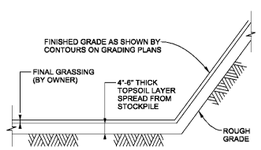
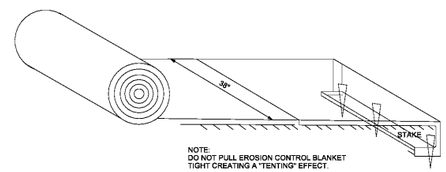


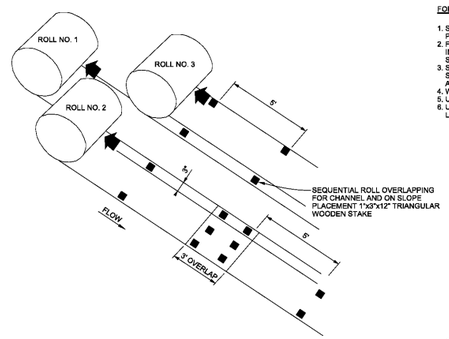
THE CONTRACTOR SHALL SPREAD TOPSOIL ON ALL DISTURBED AREAS NOT OCCUPIED BY STRUCTURES OR CALLED OUT FOR OTHER SURFACE TREATMENT. WITHIN THE CONCRETE SIDEWALK, TOPSOIL SHALL BE LEFT 1.5" BELOW FINISHED GRADE AND SHALL NOT BE THICKER THAN 4.5" FOR INSTALLATION OF SOLID SOD. SODDING TO BE PERFORMED BY OWNER.

TS

E1 TOPSOILING — NO SCALE



NOTE:
DO NOT PULL EROSION CONTROL BLANKET TIGHT CREATING A "TENTING" EFFECT.

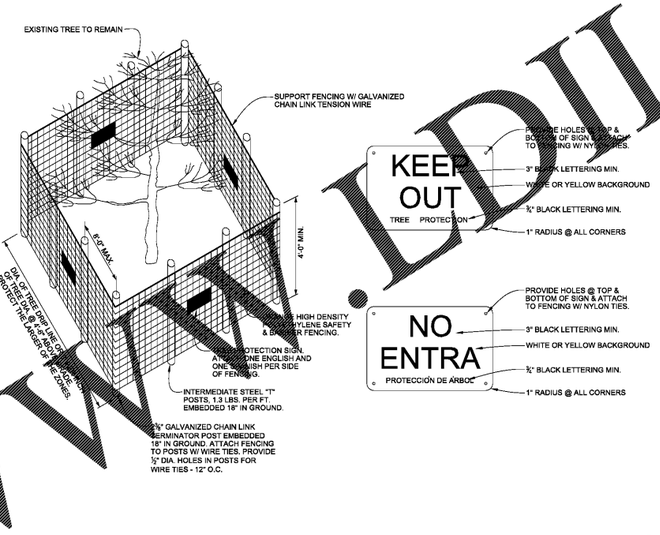


FOR ECB INSTALLATION IN CHANNELS:

1. START AT DOWNSTREAM TERMINAL AND PROGRESS UPSTREAM.
2. FIRST ROLL IS CENTERED LONGITUDINALLY IN MID CHANNEL AND PINNED WITH TEMPORARY STAKES TO MAINTAIN ALIGNMENT.
3. SURSEQUENT ROLLS FOLLOW IN STAGGERED SEQUENCE BEHIND FIRST ROLL. USE CENTER ROLL FOR ALIGNMENT TO CHANNEL CENTER.
4. WORK OUTWARDS FROM CHANNEL CENTER TO EDGE.
5. USE 3" OVERLAP AND STAKE AT 5' INTERVAL ALONG SEAMS.
6. USE 3" OVERLAPS AND SHINGLE DOWNSTREAM TO CONNECT LINING AT ROLL ENDS.

SB

E3 EROSION CONTROL MATTING & BLANKETS — NO SCALE



NOTE:
FENCING TO REMAIN IN PLACE UNTIL CLEAN UP @ END OF CONSTRUCTION.

TP

E7 TREE PROTECTION FENCING — NO SCALE

EROSION CONTROL BEST MANAGEMENT PRACTICES (BMP'S)

A. GENERAL:

1. THE CONTRACTOR SHALL UTILIZE EROSION CONTROL BEST MANAGEMENT PRACTICES (BMP'S) TO PREVENT THE DISCHARGE OF SEDIMENT-BEARING WATER RUNOFF OR AIRBORNE DUST FROM THE PROJECT SITE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS DURING CONSTRUCTION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AN NPDES FOR STORMWATER DISCHARGE FROM THE CONSTRUCTION SITE(S) FOR ALL WORK DESCRIBED IN THESE SPECIFICATIONS AND SHOWN ON THE DRAWINGS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MEET ALL REQUIREMENTS AND OBLIGATIONS OF THE PERMIT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH MAKING APPLICATION FOR THE PERMIT AND FOR MEETING THE REQUIREMENTS OF THE PERMIT.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSPECTION AND MAINTENANCE OF ALL BMP'S IN ACCORDANCE WITH THE REQUIREMENTS OF THE PERMITTING AUTHORITY.
4. THE CONTRACTOR SHALL ENSURE THAT ALL DOWNSLOPE BMP'S ARE INSTALLED AND FUNCTIONAL BEFORE ANY LAND DISTURBING ACTIVITY IS COMMENCED ON ANY PORTION OF THE SITE.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADDITIONAL BMP'S IF REQUIRED BY FIELD CONDITIONS, THE ARCHITECT/ENGINEER OR A PERMITTING AUTHORITY HAVING JURISDICTION OVER THE SITE.

B. SILT FENCE:

1. THE INSTALLATION OF SILT FENCES SHALL BE IN CONFORMANCE WITH THE SILT FENCE MANUFACTURER'S RECOMMENDATIONS. PARTICULAR CARE SHALL BE EXERCISED TO ENSURE THAT ALL SILT FENCING IS PROPERLY KEYED INTO THE EARTH AT THE TOE.
2. THE CONTRACTOR SHALL MAINTAIN, CLEAN, REPAIR OR REPLACE SILT FENCE AS MAY BE REQUIRED DURING THE CONSTRUCTION PERIOD. IF A LINE OF SILT FENCING EXCEEDS ITS CAPACITY TO FUNCTION PROPERLY AND THE NEED FOR A BACK-UP FENCE BECOMES EVIDENT, THE CONTRACTOR SHALL INSTALL A SECONDARY LINE OF SILT FENCE AT THE AFFECTED AREAS AS REQUIRED AND AUTHORIZED BY THE ARCHITECT/ENGINEER. FAILURE TO MAINTAIN A SILT FENCE SHALL NOT BE CAUSE FOR THE CONTRACTOR TO CLAIM ADDITIONAL COMPENSATION.

C. HAY BALES:

1. HAY BALES SHALL BE INSTALLED USING KEYWAY CUT INTO GRADE OR AGGREGATE FOR BEDDING AS REQUIRED. ALL HAY BALES SHALL BE PROPERLY ORIENTED AND STAKED. HAY BALES SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN THE PROJECT AREA UPSLOPE FROM THEM HAS BEEN STABILIZED.
2. THE CONTRACTOR IS RESPONSIBLE FOR THE PERIODIC CHECKING AND MAINTENANCE OF HAY BALE INSTALLATIONS. SILT TRAPPED BY HAY BALES INSTALLED MUST BE REMOVED AND PROPERLY DISPOSED OF.

D. AFTER STABILIZATION OF THE DISTURBED AREA HAS BEEN ACHIEVED, THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL TEMPORARY BMP'S AND RESTORE OUT THOSE AREAS TO THE PROJECT PLANS AND SPECIFICATIONS.

A1 BEST MANAGEMENT PRACTICES

EROSION CONTROL MATERIALS

A. SILT FENCE MATERIALS: SILT FENCES SHALL CONSIST OF A GEOTEXTILE FILTER FABRIC ATTACHED TO POSTS BY MEANS OF ADJUSTABLE BELTS OR LOOPS OR OTHER MEANS THAT WILL SECURELY HOLD THE FABRIC IN AN UPRIGHT POSITION. THE FILTER FABRIC SHALL BE POLYMERIC FABRIC FORMED FROM A PLASTIC YARN OF LONG-CHAIN SYNTHETIC POLYMER COMPOSED OF AT LEAST 85% BY WEIGHT OF PROPYLENE ETHYLENE, AMIDE, ESTER OR VINYLEDENE CHLORIDE AND SHALL CONTAIN STABILIZERS AND/OR INHIBITORS ADDED TO THE BASE PLASTIC TO MAKE THE FILAMENTS RESISTANT TO DETERIORATION DUE TO ULTRAVIOLET AND HEAT EXPOSURE FOR AT LEAST SIX MONTHS. THE FILTER FABRIC ROLL SHALL BE A MINIMUM OF THREE FEET IN WIDTH.

1. THE FILTER FABRIC SHALL CONFORM TO THE FOLLOWING PHYSICAL REQUIREMENTS:

PHYSICAL PROPERTY	TEST METHOD	TEST RESULTS
GRAB TENSILE STRENGTH, LBS. MIN.	ASTM D-4632	120
GRAB ELONGATION, %, MAX.	ASTM D-4632	40
MULLEN BURST STRENGTH, PSI, MIN.	ASTM D-3786	175
APPARENT OPENING SIZE, MAX.	ASTM D-4751	
U.S. STANDARD SIEVE		
FLOW RATE, MAX.	ASTM D-4491	
GAL/MIN/SQ.FT.		
UV RESISTANCE, %	ASTM D-4632	70
	ASTM D-4355	

B. HAY BALE MATERIALS: HAY BALES SHALL BE RECTANGULAR AND MAY BE EITHER HAY OR STRAW. SECURELY BOUND WITH TWINE OR WIRE. BALES SHALL CONTAIN A MINIMUM OF 5 CUBIC FEET OF MATERIAL AND SHALL WEIGH A MINIMUM OF 35 POUNDS WHEN DRY.

C. EROSION CONTROL BLANKET MATERIAL: EROSION CONTROL BLANKETS SHALL BE TYPE 1 MATERIAL DESIGNED FOR USE ON GEOTECHNICALLY STABLE SLOPES WITH GRADIENTS UP TO 3:1 AND CHANNELS WITH SHEAR STRESSES UP TO 1.5 POUNDS PER SQUARE FOOT.

1. THE EROSION CONTROL BLANKET SHALL CONFORM T THE FOLLOWING PHYSICAL REQUIREMENTS:

PHYSICAL PROPERTY	TEST METHOD	TEST RESULTS
MIN. TENSILE STRENGTH, LBS/FT	ASTM D-4595	50
MIN. PERMISSIBLE SHEAR STRESS, LBS/FT	ASTM D-6460	1.50
MAX. "C" FACTOR, TEMPORARY PRODUCTS	ASTM D-6459	0.15@3:1
UV STABILITY, MIN %, TENSILE RETENTION, PERMANENT PRODUCTS (600 HOUR EXP.)	ASTM D-4355	N/A
MIN. THICKNESS (IN.), PERMANENT PRODUCTS	ASTM D-6525	N/A

PREPARATION

A. PROTECT AND MAINTAIN BENCHMARKS AND SURVEY CONTROL POINTS FROM DISTURBANCE DURING CONSTRUCTION.

B. LOCATE AND CLEARLY FLAG TREES AND VEGETATION TO REMAIN AND TO BE PROTECTED. ALL WORK SHALL BE PERFORMED WITHIN THE LIMITS SHOWN.

C. PROTECT EXISTING SITE IMPROVEMENTS TO REMAIN FROM DAMAGE DURING CONSTRUCTION.

1. RESTORE DAMAGED IMPROVEMENTS TO THEIR ORIGINAL CONDITION, AS ACCEPTABLE TO THE OWNER.

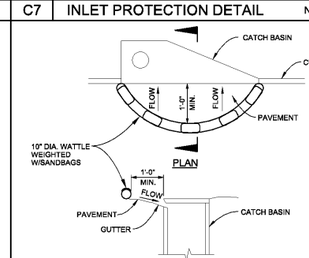
A3 MATERIALS NOTES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREVENTION OF WIND-BORNE SEDIMENT FROM LEAVING THE PROPERTY. THE CONTRACTOR SHALL SPRINKLE WATER ON BARE SOIL AREAS AS REQUIRED TO WET THE SURFACE. THE CONTRACTOR SHALL ADJUST THE FREQUENCY OF THESE SPRINKLINGS TO MATCH FIELD CONDITIONS.

C5 DUST CONTROL NOTE

1. THE EROSION CONTROL MEASURES SHOWN ARE A REQUIRED MINIMUM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREVENTION OF SEDIMENT TRANSPORT FROM THIS PROPERTY IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS DURING CONSTRUCTION. THE CONTRACTOR SHALL INSTALL ADDITIONAL DEVICES AND IMPLEMENT ADDITIONAL PRACTICES IF WARRANTED BY FIELD CONDITIONS.
2. PRIOR TO CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL INSTALL ALL SILT FENCING AND SEDIMENT TRAPS, SEDIMENT BASINS, AS SHOWN.
3. THE CONTRACTOR SHALL INSPECT AND MAINTAIN ALL EROSION CONTROL DEVICES AND PRACTICES. INSPECTIONS SHALL BE PERFORMED AT LEAST ONCE EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A RAINFALL EVENT OF 1/2 " OR GREATER.
4. THE CONTRACTOR SHALL BEGIN STABILIZATION MEASURES IN PORTIONS OF THE DISTURBED AREA AS SOON AS PRACTICABLE HOWEVER, STABILIZATION MEASURES MUST BE INITIATED WITHIN 14 CALENDAR DAYS ON PORTIONS WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY CEASED. ADDITIONALLY, STABILIZATION MEASURES MUST BE INITIATED WITHIN 21 CALENDAR DAYS ON PORTIONS WHERE CONSTRUCTION ACTIVITY HAS TEMPORARILY CEASED.
5. ALL DISTURBED AREAS NOT ENCOMPASSED BY STRUCTURES, PAVEMENT OR CALLED OUT FOR OTHER SURFACE TREATMENT SHALL BE, AT A MINIMUM, TOPSOILED, SEEDED AND MULCHED IN ACCORDANCE WITH THE SPECIFICATIONS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL EROSION CONTROL MEASURES EXCEPT CHANNEL LINING AND OUTLET PROTECTION AFTER SITE STABILIZATION. THE CONTRACTOR SHALL DRESS ALL AREAS TO THE LINE AND GRADE SHOWN ON THESE PLANS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND/OR FLUSHING SEDIMENT FROM EXISTING STORM DRAINS IF AN EXCESSIVE AMOUNT IS COLLECTED DURING CONSTRUCTION ACTIVITIES.

A5 GENERAL NOTES

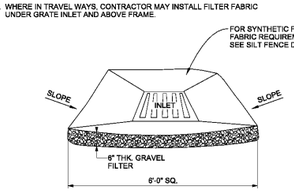


1. INSTALL FILTER AFTER ANY ASPHALT PAVEMENT INSTALLATION.
2. 8" PERFORATED HOPE WRAPPED IN FILTER FABRIC, INSERTED INTO OPEN THROAT, MAY BE USED IN LIEU OF WATTLES.

CIP — NO SCALE

A7 CURB INLET PROTECTION DETAIL

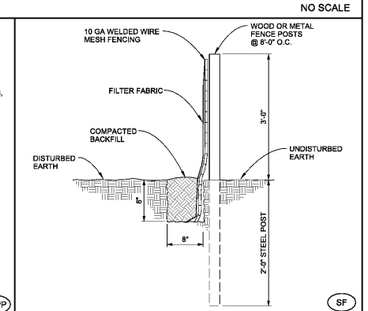
1. PLACE FILTER FABRIC BENEATH GRATE INLET AND ON TOP OF STONE FILTER MATERIAL. USE HAY BALES WEIGHTED WITH SAND BAGS AROUND PERIMETER TO HOLD STONE FILTER MATERIAL IN PLACE.
2. WHERE IN TRAVEL WAYS, CONTRACTOR MAY INSTALL FILTER FABRIC UNDER GRATE INLET AND ABOVE FRAME.



STREET GRATE INLET

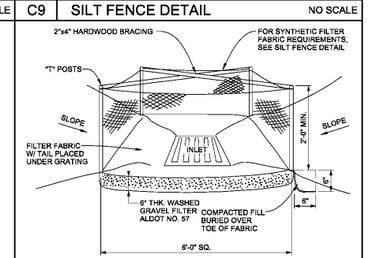
GIPP

C7 INLET PROTECTION DETAIL — NO SCALE



SF

C9 SILT FENCE DETAIL — NO SCALE



THIS DETAIL MAY BE USED FOR GRATE INLETS AND OPEN THROAT INLETS IN VEGETATED AREAS. CONTRACTOR MAY ELECT TO USE SILT SAVER TYPE PREMANUFACTURED INLET PROTECTION DEVICE.

OTIP
GIP

A9 INLET PROTECTION DETAIL — NO SCALE

GMC
2701 1st Avenue S
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

KREBS ENGINEERING

05/25/18

ISSUE	DATE
ISSUE FOR BID	2018.05.25

DRAWN BY: JHL
CHECKED BY: JRT

SIMULATION LABORATORY
BUILDING - USA JOB #16-07
MOBILE, ALABAMA
ABC #2017372
GMC # AMOB160019

EROSION CONTROL DETAILS & NOTES

EC1.04

1/31/2018 1:58:26 PM

Order Plans @ www.LDILine.com