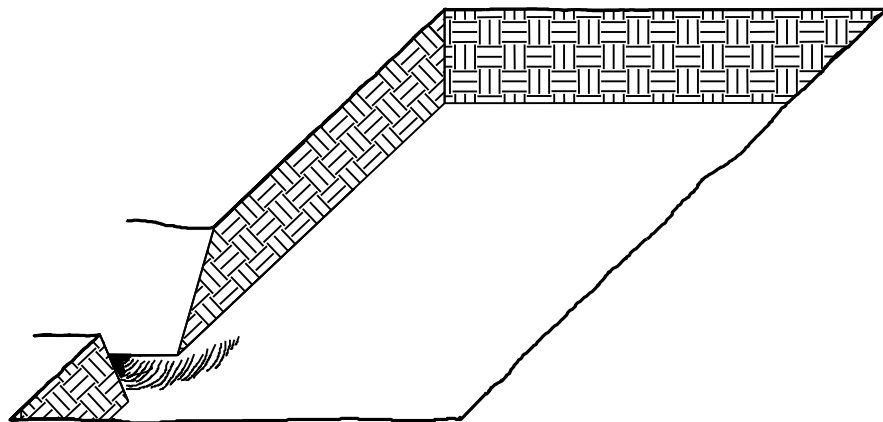


PLANTING DETAILS

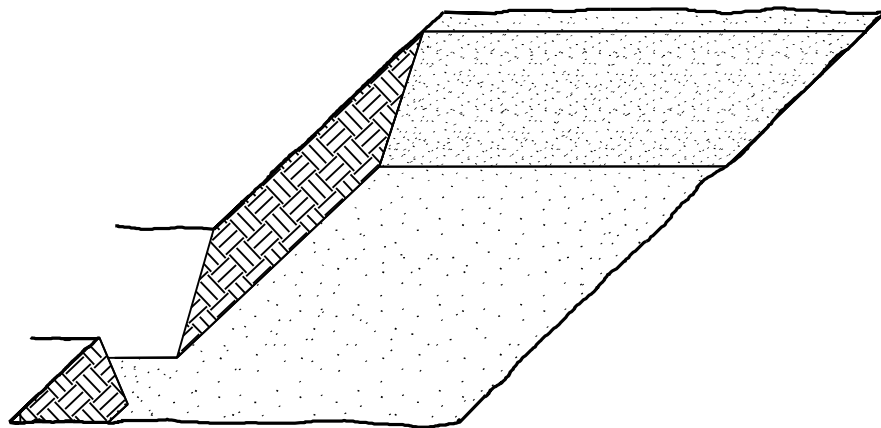
SEEDLING / LINER BARER ROOT PLANTING DETAIL

HEALING IN

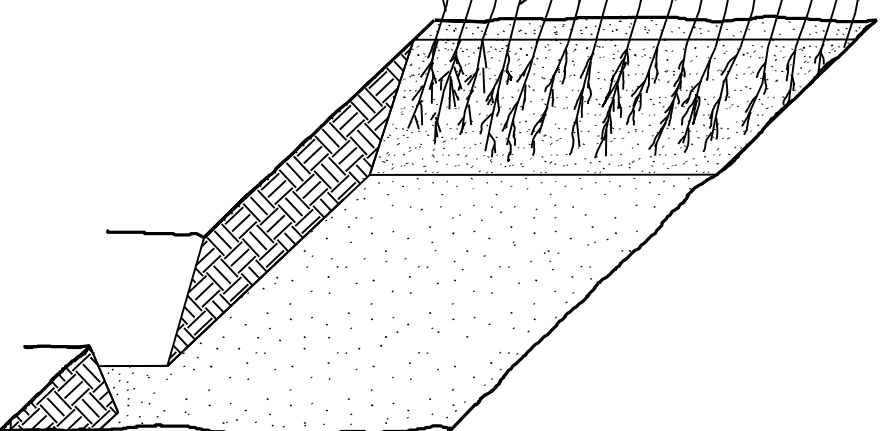
1. Locate a healing-in site in a shady, well protected area.
2. Excavate a flat bottom trench 12 inches deep and provide drainage.



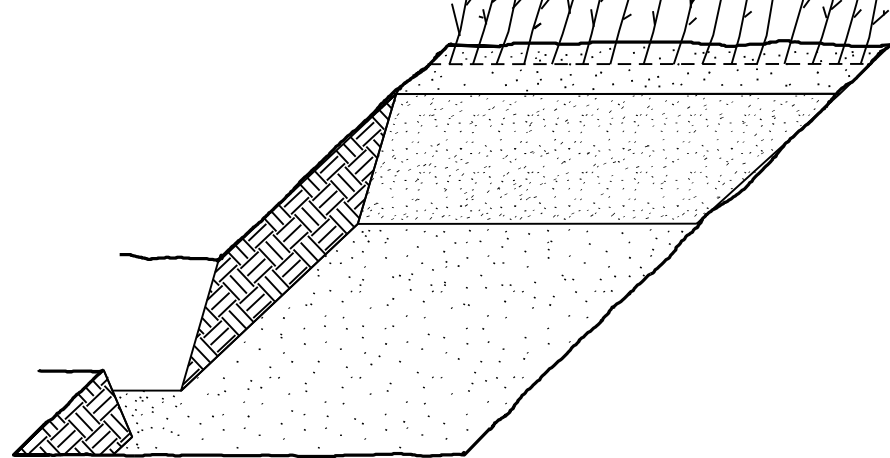
3. Backfill the trench with 2 inches well rotted sawdust. Place a 2 inch layer of well rotted sawdust at a sloping angle at one end of the trench.



4. Place a single layer of plants against the sloping end so that the root collar is at ground level.

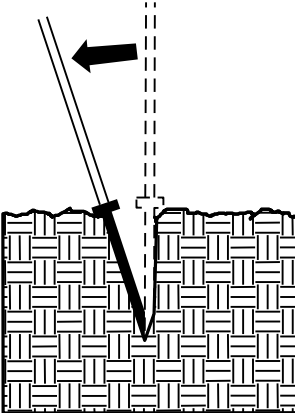


5. Place a 2 inch layer of well rotted sawdust over the roots maintaining a sloping angle.

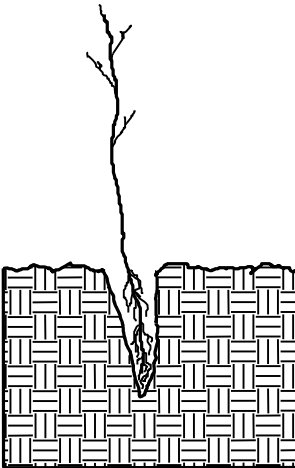


6. Repeat layers of plants and sawdust as necessary and water thoroughly.

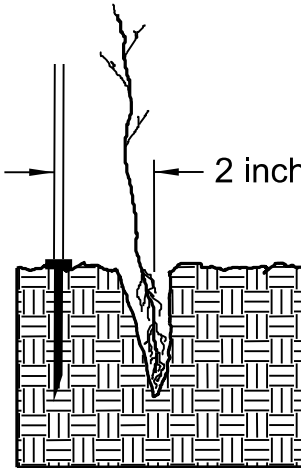
DIBBLE PLANTING METHOD USING THE KBC PLANTING BAR



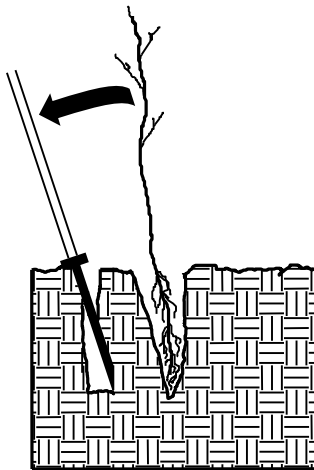
1. Insert planting bar as shown and pull handle toward planter.



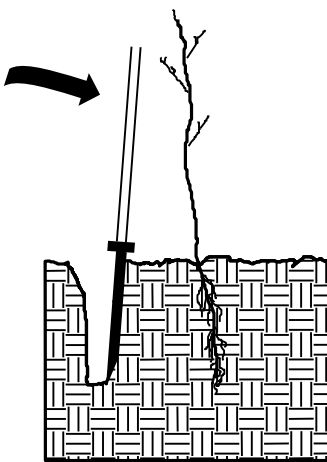
2. Remove planting bar and place seedling at correct depth.



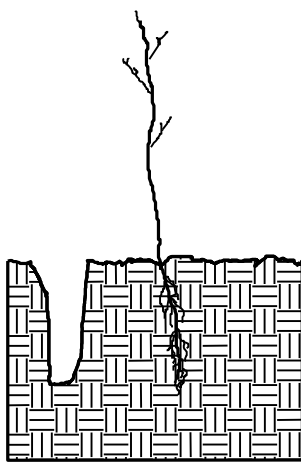
3. Insert planting bar 2 inches toward planter from seedling.



4. Pull handle of bar toward planter, firming soil at bottom.



5. Push handle forward firming soil at top.



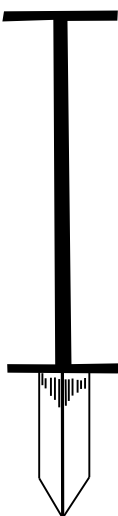
6. Leave compaction hole open. Water thoroughly.

PLANTING NOTES:

PLANTING BAG
During planting, seedlings shall be kept in a moist canvas bag or similar container to prevent the root systems from drying.



KBC PLANTING BAR
Planting bar shall have a blade with a triangular cross section, and shall be 12 inches long, 4 inches wide and 1 inch thick at center.



ROOT PRUNING
All seedlings shall be root pruned, if necessary, so that no roots extend more than 10 inches below the root collar.

REFORESTATION

- ☐ TREE REFORESTATION SHALL BE PLANTED 6 FT. TO 10 FT. ON CENTER, RANDOM SPACING, AVERAGING 8 FT. ON CENTER, APPROXIMATELY 680 PLANTS PER ACRE.

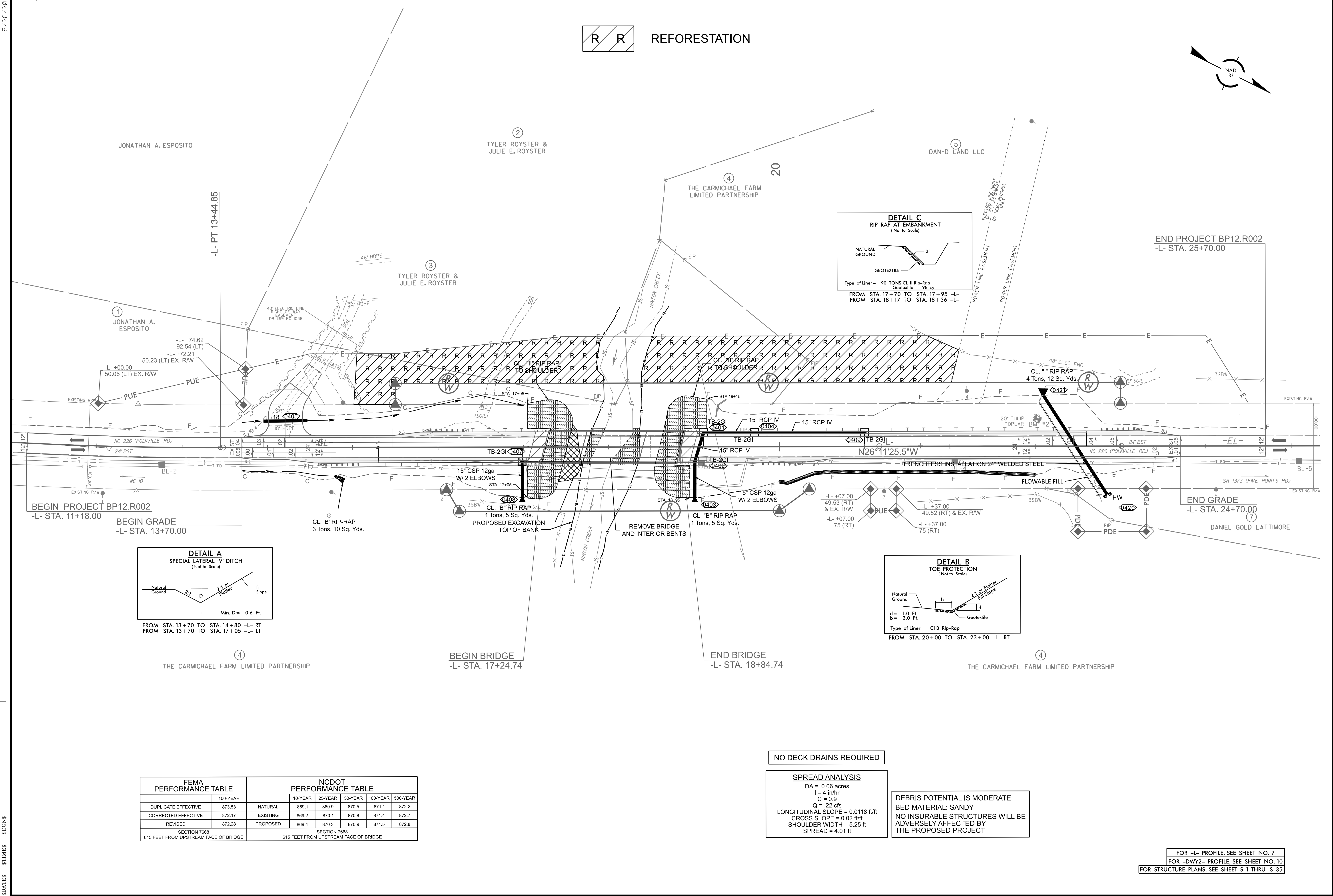
REFORESTATION

MIXTURE, TYPE, SIZE, AND FURNISH SHALL CONFORM TO THE FOLLOWING:

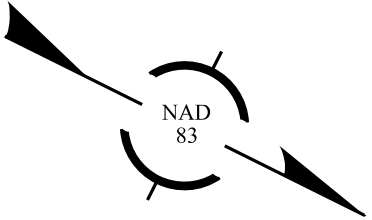
34% LIRIODENDRON TULIPIFERA	TULIP POPLAR	12 in - 18 in BR
33% PLATANUS OCCIDENTALIS	AMERICAN SYCAMORE	12 in - 18 in BR
33% BETULA NIGRA	RIVER BIRCH	12 in - 18 in BR

REFORESTATION DETAIL SHEET

N.C.D.O.T. - ROADSIDE ENVIRONMENTAL UNIT



REFORESTATION



BP12-R002

RF-2 CONST. 4

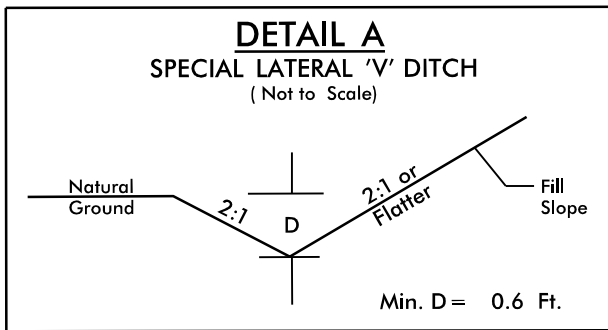
NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
CLEVELAND COUNTY

ROADWAY DESIGN UNIT
ROADWAY DESIGN
ENGINEER

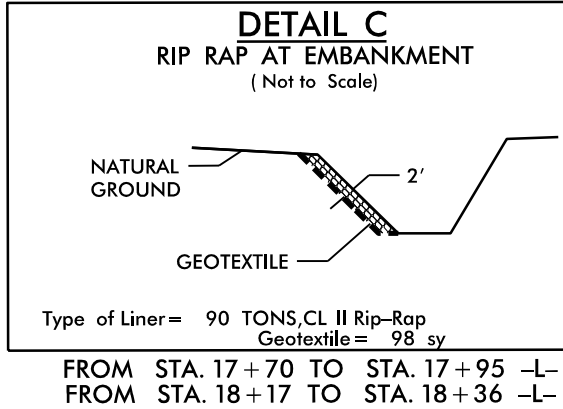
HYDRAULICS
ENGINEER

PREPARED BY
WETHERILL
ENGINEERING

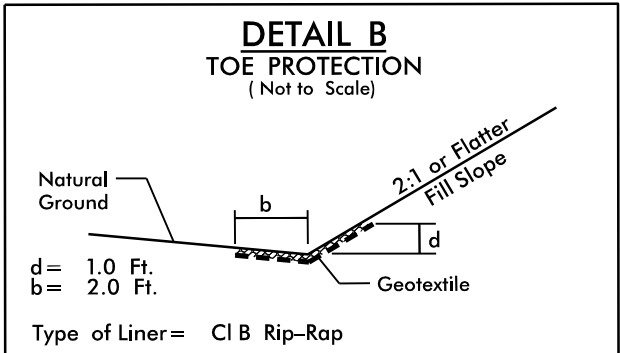
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(919) 851-8077
NC License F-0377



FROM STA. 13+70 TO STA. 14+80 -L- RT
FROM STA. 13+70 TO STA. 17+05 -L- LT



Type of Liner = 90 TONS CL II Rip-Rap
Geotextile = 98 sy
FROM STA. 17+70 TO STA. 17+95 -L-
FROM STA. 18+17 TO STA. 18+36 -L-



Type of Liner = CL II Rip-Rap
FROM STA. 20+00 TO STA. 23+00 -L- RT

FEMA PERFORMANCE TABLE		NCDOT PERFORMANCE TABLE						
	100-YEAR	NATURAL	10-YEAR	25-YEAR	50-YEAR	100-YEAR	500-YEAR	
DUPLICATE EFFECTIVE	873.53		869.1	869.9	870.5	871.1	872.2	
CORRECTED EFFECTIVE	872.17	EXISTING	869.2	870.1	870.8	871.4	872.7	
REVISED	872.28	PROPOSED	869.4	870.3	870.9	871.5	872.8	
SECTION 7668 615 FEET FROM UPSTREAM FACE OF BRIDGE		SECTION 7668 615 FEET FROM UPSTREAM FACE OF BRIDGE						

NO DECK DRAINS REQUIRED

SPREAD ANALYSIS
DA = 0.06 acres
I = 4 in/hr
C = 0.9
Q = .22 cfs
LONGITUDINAL SLOPE = 0.0118 ft/ft
CROSS SLOPE = 0.02 ft/ft
SHOULDER WIDTH = 5.25 ft
SPREAD = 4.01 ft

DEBRIS POTENTIAL IS MODERATE
BED MATERIAL: SANDY
NO INSURABLE STRUCTURES WILL BE
ADVERSELY AFFECTED BY
THE PROPOSED PROJECT

FOR -L- PROFILE, SEE SHEET NO. 7
FOR -DWY2- PROFILE, SEE SHEET NO. 10
FOR STRUCTURE PLANS, SEE SHEET S-1 THRU S-35