



**CLEARING AND GRADING**

- ALL WORK TO BE DONE IN ACCORDANCE WITH THE GEORGIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR THE CONSTRUCTION OF TRANSPORTATION (GDOT) SYSTEMS, CURRENT EDITION, AND SUPPLEMENTS THERETO, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION.
- ALL KNOWN UTILITY FACILITIES ARE SHOWN SCHEMATICALLY ON PLANS AND ARE NOT NECESSARILY ACCURATE IN LOCATION AS TO PLAN OR ELEVATION. UTILITY FACILITIES SUCH AS SERVICE LINES OR UNKNOWN FACILITIES NOT SHOWN ON PLANS WILL NOT RELIEVE THE CONTRACTOR OF HIS OR HER RESPONSIBILITY UNDER THIS REQUIREMENT. "EXISTING UTILITY FACILITIES" MEANS ANY UTILITY THAT EXISTS ON THE PROJECT IN ITS ORIGINAL, RELOCATED OR NEWLY INSTALLED POSITION. ALL SPECIFIC ITEMS IN THE DETAILED ESTIMATE ARE TO BE REMOVED OR RELOCATED TO CLEAR CONSTRUCTION IN ADVANCE OF THE WORK. DISRUPTION TO SERVICES OUTSIDE THE HOURS OF 9:00 AM AND 4:00 PM REQUIRE PRIOR APPROVAL BY THE CITY OF SANDY SPRINGS.
- UTILITY WORK COORDINATION WILL BE REQUIRED AS PART OF THIS CONTRACT. THE CONTRACTOR WILL BE REQUIRED TO USE THE ONE-CALL CENTER TELEPHONE NUMBER 811, FOR THE PURPOSE OF COORDINATING THE MARKING OF UNDERGROUND UTILITIES. THE CONTRACTOR'S ATTENTION IS CALL TO SUBSECTION 105.06 OF THE GDOT STANDARD SPECIFICATIONS "COOPERATION WITH UTILITIES."
- THE FOLLOWING UTILITIES HAVE FACILITIES IN THE PROJECT AREA:

ATLANTA GAS LIGHT (SOUTHERN COMPANY GAS)  
CONTACT: GINNNY MAULDIN-KINNEY (404) 584-3176

FULTON COUNTY WATER AND SEWER SEWER  
CONTACT: ABDUL AKBAR (404) 612-7518

GEORGIA POWER COMPANY  
CONTACT: LAMONTE WASLIEN (404) 947-0729

AT&T  
CONTACT: TIMOTHY MCCOY (770) 331-8689

- THE TOTAL EARTHWORKS QUANTITY SHOWN ON THE PLANS FOR CLEARING AND GRUBBING IS FOR INFORMATION ONLY. THE CITY OF SANDY SPRINGS PUBLIC WORKS DEPARTMENT ASSUMES NO RESPONSIBILITY FOR ITS ACCURACY. THE CONTRACTOR SHALL INCLUDE GRADING WORK AS PART OF THE BID PRICE FOR GRADING COMPLETE AND IT SHALL BE HIS OR HER RESPONSIBILITY TO DETERMINE THE ACTUAL EARTHWORK QUANTITY TO BE GRADED. NO CLAIMS WILL BE CONSIDERED FOR EXTRA COMPENSATION IF THE CONTRACTOR RELIES ON THE QUANTITY SHOWN ON THE PLANS. CLEARING AND GRUBBING ON THIS PROJECT IS LIMITED TO THE ACTUAL CONSTRUCTION LIMITS UNLESS DIRECTED BY THE ENGINEER. COST FOR CLEARING AND GRUBBING SHALL BE INCLUDED IN THE BID PRICE FOR GRADING COMPLETE.
- THE CONTRACTOR SHALL STRICTLY ADHERE TO DUST CONTROL REGULATIONS. ALL AREAS SUBJECT TO DUST FORMATION MUST BE PERIODICALLY WATERED SUFFICIENT TO RETARD DUST. NO SEPARATE PAYMENT WILL BE MADE FOR ANY COST INCURRED TO COMPLY WITH THIS REQUIREMENT.
- THE TOTAL AREA SHOWN ON THE PLANS FOR GRASSING IS FOR INFORMATION ONLY. THE CITY OF SANDY SPRINGS ASSUMES NO RESPONSIBILITY FOR ITS ACCURACY. THE CONTRACTOR SHALL INCLUDE IN THE BID PRICE FOR GRASSING, AND IT SHALL BE HIS RESPONSIBILITY TO DETERMINE THE ACTUAL AREA TO BE GRASSED. NO CLAIMS WILL BE CONSIDERED FOR COMPENSATION IF THE CONTRACTOR RELIES ON THE AREA SHOWN ON THE PLANS.
- THE TYPE OF GRASS OR SOD USED ON THIS PROJECT WILL BE REQUIRED TO MATCH ANY TYPE OF GRASS OR SOD WHICH MAY BE PLANTED AND GROWING ON THE ADJACENT LAW. I.E. BERMUDA SOD FOR BERMUDA SOD, ZOYSIA FOR ZOYSIA, ETC. NO SEPARATE PAYMENT SHALL BE MADE FOR ANY COST INCURRED TO COMPLY WITH THIS REQUIREMENT.
- INGRESS AND EGRESS SHALL BE MAINTAINED AT ALL TIMES TO ADJACENT PROPERTIES. REFER TO SUB-SECTION 107.07 OF THE GDOT STANDARD SPECIFICATIONS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FURNISH SUITABLE BORROW MATERIAL FOR THE PROJECT AND DISPOSE OF ANY UNSUITABLE OR WASTE MATERIAL.
- HORIZONTAL CONTROL IS BASED UPON GEORGIA STATE PLANE COORDINATE SYSTEM.
- IN THE EVENT A DRIVEWAY IS DAMAGED DUE TO CONSTRUCTION, THE DRIVEWAY SHALL BE REPLACED, IN KIND, I.E. ASPHALT FOR ASPHALT, CONCRETE FOR CONCRETE, AND BRICK PAVERS FOR BRICK PAVERS. EXCEPT EARTH AND GRAVEL DRIVEWAYS SHALL BE REPLACED WITH ASPHALT TO THE CONSTRUCTION LIMITS. DRIVEWAYS CONTAINING BRICK PAVERS SHALL BE CONSTRUCTED USING GDOT SPECIFICATIONS. THE DRIVEWAY LOCATIONS INDICATED ON THE PLANS ARE FROM THE BEST AVAILABLE DATA. THE CONTRACTOR SHALL CONSTRUCT NEW DRIVEWAYS TO MATCH ACTUAL FIELD LOCATIONS OF EXISTING DRIVEWAYS WHERE THEY ARE NOT IN CONFLICT WITH RULES AND REGULATIONS. THE CONTRACTOR SHALL OBTAIN THE APPROVAL OF THE ENGINEER PRIOR TO MAKING ANY REVISIONS SUCH AS TO LOCATION, WIDTH AND/OR NUMBER OF DRIVES TO BE CONSTRUCTED. WHERE REQUIRED, THE DRIVEWAY SHALL BE PAVED AS FOLLOWS:

**ASPHALTIC DRIVES**

**RESIDENTIAL:**

1.5" RECY. ASPHALTIC CONCRETE, 9.5mm SUPERPAVE,  
GP 2 ONLY, INCLUDING BITUM. MAT'L & H. LIME  
6" GRADED AGGREGATE BASE

**COMMERCIAL:**

1.5" RECY. ASPHALTIC CONCRETE, 9.5mm SUPERPAVE,  
GP 2 ONLY, INCLUDING BITUM. MAT'L AND H. LIME  
2" RECY. ASPHALTIC CONC. 19mm SUPERPAVE, GP 1 OR 2,  
INCLUDING BITUM. MAT'L AND H. LIME  
8" GRADED AGGREGATE BASE

**CONCRETE DRIVES**

**RESIDENTIAL:** 6" CONCRETE VALLEY GUTTER  
6" CONCRETE DRIVEWAY

**COMMERCIAL:** 8" CONCRETE VALLEY GUTTER  
8" CONCRETE DRIVEWAY

ALL DRIVEWAYS SHALL BE PAVED TO THE LIMITS OF CONSTRUCTION. EXISTING DRIVEWAYS SHALL NOT BE USED FOR PROJECT ACCESS.

- WHERE WET SUBGRADE IS ENCOUNTERED AND WATER IDENTIFIED BY THE ENGINEER, AN UNDERDRAIN PIPE WITH DRAINAGE AGGREGATE SHALL BE PLACED AS DIRECTED BY THE ENGINEER TO AID IN DEWATERING THE SUBGRADE.
- THE CONTRACTOR SHALL OBSERVE ALL APPLICABLE LOCAL, STATE, AND FEDERAL SAFETY REGULATIONS REGARDING PIPE INSTALLATION IN TRENCHES. NO SEPARATE PAYMENT WILL BE MADE FOR ANY COST INCURRED TO COMPLY WITH THIS REQUIREMENT.
- ALL EXISTING STORMWATER PIPE SHALL BE REMOVED UNLESS OTHERWISE NOTED ON PLANS OR AS DIRECTED BY THE ENGINEER. ALL COST FOR REMOVAL SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR GRADING COMPLETE.
- IN AREAS WHERE TYPE 2 CURB IS USED, DRAINAGE STRUCTURES 1033D AND 1034D WILL BE REQUIRED. IN AREAS WHERE TYPE 7 CURB IS USED, DRAINAGE STRUCTURES 1033G AD 1034G WILL BE REQUIRED.
- AT LOCATIONS WHERE NEW PAVEMENT IS TO BE PLACED ADJACENT TO EXISTING PAVEMENT WITHOUT AN OVERLAY OR WHERE CURBING IS TO BE PLACED ACROSS A PAVED AREA, A JOINT SHALL BE SAWS ON A LINE ESTABLISHED BY THE ENGINEER TO ENSURE PAVEMENT REMOVAL TO A NEAT LINE. THE COST FOR ASPHALT SAWS JOINTS, WHEN REQUIRED, SHALL BE INCLUDED IN THE BID PRICE FOR GRADING COMPLETE.
- WHERE EXISTING PAVEMENT MARKINGS AND LINES ARE IN CONFLICT WITH THE TRAFFIC

PATTERN BEING USED ON CONSTRUCTION, THE THE CONTRACTOR SHALL REMOVE OR OVERLAY LINES TO THE SATISFACTION OF THE ENGINEER SUCH THAT THE LINES DO NOT CONFUSE THE TRAVELING PUBLIC. ALL REMAINING LINES OR MARKINGS SHALL BE IN ACCORDANCE WITH THE 'MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES', OR AS DIRECTED BY THE ENGINEER. TRAFFIC SHALL NOT BE ALLOWED ON ANY PAVEMENT NOT PROPERTY STRIPED.

- THE CONTRACTOR'S ATTENTION IS DIRECTED TO ARTICLES 104.05 AND 107.07 OF THE STANDARD SPECIFICATIONS AND THE SPECIAL PROVISIONS FOR TRAFFIC CONTROL AND SEQUENCE OF OPERATIONS IN REGARDS TO MAINTENANCE OF TRAFFIC DURING CONSTRUCTION.
- THE BID PRICE FOR TRAFFIC CONTROL SHALL INCLUDE, BUT IS NOT LIMITED TO CONSTRUCTION, MAINTENANCE, AND REMOVAL OF TEMPORARY SIGNAGE AND PAVEMENT MARKINGS, BARRICADES, CHANNELIZING DEVICES, ETC. REQUIRED FOR MAINTENANCE OF TRAFFIC DURING CONSTRUCTION. ALL TEMPORARY SIGNAGE AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE 'MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES', CURRENT EDITION AND/OR AS DIRECTED BY THE ENGINEER.
- ALL CUT AND FILL SLOPES SHALL BE GRASSED AS DIRECTED BY THE ENGINEER IMMEDIATELY AFTER THE SLOPES ARE ESTABLISHED IN ORDER TO REDUCE EROSION. IF THE SEASON DOES NOT PERMIT GRASSING, TEMPORARY MULCH SHALL BE USED AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL ENSURE THAT POSITIVE AND ADEQUATE DRAINAGE IS MAINTAINED AT ALL TIMES WITHIN THE PROJECT LIMITS. THIS MAY INCLUDE, BUT NOT LIMITED TO, REPLACEMENT OR RECONSTRUCTION OF EXISTING DRAINAGE STRUCTURES THAT HAVE BEEN DAMAGED, REMOVED OR REGRADED AS REQUIRED BY THE ENGINEER, EXCEPT FOR THOSE DRAINAGE ITEMS SHOWN AT SPECIFIC LOCATIONS ON THE PLANS. NO SEPARATE PAYMENT WILL BE MADE FOR ANY COSTS INCURRED TO COMPLY WITH THIS REQUIREMENT.
- QUANTITIES SHOWN ON THE PLANS ARE FOR ESTIMATION PURPOSES ONLY. CONTRACTOR IS TO VERIFY ALL QUANTITIES TO BE INCLUDED IN THE BID PRICE.
- EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO OR CONCURRENT WITH LAND DISTURBANCE ACTIVITIES AND SHALL BE MAINTAINED AT ALL TIMES. ADDITIONAL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED IF DEEMED NECESSARY BY THE ON-SITE INSPECTOR OR AS DIRECTED BY THE ENGINEER.
- ALL SILT FENCES MUST BE PLACED AS ACCESS IS OBTAINED DURING CLEARING. NO GRADING SHALL BE DONE UNTIL SILT FENCE INSTALLATION IS COMPLETE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN ALL SILT FENCES AND TO REPAIR OR REPLACE ANY SILT FENCE THAT IS NOT SATISFACTORY. EROSION CONTROL MEASURES SHALL BE PLACED IMMEDIATELY AFTER DRAINAGE STRUCTURES ARE IN PLACE. ALL EROSION CONTROL DEVICES SHALL BE PLACED ACCORDING TO THE PLANS AND AS DIRECTED BY THE ENGINEER. SEE THE GEORGIA STANDARD SPECIFICATIONS AND THE 'MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA', CURRENT EDITION REGARDING EROSION CONTROL. THE CONTRACTOR SHALL BE RESPONSIBLE TO KEEP WETLAND AREAS FREE FROM SILTATION. THE CONTRACTOR SHALL OBTAIN AND ABIDE BY ALL UNITED STATES ARMY CORPS OF ENGINEERS (USACE) RULES AND REGULATIONS CONCERNING CONSTRUCTION ADJACENT TO WATERS OF THE UNITED STATES (WOTUS) AND MAINTAIN WATER QUALITY.
- THIS PROJECT HAS A TOTAL DISTURBED AREA OF 0.29 ACRES. THE DISTURBED AREA ENCOMPASSES THE THE AREA ASSOCIATED WITH CLEARING, GRADING, EXCAVATING, FILLING OF LAND, OR OTHER SIMILAR ACTIVITIES WHICH MAY RESULT IN SOIL EROSION, AS DEFINED UNDER 'CONSTRUCTION ACTIVITIES' IN THE STATE OF GEORGIA NATURAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT NO. GAR100002.
- AGGREGATE SURFACE COURSE FOR TEMPORARY DRIVEWAYS, INCLUDING MATERIAL, HAUL AND PLACEMENT SHALL BE USED AT THE ENGINEER'S DIRECTION TO FACILITATE THE MOVEMENT OF LOCAL TRAFFIC THROUGH THE CONSTRUCTION AREA DURING INCLEMENT WEATHER. WHEN USED FOR THIS PURPOSE, SECTION 318 OF THE GDOT STANDARD SPECIFICATIONS IS MODIFIED TO PERMIT TRUCK DUMPING ON UNPREPARED WET, MUDDY SUBGRADE. SECTION 318 IS FURTHER MODIFIED TO PERT THE USE OF CRUSHER STONE AS DESCRIBED IN SECTION 318.02.
- THE CONTRACTOR WILL HAVE THE USE OF THE FOLLOWING MATERIALS:  
A. GRADED AGGREGATE, ARTICLE 815.2.01  
B. COURSE GRADED AGGREGATE, SIZE 467, ARTICLE 800.2.01  
C. STABILIZED AGGREGATE, TYPE I OR II, SECTION 803.2 OR 803.2.02  
D. CRUSHED STONE, ARTICLE 806.2.01
- CONSTRUCTION LAYOUT AND STAGING PLAN WILL BE REQUIRED BY THE CONTRACTOR. ALL COST FOR THIS ITEM WILL BE INCLUDED IN THE BID PRICE.
- CITY OF SANDY SPRINGS PUBLIC WORKS DEPARTMENT SHALL BE NOTIFIED A MINIMUM OF 72 HOURS IN ADVANCE OF ALL CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL COORDINATE THIS ACTION WITH THE LEAD INSPECTOR.
- THE GDOT STANDARDS AND CONSTRUCTION DETAILS REQUIRED FOR THIS PROJECT ARE LISTED IN THIS PLAN SET WITH THE LAST KNOWN REVISION DATE. HOWEVER THE CONTRACTOR WILL BE RESPONSIBLE FOR OBTAINING AND MAINTAINING ON THE PROJECT SITE THE CURRENT GDOT STANDARD DRAWINGS AND CONSTRUCTION DETAILS REQUIRED FOR THIS PROJECT.
- ANY ADJUSTMENTS OR RELOCATIONS OF CITY OF SANDY SPRINGS PUBLIC WORKS DEPARTMENT FACILITIES SHALL BE IN ACCORDANCE WITH THE CITY OF SANDY SPRINGS ORDINANCE NUMBER 2008-08-48. THIS DOCUMENT IS AVAILABLE AT THE DEPARTMENT OFFICE AT 1 GALAMBOS WAY, CITY OF SANDY SPRINGS. TELEPHONE (770) 730-5600 AND THE 24 HR EMERGENCY CONTACT NUMBER FOR THE CITY OF SANDY SPRINGS IS (770) 730-5600.
- THE SURVEY FOR THIS PROJECT WAS PREPARED BY PLANNERS & ENGINEERS COLLABORATIVE AND SUPPLEMENTED USING FULTON COUNTY AND CITY OF SANDY SPRINGS GIS DATA.
- STORM DRAINAGE FOR THE ROADWAY MUST BE MAINTAINED DURING CONSTRUCTION.
- UNLESS OTHERWISE SPECIFIED, ANY IRRIGATION SYSTEM ENCOUNTERED WITHIN THE LIMITS OF CONSTRUCTION IS TO BE RE-ESTABLISHED (INCLUDING TESTING) BY THE CONTRACTOR. PROJECT CONTRACTOR IS TO CUT AND CAP IRRIGATION SYSTEM OUTSIDE OF LIMITS OF CONSTRUCTION DURING CONSTRUCTION.
- PRIOR TO PROCEEDING WITH CONSTRUCTION, ANY DEBRIS REMAINING AFTER THE REMOVAL OF OF THE EXISTING STORM SEWER PIPES/STRUCTURES AND OTHER DELETERIOUS NON-SOIL MATERIALS SHOULD BE STRIPPED FROM PROPOSED CONSTRUCTION AREAS.
- EXCAVATION BRACING (SHORING) DESIGN AND INSTALLATION IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. ANY SHORING (INCLUDING TRENCH BOXES) GREATER THAN FOUR (4) FEET MUST BE SIGNED AND SEALED BY A STRUCTURAL ENGINEER CURRENTLY REGISTERED IN THE STATE OF GEORGIA.
- FILL MATERIAL SHOULD BE LOW PLASTICITY SOIL (PLASTICITY INDEX LESS THAN 30), FREE OF NON-SOIL MATERIALS AND ROCK FRAGMENTS LARGER THAN 2 INCHES IN ANY ONE DIMENSION.
- SOIL MOISTURE CONTENT SHOULD BE MAINTAINED WITHIN 3% OF THE OPTIMUM MOISTURE CONTENT.
- ORGANIC AND/OR DEBRIS LADEN MATERIAL (>3% ORGANICS BY WEIGHT) IS NOT SUITABLE FOR RE-USE AS STRUCTURAL FILL.
- FILL SHOULD BE PLACED IN THIN, HORIZONTAL LOOSE LIFTS (MAXIMUM 8-INCH) AND COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D 698). THE UPPER 8 INCHES OF SOIL BENEATH PAVEMENTS SHOULD BE COMPACTED TO AT LEAST 98% STANDARD PROCTOR.
- CONTRACTOR SHALL PROVIDE INDEPENDENT GEOTECHNICAL TESTING TO VERIFY SOIL COMPACTION MEETS THE CITY OF SANDY SPRINGS STANDARDS.
- FILL MATERIALS USED IN STRUCTURAL AREAS SHOULD HAVE A TARGET MAXIMUM DRY DENSITY OF AT LEAST 95 POUNDS PER CUBIC FOOT (PCF).
- OPEN-GRADED CRUSHED STONE SHOULD BE PLACED IN RELATIVELY THIN LIFTS OF 12 INCHES OR LESS AND COMPACTED WITH VIBRATORY COMPACTION EQUIPMENT.
- WATER LEVELS SHALL BE MAINTAINED AT LEAST ONE FOOT BELOW WORKING SUBGRADE SURFACES TO AVOID DEGRADING SUBGRADE.
- THE SUBGRADE SHOULD BE WELL-DRAINED TO PREVENT THE ACCUMULATION OF WATER.
- GRADING COMPLETE - LUMP SUM SHALL INCLUDE ALL UNCLASSIFIED EXCAVATION, BORROW EXCAVATION, CHANNEL EXCAVATION, FOUNDATION BACKFILL MATERIAL, TYPE I, ROCK EXCAVATION, ASPHALT CUTS, CLEARING AND GRUBBING, TREE REMOVAL, DEBRIS/SOLID WASTE REMOVAL, AND REMOVAL OF ALL ITEMS NOT SHOWN AS SEPARATE PAY ITEM. THIS SHALL ALSO INCLUDE ALL COMPACTION EFFORTS NECESSARY TO ACHIEVE THE COMPACTION REQUIREMENT SPECIFIED IN THE PLANS.
- CONTRACTOR SHALL FURNISH "AS-BUILT" DRAWINGS INDICATING ALL CHANGES AND DEVIATIONS FROM CONTRACT DRAWINGS THAT ARE SIGNED AND SEALED BY A REGISTERED LAND SURVEYOR (R.L.S.).

**DRAWING LEGEND**

FFE XX.XX	FINISHED FLOOR ELEVATION
BFE XX.XX	BASEMENT FLOOR ELEVATION
X (10.72)	SPOT ELEVATION
---10--- -8-	EXISTING CONTOURS
---10--- -8-	PROPOSED CONTOURS
W	PROPOSED WATER LINE
☒	PROPOSED WATER METER
⊙	PROPOSED VALVE & END CAP
⊙	PROPOSED FIRE HYDRANT & FDC
⊕	PROPOSED TEE, BEND & INTERSECTION
--- ---	PROPOSED SANITARY SEWER LINE
⊙	PROPOSED SANITARY MANHOLE
⊙	PROPOSED SANITARY CLEANOUT
⊙	PROPOSED GREASE TRAP
--- ---	PROPOSED STORM LINE
⊙	PROPOSED JUNCTION BOX
⊙	PROPOSED DROP INLET
⊙	PROPOSED YARD INLET
⊙	PROPOSED CURB INLET
⊙	PROPOSED WEIR INLET
⊙	PROPOSED CATCH BASIN
⊙	PROPOSED HEADWALL
⊙	PROPOSED OUTLET CONTROL STRUCTURE
TYPICAL WALL LABELS	
TW	= TOP OF WALL
TFG	= TOP FINISHED GRADE
BFG	= BOTTOM FINISHED GRADE
TF	= TOP OF FOOTING
BF	= BOTTOM OF FOOTING

ALL WORK SHALL BE DONE IN ACCORDANCE WITH GEORGIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS CONSTRUCTION OF TRANSPORTATION SYSTEMS, APPROVED APRIL 18, 2013; AND GDOT CONSTRUCTIONS STANDARDS AND DETAILS, LATEST VERSIONS. SPECIFICATIONS USED ARE NOT LIMITED TO THE SPECIFICATIONS LISTED ON THE FOLLOWING PAGES.

**GDOT DETAILS USED IN PROJECT**

GDOT DETAIL NUMBER	GDOT DETAIL TITLE
1030D	CONCRETE & METAL PIPE CULVERTS
1125	TAPERED HEADWALL
1034F	DOUBLE WING CATCH BASIN
9032B	CONCRETE CURB & GUTTER
1011-A	PRECAST REINFORCED CONCRETE MANHOLE

Sandy Springs, GA

DEC 2 6 2019

Permitted Director

Community Development Department

**NORTH POWERS FERRY ROAD - PHASE 2**

A STORMWATER BMP MAINTENANCE PROJECT

FOR  
CITY OF SANDY SPRINGS

1 GALAMBOS WAY  
SANDY SPRINGS, GA 30328  
PHONE: (770) 730-5600

LAND LOT 175  
3RD DISTRICT

CITY OF SANDY SPRINGS  
FULTON COUNTY  
GEORGIA

**"WE PROVIDE SOLUTIONS"  
PLANNERS AND ENGINEERS COLLABORATIVE**

SITE PLANNING LANDSCAPE ARCHITECTURE CIVIL ENGINEERING LAND SURVEYING  
350 RESEARCH COURT PEACHTREE CORNERS, GEORGIA 30092 (770) 451-2741 FAX (770) 451-3915

**REVISIONS:**

NO.	DATE	BY	DESCRIPTION
-1	11-25-2019	PEC	CITY COMMENTS

SANDY SPRINGS PROJECT #17-002

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**STANDARD SPECIFICATIONS**

SCALE: N/A  
DATE: 09/03/2019  
PROJECT: 16230.00 Ph2

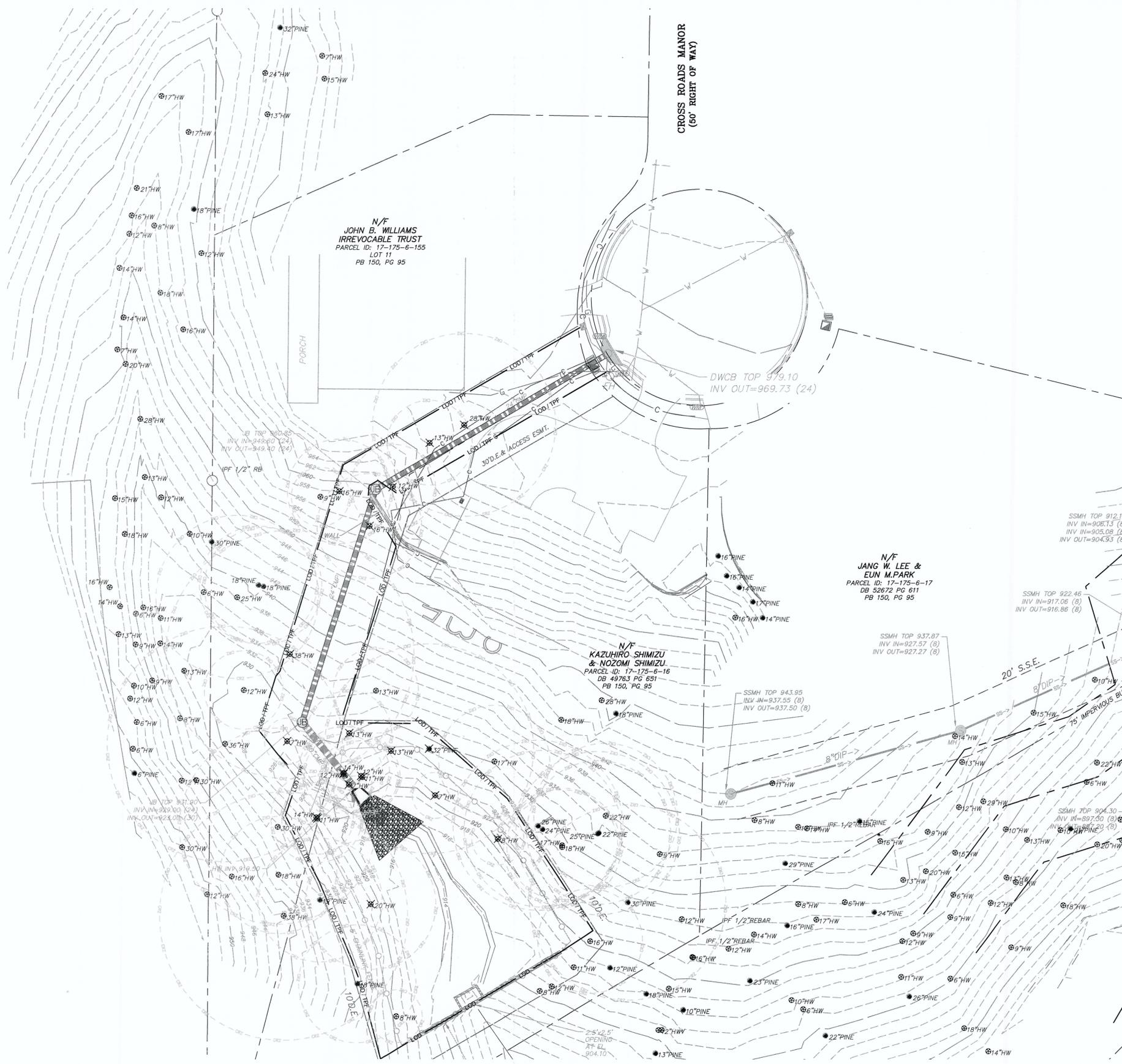
THIS SEAL IS ONLY VALID IF COUNTER SIGNED AND DATED WITH AN ORIGINAL SIGNATURE.



GSWCC LEVEL II DESIGN PROFESSIONAL CERTIFICATION # 0000067548 EXP. 12/21/2021

**C0.01**

SHEET



**LEGEND**

- #F IRON PIN FOUND (#A Re-Rod unless noted otherwise)
- #FS IRON PIN SET (#A Re-Rod unless noted otherwise)
- #OP IRON PIN FOUND (open top pipe)
- #CP IRON PIN SET (crimp top pipe)
- POINT
- CMF CONCRETE MONUMENT FOUND
- MPF SANITARY SEWER MANHOLE
- S SANITARY SEWER LINE
- - - SD STORM DRAINAGE LINE
- - - CS COMB. STORM & SAN. SEWER LINE
- DWCB DOUBLE WING CATCH BASIN
- CB CATCH BASIN
- JB JUNCTION BOX
- DI DROP INLET
- MI MANHOLE INLET
- CI CURB INLET
- PP POWER POLE
- P/W/GUY WIRE OVERHEAD POWER / TELEPHONE LINE
- V WATER VALVE
- V GAS VALVE
- FH FIRE HYDRANT
- W WATER LINE
- G UNDERGROUND GAS LINE
- E UNDERGROUND ELECTRIC LINE
- T UNDERGROUND TELEPHONE LINE
- C UNDERGROUND CABLE LINE
- L LIGHT POLE
- (30310)W EXISTING TREE CALLS PER DEED
- TW TOP OF WALL
- BW BOTTOM OF WALL
- W WALL (TYP)
- T TRANSFORMER
- BH BOREHOLE
- RCP REINFORCED CONCRETE PIPE
- B.S.L. BUILDING SETBACK LINE
- SIGN SIGN
- B/C/O BACK OF CURB CLEANOUT
- F FENCE
- PIPE STORM PIPE
- HW HEAD WALL
- DBH DIAMETER AT BREAST HEIGHT
- CRZ CRITICAL ROOT ZONE
- D.E. (DRAINAGE EASEMENT)
- S.S.E. (SANITARY SEWER EASEMENT)
- 6\"/>

- EXISTING TREES TO BE REMOVED:**
- |        |        |
|--------|--------|
| 28\"/> | 13\"/> |
| 16\"/> | 38\"/> |
| 7\"/>  | 13\"/> |
| 12\"/> | 14\"/> |
| 12\"/> | 11\"/> |
| 7\"/>  | 14\"/> |
| 11\"/> | 13\"/> |
| 32\"/> | 12\"/> |
| 7\"/>  | 20\"/> |
| 8\"/>  | 16\"/> |

**NORTH POWERS FERRY ROAD - PHASE 2**  
A STORMWATER BMP MAINTENANCE PROJECT

FOR THE  
**CITY OF SANDY SPRINGS**  
1 GALAMBOS WAY  
SANDY SPRINGS, GA 30328  
PHONE: (770) 730-5600

**PLANNERS AND ENGINEERS COLLABORATIVE**  
SITE PLANNING LANDSCAPE ARCHITECTURE CIVIL ENGINEERING LAND SURVEYING  
350 RESEARCH COURT PEACHTREE CORNERS, GEORGIA 30092 (770) 451-2741 FAX (770) 451-5915

**REVISIONS:**

NO.	DATE	BY	DESCRIPTION
-1	11-25-2019	PEC	CITY COMMENTS

SANDY SPRINGS PROJECT #17-002

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**EXISTING CONDITIONS**

SCALE: 1" = 20'  
DATE: 09/03/2019  
PROJECT: 16230.00 Ph2

THIS SEAL IS ONLY VALID IF COUNTER SIGNED AND DATED WITH AN ORIGINAL SIGNATURE.

Sandy Springs, GA  
**DEC 2 9 2019**  
Permitted Director  
Community Development Department

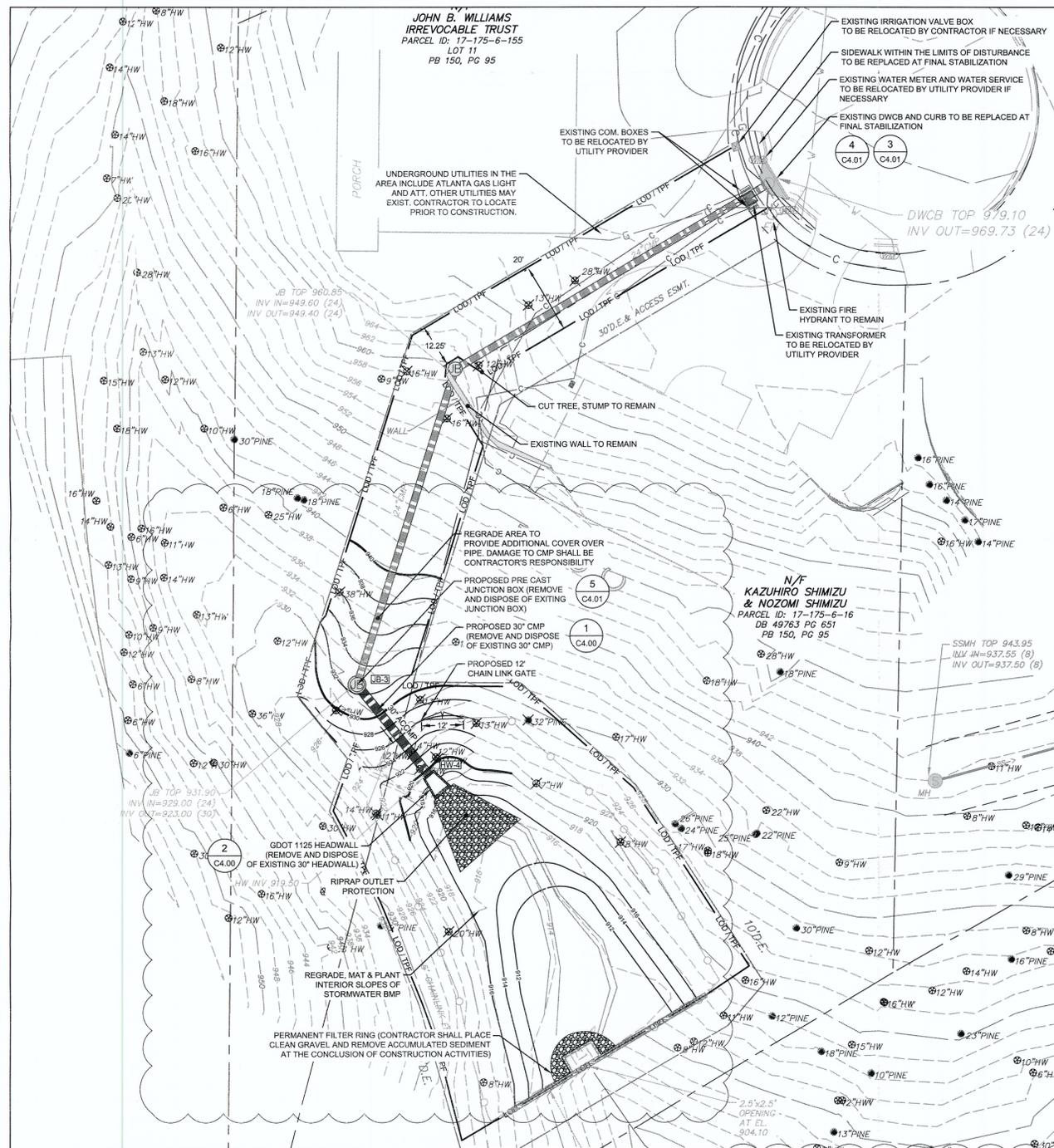
**GEORGIA**  
REGISTERED PROFESSIONAL ENGINEER  
WILLIAM W. SCHWAB  
11/25/2019

GSWCC LEVEL II DESIGN PROFESSIONAL  
CERTIFICATION # 000087548 EXP. 12/21/2021

**C1.00**  
SHEET

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

24-HOUR CONTACT:  
CITY OF SANDY SPRINGS  
770-730-5600



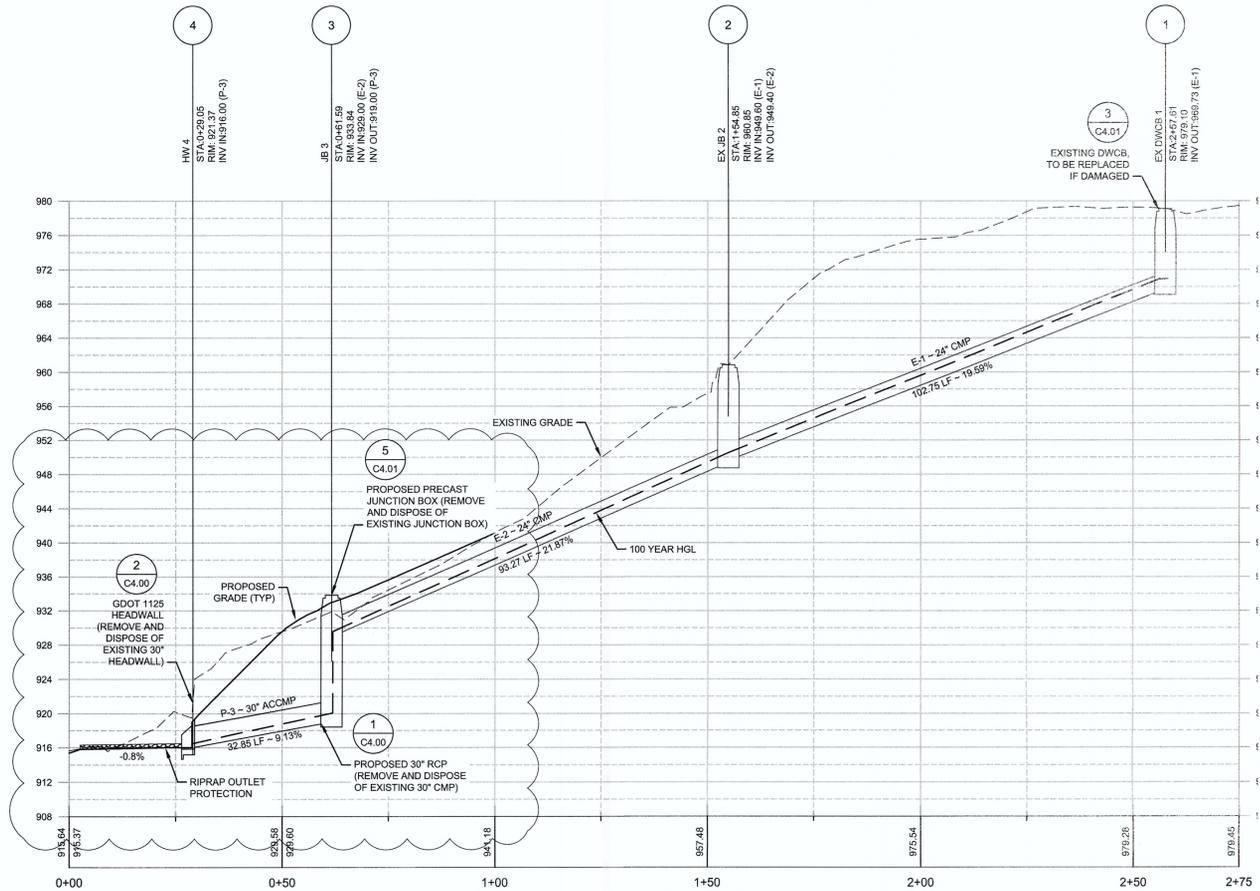
**GRADING & UTILITY PLAN**  
SCALE: 1" = 20'

**GRADING NOTES:**

- DISTURBED AREAS LEFT IDLE FOR FOURTEEN DAYS, AND NOT TO FINAL GRADE, SHALL BE ESTABLISHED TO TEMPORARY VEGETATION (D&2). DISTURBED AREAS LEFT IDLE FOUR WEEKS OR MORE WILL BE ESTABLISHED TO PERMANENT VEGETATION (D&3). ALL AREAS TO FINAL GRADE SHALL BE ESTABLISHED TO PERMANENT VEGETATION WITHIN TWO WEEKS.
- WHEN HAND PLANTING, MULCH (HAY OR STRAW) SHALL BE UNIFORMLY SPREAD OVER SEEDED AREA WITHIN 24 HOURS OF SEEDING.
- DURING UNSUITABLE GROWING SEASONS, MULCH SHALL BE USED AS A TEMPORARY COVER (D&1). ON SLOPES THAT ARE 4:1 OR STEEPER, MULCH SHALL BE ANCHORED.
- CITY OF SANDY SPRINGS LAND DISTURBANCE PERMIT MUST BE DISPLAYED ON THE SITE AT ALL TIMES DURING CONSTRUCTION AND IN PLAIN VIEW FROM A COUNTY ROAD OR STREET.
- SEDIMENT/EROSION CONTROL DEVICES MUST BE CHECKED AFTER EACH STORM EVENT. EACH DEVICE SHALL BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ON HALF THE CAPACITY OF THE DEVICE.
- ALL WORK AND MATERIALS SHALL COMPLY WITH THE CITY OF SANDY SPRINGS GEORGIA REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
- SITE CONTRACTOR SHALL FURNISH "AS-BUILT" DRAWINGS INDICATING ALL CHANGES AND DEVIATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATION INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, TRAFFIC SIGNALS AND POLES, ETC. GOVERNING AUTHORITIES SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN BASE BID.
- OPEN BURNING OR BURY PITS ARE NOT ALLOWED.

**TRAFFIC CONTROL NOTES:**

- CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL IN ACCORDANCE WITH MUTCD REQUIREMENTS.
- IF A ROAD CLOSURE IS NECESSARY, CONTRACTOR SHALL PROVIDE A DETOUR PLAN.
- DURING CONSTRUCTION, ONE LANE OF ROAD SHALL REMAIN OPEN AT ALL TIMES UNLESS OTHERWISE APPROVED.



**P-STORM**  
HORIZONTAL SCALE: 1" = 20'  
VERTICAL SCALE: 1" = 10'

**10-YR GUTTER SPREAD**

LineNo.	LineID	Junct Type	Drainage Area (ac)	Inlet Time (min)	Inlet (in/hr)	Runoff Coeff (C)	IncrQ (cfs)	QCarryover (cfs)	QCaptured (cfs)	QBypass (cfs)	Curb Length (ft)	Gutter Length (ft)	Inlet Depth (ft)	Cross Slope, Sx (ft/ft)	Local Depr (in)	Gutter Width (ft)	Gutter Depth (ft)	Gutter Slope (ft/ft)	Gutter Spread (ft)	InletID
3	E-1	Curb	1.84	5	7.24	0.61	8.12	0	8.12	0	13	13	0.35	0.04	0	2	0.35	Sag	8.78	1

**100-YR PIPE CHART**

Flow Rate (cfs)	Runoff Coeff (C)	IncrQ (cfs)	InvertDn (ft)	InvertUp (ft)	Line Slope (%)	Line Length (ft)	Line Size (in)	Line Type	n-value	PipeD/RimElev (ft)	Grnd/RimElev (ft)	HGLDn (ft)	HGLUp (ft)	iSys (in/hr)	Tc (min)	VelDn (ft/s)	VelUp (ft/s)	VelAve (ft/s)	QCarryover (cfs)	QCaptured (cfs)	QBypass (cfs)	Inlet Depth (ft)	Capacity Full (cfs)	HGLJct (ft)	InletID
10.68	0	0	916.0	919.00	9.13	32.85	30	Cir	0.013	919.00	933.84	916.50	920.09	9.51	5.9	15.44	5.18	10.31	...	...	...	...	123.94	920.09	3
10.85	0	0	929.0	949.40	21.87	93.27	24	Cir	0.024	933.84	960.85	929.59	950.58	9.66	5.5	14.02	5.63	9.82	...	...	...	...	57.3	950.58	2
11.04	0.61	11.04	949.6	969.73	19.54	103.00	24	Cir	0.024	960.85	979.10	950.58	970.92	9.83	5	7.21	5.66	6.44	0	11.04	0	0.43	54.16	970.92	1

**DIRT STATEMENT**

GRADING AREA	CUT	FILL
TOTAL AREA	283.70 C.Y.	53.08 C.Y.

CONTRACTOR SHALL PERFORM AND CONCLUDE EARTHWORK CALCULATIONS INDEPENDENTLY AND SHALL NOT RELY ON THESE OPINION OF VOLUMES. VOLUMES STATED ARE USED TO SECURE A HAUL ROUTE PERMIT ONLY.

**24 HOUR CONTACT:**  
CITY OF SANDY SPRINGS  
770-730-5600



**NORTH POWERS FERRY ROAD - PHASE 2**  
A STORMWATER BMP MAINTENANCE PROJECT  
FOR  
CITY OF SANDY SPRINGS  
1 GALAMBOS WAY  
SANDY SPRINGS, GA 30328  
PHONE: (770) 730-5600

**PLANNERS AND ENGINEERS COLLABORATIVE**  
SITE PLANNING LANDSCAPE ARCHITECTURE CIVIL ENGINEERING LAND SURVEYING  
350 RESEARCH COURT PEACHTREE CORNERS, GEORGIA 30092 (770) 451-2741 FAX (770) 451-9915

**REVISIONS:**

NO.	DATE	BY	DESCRIPTION
-1	11-25-2019	PEC	CITY COMMENTS

**WE PROVIDE SOLUTIONS™**

**GRADING & UTILITY PLAN & PIPE PROFILE**

SCALE: 1" = 20'  
DATE: 09/03/2019  
PROJECT: 16230.00 Ph2

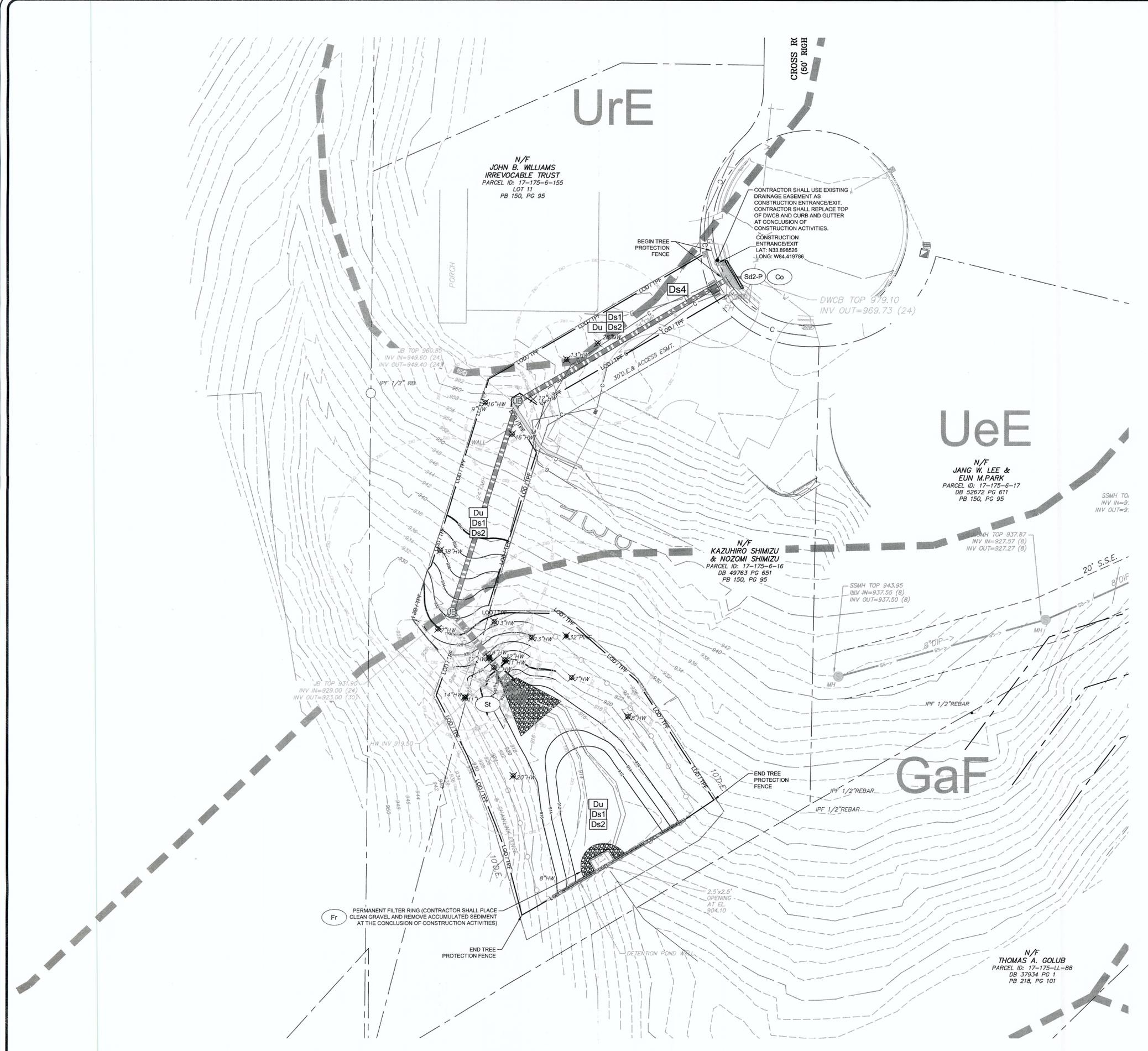
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**GEORGIA**  
REGISTERED PROFESSIONAL ENGINEER  
No. 34209  
WEL M. SCHUMER  
11/25/2019

GSWCC LEVEL II DESIGN PROFESSIONAL  
CERTIFICATION # 0000067548 EXP. 12/21/2021

**C2.00**

SHEET



Sandy Springs, GA  
 DEC 2 6 2019  
 Permitted Director  
 Community Development Department

**EXISTING TREES TO BE REMOVED:**

28" HARDWOOD	13" HARDWOOD
16" HARDWOOD	38" HARDWOOD
7" HARDWOOD	13" HARDWOOD
12" HARDWOOD	14" HARDWOOD
12" HARDWOOD	11" HARDWOOD
7" HARDWOOD	14" HARDWOOD
11" HARDWOOD	13" HARDWOOD
32" PINE	12" HARDWOOD
7" HARDWOOD	20" HARDWOOD
8" HARDWOOD	16" HARDWOOD

- EROSION CONTROL NOTES:**
- SEE OUTLET PROTECTION (SI) DETAIL ON SHEET C3.41 FOR DESIGN DETAILS.
  - ALL SILT FENCE AND/OR TREE PROTECTION FENCE SHALL BE REMOVED FOLLOWING FINAL STABILIZATION.
  - ANY FILL DIRT PLACED ONSITE MUST BE CERTIFIED AS "WEED FREE".
  - Ds2 MULCH TO BE BROOM SEDGE MULCH.
  - Ds3 GRASS TO BE ERNST MIX 187 (SOUTHEASTERN UNITED STATES ROADSIDE NATIVE MIX) UNLESS OTHERWISE NOTED.
  - NO EQUIPMENT SHALL BE STAGED OUTSIDE OF ROAD SHOULDER OR IN RIGHT-OF-WAY WITHOUT THE REQUIRED TRAFFIC CONTROL MEASURES IN PLACE.

- TRAFFIC CONTROL NOTES:**
- CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL IN ACCORDANCE WITH MUTCD REQUIREMENTS.
  - IF A ROAD CLOSURE IS NECESSARY, CONTRACTOR SHALL PROVIDE A DETOUR PLAN.
  - DURING CONSTRUCTION, ONE LANE OF ROAD SHALL REMAIN OPEN AT ALL TIMES UNLESS OTHERWISE APPROVED.

**ES&PC LEGEND**

**VEGETATIVE BEST MANAGEMENT PRACTICES**

<b>Du</b> DUST CONTROL ON DISTURBED AREA	<b>Ds4</b> DISTURBED AREA STABILIZATION (WITH SODDING)
<b>Ds1</b> DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)	<b>Ss</b> SLOPE STABILIZATION
<b>Ds2</b> DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)	<b>X</b> EXISTING TREES TO BE REMOVED
<b>Ds3</b> DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)	

**STRUCTURAL BEST MANAGEMENT PRACTICES**

— LOD / TPF — LIMITS OF DISTURBANCE / TREE PROTECTION FENCE	CURB INLET SEDIMENT FILTER
— LOD — LIMITS OF DISTURBANCE	<b>Sd2-P</b> Sd2-P
— x — SILT FENCE <b>Sd1-S</b>	

TOTAL DISTURBED AREA: 0.29 ACRES

THERE ARE KNOWN STATE WATERS ON THE PROPERTY  
 THERE ARE IMPAIRED STREAMS WITHIN ONE MILE DOWNSTREAM AND WITHIN THE SAME WATERSHED AS THE PROJECT SITE  
 THERE ARE NO WETLANDS ON THE PROJECT SITE

**SOILS INFORMATION**  
 THE EXISTING SOILS ON SITE CONSIST OF:  
 UeE - Urban land - Ashlar - Rion complex, 10 to 25 percent slopes, stony  
 UrE - Urban land - Rion complex, 10 to 25 percent slopes  
 GaF - Grover - Mountain Park complex, 20 to 60 percent slopes, stony

24 HOUR CONTACT:  
 CITY OF SANDY SPRINGS  
 770-730-5600



**NORTH POWERS FERRY ROAD - PHASE 2**  
 A STORMWATER BMP MAINTENANCE PROJECT  
 FOR  
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 1 GALAMBOS WAY  
 SANDY SPRINGS, GA 30028  
 PHONE: (770) 730-5600

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 (770) 451-2741 FAX (770) 451-5915

**"WE PROVIDE SOLUTIONS"**

**REVISIONS:**

NO.	DATE	BY	DESCRIPTION
-1	11-25-2019	PEC	CITY COMMENTS

SANDY SPRINGS PROJECT #17-002

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**INITIAL EROSION CONTROL PLAN**

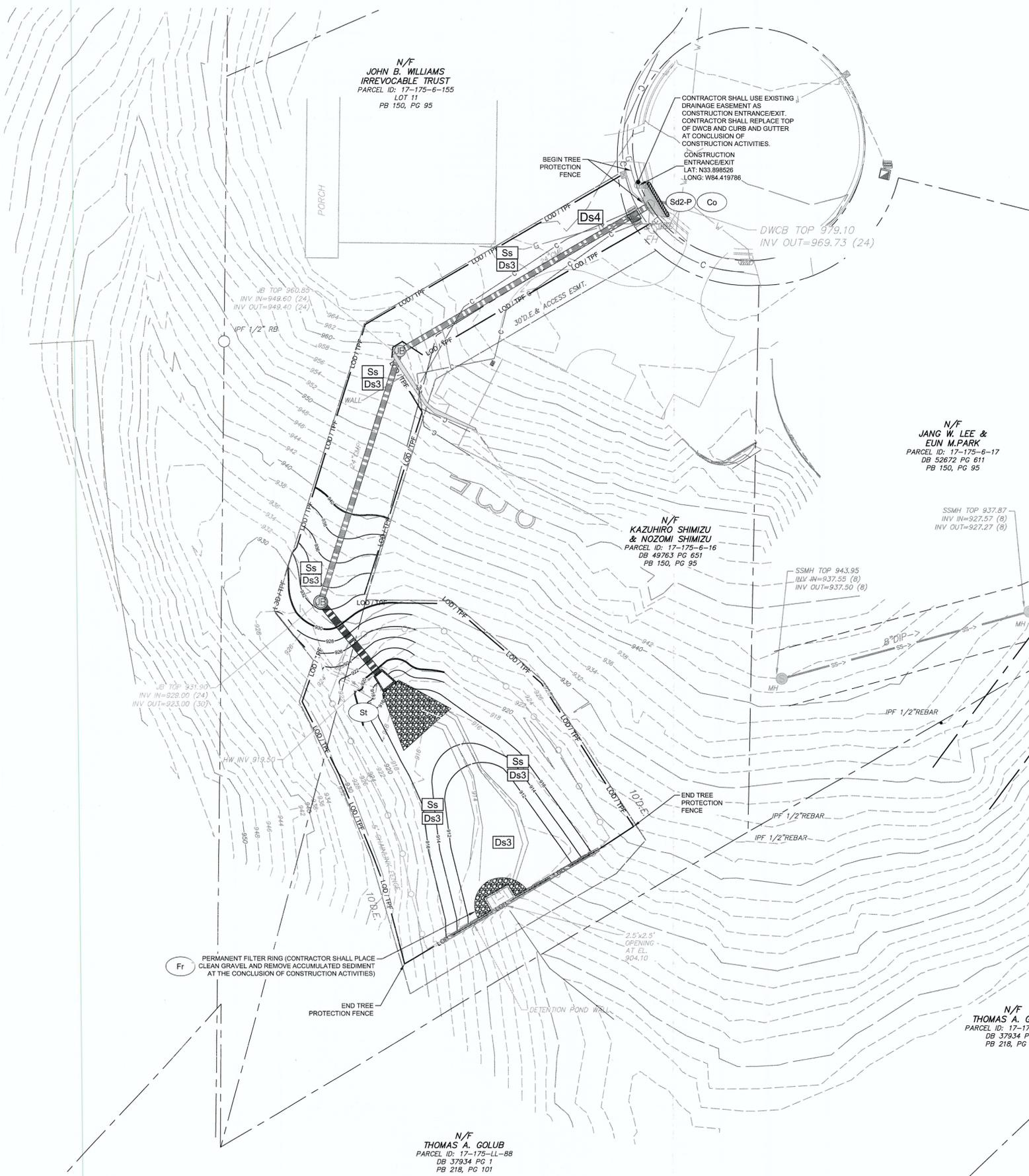
0 10 20 40 60

SCALE: 1" = 20'  
 DATE: 09/03/2019  
 PROJECT: 16230.00 Ph2

THIS SEAL IS ONLY VALID IF COUNTER SIGNED AND DATED WITH AN ORIGINAL SIGNATURE.

**GEORGIA REGISTERED PROFESSIONAL ENGINEER**  
 No. 34205  
 WILL M. SCHLAK  
 11/25/2019  
 GSACC LEVEL II DESIGN PROFESSIONAL CERTIFICATION # 00000067548 EXP. 12/21/2021

**C3.10**  
 SHEET



Sandy Springs, GA  
 DEC 2 3 2019  
 Permitted Director  
 Community Development Department

**GA Piedmont Riparian Mix**

ERNMX # ERNMX-508  
 Seeding Rate 20 lb per acre  
 Mix Type Riparian Sites

Species List

- 16% Redtop Panicgrass, Coastal Plain NC Ecotype (*Panicum rigidulum* (P. stipitatum), Coastal Plain NC Ecotype)
  - 16% Beaked Panicgrass, GA Ecotype (*Panicum anceps*, GA Ecotype)
  - 16% Virginia Wildrye, GA Ecotype (*Elymus virginicus*, GA Ecotype)
  - 14% River Oats, Coastal Plain NC Ecotype (*Chasmanthium latifolium* (*Uniola latifolia*), Coastal Plain NC Ecotype)
  - 12% Switchgrass, 'Carthage', NC Ecotype (*Panicum virgatum*, 'Carthage', NC Ecotype)
  - 5% Winter Bentgrass, Piedmont NC Ecotype (*Agrostis hyemalis*, Piedmont NC Ecotype)
  - 5% Partridge Pea, FL Ecotype (*Chamaecrista fasciculata* (*Cassia f.*), FL Ecotype)
  - 3% Slender Woodoats, NC Ecotype (*Chasmanthium laxum* (*Uniola laxa*), NC Ecotype)
  - 2% Boneset, FL Ecotype (*Eupatorium perfoliatum*, FL Ecotype)
  - 2% Joe Pye Weed, AL Ecotype (*Eupatorium fistulosum*, AL Ecotype)
  - 2% Mistflower, FL Ecotype (*Eupatorium coelestinum* (*Conoclinium c.*), FL Ecotype)
  - 2% Leathery Rush, Coastal Plain NC Ecotype (*Juncus coriaceous*, Coastal Plain NC Ecotype)
  - 1% Crimsoneyed Rosemallow, 'Suther'-Piedmont NC Ecotype (*Hibiscus moscheutos*, 'Suther'-Piedmont NC Ecotype)
  - 1% Purplehead Sneezeweed, VA Ecotype (*Helianthus flexuosus*, VA Ecotype)
  - 1% New York Ironweed, 'Suther'-Piedmont NC Ecotype (*Vernonia noveboracensis*, 'Suther'-Piedmont NC Ecotype)
  - 1% Swamp (Narrowleaf) Sunflower, GA Ecotype (*Helianthus angustifolius*, GA Ecotype)
  - 1% Common Sneezeweed, FL Ecotype (*Helianthus autumnale*, FL Ecotype)
- Total: 100%

**ES&PC LEGEND**

**VEGETATIVE BEST MANAGEMENT PRACTICES**

- Du** DUST CONTROL ON DISTURBED AREA
- Ds1** DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)
- Ds2** DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)
- Ds3** DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)
- Ds4** DISTURBED AREA STABILIZATION (WITH SODDING)
- Ss** SLOPE STABILIZATION
- X** EXISTING TREES TO BE REMOVED

**STRUCTURAL BEST MANAGEMENT PRACTICES**

- LOD / TPF** LIMITS OF DISTURBANCE / TREE PROTECTION FENCE
- LOD** LIMITS OF DISTURBANCE
- X** SILT FENCE (**Sd1-S**)
- Sd2-P** CURB INLET SEDIMENT FILTER

TOTAL DISTURBED AREA: 0.29 ACRES

**EROSION CONTROL NOTES:**

1. SEE OUTLET PROTECTION (S1) DETAIL ON SHEET C3.41 FOR DESIGN DETAILS.
2. ALL SILT FENCE AND/OR TREE PROTECTION FENCE SHALL BE REMOVED FOLLOWING FINAL STABILIZATION.
3. ANY FILL DIRT PLACED ONSITE MUST BE CERTIFIED AS 'WEED FREE'.
4. Ds2 MULCH TO BE BROOM SEDGE MULCH.
5. Ds3 GRASS TO BE ERNST MIX 508 (GA PIEDMONT RIPARIAN MIX) UNLESS OTHERWISE NOTED.
6. NO EQUIPMENT SHALL BE STAGED OUTSIDE OF ROAD SHOULDER OR IN RIGHT-OF-WAY WITHOUT THE REQUIRED TRAFFIC CONTROL MEASURES IN PLACE.

THERE ARE KNOWN STATE WATERS ON THE PROPERTY  
 THERE ARE IMPAIRED STREAMS WITHIN ONE MILE DOWNSTREAM  
 AND WITHIN THE SAME WATERSHED AS THE PROJECT SITE  
 THERE ARE NO WETLANDS ON THE PROJECT SITE

24 HOUR CONTACT:  
 CITY OF SANDY SPRINGS  
 770-730-5600



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**REVISIONS:**

NO.	DATE	BY	DESCRIPTION
-1	11-25-2019	PEC	CITY COMMENTS

SANDY SPRINGS PROJECT #17-002

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**INTERMEDIATE & FINAL  
 EROSION CONTROL PLAN**



SCALE: 1" = 20'  
 DATE: 09/03/2019  
 PROJECT: 16230.00 Ph2

THIS SEAL IS ONLY VALID IF COUNTER SIGNED AND DATED WITH AN ORIGINAL SIGNATURE.



GSWCC LEVEL II DESIGN PROFESSIONAL  
 CERTIFICATION # 0000067548 EXP. 12/21/2021

**C3.30**  
 SHEET

## Du DUST CONTROL ON DISTURBED AREAS

### DEFINITION

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

### CONDITIONS

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

### METHOD AND MATERIALS

#### A. TEMPORARY METHODS

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

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

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

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

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

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

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

#### B. PERMANENT METHODS

Permanent Vegetation. See standard Ds3 - Disturbed Area Stabilization (With Permanent Vegetation). Refer to standard Cr - Construction Road Stabilization.

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

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

## Ds1 DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)

### DEFINITION

Applying plant residues or other suitable materials, produced on the site if possible, to the soil surface.

### CONDITIONS

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

### SPECIFICATIONS

#### MULCHING WITHOUT SEEDING

This standard applies to grades or cleared areas where seedings may not have a suitable growing season to produce an erosion retardant cover, but can be stabilized with a mulch cover.

#### SITE PREPARATION

- 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 barriers.
- Loosen compact soil to a minimum depth of 3 inches.

#### MULCHING MATERIALS

Select one of the following materials and apply at the depth indicated:

- Dry straw or hay shall be applied to a depth of 2 to 4 inches providing complete soil coverage. One advantage of the material is easy application.
- Wood waste (chips, sawdust or bark) shall be applied at a depth of 2 to 3 inches. Organic material from the clearing stage of development should remain

on site, be chipped, and applied as mulch. This method of mulching can greatly reduce erosion control costs.

- Cutback asphalt (slow curling) 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 material can be salvaged and reused.

#### APPLYING MULCH

When mulch is used without seeding, mulch shall be applied to provide full coverage of the exposed area.

- Dry Straw or hay mulch and wood chips shall be applied uniformly by hand or by mechanical equipment.
- If the area will eventually be covered with perennial vegetation, 20-30 pounds of nitrogen per acre in addition to the normal amount shall be applied to offset the uptake of nitrogen caused by the decomposition of the organic mulches.
- 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.
- Apply polyethylene film on exposed areas.

#### ANCHORING MULCH

- Straw or hay mulch can be pressed into the soil with a disk harrow with the disk set straight or with a special "packer disk." Disks may be smooth or serrated and should be 20 inches or more in diameter and 8 to 12 inches apart. The edges of the disk should be dull enough not to cut the mulch, but to press it into the soil leaving much of it in an erect position. Straw or hay mulch shall be anchored immediately after application. Straw or hay mulch spread with special blower-type equipment may be anchored with emulsified asphalt (Grade 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. Tackifiers and binders can be substituted for emulsified asphalt. Please refer to specification Tb-Tackifiers and Binders. Plastic mesh or netting with mesh no larger than one inch by one inch shall be installed according to manufacturer's specifications.
- 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.

## Ds2 DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)

### DEFINITION

The establishment of temporary vegetative cover with fast growing seedlings for seasonal protection on disturbed or denuded areas.

### CONDITIONS

Temporary grassing, instead of mulch, can be applied to rough graded areas that will be exposed for less than six months. Temporary vegetative measures should be coordinated with permanent measures to assure economical and effective stabilization. Most types of temporary vegetation are ideal to use as companion crops until the permanent vegetation is established.

## SEEDING RATES FOR TEMPORARY SEEDING

SPECIES	RATE Per 1,000 sq.ft.	RATE Per Acre*	PLANTING DATES**
Rye	3.9 pounds	3 bu.	9/15-11/30
Ryegrass	0.9 pounds	40 lbs.	9/1-12/15
Annual Lespedeza	0.9 pounds	40 lbs.	3/1-3/31
Weeping Lovegrass	0.1 pounds	4 lbs.	4/1-5/31
Sudangrass	1.4 pounds	60 lbs.	5/1-7/31
Browntop Millet	0.9 pounds	40 lbs.	4/15-6/30
Wheat	4.1 pounds	3bu.	10/1-12/15

\* Unusual site conditions may require heavier seeding rates.

\*\* Seeding dates may need to be altered to fit temperature variations and conditions.

SEE EROSION CONTROL NOTES SHEET C3.4

### SPECIFICATIONS

#### GRADING AND SHAPING

Excessive water run-off shall be reduced by properly designed and installed erosion control practices such as closed drains, ditches, dikes, diversions, sediment barriers and others.

#### SEEDBED PREPARATION

When a hydraulic seeder is used, seedbed preparation is not required. When using conventional or handseeding, seedbed preparation is not required if the soil material is loose and not sealed by rainfall.

When soil has been sealed by rainfall or consists of smooth cut slopes, the soil shall be pitted, trenched or otherwise scarified to provide a place for seed to lodge and germinate.

#### LIME AND FERTILIZER

Agricultural lime is required unless soil tests indicate otherwise. Apply agricultural lime at a rate of one ton per acre. Graded areas require lime application. Soils can be tested to determine if fertilizer is needed. On reasonably fertile soils or soil material, fertilizer is not required. For soils with low fertility, 500 to 700 pounds of 10-10-10 fertilizer or the equivalent per acre (12-16 lbs./1,000 sq. ft.) shall be applied. Fertilizer should be applied before land preparation and incorporated with a disk, ripper or chisel.

#### SEEDING

Select a grass or grass-legume mixture suitable to the area and season of the year. Seed shall be applied uniformly by hand, cyclone seeder, drill, cultipacker seeder, or hydraulic seeder (slurry including seed and fertilizer). Drill or cultipacker seeders should normally place seed one-quarter to one-half inch deep. Appropriate depth of planting is ten times the seed diameter. Soil should be "raked" lightly to cover seed with soil if seeded by hand.

#### MULCHING

Temporary vegetation can, in most places, be established without the use of mulch. Mulch without seeding should be considered for short term protection. Refer to Ds1 - Disturbed Area Stabilization (With Mulching Only).

#### IRRIGATION

During times of drought, water shall be applied at a rate not causing runoff and erosion. The soil shall be thoroughly wetted to a depth that will ensure germination of the seed. Subsequent applications should be made when needed.

## Ds3 DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)

### DEFINITION

The planting of perennial vegetation such as trees, shrubs, vines, grasses, or legumes on exposed areas for final permanent stabilization. Permanent perennial vegetation shall be used to achieve final stabilization.

### CONDITIONS

Permanent perennial vegetation is used to provide a protective cover for exposed areas including cuts, fills, dams, and other denuded areas.

### SPECIFICATIONS

#### GRADING AND SHAPING

Grading and shaping may not be required where hydraulic seeding and fertilizing equipment is to be used. Vertical banks shall be sloped to enable plant establishment.

When conventional seeding and fertilizing are to be done, grade and shape where feasible and practical, so that equipment can be used safely and efficiently during seedbed preparation, seeding, mulching and maintenance of the vegetation.

Concentrations of water that will cause excessive soil erosion shall be diverted to a safe outlet. Diversions and other treatment practices shall conform with the appropriate standards and specifications.

#### SEEDBED PREPARATION

Seedbed preparation may not be required where hydraulic seeding and fertilizing equipment is to be used. When conventional seeding is to be used, seedbed preparation will be done as follows:

#### I. Broadcast plantings

- 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 anchoring of soil; allow for the proper placement of seed, sprigs, or plants; and allow for the anchoring of straw or hay mulch if a disk is to be used.
- Tillage may be done with any suitable equipment.
- Tillage should be done on the contour where feasible.
- On slopes too steep for the safe operations of tillage equipment, the soil surface shall be pitted or trenched across the slope with appropriate hand tools to provide two places 6 to 8 inches apart in which seed may lodge and germinate. Hydraulic seeding may also be used.

#### II. Individual Plants

- Where individual plants are to be set, the soil shall be prepared by excavating holes, opening furrows, or dibble planting.
- 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 six months prior to planting. Subsoiling should be done when the soil is dry, preferably in August or September

#### PLANTING

##### I. Hydraulic Seeding

Mix the seed (inoculated if needed), fertilizer, and wood cellulose or wood pulp fiber mulch with water and apply in a slurry uniformly over the area to be treated. Apply within one hour after the mixture is made.

##### II. Conventional Seeding

Seeding will be done on a freshly prepared and firmed seedbed. For broadcast planting, use a cultipacker seeder, drill, rotary seeder, other mechanical seeder, or hand seeding to distribute the seed uniformly over the area to be treated. Cover the seed lightly with 1/8 to 1/4 inch of soil for small seed and 1/2 to 1 inch for large seed when using a cultipacker or other suitable equipment.

##### III. No-Till Seeding

No-till seeding is permissible into annual cover crops when planting is done following maturity of the cover crop or if the temporary cover stand is sparse enough to allow adequate growth of the permanent (perennial) species. No-till seeding shall be done with appropriate no-till seeding equipment. The seed must be uniformly distributed and planted at the proper depth.

##### IV. Individual Plants

Shrubs, vines and sprigs may be planted with appropriate planters or hand tools. Pine trees shall be planted manually in the subsoil furrow. Each plant shall be set in a manner that will avoid crowding the roots. Nursery stock plants shall be planted at the same depth or slightly deeper than they grew at the nursery. The tips of vines and sprigs must be at or slightly above the ground surface. Where individual holes are dug, fertilizer shall be placed in the bottom of the hole, two inches of soil shall be added and the plant shall be set in the hole.

#### MULCHING

Mulch is required for all permanent vegetation applications. Mulch applied to seeded areas shall receive 75% soil cover. Select the mulching material from the following and apply as indicated.

- Dry straw or dry hay of good quality and free of weed seeds can be used. Dry

straw shall be applied at the rate of 2 tons per acre. Dry hay shall be applied at a rate of 2 1/2 tons per acre.

- Wood cellulose mulch or wood pulp fiber shall be used with hydraulic seeding. It shall be applied at the rate of 500 pounds per acre. Dry straw or dry hay shall be applied (at the rate indicated above) after hydraulic seeding.
- 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.
- Senecio 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 suitable materials in sufficient quantity may be used where ornaments or other ground covers are planted. This is not appropriate for seeded areas.
- 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 to prevent erosion. Bituminous treated roving shall be applied within 24 hours after an area has been planted. Application rates and materials must meet Georgia Department of Transportation specifications.

Wood cellulose and wood pulp fibers shall not contain germination or growth inhibiting factors. They shall be evenly dispersed when agitated in water. The fibers shall contain a dye to allow visual metering and aid in uniform application during seeding.

#### Applying Mulch

Straw or hay mulch will be spread uniformly within 24 hours after seeding and/or planting. The mulch may be spread by blower-type spreading equipment, other spreading equipment or by hand. Mulch shall be applied to cover 75% of the soil surface.

Wood cellulose or wood pulp fiber mulch shall be applied uniformly with hydraulic seeding equipment.

#### Anchoring Mulch

Anchor straw or hay mulch immediately after application by one of the following methods:

- Emulsified asphalt can be (a) sprayed uniformly onto the mulch as it is ejected from the blower machine or (b) sprayed on the mulch immediately following mulch application when straw or hay is spread by methods other than special blower equipment.
- The combination of asphalt emulsion and water shall consist of a homogenous mixture satisfactory for spraying. The mixture shall consist of 100 gallons of grade SS-1h or CSS-1h emulsified asphalt and 100 gallons of water per ton of mulch.
- Care shall be taken at all times to protect state waters, the public, adjacent property, pavements, curbs, sidewalks, and all other structures from asphalt discoloration.

- Hay and straw mulch shall be pressed into the soil immediately after the mulch is spread. A special "packer disk" or disk harrow with the disks set straight may be used. The disks may be smooth or serrated and should be 20 inches or more in diameter and 8 to 12 inches apart. The edges of the disks shall be dull enough to press the mulch into the ground without cutting it, leaving much of it in an erect position. Mulch shall not be plowed into the soil.

3. Synthetic tackifiers or binders approved by GDOT shall be applied in conjunction with or immediately after the mulch is spread. Synthetic tackifiers shall be mixed and applied according to manufacturer's specifications. Refer to Tb - Tackifiers and Binder.

4. Rye or wheat can be included with Fall and Winter plantings to stabilize the mulch. They shall be applied at a rate of one-quarter to one-half bushel per acre.

5. Plastic mesh or netting with mesh no larger than one inch by one inch may be needed to anchor straw or hay mulch on unstable soils and concentrated flow areas. These materials shall be installed and anchored according to manufacturer's specifications.

#### IRRIGATION

Irrigation shall be applied at a rate that will not cause runoff.

## SEEDING RATES FOR PERMANENT SEEDING

SPECIES	RATE Per 1,000 sq.ft.	RATE Per Acre*	PLANTING DATES**
BAHIA	1.4 pounds	60 lbs.	4/1-5/31
BERMUDA	0.2 pounds	10 lbs.	4/1-5/31
CENTPEDE	BLOCK SOD ONLY	BLOCK SOD ONLY	11/1-5/31
LESPEDEZA	1.7 pounds	75 lbs.	9/1-2/28
WEEPING LOVE GRASS	0.1 pounds	4 lbs.	3/15-5/31
SWITCH GRASS	0.9 pounds	40 lbs.	3/1-4/30

\* Unusual site conditions may require heavier seeding rates. Seeding dates may need to be altered to fit temperature variations and conditions.

Types of Species	Planting Year	Fertilizer (N-P-K)	Rate (lbs./acre)	Nitrogen Top Dressing Rate (lbs./acre)
Cool Season Grasses	First	6-12-12	1500	50-100 <sup>1,2</sup>
	Second Maintenance	6-12-12 10-10-10	1000 400	30
Cool Season Grasses & Legumes	First	6-12-12	1500	0-50 <sup>1</sup>
	Second Maintenance	0-10-10 0-10-10	1000 400	-
Ground Covers	First	10-10-10	1300 <sup>3</sup>	-
	Second Maintenance	10-10-10 10-10-10	1300 <sup>3</sup> 400	-
Pine Seedlings	First	20-10-5	one 21g pellet per seeding placed in closing hole	-
Shrub Lespedeza	First	0-10-10	700	-
	Maintenance	0-10-10	700 <sup>4</sup>	-
Temporary cover crops seeded alone	First	10-10-10	500	30 <sup>5</sup>
Warm Season Grasses	First	6-12-12	1500	50-100 <sup>2,6</sup>
	Second Maintenance	6-12-12 10-10-10	800 400	30
Warm Season Grasses & Legumes	First	6-12-12	1500	50 <sup>6</sup>
	Second Maintenance	0-10-10 0-10-10	800 400	-

<sup>1</sup> Apply in spring following seeding.

<sup>2</sup> Apply in split applications when high rates are used.

<sup>3</sup> Apply in 3 split applications.

<sup>4</sup> Apply when plants are pruned.

<sup>5</sup> Apply to grass species only.

<sup>6</sup> Apply when plants grow to a height of 2 to 4 inches.

# NORTH POWERS FERRY ROAD - PHASE 2

A STORMWATER BMP MAINTENANCE PROJECT

CITY OF SANDY SPRINGS

1 GALAMBOS WAY

SANDY SPRINGS, GA 30028

PHONE: (770) 730-5600

CITY OF SANDY SPRINGS  
FULTON COUNTY  
GEORGIA

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SITE PLANNING LANDSCAPE ARCHITECTURE CIVIL ENGINEERING LAND SURVEYING  
350 RESEARCH COURT PEACHTREE CORNERS, GEORGIA 30092 (770) 451-2741 FAX (770) 451-3915

LAND LOT 175  
3RD DISTRICT

## REVISIONS:

NO.	DATE	BY	DESCRIPTION
-1	11-25-2019	PEC	CITY COMMENTS

## SANDY SPRINGS PROJECT #17-002

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## EROSION & SEDIMENT CONTROL DETAILS

SCALE: N/A  
DATE: 09/03/2019  
PROJECT: 16230.00 Ph2

THIS SEAL IS ONLY VALID IF COUNTER SIGNED AND DATED WITH AN ORIGINAL SIGNATURE.



GSWCC LEVEL II DESIGN PROFESSIONAL CERTIFICATION # 0000067548 EXP. 12/21/2021

Sandy Springs, GA

DEC 2 6 2019

Permitted Director  
Community Development Department

C3.40

SHEET



PIPE DIAMETER (INCHES)	PIPE TYPE	MINIMUM COVER (INCHES)	HEIGHT OF FILL IN FEET ABOVE TOP OF PIPE																PIPE DIAMETER (INCHES)
			1-10	10-15	15-20	20-25	25-30	30-35	35-40	40-50	50-60	60-70	70-80	80-90	90-100				
12	CONCRETE	12	III	III	IV	V	V	V	V	V	V	V	V	V	V	V	V	12	
	STEEL 1	12	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	
15	CONCRETE	15	III	III	IV	V	V	V	V	V	V	V	V	V	V	V	V	15	
	STEEL 1	15	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	
18	CONCRETE	18	III	III	IV	V	V	V	V	V	V	V	V	V	V	V	V	18	
	STEEL 1	18	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	
24	CONCRETE	24	III	III	IV	V	V	V	V	V	V	V	V	V	V	V	V	24	
	STEEL 1	24	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	
30	CONCRETE	30	III	III	IV	V	V	V	V	V	V	V	V	V	V	V	V	30	
	STEEL 1	30	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	
36	CONCRETE	36	III	III	IV	V	V	V	V	V	V	V	V	V	V	V	V	36	
	STEEL 1	36	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	
42	CONCRETE	42	III	III	IV	V	V	V	V	V	V	V	V	V	V	V	V	42	
	STEEL 1	42	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	
48	CONCRETE	48	III	III	IV	V	V	V	V	V	V	V	V	V	V	V	V	48	
	STEEL 1	48	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	
54	CONCRETE	54	III	III	IV	V	V	V	V	V	V	V	V	V	V	V	V	54	
	STEEL 1	54	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	
60	CONCRETE	60	III	III	IV	V	V	V	V	V	V	V	V	V	V	V	V	60	
	STEEL 1	60	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	
66	CONCRETE	66	III	III	IV	V	V	V	V	V	V	V	V	V	V	V	V	66	
	STEEL 1	66	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	
72	CONCRETE	72	III	III	IV	V	V	V	V	V	V	V	V	V	V	V	V	72	
	STEEL 1	72	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	
78	CONCRETE	78	III	III	IV	V	V	V	V	V	V	V	V	V	V	V	V	78	
	STEEL 1	78	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	
84	CONCRETE	84	III	III	IV	V	V	V	V	V	V	V	V	V	V	V	V	84	
	STEEL 1	84	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	
90	CONCRETE	90	III	III	IV	V	V	V	V	V	V	V	V	V	V	V	V	90	
	STEEL 1	90	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	
96	CONCRETE	96	III	III	IV	V	V	V	V	V	V	V	V	V	V	V	V	96	
	STEEL 1	96	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	
102	CONCRETE	102	III	III	IV	V	V	V	V	V	V	V	V	V	V	V	V	102	
	STEEL 1	102	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	
108	CONCRETE	108	III	III	IV	V	V	V	V	V	V	V	V	V	V	V	V	108	
	STEEL 1	108	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	
114	CONCRETE	114	III	III	IV	V	V	V	V	V	V	V	V	V	V	V	V	114	
	STEEL 1	114	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	
120	CONCRETE	120	III	III	IV	V	V	V	V	V	V	V	V	V	V	V	V	120	
	STEEL 1	120	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	

IMPERFECT BACKFILL IS NOT REQUIRED FOR CONDITIONS SHOWN ON THE LEFT SIDE OF THE HEAVY LINE. USE NORMAL BACKFILL.

FOR CONDITIONS TO THE RIGHT OF THE HEAVY LINE, CLASS V CONCRETE PIPE REQUIRES IMPERFECT BACKFILL ACCORDING TO DETAIL "A" OR "B" ON SHEET 1 OF 3.

STEEL 1 OR ALUM 1 DENOTES CORRUGATION PROFILE 2 2/3" x 1/2"

STEEL 2 OR ALUM 2 DENOTES CORRUGATION PROFILE 3" x 1/2" (OR 5" x 1/2" FOR STEEL PIPE ONLY)

ALL STEEL AND ALUMINUM PIPE SHALL BE LOCK-SEAM OR WELDED-SEAM (HEAVY LINE) CONSTRUCTION. MINIMUM COVER VALUES APPLY TO HS-20 LIVE LOAD. MINIMUM COVER NEEDED FOR CONSTRUCTION VEHICLES MAY BE GREATER AND IS THE RESPONSIBILITY OF THE CONTRACTOR.

TRENCH CONSTRUCTION IS REQUIRED FOR CONDITIONS ON BOTH SIDES OF HEAVY LINE. SEE SHEET 1 OF 3.

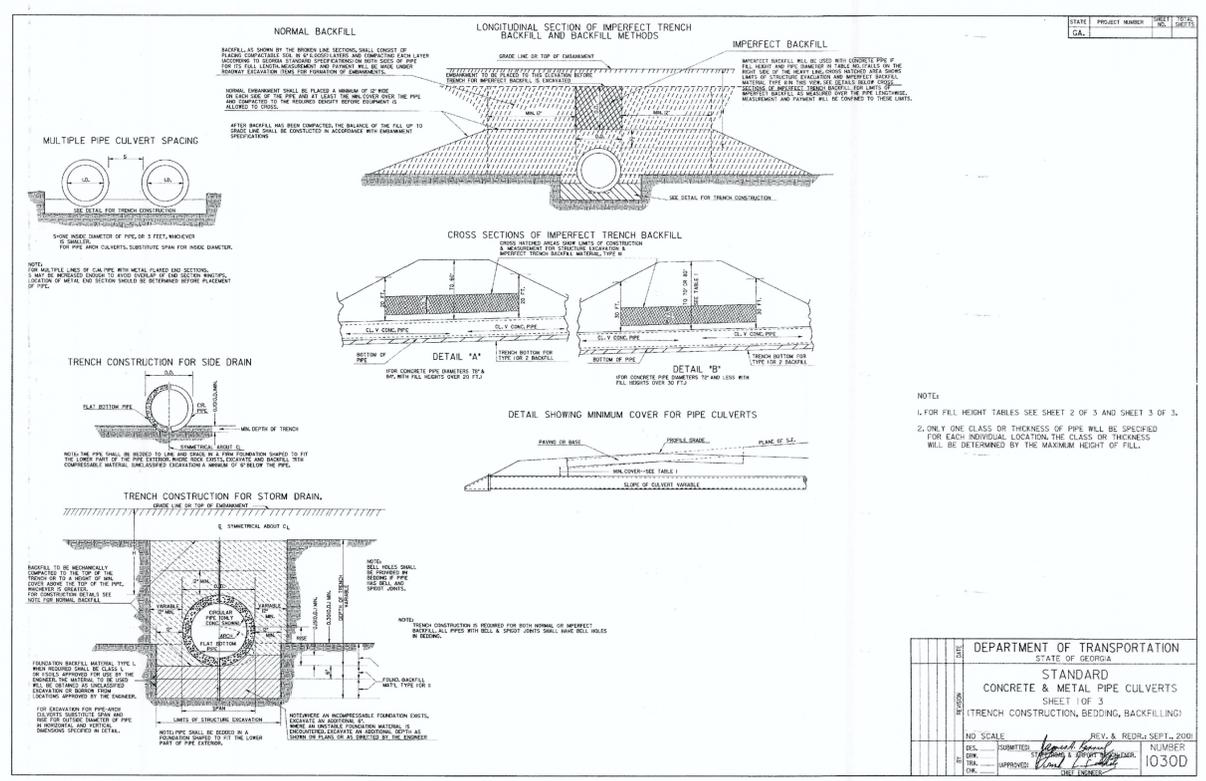
FOR CONDITIONS TO RIGHT OF HEAVY LINE, CONCRETE PIPE REQUIRES IMPERFECT BACKFILL ACCORDING TO SPECIFICATIONS AND THIS STANDARD.

TABLE VALUES FOR ALUMINUM CORRUGATED PIPE (OR ALUMINUM SPIRAL RIB PIPE) ARE COMPUTED BASED UPON ALLCAD 3004-H34 HAVING MINIMUM YIELD STRENGTH,  $f_y=24,000$  PSI. IF ALUMINUM PIPE IS OTHERWISE FURNISHED AS 3004-H32 ( $f_y=20,000$  PSI), THE TABLE NO. ALLOWABLE FILL HEIGHTS SHALL BE ADJUSTED AS FOLLOWS:

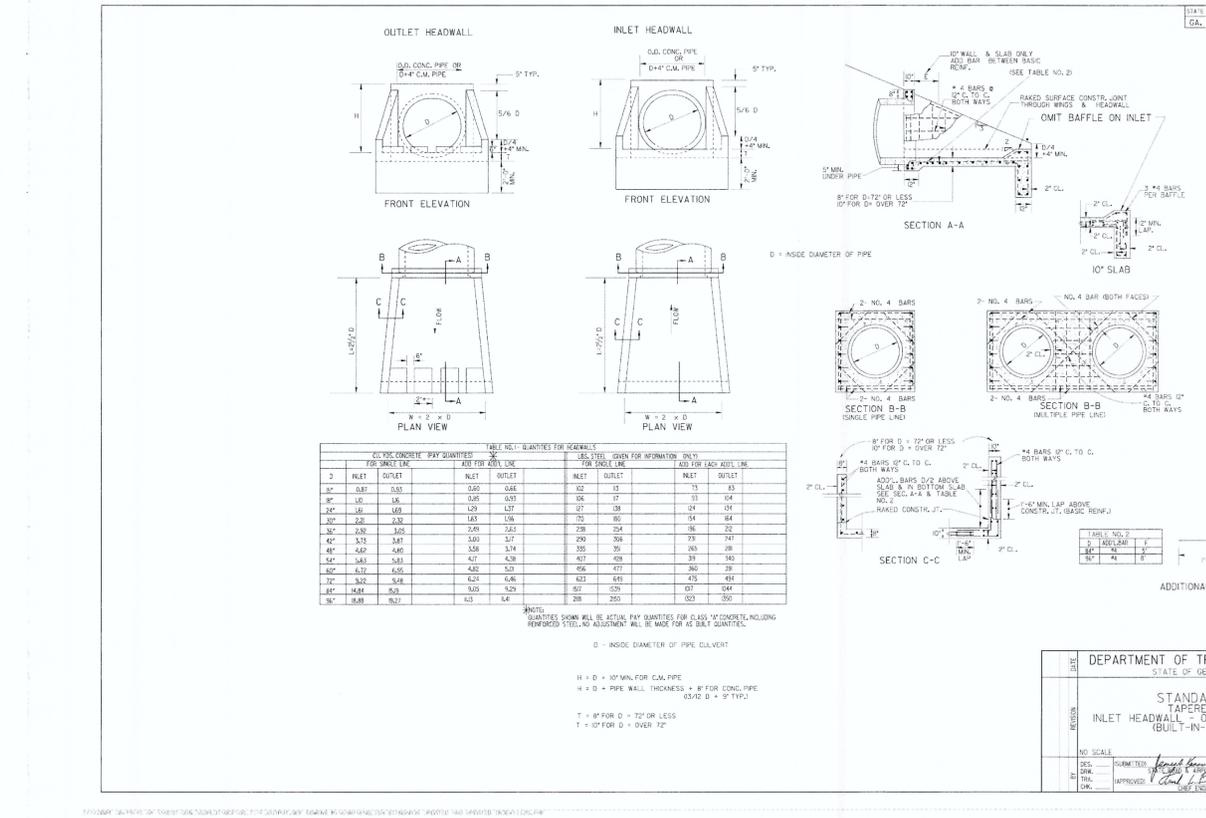
A. ALL MINIMUM COVER VALUES SHALL BE INCREASED BY 15 PERCENT. (EXAMPLE: 12 INCHES BECOMES 13.8 INCHES)

B. ALL HEIGHT OF FILL VALUES SHALL BE DECREASED BY 15 PERCENT. (EXAMPLE: 35-40 FEET BECOMES 29.1-34.0 FEET)

1 DETAIL  
C4.00 GDOT 1030D CULVERT EMBEDMENT



NO.	DATE	BY	DESCRIPTION
-1	11-25-2019	PEC	CITY COMMENTS



2 DETAIL  
C4.00 GDOT 1125 TAPERED HEADWALL

# NORTH POWERS FERRY ROAD - PHASE 2

## A STORMWATER BMP MAINTENANCE PROJECT

FOR  
CITY OF SANDY SPRINGS

1 GALAMBOS WAY  
SANDY SPRINGS, GA 30328  
PHONE: (770) 730-5600

LAND LOT 175  
364 DISTRICT

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350 RESEARCH CORNERS, GEORGIA 30092 | (770) 451-2741 | FAX (770) 451-5915

### REVISIONS:

NO.	DATE	BY	DESCRIPTION
-1	11-25-2019	PEC	CITY COMMENTS

SANDY SPRINGS PROJECT #17-002

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### CONSTRUCTION DETAILS

SCALE: N/A  
DATE: 09/03/2019  
PROJECT: 16230.00 Ph2

THIS SEAL IS ONLY VALID IF COUNTER SIGNED AND DATED WITH AN ORIGINAL SIGNATURE.

GSWCC LEVEL II DESIGN PROFESSIONAL  
 CERTIFICATION # 0000067548 EXP. 12/21/2021

Sandy Springs, GA  
 DEC 2 6 2019  
 Permitted Director  
 Community Development Department

# C4.00

SHEET

