

CONSTRUCTION PLANS FOR: COBB COUNTY-MARIETTA WATER AUTHORITY

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| PROJECT BREAKDOWN BY COUNTY/CITY |
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STA: 0+00 - 49+25 (4,925 LF.)

COBB COUNTY GEORGIA, WITHIN ACWORTH CITY LIMITS DISTRICT 20, LAND LOTS 5,34, 43, 44 PROJECT AREA: 6.36 AC. DISTURBED AREA: 5.09 AC

STA: 49+38 - 56+88 (750 LF.)

COBB COUNTY, OUTSIDE ACWORTH CITY LIMITS DISTRICT 20, LAND LOTS 5,34, 43, 44 PROJECT AREA: 1.09 AC., DISTURBED AREA: 0.87 AC

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STA: 56+88 - 70+79 (1,391 LF.) BARTOW COUNTY SECTION 2, DISTRICT 21, LAND LOT 1287 PROJECT AREA: 1.8 AC, DISTRUBED AREA: 1.44 AC



PROJECT: WYCKOFF RAW WATER PIPELINE **REPLACEMENT (30-INCH REPLACEMENT)** CCMWA PROJECT No: 505-9005-35-20-0000

CONSULTING ENGINEER:





24 HOUR CONTACT: CHRIS DILLARD, P.E., PMP (770)-514-5350 (770)-616-5668



CCMWA BOARD MEMBERS

| JAMES C. SCOTT, JR. | CHAIRMAN |
|---------------------------------|-------------------------|
| T.DANIEL "DAN" BUYERS | VICE CHAIRMAN |
| CHARLIE N. CROWDER | SECRETARY |
| CHARLES "CORKEY" A. WELCH | MEMBER |
| JAMES A. BALLI | MEMBER |
| LISA N. CUPID | MEMBER |
| GRIFFIN "GRIF" L. CHALFANT, JR. | MEMBER |
| GLENN M. PAGE, P.E. | GENERAL MANAGER |
| GEORGE J. KAFFEZAKIS, P.E. | DIRECTOR OF ENGINEERING |
| | |

GENERAL INFORMATION

STANDARD PATTERNS

USACE PROPERTY

EXISTING ASPHALT



ASPHALT MILL AND REPAVE

PERMANENT EASEMENT

1. OWNER: 1170 ATLANTA INDUSTRIAL DRIVE MARIETTA, GEORGIA 30066

- (770) 514-5350 514-5350 3. ENGINEER:
- ENGINEERING STRATEGIES, INC. 3855 SHALLOWFORD ROAD, SUITE 525 MARIETTA, GEORGIA 30062 (770) 429-0001
- 4. THE CONTRACTOR SHALL GIVE A 24-HOUR EMERGENCY TELEPHONE NUMBER AND NAME OF PERSON TO CONTACT IN AN EMERGENCY.
- 5. ALL CONSTRUCTION AND MATERIALS SHALL BE TO COBB COUNTY-MARIETTA WATER AUTHORITY STANDARDS.
- 6. THE PERMANENT EASEMENT REPRESENTS THE LIMITS OF CLEARING FOR THE COMPLETE JOB. THE CONTRACTOR SHALL NOT CLEAR BEYOND THIS LIMIT. 7. CONTRACTOR SHALL DELINEATE THE LIMITS OF CLEARING (PERMANENT EASEMENT) WITH
- TREE PROTECTION FENCE. 8. CONTRACTOR SHALL PROVIDE AND MAINTAIN OFF STREET PARKING, AND A CONSTRUCTION STORAGE AREA DURING THE ENTIRE CONSTRUCTION PERIOD. THIS AREA SHALL NOT BE LOCATED WITHIN THE LIMITS OF DISTURBANCE OF THIS PROJECT.
- 9. AS-BUILTS ARE REQUIRED TO BE SUBMITTED UPON COMPLETION OF CONSTRUCTION. 10. EXISTING ROADS SHALL NOT BE OPEN CUT UNLESS PERMISSION IS GRANTED BY THE GEORGIA DOT, THE COBB COUNTY DOT, THE BARTOW COUNTY DOT OR THE CITY OF ACWORTH DOT. A COPY OF THE AUTHORIZATION LETTER FROM THE DOT MUST BE PROVIDED TO THE OWNER & ENGINEER PRIOR TO CONSTRUCTION.
- 11. IF WORK IS PERFORMED ON A GEORGIA DOT OR A COBB COUNTY/BARTOW COUNTY/CITY OF ACWORTH RIGHT-OF-WAY A LETTER FROM THE GOVERNING AGENCY IS REQUIRED TO BE SUBMITTED TO THE OWNER & ENGINEER AFTER CONSTRUCTION IS COMPLETE STATING THAT GRASSING, CLEAN-UP, DRAINAGE, ETC. IS ACCEPTABLE.

UNDERGROUND UTILITIES

COORDINATION WITH COBB COUNTY

- 1. COBB COUNTY HAS ENACTED A LOCAL ORDINANCE, WHICH REQUIRES STRICT ADHERENCE TO OSHA REGULATIONS SUBPART P. PART 1926 PERTAINING TO TRENCHING AND EXCAVATION. ALL BIDDERS ARE ADVISED TO BE FAMILIAR WITH BOTH THE OSHA REGULATIONS AND THE LOCAL ORDINANCE BEFORE BIDDING THIS PROJECT. 2. A TRENCHING AND DITCHING PERMIT IS REQUIRED PRIOR TO ANY WATER AND SEWER MAIN CONSTRUCTION. UTILITY CONTRACTORS MAY OBTAIN THIS PERMIT BY CONTACTING TRACY
- BROWN AT (770) 258-0271.
- DEPARTMENT 4. ALL SIGNS ON THIS PROJECT ARE TO BE PERMITTED THROUGH CODE ENFORCEMENT/SIGN DIVISION.
- 5. ALL TRAFFIC CONTROL MEASURES MUST BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST REVISION AND APPROVED BY THE COBB COUNTY DEPARTMENT OF TRANSPORTATION AND/OR THE GEORGIA DEPARTMENT OF TRANSPORTATION PRIOR TO IMPLEMENTATION. THE CONTRACTOR SHALL MODIFY ANY TRAFFIC CONTROL MEASURES AS DIRECTED BY EITHER ENTITY AT NO ADDITIONAL COST TO THE OWNER.
- 6. PRIOR TO ANY STREET CLOSING, PARTIAL OR TOTAL, THE CONTRACTOR MUST OBTAIN A ROAD CLOSING PERMIT FROM THE COBB COUNTY DEPARTMENT OF TRANSPORTATION. FOR LANE CLOSURE - (770) 528-2145, DEVELOPMENT AND INSPECTIONS. FOR TOTAL STREET CLOSURE - (770) 528-1670, CCDOT.
- 7. EROSION CONTROL PRACTICES MUST COMPLY WITH THE MINIMUM BEST MANAGEMENT PRACTICES FOR EROSION CONTROL (COBB COUNTY CODE SECTION 50-75) AND SHALL COMPLY WITH THE STANDARDS AND SPECIFICATIONS IN THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA"
- 8. THE CONTRACTOR SHALL OBTAIN A GRADING PERMIT FROM THE COBB COUNTY DEVELOPMENT CONTROL DEPARTMENT AT 100 CHEROKEE ST., MARIETTA, GA. AFTER ALL SEDIMENT AND EROSION CONTROL DEVICES ARE INSTALLED ACCORDING TO THE PLANS, CALL DEVELOPMENT CONTROL AT (770) 528-2134 WITH ENOUGH LEAD TIME FOR AN INSPECTION TO MEET THE SCHEDULE. 9. COBB COUNTY ACCEPTS NO RESPONSIBILITY FOR THE AMERICANS WITH DISABILITIES ACT (ADA), EXCEPT FOR NOTIFICATION REQUIREMENT.
- 10. ALL CONSTRUCTION TO CONFORM TO APPLICABLE COBB COUNTY DOT SPECIFICATIONS AND IN ACCORDANCE WITH COBB COUNTY ORDINANCES.
- WORKMANSHIP
- 1. THE CONTRACTOR SHALL PROVIDE, ERECT, AND MAINTAIN ALL NECESSARY BARRICADES, SUITABLE AND SUFFICIENT RED LIGHTS, DANGER SIGNALS, AND SIGNS, PROVIDE SUFFICIENT NUMBER OF WATCHMEN, AND TAKE NECESSARY PRECAUTIONS FOR THE PROTECTION OF THE WORK AND THE SAFETY OF THE PUBLIC. 2. CONSTRUCTION EQUIPMENT SHALL NOT BE PARKED IN THE RIGHT-OF-WAY AT ANY TIME OTHER THAN WORK HOURS UNLESS PRIOR APPROVAL HAS BEEN OBTAINED FROM THE LOCAL DOT.
- 3. CONSTRUCTION EQUIPMENT SHALL NOT BE PARKED IN AREAS, WHICH RESTRICT SIGHT DISTANCE AT ANY TIME.
- 4. ROADWAYS ARE TO BE KEPT FREE OF DIRT, MUD, AND OTHER DEBRIS AT ALL TIMES. 5. THE ROADWAY AND THE ROADWAY SHOULDERS SHALL BE SHORED PROPERLY DURING ALL TRENCHING ACTIVITY. BACKFILLING SHALL MEET MINIMUM COUNTY OR STATE COMPACTION REQUIREMENTS. NO DROP-OFFS ADJACENT TO THE ROADWAY WILL REMAIN AFTER THE
- SUSPENSION OF WORK. 6. CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS AND POSTAL SERVICE THROUGHOUT THE DURATION OF THE PROJECT.
- 7. THE CONTRACTOR SHALL INSTALL TREE PROTECTION DEVICES AT THE SAME TIME AS EROSION CONTROL DEVICES.
- 8. ANY INFRASTRUCTURE (PAVEMENT, DRAINAGE STRUCTURES, CURB AND GUTTER, SIDEWALKS, SIGNALS, ETC.) DAMAGED OR DISPLACED AS THE RESULT OF THIS PROJECT SHALL BE REPLACED BY THE CONTRACTOR.
- 9. CONTRACTOR IS RESPONSIBLE FOR REPLACING IN AND MATCHING ORIGINAL CONDITION ANY LANDSCAPING THAT HAS BEEN DESTROYED OR REMOVED DUE TO THE INSTALLATION OF THE WATER MAIN. 10. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY STORM DRAINAGE INFRASTRUCTURE DAMAGED OR DISTURBED DURING THE CONSTRUCTION PROCESS.

PIPELINE CONSTRUCTION

- - 1. THE CONTRACTOR SHALL SCHEDULE ANY SYSTEM SHUTDOWNS, CONNECTIONS TO EXISTING WATER MAINS, AND SERVICE CONNECTIONS WITH THE COBB COUNTY-MARIETTA WATER AUTHORITY, COBB COUNTY WATER SYSTEM, AND BARTOW COUNTY COUNTY WATER SYSTEM. 2. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING THE EXACT LOCATION, SIZE, AND MATERIAL OF ANY EXISTING WATER MAIN PRIOR TO THE PROPOSED CONNECTIONS AS SHOWN ON THE CONTRACT DRAWINGS.
 - 3. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING PROPER HORIZONTAL AND VERTICAL ALIGNMENT AS SHOWN ON THE PLANS. BENDS INSTALLED DUE TO CONTRACTOR ERROR OR NEGLIGENCE WILL NOT BE MEASURED FOR PAYMENT.

COBB COUNTY-MARIETTA WATER AUTHORITY

2. THE COBB COUNTY-MARIETTA WATER AUTHORITY 24-HOUR TELEPHONE NUMBER IS (770)

INFORMATION REGARDING UNDERGROUND UTILITIES ON THESE PLANS IS NOT GUARANTEED AS TO ACCURACY OR COMPLETENESS. PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL REQUEST A FIELD LOCATION THROUGH THE UTILITY PROTECTION CENTER AND ANY UTILITY OWNERS THOUGHT TO HAVE FACILITIES IN THE AREA. THE CONTRACTOR SHALL PROMPTLY COMPARE THESE FIELD-MARKED LOCATIONS WITH THE PROJECT PLANS AND THEN NOTIFY THE ENGINEER OF ANY ANTICIPATED PROBLEMS OR NEED FOR CONTRACT CHANGES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXCAVATE OR CAUSE THE UTILITY TO EXCAVATE FOR THE PURPOSE OF DETERMINING EXACT ELEVATIONS OR LOCATIONS AT UTILITY CROSSINGS AND OTHER CRITICAL LOCATIONS WELL IN ADVANCE OF THE WORK UNDER THIS CONTRACT.

- 3. ALL CONSTRUCTION TRAILERS ARE TO BE PERMITTED THROUGH THE PLANNING AND ZONING

- 4. ALL PIPES, FITTINGS, VALVES, AND RESTRAINT SYSTEMS SHALL BE ABLE TO WITHSTAND A FIELD TEST PRESSURE 1.5 TIMES WORKING PRESSURE AT THE LOWEST POINT. 5. ALL PIPE JOINTS TO HAVE DOUBLE BONDING CABLES. (SEE STANDARD DETAILS)
- SITE INFORMATION
- 1. THERE IS ONE CEMETERY LOCATED WITHIN THE LIMITS OF THIS PROJECT OR ADJACENT TO THIS PROJECT AND IT IS LOCATED WITHIN THE CITY OF ACWORTH.
- 2. THE COBB COUNTY CEMETERY PRESERVATION COMMISSION RESERVES THE RIGHT TO EXAMINE THIS PROPERTY FOR ETHNIC, CULTURAL AND RELIGIOUS EVIDENCE LOCATED THEREIN. IF ANY ETHNIC, CULTURAL OR RELIGIOUS EVIDENCE IS FOUND DURING DEVELOPMENT, THEN THE COBB COUNTY CEMETERY PRESERVATION COMMISSION MUST BE NOTIFIED AT ONCE AT (770) 528-2035. FAILURE TO DO SO WILL RESULT IN A STOP-WORK ORDER.
- 3. THE TOTAL DISTURBED IMPACT OF THIS PROJECT IS 7.40 AC.
- 4. THERE WILL BE NO PERMANENT EFFECTS CAUSED BY THIS PROJECT, WHICH WOULD RESULT IN THE POTENTIAL OF DOWNSTREAM FLOOD HAZARDS.
- 5. ZONING REGULATIONS OBTAINED FROM COBB/BARTOW PLANNING AND ZONING INDICATE THAT THE PROJECT IS LOCATED IN R-20 ZONED AREAS IN COBB COUNTY, A-1 ZONED AREAS IN BARTOW COUNTY AND IN R-2 ZONED AREAS IN THE CITY OF ACWORTH.
- 6. THESE PLANS ARE EXEMPT FROM ZONING REQUIREMENTS PER SEC. 134-3 OF THE COBB COUNTY CODE. HOWEVER, THIS PROJECT SHALL BE REQUIRED TO MEET ALL OTHER DEVELOPMENT CODES, REGULATIONS, ORDINANCES, AND LAWS.

TREE PROTECTION NOTES

- 1. A PRE-CONSTRUCTION CONFERENCE IS REQUIRED PRIOR TO THE ISSUANCE OF THE ON-SITE CONSTRUCTION PERMIT. CALL THE SITE INSPECTIONS SECTION AT (770) 528-2142 TO ARRANGE A MEETING AT THE SITE.
- 2. THE SITE CONTRACTOR SHALL COORDINATE SERVICE ROUTING OF ALL GAS, TELEPHONE, AND ELECTRICAL LINES WITH THE APPROPRIATE UTILITY COMPANY. ALL CONSTRUCTION MUST COMPLY WITH EACH UTILITY'S STANDARDS AND SPECIFICATIONS AND NOT INTERFERE WITH TREE PLANTING SITES OR EXISTING TREES TO BE PRESERVED.
- 3. TREE PROTECTION DEVICES MUST BE INSTALLED AND INSPECTED PRIOR TO ANY CLEARING, GRUBBING OR GRADING.
- 4. ROOT SYSTEMS OF SIGNIFICANT TREES, AS INDICATED ON THE PLANS, WHICH ARE ENCOUNTERED DURING CONSTRUCTION, SHALL BE FREE-BORED UNDER.
- 5. TREE PROTECTION SHALL BE ENFORCED ACCORDING TO COBB COUNTY, BARTOW COUNTY AND CITY OF ACWORTH STANDARDS. ANY FIELD ADJUSTMENTS TO TREE PROTECTION DEVICE TYPES OR LOCATIONS OR SUBSTITUTIONS OF REPLACEMENT PLANT MATERIALS SHOWN ON THE APPROVED PLANS ARE SUBJECT TO THE REVIEW AND APPROVAL OF THE COBB COUNTY, BARTOW COUNTY OR CITY OF ACWORTH ARBORIST.
- 6. THE INSTALLATION OF EROSION CONTROL DEVICES CAUSES HARM TO TREES. USE SILT FENCE ONLY AS REQUIRED AND LOCATE IT AS FAR FROM TREE PROTECTION ZONES AS POSSIBLE.
- 7. WHEN DIGGING NEAR TREES, THE CONTRACTOR SHALL PRUNE ALL EXPOSED ROOTS ONE (1) INCH IN DIAMETER AND LARGER ON THE SIDE OF THE TRENCH ADJACENT TO THE TREES. PRUNING SHALL CONSIST OF MAKING A CLEAN CUT FLUSH WITH THE SIDE OF THE TRENCH TO PROMOTE NEW ROOT GROWTH.
- 8. PRUNING OF TREE LIMBS TO PROVIDE CLEARANCE FOR EQUIPMENT AND MATERIALS SHALL BE DONE ACCORDING TO STANDARD ARBORICULTURAL PRACTICE (SEE ANSI A300-1995).
- 9. PROTECT THE TRUNKS OF ANY TREES BEING PRESERVED WITHIN THE TEMPORARY OR PERMANENT UTILITY EASEMENTS WITH STRAPPED-ON PLANKING OR SIMILAR PROTECTIVE DEVICE.
- 10. ROOT SYSTEMS OF SIGNIFICANT TREES, AS INDICATED ON PLANS, WHICH ARE ENCOUNTERED DURING CONSTRUCTION, SHALL BE FREE BORED UNDER.
- 11. THE INSTALLATION OF EROSION CONTROL DEVICES CAN CAUSE HARM TO TREES. USE SILT FENCE ONLY AS REQUIRED AND LOCATE IT AS FAR FROM TREE PROTECTION ZONES AS POSSIBLE.

COBB COUNTY PIPE NOTES

- 1. THE DEPARTMENT OF TRANSPORTATION, STATE OF GEORGIA STANDARD "PIPE CULVERTS" NUMBER 1030D, LATEST EDITION SHALL BE USED IN DETERMINING THE CLASS OF REINFORCED CONCRETE PIPE OR GAGE OF CORRUGATED STEEL PIPE OR TYPE 2 CORRUGATED ALUMINUM PIPE UNDER FILL AND THE METHOD OF BACK-FILLING. THE MINIMUM GAGE FOR CORRUGATED STEEL PIPE ALLOWED UNDER COBB COUNTY STANDARDS IS 12 (0.109 INCHES). ALL CORRUGATED STEEL PIPES ARE TO BE FULLY COATED. THE MINIMUM GAGE FOR TYPE 2 CORRUGATED ALUMINUM PIPE UNDER COBB COUNTY STANDARDS IS 14 (0.075 INCHES).
- 2. FIELD JOINTS FOR CORRUGATED PIPE SHALL BE MADE WITH BANDS OF THE SAME BASE METAL AND COATING AS THE CORRUGATED PIPE. BANDS SHALL BE OF THE HUGGER TYPE DESIGNED TO FULLY ENGAGE AT LEAST ONE ANNULAR CORRUGATION AT THE END OF EACH CORRUGATED PIPE AROUND ITS ENTIRE CIRCUMFERENCE, MINIMUM BAND WIDTH SHALL EQUAL THE CENTERLINE LENGTH OF FOUR (4) ANNULAR CORRUGATIONS. BANDS SHALL CONFORM TO CURRENT ASTM/AASHTO INDUSTRY STANDARDS AS TO SECURING BOLTS, THEIR NUMBER AND PLACEMENT.
- 3. CONCRETE PIPE SECTIONS MAY BE JOINED WITH BITUMINOUS PLASTIC CEMENT JOINTS, RUBBER-TYPE GASKET JOINTS, O-RING GASKET JOINTS OR PRE-FORMED PLASTIC GASKET JOINTS. IN BITUMINOUS PLASTIC CEMENT JOINTS, THE ANNULAR SPACE SHALL BE FILLED WITH JOINT MATERIAL, AND THE INSIDE OF EACH JOINT WIPED SMOOTH. RUBBER-TYPE, O_RING, AND PRE-FORMED PLASTIC GASKET JOINTS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- 4. ALL CATCH BASINS, DROP INLETS OR OTHER DRAINAGE STRUCTURES SHALL COMPLY WITH THE LATEST STANDARDS APPROVED AND PROMULGATED BY THE GEORGIA DEPARTMENT OF TRANSPORTATION IN "STANDARDS SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES". LATEST EDITION.
- 5. USE OF HDPE REQUIRES THE FOLLOWING:
- GRANULAR BACKFILL TO TOP OF THE PIPE.
- DEPTHS NO GREATER THAN TEN (10') FEET AS MEASURED TO INVERT OF PIPE.
- INSTALLATION MUST BE OUTSIDE COUNTY RIGHT-OF-WAY.
- WATERTIGHT BELL AND SPIGOT GASKETED JOINTS MUST BE PROVIDED.
- 36-INCH DIAMETER OR GREATER MUST BE INSPECTED AND CERTIFIED BY A GEOTECHNICAL ENGINEER OR A MANUFACTURERS REPRESENTATIVE.
- SMOOTHBORE PIPE ONLY.

- 3. A GEORGIA DEPARTMENT OF TRANSPORTATION (GDOT) PERMIT IS REQUIRED. APPROVAL WORK WITHIN OR ADJACENT TO GDOT RIGHT-OF-WAY IS DEFERRED TO GDOT, CHAMBLEE PERMITTING OFFICE, (770) 986-1771. CEMETERY PRESERVATION NOTES

COBB DOT NOTES

1. SIGNAL NOTE: ALL SIGNAL PLANS MUST BE SUBMITTED TO AND APPROVED BY THE COBB COUNTY TRAFFIC SIGNAL ENGINEER.

- ANY TRAFFIC SIGNAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT CONTRACT DOT TRAFFIC SIGNAL SPECIFICATIONS BY AN APPROVED TRAFFIC SIGNAL CONTRACTO
- ANY TRAFFIC SIGNAL EQUIPMENT DAMAGED AS A RESULT OF THIS PROJECT SHALL BE REPLACED/UPGRADED BY THE CONTRACTOR/DEVELOPER IMMEDIATELY.
- DAMAGED LOOPS SHALL BE REPLACED.
- DEVELOPER/CONTRACTOR IS REQUIRED TO MAINTAIN VEHICLE DETECTION WITHOUT INTERRUPTION FOR ALL TRAFFIC SIGNAL PHASES AFFECTED DURING CONSTRUCTION THIS PROJECT. APPROVED VIDEO DETECTION SHALL BE USED FOR PRESENCE DETECT AND APPROVED VIDEO OR MICROWAVE DETECTION SHALL BE USED FOR PULSE DETECTION. ADDITIONAL POLES/EQUIPMENT MAY BE REQUIRED TO SUPPORT THESE DETECTION DEVICES.
- CONTACT COBB TRAFFIC SIGNAL ENGINEER AT (770) 528-3664 FOR ANY TRAFFIC SIGNA RELATED ISSUES. CONTACT THE SIGNAL MAINTENANCE SUPERVISOR AT (770) 528-1689 LOCATE ANY SIGNAL EQUIPMENT IF PROPOSED DEVELOPMENT IS WITHIN 450' OR LESS A SIGNALIZED INTERSECTION.
- ANY DRIVE, ACCESS, SIDEWALK/SHOULDER CROSS-SLOPE, IN THE RIGHT OF WAY, IS TO MATCH $\frac{1}{4}$ " PER LF (2%, PER ADA).
- 2. ALL ROAD OPEN-CUT MAY REQUIRE MILL AND ROAD OVERLAY OF THE ENTIRE ROADWAY WIDTH FOR THE LENGTH OF THE OPEN-CUT. ROADWAY LENGTH OF MILL AND OVERLAY SECTION AND OTHER DETAILS TO BE DETERMINED BY COBB UTILITY DIVISION, UNDER SEPARATE REVIEW AND APPROVAL.
- 3. ANY ROAD OPEN-CUTS ARE TO BE SUBMITTED, REVIEWED AND PERMITTED TO DOT UTILITY DIVISION UNDER SEPARATE PERMIT.
- 4. SIGNAL NOTE: ALL SIGNAL PLANS MUST BE SUBMITTED TO AND APPROVED BY THE COBB COUNTY TRAFFIC SIGNAL ENGINEER. - ANY TRAFFIC SIGNAL WORK SHALL BE PERFORMED ACCORDANCE WITH CURRENT COBB DOT TRAFFIC SIGNAL SPECIFICATIONS BY AN APPROV TRAFFIC SIGNAL CONTRACTOR. - ANY TRAFFIC SIGNAL EQUIPMENT DAMAGED AS A RESUL THIS PROJECT SHALL BE REPLACED/UPGRADED BY THE CONTRACTOR/DEVELOPER IMMEDIATELY. DAMAGED LOOPS SHALL BE REPLACED/UPGRADED WITH VIDEO DETECTION -DEVELOPER/CONTRACTOR IS REQUIRED TO MAINTAIN VEHICLE DETECTION WITHOUT INTERRUPTION FOR ALL TRAFFIC SIGNAL PHASES AFFECTED DURING CONSTRUCTION OF PROJECT. APPROVED VIDEO DETECTION SHALL BE USED FOR PRESENCE DETECTION AND APPROVED VIDEO OR MICROWAVE DETECTION SHALL BE USED FOR PULSE DETECTION. ADDITIONAL POLES/EQUIPMENT MAY BE REQUIRED TO SUPPORT THESE DETECTION DEVICE - CONTACT THE COBB TRAFFIC SIGNAL ENGINEER AT (770)528-3664 FOR ANY TRAFFIC SIGNA RELATED ISSUES. CONTACT THE SIGNAL MAINTENANCE SUPERVISOR AT (770)528-1689 TO LOCATE ANY SIGNAL EQUIPMENT IF PROPOSED DEVELOPMENT IS WITHIN 450' OR LESS OF / SIGNALIZED INTERSECTION.

TO: ALL CONTRACTORS WORKING ON DOT R/W WITHIN 350` OF ANY TRAFFIC SIGNAL. COBB DOT SIGNALS ARE NOT ON THE LOCATE PROGRAM, YOU ARE REQUIRED TO CALL US AT LEAST 24HRS IN ADVANCE FOR TRAFFIC SIGNAL U/G UTILITY LOCATES @ (770) 528-3666

PLEASE PROVIDE THE FOLLOWING INFORMATION WHEN CALLING:

- COMPANY AND CALLER NAME & NUMBER
- CONTACT PERSON NAME & NUMBER AT JOB SITE
- LOCATION OF WORK TO BE PERFORMED
- TYPE OF WORK BEING PERFORMED

IF SIGNAL DAMAGE IS EXPECTED, BEFORE BEGINNING ANY WORK YOU ARE REQUIRED TO HAVE CONTACTED AN APPROVED SIGNAL SUB TO IMMEDIATELY REPAIR ANY DAMAGE THAT MAY OCC CDOT CONTACTS: 770-528-1680

1890 COUNTY SERVICES PARKWAY

MARIETTA, GA, 30008 LENNY PRICE, X1689

TONY LEWIS, X1692

COORDINATION WITH GEORGIA DEPARTMENT OF TRANSPORTATION

- 1. THE CONTRACTOR SHALL NOTIFY GDOT DISTRICT ENGINEER.
- 2. THE CONTRACTOR SHALL CONTACT GDOT, TO SCHEDULE A PRECONSTRUCTION INSPECTION PRIOR TO ANY DISTURBANCE. THE CONTRACTOR SHALL IMPLEMENT ANY RECOMMENDATION AND MODIFICATIONS MADE BY GDOT TO MINIMIZE IMPACT OR DAMAGE AS A RESULT OF TH INSTALLATION. THIS REQUIREMENT SHALL BE STRICTLY MAINTAINED.

THE COBB COUNTY, BARTOW COUNTY AND CITY OF ACWORTH CEMETERY PRESERVATION COMMISSION RESERVES THE RIGHT TO EXAMINE THIS PROPERTY FOR ETHNIC, CULTURAL AND RELIGIOUS EVIDENCE LOCATED THEREIN. IF ANY ETHNIC, CULTURAL OR RELIGIOUS EVIDENCE FOUND DURING DEVELOPMENT, THEN THE COBB COUNTY CEMETERY PRESERVATION COMMISS MUST BE NOTIFIED AT ONCE AT (770) 528-2035. FAILURE TO DO SO WILL RESULT IN A STOP-WOR ORDER.

> CERTIFIED EROSION CONTROL DESIGN PROFESSIONAL NUMBER 0000075695

| EASEMENT NUMBER | OWNER | ADDRESS | ACQUIRED | DATE ACQUIRED | STIPULATIONS/NOTES |
|--------------------|--|-------------------------|----------|------------------|--|
| 1 | JOHN & JULIE LANCASTER | 5204 DAWN DRIVE | - | | |
| 2 | ELIZABETH A. MULLIGAN | 4969 DEWBERRY CIRCLE | YES | 5/6/2021 | PROPERTY OWNER PAID FOR 4 LARGE HARDWOOD TREES AND 75' OF 7' PRIVACY FENCE IN NEW EASEMENT. |
| 3 | ANDREW WILLIAM & TRACEY LEE SYNOWSKY | 4909 COVE STREET | - | | |
| 4 | THERSA T. LEE | 4606 HUDSON DRIVE | YES | 4/15/2021 | PROPERTY OWNER PAID FOR LARGE ROW OF HOLLY HEDGES. |
| 5 | ROBERT C. HAACK | 4618 HUDSON DRIVE | YES | 5/17/2021 | PROPERTY OWNER PAID FOR 4 LARGE TREES & ZOYSIA SOD. STIPS FOR TREES, BERM FOR WATER & SOD. |
| 6 | GEORGE D. & FRANCES C. CARROLL | 4630 HUDSON DRIVE | - | | |
| 7 | LOWRY T, SR. & BARBARA F. ISBILL | 4644 HUDSON DRIVE | YES | 4/7/2021 | PROPERTY OWNER PAID FOR 10 LARGE SHRUBS, LARGE PLANTED FERN, 1 HARDWOOD TREE, 2 PALM TREES, 4 GRASS BORDERS, |
| 8 | PAMELA MARY & THOMAS EDWARD LOWE, JR. | 4692 PINECREST DRIVE | YES | 4/7/2021 | PROPERTY OWNER PAID FOR 15 LARGE LYLAND CYPRESS TREES, 1 LARGE MAGNOLIA TREE, 2 LARGE CALTALBA TREES, 7 MEDIUM |
| 9 | JOHN E. SLATER, JR. | 4714 PINECREST DRIVE | YES | 4/29/2021 | NONE |
| 10 | BARBARA H. NATOLI | 4726 PINECREST DRIVE | YES | 4/29/2021 | NONE |
| 11 | HARLEY L. & SHIRLEY F. WALKER | 4770 PINECREST DRIVE | YES | 4/15/2021 | NONE |
| 12 | RICHARD & JUDITH LE FEVER | 4792 PINECREST DRIVE | YES | 4/15/2021 | PROPERTY OWNER PAID FOR 4 LARGE PEAR TREES, 2 LARGE CRAPE MYRTLE TREES, & 1 - 4X4 BENCH SWING. |
| 13 | CITY OF ACWORTH | - | - | | |
| 14 | TANNER MILES | 4952 HAMPSTEAD LANE | - | | |
| 15 | CHARLES G. ATKINSON | 4951 HAMPSTEAD LANE | YES | 6/29/2021 | CONTRACTOR SHALL REMOVED DOWNED TREE AND STAKE EASEMENT NEAR POOL LOCATION TO MAKE ENSURE THEY ARE ADEQ FENCING AND 75' WOOD (STOCKADE) FENCING. |
| 16 | SPENCER SCOTT SHERER | 4988 HUNTERS COVE DRIVE | - | | |
| 17 | TAH HOLDING, LP | 4974 HOLBORN COURT | - | | |
| 18 | LUZ MARIA ALCARAZ | 4978 HOLBORN COURT | - | | |
| 19 | DONALD WILLIAM COOPER | 4983 HUNTERS COVE DRIVE | - | | |
| 20 | LESLIE R AND JEREMY ALAN DORSETT | 4964 HAMPSTEAD LANE | YES | | |
| 21 | STEVEN & JANICE M. MERHIB | 4966 HAMPSTEAD LANE | YES | 6/29/2021 | CONTRACTOR SHALL INSTALL TEMPORARY FENCING FOR DOGS. PROPERTY OWNER PAID FOR 1 LARGE TREE AND 118 LF OF CHAI |
| 22 | DAVID R SMITH AS TRUSTEE OF THE R DAVID SMITH REVOCABLE TRUST | 4986 HAMPSTEAD LANE | - | | |
| 23 | RACHEL E. & PAUL L. MILLER | 4968 HAMPSTEAD LANE | - | | |
| 24 | IH2 PROPERTY GEORGIA, LP | 4990 HOLBORN COURT | - | | |
| 25 | IH3 PROPERTY GEORGIA, LP | 4987 HOLBORN COURT | - | | |
| 26 | RICHARD DUNN | 4997 LUCILLE AVENUE | YES | 6/16/2021 | PROPERTY OWNER PAID FOR 1 LARGE TREE, 150 LF OF FENCING AND 2 PINE TREES |
| 27 | CARLY YAHR | 4975 ROBINSON ROAD | - | | |
| 28 | ARTHUR DAVID HIGHTOWER | 4996 LUCILLE AVENUE | - | | |
| 29 | BARRY W. & BRENDA L. MORGAN | 5025 MCLAIN DRIVE | - | | |
| 30 | LARRY TODD HEATON | 5004 MCLAIN DRIVE | - | | |
| 31 | WILLIAM SMITH | 5178 POPLAR STREET | - | | |
| 32 | WILEY G PAGE | 5126 POPLAR STREET | - | | |
| 33 | WAYNE & SUZANNE WARRICK | 4749 COX STREET | - | | |
| 34 | JOHN E. BRADY | 5002 MCLAIN DRIVE | - | | |
| 35 | LUCY S. WILSON | 5000 MCLAIN DRIVE | - | | |
| 36 | LUCY S. WILSON | 5197 POPLAR STREET | - | | |
| 37 | BARTOW AREA HABITAT | - | - | | |
| 38 | ADVANTA IRA SERVICES, LLC | 6147 MAIN STREET | - | | |
| 39 | LAKEMONT BARTOW LLC | 6147 MAIN STREET | - | | |
| 40 | LAKEMONT BARTOW LLC | 6147 NORTH MAIN STREET | - | | |
| 41 | KEVIN LYNN & LEEANN TIEMAN | 6121 NORTH MAIN STREET | - | | |
| 42 | THE CKT TRUST | 5222 DAWN DR. | - | | |
| 43 | THOMAS P. & KRISTY REIDY | 4925 COVE STREET | - | | |

EASEMENT TABLE

| , 1 ORNAMENTAL GRASS, & STONE MAILBOX. M HARDWOOD TREES, & 1 EXTREMELY LARGE HARDWOOD TREE. | | No.2 PROFESSION OF THE PROFESSION OF THE PROFESS | SINEERING STRATEGIES, INC. |
|--|---|---|---|
| QUATING SITUATING POOL.PROPERTY OWNER PAID FOR 60' WIRE | | DATE | ENC |
| IN LINK FENCE. | DESIGNED BY: PROJECT NUMBER: 505-9005-35-20-0000 DRAWN BY: PROJECT DATE: JUNE 2021 | BAR BELOW IS 1" LONG FOR SCALES SHOWN ON THIS SHEET. | IF NOT 1" LONG ON THIS SHEET, ADJUST SCALES ACCORDINGLY. |
| | | (30-INCH REPLACEMENI) | EASEMENT TABLE |
| | | | 2 |



| WATER PIPELINE REPLACEMENT PESIGNED BY: DE PROJECT NUMBER: 505-9005-35-20-0000 DE P <th></th> <th></th> <th></th> <th>5 5 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7</th> <th>PROF PROF</th> <th></th> <th>TE 55248 SSIO Ae NE</th> <th></th> <th>▼ ★ 5</th> <th></th> | | | | 5 5 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 | PROF PROF | | TE 55248 SSIO Ae NE | | ▼ ★ 5 | |
|---|---|-------------------------------------|----------|--|--------------------------|-----------------------------|---------------------------------|----------------------------|------------------------------|--|
| WATER PIPELINE REPLACEMENT Designed BY: DE NATER PIPELINE REPLACEMENT Designed BY: DE PROJECT NUMBER: 505-9005-35-20-0000 PROJECT NUMBER: 505-9005-35-20-0000 INCH REPLACEMENT Designed BY: DE INCH REPLACEMENT Designed BY: DE PROJECT NUMBER: 505-9005-35-20-0000 Project NUMBER: 505-9005-35-20-0000 INCH REPLACEMENT Designed BY: DE PROJECT NUMBER: 505-9005-35-20-0000 Project NUMBER: 505-9005-35-20-0000 INCH REPLACEMENT Designed BY: Project NATE: JUNE 2021 INCH REPLACEMENT Designed Synthis Sheft: Project NATE: JUNE 2021 IN AND OVERALL PROFILE Project NATE: JUNE 2021 Date: JUNE 2021 | ON 3 2 2 3 2 3 3 2 3 3 3 3 3 3 3 3 3 3 3 | | | | | | | | ENGINEEKING SI KAI EGIES, I | |
| WATER PIPELINE REPLACEMENT Designed by: De Designed by: Designed by: De Designed by: De Designed by: De Designed by: De |) 3 | | | | DATE | | | | | |
| | APS | PROJECT NUMBER: 505-9005-35-20-0000 | | PROJECT DATE: JUNE 2021 | | | | | | |
| WATER PIPELINE REPLACEMENT INCH REPLACEMENT) N AND OVERALL PROFILE | | DESIGNED BY: DE | DE DE DE | REVIEWED BY: WSH F | BAR BELOW IS 1" LONG FOR | SCALES SHOWN ON THIS SHEET. | IF NOT 1" LONG ON THIS SHEET, | ADJUST SCALES ACCORDINGLY. | | |
| WYCKOFF RAW (30- KEY PLA | | | | R | (30-INCH REPLACEMENT) | 00 | | | KEY PLAN AND OVERALL PROFILE | |

| | | 300' | 600' |
|---------|--------------|--------------|----------|
| | CONTR | OL POINTS | |
| POINT # | NORTHING | EASTING | ELEVATIO |
| CP-1 | 1478834.2690 | 2136751.8940 | 885.83 |
| CP-9 | 1482353.8310 | 2136541.8190 | 870.32 |
| CP-2 | 1479137.4450 | 2136719.3840 | 872.00 |
| CP-3 | 1479609.6300 | 2136689.4660 | 882.95 |
| CP-4 | 1479658.9310 | 2136906.7320 | 884.92 |
| CP-5 | 1480556.3730 | 2136909.0270 | 896.41 |
| CP-6 | 1481425.5000 | 2136983.5280 | 935.41 |
| CP-7 | 1481443.0310 | 2136710.9650 | 914.55 |
| CP-8 | 1482351.9900 | 2136699.9370 | 876.52 |
| CP-10 | 1482632.2440 | 2136527.5450 | 879.44 |
| CP-11 | 1482884.6270 | 2136524.6040 | 879.64 |
| CP-12 | 1482977.7700 | 2136171.2180 | 894.80 |
| CP-13 | 1479947.5170 | 2136735.6580 | 888.68 |
| CP-14 | 1480285.0220 | 2136736.7780 | 901.74 |
| CP-15 | 1483037.6850 | 2136450.6750 | 875.14 |
| CP-16 | 1483220.9200 | 2136566.7690 | 883.10 |
| CP-17 | 1483626.8520 | 2136425.6000 | 909.25 |
| CP-18 | 1484014.8640 | 2136323.4230 | 892.45 |
| CP-19 | 1484344.0000 | 2136313.5300 | 874.04 |
| CP-20 | 1485234.4320 | 2136541.3650 | 906.07 |
| CP-21 | 1485425.1810 | 2136237.0760 | 904.97 |
| CP-22 | 1484995.4940 | 2136334.8300 | 888.98 |
| CP-23 | 1484872.4200 | 2136496.0770 | 895.49 |
| CP-24 | 1484750.6010 | 2136488.6570 | 887.13 |
| CP-25 | 1484815.9310 | 2136338.1610 | 886.49 |

















| | | + + ₩.900 | ORG GISTER ROFESSIONA WGINEE THEN | INC. |
|---|---|--|--|-------------------------|
| TCH LINE STA: 65+00 | | | | ENGINEERING STRATEGIES, |
| A A A A A A A A A A A A A A A A A A A | NOTES: 1. CONTRACTOR SHALL REPLACE ALL DISTURBED STORM CULVERTS. CMP PIPES SHALL BE REPLACED WITH RCP. 2. CONTRACTOR SHALL COORDINATE WITH HOMEOWNER BEFORE REMOVAL AND DISPOSAL OF ITEM. 4. ALL PROPERTIES IN BARTOW COUNTY HAVE SEPTIC TANKS AND DRAIN FIELD LINES. CONTRACTOR TO COORDINATE WITH PROPERTY OWNER AND CCMWA PRIOR TO REMOVAL DRAIN FIELD LINES. RE-INSTALLATION WILL BE BY OTHERS. | DE PROJECT NUMBER: 505-9005-35-20-0000 DE PROJECT DATE: JUNE 2021 | FOR SHEET. SHEET, INGLY. | |
| 895' | | DESIGNED BY: I DRAWN BY: I REVIEWED BY: V | BAR BELOW IS 1" LONG SCALES SHOWN ON THIS IF NOT 1" LONG ON THIS ADJUST SCALES ACCORI | 0 |
| 890' 885' 8885' 8880' | | VE REPLACEMENT | | 59+25 - 64+75 |
| 875' 870' 870' 865' | | KOFF RAW WATER PIPELIN | | PLAN AND PROFILE STA: { |
| DING SE SHOWN) 75 65+00 | | WΥC | 11 | |



| | ₩. ₩. | H GIS PROFE No.: PROFE | R G 5TERK 25248 SSIONAL NEE HENN | |
|--|--|---------------------------------|---|-----------------------------------|
| | | | | ENGINEERING STRATEGIES, INC. |
| | | DATE | | |
| NOTES: 1. CONTRACTOR SHALL REPLACE ALL DISTURBED STORM CULVERTS. CMP PIPES SHALL BE REPLACED WITH RCP. 2. ALL PROPERTIES IN BARTOW COUNTY HAVE SEPTIC TANKS AND DRAIN FIELD LINES. CONTRACTOR TO COORDINATE WITH | PROJECT NUMBER: 505-9005-35-20-0000 PROJECT DATE: JUNE 2021 | | | |
| DRAIN FIELD LINES. CONTRACTOR TO COORDINATE WITH PROPERTY OWNER AND CCMWA PRIOR TO REMOVAL DRAIN FIELD LINES. RE-INSTALLATION WILL BE BY OTHERS. | DE WSH | 1" LONG FOR | ACCORDINGLY. | ÷ |
| | DESIGNED BY: DRAWN BY: REVIEMED RV· | BAR BELOW IS | IF NOT 1" LONG C ADJUST SCALES. | 0- |
| | WYCKOFF RAW WATER PIPELINE REPLACEMENT | (30-INCH REPLACEMENT) | | PLAN AND PROFILE STA: 64+75 - END |
| | | 1 | 2 | |





- <u>NOTES:</u> 1. FR = FLEX RING
- 2. CONTRACTOR MAY ROLL FITTINGS AS REQUIRED FOR PIPELINE INSTALLATION.
- 3. PRIOR TO LAYING PIPE AND ORDERING MATERIALS, CONTRACTOR SHALL FULLY EXPOSE AND VERIFY RESTRAINT OF EXISTING 30" BUTTERFLY VALVE. SHOULD 30" BUTTERFLY VALVE NOT BE RESTRAINED, CONTRACTOR SHALL SUBMIT A PLAN TO THE ENGINEER FOR RESTRAINING THE VALVE. CONTRACTOR SHALL ALSO VERIFY FLANGE CLASS AND BOLT PATTERN.

| DAVA VATED DIDEI INIE DEDI ACEMENT | DESIGNED BY: DE | PROJECT NUMBER: 505-9005-35-20-0000 | | | |
|------------------------------------|-------------------------------|-------------------------------------|------|--|---------------------------------------|
| | DRAWN BY: DE | | | , and an and a second s | |
| | REVIEWED BY: WSH | PROJECT DATE: JUNE 2021 | | トて「 | C C C C C C C C C C C C C C C C C C C |
| (30-INCH REPLACEMENT) | BAR BELOW IS 1" LONG FOR | REVISION | DATE | | PROF PROF |
| | SCALES SHOWN ON THIS SHEET. | | | | |
| | IF NOT 1" LONG ON THIS SHEET, | | | | |
| | ADJUST SCALES ACCORDINGLY. | | | | |
| | | | | | |
| CONNECTION DETAILS | 0 | | | ENGINEERING STRATEGIES, INC. | F * |
| | | | | | |
| | | | | | |

WYCKOFF







12' min to 20' max width

e beyond sidewalk 4" Thick

4" GAB, 2" Asph B in lieu of concrete

Drive to slope 3/4" per 1' away from road.

No portion of drive shall extend into the road.

Residential Driveway Standard

Section Thru Drive without curb on Roadway.

DETAIL 116R

Section Thru Gutter

with Curbed Roadwa

Pavin

Drive to slope 3/4" per 1' toward)

rote for Aprot

- - -

NOTES

2. See Cobb Detail 113 for access ramp spec.

7. Cobb County will not maintain driveway.

Conflicts to be reviewed by DOT.

770-528-1643.

3. Traffic control to meet MUTCD requirements.

Apron slope to match shoulder or 3/4" per LF.

4. Drive to be no closer than 50' to an adjacent intersection

Plan Review Division, for other requirements and review.

8. Lane Closure Permit is required from CDOT, Utility Division

9. Drainage structures are not allowed within drive limits.

10. Final appearance to have a smooth, solid, clean joint.

No structural obstructions (Fences, Signs, Walls, irrigation) allowed in the R/W. Only low growing seasional landscaping allowed.

5. For access to a Major Thoroughfare submit to CDOT,

6" Thick 3000 PSI do

- WHEN VALVES ARE LOCATED IN UNPAVED AREAS. PAD NOT REQUIRED IN PAVED AREAS. IF PRECAST PADS ARE USED, THE VOID BETWEEN THE PRECAST PAD AND THE VALVE BOX SHALL BE FILLED W/NON-SHRINK EPOXY GROUT.
- NOTES CAST AROUND THE TOP OF EACH VALVE BOX A CONCRETE PAD 2'-0" IN DIA. OR 2'-0" SQUARE AND 8" THICK

(NOTE 1)

54"DIF

| CATHODIC TEST STATION LOCATION TABLE | | | | | | | |
|--------------------------------------|---------|-------------------------|--------|--|--|--|--|
| CTS NO. | STATION | DISTANCE TO PREVIOUS | TYPE | | | | |
| 1 | 0+00 | - | GROUND | | | | |
| 2 | 1+48 | 148± | MH-AV | | | | |
| 3 | 1+60 | 12± | MH-GV | | | | |
| 4 | 1+95 | 35± | MH-GV | | | | |
| 5 | 2+13 | 18± | MH-AV | | | | |
| 6 | 7+05 | 492± | MH-BO | | | | |
| 7 | 17+91 | 1086± | MH-AV | | | | |
| 8 | 22+12 | 421± | MH-BO | | | | |
| 9 | 28+30 | 618± | MH-AV | | | | |
| 10 | 34+47 | 617± | MH-BO | | | | |
| 11 | 42+63 | 816± | MH-AV | | | | |
| 12 | 45+11 | 248± | MH-BO | | | | |
| 13 | 51+40 | 629± | MH-AV | | | | |
| 14 | 59+05 | 765± | MH-BO | | | | |
| 15 | 67+16 | 811± | MH-AV | | | | |
| 16 | 67+29 | 13± | MH-GV | | | | |
| 17 | 67+64 | 35± | MH-GV | | | | |
| 18 | 70+60 | 296± | MH-AV | | | | |
| 19 | 70+79 | 19± | GROUND | | | | |

| | K ORG K ORG K G C STERE No. 25248 PROFESSIONAL K Aut Hermaney NG I NEE COT HENNESS | | | | |
|--|---|---|---|------------------------------|--|
| DETAIL DE | | | | ENGINEERING STRATEGIES, INC. | |
| DETAIL BOJENTINE DETAIL | | DATE | | | |
| ZAM MATER PIDELINE REPLACEMENT | PROJECT DATE: JUNE 2021 | | | | |
| | JRAWN BY: DE REVIEWED BY: WSH | BAR BELOW IS 1" LONG FOR SCALES SHOWN ON THIS SHEET. | IF NOT 1" LONG ON THIS SHEET, ADJUST SCALES ACCORDINGLY. | 0. | |
| | | | | STANDARD DETAILS (5 OF 5) | |

FILE PIPE TO BARE METAL AND CLEAN WITH WIRE BRUSH

STRIP INSULATION FROM WIRE AND SLIP ON COPPER SLEEVE PER MANUFACTURERS INSTRUCTIONS

PLACE WIRE ON CLEAN PIPE AND HOLD WELDER OVER WIRE FIRMLY AGAINST PIPE AND IGNITE WITH FLINT GUN

REMOVE SLAG, TEST CONNECTION AND APPLY ROYBOND 747 PRIMER TO WELD AREA

INSTALL ROYSTON HANDY-CAP OVER WELD AND WRAP AREA WITH POLYETHELENE TAPE, OR PROTECTOR MASTIC AND TAPE WRAP COATING SYSTEM M-1

EXOTHERMIC WELD DETAIL

| PERIMETER EROSION CONTROL BMPS, HING AND/OR REMOVING AND REPLACING APING DURING WATER MAIN | © ★ ₽ | No. 043 PROFESS | | 2:12 PM BY: DERE |
|---|--|--|------------------------------|--|
| LL BE INSTALLED ALONG ALL LIMITS OF OR AROUND CRITICAL ROOT ZONES AS REQUIRED. PPROVED, TREES SHALL BE REMOVED IN A MANNER IPACT THE TREES TO BE PRESERVED. AVOID ED ZONES OR DISTURBING ROOTS INSIDE THE HE CONTRACTOR SHALL PRUNE ALL EXPOSED ER AND LARGER ON THE SIDE OF THE TRENCH INING SHALL CONSIST OF MAKING A CLEAN CUT RENCH TO PROMOTE NEW ROOT GROWTH. TECTED FROM DRYING AND BACKFILLED AS SOON ROVIDE CLEARANCE FOR EQUIPMENT AND R REASON SHALL BE DONE ACCORDING TO PRACTICE (SEE ANSI A300-2001 STANDARDS FOR RATIONS PART 1 AND ANSI Z133.1 AMERICAN E CARE OPERATIONS SAFETY REQUIREMENTS). | | | ENGINEERING STRATEGIES, INC. | L:\CCMWA\Wyckoff RW Pipeline\Dwg\Sheets\ECS-Plan.dwg - 6/29/2021 1 |
| | DESIGNED BY: AHW PROJECT NUMBER: 505-9005-35-20-0000 DRAWN BY: AHW REVIEWED BY: JRF PROJECT DATE: JUNE 2021 | BAR BELOW IS 1" LONG FOR SCALES SHOWN ON THIS SHEET. | ADJUST SCALES ACCORDINGLY. | |
| | WYCKOFF RAW WATER PIPELINE REPLACEMENT | (30-INCH REPLACEMENT) | EROSION CONTROL - PLAN | |
| CERTIFIED EROSION CONTROL DESIGN PROFESSIONAL NUMBER 0000075695 | | 23 | 3 | |

STORM WATER AND EROSION CONTROL NOTES

- 1. FLOODPLAIN ON THIS PROPERTY FROM ALL WATER COURSES WITH A DRAINAGE AREA EXCEEDING 100 ACRES IS SHOWN. THIS PROJECT PRIMARILY LIES OUTSIDE OF THE 100-YEAR FLOOD PLAIN BUT PORTIONS OF THE PROJECT DO LIE WITHIN THE 100-YEAR FLOOD PLAIN PER FEMA FIRM PANEL 13067C0004G AND 13015C0380H. DATED OCTOBER 5, 2018.
- 2. A 25-FOOT UNDISTURBED STATE STREAM BUFFER SHALL BE MAINTAINED ADJACENT TO ALL STREAMS. IN ADDITION, A 50, 75, 100, AND 200-FOOT COBB COUNTY BUFFER SHALL BE MAINTAINED ADJACENT TO ALL STREAMS.
- 3. TOTAL WETLAND AREA = 0.00 ACRES. NATIONAL WETLAND INVENTORY MAPS DO NOT INDICATE WETLANDS TO BE LOCATED WITHIN THE PROJECT AREA. NO WETLAND STUDY WAS CONDUCTED AS PART OF THIS PROJECT.
- 4. SOURCE OF TOPOGRAPHY IS PROVIDED BY TERRAMARK, INC. RECEIVED BY ESI IN FEBRUARY, 2021.
- ACCEPTANCE AND/OR SUBSEQUENT ACCEPTANCE OF THESE PLANS DOES NOT CONSTITUTE APPROVAL BY COBB COUNTY 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.
- COBB COUNTY, BARTOW COUNTY AND THE CITY OF ACWORTH ASSUMES NO RESPONSIBILITY FOR OVERFLOW OR EROSION OF NATURAL OR ARTIFICIAL DRAINS BEYOND THE EXTENT OF THE STREET RIGHT-OF-WAY, OR FOR THE EXTENSION OF CULVERTS BEYOND THE POINT SHOWN ON THE APPROVED AND RECORDED PLAN. COBB COUNTY, BARTOW COUNTY AND/OR THE CITY OF ACWORTH DO/DOES NOT ASSUME THE RESPONSIBILITY FOR THE MAINTENANCE OF PIPES IN DRAINAGE EASEMENTS BEYOND THE COUNTY AND/OR CITY RIGHT-OF-WAY.
- 7. EROSION AND SEDIMENT CONTROL DEVICES SHOWN ARE THE MINIMUM REQUIRED. ADDITIONAL DEVICES MAY BE REQUIRED AS NECESSARY.
- MAINTENANCE OF ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES, WHETHER TEMPORARY OR PERMANENT, SHALL BE AT ALL TIMES THE RESPONSIBILITY OF THE CONTRACTOR.
- 9. PERMANENT GRASSING AND/OR LANDSCAPING SHALL BE INSTALLED WITHIN FOURTEEN (14) DAYS AFTER THE COMPLETION OF ANY LAND DISTURBING ACTIVITY, OR IF ACTIVITY IS DISCONTINUED FOR A PERIOD OF TWO WEEKS OR LONGER.
- 10. 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.
- 11. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING EROSION AND SEDIMENT CONTROL DEVICES IN GOOD WORKING CONDITION AND CLEANING OUT THE DEVICES BEFORE THEY ARE HALF-FULL OF SEDIMENT.
- 12. 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.
- 13. CONTRACTOR SHALL BUILD, MAINTAIN, AND USE A CONSTRUCTION EXIT AT ALL SITE ENTRY/EXIT LOCATIONS ADJACENT TO PAVED ROADS.
- 14. ALL EROSION AND SEDIMENT CONTROL DEVICES TO BE USED ARE DETAILED ON THE EROSION CONTROL PLAN OR EROSION CONTROL DETAILS.
- 15. ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL MEET THE MINIMUM REQUIREMENTS OF THE SPECIFICATIONS AND ALL LOCAL, STATE, AND FEDERAL LAWS AS APPLICABLE TO THIS PROJECT. ALL DEVICES SHALL BE PROPERLY INSTALLED AND BE OF SUITABLE MATERIALS. ANY DEVICES JUDGED TO BE INADEQUATE IN MATERIAL AND/OR CONSTRUCTION WILL IMMEDIATELY BE REPLACED WITH NEW OR ADDITIONAL DEVICES TO ENSURE PROPER CONTROL.
- 16. TEMPORARY SILT CONTROL FENCE, TYPE `S' DOUBLE ROW SHALL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR THROUGHOUT THE LIFE OF THE PROJECT. THE CONTRACTOR SHALL INSPECT FENCE DAILY AND AFTER EVERY RAIN. ACCUMULATED SILT SHALL BE REMOVED AS SOON AS PRACTICAL, BUT NO LATER THAN WHEN FENCE IS HALF FULL. CONTRACTOR SHALL REMOVE THE SILT FENCE WHEN PERMANENT GRASSING HAS BEEN ESTABLISHED.
- 17. 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, FIFTH ED. 2000.
- 18. CONSTRUCTION EXITS (Co) SHALL BE REQUIRED AT ALL OTHER 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.
- 19. MAXIMUM SLOPE FOR CUT OR FILL IS 2H:1V EXCEPT EARTHEN DAM EMBANKMENTS SHALL BE 2.5H:1V.
- 20. ALL FILL SLOPES SHALL HAVE SILT FENCE PLACED AT THE TOE OF THE SLOPE.
- 21. CONSTRUCTION EQUIPMENT AND MATERIALS SHALL BE STORED IN THE DESIGNATED STAGING/LAY-DOWN AREAS. CONSTRUCTION MATERIALS, CONSTRUCTION WASTE, TRASH, LANDSCAPING MATERIALS, FERTILIZERS, ETC SHALL BE COVERED (E.G. PLASTIC SHEETING OR TEMPORARY ROOF) AND ELEVATED ON WOOD BLOCKING TO MINIMIZE EXPOSURE OF THESE PRODUCTS TO PRECIPITATION AND STORMWATER TO MINIMIZE THE DISCHARGE OF POLLUTANTS FROM THESE AREAS.

LOCAL EROSION CONTROL NOTES

- 1. THE EXISTING AND PROPOSED LAND USE OF THE PROJECT SITE IS A PRIVATE EASEMENT OCCUPIED BY TRANSMISSION WATER MAINS OWNED BY THE COBB COUNTY-MARIETTA WATER AUTHORITY.
- 2. OWNER/DEVELOPER/PRIMARY PERMITTEE: COBB COUNTY MARIETTA WATER AUTHORITY 1170 ATLANTA INDUSTRIAL DRIVE MARIETTA, GEORGIA 30066
- 3. 24-HOUR CONTACT: CHRIS DILLARD (770) 514-5350
- 4. THIS PROJECT LIES WITHIN DISTRICT 20, LAND LOTS 43, 44, 33, 34, 5, AND 6 OF COBB COUNTY, GEORGIA AND IN THE 21ST DISTRICT, LAND LOT 287 OF BARTOW COUNTY.
- 5. TOTAL PROJECT AREA: 9.25± ACRES.
- 6. TOTAL DISTURBED AREA: 7.40± ACRES
- 7. ADDITIONAL EROSION CONTROL DEVICES TO BE USED AS REQUIRED BY COBB COUNTY, BARTOW COUNTY, AND/OR THE CITY OF ACWORTH.
- 8. A COBB COUNTY LAND DISTURBANCE PERMIT MUST BE DISPLAYED ON-SITE AT ALL TIMES DURING CONSTRUCTION AND IN PLAIN VIEW FROM A COUNTY ROAD OR STREET.
- **EROSION CONTROL PRACTICES MUST COMPLY WITH THE MINIMUM BEST MANAGEMENT PRACTICES FOR** EROSION CONTROL, COBB COUNTY CODE SECTION 50-75, AND SHALL COMPLY WITH THE STANDARDS/SPECIFICATIONS IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.
- 10. EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSTALLED PRIOR TO ANY GRADING ON SITE. PLEASE CALL (770) 528-2134 WITH ENOUGH LEAD TIME FOR AN INSPECTION TO MEET YOUR SCHEDULE.
- 11. DISTURBED AREAS LEFT IDLE FOR MORE THAN FIVE (5) DAYS, AND NOT TO FINAL GRADE, WILL BE ESTABLISHED TO TEMPORARY VEGETATION (DS2). MULCH, TEMPORARY VEGETATION OR PERMANENT VEGETATION SHALL BE COMPLETED ON ALL EXPOSED AREAS WITHIN 14 DAYS AFTER DISTURBANCE. ALL AREAS TO FINAL GRADE WILL BE ESTABLISHED TO PERMANENT VEGETATION IMMEDIATELY UPON COMPLETION.
- 12. WHEN HAND PLANTING, MULCH (HAY OR STRAW) SHOULD BE UNIFORMLY SPREAD OVER SEEDED AREAS WITHIN 24 HOURS OF SEEDING.

- ACTIVITIES.
- OR TREAT THE SEDIMENT SOURCE.
- DISTURBANCE.
- PROJECT.
- WITHIN 24 HOURS OF SEEDING.
- TEMPORARY COVER.
- UNDER MY DIRECT SUPERVISION.
- DAYS AFTER INITIAL CONSTRUCTION ACTIVITIES BEGIN.
- 528-2120 OR AT JASON.GAINES@COBBCOUNTY.ORG.
- ACQUIRING THE NECESSARY VARIANCES AND PERMITS.
- SECTION 404 PERMIT.
- CONSTRUCTION RUNOFF COEFFICIENT IS C = 0.36.
- BY THE GENERAL CONTRACTOR. INSPECTION.
- CONCURRENT WITH LAND DISTURBING ACTIVITIES.

EROSION CONTROL PROJECT NARRATIVE

THE PROPOSED PROJECT CONSISTS OF THE INSTALLATION OF APPROXIMATELY 7.055 LINEAR FEET OF 54-INCH DIP WATER TRANSMISSION MAIN. THE ROUTE WILL BEGIN JUST NORTH OF ALLATOONA LAKE APPROXIMATELY 0.25 MILES FROM HIGHWAY 92, HEADING NORTH TO THE INTERSECTION OF OLD US HIGHWAY 41 AND CEDAR STREET. THE PROJECT LIES WITHIN PUBLIC ROAD RIGHT-OF-WAY OR PERMANENT EASEMENT OWNED BY THE COBB COUNTY MARIETTA WATER AUTHORITY. THE TOTAL PROJECT AREA IS 9.25 ACRES AND THE TOTAL DISTURBED AREA IS 7.40 ACRES.

PROJECT.

- SEDIMENT FROM BEING WASHED OFF OF THE SITE.
- VEGETATION ON THE DISTURBED AREAS AS CONSTRUCTION PROCEEDS.
- TRUCKS AND CONSTRUCTION EQUIPMENT.
- STORM DRAIN PIPES LEADING AWAY FROM THE PROJECT SITE.

- PREVENT SEDIMENT FROM BEING WASHED OFF OF THE SITE.

ESTABLISHMENT OF A STRONG STAND OF GRASS BEFORE BEING RELEASED FROM HIS CONTRACTUAL OBLIGATIONS. HE WILL BE HELD RESPONSIBLE FOR A PERIOD OF TWELVE MONTHS AFTER ACCEPTANCE OF THE PROJECT TO REPAIR ANY WASHOUT AREAS, ETC.

PERMITTEE CONTACT INFORMATION

COBB COUNTY-MARIETTA WATER AUTHORITY CHRIS DILLARD (cdillard@ccmwa.org) 1170 ATLANTA INDUSTRIAL DRIVE MARIETTA, GEORGIA 30066 PHONE: (770) 514-5350

PERMITTEE CERTIFICATION STATEMENT

I CERTIFY THAT THE RECEIVING WATER(S) OR THE OUTFALL(S) OR A COMBINATION OF RECEIVING WATER(S) AND OUTFALL(S) WILL BE MONITORED IN ACCORDANCE WITH THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN.

OPERATOR'S PRINTED NAME: _____

SIGNATURE:

13. EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSTALLED AND INSPECTED PRIOR TO ANY GRADING ON SITE. PLEASE CALL WITH ENOUGH LEAD-TIME FOR AN INSPECTION TO MEET YOUR SCHEDULE.

14. SEDIMENT AND EROSION CONTROL DEVICES MUST BE CHECKED AFTER EACH STORM EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE-HALF THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE DEVELOPED.

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

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

17. MULCH OR APPLY TEMPORARY VEGETATION ON ALL EXPOSED AREAS WITHIN SEVEN (7) DAYS AFTER

18. CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS AND POSTAL SERVICE THROUGHOUT THE DURATION OF THE

19. WHEN PLANTING VEGETATION, MULCH (HAY OR STRAW) SHOULD BE UNIFORMLY SPREAD OVER SEEDED AREA

20. IN CONCENTRATED FLOW AREAS, ALL SLOPES STEEPER THAN 2.5:1 AND WITH A HEIGHT OF TEN FEET OR GREATER (DOES NOT APPLY TO RETAINING WALLS), AND CUTS AND FILLS WITHIN STREAM BUFFERS, SHALL BE STABILIZED WITH THE APPROPRIATE EROSION CONTROL MATTING OR BLANKETS. MULCH SHALL BE USED AS A

21. THE PROFESSIONAL WHO SEALS THIS PLAN CERTIFIES UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER A SITE VISIT TO THE LOCATION DESCRIBED HEREIN BY MYSELF OR MY AUTHORIZED AGENT,

22. THE USE OF POLYMERS IS ACCEPTED AS A BMP AS RECOMMENDED BY THE STATE SOIL & WATER CONSERVATION COMMISSION BMP "GREEN BOOK". COBB COUNTY ALSO REQUIRES THAT POLYMERS USED TO STABILIZE CONSTRUCTION SITES MUST BE USED IN CONJUNCTION WITH MULCHING AND OR HYDRO SEEDING.

23. UPON NOTIFICATION AND AUTHORIZATION OF THE OWNER AND/OR CONTRACTOR, THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN IS RESPONSIBLE FOR INSPECTING THE INSTALLATION OF THE BMPs WITHIN 7

24. IF STREAMS ARE ON YOUR SITE. COBB COUNTY WILL REQUIRE THAT THE STREAM BUFFERS BE LEFT UNDISTURBED AND A CONSERVATION EASEMENT OR A RESTRICTIVE COVENANT BE PLACED ON THAT PROPERTY. FOR MORE INFORMATION, PLEASE CONTACT JASON GAINES WITH THE PLANNING DIVISION AT (770)

25. NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION OR WITHIN 25-FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST

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

27. THE RECEIVING WATERS FOR THIS PROJECT ARE UNNAMED TRIBUTARIES TO ALLATOONA LAKE.

28. THE ESTIMATE OF THE PRE-CONSTRUCTION RUNOFF COEFFICIENT IS C = 0.35. THE ESTIMATE OF THE POST

29. EROSION CONTROL MEASURES WILL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RAIN, AND REPAIRED

30. ADDITIONAL EROSION CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE

31. THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES SHALL OCCUR PRIOR TO OR

32. ALL IMPERVIOUS COVER SHALL BE PROHIBITED WITHIN 25 FEET IMPERVIOUS SETBACK.

33. GRADING, FILLING AND EARTHMOVING SHALL BE MINIMIZED WITHIN THE SETBACK

34. NO SEPTIC TANKS OR SEPTIC DRAIN FIELDS SHALL BE PERMITTED WITHIN THE BUFFER OR THE SETBACK.

35. NOT ALL TREES WITH CRITICAL ROOT ZONES REQUIRING PROTECTION ARE SHOWN ON THE DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING SPECIMEN TREES, AS SPECIFIED WITHIN COBB COUNTY DEVELOPMENT STANDARDS SECTION 416.3, AND INSTALLING TREE PROTECTION MEASURES AS REQUIRED.

SIX (6) TYPES OF EROSION CONTROL MEASURES WILL PRIMARILY BE UTILIZED IN THE CONSTRUCTION OF THE

1. SILT FENCE - TYPE SENSITIVE (SD1-S) SHALL BE INSTALLED AT APPROPRIATE LOCATIONS TO PREVENT

MULCHING, TEMPORARY AND PERMANENT GRASSING (DS1, DS2 & DS3) SHALL BE USED TO RE-ESTABLISH

CONSTRUCTION EXITS (CO) WILL BE USED TO PREVENT SEDIMENT FROM LEAVING THE SITE VIA THE TIRES OF

INLET SEDIMENT TRAPS WILL BE INSTALLED TO PREVENT SEDIMENT FROM ESCAPING THROUGH EXISTING HAYBALE CHECKDAMS (CD-Hb) SHALL BE PLACED IN DITCHES AND CHANNELS WITH LOW STORMWATER FLOW

AND SLOPE TO PREVENT SEDIMENT FROM BEING WASHED OFF OF THE SITE. 6. STONE CHECKDAMS (CD-S) SHALL BE PLACED IN DITCHES AND CHANNELS WITH SIGNIFICANT SLOPE TO

ALL DISTURBED AREAS WILL BE STABILIZED WITH EITHER TEMPORARY OR PERMANENT MEASURES WITHIN 48 HOURS OR PRIOR TO ANY EXPECTED RAINFALL EVENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE

| <u>GEORGIA UNIFORM CODING SYSTEM</u> FOR SOIL EROSION AND SEDIMENT CONTROL PRACTICES GEORGIA SOIL AND WATER CONSERVATION COMMISSION STRUCTURAL PRACTICES | | | | | | C te C | NO. 043966 | | | | |
|--|---|---|--|--|---|---|---|-----------------------------------|--|--|--------------------------------------|
| CODE | PRACTICE | DETAIL | MAP SYMBOL | DESCRIPTION | CODE | PRACTICE | DETAIL | MAP SYMBOL | DESCRIPTION | PRO I I I I I I I I I I I I I I I I I I I | GINEE |
| Cd | CHECKDAM | | J | A small temporary barrier or dam constructed across a swale, drainage ditch or area of concentrated flow. | Sr | TEMPORARY STREAM CROSSING | | Call Call | A temporary bridge or culvert-type structure protecting a stream or watercourse from damage by crossing construction equipment. | N. N. | H.WA |
| Ch | CHANNEL STABILIZATION | | 1 | Improving, constructing or stabilizing an open channel, existing stream, or ditch. | St | STORMDRAIN OUTLET PROTECTION | | (LABEL) | A paved or short section of riprap channel at the outlet of a storm drain system preventing erosion from the concentrated runoff. | | ES, IN(|
| C.0 | CONSTRUCTION EXIT | | | A crushed stone pad located at the construction site exit to provide a place for removing mud from tires thereby protecting public streets. | Su | SURFACE ROUGHENING | | H-Su-H | A rough soil surface with horizontal depressions on a contour or slopes left in a roughened condition after grading. | | ATEGI |
| Cr | CONSTRUCTION ROAD STABILIZATION | | Cr | A travelway constructed as part of a construction plan including access roads, subdivision roads, parking areas and other on-site vehicle transportation routes. | Tc | TURBIDITY CURTAIN | | Te | A floating or staked barrier installed within the water (it may also be referred to as a floating boom, silt barrier, or silt curtain). | | G STR |
| Dc | STREAM DIVERSION CHANNEL | <u></u> | | A temporary channel constructed to convey flow around a construction site while a permanent structure is being constructed. | Тр | TOPSOILING | | (SHOW | The practice of stripping off the more fertile soil, storing it, then spreading it over the disturbed area after completion of construction activities. | | EERIN |
| Di | DIVERSION | | | An earth channel or dike located above, below, or across a slope to divert runoff. This may be a temporary or permanent structure. | Tr | TREE PROTECTION | \bigcirc | STORAGE AREAS) | To protect desirable trees from injury during construction activity. | | INIĐN |
| Dn1 | TEMPORARY DOWNDRAIN STRUCTURE | | (LABE | A flexible conduit of heavy-duty fabric or other material designed to safely conduc surface runoff down a slope. This is temporary and inexpensive. | wt | VEGETATED WATERWAY OR STORMWATER CONVEYANCE CHANNEL | | | Paved or vegetative water outlets for diversions, terraces, berms, dikes or similar structures. | | |
| Dn2 | PERMANENT DOWNDRAIN STRUCTURE | | Dn2 | A paved chute, pipe, sectional conduit or similar material designed to safely conduct surface runoff down a slope. | | | VEGET | ATIVE PR | ACTICES | DATI | |
| Fr | FILTER RING | | (LABE | L) A temporary stone barrier constructed at storm drain inlets and pond outlets. | CODE | PRACTICE | DETAIL | MAP SYMBOL | DESCRIPTION | | |
| Ga | GABION | | and the second s | Rock filter baskets which are hand-placed into position forming soil stabilizing structures. | Bf | BUFFER ZONE | | Bf (LABE | Strip of undisturbed original vegetation, enhanced or restored existing vegetation or the reestablishment of vegetation surrounding an area of disturbance or bordering streams. | 20-000 | |
| Gr | GRADE STABILIZATION STRUCTURE | | G G G | Permanent structures installed to protect channels or waterways where otherwise the slope would be sufficient for the running water to form gullies. | Cs | COASTAL DUNE STABILIZATION (WITH VEGETATION) | Jeffert + J + J + J + J + J + J + J + J + J + | Cs | Planting vegetation on dunes that are denuded, artificially constructed, or re-nourished. | 9005-35-; 121 Ision | |
| | LEVEL | | | L) A structure to convert concentrated flow of water into less erosive sheet flow. This should be constructed only on undisturbed soils. | Ds1 | DISTURBED AREA STABILIZATION (WITH MULCHING ONLY) | | Ds1 | Establishing temporary protection for disturbed areas where seedings may not have a suitable growing season to produce an erosion retarding cover. | ER: 505-9 JUNE 20 | |
| Rd | ROCK FILTER DAM | | | A permanent or temporary stone filter dam installed across small streams or drainageways. | Ds2 | DISTURBED AREA STABILIZATION (WITH TEMP SEEDING) | | Ds2 | Establishing a temporary vegetative cover with fast growing seedings on disturbed areas. | T NUMBI T DATE: | |
| Re | RETAINING | | | A wall installed to stabilize cut and fill slopes where maximum permissible slopes are not obtainable. Each situation will require special design. | Ds3 | DISTURBED AREA STABILIZATION (WITH PERM SEEDING) | 1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1. | Ds3 | Establishing a permanent vegetative cover such as trees, shrubs, vines, grasses, or legumes on disturbed areas. | ROJEC [.] | 1 |
| Rt | RETRO | | | L) A device or structure placed in front of a permanent stormwater detention pond outlet structure to serve as a temporary sediment filter. | Ds4 | DISTURBED AREA STABILIZATION (SODDING) | 820 | Ds4 | A permanent vegetative cover using sods on highly erodable or critically eroded lands. | | NGLY. |
| Sd1 | SEDIMENT | | (LABE | L) A barrier to prevent sediment from leaving the construction site. It may be sandbags, bales of straw or hay, brush, logs and poles, gravel, or a silt fence. | Du | DUST CONTROL ON DISTURBED AREAS | | Du | Controlling surface and air movement of dust on construction site, roadways and similar sites. | Y: AH AH Y: JF | |
| Sd2 | INLET SEDIMENT TRAP | * * * * * * * * * * * * * * * * * * * | | An impounding area created by excavating around a storm drain drop inlet. The excavated area will be filled and stabilized on completion of construction activities. | FI-Co | FLOCCULANTS AND COAGULANTS | | FI-Co | Substance formulated to assist in the solids/liquid separation of suspended particles in solution. | SIGNED BY AWN BY: VIEWED BY | ALES SHOW NOT 1" LON JUST SCAL |
| Sd3 | TEMPORARY SEDIMENT BASIN | | Sag Sag | A basin created by excavation or a dam across a waterway. The surface water runoff is temporarily stored allowing the bulk of the sediment to drop out. | Sb | STREAMBANK STABILIZATION (USING PERM VEGETATION) | | Sb | streambanks, or to prevent, or restore and repair small streambank erosion problems. | | AF |
| Sd4 | TEMPORARY SEDIMENT TRAP | | | L) A small temporary pond that drains a disturbed area so that sediment can settle out. The principle feature distinguishing a temporary sediment trap from a temporary sediment basin is the lack of a pipe or riser. | Ss | SLOPE STABILIZATION | | Ss | A protective covering used to prevent erosion and establish temporary or permanent vegetation on steep slopes, shore lines, or channels. | EME | |
| Sk | FLOATING SURFACE SKIMMER | | Sk | A buoyant device that releases/drains water from the surface of sediment ponds, traps, or basins at a controlled rate of flow. | Tac | TACKIFIERS AND BINDERS | | Тас | Substance used to anchor straw or hay mulch by causing the organic material to bind together. | PLAC | S |
| Spb | SEEP BERM | | (LABE | L) Linear control device constructed as a diversion perpendicular to the direction of runoff to enhance dissipation and infiltration, while creating multiple sedimentation chambers with the employment of intermediate dikes. | | | | | | IE RE AENT | NOTI |
| | | | (LABE | iL) | | | | | | | OL - |
| <u>ERTIFICA</u> CERTIFY SSURE T HOSE PE | A <u>TION</u> UNDER PENAI HAT CERTIFIE RSONS DIREC | _TY OF LAW THAT ⁻ D PERSONNEL PR(CTLY RESPONSIBLE | THIS DOCL OPERLY G. E FOR GAT | JMENT AND ALL ATTACHMENTS WERE PREPARE ATHER AND EVALUATE THE INFORMATION SUBN HERING THE INFORMATION, THE INFORMATION | ED UNDER MY D AITTED. BASED SUBMITTED IS, | IRECTION OR SU ON MY INQUIRY TO THE BEST OI | JPERVISION IN AC OF THE PERSON MY KNOWLEDGE | CORDANC OR PERSC E AND BELI | E WITH A SYSTEM DESIGNED TO DNS WHO MANAGE THE SYSTEM, OR IEF, TRUE, ACCURATE, AND COMPLETE. I | RPLA | NTR |
| M AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS. CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BEST MANAGEMENT PRACTICES EQUIRED BY THE GEORGIA WATER QUALITY CONTROL ACT AND THE DOCUMENT "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" (MANUAL) PUBLISHED BY THE STATE SOIL AND | | | | | | | ATEI CH R | | | | |
| ATER CONSERVATION COMMISSION AS OF JANUARY 1 OF THE YEAR IN WHICH THE LAND DISTURBING ACTIVITY WAS PERMITTED, PROVIDES FOR THE SAMPLING OF THE RECEIVING WATER(S) OR HE SAMPLING OF THE STORM WATER OUTFALLS AND THAT THE DESIGNED SYSTEM OF BEST MANAGEMENT PRACTICES AND SAMPLING METHODS IS EXPECTED TO MEET THE REQUIREMENTS ONTAINED IN THE GENERAL NPDES PERMIT NO. GAR 100002. | | | | | | | NON- | SIOI | | | |
| CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN PROVIDES FOR THE MONITORING OF: (A) ALL PERENNIAL AND INTERMITTENT STREAMS AND OTHER ATER BODIES SHOWN ON THE USGS TOPOGRAPHIC MAP AND ALL OTHER FIELD VERIFIED PERENNIAL AND INTERMITTENT STEAMS AND OTHER WATER BODIES, OR (B) WHERE ANY SUCH SPECIFIC DENTIFIED PERENNIAL OR INTERMITTENT STREAM AND OTHER WATER BODY IS NOT PROPOSED TO BE SAMPLED, I HAVE DETERMINED IN MY PROFESSIONAL JUDGMENT, UTILIZING THE FACTORS EQUIRED IN THE GENERAL NPDES PERMIT NO. GAR 100002, THAT THE INCREASE IN THE TURBIDITY OF FACH SPECIFIC IDENTIFIED SAMPLED RECEIVING WATER WITH BE DEDESENTATIVE OF THE | | | | | | | RAV (30 | RO RO | | | |
| ICREASE IN THE TURBIDITY OF A SPECIFIC IDENTIFIED UN-SAMPLED RECEIVING WATER. | | | | | | | 1 H H | | | | |
| UPERVISION. HE PROPOSED EROSION AND RUNOFF CONTROL MEASURES ARE IN COMPLIANCE WITH THE COBB COUNTY SEDIMENT CONTROL AND FLOOD PROTECTION REGULATIONS AND WILL NOT INCREASE HE RUNOFF RATE FROM THE SITE FOR RAINSTORMS WITH A RETURN PERIOD OF 2, 5, 10, 25, 50 AND/OR 100 YEARS. | | | | | | | | YCK | | | |
| A Waters PE | | | | | | | 3 | | | | |
| EVEL II C KP. DATE | ERTIFIED DES E: 12/02/2021 | IGN PROFESSIONA | AL #000007 | 5695 | | | | CER ⁻ PR(| TIFIED EROSION CONTROL DESIGN DFESSIONAL NUMBER 0000075695 | | 24 |

ITRODUCTION

THIS EROSION SEDIMENTATION AND POLLUTION CONTROL PLAN (ESPCP) IS FOR THE PROJECT KNOWN AS WYCKOFF RAW WATER MAIN IMPROVEMENTS (30-INCH REPLACEMENT), LOCATED IN COBB COUNTY AND BARTOW COUNTY, GEORGIA. THE COBB COUNTY-MARIETTA WATER AUTHORITY (CCMWA) IS THE OWNER OF THE PROJECT. THE PROJECT INVOLVES THE INSTALLATION OF APPROXIMATELY 7,055 LINEAR FEET OF A 54-INCH DIP TRANSMISSION WATER MAIN. THE TOTAL AREA OF THE SITE IS 9.25 ACRES. THE TOTAL DISTURBED AREA IS 7.4 ACRES.

THE INTENT OF THIS ESPCP IS TO COMPLY WITH NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT NUMBER GAR 100002 (PERMIT) BY PROVIDING BEST MANAGEMENT PRACTICES (BMPS) TO MINIMIZE AND MANAGE STORM WATER DISCHARGE FROM THE CONSTRUCTION SITE.

THE PERMIT AUTHORIZES STORM WATER DISCHARGES TO WATERS OF THE STATE FROM INFRASTRUCTURE CONSTRUCTION ACTIVITIES SUBJECT TO LIMITATIONS, MONITORING REQUIREMENTS AND OTHER CONDITIONS SET FORTH IN THE PERMIT. REQUIREMENTS OF THIS ESPC PLAN ARE INCORPORATED BY REFERENCE INTO THE CONSTRUCTION CONTRACT DOCUMENTS FOR THE WYCKOFF RAW WATER MAIN IMPROVEMENTS (30-INCH REPLACEMENT).

IMPLEMENTATION

THE CONTRACTOR FOR CONSTRUCTION OF THE PROJECT IS CONTRACTUALLY OBLIGATED TO CARRY OUT ALL RESPONSIBILITIES OF THE PERMIT OPERATOR AS DEFINED IN THE PERMIT. THE BMPS AND CONTROL ELEMENTS WILL BE IMPLEMENTED TO COMPLY WITH THOSE RECOMMENDED BY THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION FOUND IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, LATEST EDITION (MANUAL). THE CONTRACTOR WILL INSTALL, INSPECT, MAINTAIN, AND DOCUMENT THE BMPS AND CONTROL ELEMENTS IN ACCORDANCE WITH THIS DOCUMENT, THE CONTRACT DOCUMENTS AND THE CONSTRUCTION PLANS. GEORGIA LAW STIPULATES THAT ANY INCREASE IN TURBIDITY ABOVE THE STIPULATED AMOUNTS IN THE PERMIT IS A VIOLATION OF THE PERMIT UNLESS THE BMPS HAVE BEEN PROPERLY INSTALLED AND MAINTAINED. VIOLATIONS OF THE PERMIT DESCRIBED IN THE GEORGIA WATER QUALITY CONTROL ACT INCLUDE SIGNIFICANT FINES AND/OR IMPRISONMENT.

THIS PROJECT IS LOCATED IN NORTHWEST COBB COUNTY AND A SMALL PORTION OF THE PROJECT OCCURS IN SOUTHERN BARTOW COUNTY. THE RAW WATER MAIN CONSTRUCTION IS WITHIN THE RIGHT-OF-WAY OF PUBLIC ROADS OR WITHIN PERMANENT EASEMENT OWNED BY CCMWA. A SEGMENT OF THE PROJECT WILL OCCUR WITHIN ARMY CORPS OF ENGINEERS OWNED PROPERTY. STORM WATER DRAINAGE WILL GENERALLY DRAIN TO UNKNOWN TRIBUTARIES TO ALLATOONA LAKE. A PORTION OF THE PROJECT DOES RESIDE WITHIN THE 100-YEAR FLOOD PLAIN. REVIEW OF THE NATIONAL WETLANDS INVENTORY MAP FOR THE PROJECT AREA INDICATE NO WETLANDS AREAS WILL BE IMPACTED BY THE PROJECT. THE PROJECT WILL COMPLY WITH GEORGIA EROSION AND SEDIMENTATION CONTROL ACT OF 1975.

THIS ESPCP CONTAINS THE FOLLOWING BMPS AND CONTROL ELEMENTS

 EROSION AND SEDIMENT CONTROL BMPS CONTROLS FOR OTHER CONSTRUCTION-RELATED POLLUTANTS

TO COMPLY WITH THE PERMIT, BMPS AND CONTROL ELEMENTS DESCRIBED BELOW WILL BE IMPLEMENTED FOR CONSTRUCTION ACTIVITIES ASSOCIATED WITH THE PROJECT.

EROSION AND SEDIMENT CONTROL BMPS:

EROSION AND SEDIMENT CONTROL BMPS WILL BE USED TO REDUCE EROSION AT LAND-DISTURBING ACTIVITIES AND TO LIMIT THE DEPOSITION OF SEDIMENT ONTO ADJACENT LANDS AND/OR WATERSHEDS. THE CONTRACTOR WILL IMPLEMENT THE EROSION AND SEDIMENT CONTROL BMPS LISTED BELOW AND THE BMPS SPECIFIED IN THE CONTRACT DOCUMENTS AND CONSTRUCTION PLANS. THE SPECIFIED EROSION AND SEDIMENT CONTROL BMPS ARE DESCRIBED IN THE MANUAL. EXAMPLES OF EROSION AND SEDIMENT CONTROL BMPS THAT WILL BE USED FOR THIS PROJECT INCLUDE, BUT ARE NOT LIMITED

- TEMPORARY SEEDING
- PERMANENT SEEDING
- MULCHING SILT FENCE
- STONE CHECKDAMS
- CONSTRUCTION EXITS

THE STANDARD CONFIGURATION AND DEFINITIONS OF ADDITIONAL BMPS CAN BE FOUND ON SHEETS 27 AND 28. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL INCLUDE:

- USING ANIONIC POLYACRYLAMIDE (PAM) AND/OR MULCH TO STABILIZE AREAS LEFT DISTURBED FOR MORE THAN SEVEN (7) CALENDAR DAYS IN ACCORDANCE WITH PART III.D.1 OF THE PERMIT.
- CONDUCT TURBIDITY AND TOTAL SUSPENDED SOLIDS (TSS) SAMPLING AFTER EVERY RAIN EVENT OF 0.5 INCH OR GREATER WITHIN ANY 24 HOUR PERIOD, RECOGNIZING THE EXCEPTIONS SPECIFIED IN PART IV.D.6.d OF THE PERMIT.
- LIMIT THE AMOUNT OF DISTURBED AREA AT ANY ONE TIME TO NO GREATER THAN 25 ACRES OR 50% OF THE TOTAL PLANNED SITE, WHICHEVER IS LESS. • CERTIFIED PERSONNEL SHALL CONDUCT INSPECTIONS AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 25 HOURS OF
- THE END OF THE STORM THAT IS 0.5 INCHES RAINFALL OR GREATER IN ACCORDANCE WITH PART IV.D.4.a.(2). (a) (c) OF THE PERMIT. USING STAGED CONSTRUCTION TO MINIMIZE THE EXPOSURE TO NATURAL EROSION ELEMENTS;
- STABILIZING DISTURBED SOILS WITH GRASS SEEDING AND HAY MULCH DAILY AS CONSTRUCTION OF THE PIPELINE PROGRESSES. ON A LINEAR AND NARROW INFRASTRUCTURE PROJECT, SUCH AS THE PIPELINES THAT ARE THE SUBJECT OF THIS ESPCP, IT IS DIFFICULT TO PROVIDE BASINS TO STORE SEDIMENT DUE TO THE DRAINAGE PATTERNS CROSSING A 20' TO 30' SWATH. NORMALLY, EROSION IS PREVENTED WITH VEGETATIVE MEASURES AND THEN SILT FENCE IS USED TO PROVIDE STORAGE FOR ANY SEDIMENT RELEASED. THE TYPICAL STORAGE IN SILT FENCE ACCEPTED BY MOST JURISDICTIONS IS 0.2 CY PER LINEAR FOOT OF SILT FENCE THE PROJECT WILL CONTAIN 6,542 LF OF SILT FENCE WHICH WILL PROVIDE STORAGE OF 0.2 CY X 6,542 LF = 1,308.4 CY. THIS IS ADEQUATE STORAGE FOR THE 67 CY X 7.40 DISTURBED ACRES = 495.8 CY.

CONTROLS FOR OTHER CONSTRUCTION-RELATED POLLUTANTS THE CONTRACTOR WILL IMPLEMENT THE FOLLOWING CONTROLS FOR POTENTIAL CONSTRUCTION-RELATED POLLUTANTS:

- ADEQUATE WASTE CONTAINERS WILL BE PROVIDED AT APPROPRIATE LOCATIONS ON THE PROJECT SITE AWAY FROM STREETS,
- GUTTERS, WATER COURSES AND STORM DRAINS, AND WILL HAVE PROPER DISPOSAL. WORKERS WILL BE REQUIRED TO UTILIZE WASTE CONTAINERS.
- LIQUID WASTE COLLECTION AREAS SHALL BE LOCATED WITHIN SECONDARY CONTAINMENT STRUCTURES TO MINIMIZE THE RISK OF CONTAMINATED DISCHARGES.
- ALL SANITARY SEWER OR SEPTIC SYSTEM WASTE SHALL BE HANDLED AND DISPOSED OF IN ACCORDANCE WITH THE STATE AND/OR LOCAL REGULATIONS.
- CONSTRUCTION MATERIALS STORED AT THE SITE WILL BE MONITORED AND KEPT IN A LOCATION WHERE CONTACT WITH STORM WATER. WELLS, AND ANY OTHER BODY OF WATER CAN BE PREVENTED.
- STORAGE CONTAINERS FOR OIL, FUEL AND OTHER HAZARDOUS SUBSTANCES WILL BE LOCATED IN DESIGNATED AREAS PROTECTED WITH IMPERVIOUS CONTAINMENT BERMS.
- THE CONTRACTOR WILL NOTIFY GEORGIA EPD (404-656-4863) AND THE NATIONAL RESPONSE CENTER (NRC) (800-424-8802) UPON AWARENESS OF A RELEASE CONTAINING A HAZARDOUS SUBSTANCE OR OIL IN AN AMOUNT EQUAL TO OR GREATER THAN A REPORTING QUANTITY ESTABLISHED UNDER THE GEORGIA OIL OR HAZARDOUS MATERIAL SPILL OR RELEASE ACT (O.C.G.A. 12-14-2, ET SEQ.), 40 CFR 117 AND 40 CFR 302, AS SOON AS THE CONTRACTOR HAS KNOWLEDGE OF THE DISCHARGE. DISCHARGE OF CONSTRUCTION MATERIALS INTO ANY BODY OF WATER WILL BE PREVENTED.
- ANY SPILL WILL BE CLEANED UP IMMEDIATELY.
- WHEN WASHING VEHICLES BEFORE THEY LEAVE THE SITE, ANY HAZARDOUS SUBSTANCES THAT HAVE BEEN IN CONTACT WITH THE CONSTRUCTION VEHICLES WILL NOT BE WASHED INTO ANY STREAMS, LAKES, WELLS, ETC.
- THE CONTRACTOR SHALL FOLLOW THE REQUIREMENTS FOR CONCRETE EQUIPMENT WASHDOWN AS SHOWN IN THE CONCRETE
- WASHDOWN DETAIL ON SHEET ESC-3. WASHOUT OF THE DRUM AT THE CONSTRUCTION SITE IS PROHIBITED.

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

INSPECTIONS

EACH EROSION AND SEDIMENT CONTROL AND STORM WATER MANAGEMENT DEVICE WILL BE INSPECTED IN ACCORDANCE WITH THIS ESPCP, CONTRACT DOCUMENTS AND CONSTRUCTION PLANS. ALL INSPECTIONS REQUIRED BY THIS ESPCP SHALL BE CONDUCTED BY QUALIFIED PERSONNEL, AS DEFINED BY THE PERMIT. FOR THIS PROJECT THE CONTRACTOR IS OBLIGATED, BY AGREEMENT WITH THE OWNER, TO PROVIDE QUALIFIED PERSONNEL FOR ALL INSPECTIONS.

REQUIREMENTS FOR INSPECTION AND MAINTENANCE INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:

- EACH DAY WHEN ANY TYPE OF CONSTRUCTION ACTIVITY HAS TAKEN PLACE AT A PRIMARY PERMITTEE'S SITE, CERTIFIED PERSONNEL PROVIDED BY THE PRIMARY PERMITTEE SHALL INSPECT (A) ALL AREAS AT THE PRIMARY PERMITTEE'S SITE WHERE PETROLEUM PRODUCTS ARE STORED, USED, OR HANDLED FOR SPILLS AND LEAKS FROM VEHICLES AND EQUIPMENT; (B) ALL LOCATIONS AT THE PRIMARY PERMITTEE'S SITE WHERE VEHICLES ENTER OR EXIT THE SITE FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING. THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.
- MEASURE AND RECORD RAINFALL WITHIN DISTURBED AREAS OF THE SITE THAT HAVE NOT YET MET FINAL STABILIZATION ONCE EVERY 24-HOURS, EXCEPT ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY AND NON-WORKING FEDERAL HOLIDAY. THE DATA COLLECTED FOR THE PURPOSE OF COMPLIANCE WITH THIS PERMIT SHALL BE REPRESENTATIVE OF THE MONITORED ACTIVITY. MEASUREMENT OF RAINFALL MAY BE SUSPENDED IF ALL AREAS OF THE SITE HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS.
- CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT THE FOLLOWING AT LEAST ONCE EVERY FOURTEEN (14) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCH OR GREATER (UNLESS SUCH STORM ENDS

AFTER 5:00 PM ON ANY FRIDAY OR ON ANY NONWORKING SATURDAY, NONWORKING SUNDAY, OR ANY NONWORKING FEDERAL HOLIDAY IN WHICH CASE THE INSPECTION SHALL BE COMPLETED BY THE END OF THE NEXT BUSINESS DAY AND/OR WORKING DAY, WHICHEVER OCCURS FIRST): (A) DISTURBED AREAS OF THE PRIMARY PERMITTEE'S CONSTRUCTION SITE; (B) AREAS USED BY THE PRIMARY PERMITTEE FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION; AND (C) STRUCTURAL CONTROL MEASURES. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN APPLICABLE TO THE PRIMARY PERMITTEE'S SITE SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S). FOR AREAS OF A SITE THAT HAVE UNDERGONE FINAL STABILIZATION, THE PERMITTEE MUST COMPLY WITH PART IV.D.4.a.(3). THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.

MAINTENANCE THE CONTRACTOR WILL IMPLEMENT ROUTINE MAINTENANCE PROCEDURES, SUCH AS REMOVING SILT AT SILT BARRIERS WHEN THE ACCUMULATION REACHES FIFTY PERCENT OF CAPACITY, TO ENSURE THAT THE BMPS WILL FUNCTION AS INTENDED THROUGHOUT THE DURATION OF THE PROJECT. WITHIN 48 HOURS FOLLOWING EACH INSPECTION, ANY REQUIRED MAINTENANCE MUST BE COMPLETED. MAINTENANCE OF EACH EROSION AND SEDIMENT CONTROL DEVICE WILL BE PERFORMED THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL FINAL STABILIZATION IS ACHIEVED.

SAMPLING REQUIREMENTS PERMIT.

ANALYSIS IS UTILIZED. DILUTION OF SAMPLES IS NOT REQUIRED. SAMPLES MAY BE ANALYZED DIRECTLY WITH A PROPERLY CALIBRATED TURBIDIMETER. SAMPLES ARE NOT REQUIRED TO BE COOLED. 5. SAMPLING AND ANALYSIS OF THE RECEIVING WATER(S) OR OUTFALL BEYOND THE MINIMUM FREQUENCY STATED IN THE PERMIT MUST BE REPORTED TO EPD.

SAMPLING POINTS THE CONTRACTOR WILL SAMPLE UNNAMED TRIBUTARIES AND CREEKS AT THE LOCATIONS LISTED BELOW. THE PLAN SHEETS WITHIN THESE CONSTRUCTION PLANS SHOW THE LOCATION OF ALL PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES INTO WHICH STORM WATER IS DISCHARGED, AND THE SAMPLING LOCATIONS FOR EACH REPRESENTATIVE STORM WATER OUTFALL.

1A: LATI 1B: LATI

SAMPLE LOCATIONS 2A AND 2B - UNNAMED TRUBUTARY TO ALLATOONA LAKE 2A: LATITUDE: N34° 04' 23.33" LONGITUDE: W84° 41' 40.22" (UPSTREAM) - UNNAMED STREAM CROSSING 2B: LATITUDE: N34° 04' 23.03" LONGITUDE: W84° 41' 41.24" (DOWNSTREAM) - UNNAMED STREAM CROSSING

3A: LATITUDE: N34° 04' 45.97" LONGITUDE: W84° 41' 45.06" (UPSTREAM) - UNNAMED STREAM CROSSING 3B: LATITUDE: N34° 04' 45.86" LONGITUDE: W84° 41' 45.77" (DOWNSTREAM) - UNNAMED STREAM CROSSING

IT SHOULD BE NOTED THAT ALL OF THE ABOVE SAMPLING LOCATIONS MAY NOT BE ACTIVE AT ALL TIMES DURING CONSTRUCTION OF THE PIPELINE. A SAMPLING LOCATION WILL BE ACTIVE FROM THE TIME CONSTRUCTION ACTIVITY STARTS IN THE WATERSHED THAT FEEDS THE SAMPLING LOCATION UNTIL FINAL STABILIZATION IS ACHIEVED IN THAT WATERSHED. THE TIMING OF THE CONSTRUCTION ACTIVITY WITHIN A WATERSHED DEPENDS ON CONSTRUCTION STAGING. HOWEVER, CONSTRUCTION STAGING HAS NOT YET BEEN DETERMINED. THE CONTRACTOR MAY STAGE THE CONSTRUCTION SO THAT 1) CONSTRUCTION BEGINS AT ONE END OF THE PROJECT AND PROGRESSES SYSTEMATICALLY TO THE OTHER END: 2) CONSTRUCTION BEGINS AT BOTH ENDS OF THE PROJECT AND PROGRESSES TO A COMMON MEETING POINT; OR 3) MULTIPLE CREWS BEGIN CONSTRUCTION AT DIFFERENT SECTIONS OF THE PROJECT AND EVENTUALLY LINK UP WITH EACH OTHER.

- CHANNEL.

4. CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT AT LEAST ONCE PER MONTH DURING THE TERM OF THIS PERMIT (I.E., UNTIL A NOTICE OF TERMINATION IS RECEIVED BY THE EPD) THE AREAS OF THE SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERINNEALS APPROPRIATE FOR THE REGION. THESE AREAS SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM AND THE RECEIVING WATER(S). EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE. THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S).

5. BASED ON THE RESULTS OF EACH INSPECTION, THE SITE DESCRIPTION AND THE POLLUTION PREVENTION AND CONTROL MEASURES IDENTIFIED IN THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, THE PLAN SHALL BE REVISED AS APPROPRIATE NOT LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION. IMPLEMENTATION OF SUCH CHANGES SHALL BE MADE AS SOON AS PRACTICAL BUT IN NO CASE LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION.

6. A REPORT OF EACH INSPECTION THAT INCLUDES NAME(S) OF PERSONNEL MAKING EACH INSPECTION, THE DATE(S) OF EACH INSPECTION, MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, AND ACTIONS TAKEN IN ACCORDANCE WITH PART IV.D.4.a.(4). OF THE PERMIT SHALL BE MADE AND RETAINED AT THE SITE OR BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION UNTIL THE ENTIRE SITE OR THAT PORTION OF A CONSTRUCTION PROJECT THAT HAS BEEN PHASED HAS UNDERGONE FINAL STABILIZATION AND A NOTICE OF TERMINATION IS SUBMITTED TO EPD. SUCH REPORTS SHALL IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE. WHERE THE REPORT DOES NOT IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE. THE REPORT SHALL CONTAIN A CERTIFICATION THAT THE CONSTRUCTION SITE IS IN COMPLIANCE WITH THE EROSION. SEDIMENTATION AND POLLUTION CONTROL PLAN AND THIS PERMIT. THE REPORT SHALL BE SIGNED IN ACCORDANCE WITH PART V.G. OF THIS PERMIT.

THE PERMIT REQUIRES THE MONITORING OF NEPHELOMETRIC TURBIDITY IN RECEIVING WATER(S) OR OUTFALLS IN ACCORDANCE WITH THE

RECEIVING WATER SAMPLES AND STORM WATER DISCHARGE SAMPLES WILL BE COLLECTED BY GRAB SAMPLES AND THE ANALYSIS OF THESE SAMPLES MUST BE CONDUCTED IN ACCORDANCE WITH METHODOLOGY AND TEST PROCEDURES SPECIFIED BY THE PERMIT. THE FREQUENCY OF SAMPLING WILL BE AS DESCRIBED IN THE FOLLOWING SECTION. SAMPLING AND ANALYSIS OF THE RECEIVING WATER(S) OR OUTFALLS BEYOND THE MINIMUM FREQUENCY STATED BELOW WILL BE REPORTED TO THE EPD.

1. SAMPLE CONTAINERS WILL BE LABELED BEFORE COLLECTING SAMPLES.

2. SAMPLES WILL BE WELL MIXED BEFORE TRANSFERRING TO A SECONDARY CONTAINER.

3. CLEAN GLASS OR PLASTIC JARS WITH LARGE MOUTHS WILL BE USED TO COLLECT SAMPLES. THE JARS SHOULD BE CLEANED THOROUGHLY TO AVOID CONTAMINATION.

4. MANUAL, AUTOMATIC OR RINSING STAGE SAMPLING MAY BE UTILIZED. SAMPLES REQUIRED BY THE PERMIT SHOULD BE ANALYZED IMMEDIATELY, BUT IN NO CASE LATER THAN 48 HOURS AFTER COLLECTION. HOWEVER, SAMPLES FROM AUTOMATIC SAMPLERS MUST BE COLLECTED NO LATER THAN THE NEXT BUSINESS DAY AFTER THEIR ACCUMULATION, UNLESS FLOW THROUGH AUTOMATED

SAMPLE LOCATIONS 1A AND 1B - UNNAMED TRIBUTARY TO ALLATOONA LAKE

| ITUDE: N34° 04' 23.33" | LONGITUDE: W84° 41' 40.22" | (UPSTREAM) - STORMWATER HEADWALL INLET |
|------------------------|----------------------------|---|
| ITUDE: N34° 04' 23.03" | LONGITUDE: W84° 41' 41.24" | (DOWNSTREAM) - CENTERLINE WET WEATHER DITCH |

SAMPLE LOCATIONS 3A AND 3B - UNNAMED TRUBUTARY TO ALLATOONA LAKE

MANUAL SAMPLING

 SAMPLING WILL BEGIN AT THE DESIGNATED REPRESENTATIVE RECEIVING WATER(S) AT THE DOWNSTREAM LOCATION. THIS SAMPLE WILL BE TAKEN AT THE DISCHARGE FARTHEST DOWNSTREAM AT THE SITE BUT UPSTREAM OF ANY OTHER STORM WATER DISCHARGE NOT ASSOCIATED WITH THE PROJECT. FOR LARGE STREAMS WHERE VARIATIONS IN COLOR ARE VISIBLE, SEVERAL DOWNSTREAM SAMPLES FROM ACROSS THE RECEIVING WATER(S) MAY BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY OF THESE SAMPLES MAY BE USED FOR THE DOWNSTREAM VALUE.

 UPSTREAM SAMPLES WILL BE TAKEN AFTER DOWNSTREAM SAMPLES HAVE BEEN ACQUIRED. THE UPSTREAM SAMPLE WILL BE TAKEN AT THE DISCHARGE FARTHEST UPSTREAM AT THE SITE BUT DOWNSTREAM OF ANY OTHER STORM WATER DISCHARGES NOT ASSOCIATED WITH THE PROJECT. WHERE APPROPRIATE, SEVERAL UPSTREAM SAMPLES FROM ACROSS THE RECEIVING WATER(S) MAY BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY OF THESE SAMPLES MAY BE USED FOR THE UPSTREAM VALUE. • THE SAMPLES WILL BE TAKEN FROM THE HORIZONTAL AND VERTICAL CENTER OF THE RECEIVING WATER(S) OR THE STORM WATER OUTFALL CHANNEL(S).

• CARE WILL BE TAKEN TO AVOID STIRRING THE BOTTOM SEDIMENTS IN THE RECEIVING WATER(S) OR IN THE OUTFALL STORM WATER

THE SAMPLING CONTAINER WILL BE HELD SO THAT THE OPENING FACES UPSTREAM.

THE SAMPLES WILL BE KEPT FREE OF FLOATING DEBRIS.

 ONCE THE SAMPLE JAR OR BOTTLE IS FULL AND CAPPED, IT WILL BE TRANSPORTED TO THE LOCATION WHERE THE TURBIDITY TESTING WILL BE CONDUCTED. ALL TURBIDITY TESTS WILL BE CONDUCTED IMMEDIATELY, BUT NO LATER THAN 48 HOURS AFTER THE TIME THE SAMPLE WAS OBTAINED.

SAMPLING FREQUENCY

THE CONTRACTOR SHALL SAMPLE IN ACCORDANCE WITH THIS ES&PCP AT LEAST ONCE FOR EACH RAINFALL EVENT DESCRIBED BELOW: a. FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING STREAM, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR MONITORING DURING NORMAL BUSINESS HOURS* (MONDAY THROUGH FRIDAY, 8:00 AM TO 5:00 PM AND SATURDAY 8:00 AM TO 5:00 PM, EXCLUDING ALL NONWORKING FEDERAL HOLIDAYS, WHEN CONSTRUCTION ACTIVITY IS BEING CONDUCTED BY THE PRIMARY PERMITTEE) THAT OCCURS AFTER ALL CLEARING AND GRUBBING OPERATIONS HAVE BEEN COMPLETED IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE REPRESENTATIVE SAMPLING LOCATION;

b. IN ADDITION TO ITEM A) ABOVE, FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING STREAM, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR MONITORING DURING NORMAL BUSINESS HOURS* THAT OCCURS EITHER 90

- DESIGNED, INSTALLED, AND MAINTAINED.
- OTHER THAN AS REQUIRED BY (c) ABOVE.

RAINFALL DATA

DAILY RAINFALL MONITORING DATA FORM.

TESTING

QUAILIFIED TESTING LABORATORY.

DOCUMENTS THAT MAY BE PREPARED BY THE EPD.

NTU LIMIT RATIONAL

NOT EXCEED 25 NTU.

REPORTING

WITH PART VI OF THE PERMIT.

- a. THE DATE, EXACT PLACE, AND TIME OF SAMPLING OR MEASUREMENTS;
- c. THE DATE(S) ANALYSES WERE PERFORMED;
- d. THE TIME(S) ANALYSES WERE INITIATED; e. THE NAME(S) OF THE INDIVIDUAL(S) WHO PERFORMED THE ANALYSES;

- TO DETERMINE THESE RESULTS; AND h. RESULTS THAT EXCEED 1,000 NTU SHALL BE REPORTED AS "EXCEEDS 1,000 NTU."

MONITORING RESULTS.

RETENTION OF RECORDS

TERMINATION IS SUBMITTED IN ACCORDANCE WITH PART VI:

- a. A COPY OF ALL NOTICES OF INTENT SUBMITTED TO EPD:
- PERMIT:
- d. A COPY OF ALL MONITORING INFORMATION, RESULTS, AND REPORTS REQUIRED BY THIS PERMIT;
- e. A COPY OF ALL INSPECTION REPORTS GENERATED IN ACCORDANCE WITH PART IV.D.4.a. OF THIS PERMIT;
- PERMIT; AND

MAY BE EXTENDED BY REQUEST OF THE EPD AT ANY TIME UPON WRITTEN NOTIFICATION TO THE PERMITTEE.

REPORT SUBMITTAL

ON A MONTHLY BASIS.

| ACTIVITY |
|--------------------------------------|
| NOTICE TO PROCEED |
| INSTALLATION OF EROSION CONTROL |
| MAINTENANCE OF EROSION CONTROL |
| INSTALLATION OF TREE PROTECTION DEVI |
| MAINTENANCE OF TREE PROTECTION DEV |
| INSTALLATION OF WATER MAIN |
| TEMPORARY AND PERMANENT GRASSING |
| CLEAN-UP |
| |

CONSTRUCTION ACTIVITIES ARE EXPECTED TO BEGIN IN AUGUST 2021.

CERTIFIED EROSION CONTROL DESIGN PROFESSIONAL NUMBER 0000075695

| | IEMPORARY & PERMANENT VEGETATIVE COVERS - SEEDING CHART | | | | | | | | | | |
|-----|---|---|---|--|----------------------------|--|--|---|----------------------------|--|--|
| | | | | RATES/1,000 SQ. FT. | | | | RATES/1,000 SQ. | RATES/1,000 SQ. FT. | | |
| | MONTH | TEMPORARY SEED | RATE/ACRE | FERTILIZER | LIME STONE | PERMANENT SEED | RATE/ACRE | FERTILIZER | LIME STONE | MAINTENANCE | |
| 1) | JANUARY | RYEGRASS | 40 - 50 LB. | 12 LB (10-10-10) | 45 LB. | UNHULLED BERMUDA SERICEA LESPEDEZA (2) | 8 - 10 LB. 30 - 40 LB. (1) | 12 LB (10-10-10) 35 LB (6-12-12) | 45 LB. 45 LB. | 10 LB (10-10-10) 10 LB (10-10-10) | |
| 2) | FEBRUARY | RYEGRASS | 40 - 50 LB. | 12 LB (10-10-10) | 45 LB. | UNHULLED BERMUDA SERICEA LESPEDEZA (2) FESCUE | 8 - 10 LB. 30 - 40 LB. 30 - 50 LB. | 12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12) | 45 LB. 45 LB. 45 LB. | 10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10) | |
| 3) | MARCH | RYE ANNUAL LESPEDEZA WEEPING LOVEGRASS | 2 - 3 BU. 20 - 25 LB. 4 - 6 LB. | 12 LB (10-10-10) 35 LB (6-12-12) 12 LB (10-10-10) | 45 LB. 45 LB. 45 LB. | UNHULLED BERMUDA SERICEA LESPEDEZA (2) FESCUE | 8 - 10 LB. 30 - 40 LB. 30 - 50 LB. | 12 LB (10-10-10) 35 LB (6-12-12) 12 LB (10-10-10) | 45 LB. 45 LB. 45 LB. | 10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10) | |
| 4) | APRIL | RYE BROWN TOP MILLET ANNUAL LESPEDEZA SUDAN ANNUAL | 2 - 3 BU. 30 - 40 LB. 20 - 25 LB. 35 LB. | 12 LB (10-10-10) 12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12) | 45 LB. 45 LB. 45 LB. | WEEPING LOVEGRASS HULLED BERMUDA BAHIA | 4 - 6 LB. 5 - 6 LB. 40 - 60 LB. | 12 LB (10-10-10) 12 LB (10-10-10) 35 LB (6-12-12) | 45 LB. 45 LB. 45 LB. | 10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10) | |
| 5) | MAY | WEEPING LOVEGRASS SUDAN GRASS BROWN TOP MILLET | 4 - 6 LB. 35 LB. 30 - 40 LB. | 12 LB (10-10-10) 35 LB (6-12-12) 12 LB (10-10-10) | 45 LB. 45 LB. 45 LB. | WEEPING LOVEGRASS HULLED BERMUDA BAHIA | 4 - 6 LB. 5 - 6 LB. 40 - 60 LB. | 12 LB (10-10-10) 12 LB (10-10-10) 35 LB (6-12-12) | 45 LB. 45 LB. 45 LB. | 10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10) | |
| 6) | JUNE | WEEPING LOVEGRASS SUDAN GRASS BROWN TOP MILLET | 4 - 6 LB. 35 LB. 30 - 40 LB. | 12 LB (10-10-10) 35 LB (6-12-12) 12 LB (10-10-10) | 45 LB. 45 LB. | WEEPING LOVEGRASS HULLED BERMUDA BAHIA | 4 - 6 LB. 5 - 6 LB. 40 - 60 LB. | 12 LB (10-10-10) 12 LB (10-10-10) 35 LB (6-12-12) | 45 LB. 45 LB. 45 LB. | 10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10) | |
| 7) | JULY | WEEPING LOVEGRASS SUDAN GRASS BROWN TOP MILLET | 4 - 6 LB. 35 LB. 30 - 40 LB. | 12 LB (10-10-10) 35 LB (6-12-12) 12 LB (10-10-10) | 45 LB. 45 LB. | WEEPING LOVEGRASS SUDAN GRASS BROWN TOP MILLET | 4 - 6 LB. 35 LB. 30 - 40 LB. | 12 LB (10-10-10) 35 LB (6-12-12) 12 LB (10-10-10) | 45 LB. 45 LB. 45 LB. | 10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10) | |
| 8) | AUGUST | RYEGRASS WEEPING LOVEGRASS | 40 - 50 LB. 4 - 6 LB. | 12 LB (10-10-10) 12 LB (10-10-10) | 45 LB. | HULLED BERMUDA BAHIA | 5 - 6 LB. 40 - 60 LB. | 12 LB (10-10-10) 35 LB (6-12-12) | 45 LB. 45 LB. | 10 LB (10-10-10) 10 LB (10-10-10) | |
| 9) | SEPTEMBER | RYEGRASS TALL FESCUE | 40 - 50 LB. 30 - 50 LB. | 12 LB (10-10-10) 35 LB (6-12-12) | 45 LB. 45 LB. | TALL FESCUE | 30 - 50 LB. | 35 LB (6-12-12) | 45 LB. | 10 LB (10-10-10) | |
| 10) | OCTOBER | WHEAT | 2 - 3 BU. | 12 LB (10-10-10) | 45 LB. | UNHULLED BERMUDA SERICEA LESPEDEZA (2) FESCUE | 8 - 10 LB. 30 - 40 LB. 30 - 50 LB. | 12 LB (10-10-10) 35 LB (10-10-10) 35 LB (6-12-12) | 45 LB. 45 LB. 45 LB. | 10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10) | |
| 11) | NOVEMBER | WHEAT | 2 - 3 BU. | 12 LB (10-10-10) | 45 LB. | UNHULLED BERMUDA FESCUE SERICEA LESPEDEZA | 8 - 10 LB. 30 - 50 LB. 30 - 40 LB. | 12 LB (10-10-10) 35 LB (10-10-10) 35 LB (6-12-12) | 45 LB. 45 LB. 45 LB. | 10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10) | |
| 12) | DECEMBER | RYE RYEGRASS WHEAT | 2 - 3 BU. 40 - 50 LB. 2 - 3 BU. | 12 LB (10-10-10) 12 LB (10-10-10) 12 LB (10-10-10) | 45 LB. 45 LB. 45 LB. | UNHULLED BERMUDA SERICEA LESPEDEZA FESCUE | 8 - 10 LB. 30 - 40 LB. 30 - 50 LB. | 12 LB (10-10-10) 35 LB (10-10-10) 35 LB (6-12-12) | 45 LB. 45 LB. 45 LB. | 10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10) | |
| 1 | (1) - USE A MINIMUM OF 40 LBS. SCARIFIED SEED. REMAINDER MAY BE UNSCARIFIED. CLEAN HULLED SEED. | | | | | | | | | | |

(2) - USE EITHER COMMON SERALA, OR INTERSTATE SERICEA LESPEDEZA.

THE ABOVE SEEDING CHART LISTS ALL POTENTIAL OPTIONS. CONTRACTOR IS TO SUBMIT THE SCHEDULE AND PROPOSED SEED MIXTURE FOR THIS PROJECT FOR ENGINEER'S APPROVAL PRIOR TO SEEDING.

Ds2 - DISTURBED AREA STABILIZATION WITH TEMPORARY SEEDING

THE PURPOSE OF TEMPORARY SEEDING IS TO REDUCE RUNOFF, EROSION, AND SEDIMENTATION, IMPROVE WILDLIFE HABITAT, IMPROVE AESTHETICS, AND IMPROVE TILTH AND ORGANIC MATTER.

INSTALLATION

- INSTALL ALL E&SC MEASURES PRIOR TO APPLYING TEMPORARY VEGETATION. GRADING OR SHAPING ARE NOT REQUIRED IF SLOPES CAN BE PLANTED WITH A HYDROSEEDER
- OR BY HAND-SEEDING. SEEDBED PREPARATION IS NOT REQUIRED IF SOIL IS LOOSE AND NOT SEALED BY RAIN. WHEN THE SOIL IS SEALED OR CRUSTED, IT SHOULD BE PITTED, TRENCHED OR SCARIFIED TO
- PROVIDE A PLACE FOR SEED TO LODGE AND GERMINATE AGRICULTURAL LIME IS NOT REQUIRED.
- 6. FERTILIZE LOW FERTILITY SOILS PRIOR TO OR DURING PLANTING AT A RATE OF 500-700 POUNDS PER ACRE OF 10-10-10 FERTILIZER OR EQUIVALENT (12-16 POUNDS PER 1000 SQUARE FEET).
- 7. IT IS IMPERATIVE THAT CONTRACTOR CHECK THE TAG ON THE BAG OF SEED TO VERIFY THE TYPE AND GERMINATION OF THE SEED TO BE PLANTED. APPLY SEED BY HAND, CYCLONE SEEDER, DRILL OR HYDRO-SEEDER. SEED PLANTED WITH A
- DRILL SHALL BE PLANTED $\frac{1}{4}$ " TO $\frac{1}{2}$ " DEEP.
- APPLY IN ACCORDANCE WITH ABOVE TABLE. 10. TEMPORARY COVER SHALL APPLIED TO ALL DISTURBED AREAS LEFT IDLE FOR 14 DAYS. IF AN AREA IS LEFT IDLE FOR 6 MONTHS, PERMANENT COVER SHALL BE APPLIED.

MAINTENANCE

- 1. RE-SEED AREAS WHERE AN ADEQUATE STAND OF TEMPORARY VEGETATION FAILS TO EMERGE OR WHERE A POOR STAND EXISTS.
- Ds3 DISTURBED AREA STABILIZATION WITH PERMANENT SEEDING

IF THE DISTURBED AREA TO BE GRASSED HAD EXISTING GRASS PRIOR TO DISTURBANCE, THEN PERMANENT SEEDING SHALL MATCH THE EXISTING GRASS. IF THE DISTURBED AREA TO BE GRASSED DID NOT HAVE EXISTING GRASS PRIOR TO DISTURBANCE OR CONTAINED WEEDS AND OTHER UNDESIRABLE VEGETATION. THEN THE PERMANENT SEEDING SHALL BE PER THE ABOVE TABLE.

THE PURPOSE OF PERMANENT SEEDING IS TO REDUCE RUNOFF AND EROSION, IMPROVE WILDLIFE HABITAT, IMPROVE AESTHETICS, IMPROVE TILTH AND ORGANIC MATTER, REDUCE DOWNSTREAM COMPLAINTS, REDUCE LIKELIHOOD OF LEGAL ACTION, REDUCE LIKELIHOOD OF WORK STOPPAGE DUE TO LEGAL ACTION, AND INCREASE GOOD NEIGHBOR BENEFITS.

INSTALLATION

- USE CONVENTIONAL PLANTING METHODS IF POSSIBLE.
- APPLY IN ACCORDANCE WITH ABOVE TABLE. CHECK THE TAG ON THE BAG OF SEED TO VERIFY THE TYPE AND GERMINATION OF THE SEED TO BE PLANTED AND THE DATE OF THE TEST
- 4. SCARIFY, PIT OR TRENCH SEALED OR CRUSTED SOIL
- FERTILIZE BASED ON SOIL TESTS OR AS SHOWN IN ABOVE TABLE. 5 6. APPLY AGRICULTURAL LIME AS PRESCRIBED BY SOIL TESTS OR AT A RATE OF 1 to 2 TONS PER
- ACRE 7. APPLY SEED BY HAND, CYCLONE SEEDER, DRILL OR HYDRO-SEEDER. SEED PLANTED WITH A
- DRILL SHALL BE PLANTED $\frac{1}{4}$ " TO $\frac{1}{2}$ " DEEP.
- STRAW OR HAY MULCH SHALL BE APPLIED AT A RATE OF 2 TO 2.5 TONS PER ACRE. 9. IRRIGATION SHOULD BE USED TO SUPPLEMENT RAINFALL, BUT NOT TO THE EXTENT TO CAUSE EROSION.

MAINTENANCE

- 1. RE-SEED AREA WHERE AN ADEQUATE STAND OF VEGETATION FAILS TO EMERGE OR WHERE A POOR STAND EXISTS.
- 2. APPLY FERTILIZER PER ABOVE TABLE.
- 3. MOW BERMUDA AND BAHIA AS DESIRED. MOW SERICEA LESPEDEZA ONLY AFTER FROST TO ENSURE SEEDS ARE MATURE. 4. MAINTAIN 6" OR MORE OF TOP GROWTH.
- Ds2 Ds3 TEMPORARY & PERMANENT GRASSING

MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 14 DAYS OF DISTURBANCE. MULCH CAN BE USED AS A SINGULAR CONTROL DEVICE FOR UP TO SIX MONTHS, BUT IT SHALL BE APPLIED AT THE APPROPRIATE DEPTH, DEPENDING ON THE MATERIAL USED, ANCHORED, AND HAVE 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 VEGETATION TECHNIQUES SHALL BE EMPLOYED.

SITE PREPARATION

- GRADE TO PERMIT THE USE OF EQUIPMENT FOR APPLYING AND ANCHORING MULCH
- INSTALL NEEDED EROSION CONTROL MEASURES AS REQUIRED SUCH AS
- DIKES, DIVERSION BERMS, TERRACES, AND SEDIMENT BARRIERS. 3. LOOSEN COMPACT SOIL TO A MINIMUM DEPTH OF 3 INCHES.

APPLYING MULCH

WHEN MULCH IS USED WITHOUT SEEDING, MULCH SHALL BE APPLIED TO PROVIDE FULL COVERAGE OF THE EXPOSED AREA.

- 1. DRY STRAW OR HAY MULCH AND WOOD CHIPS SHALL BE APPLIED UNIFORMLY BY HAND OR BY MECHANICAL EQUIPMENT
- 2. 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.

4. APPLY POLYETHYLENE FILM ON EXPOSED AREAS.

- 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 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 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. PLASTIC MESH OR NETTING WITH A 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.

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Ds4 SOD VEGETATIVE PLAN

6-12-12

6-12-12

10-10-10

6-12-12

6-12-12

10-10-10

SECOND

MAINTENANCE

SECOND

MAINTENANCE

COOL SEASON

GRASSES

WARM SEASON

GRASSES

ADDITIONAL BMP NOTES FOR IMPAIRED STREAM SEGMENTS: CONTRACTOR SHALL MAINTAIN A 50' UNDISTURBED STREAM BUFFER IN COMPLIANCE WITH PART III.C OF THE NPDES GAR 1000002 PERMIT

1000

400

800

400

CONTRACTOR SHALL PLACE A 4' X 8' SIGN, VISIBLE FROM THE STREET, THAT IDENTIFIES THE CONSTRUCTION SITE, THE PRIMARY PERMITTEE(S), AND THE CONTACT PERSON(S) AND TELEPHONE NUMBER(S) IN COMPLIANCE WITH PART III.C OF THE NPDES GAR 1000002 PERMIT. (ALL COUNTY RULES FOR PERMITTING MUST BE FOLLOWED)

50-100

30

50-100

50-100

30

CONTRACTOR SHALL LIMIT THE AMOUNT OF DISTURBED AREA AT ANY ONE TIME TO NO GREATER THAN 50% OF THE TOTAL PROJECT DISTURBED AREA IN COMPLIANCE WITH PART III.C OF THE NPDES GAR 1000002 PERMIT. TOTAL PROJECT DISTURBED AREA = 7.40 ACRES. FIFTY PERCENT OF THIS AREA AMOUNTS TO APPROXIMATELY 3.70 ACRES.

CONTRACTOR SHALL CONDUCT TURBIDITY AND TOTAL SUSPENDED SOLIDS (TSS) SAMPLING AFTER EVERY RAIN EVENT OF 0.5 INCH OR GREATER WITHIN ANY 24 HOUR PERIOD, RECOGNIZING THE EXCEPTIONS SPECIFIED IN PART IV.D.6.d OF THE PERMIT.

1. CHECK DAMS ARE TO BE USED ONLY IN SMALL OPEN CHANNELS (THEY ARE NOT TO BE USED IN LIVE STREAMS)

THE DRAINAGE AREA FOR STONE CHECK DAMS SHALL NOT EXCEED TWO ACRES.

3. THE CENTER OF THE CHECK DAM MUST BE AT LEAST 9 INCHES LOWER THAN THE OUTER EDGES. 4. THE DAM HEIGHT SHOULD BE A MAXIMUM OF 2 FEET FROM CENTER TO RIM EDGE.

5. THE SIDE SLOPES OF THE CHECK DAM SHALL NOT EXCEED A 2:1 SLOPE.

GEOTEXTILE SHALL BE USED TO PREVENT THE MITIGATION OF SUBGRADE SOIL PARTICLES INTO THE STONES (REFER TO AASHTO M288-96, SECTION 7.3, TABLE 3).

STONE CHECK DAM Sd-S

