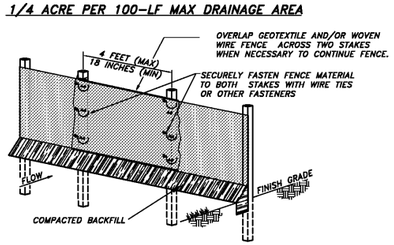
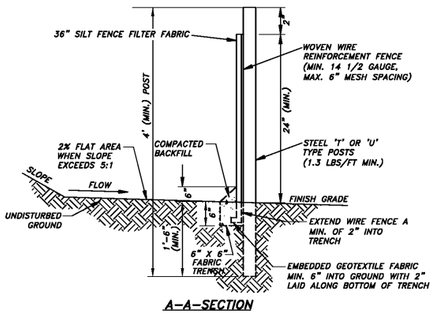
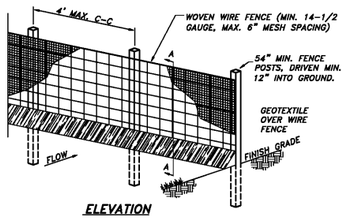
1/4 ACRE PER 100-LF MAX DRAINAGE AREA





A-A-SECTION



ELEVATION

MAXIMUM SLOPE LENGTH

- WHERE ALL RUNOFF IS TO BE STORED BEHIND THE SILT FENCE, MAXIMUM SLOPE LENGTH SHALL NOT EXCEED:

LAND SLOPE	= MAX. SLOPE LENGTH
< 2%	= 100 FT.
2% – 5%	= 75 FT.
5% – 10%	= 50 FT.
10% – 20%	= 25 FT.
> 20%	= 15 FT.

- IN AREAS WHERE THE SLOPE IS GREATER THAN 20% OR 5:1, A FLAT AREA LENGTH OF 10 FT BETWEEN THE TOE OF THE SLOPE AND THE SILT FENCE MUST BE PROVIDED.

INSTALLATION

- DO NOT INSTALL ACROSS STREAMS, DITCHES, WATERWAYS OR OTHER AREAS OF CONCENTRATED FLOW.
- INSTALL WHERE SHEET FLOW CONDITION EXIST.
- START POST INSTALLATION AT THE CENTER OF THE LOWEST POINT WITH REMAINING POSTS SPACED 4 FEET APART.
- TYPE 'C' SILT FENCE SHALL BE USED WHERE RUNOFF FLOWS OR VELOCITIES ARE PARTICULARLY HIGH.
- TYPE 'C' SILT FENCE SHALL BE USED WHERE SLOPES EXCEED A VERTICAL HEIGHT OF 10 FEET.
- TWO ROWS OF TYPE 'C' SILT FENCE MUST BE USED ALONG ALL STREAM BUFFERS.
- WOVEN WIRE REINFORCEMENT FENCE TO BE FASTENED SECURELY TO STEEL POSTS WITH WIRE TIES OR APPROVED EQUAL AT TOP, MID AND BOTTOM.
- FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE REINFORCEMENT FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.

MAINTENANCE

- SEDIMENT SHALL BE REMOVED ONCE IT HAS ACCUMULATED TO ONE-HALF THE ORIGINAL HEIGHT OF THE BARRIER.
- FILTER FABRIC SHALL BE REPLACED WHENEVER IT HAS DETERIORATED TO SUCH AN EXTENT THAT THE EFFECTIVENESS OF THE FABRIC IS REDUCED (APPROX. 6 MONTHS), OR ANY TEARS OR HOLES ARE IN THE FABRIC.
- TEMPORARY SEDIMENT BARRIERS SHALL REMAIN IN PLACE UNTIL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED.
- ALL SEDIMENT ACCUMULATED AT THE BARRIER SHALL BE REMOVED AND PROPERLY DISPOSED OF BEFORE THE BARRIER IS REMOVED.

SILT FENCE FILTER FABRIC

- UTILIZE DOT APPROVED FABRICS. COMMON EXAMPLES INCLUDE: MIRAFI 130I, AMOCO 1198, BELTECH 810, SI 915 SC, LING GTF 190
- UTILIZE FENCE FABRIC THAT MEETS THE FOLLOWING CRITERIA:
- TENSILE STRENGTH PER ASTM D-4632 WITH WARP-260 AND FILL-180 (LBS. MIN.)
- ELONGATION PER ASTM D-4632 OF 40% MAX
- APPARENT OPENING SIZE (MAX. SIEVE SIZE) PER ASTM D-4751 OF #30
- FLOW RATE OF 70 GAL/MIN/SQ.FT.
- ULTRAVIOLET STABILITY OF 80 PER ASTM D-4632 AFTER 300 HOURS WEATHERING IN ACCORDANCE WITH ASTM D-4355
- BURSTING STRENGTH OF 175 PSI MIN. PER ASTM D-3786

SEDIMENT BARRIER - TYPE 'C' SILT FENCE

N.T.S.

Sd1-C

GA-Sd1C

METHOD AND MATERIALS

TEMPORARY METHODS

- MULCHES – COVER DISTURBED AREA WITH MULCHING ONLY.
- SYNTHETIC RESINS – USED TO BIND MULCH MATERIAL, SUCH AS ASPHALT EMULSIONS.
- TACKIFIERS AND BINDERS – RESINS SUCH AS CURASOL OR TERRATACK SHOULD BE USED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- VEGETATIVE COVER – COVER DISTURBED AREA WITH TEMPORARY SEEDING.
- SPRAY-ON ADHESIVES – USED ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS). KEEP TRAFFIC OFF THESE AREAS. APPLY PER RATE REQUIREMENTS.
- TILLAGE – THIS PRACTICE IS DESIGNED TO ROUGHEN AND BRING CLODS TO THE SURFACE. IT IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE WIND EROSION STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART, SPRING-TOOTHED HARROWS, AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.
- IRRIGATION – THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS WET. REPEAT AS NEEDED.
- BARRIERS – SOLID BOARD FENCES, SNOWFENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. BARRIERS PLACED AT RIGHT ANGLES TO PREVAILING CURRENTS AT INTERVALS OF ABOUT 15 TIMES THEIR HEIGHT ARE EFFECTIVE IN CONTROLLING WIND EROSION.
- CALCIUM CHLORIDE – APPLY AT RATE THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT.

PERMANENT METHODS

- PERMANENT VEGETATION – COVER DISTURBED AREA WITH PERMANENT VEGETATION. EXISTING TREES AND LARGE SHRUBS MAY AFFORD VALUABLE PROTECTION IF LEFT IN PLACE.
- TOPSOILING – THIS ENTAILS COVERING THE SURFACE WITH LESS EROSIVE SOIL MATERIAL.
- STONE – COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL, SUCH AS A CONSTRUCTION ROAD.

INSTALLATION

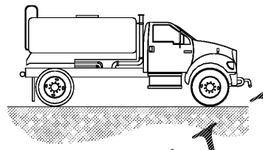
- APPLY AS NEEDED ON ALL SITES.
- PREVENT SURFACE AND AIR MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES.
- REDUCE THE PRESENCE OF AIRBORNE SUBSTANCES WHICH MAY BE HARMFUL OR INJURIOUS TO HUMAN HEALTH, WELFARE, OR SAFETY, OR TO ANIMALS OR PLANT LIFE.
- APPLY TEMPORARY OR PERMANENT CONTROL MEASURES AS NEEDED.

SPRAY-ON ADHESIVE APPLICATION

ADHESIVE	WATER DILUTION	NOZZLE TYPE	APPLICATION (GAL./ACRE)
ANIONIC ASPHALT EMULSION	7:1	COARSE SPRAY	1,200
LATEX EMULSION	12.5:1	FINE SPRAY	235
RESIN-IN-WATER EMULSION	4:1	FINE SPRAY	300

MAINTENANCE

- PROHIBIT TRAFFIC ON SURFACE AFTER SPRAYING.
- SUPPLEMENT SURFACE COVERING AS NEEDED.
- RE-APPLY AS NEEDED.



DUST CONTROL ON DISTURBED AREA

Du

GA-Du

Sediment Summary

Drainage Area (AC)	Required Sediment Storage (CY)	Excavation Depth	Side Slopes	Required Surface Area (SF)	Shape	Dimensions Length (ft)	Dimensions Width (ft)	Total SA (ft^2)
0.33	22.1	3	3:1	198.99	Rectangular	20	10	200
0.32	21.4	3	3:1	192.96	Rectangular	20	10	200
0.20	13.4	3	3:1	120.60	Rectangular	16	8	128
0.20	13.4	3	3:1	120.60	Rectangular	16	8	128
1.05								72.9

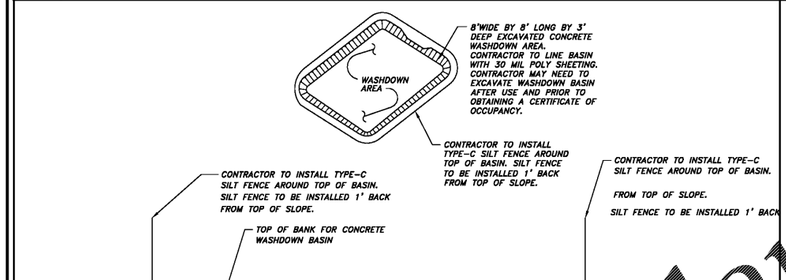
EXCAVATED INLET SEDIMENT TRAP (Sd2)

TO BE SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN

If the EXCAVATED INLET SEDIMENT TRAP is used, show the following information:

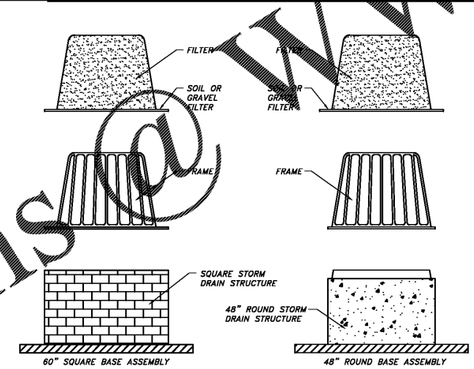
1. Drainage area = _____ ac
2. Required sediment storage = 67 cy/ac * drainage area
   Required sediment storage = 67 cy/ac * _____ ac
   Required sediment storage = _____ cy = _____ ft^3
3. Assume reasonable depth (maximum of 1.5 ft) = _____ ft
4. Assume slope of sides (should not be steeper than 2:1) = _____ :1
5. Determine required surface area
   SA = required sediment storage / excavation depth
   SA = _____ cy / _____ ft
   SA = _____ ft^2
6. Assume shape of excavation and determine dimensions.
   (An undersized shape with 2:1 length to width ratio is recommended.)
   Shape: _____
   Dimensions: l = _____ ft w = _____ ft diameter (if applicable) = _____ ft

Provide a detail showing the depth, length and width, or diameter (if applicable), and side slopes of the excavation.



NOTE:
ALL CONTRACTORS AND SUB-OCONTRACTORS TO USE BEST MANAGEMENT PRACTICES FOR CONCRETE WASHDOWN OF TOOLS, CONCRETE MIXER CHUTES, HOPPERS AND THE REAR OF VEHICLES. WASHOUT OF DRUM AT THE CONSTRUCTION SITE IS PROHIBITED. ADDITIONAL INFORMATION ABOUT BEST MANAGEMENT PRACTICES FOR CONCRETE WASHOUT IS AVAILABLE AT www.epa.gov/npdes/pubs/concretewashout.pdf.

CONCRETE WASHDOWN BASIN DETAIL



SPECIFICATIONS:

MECHANICAL		
TENSILE STRENGTH AT YIELD	D638-89	3600 psi
ELONGATION AT BREAK	D638-89	> 600%
TENSILE IMPACT	D1822-89	170 ft. lb. /^{2}in.
IMPACT BRITTLENESS TEMPERATURE	D746-79	< -105° F
ENVIRONMENTAL STRESS CRACK RESISTANCE	D1693-70	> 800 hrs.
HARDNESS, SHORE D	D2240-86	68
THERMAL		
VICAT SOFTENING TEMPERATURE	D1525-87	254° F
HEAT DEFLECTION TEMPERATURE, 66 psi LOAD	D648-82	157° F
COEFFICIENT OF LINEAR THERMAL EXPANSION	D696-86	7 X 10^{-5} in/in/°F
PROCESSING		
BULK DENSITY	D1895-89	37 lb. /^{3}ft.
FILTER, MAIN BODY		
WEIGHT	D-3776	3.0 oz y^2
TENSILE STRENGTH	D-4632	80 lb.
ELONGATION AT BREAK	D-4632	50%
MULLEN BURST	D-3786	150
PUNCTURE STRENGTH	D-4833	50
TRAPEZOIDAL TEAR	D-4533	30
AOS-US STD SLEEVE	D-4751	70
PERMITTIVITY	D-4491	2.0
U.V. RESISTANCE, %	D-4355 (500 HOURS)	70

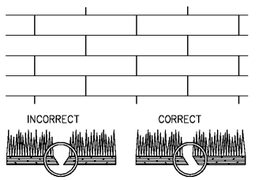
INLET SEDIMENT CAP

N.T.S.

Sd2

SOD MAINTENANCE AND INSTALLATION

SOD LAYOUT AND PREPARATION



LAY SOD IN A STAGGERED PATTERN. BUTT THE STRIPS TIGHTLY AGAINST EACH OTHER. DO NOT LEAVE SPACES AND DO NOT OVERLAP. A SHARPENED MASON'S TROWEL IS A HANDY TOOL FOR TUCKING DOWN THE ENDS AND TRIMMING PIECES.

BUTTING: ANGLED ENDS CAUSED BY THE AUTOMATIC SOD CUTTER MUST BE MATCHED CORRECTLY.

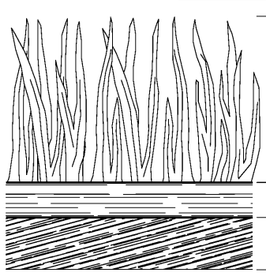
DIRECTIONS FOR INITIAL MAINTENANCE

Step 1. ROLL SOD IMMEDIATELY TO ACHIEVE FIRM CONTACT WITH THE SOIL

Step 2. WATER TO A DEPTH OF 4" AS NEEDED. WATER WELL AS SOON AS THE SOD IS LAID.

Step 3. MOW WHEN THE SOD IS ESTABLISHED -- IN 2-3 WEEKS. SET THE MOWER HIGH (2"-3").

APPEARANCE OF GOOD SOD



SHOOTS OR GRASS BLADES: GRASS SHOULD BE GREEN AND HEALTHY, MOWED AT A 2"-3" CUTTING HEIGHT.

THATCH: GRASS CLIPPINGS AND DEAD LEAVES (UP TO 1/2" THICK).

ROOT ZONE: SOIL AND ROOTS. SHOULD BE 1/2"-3/4" THICK WITH DENSE ROOT MAT FOR STRENGTH.

24 50 51 52

2019 EROSION CONTROL CHECKLIST ITEM

10/2/2019

JEFFREY P. MASISAK, PE, CPESC — DATE
GSWCC LEVEL II CERTIFICATION NO. 0000001217
EXPIRES: 05/05/2021

GEORGIA REGISTERED No. 001742 PROFESSIONAL ENGINEER JEFFREY P. MASISAK

GEORGIA811 www.Georgia811.com

811 NOTE:
THE CONTRACTOR/INSTALLER SHALL ADHERE TO THE GEORGIA UTILITIES PROTECTION CENTER "GEORGIA 811 CALL BEFORE YOU DIG" LAW BY CALLING THE UNDERGROUND PROTECTION CENTER AT 1.800.282.7411 OR 811 48 HOURS PRIOR TO BEGINNING ANY GROUND DISTURBING ACTIVITIES.

E11

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GEORGIA REGISTERED No. 001742 PROFESSIONAL ENGINEER JEFFREY P. MASISAK

MASS ENGINEERING AND CONSULTANTS, LLC

REVISIONS

DATE:	DESCRIPTION

DETAILS

PROJECT NUMBER: 19-0103

DATE: OCTOBER 1, 2019

C-13