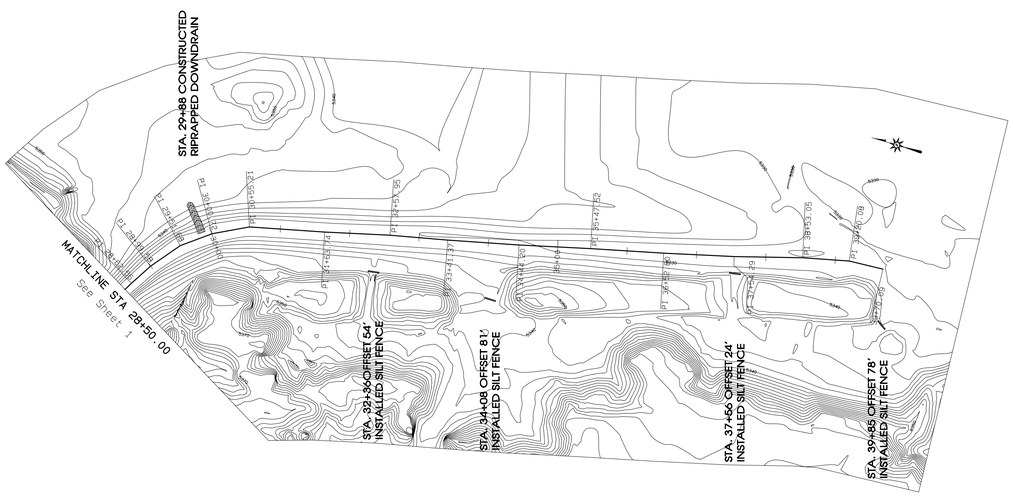
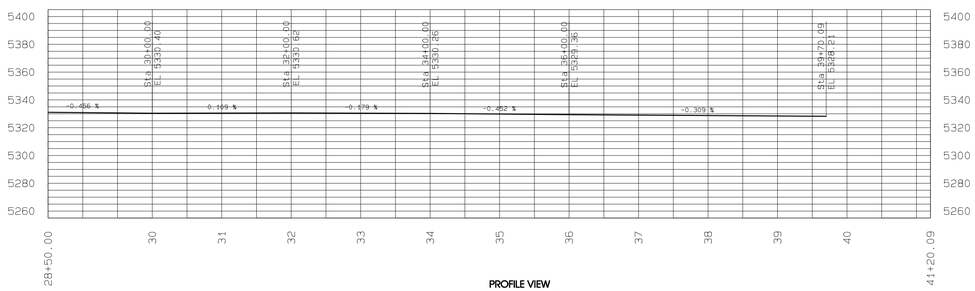
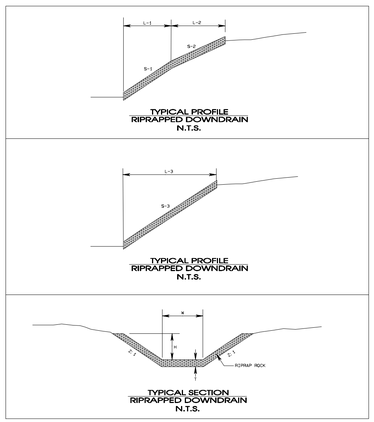


PLAN VIEW
Horz. Scale: 1" = 100'

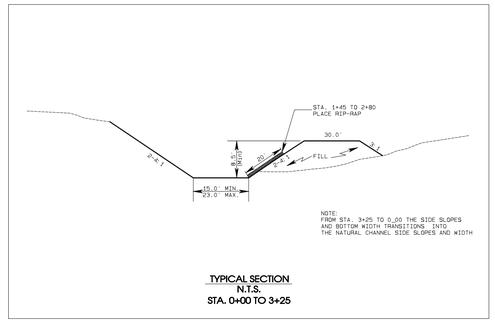


PROFILE VIEW
Vert. Scale: 1" = 50'

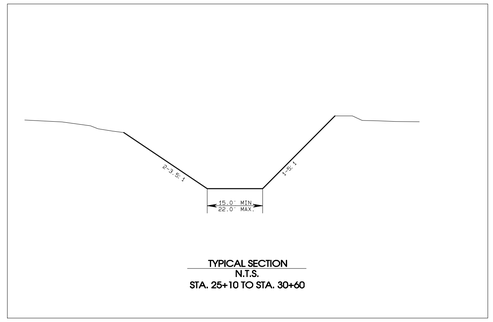


RIPRAPPED DOWNDRAIN SCHEDULE

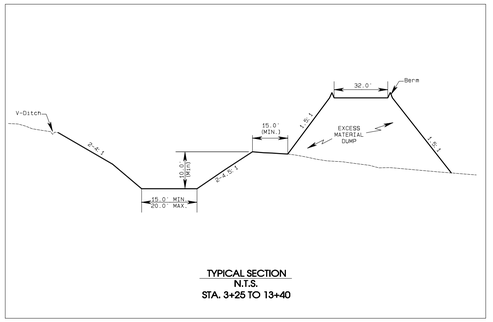
LOCATION	L (ft)			S (%)								
LOCATION	L-1	L-2	L-3	S-1	S-2	S-3	Z	W (ft)	H (ft)	T (ft)	Dsg. ROCK SIZE (IN)
1+59	34.8	22.0		15.8	-2.5		2-3	4	1.25	1.0	12
3+55	11.4	26.6		24.0	18.7		2-3	4	1.0	1.0	12
7+43	18.4	21.7		20.5	8.0		2	3	1.0	1.0	12
9+89	44.4	25.0		24.0	13.0		2-3	3	1.25	1.0	9
20+84			33.4			21.5	3	5	1	1.0	9
26+16			31.7			23.5	2-3	4	1.25	1.0	9
29+88			48.0			10.7	3	4	1.0	1.0	9



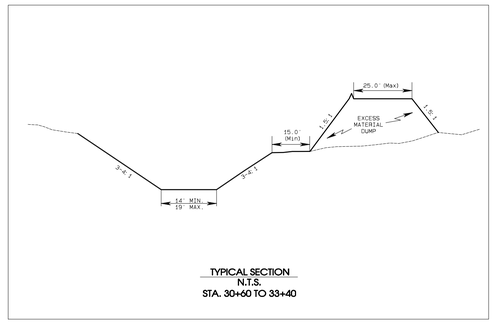
TYPICAL SECTION
N.T.S.
STA. 0+00 TO 3+25



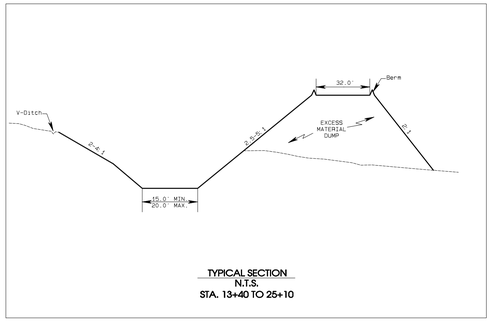
TYPICAL SECTION
N.T.S.
STA. 25+10 TO STA. 30+60



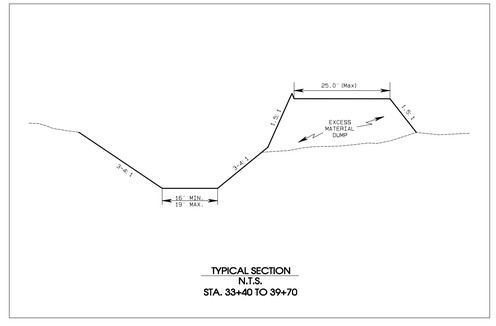
TYPICAL SECTION
N.T.S.
STA. 3+25 TO 13+40



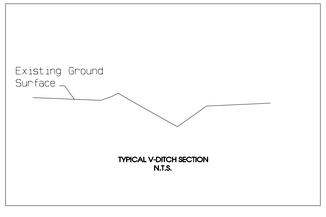
TYPICAL SECTION
N.T.S.
STA. 30+60 TO 33+40



TYPICAL SECTION
N.T.S.
STA. 13+40 TO 25+10



TYPICAL SECTION
N.T.S.
STA. 33+40 TO 39+70



TYPICAL V-DITCH SECTION
N.T.S.

CERTIFICATION STATEMENT

I, Leonard Raymond, hereby certify that this Diversion has been constructued in accordance with the approved design plans and that the information shown is complete and accurate to the best of my knowledge, except as noted below.

LEONARD RAYMOND
NEW MEXICO
5600
REGISTERED PROFESSIONAL ENGINEER

NOTES:

1. The bottom width, side slopes and grade of both the diversion channel and the riprapped downdrains were not constructed in accordance with the approved design plans. Design checks were made on these structure to ensure their adequacy and compliance with design stanards. For supporting design data refer to Chapter 11 Appendix 11-QQ as-built data of the mine permit.
2. The downdrain at Statin 3+92 did not require riprap material, the downdrain is in competent sandstone formation.
3. Berms, v-ditches, and silt fences were installed to control drainage and sediment from the excess material dump.

REV NO.	DESCRIPTION	REV BY	DATE
1	SUBMITTED TO DOM FOR REVIEW	PJF	7-12-02
2			
3			
4			
5			

PROJECT MANAGER: Steve Smith
ENGR. of RECORD: Leonard Raymond
REG. NO. 5600
SRVYR of RECORD: W. Benally
REG. NO. 11952

BHP BILLITON NAVAJO COAL CO.
NAVAJO MINE
PO BOX 1717, FRUITLAND, NEW MEXICO, 87416

ACCOUNT:
DATE PREPARED BY: JUNE 17, 2002
PREPARED BY: PJFOSTER
DRAWN BY: PJFOSTER
CHECKED BY: LRAYMOND
APPROVED BY: LRAYMOND

PLAN, PROFILE, SECTIONS AN DETAILS

EXHIBIT 11-142E
NORTH FORK DIVERSION
CHANNEL
AS-BUILT

DRAWING
P/P-2

SHEET 2
OF 2

G:\Department\GIS\DOM_SURVEYS_PROJ\CH_11_PAP EXHIBIT\11-142-N FORK DIV CHAN\NORTH FORK DIVERSION\EXH_11-142D_E_AS-BUILT.dwg
PJFoster Tue Aug 19 16:46:56 2025