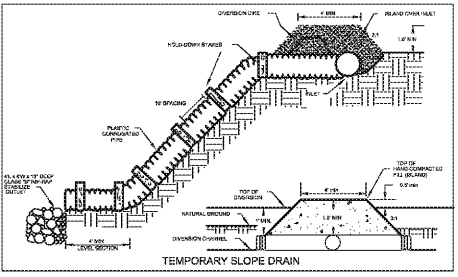
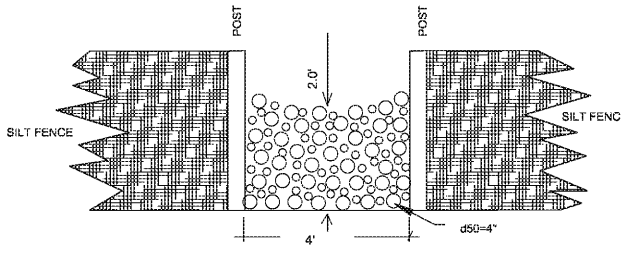


TEMPORARY GRAVEL CONSTRUCTION ENTRANCE
N.T.S.

- Construction 1. Clear the entrance area of all vegetation, rocks, and other objectionable material and properly grade it.
2. Place the gravel to the specific grade and dimensions shown on the plans, and smooth it.
3. Provide drainage to carry water to a sediment trap or other suitable outlet.
4. Use geotextile fabric because it improves stability of the foundation in locations subject to seepage or high water table.
- Maintenance Maintain the gravel pad in a condition to prevent mud or sediment from leaving the construction site. This may require periodic regrading with 2-inch stone. After each rainfall, repair any erosion used to trap sediment and clean it out as necessary. Immediately remove all objectionable material, washed, or tracked onto public roadways.

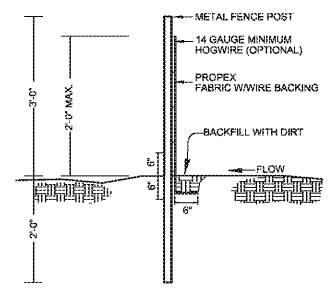


TEMPORARY SLOPE DRAIN
N.T.S.



SILTS FENCE W/ TEMP. ROCK FILTER DAM
N.T.S.

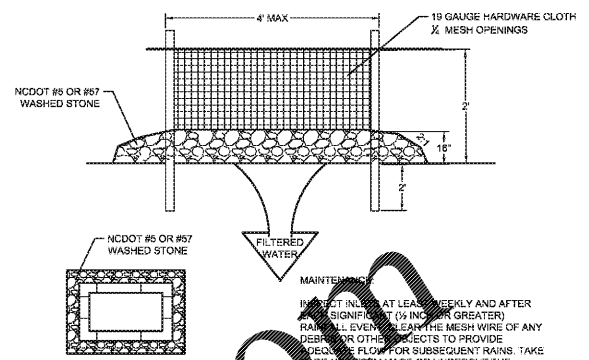
- NOTES:
1.) TOTAL DRAINAGE AREA FLOWING TO SILT FENCE MAY NOT EXCEED 1/4 ACRE PER 100' OF FENCE. DRAINAGE AREAS MAY BE INCREASED WITH A STORAGE PIT IN FRONT OF FENCE AND/OR STONE OUTLETS.
2.) MAXIMUM PLACEMENT OF POST USING HOG WIRE WITH APPROVED EROSION CONTROL FABRICS TO BE 4'-0\"/>
3.) MAXIMUM PLACEMENT OF POST WITHOUT HOG WIRE WITH APPROVED EROSION CONTROL FABRICS TO BE 6'-0\"/>
4.) SKIRT AND WIRE OF FABRIC SHOULD BE TRENCHED 6\"/>



SILTS FENCE DETAIL
N.T.S.

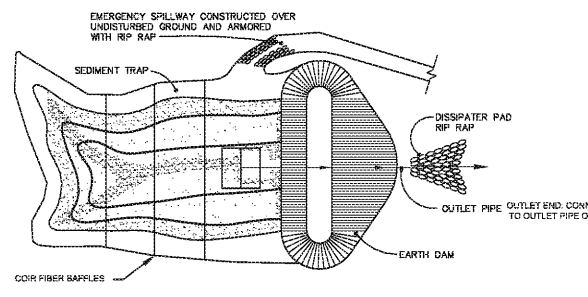
- POST: METAL T-POST 5'-0\"/>
FABRIC: 3'-0\"/>

MAINTENANCE
INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REPAIRS IMMEDIATELY.
SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, YEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.
REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE.
REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

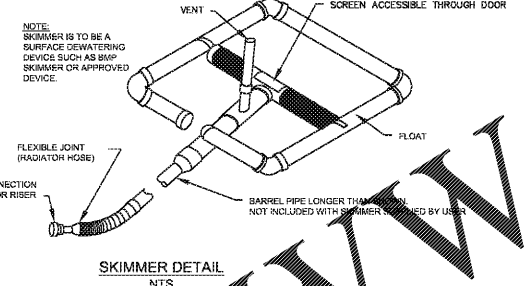


HARDWARE CLOTH & GRAVEL
INLET PROTECTION
N.T.S.

MAINTENANCE
INSPECT INLETS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL. EVENING CLEAN THE MESH WIRE OF ANY DEBRIS OR OTHER OBJECTS TO PROVIDE UNOBSTRUCTED FLOW FOR SUBSEQUENT RAINS. TAKE CARE NOT TO DAMAGE OR UNDERCUT THE MESH. DURING SEDIMENT REMOVAL, REPLACE STONE AS NEEDED.



STANDARD SEDIMENT BASIN WITH SKIMMER
N.T.S.



SKIMMER DETAIL
N.T.S.

EROSION CONTROL MAINTENANCE PLAN

1. ALL EROSION CONTROL MEASURES SHALL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY NEEDED REPAIRS SHALL BE MADE IMMEDIATELY TO MAINTAIN ALL MEASURES AS DESIGNED.
2. SEDIMENT BASINS SHALL BE INSPECTED REGULARLY DURING LAND DISTURBING ACTIVITIES AND AFTER EACH RUNOFF-PRODUCING RAINFALL. SEDIMENT SHALL BE REMOVED AND THE BASIN RESTORED TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO ONE-HALF THE DESIGN DEPTH OF EACH BASIN. PORTIONS OF THE BASIN GRAVEL FACING THAT ARE CONTAMINATED BY SEDIMENT SHALL BE REPLACED WITH FRESH GRAVEL DURING EACH SEDIMENT REMOVAL EPISODE.
3. SEDIMENT FENCES SHALL BE INSPECTED AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. REPAIRS SHALL BE MADE IMMEDIATELY. SEDIMENT DEPOSITS SHALL BE REMOVED AS NEEDED TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAINFALL EVENT, AND TO REDUCE PRESSURE ON THE FENCE. FENCING MATERIALS AND SEDIMENT DEPOSITS SHALL BE REMOVED AND THE AREA BROUGHT TO GRADE FOLLOWING STABILIZATION OF UPGRADING DISTURBED AREAS.
4. DIVERSION DITCHES MUST REMAIN IN PLACE UNTIL PROJECT IS STABILIZED AND PERMISSION GIVEN BY THE EROSION CONTROL OFFICER.
5. THE NC STATE BUILDING CODE REQUIRES THAT ANY CONSTRUCTION INCLUDING DECKS LOCATED LESS THAN FIVE (5) FEET FROM A PROPERTY LINE, SHALL HAVE NOT LESS THAN A ONE-HOUR FIRE-RESISTIVE RATING WITH EXPOSURE FROM BOTH SIDES. THIS REQUIREMENT APPLIES TO ANY ATTACHED STRUCTURE SUCH AS DECKS OR PORCHES. THE NC STATE BUILDING CODE REQUIREMENTS IN EFFECT AT THE TIME OF THE BUILDING PERMIT APPLICATION WILL SUPERSEDE THIS NOTE.
6. A RAIN GAUGE AND REPORT BOX SHALL BE LOCATED ON-SITE FOR RAINFALL MONITORING AND SITE INSPECTIONS. THE CONTRACTOR IS RESPONSIBLE FOR CONDUCTING THE WEEKLY INSPECTIONS OR AFTER 1\"/>

PERMANENT SEEDING SPECIFICATIONS

VEGETATION	PLANTING RATE	SEEDING RATE
Grass	100-150 lbs/acre	100-150 lbs/acre
Legume	50-75 lbs/acre	50-75 lbs/acre
Grass/Legume	150-200 lbs/acre	150-200 lbs/acre

TEMPORARY SEEDING SPECIFICATIONS

VEGETATION	PLANTING RATE	SEEDING RATE
Grass	100-150 lbs/acre	100-150 lbs/acre
Legume	50-75 lbs/acre	50-75 lbs/acre
Grass/Legume	150-200 lbs/acre	150-200 lbs/acre

CITY OF GRAHAM PERMANENT AND TEMPORARY SEEDING SPECIFICATIONS

NEW YORK DOT DISSIPATOR METHOD FOR USE IN DEFINED CHANNELS

(Source: "Bank and channel lining procedures", New York Department of Transportation, Division of Design and Construction, 1971.)

- NOTE: To use the following chart you must know:
(1) Q full capacity
(2) Q_c
(3) V full
(4) V_c

where Q = discharge in cfs and V = Velocity in FPS.

ESTIMATION OF STONE SIZE AND DIMENSIONS FOR CULVERT APRONS

- Step 1) Compute flow velocity V_c at culvert or paved channel outlet.
- Step 2) For pipe culverts D_c is diameter. For pipe arch, arch and box culverts, and paved channel outlets, $D_c = A_c$ where A_c = cross-sectional area of flow at outlet. For multiple culverts, use $D_c = 1.25 \times D_c$ of single culvert.
- Step 3) For apron grades of 10% or steeper, use recommendations for next higher zone. (Zones 1 through 6).

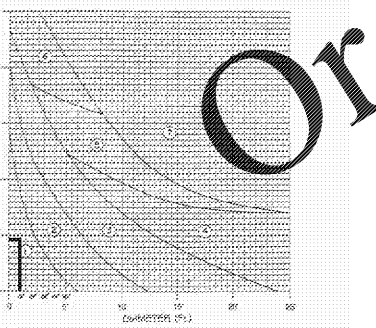


Figure 8.09c

ZONE	APRON MATERIAL	LENGTH OF APRON (FOOT)	LENGTH OF APRON (FEET)	
			TO PROTECT GRAVEL	TO PROTECT ROCK
1	STONE FILLING (FINE)	CL. A	3 x D _c	4 x D _c
2	STONE FILLING (LIGHT)	CL. B	3 x D _c	5 x D _c
3	STONE FILLING (MEDIUM)	CL. 1	4 x D _c	6 x D _c
4	STONE FILLING (HEAVY)	CL. 1	4 x D _c	6 x D _c
5	STONE FILLING (HEAVY)	CL. 2	5 x D _c	7 x D _c
6	STONE FILLING (HEAVY)	CL. 2	5 x D _c	7 x D _c
7	SPECIAL STUDY REQUIRED (SEE NOTE)			

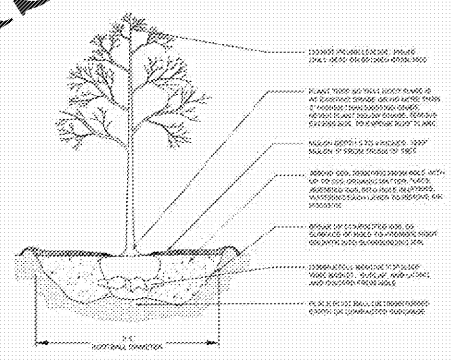
Figure 8.06d

DETERMINATION OF STONE SIZES FOR DUMPED STONE CHANNEL LINING AND REVISION

- Step 1) Determine maximum stone size (e.g. for 12 inch apron, use 2 inch stone).
- Step 2) Use Figure 8.06c to determine acceptable size range for stone. If it is 125-500 lbs. for 75% of stone, and the maximum stone size range in weight should be 25-500 lbs.
- Step 3) In determining channel velocities for stone linings and revetment, use the following coefficients of roughness:

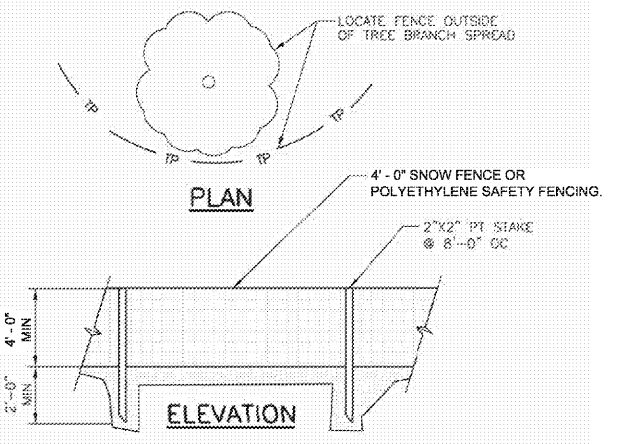
Chamber (radius)	Manning's "n"	Min. thickness of lining (inches)
Face	0.031	9
Light	0.035	12
Medium	0.040	18
Heavy	0.044	30

FES 100 ZONE 2 CLASS B RIP RAP
L = 7.5
W = 3.75
D = 18"



STANDARD TREE PLANTING DETAIL
N.T.S.

1. ALL TREES MUST BE THE APPROPRIATE SPECIES, LOCALLY ADAPTED, HAVE AN OPEN GROWTH HABIT, AND BE FREE OF DISEASE AND PESTS.
2. TREES MUST BE PLANTED IN PLANTERS OR CONTAINERS, OR IN HOLES THAT MEET THE FOLLOWING REQUIREMENTS:
3. PLANTERS OR CONTAINERS MUST BE PROPERLY VENTILATED AND DRAINAGE MUST BE PROVIDED.
4. HOLES MUST BE PROPERLY DRAINAGE AND MUST BE PROTECTED AFTER THE TREE IS PLANTED.
5. TREES MUST BE PLANTED AT LEAST 18 INCHES FROM ANY EXISTING UTILITY.
6. TREES MUST BE PLANTED AT LEAST 18 INCHES FROM ANY EXISTING UTILITY.



NOTE: FENCING SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE AND OTHER LANDSCAPING HAS BEEN INSTALLED.

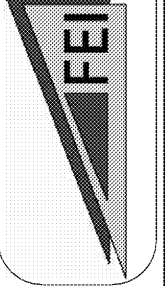
TREE PROTECTION FENCE DETAIL
N.T.S.

Ground Stabilization*

Site Area Description	Stabilization Time Frame	Stabilization Time Frame Exceptions
Perimeter Dikes, Swales, Ditches and Slopes	7 Days	None
High Quality Water (HQW) Zones	7 Days	None
Slopes Steeper than 3:1	7 Days	If slopes are 10' or less in length and are not steeper than 2:1, 14 Days are allowed.
Slopes 3:1 or flatter	14 Days	7-Days for slopes greater than 50 feet in length
All other areas with Slopes flatter than 4:1	14 Days	None (except for perimeters and HQW zones)

* Extensions of time may be approved by the permitting authority based on weather or other site-specific conditions that make compliance impracticable. (Section 1.8(2)(b))

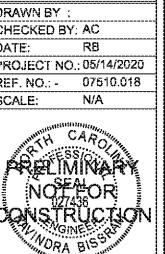
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STRICKLAND BROTHERS 10 MINUTE OIL CHANGE
EROSION DETAILS
PROJECT LOCATION:
CITY: COUNTY: STATE:

NO	REVISION	DATE

DRAWN BY: AC
CHECKED BY: RB
DATE: 05/14/2020
PROJECT NO.: 07510.018
REF. NO.: N/A
SCALE: N/A



SHEET
10 OF 10