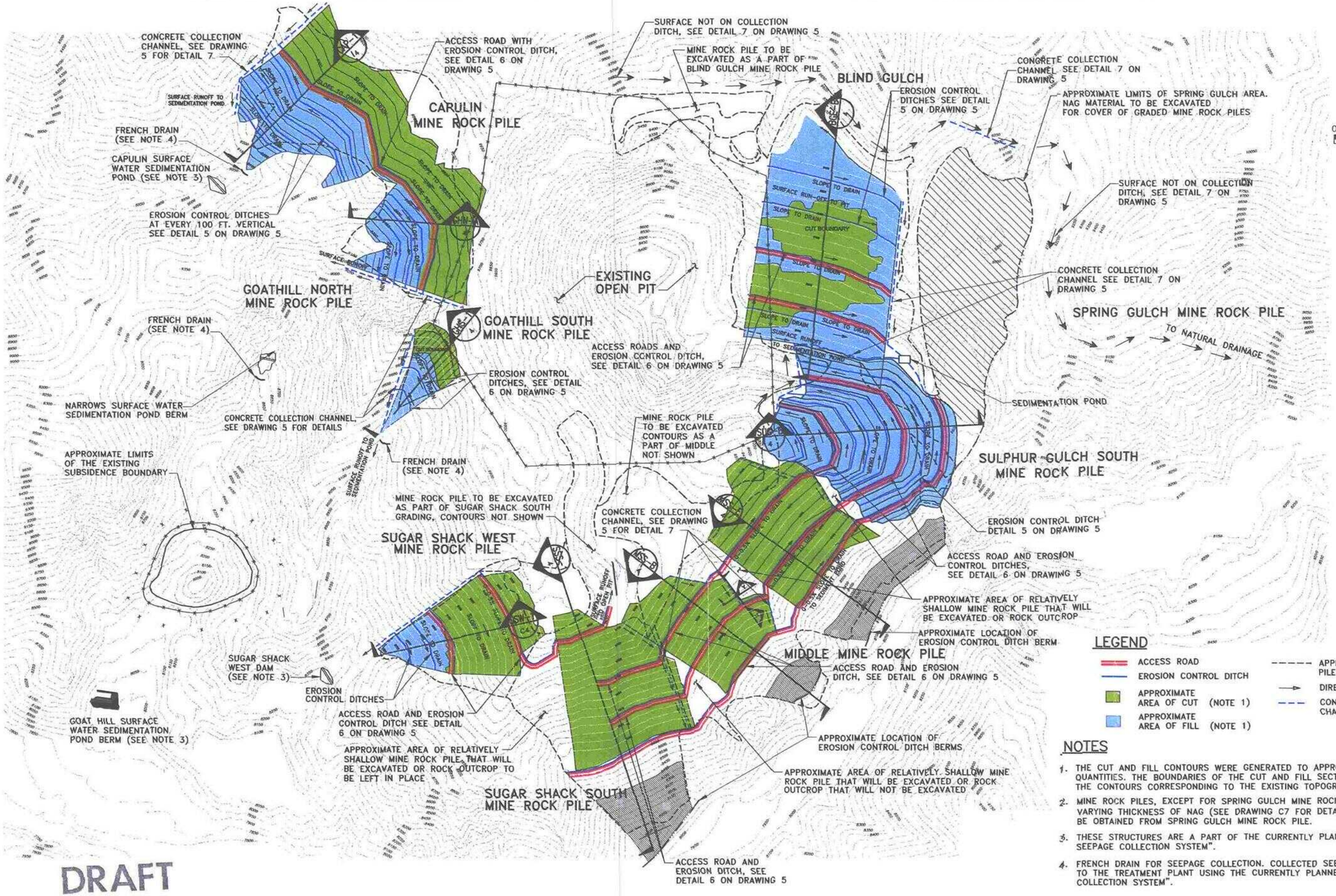


NOTES

1. THE CUT AND FILL CONTOURS WERE GENERATED TO APPROXIMATELY ESTIMATE EARTHWORK QUANTITIES. THE BOUNDARIES OF THE CUT AND FILL SECTIONS HAVE NOT BEEN TIED TO THE CONTOURS CORRESPONDING TO THE EXISTING TOPOGRAPHY.
2. MINE ROCK PILES, EXCEPT FOR SPRING GULCH MINE ROCK PILE, WILL BE COVERED WITH VARYING THICKNESS OF NAG (SEE DRAWING C7 FOR DETAILS). THE NAG MATERIAL WILL BE OBTAINED FROM SPRING GULCH MINE ROCK PILE.
3. THESE STRUCTURES ARE A PART OF THE CURRENTLY PLANNED "STORM WATER AND SEEPAGE COLLECTION SYSTEM".
4. FRENCH DRAIN FOR SEEPAGE COLLECTION. COLLECTED SEEPAGE SHALL BE CONVEYED TO THE TREATMENT PLANT USING THE CURRENTLY PLANNED "STORM WATER AND SEEPAGE COLLECTION SYSTEM".

DRAFT

LOC: DENVER	PROJ. # 6800044388
DATE: 2/09/01	TASK # 600
MANMOLY-1	
(s)	

URS
Stanford Place 3, Suite 1000
4582 South Ulster St.
Denver, CO 80237-2637

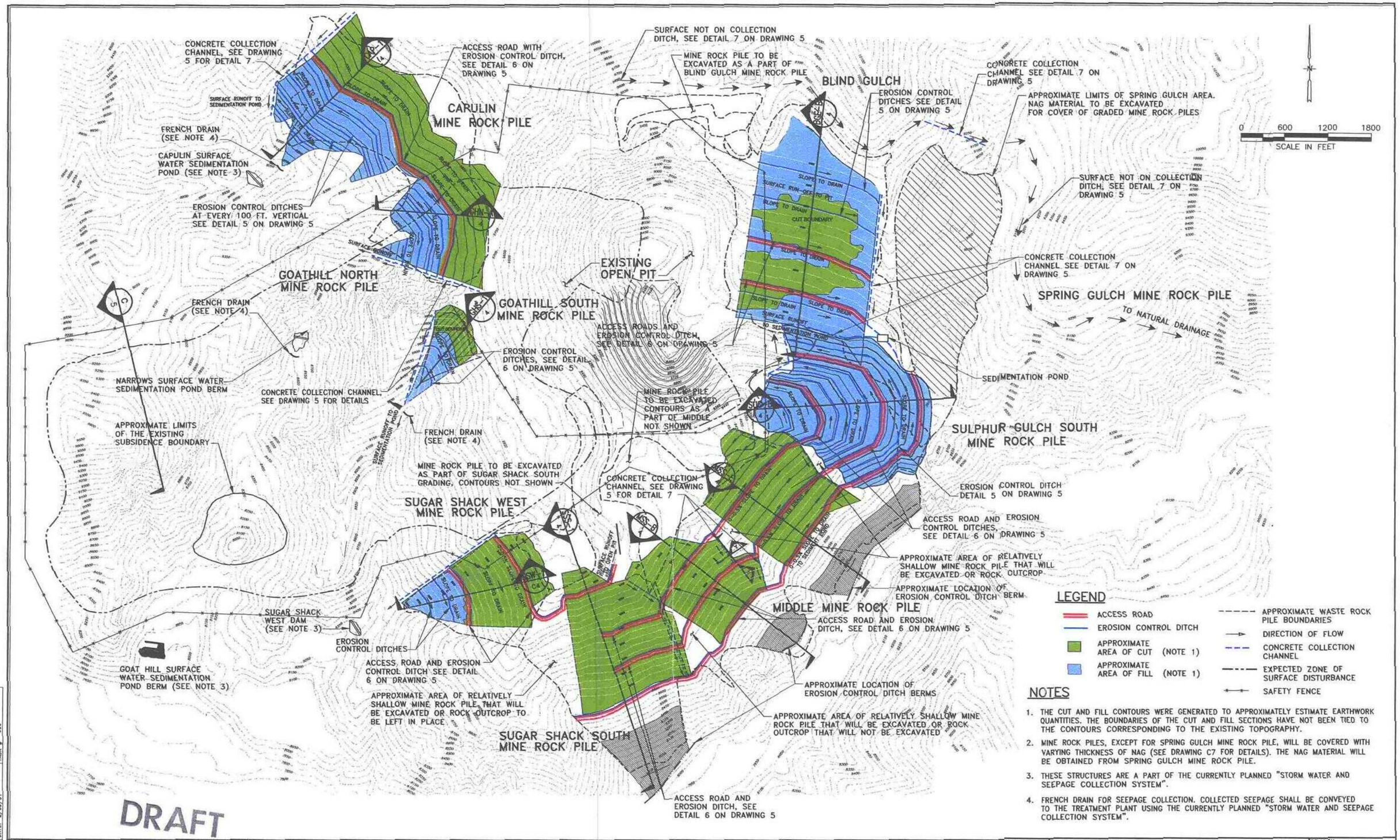
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS

DESIGNED:	PGM
DRAWN:	WDH
CHECKED:	JHS
PEER REVIEWED:	DLJ
PROJECT MANAGER:	WSE

MOLYCORP QUESTA, NEW MEXICO

MINE ROCK PILE, SUBSIDENCE ZONE AND OPEN PIT CLOSURE PLAN VIEW CURRENT CONDITIONS

REVISION 0
PROJECT 6800044388.00
DRAWING 1



LEGEND

- ACCESS ROAD
- EROSION CONTROL DITCH
- APPROXIMATE AREA OF CUT (NOTE 1)
- APPROXIMATE AREA OF FILL (NOTE 1)
- APPROXIMATE WASTE ROCK PILE BOUNDARIES
- DIRECTION OF FLOW
- CONCRETE COLLECTION CHANNEL
- EXPECTED ZONE OF SURFACE DISTURBANCE
- SAFETY FENCE

NOTES

1. THE CUT AND FILL CONTOURS WERE GENERATED TO APPROXIMATELY ESTIMATE EARTHWORK QUANTITIES. THE BOUNDARIES OF THE CUT AND FILL SECTIONS HAVE NOT BEEN TIED TO THE CONTOURS CORRESPONDING TO THE EXISTING TOPOGRAPHY.
2. MINE ROCK PILES, EXCEPT FOR SPRING GULCH MINE ROCK PILE, WILL BE COVERED WITH VARYING THICKNESS OF NAG (SEE DRAWING C7 FOR DETAILS). THE NAG MATERIAL WILL BE OBTAINED FROM SPRING GULCH MINE ROCK PILE.
3. THESE STRUCTURES ARE A PART OF THE CURRENTLY PLANNED "STORM WATER AND SEEPAGE COLLECTION SYSTEM".
4. FRENCH DRAIN FOR SEEPAGE COLLECTION. COLLECTED SEEPAGE SHALL BE CONVEYED TO THE TREATMENT PLANT USING THE CURRENTLY PLANNED "STORM WATER AND SEEPAGE COLLECTION SYSTEM".

LOC.	DENVER
DATE:	2/09/01
PROJ. #	6800044388
TASK #	600
FILE	HANNOLY-2
	1=1

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Denver, CO 80237-2637

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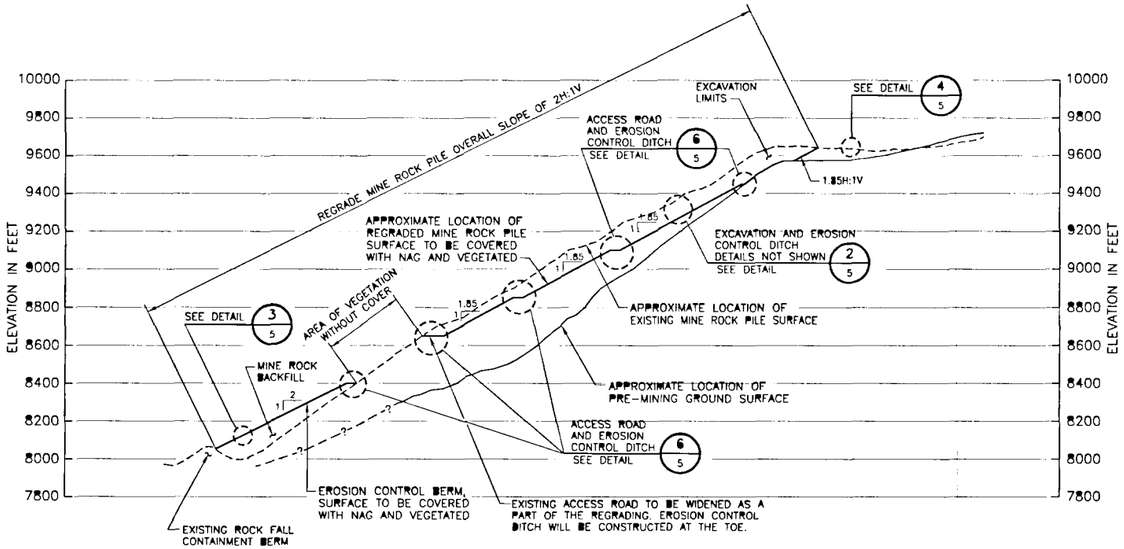
DRAWN:	WDH
CHECKED:	JHS
PEER REVIEWED:	DLJ
PROJECT MANAGER:	WSE

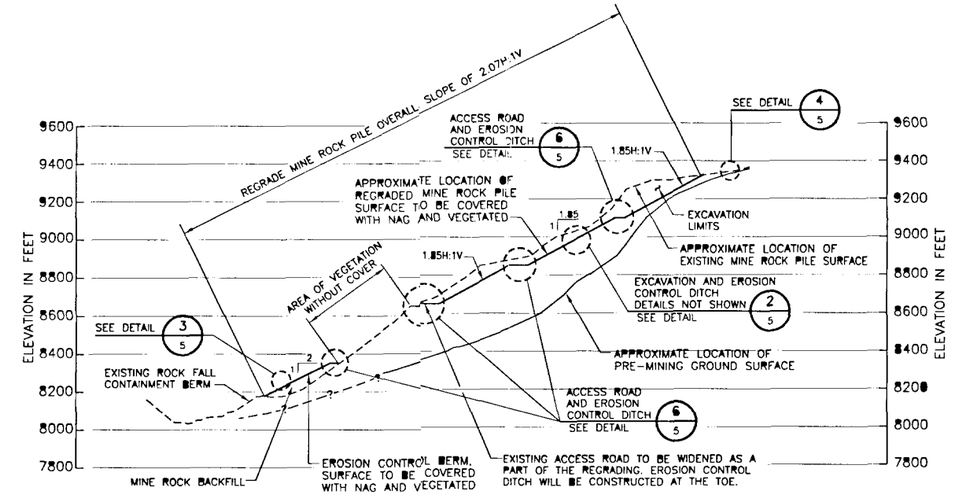
MOLYCORP — QUESTA, NEW MEXICO

CUT/FILL GRADING AND NAG COVER MINE ROCK PILES ALTERNATIVE POST MINING CONDITIONS

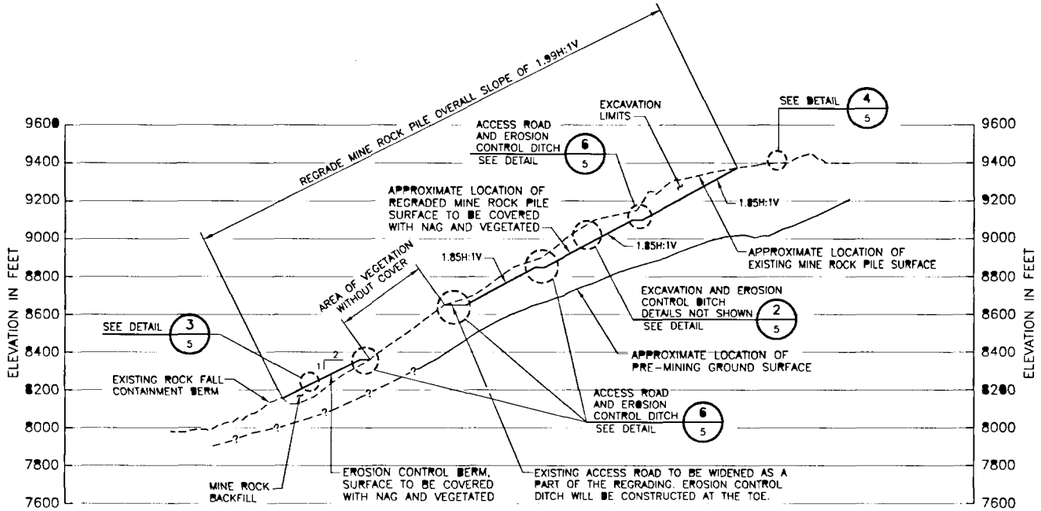
REVISION 0
PROJECT 6800044388.00
DRAWING 2



SUGAR SHACK SOUTH MINE ROCK PILE
SECTION SSS-1



MIDDLE 2 MINE ROCK PILE
SECTION MSS-E



MIDDLE 1 MINE ROCK PILE
SECTION MSS-B

DRAFT

0 200 400 800 1200
SCALE IN FEET

NOTES

1. SEE DRAWING 1 AND 2 FOR LOCATION OF SECTIONS.
2. THE MINE ROCK PILE SURFACE WILL BE COVERED WITH MINIMUM OF 3 FEET OF NAG MATERIAL IN ACCORDANCE WITH THE DETAILS SHOWN ON DRAWING 5. ALL SURFACES OF MINE ROCK PILE WILL BE VEGETATED.

REV	DESCRIPTION OF REVISION	BY	DATE
0			
1			
2			
3			
4			
5			

FILE # HANMOLY-3 | LOC. DENVER | PROJ. # 68000443.88
SCALE 1=400 | DATE: 12/27/00 | TASK # 700

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Stanford Place 3, Suite 1000
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Denver, CO 80237-2637
(303) 694-2770

WARNING
0 ½ 1
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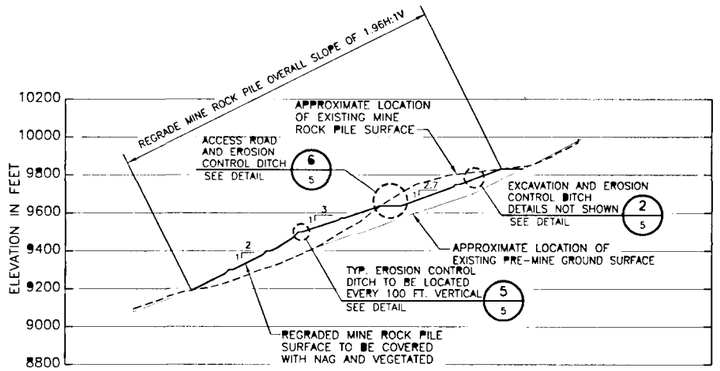
DESIGNED: PGM
DRAWN: WDH
CHECKED: –
PEER REVIEWED: DLJ
PROJECT MANAGER: WSE
DATE: 2/09/01

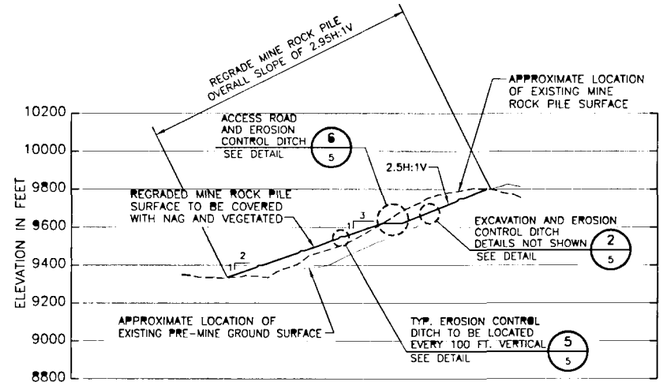
MOLYCORP, INC. QUESTA, NEW MEXICO

MINE ROCK PILE CLOSURE

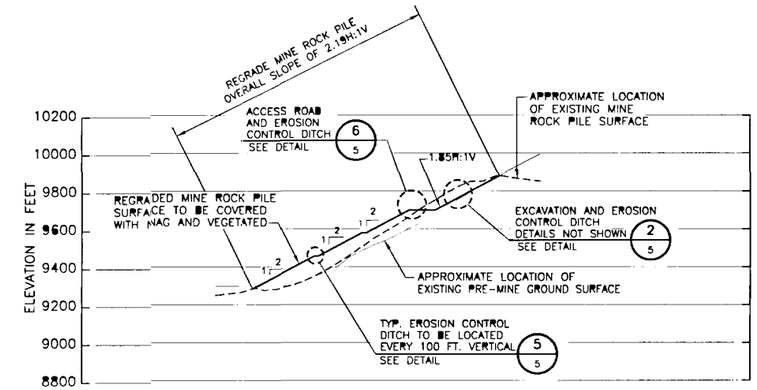
REVISION 0
PROJECT 68000443.88
DRAWING 3
SHEET OF



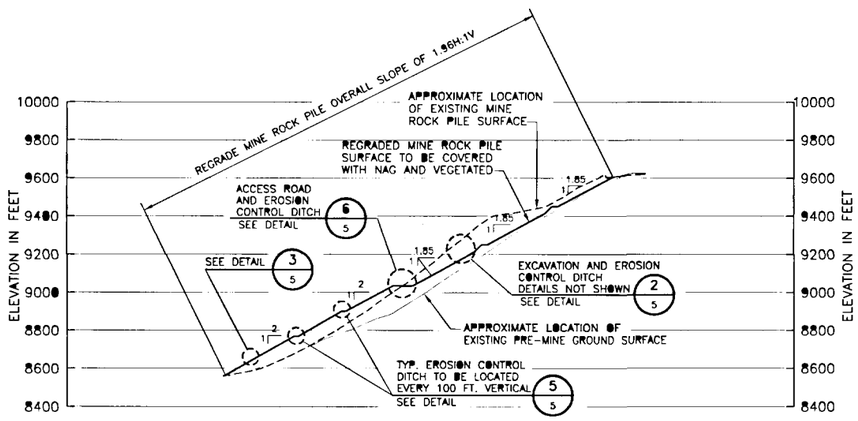
CAPULIN MINE ROCK PILE
SECTION CAP-1



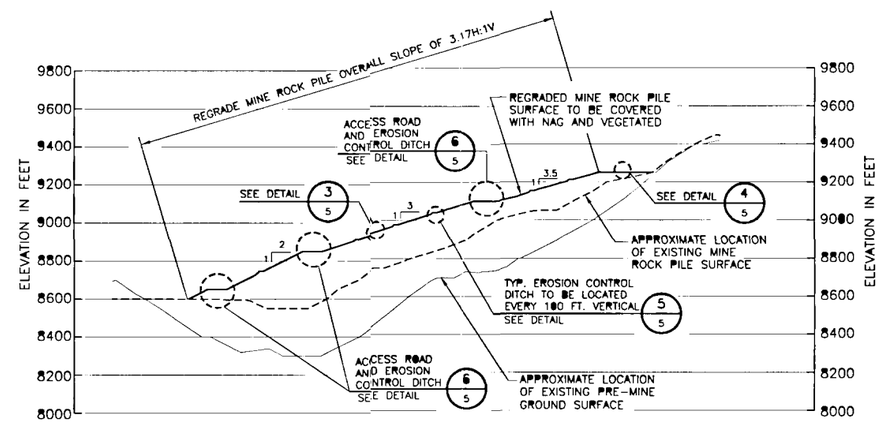
GOAT HILL NORTH MINE ROCK PILE
SECTION GHN-A



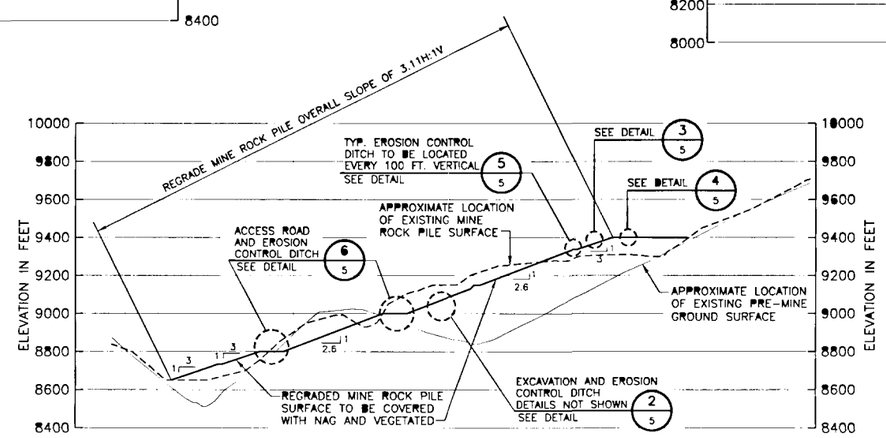
GOAT HILL SOUTH MINE ROCK PILE
SECTION GHS-1



SUGAR SHACK WEST MINE ROCK PILE
SECTION SSW-1



SULFUR GULCH MINE ROCK PILE
SECTION SUG-B



BLIND GULCH EAST MINE ROCK PILE
SECTION BG-B

0 200 400 800 1200
SCALE IN FEET

NOTES

1. SEE DRAWINGS 1 AND 2 FOR LOCATION OF SECTIONS.
2. THE MINE ROCK PILE SURFACE WILL BE COVERED WITH MINIMUM 3.0 FT. OF NAG MATERIAL IN ACCORDANCE WITH THE DETAILS SHOWN ON DRAWING 5. ALL SURFACES OF COVERED MINE ROCK PILE WILL BE VEGETATED.

DRAFT

REV	DESCRIPTION OF REVISION	BY	DATE

URS
Stanford Place 3, Suite 1000
4582 South Ulster St.
Denver, CO 80237-2637
(303) 694-2770

WARNING
0 ½ 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

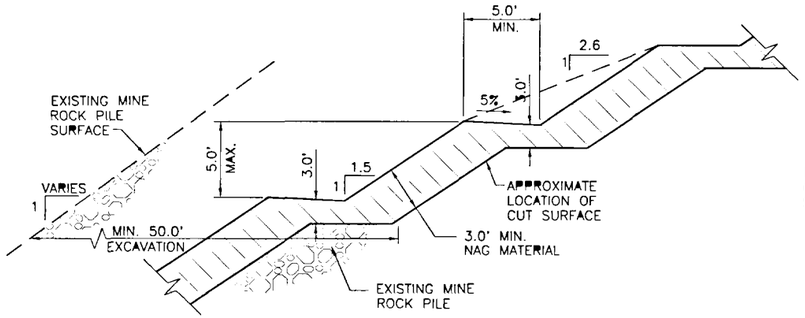
DESIGNED: PGM
DRAWN: WBH
CHECKED: –
PEER REVIEWED: DLJ
PROJECT MANAGER: WSE
DATE: 2/09/01

MOLYCORP, INC. QUESTA, NEW MEXICO

MINE ROCK PILE CLOSURE

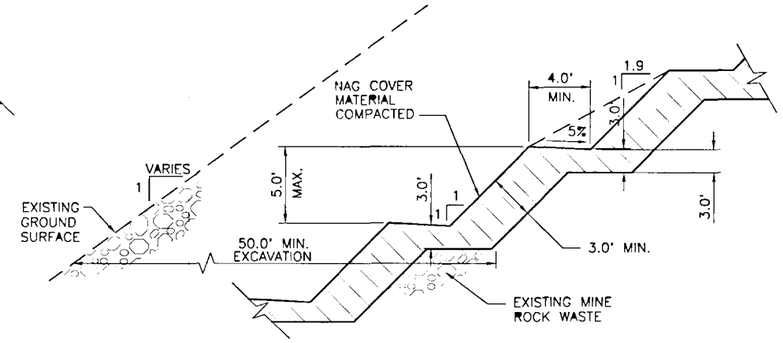
REVISION 0
PROJECT 6800044388.00
DRAWING 4
SHEET OF

FILE # HANMOLY-4 LOC. DENVER PROJ. # 6800044388
SCALE 1=40' DATE 12/27/00 TASK # 700



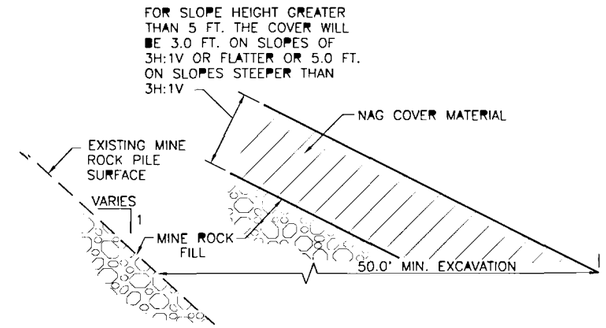
CUT SLOPE COVER DETAIL FOR AN OVERALL EXCAVATION SLOPE OF 2.6H:1V (1)

NOT TO SCALE



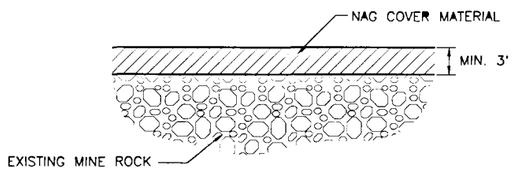
CUT SLOPE COVER DETAIL FOR AN OVERALL EXCAVATION SLOPE OF 1.9H:1V (2)

NOT TO SCALE



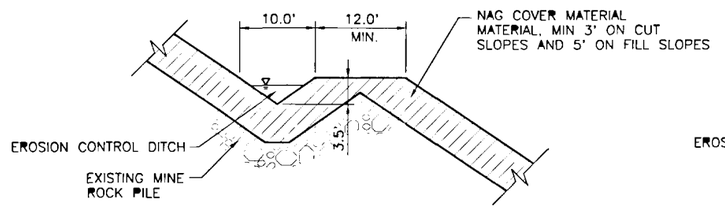
FILL SLOPE COVER DETAIL FOR VARYING SLOPES (3)

NOT TO SCALE



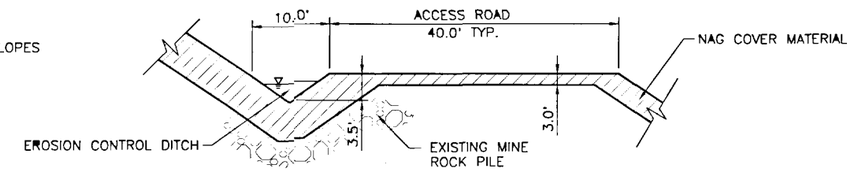
RELATIVELY FLAT COVER DETAIL (4)

NOT TO SCALE



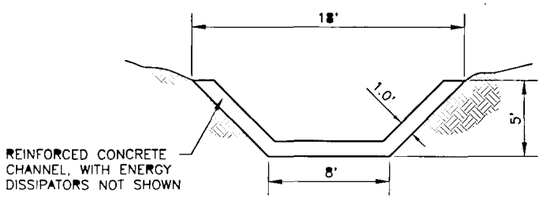
TYPICAL EROSION CONTROL DITCH DETAIL FOR FILL SLOPE AREAS (5)

NOT TO SCALE

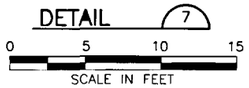


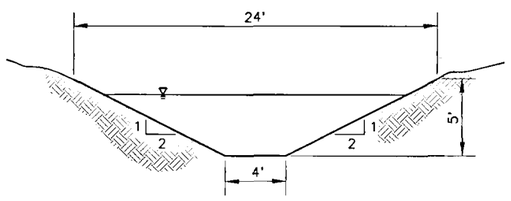
TYPICAL ACCESS ROAD AND EROSION CONTROL DITCH DETAIL FOR FILL AND CUT SLOPE (6)

NOT TO SCALE

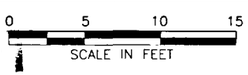


DETAIL (7)

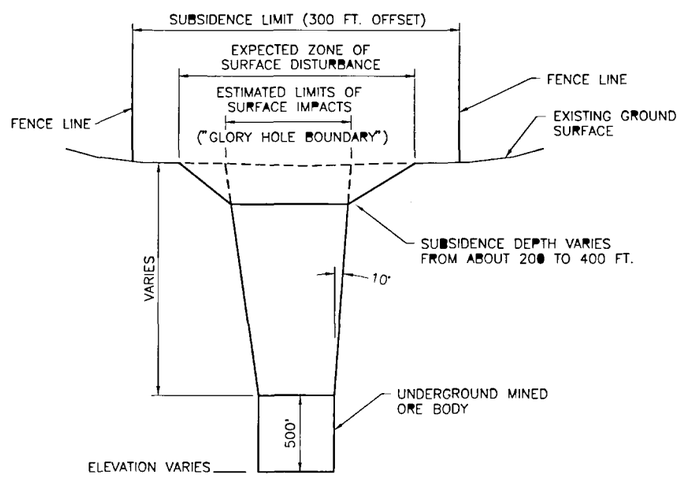




SURFACE RUN-ON DITCH DETAIL (8)

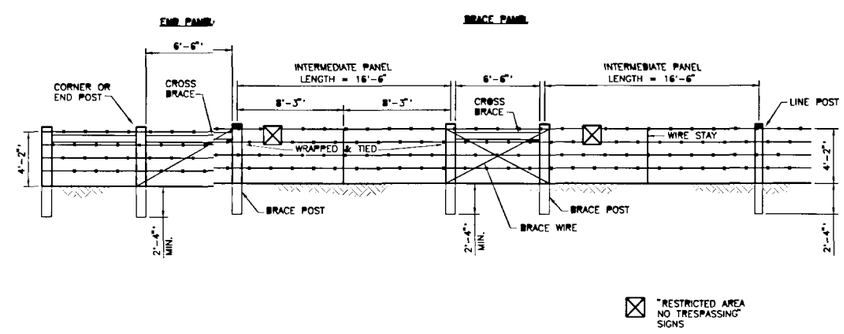


DRAFT



TYPICAL BLOCK CAVING SECTION (C)

NOT TO SCALE



TYPICAL FENCING DETAIL

NOT TO SCALE

REV	DESCRIPTION OF REVISION	BY	DATE

URS

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4582 South Ulster St.
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(303) 694-2770

WARNING

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DESIGNED:	PGM
DRAWN:	WBH
CHECKED:	HAN
PEER REVIEWED:	BLJ
PROJECT MANAGER:	WSE
DATE:	2/99/01

MOLYCORP, INC. QUESTA, NEW MEXICO

MISCELLANEOUS DETAILS

REVISION 0

PROJECT 6800044388.00

DRAWING 5

SHEET OF

FILE # HANMOLY-5.DWG LOC: DENVER PROJ. # 6800044388
SCALE 1=1 DATE: 12/28/00 TASK # 700