WATERSHED MANAGEMENT
MULCHING		OFFICE OF ENGINEERING SERVICES
TEMPORARY VEGETATION CAN, IN MOST CASES, BE ESTABLISHED WITHOUT THE USE OF MULCH. MULCH WITHOUT SEEDING SHOULD BE	Christopher Hamblen Level II Certified Design Professional	LOWER PROCTOR SEWER REPAIRS
		EROSION AND SEDIMENT CONTROL PLAN
CONSIDERED FOR SHORT TERM PROTECTION. REFER TO DS1 - DISTURBED AREA STABILIZATION (WITH MULCHING ONLY).	Certification Number: 0000069253 Expires: 08-21-2019	
CONSIDERED FOR SHORT TERM PROTECTION. REFER TO DS1 - DISTURBED AREA STABILIZATION (WITH MULCHING ONLY).	Level II Certified Design Professional Certification Number: 0000069253 Expires: 08-21-2019 Issued: 08-21-2015	SURVEYOR FIELD BOOKS L.L. DIST. COUNTY SCALE
	Certification Number: 0000069253 Expires: 08-21-2019 Issued: 08-21-2015 Know what's below. Call before you dig.	SURVEYOR FIELD BOOKS L.L. DIST. COUNTY SCALE D DRAWN BY DESIGNED BY CHECKED BY APPROVED BY DATE D D CORBETT A KINSEY CHAMBLEN T KELLEY OCT 2018

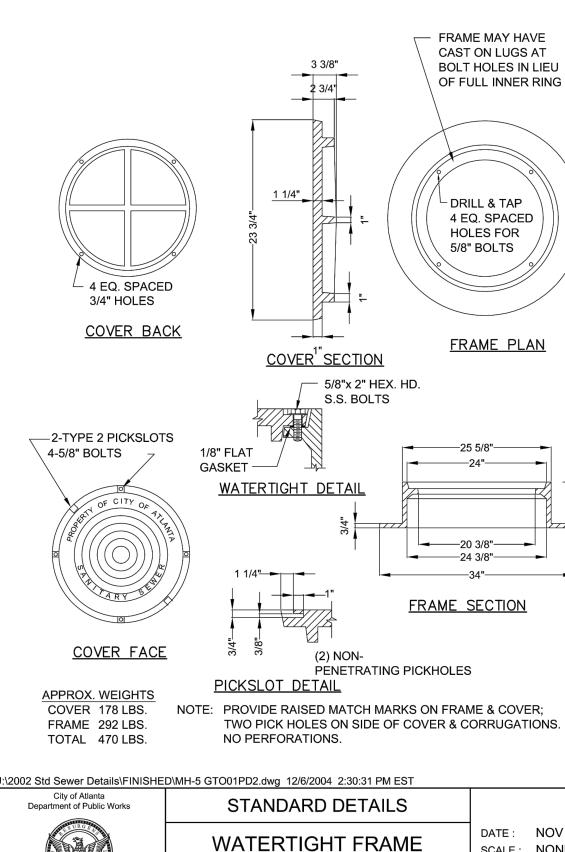
Caomio Soil & Watar Cons	ownetion	Commissi													
Georgia Soil & Water Cons Manual for Erosion and Sedimer				and	- d - C	200	0)								
								тz		ED					
Table 6-5.2 - Plants, planting rat		<u> </u>								EK					
Major Land Resource Area (MI	RA): South	iern Piedm	ont	· (P), p	er F	ngui	re 6	-4.1						
	Broadca	nst Rates]	Plar	nting	g Dat	tes*					
		per 1000													
	per acre	sq.ft.													
Species	(lbs.)	(lbs.)	J	F	M	Α	M	J	J	Α	S	0	Ν	D	Remarks
Bermuda, common (Cynodon dact	ylon) - Hull	led													
alone	10	0.2			-	X	X	-							1,787,000 see per pound. Quick cover. Low growing and sod forming. Full sun. Goo
with other perennials	6	0.1													for athletic fields.
Bermuda, common (Cynodon dact	, ylon) - Unh	ulled													
alone	10	0.2	X	X								Х	X	X	Plant with winter annuals.
with other perennials	6	0.1													Plant with Tall fescue.
Fescue, tall (festuca arundinacea)															227,000 seed per pound. Use alone only on better sites. Not for droughty soils. Mix
alone	50	1.1								-	Х	Х			with perennial lespedezas or Crownvetch. Apply topdressing in spring following fall
with other perennials	30	0.7													plantings. Not for heavy use areas or athletic fields.
Lovegrass, weeping (Eragrosits cu	rvula)	•													
alone	4	0.1			-	X	X	-							1,500,000 seed per pound. May last for several years. Grows well with Sericea
in mistaros	2	0.05		1	1	1	1	1						1	los podozo op road borks

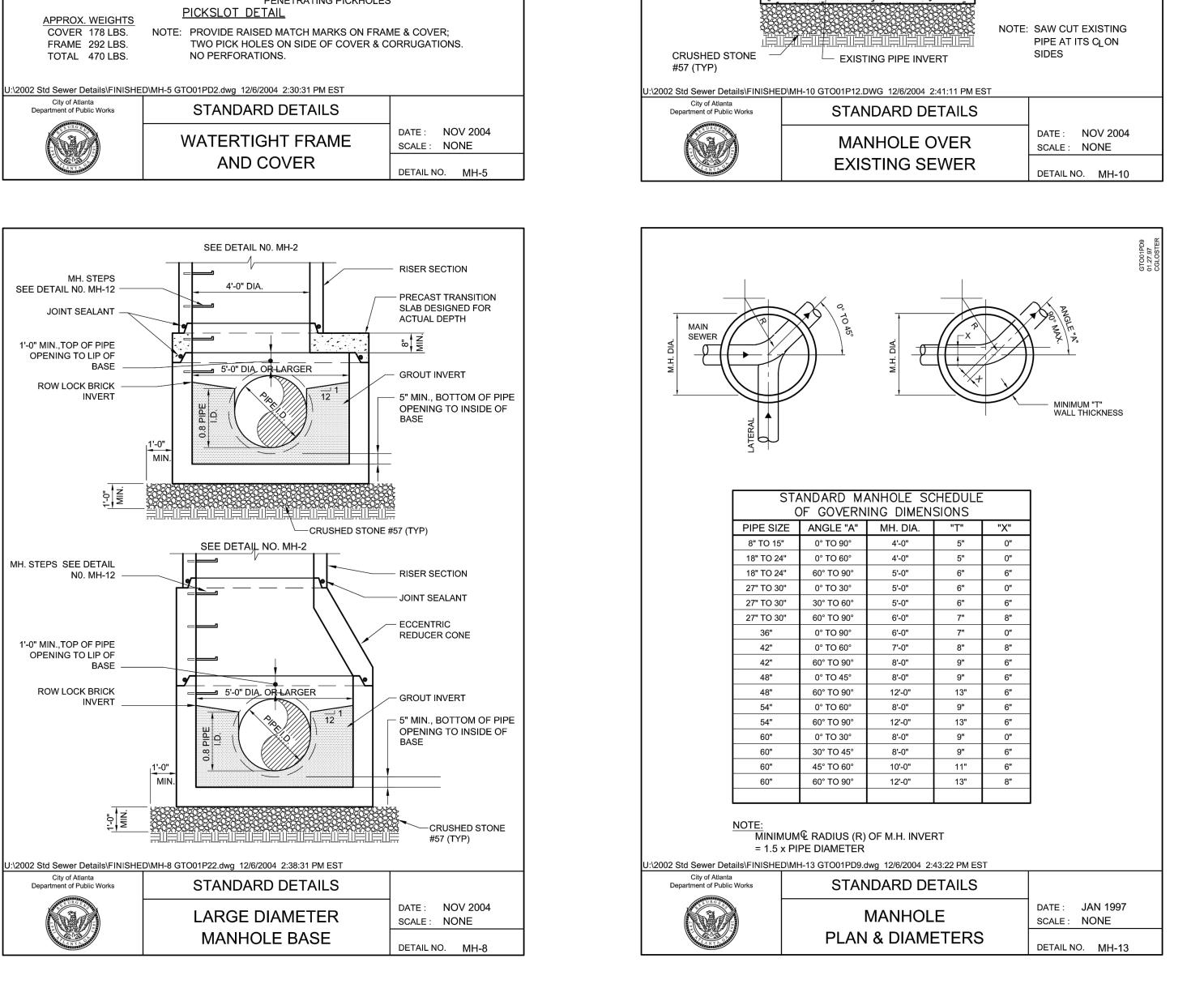






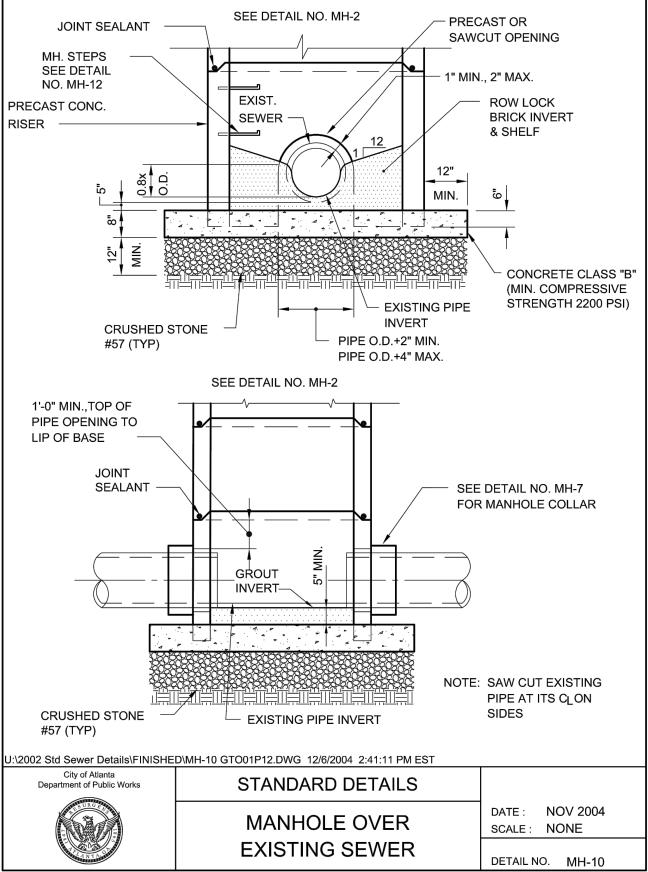
ISHE	D/MIH-2 GT001P23.dwg 12/0/2004 2.20.32 PM EST	
	STANDARD DETAILS	
	MANHOLE	DATE : JAN 1997 SCALE : NONE
	RISER AND CONE	DETAIL NO. MH-2

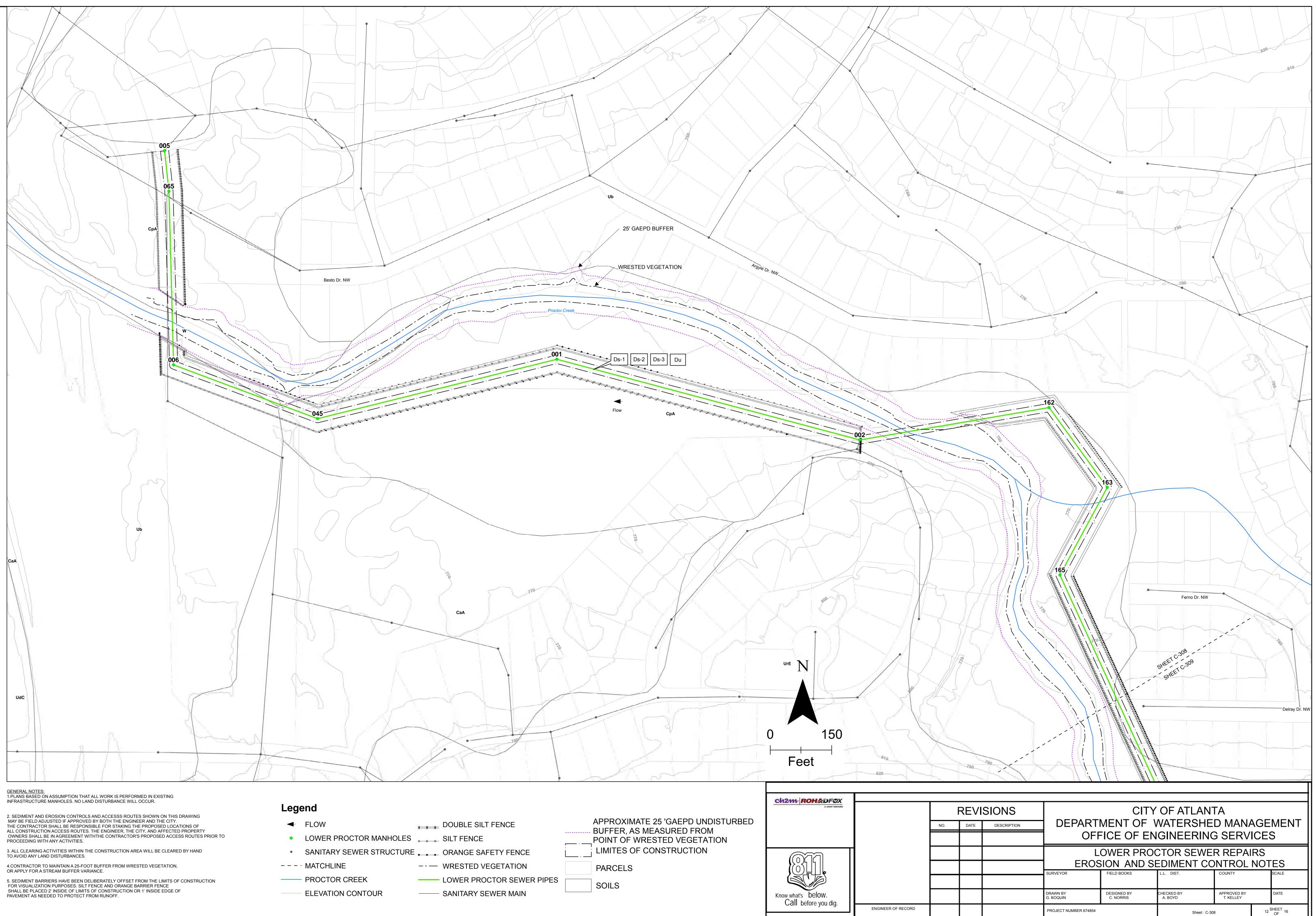




ch2m: ROH&DFOX Know what's **below.** ENGINEER OF RECO

		REVI	SIONS	CITY OF ATLANTA										
	NO.	DATE	DESCRIPTION		DEPARTMENT OF WATERSHED MANAGEMENT									
				OFFI	OFFICE OF ENGINEERING SERVICES									
				LOWER PROCTOR SEWER REPAIRS										
				r	S	STANE	DARD [DETAI	LS					
				SURVEYOR	FIELD	BOOKS	L.L.	DIST.	COUN	ΓY	SCALE			
				DRAWN BY D CORBETT	DESIGNED C NO		Checked A E	by Boyd	APPROVED	BY Y	DATE OCT 2018			
CORD				PROJECT NUMBER: 674	SHEET: C-312 1				IEET F 16					





		OFFICE OF ENGINEERING SERVICES												
			LOWER PROCTOR SEWER REPAIRS EROSION AND SEDIMENT CONTROL NOTES											
		EROS	SION AND SE	DIMENT CO	NIROL	NOT	ES							
		SURVEYOR	FIELD BOOKS	L.L. DIST.	COUNTY		SCALE							
		DRAWN BY G. BOQUIN	DESIGNED BY C. NORRIS	CHECKED BY A. BOYD	APPROVED BY T. KELLEY		DATE							
CORD		PROJECT NUMBER 674854		Sheet : C-308	OF 16									

