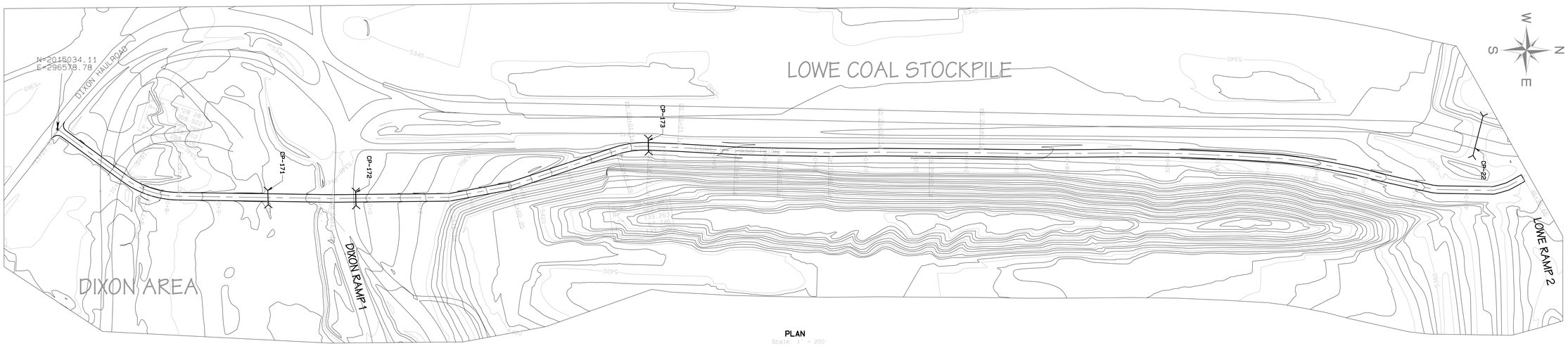
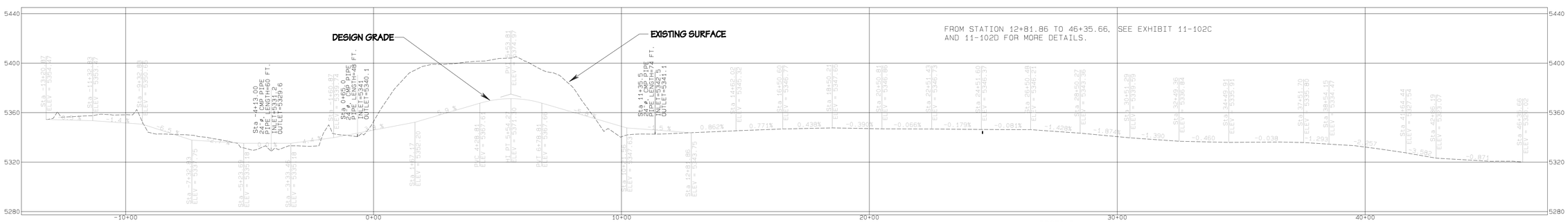
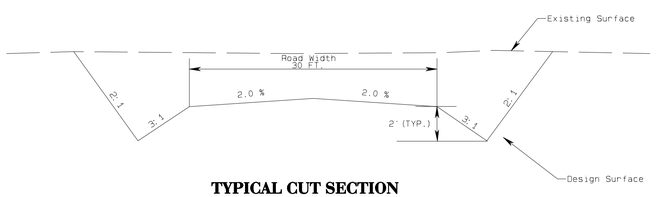


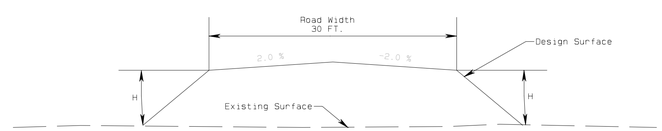
PLAN
Scale: 1" = 200'



PROFILE
HORIZONTAL - 1"=200'
VERTICAL - 1"=40'

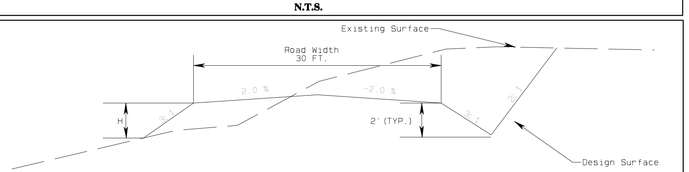


TYPICAL CUT SECTION
FROM STA.-13+20.87 TO -1+10.0
N.T.S.



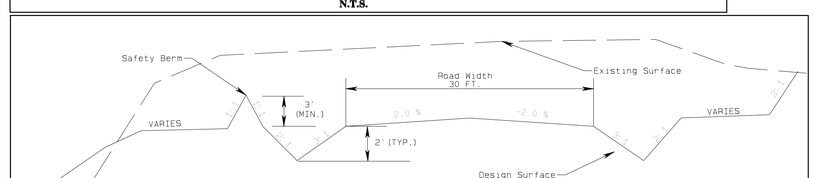
H ≤ 4.0' SIDE SLOPE = 3:1
H > 4.0' SIDE SLOPE = 2:1,
WITH SAFETY BERM

TYPICAL FILL SECTION
FROM STA.-13+20.87 TO -1+10.0
N.T.S.

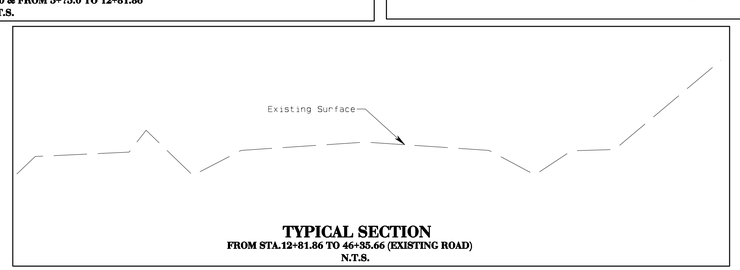


H ≤ 4.0' SIDE SLOPE = 3:1
H > 4.0' SIDE SLOPE = 2:1,
WITH SAFETY BERM

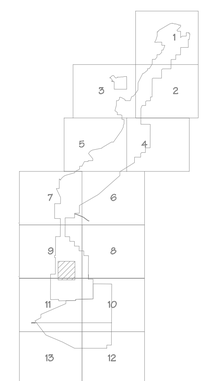
TYPICAL CUT & FILL SECTION
FROM STA.-13+20.87 TO -1+10.0 & FROM 5+75.0 TO 12+81.86
N.T.S.



TYPICAL SECTION
FROM STA.-1+10.0 & TO 5+75.0
N.T.S.



TYPICAL SECTION
FROM STA.12+81.86 TO 46+35.66 (EXISTING ROAD)
N.T.S.



SCALE AS NOTED

LEGEND

- ROAD
- WATERSHED
- BUILDING
- FENCE
- IRRIGATION LINE
- CULVERT
- DAM
- DRAINAGE
- RAILROAD
- TREES
- POWERLINE
- ×5338.5 SPOT ELEVATION
- 5300 INDEX CONTOUR
- 5299 INTERMEDIATE CONTOUR
- 218 5422.45 LEASE CORNER
- L-30 PERMIT/LEASE BOUNDARY

NOTES

1. For hydrology and design information refer to Appendix 11-V in the approved PAP.
2. The watershed areas for culverts are shown on Exhibit 11-12E.

CERTIFICATION STATEMENT

I, Leonard Raymond, hereby certify that this drawing was reviewed by me and that the information shown is complete and accurate to the best of my knowledge.

LEONARD RAYMOND
NEW MEXICO
6600
REGISTERED PROFESSIONAL ENGINEER

REV NO.	DESCRIPTION	REV BY	DATE
1	SUBMITTED TO OSM FOR APPROVAL		02-7-03
2			
3			
4			
5			

PROJECT MANAGER: DEREK RANSON
ENGR. AT RECORD: LEONARD RAYMOND
REG. NO. 6600
SRVYR. AT RECORD:
REG. NO.

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

ACCOUNT: PERMITTING-NB54
DATE: February 7, 2003
DESIGNED BY: RY
DRAWN BY: B
CHECKED BY: LR
APPROVED BY:

PLAN, PROFILE AND SECTIONS

EXHIBIT 11-102A
LOWE BY-PASS ROAD MODIFICATION DESIGN

DRAWING

SHEET 1 OF 1

Path: G:\Departments\GIS\BP_SUBMITTAL\PROJECTS_11_PAP EXHIBIT\11-102-LOWE BY-PASS\EXHIBITS\Lowe Bypass Modification Road.dwg