
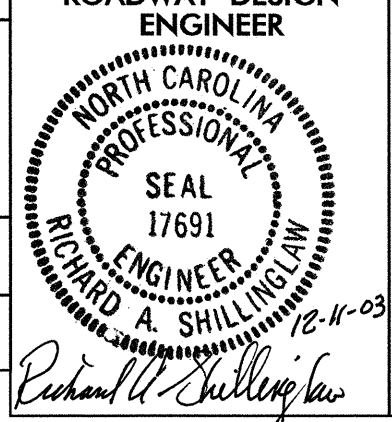
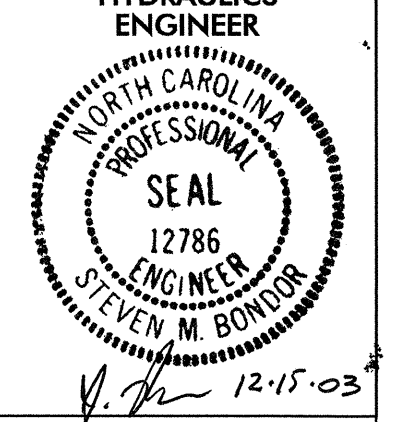
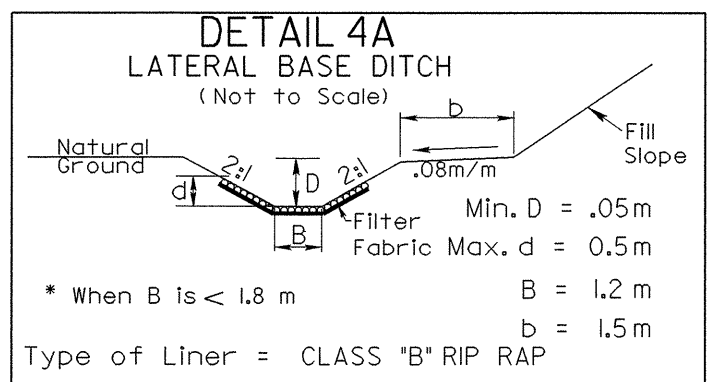


5/10/03

# DITCH DETAILS

	PROJECT REFERENCE NO. R-2610A	SHEET NO. 2-H
	R/W SHEET NO.	
	ROADWAY DESIGN ENGINEER 	HYDRAULICS ENGINEER 
CONST.REV.		
R/W REV.		

**DETAIL 4A**  
LATERAL BASE DITCH  
(Not to Scale)



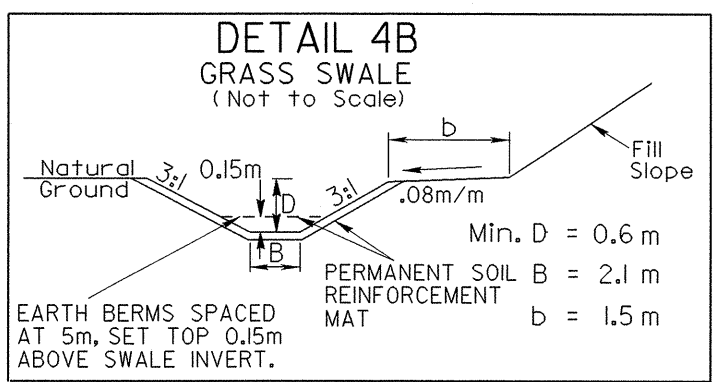
Min. D = .05m  
Filter Fabric Max. d = 0.5m  
\* When B is < 1.8 m B = 1.2 m  
b = 1.5m

Type of Liner = CLASS 'B' RIP RAP

-L- STA. 13+00 TO 13+29 RT.  
EST. 58 MTNS CLASS 'B' RIP RAP  
W/ 143 SM FILTER FABRIC  
EST DDE = 119 CM

-L- STA. 13+29 TO 14+35 RT  
EST. 213 MTNS CLASS 'B' RIP RAP  
W/ 522 SM FILTER FABRIC  
DDE = 203 CM

**DETAIL 4B**  
GRASS SWALE  
(Not to Scale)

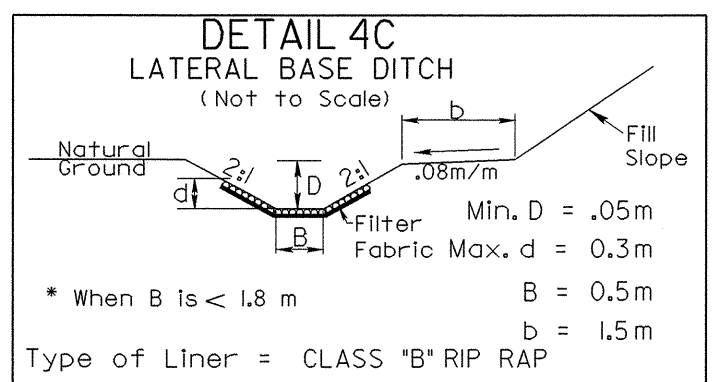


Min. D = 0.6 m  
PERMANENT SOIL REINFORCEMENT MAT  
EARTH BERMS SPACED AT 5m. SET TOP 0.15m ABOVE SWALE INVERT.

-L- STA. 12+55 TO 13+00 RT  
265 SM PERMANENT SOIL REINFORCEMENT MAT  
DDE = 667 CM

-L- STA. 14+35 TO 14+80 RT  
265 SM PERMANENT SOIL REINFORCEMENT MAT  
DDE = 293 CM

**DETAIL 4C**  
LATERAL BASE DITCH  
(Not to Scale)



Min. D = .05m  
Filter Fabric Max. d = 0.3m  
\* When B is < 1.8 m B = 0.5m  
b = 1.5m

Type of Liner = CLASS 'B' RIP RAP

-L- STA. 12+20 TO -L- STA. 12+55 RT  
EST. 44 MTNS CLASS 'B' RIP RAP  
W/ 117 SM FILTER FABRIC  
DDE = 80 CM

-L- STA. 13+23 TO 13+84 LT  
EST. 76 MTNS CLASS 'B' RIP RAP  
W/ 203 SM FILTER FABRIC  
DDE = 126 CM

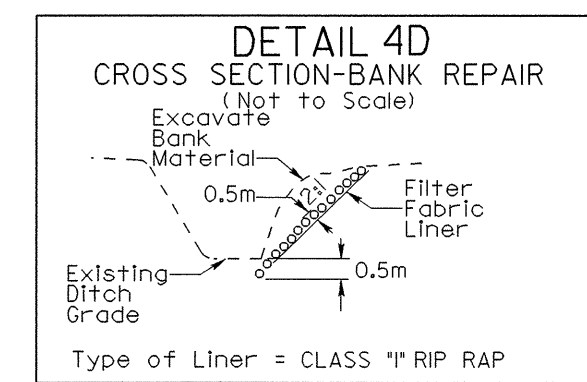
-L- STA. 23+61 TO 24+73 LT  
EST. 139 MTNS CLASS 'B' RIP RAP  
W/ 372 SM FILTER FABRIC  
DDE = 190 CM

-L- STA. 41+96 TO 42+40 LT  
EST. 81 MTNS CLASS 'B' RIP RAP  
W/ 217 SM FILTER FABRIC  
DDE = 24 CM

-L- STA. 62+20 TO 62+67 LT  
EST. 58 MTNS CLASS 'B' RIP RAP  
W/ 156 SM FILTER FABRIC  
DDE = 261 CM

-L- STA. 83+87 TO 84+00 LT  
EST. 16 MTNS CLASS 'B' RIP RAP  
W/ 43 SM FILTER FABRIC  
DDE = 44 CM

**DETAIL 4D**  
CROSS SECTION-BANK REPAIR  
(Not to Scale)

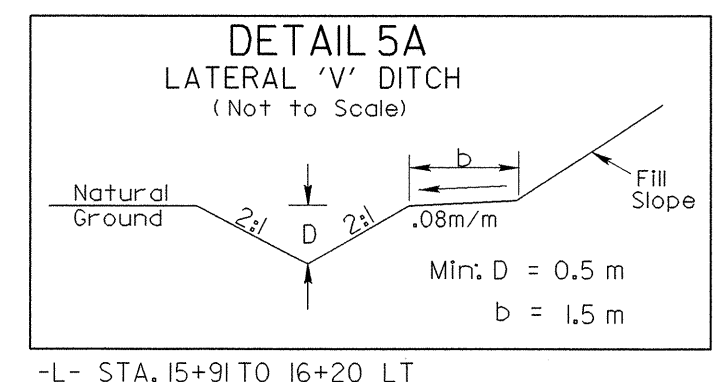


Min. D = 0.5m

Type of Liner = CLASS 'B' RIP RAP

-L- STA. 13+13 TO 13+27 LT  
EST. 53 MTNS CLASS 'B' RIP RAP  
W/ 62 SM FILTER FABRIC

**DETAIL 5A**  
LATERAL 'V' DITCH  
(Not to Scale)



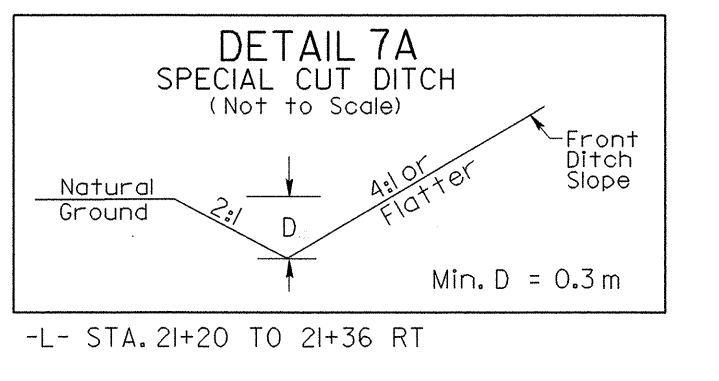
Min. D = 0.5 m  
b = 1.5 m

-L- STA. 15+91 TO 16+20 LT  
DDE = 134 CM

-L- STA. 58+00 TO 58+07 LT  
DDE = 3 CM

-L- STA. 68+74 TO 69+25 LT  
DDE = 31 CM

**DETAIL 7A**  
SPECIAL CUT DITCH  
(Not to Scale)



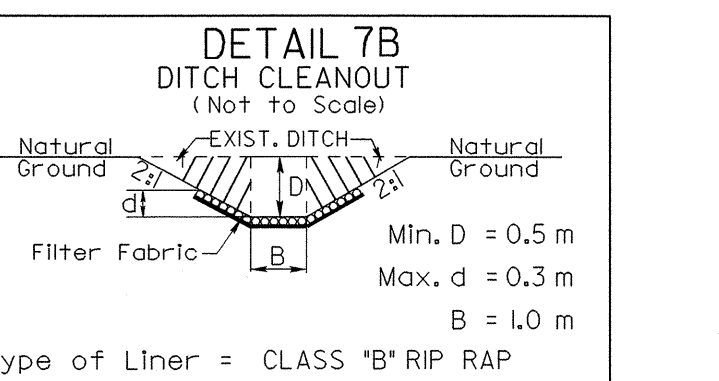
Min. D = 0.3 m

-L- STA. 21+20 TO 21+36 RT

-L- STA. 72+00 TO 73+00 LT

-RPD- STA. 12+80 TO 13+40 RT

**DETAIL 7B**  
DITCH CLEANOUT  
(Not to Scale)



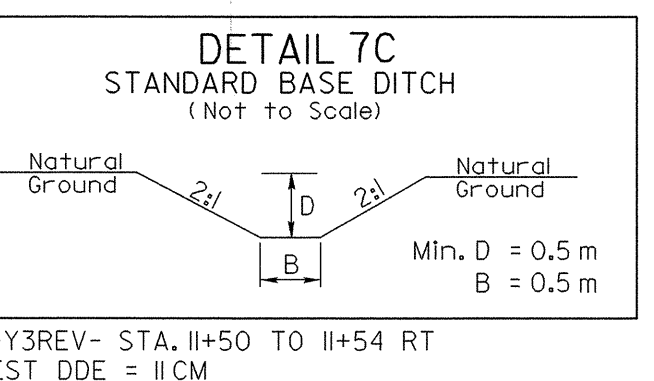
Min. D = 0.5 m  
Max. d = 0.3 m  
B = 1.0 m

Type of Liner = CLASS 'B' RIP RAP

NOTE: TRANSITION TOP WIDTH TO MATCH EXISTING

-L- STA. 19+50 TO 19+56 RT  
EST. 45 MTNS CLASS 'B' RIP RAP  
W/ 115 SM FILTER FABRIC  
EST DDE = 15 CM

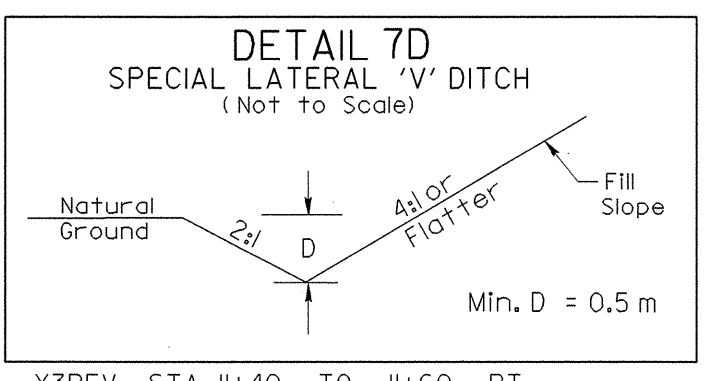
**DETAIL 7C**  
STANDARD BASE DITCH  
(Not to Scale)



Min. D = 0.5 m  
Max. d = 0.5 m  
B = 0.5 m

-Y3REV- STA. 11+50 TO 11+54 RT  
EST DDE = 11 CM

**DETAIL 7D**  
SPECIAL LATERAL 'V' DITCH  
(Not to Scale)



Min. D = 0.5 m

-Y3REV- STA. 11+40 TO 11+60 RT

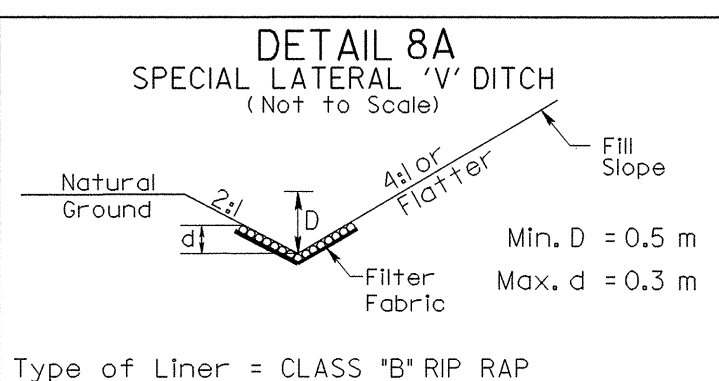
-L- STA. 24+94 TO 25+10 RT

-L- STA. 33+00 TO 33+80 LT

-L- STA. 74+80 LT TO -LPD- 11+40 RT

-L- STA. 77+83 TO 78+80 LT

**DETAIL 8A**  
SPECIAL LATERAL 'V' DITCH  
(Not to Scale)



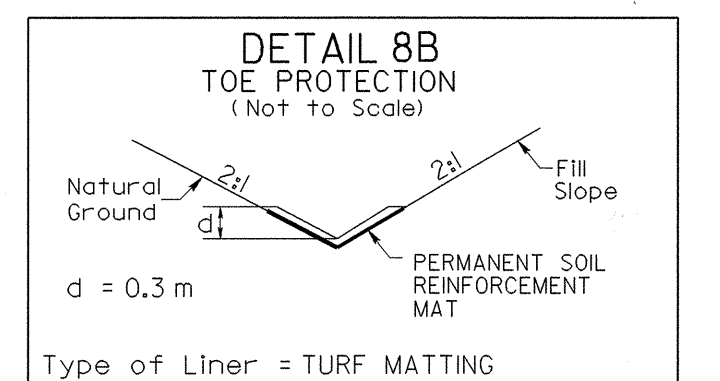
Min. D = 0.5 m  
Max. d = 0.3 m

Type of Liner = CLASS 'B' RIP RAP

-L- STA. 23+48 TO 23+66 RT.  
EST. 18 MTNS CLASS 'B' RIP RAP  
W/ 51 SM FILTER FABRIC

-L- STA. 59+20 TO 59+83 LT.  
EST. 63 MTNS CLASS 'B' RIP RAP  
W/ 177 SM FILTER FABRIC

**DETAIL 8B**  
TOE PROTECTION  
(Not to Scale)

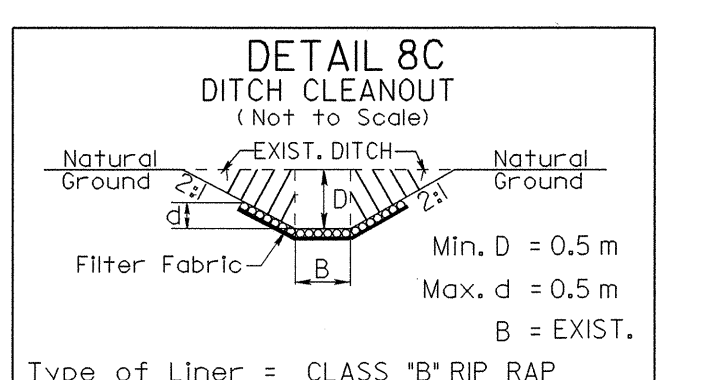


d = 0.3 m

Type of Liner = TURF MATTING

-L- STA. 25+10 TO 25+40 RT  
40 SM PERMANENT SOIL REINFORCEMENT MAT

**DETAIL 8C**  
DITCH CLEANOUT  
(Not to Scale)



Min. D = 0.5 m  
Max. d = 0.5 m  
B = EXIST.

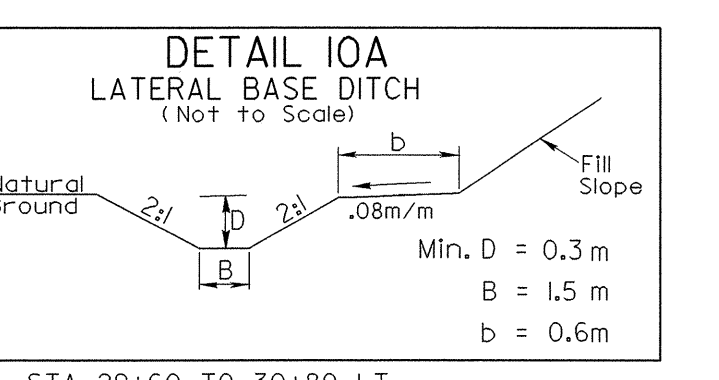
Type of Liner = CLASS 'B' RIP RAP

NOTE: TRANSITION TOP WIDTH TO MATCH EXISTING

-L- STA. 23+61 TO 23+62 LT  
EST. 153 MTNS CLASS 'B' RIP RAP  
W/ 306 SM FILTER FABRIC  
DDE = 55 CM

-L- STA. 55+27 TO 55+30 RT  
EST. 77 MTNS CLASS 'B' RIP RAP  
W/ 153 SM FILTER FABRIC  
DDE = 110 CM

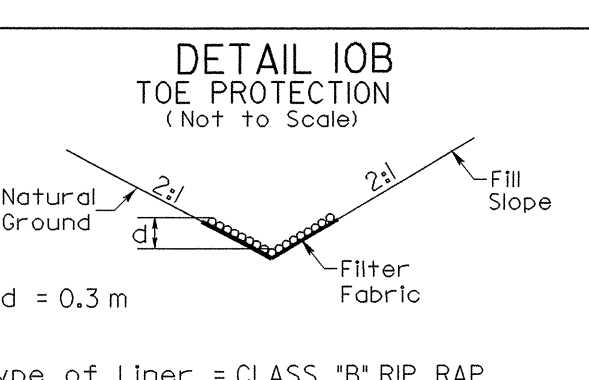
**DETAIL 10A**  
LATERAL BASE DITCH  
(Not to Scale)



Min. D = 0.3 m  
B = 1.5 m  
b = 0.6m

-L- STA. 29+60 TO 30+80 LT  
DDE = 156 CM

**DETAIL 10B**  
TOE PROTECTION  
(Not to Scale)

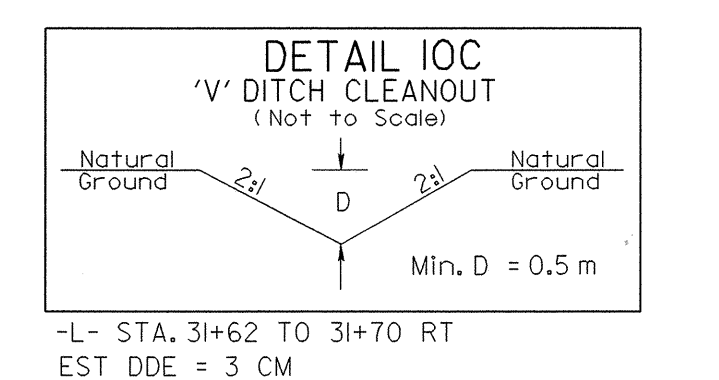


d = 0.3 m

Type of Liner = CLASS 'B' RIP RAP

-L- STA. 30+60 TO 31+10 RT  
EST. 50 MTNS CLASS 'B' RIP RAP  
W/ 142 SM FILTER FABRIC

**DETAIL 10C**  
'V' DITCH CLEANOUT  
(Not to Scale)

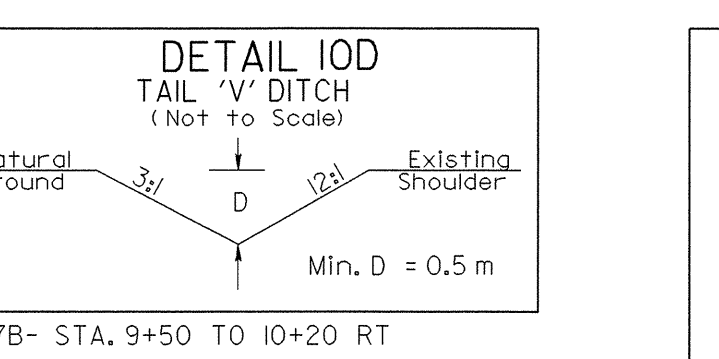


Min. D = 0.5 m

-L- STA. 31+62 TO 31+70 RT  
EST DDE = 3 CM

-L- STA. 45+56 TO 45+75 LT  
EST DDE = 7 CM

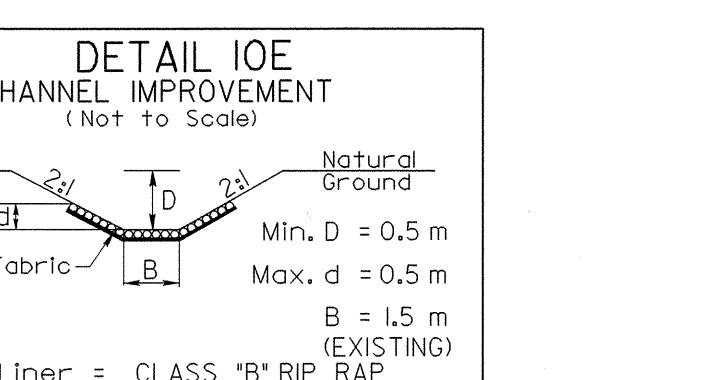
**DETAIL 10D**  
TAIL 'V' DITCH  
(Not to Scale)



Min. D = 0.5 m

-Y7B- STA. 9+50 TO 10+20 RT

**DETAIL 10E**  
CHANNEL IMPROVEMENT  
(Not to Scale)



Min. D = 0.5 m  
Max. d = 0.5 m  
B = 1.5 m  
(EXISTING)

Type of Liner = CLASS 'B' RIP RAP

-Y9- STA. 12+49 TO 12+74 RT  
EST. 60 MTNS CLASS 'B' RIP RAP  
W/ 143 SM FILTER FABRIC  
DDE = 5 CM

05-NOV-2003 07:55  
V:\pandor AT R018852