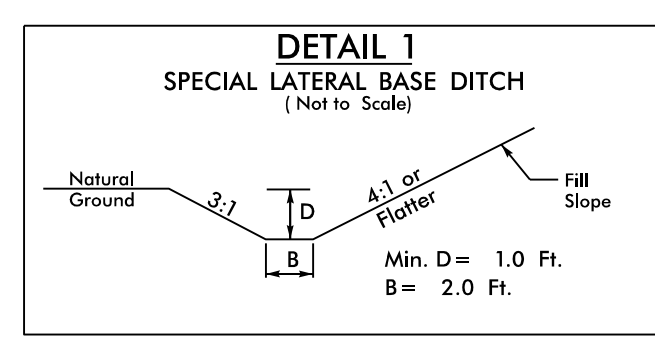


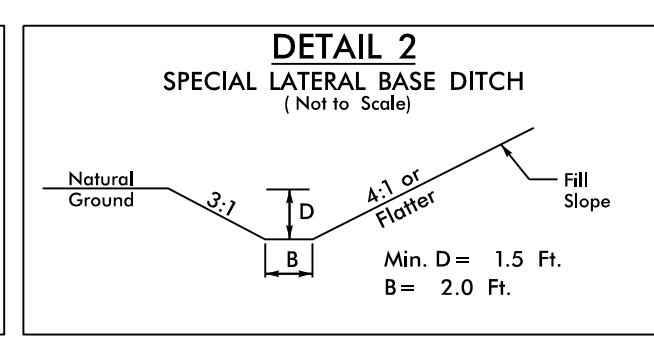
8/17/09



**DETAIL 1**  
SPECIAL LATERAL BASE DITCH  
(Not to Scale)

Min. D = 1.0 Ft.  
B = 2.0 Ft.

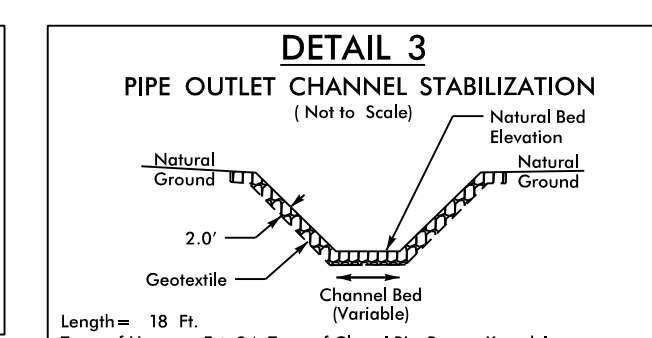
FROM STA. 11+00 TO STA. 15+52 -L2- LT  
FROM STA. 78+50 TO STA. 80+00 -L- LT  
FROM STA. 19+54 TO STA. 21+00 -RPB- LT  
FROM STA. 14+75 TO STA. 20+00 -RPD- RT  
FROM STA. 41+45 TO STA. 45+00 -Y- LT



**DETAIL 2**  
SPECIAL LATERAL BASE DITCH  
(Not to Scale)

Min. D = 1.5 Ft.  
B = 2.0 Ft.

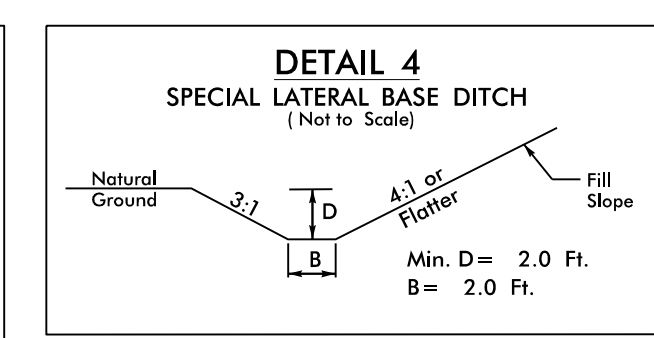
FROM STA. 12+00 TO STA. 15+42 -L1- RT  
FROM STA. 22+00 TO STA. 26+54 -L1- RT  
FROM STA. 27+55 TO STA. 28+32 -L1- RT  
FROM STA. 28+32 TO STA. 37+18 -L- RT  
FROM STA. 81+00 TO STA. 84+16 -L- RT  
FROM STA. 84+16 TO STA. 100+75 -L3- RT  
FROM STA. 93+00 TO STA. 96+00 -L4- LT  
FROM STA. 10+85 TO STA. 13+54 -LPD- RT  
FROM STA. 14+26 TO STA. 18+00 -RPB- LT  
FROM STA. 22+00 TO STA. 24+90 -RPB- LT  
FROM STA. 11+00 TO STA. 14+00 -Y- RT  
FROM STA. 19+50 TO STA. 22+00 -Y- RT  
FROM STA. 20+25 TO STA. 26+00 -Y- LT



**DETAIL 3**  
PIPE OUTLET CHANNEL STABILIZATION  
(Not to Scale)

Length = 18 Ft.  
Type of Liner = Est. 34 Tons of Class I Rip-Rap - Keyed-In  
Est. 40 SYGF

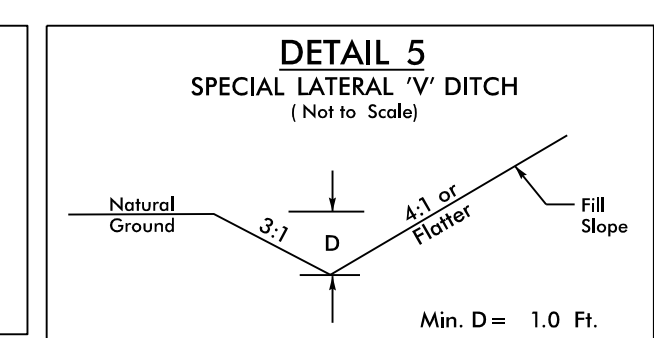
STA. 15+62 -L2- LT



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

Min. D = 2.0 Ft.  
B = 2.0 Ft.

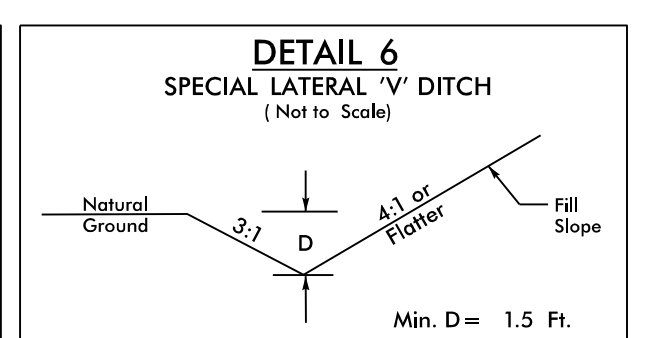
FROM STA. 15+42 TO STA. 22+00 -L1- RT  
FROM STA. 38+00 TO STA. 46+92 -L- RT  
FROM STA. 74+00 TO STA. 78+50 -L- LT  
FROM STA. 18+00 TO STA. 19+54 -RPB- LT



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

Min. D = 1.0 Ft.

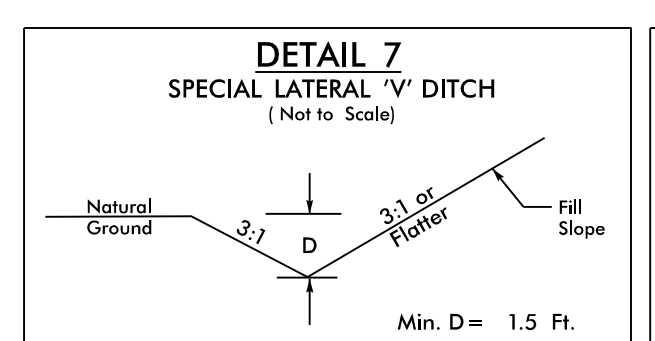
FROM STA. 15+75 TO STA. 18+50 -L2- LT  
FROM STA. 21+50 TO STA. 23+50 -L2- LT  
FROM STA. 56+56 TO STA. 57+17 -L- RT  
FROM STA. 64+65 TO STA. 65+50 -L- RT  
FROM STA. 17+70 TO STA. 18+82 -LPB- RT  
FROM STA. 10+00 TO STA. 10+85 -LPD- LT  
FROM STA. 16+87 TO STA. 19+14 -LPD- RT  
FROM STA. 18+00 TO STA. 21+62 -RPB- RT  
FROM STA. 21+62 TO STA. 22+00 -RPB- LT  
FROM STA. 14+75 TO STA. 17+50 -RPD- LT  
FROM STA. 25+61 TO STA. 26+00 -Y- RT  
FROM STA. 45+50 TO STA. 47+78 -Y- LT  
FROM STA. 13+25 TO STA. 14+50 -Y3- RT  
FROM STA. 13+00 TO STA. 13+75 -Y4- LT  
FROM STA. 86+57 TO STA. 87+00 -L4- LT  
FROM STA. 87+30 TO STA. 88+50 -L4- LT  
FROM STA. 89+00 TO STA. 91+00 -L4- LT  
FROM STA. 91+50 TO STA. 92+50 -L4- LT  
FROM STA. 100+50 TO STA. 101+00 -L4- LT



**DETAIL 6**  
SPECIAL LATERAL 'V' DITCH  
(Not to Scale)

Min. D = 1.5 Ft.

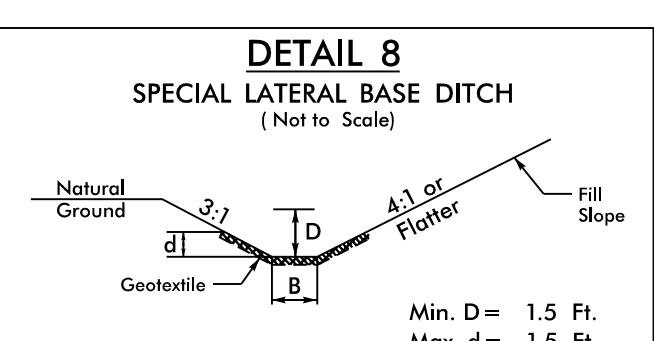
FROM STA. 27+50 TO STA. 28+33 -L2- LT  
FROM STA. 28+33 TO STA. 29+00 -L- LT  
FROM STA. 29+50 TO STA. 35+00 -L- LT  
FROM STA. 44+50 TO STA. 50+50 -L- LT  
FROM STA. 51+50 TO STA. 54+00 -L- RT  
FROM STA. 10+00 TO STA. 15+50 -LPB- LT  
FROM STA. 12+50 TO STA. 14+00 -LPB- RT  
FROM STA. 96+00 TO STA. 99+50 -L4- LT  
FROM STA. 22+00 TO STA. 25+00 -Y- RT  
FROM STA. 27+27 TO STA. 28+22 -Y- LT  
FROM STA. 30+00 TO STA. 32+75 -Y- LT



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

Min. D = 1.5 Ft.

FROM STA. 23+70 TO STA. 26+57 -L2- LT  
FROM STA. 56+32 TO STA. 60+00 -L- LT  
FROM STA. 43+50 TO STA. 48+00 -Y- RT  
FROM STA. 12+50 TO STA. 14+20 -Y2- RT  
FROM STA. 11+71 TO STA. 14+54 -Y2- LT  
FROM STA. 30+00 TO STA. 33+50 -YDET- RT  
FROM STA. 30+00 TO STA. 33+78 -YDET- LT

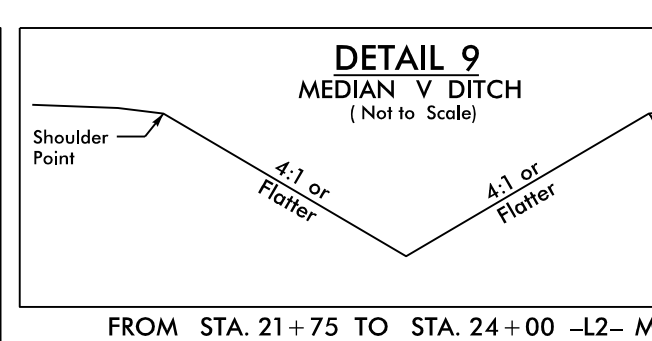


**DETAIL 8**  
SPECIAL LATERAL BASE DITCH  
(Not to Scale)

Min. D = 1.5 Ft.  
Max. d = 1.5 Ft.  
B = 2.0 Ft.

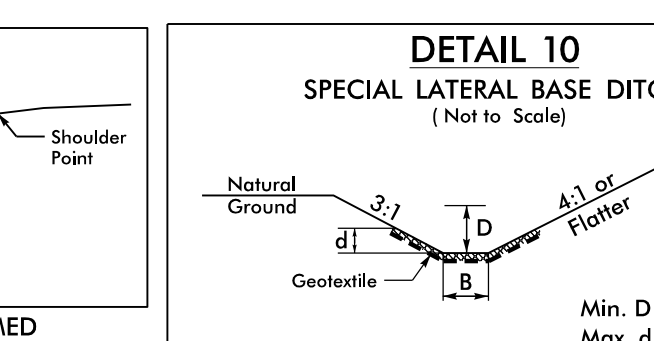
Type of Liner = Class B Rip-Rap

FROM STA. 10+50 TO STA. 12+00 -L1- RT  
FROM STA. 77+00 TO STA. 81+00 -L- RT  
FROM STA. 80+90 TO STA. 84+16 -L- LT  
FROM STA. 84+16 TO STA. 86+00 -L4- LT



**DETAIL 9**  
MEDIAN 'V' DITCH  
(Not to Scale)

FROM STA. 21+75 TO STA. 24+00 -L2- MED  
FROM STA. 34+50 TO STA. 42+00 -L- MED  
FROM STA. 72+00 TO STA. 73+00 -L- MED

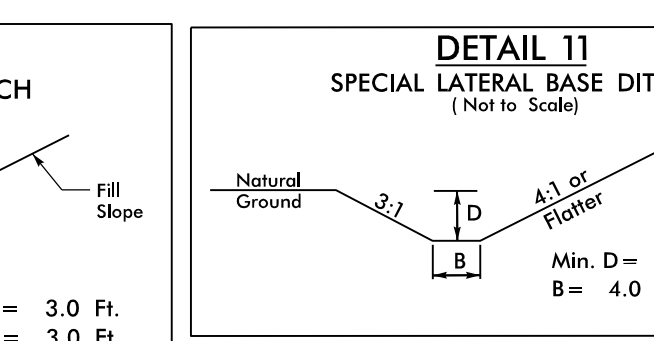


**DETAIL 10**  
SPECIAL LATERAL BASE DITCH  
(Not to Scale)

Min. D = 3.0 Ft.  
Max. d = 3.0 Ft.  
B = 4.0 Ft.

Type of Liner = Class I Rip-Rap

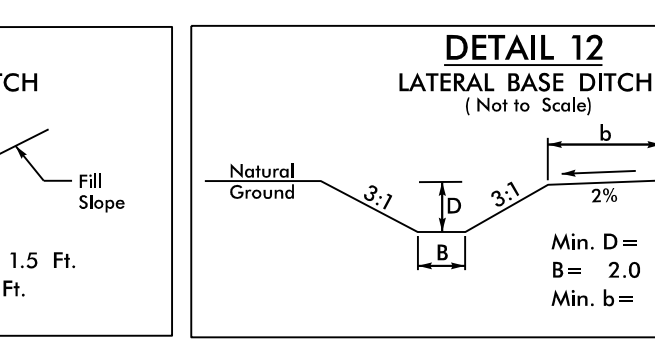
FROM STA. 12+07 TO STA. 14+75 -RPD- LT



**DETAIL 11**  
SPECIAL LATERAL BASE DITCH  
(Not to Scale)

Min. D = 1.5 Ft.  
B = 4.0 Ft.

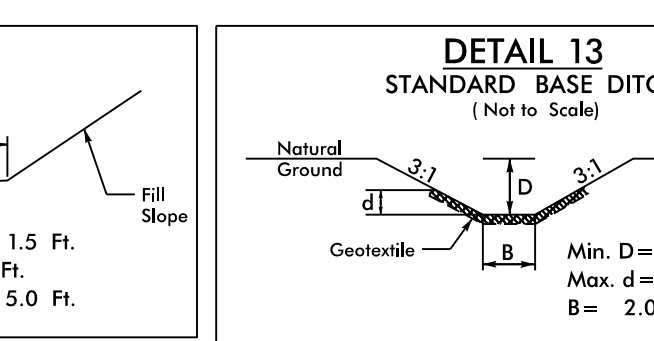
FROM STA. 48+00 TO STA. 48+89 -Y- RT



**DETAIL 12**  
LATERAL BASE DITCH  
(Not to Scale)

Min. D = 1.5 Ft.  
B = 2.0 Ft.  
Min. b = 5.0 Ft.

FROM STA. 35+32 TO STA. 39+55 -Y- LT  
FROM STA. 36+19 TO STA. 39+70 -YDET- LT

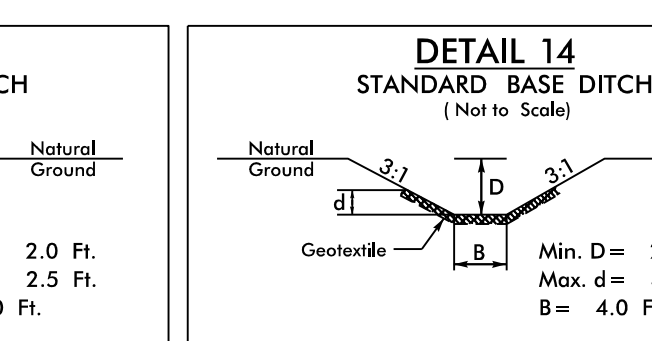


**DETAIL 13**  
STANDARD BASE DITCH  
(Not to Scale)

Min. D = 2.0 Ft.  
Max. d = 2.5 Ft.  
B = 2.0 Ft.

Type of Liner = Class B Rip-Rap

STA. 12+50 -LPB- RT  
STA. 16+94 -LPB- RT  
STA. 13+54 -LPD- LT  
STA. 33+50 -YDET- RT  
STA. 38+58 -YDET- LT

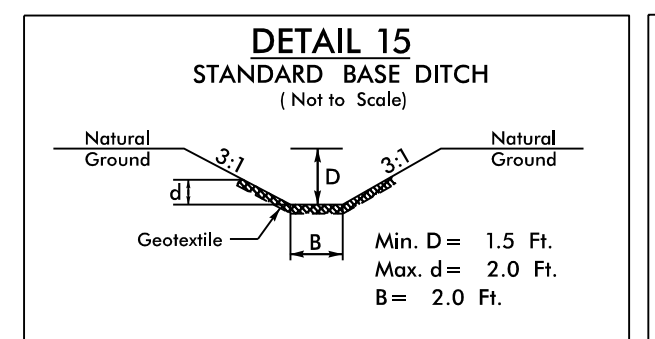


**DETAIL 14**  
STANDARD BASE DITCH  
(Not to Scale)

Min. D = 2.5 Ft.  
Max. d = 3.0 Ft.  
B = 4.0 Ft.

Type of Liner = Class I Rip-Rap

STA. 19+79 -RPB- RT  
STA. 15+90 -LPB- RT  
STA. 37+65 -YDET- RT

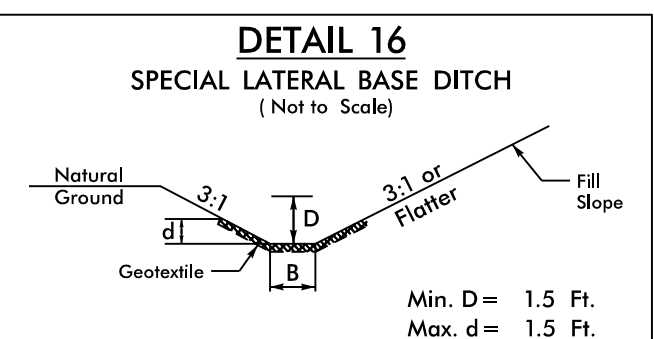


**DETAIL 15**  
STANDARD BASE DITCH  
(Not to Scale)

Min. D = 1.5 Ft.  
Max. d = 2.0 Ft.  
B = 2.0 Ft.

Type of Liner = Class B Rip-Rap

STA. 30+14 -L- RT  
STA. 11+58 -Y3- LT  
STA. 30+55 -Y- RT

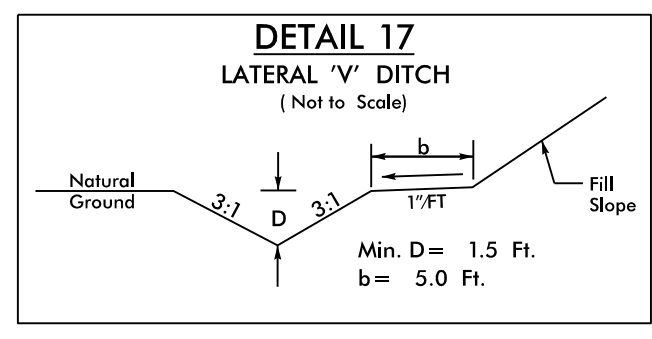


**DETAIL 16**  
SPECIAL LATERAL BASE DITCH  
(Not to Scale)

Min. D = 1.5 Ft.  
Max. d = 1.5 Ft.  
B = 2.0 Ft.

Type of Liner = Class B Rip-Rap

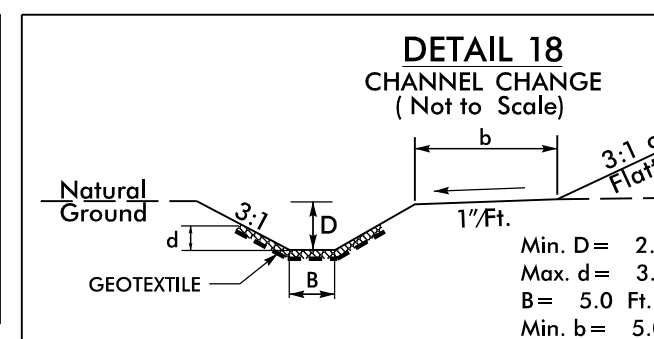
FROM STA. 69+46 TO STA. 70+19 -L- RT  
FROM STA. 10+00 TO STA. 10+97 -RPD- LT  
FROM STA. 16+00 TO STA. 16+60 -Y- RT  
FROM STA. 48+50 TO STA. 49+50 -YDET- LT



**DETAIL 17**  
LATERAL 'V' DITCH  
(Not to Scale)

Min. D = 1.5 Ft.  
b = 5.0 Ft.

FROM STA. 35+23 TO STA. 36+50 -Y- RT

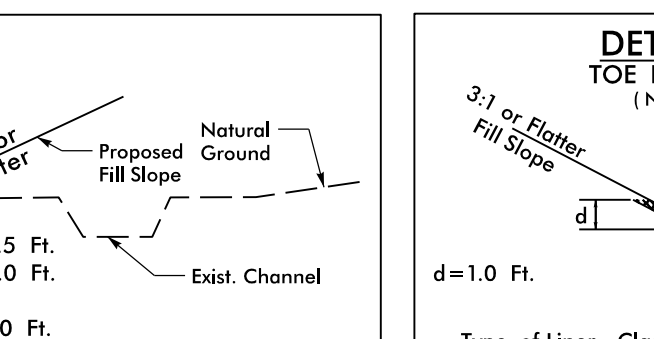


**DETAIL 18**  
CHANNEL CHANGE  
(Not to Scale)

Min. D = 2.5 Ft.  
Max. d = 3.0 Ft.  
B = 5.0 Ft.  
Min. b = 5.0 Ft.

Type of Liner = Class I Rip-Rap; Thickness = 2.0 Ft.  
EST. 162 TONS; EST. 291 SYGF

STA. 28+18 -Y- LT

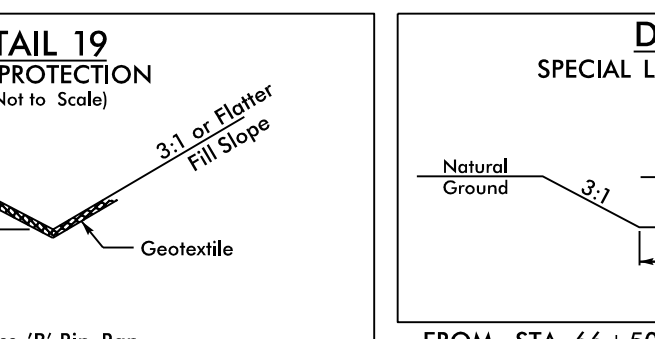


**DETAIL 19**  
TOE PROTECTION  
(Not to Scale)

d = 1.0 Ft.

Type of Liner = Class 'B' Rip-Rap

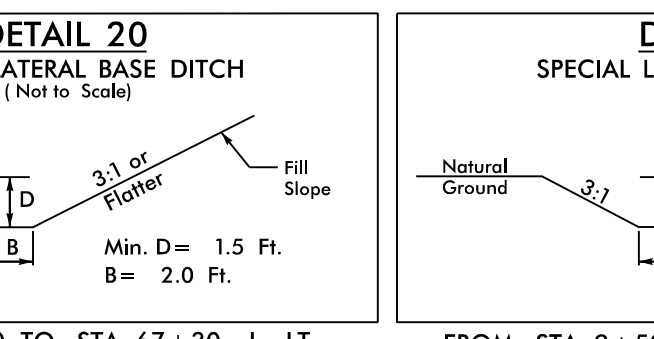
FROM STA. 20+00 TO STA. 20+50 -RPD- RT



**DETAIL 20**  
SPECIAL LATERAL BASE DITCH  
(Not to Scale)

Min. D = 1.5 Ft.  
B = 2.0 Ft.

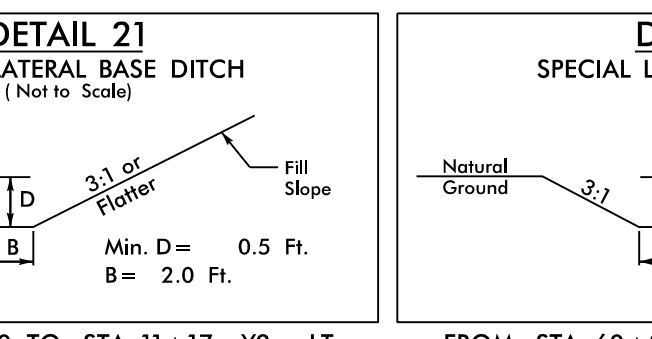
FROM STA. 66+50 TO STA. 67+30 -L- LT  
FROM STA. 14+00 TO STA. 16+00 -Y- RT  
FROM STA. 35+50 TO STA. 36+19 -YDET- LT  
FROM STA. 39+70 TO STA. 43+00 -YDET- LT



**DETAIL 21**  
SPECIAL LATERAL BASE DITCH  
(Not to Scale)

Min. D = 0.5 Ft.  
B = 2.0 Ft.

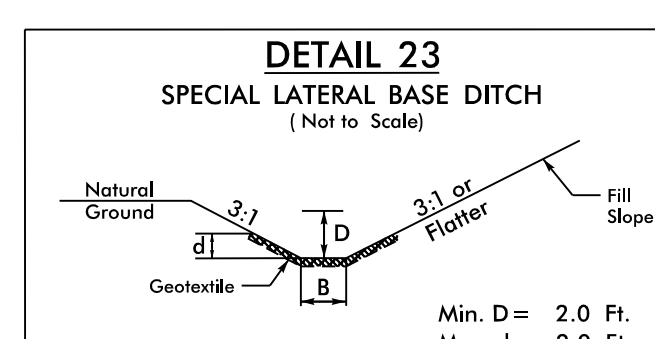
FROM STA. 9+50 TO STA. 11+17 -Y2- LT  
FROM STA. 16+00 TO STA. 18+25 -Y2A- RT



**DETAIL 22**  
SPECIAL LATERAL BASE DITCH  
(Not to Scale)

Min. D = 2.5 Ft.  
B = 4.0 Ft.

FROM STA. 60+25 TO STA. 64+65 -L- RT

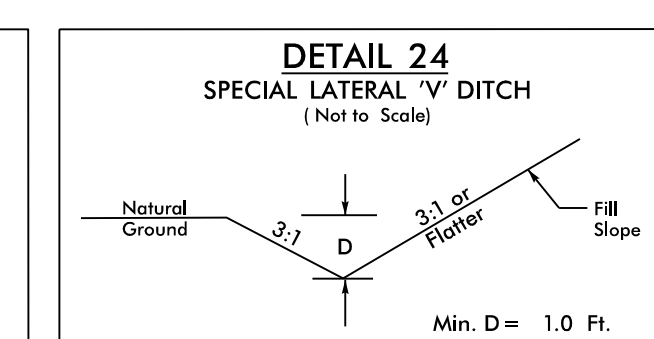


**DETAIL 23**  
SPECIAL LATERAL BASE DITCH  
(Not to Scale)

Min. D = 2.0 Ft.  
Max. d = 2.0 Ft.  
B = 2.0 Ft.

Type of Liner = Class B Rip-Rap

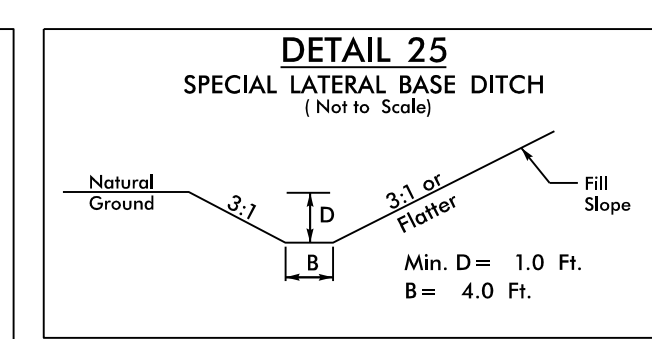
FROM STA. 71+30 TO STA. 74+00 -L- LT



**DETAIL 24**  
SPECIAL LATERAL 'V' DITCH  
(Not to Scale)

Min. D = 1.0 Ft.

FROM STA. 13+50 TO STA. 16+00 -Y2A- RT  
FROM STA. 10+60 TO STA. 13+25 -Y3- RT  
FROM STA. 10+80 TO STA. 14+25 -Y3- LT  
FROM STA. 13+00 TO STA. 13+50 -Y4- RT  
FROM STA. 10+00 TO STA. 11+58 -DR3- LT  
FROM STA. 10+00 TO STA. 11+16 -DR3- RT  
FROM STA. 10+25 TO STA. 11+50 -DR3- LT  
FROM STA. 24+00 TO STA. 26+50 -YDET- LT  
FROM STA. 27+50 TO STA. 28+58 -YDET- LT  
FROM STA. 29+04 TO STA. 29+50 -YDET- LT  
FROM STA. 45+00 TO STA. 47+88 -YDET- LT  
FROM STA. 23+00 TO STA. 26+50 -YDET- RT  
FROM STA. 35+50 TO STA. 37+65 -YDET- RT  
FROM STA. 41+50 TO STA. 42+50 -YDET- RT  
FROM STA. 44+00 TO STA. 47+50 -YDET- RT



**DETAIL 25**  
SPECIAL LATERAL BASE DITCH  
(Not to Scale)

Min. D = 1.0 Ft.  
B = 4.0 Ft.

FROM STA. 18+25 TO STA. 19+00 -Y2A- LT

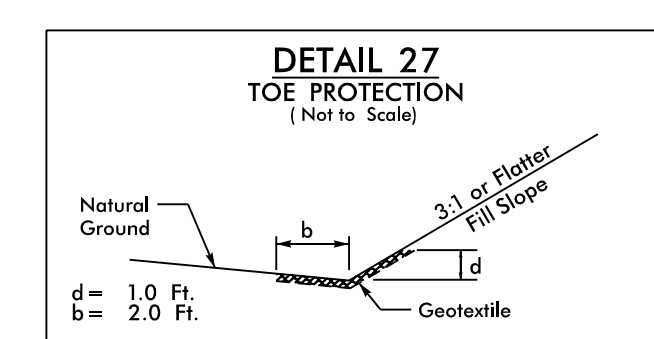


**DETAIL 27**  
TOE PROTECTION  
(Not to Scale)

d = 1.0 Ft.  
b = 2.0 Ft.

Type of Liner = Class B Rip-Rap

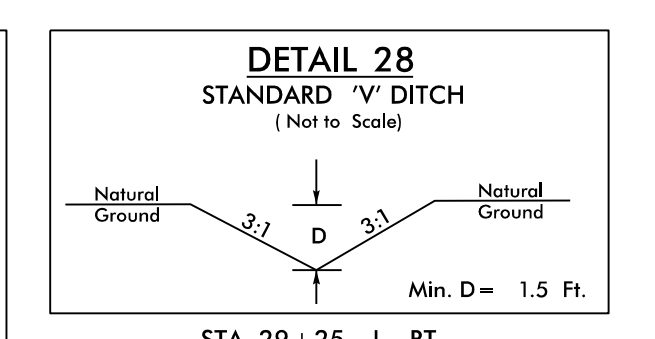
FROM STA. 36+40 TO STA. 39+00 -L- LT  
FROM STA. 74+00 TO STA. 77+00 -L- RT  
FROM STA. 12+73 TO STA. 13+26 -Y- LT  
FROM STA. 17+56 TO STA. 19+00 -Y- RT  
FROM STA. 15+00 TO STA. 18+25 -Y2A- LT  
FROM STA. 18+25 TO STA. 18+80 -Y2A- RT



**DETAIL 28**  
STANDARD 'V' DITCH  
(Not to Scale)

Min. D = 1.5 Ft.

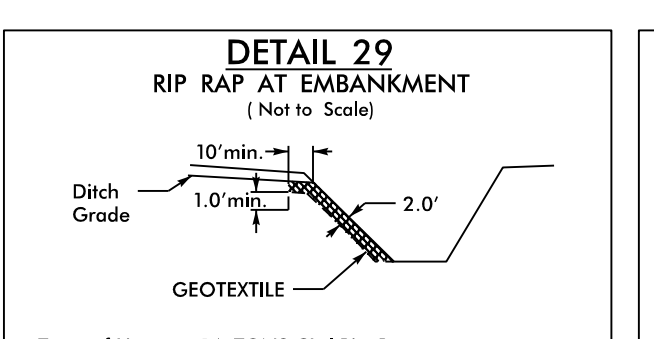
STA. 29+25 -L- RT  
STA. 21+63 -RPD- LT



**DETAIL 29**  
RIP RAP AT EMBANKMENT  
(Not to Scale)

Type of Liner = 14 TONS, CL I Rip-Rap  
Geotextile = 21 SY

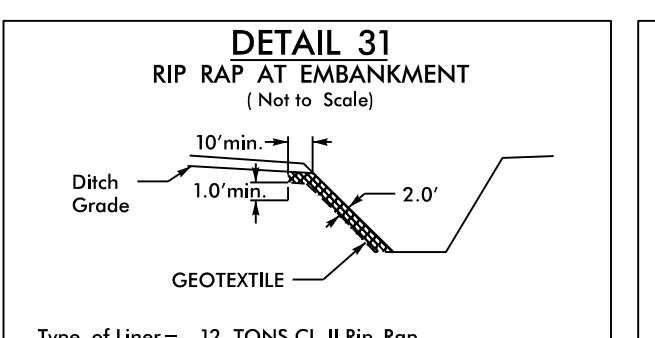
FROM STA. 15+52 TO STA. 15+62 -L2- LT



**DETAIL 30**  
RIP RAP AT EMBANKMENT  
(Not to Scale)

Type of Liner = 12 TONS, CL I Rip-Rap  
Geotextile = 19 SY

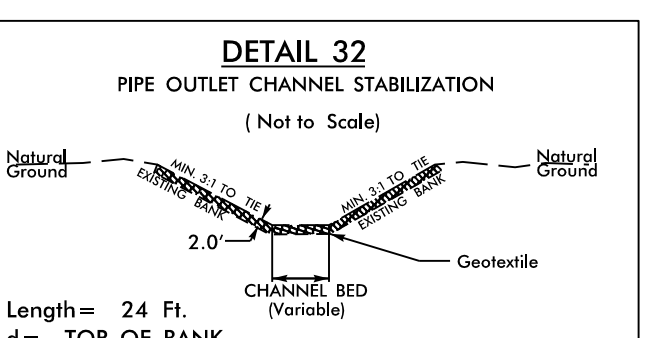
FROM STA. 15+65 TO STA. 15+75 -L2- LT



**DETAIL 31**  
RIP RAP AT EMBANKMENT  
(Not to Scale)

Type of Liner = 12 TONS, CL II Rip-Rap  
Geotextile = 20 SY

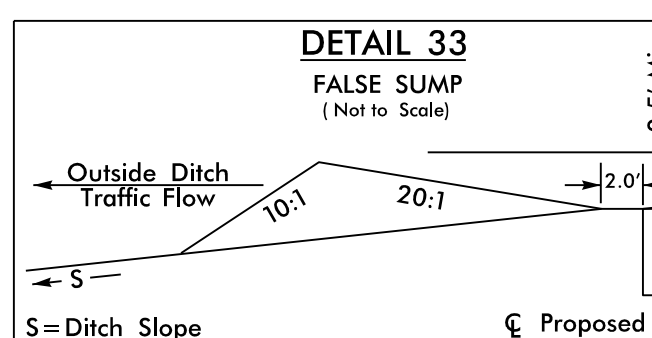
FROM STA. 16+60 TO STA. 16+85 -Y- LT



**DETAIL 32**  
PIPE OUTLET CHANNEL STABILIZATION  
(Not to Scale)

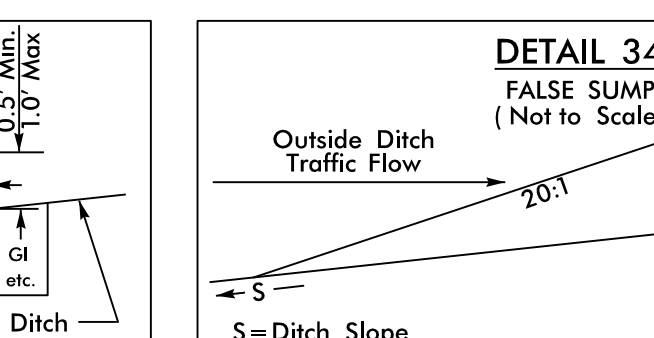
Length = 24 Ft.  
d = TOP OF BANK  
Liner = Est. 130 Tons of Class I Rip-Rap; Est. 155 SYGF

AT STA. 22+75 -RPD- LT



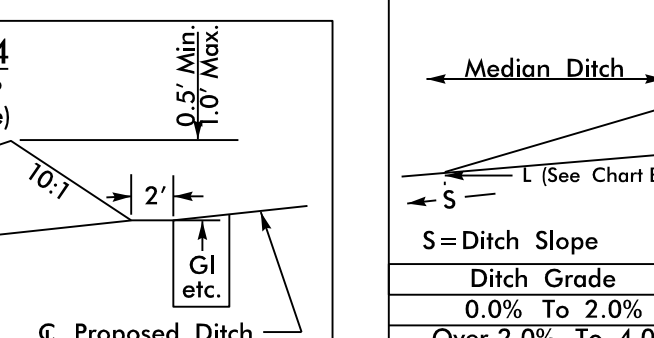
**DETAIL 33**  
FALSE SUMP  
(Not to Scale)

FROM STA. 60+00 TO STA. 60+20 -L- LT  
FROM STA. 64+00 TO STA. 64+20 -L- LT



**DETAIL 34**  
FALSE SUMP  
(Not to Scale)

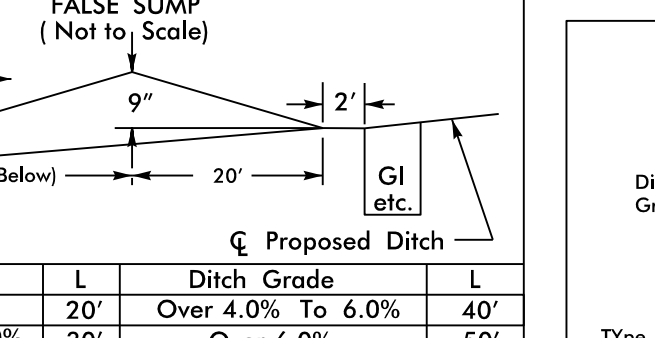
FROM STA. 52+80 TO STA. 53+00 -L- RT  
FROM STA. 67+30 TO STA. 67+50 -L- LT



**DETAIL 35**  
FALSE SUMP  
(Not to Scale)

Ditch Grade	L	Ditch Grade	L
0.0% To 2.0%	20'	Over 4.0% To 6.0%	40'
Over 2.0% To 4.0%	30'	Over 6.0%	50'

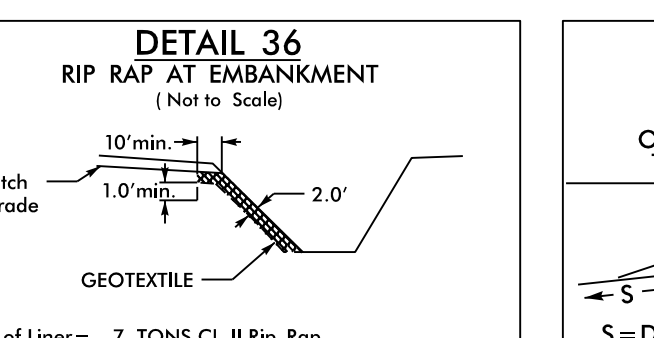
FROM STA. 42+00 TO STA. 42+20 -L- MED  
FROM STA. 44+50 TO STA. 42+70 -L- MED  
FROM STA. 46+95 TO STA. 47+15 -L- MED  
FROM STA. 50+00 TO STA. 50+20 -L- MED  
FROM STA. 60+25 TO STA. 60+45 -L- MED  
FROM STA. 64+00 TO STA. 64+20 -L- MED  
FROM STA. 68+60 TO STA. 68+80 -L- MED  
FROM STA. 78+30 TO STA. 78+50 -L- MED  
FROM STA. 80+75 TO STA. 80+95 -L- MED  
FROM STA. 82+65 TO STA. 82+85 -L- MED  
FROM STA. 84+80 TO STA. 85+00 -L3- MED



**DETAIL 36**  
RIP RAP AT EMBANKMENT  
(Not to Scale)

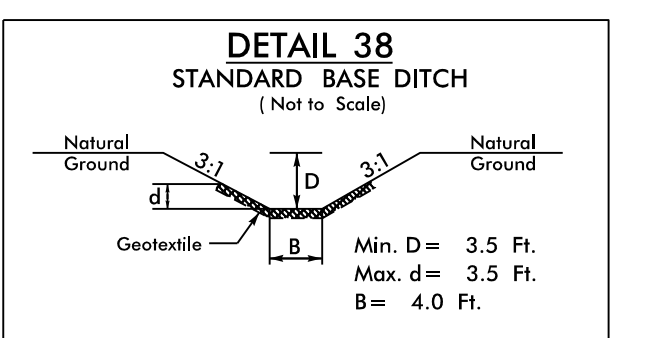
Type of Liner = 7 TONS, CL II Rip-Rap  
Geotextile = 10 SY

FROM STA. 71+16 TO STA. 71+30 -L- LT



**DETAIL 37**  
FALSE SUMP  
(Not to Scale)

FROM STA. 23+50 TO STA. 23+70 -L1- LT  
FROM STA. 37+30 TO STA. 37+50 -L- RT  
FROM STA. 46+92 TO STA. 47+10 -L- RT  
FROM STA. 60+06 TO STA. 60+26 -L- LT



**DETAIL 38**  
STANDARD BASE DITCH  
(Not to Scale)

Min. D = 3.5 Ft.  
Max. d = 3.5 Ft.  
B = 4.0 Ft.

Type of Liner = Class I Rip-Rap

STA. 12+07 -RPD- LT  
STA. 37+50 -Y- LT  
STA. 37+50 -Y- RT

