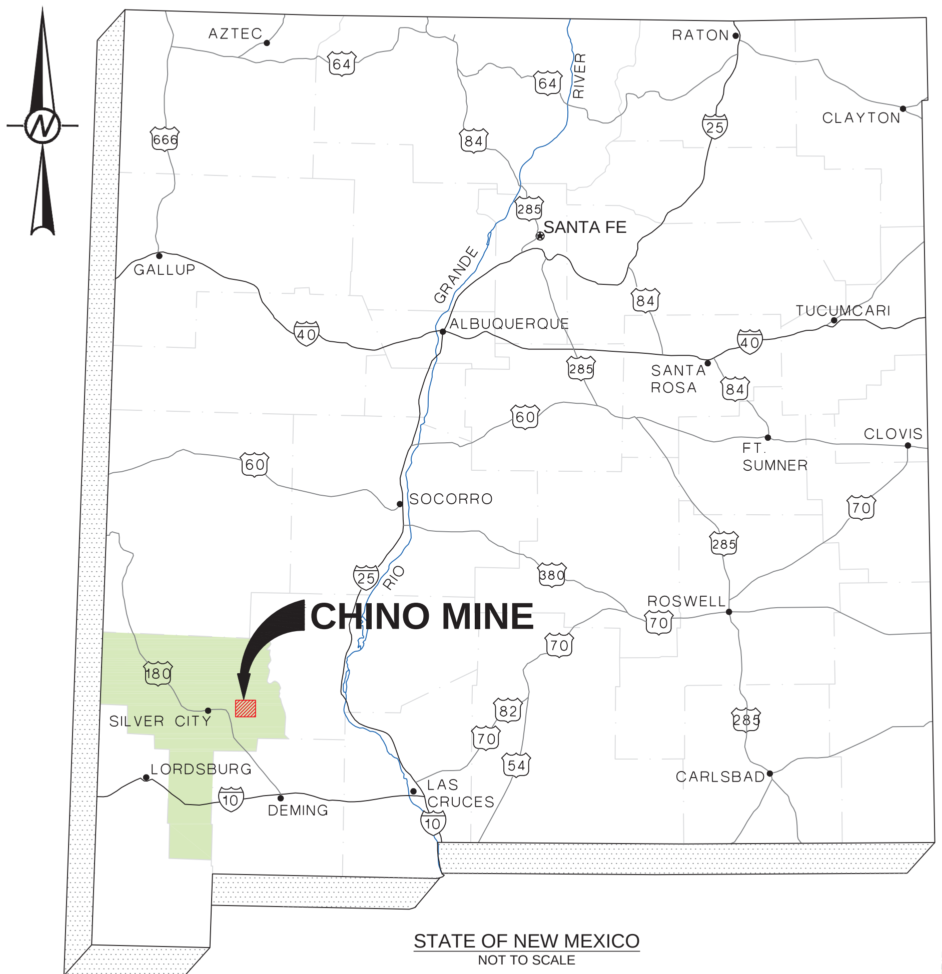
Appendix A

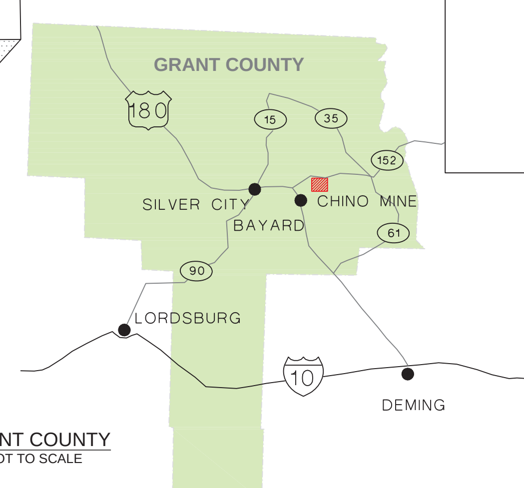
Reclamation Design – Updated Drawings and Quantities/ Takeoffs

Chino Mine Reclamation Drawings

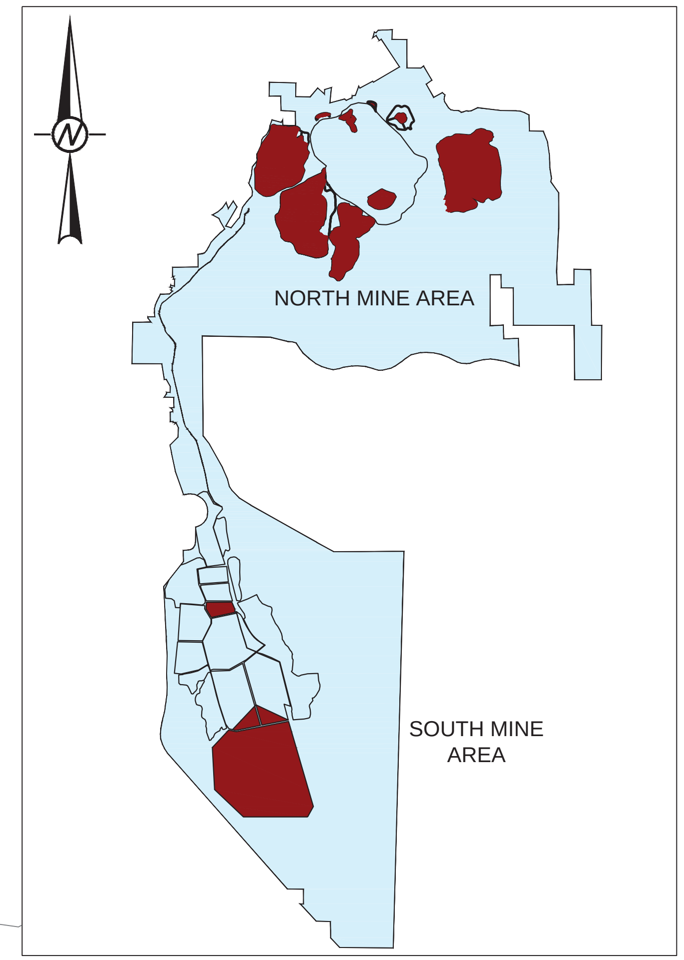
CHINO MINES COMPANY
CHINO MINE AREA RECLAMATION
HURLEY, NEW MEXICO
APRIL 2016



STATE OF NEW MEXICO
NOT TO SCALE



GRANT COUNTY
NOT TO SCALE



CHINO MINE AREA
NOT TO SCALE

SHEET INDEX		
SHEET NUMBER	DRAWING TITLE	REVISION
001	SHEET INDEX AND LOCATION PLAN	C
002	NORTH MINE AREA END OF YEAR 2018 PRE-RECLAMATION TOPOGRAPHY	C
003	NORTH MINE AREA POST-RECLAMATION TOPOGRAPHY	A
004	SOUTH STOCKPILE AND STS2 STOCKPILE GRADING AND DRAINAGE PLAN	C
005	SOUTH STOCKPILE AND STS2 STOCKPILE DESIGN SECTIONS (1 OF 2)	C
006	SOUTH STOCKPILE AND STS2 STOCKPILE DESIGN SECTIONS (2 OF 2)	C
007	LAMPBRIGHT STOCKPILE GRADING AND DRAINAGE PLAN	C
008	LAMPBRIGHT STOCKPILE DESIGN SECTIONS (1 OF 2)	C
009	LAMPBRIGHT STOCKPILE DESIGN SECTIONS (2 OF 2)	C
010	WEST STOCKPILE GRADING AND DRAINAGE PLAN	C
011	WEST STOCKPILE DESIGN SECTIONS (1 OF 3)	C
012	WEST STOCKPILE DESIGN SECTIONS (2 OF 3)	C
013	WEST STOCKPILE DESIGN SECTIONS (3 OF 3)	C
014	NORTH PIT AREA STOCKPILES GRADING AND DRAINAGE PLAN	C
015	NORTH PIT AREA STOCKPILES DESIGN SECTIONS (1 OF 2)	C
016	NORTH PIT AREA STOCKPILES DESIGN SECTIONS (2 OF 2)	C
017	PROPOSED 3A STOCKPILE GRADING AND DRAINAGE PLAN	C
018	PROPOSED 3A STOCKPILE DESIGN SECTIONS	C
019	PLANNED SANTA RITA STOCKPILE GRADING AND DRAINAGE PLAN	C
020	UPPER SOUTH STOCKPILE GRADING AND DRAINAGE PLAN	C
021	NORTH MINE AREA BORROW LOCATIONS AND HAUL ROUTES	C
022	TYPICAL RECLAMATION GRADING DETAILS	C
023	SOUTH MINE AREA END OF YEAR 2018 PRE-RECLAMATION TOPOGRAPHY	C
024	SOUTH MINE AREA POST-RECLAMATION TOPOGRAPHY	A
025	AXI-FLO LAKE GRADING AND DRAINAGE PLAN	C
026	AXI-FLO LAKE DESIGN SECTIONS	C
027	TAILING POND 6 EAST, 6 WEST AND 7 GRADING AND DRAINAGE PLAN	C
028	TAILING POND 6 EAST, 6 WEST AND 7 DESIGN SECTIONS (1 OF 2)	C
029	TAILING POND 6 EAST, 6 WEST AND 7 DESIGN SECTIONS (2 OF 2)	C
030	SOUTH MINE AREA BORROW AREAS & HAUL ROUTES	C

Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED
C	2016-04-12	INCORPORATE CLIENT COMMENTS & ISSUE FOR CLIENT REVIEW	DET	DET	TMF	BRB

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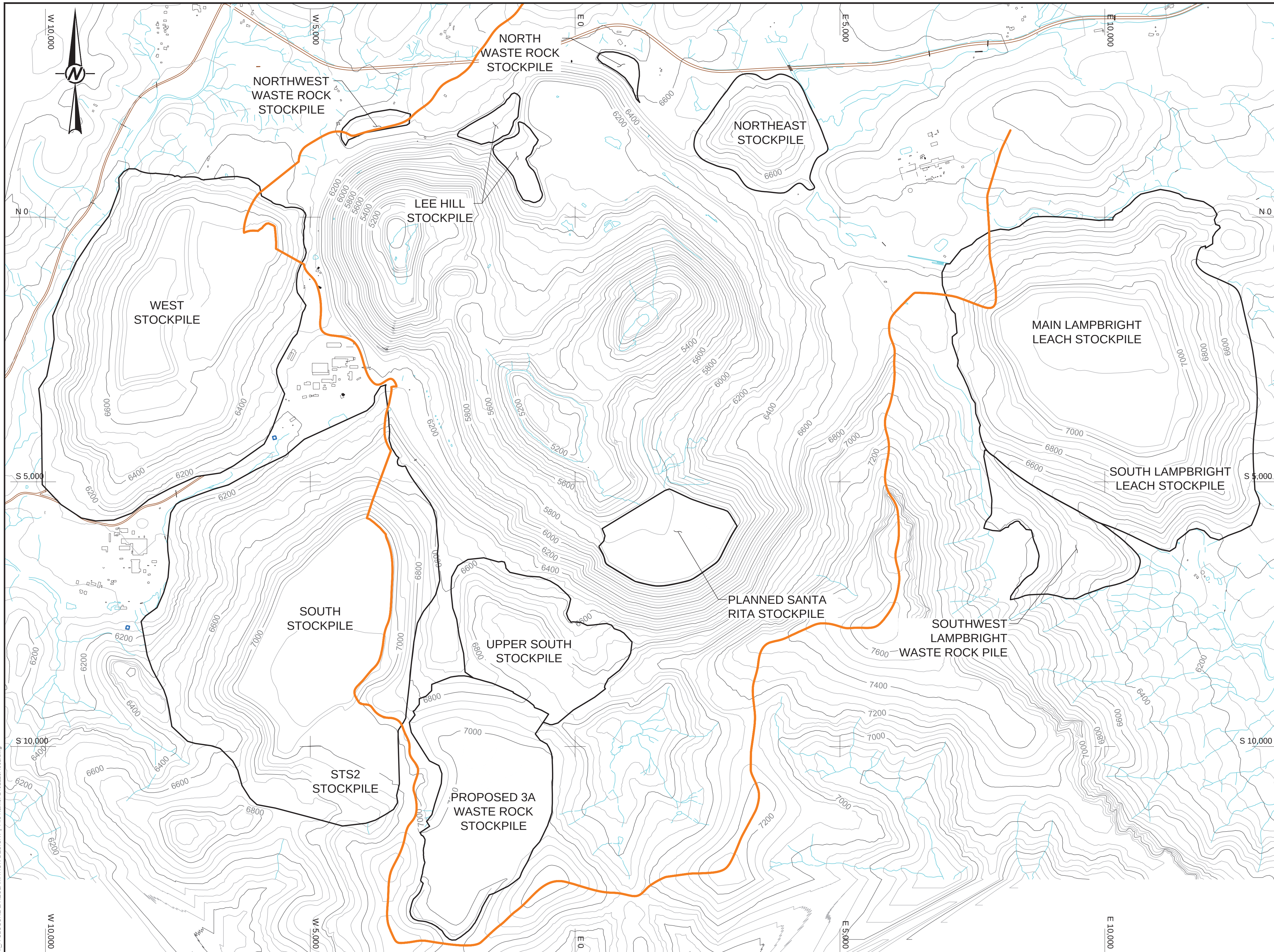
PROJECT
CHINO MINE AREA RECLAMATION
HURLEY, NEW MEXICO

TITLE
SHEET INDEX AND LOCATION PLAN

PROJECT No.	CONTROL	Rev.		FIGURE
1401129		C	1 of 30	001



LEGEND

5600	EOY 2018 TOPO
	BUILDINGS
	PAVED ROAD
	EXISTING DRAINAGE
	FACILITY TOE LIMITS

REFERENCE

1. END OF YEAR 2018 TOPOGRAPHY PROVIDED BY CHINO MINES CO.

0 500 1000
SCALE FEET

Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED
C	2016-04-12	INCORPORATE CLIENT COMMENTS & ISSUE FOR CLIENT REVIEW	CM	CM	TMF	BRB

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PROJECT

CLOSURE/CLOSEOUT PLAN UPDATE
CHINO MINES COMPANY
GRANT COUNTY, NEW MEXICO

TITLE

NORTH MINE AREA END OF YEAR 2018 PRE-RECLAMATION TOPOGRAPHY

PROJECT No.	CONTROL	Rev.		FIGURE
1401129		C	2 of 30	002

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

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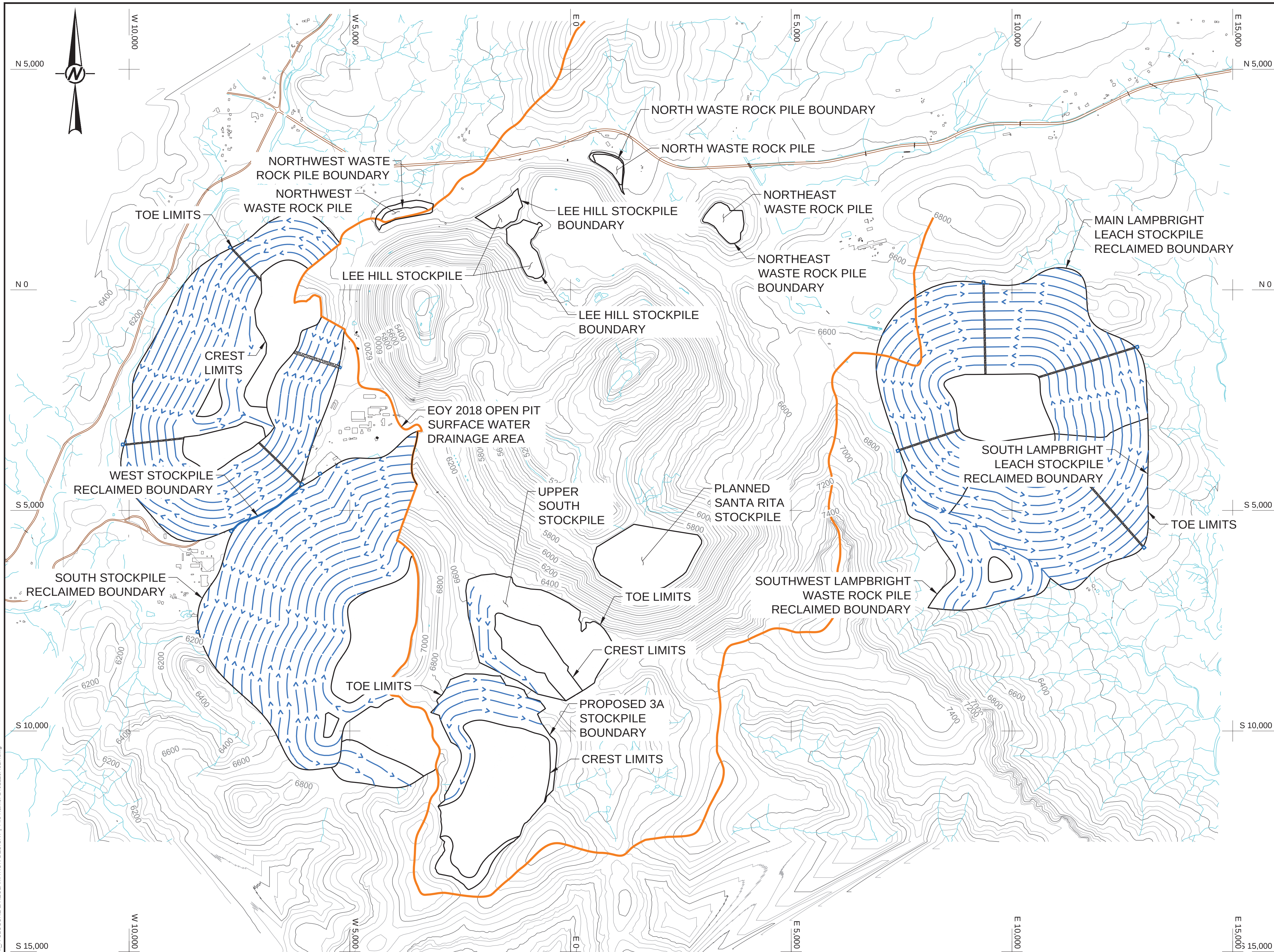

LEGEND

5600	EOY 2018 TOPO
	BUILDINGS
	PAVED ROAD
	EXISTING DRAINAGE
	FACILITY TOE LIMITS
	SURFACE WATER DRAINAGE CHANNEL

REFERENCE

1. END OF YEAR 2018 TOPOGRAPHY PROVIDED BY CHINO MINES CO.

0 1200 2400
SCALE FEET

Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED
A	2016-04-12	INCORPORATE CLIENT COMMENTS & ISSUE FOR CLIENT REVIEW	LRS	DET	TMF	BRB

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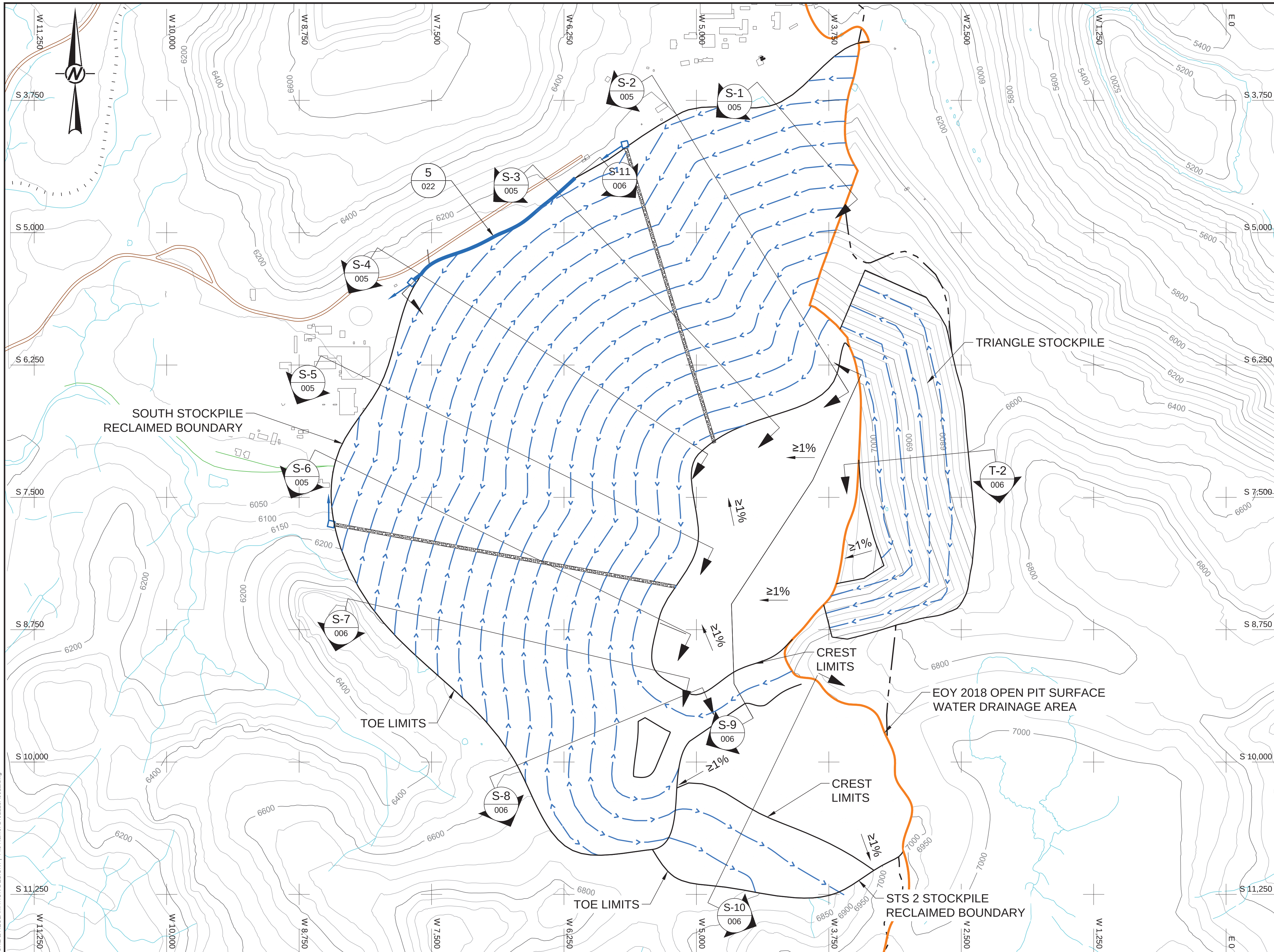
PROJECT
CHINO MINES AREA RECLAMATION
HURLEY, NEW MEXICO

TITLE
NORTH MINE AREA POST-RECLAMATION TOPOGRAPHY

PROJECT No.	CONTROL	Rev.		FIGURE
1401129		A	3 of 30	003



LEGEND

- 5600 — EOY 2018 TOPO
- BUILDINGS
- PAVED ROAD
- DOWNDRAIN OUTFLOW
- EXISTING DRAINAGE
- BENCH CHANNEL
- DOWNDRAIN
- TOE AND TOP SURFACE OUTLINE
- EOY 2018 OPEN PIT SURFACE WATER DRAINAGE AREA
- SURFACE WATER DRAINAGE CHANNEL
- ENERGY DISSIPATOR
- S-7 006 — CROSS SECTION LETTER; SHEET WHERE SECTION IS REFERENCED

REFERENCE

1. END OF YEAR 2018 TOPOGRAPHY PROVIDED BY CHINO MINES CO.

0 500 1000
SCALE FEET

Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED
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C	2016-04-12	INCORPORATE CLIENT COMMENTS & ISSUE FOR CLIENT REVIEW	CM	DET	TMF	BRB

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PROJECT
CHINO MINES AREA RECLAMATION
HURLEY, NEW MEXICO

TITLE
SOUTH STOCKPILE, STS2 STOCKPILE AND TRIANGLE STOCKPILE GRADING AND DRAINAGE PLAN

PROJECT No. 1401129 | CONTROL | Rev. D | 3 of 30 | FIGURE 004

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

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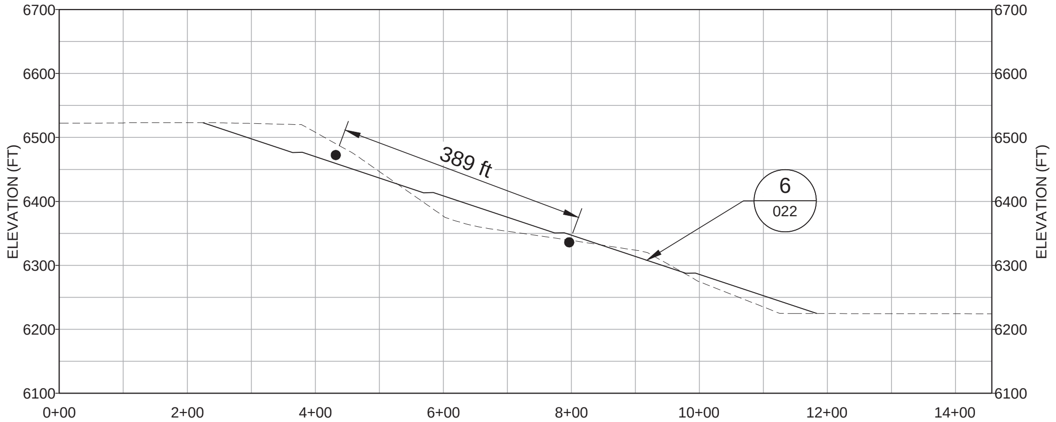

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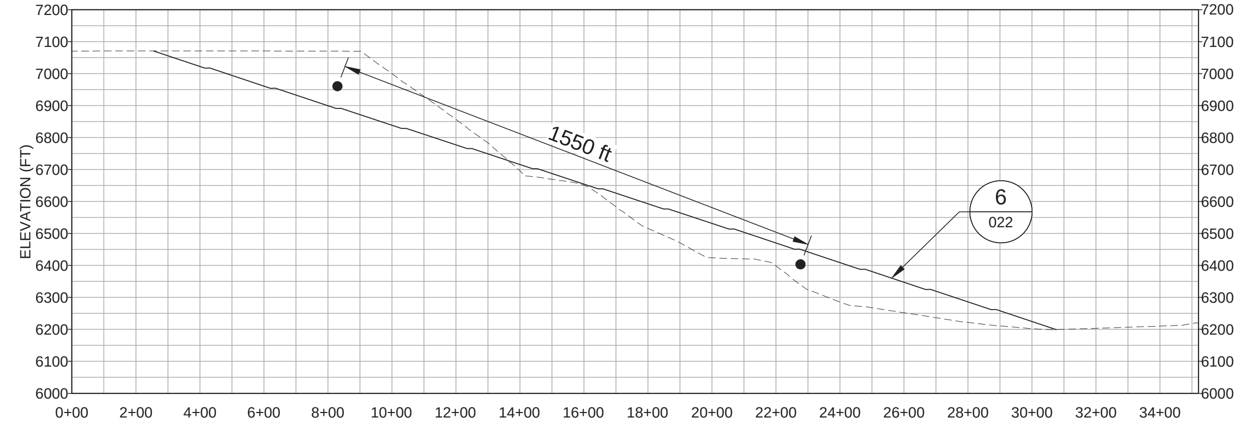


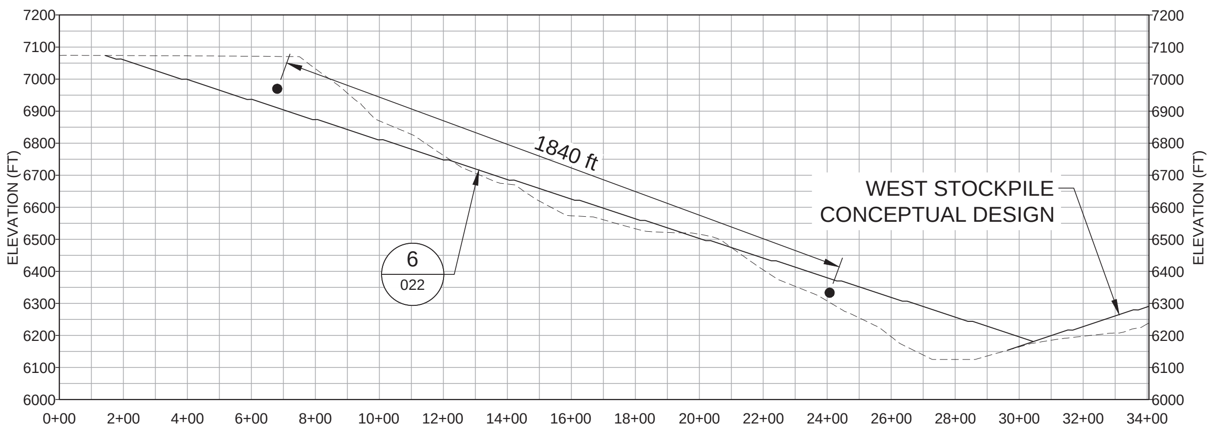
SCALE B S-2 004 SECTION S-2

LEGEND

- EOY 2018 TOPOGRAPHY
- CCP GRADING DESIGN
- CENTROID OF CUT/FILL AREA

REFERENCE

1. END OF YEAR 2018 TOPOGRAPHY PROVIDED BY CHINO MINES CO.



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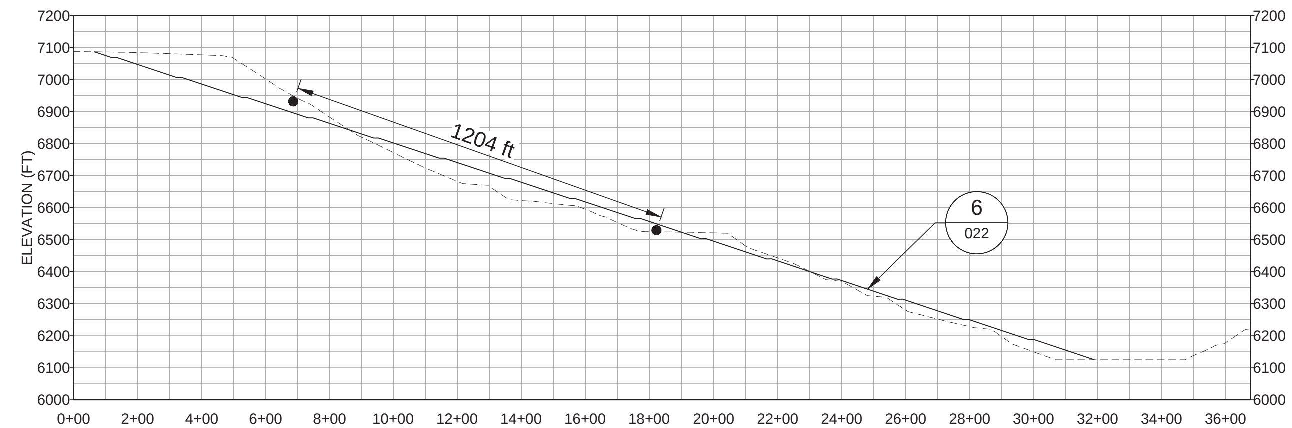

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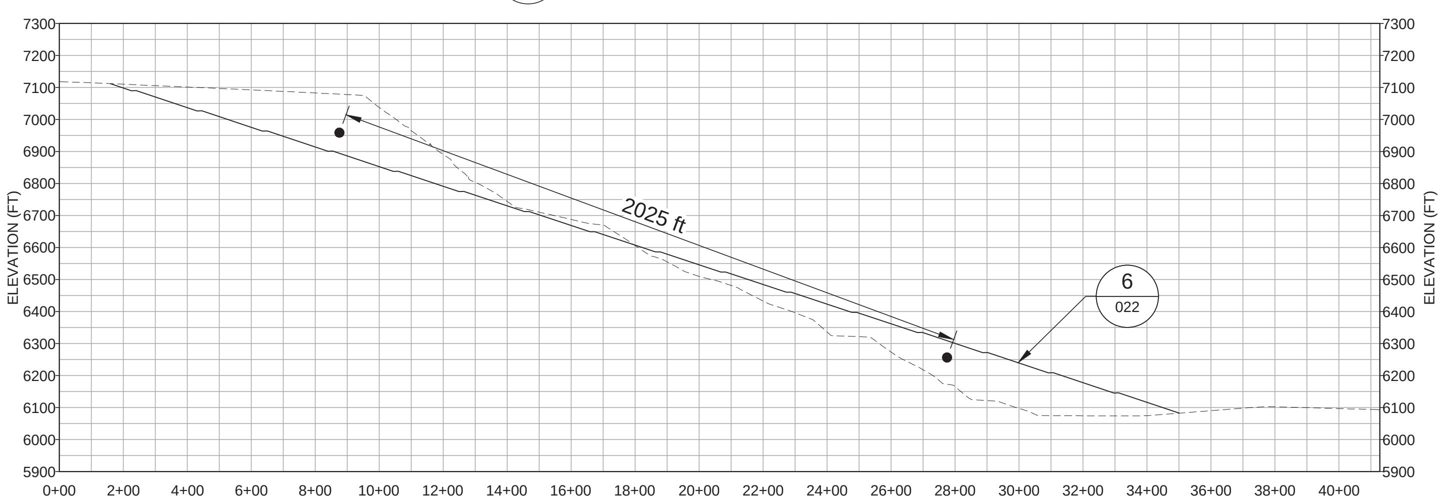

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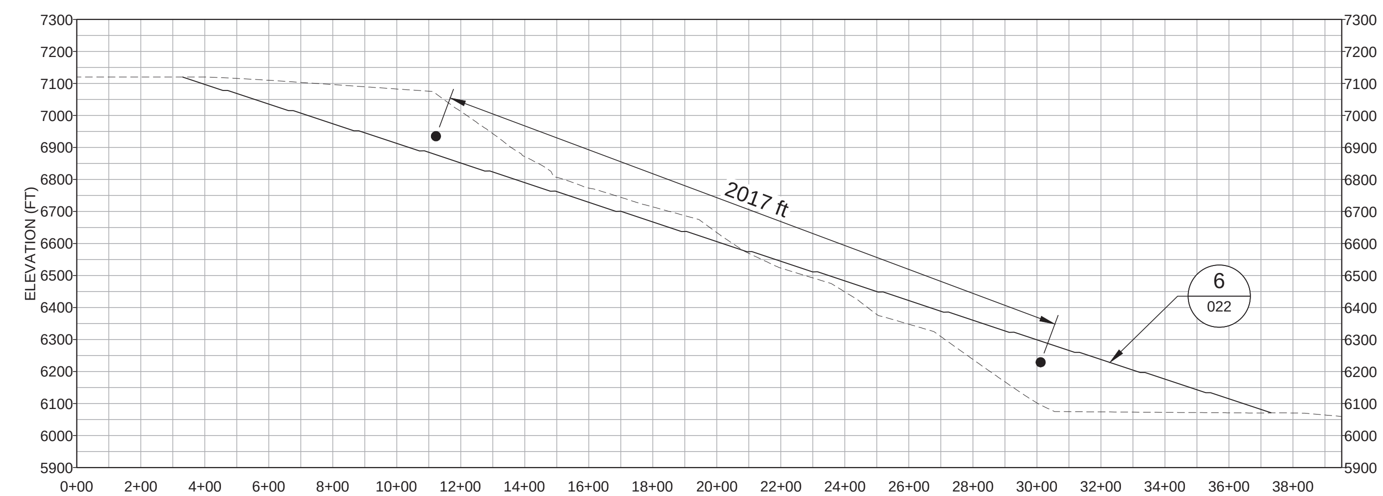

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SCALE A FEET

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SCALE B FEET

Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED
C	2016-04-12	INCORPORATE CLIENT COMMENTS & ISSUE FOR CLIENT REVIEW	DET	DET	TMF	BRB

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PROJECT
CLOSURE/CLOSEOUT PLAN UPDATE
CHINO MINES COMPANY
GRANT COUNTY, NEW MEXICO

TITLE
SOUTH STOCKPILE AND STS2 STOCKPILE DESIGN SECTIONS (1 OF 2)

PROJECT No.	CONTROL	Rev.		FIGURE
1401129		C	4 of 30	005

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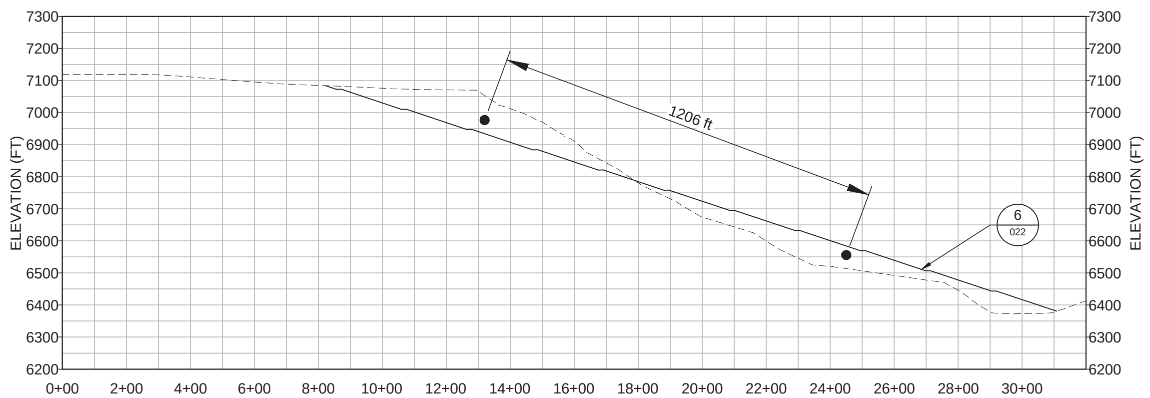
IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

LEGEND

- - - - EOY 2018 TOPOGRAPHY
—— CCP GRADING DESIGN
● CENTROID OF CUT/FILL AREA

REFERENCE

1. END OF YEAR 2018 TOPOGRAPHY PROVIDED BY CHINO MINES CO.



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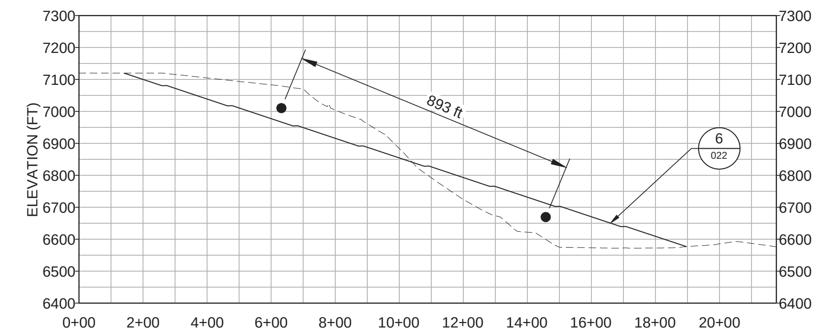

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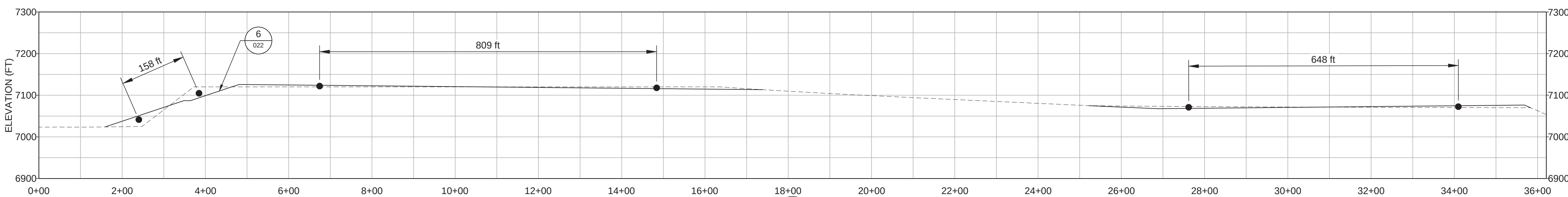

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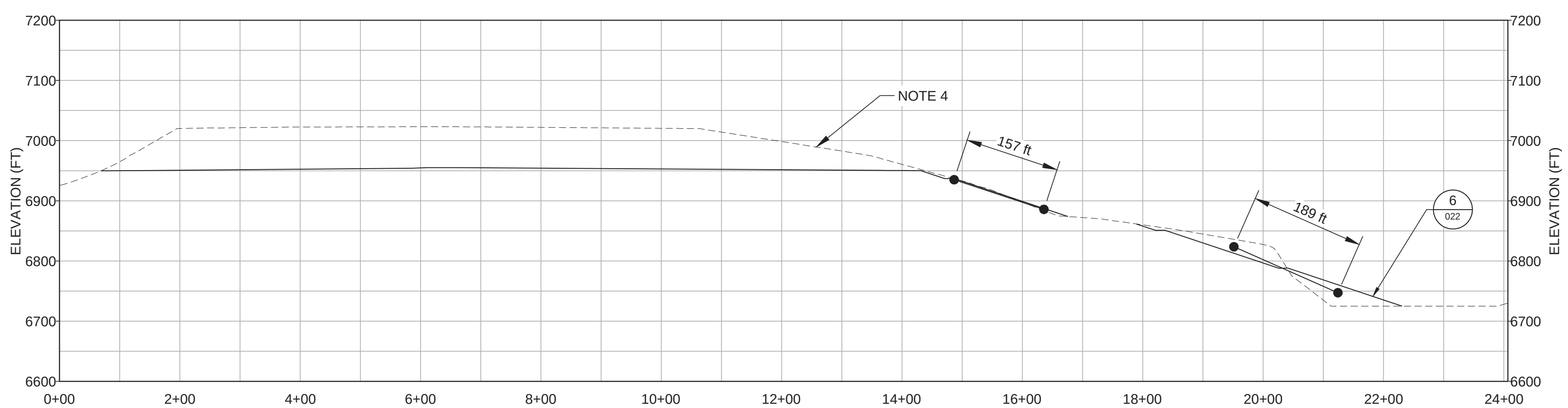

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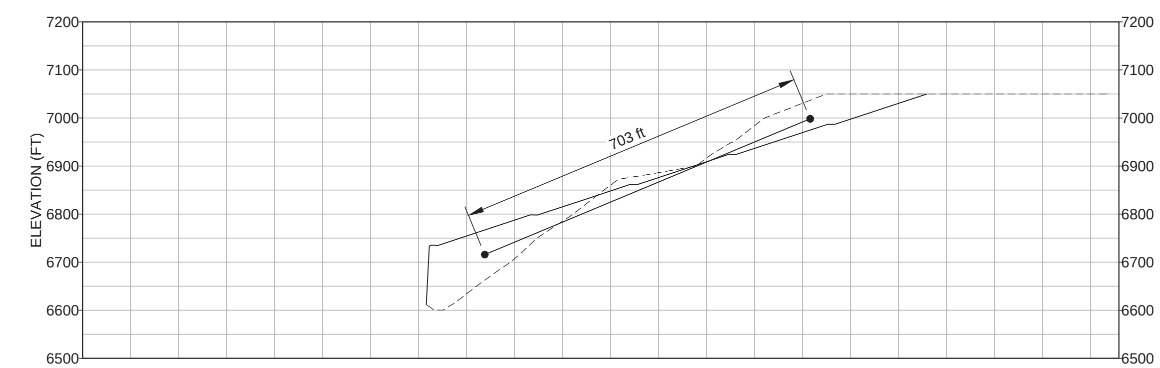

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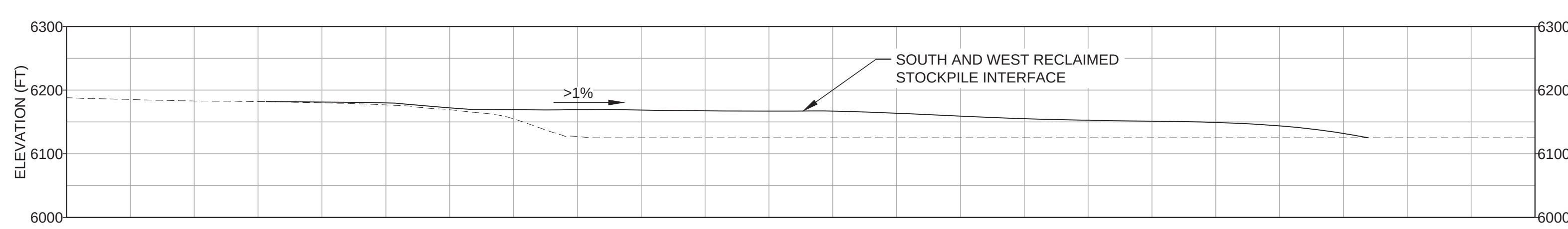

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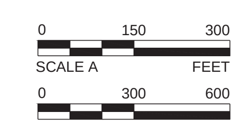

Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED
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C	2016-04-12	INCORPORATE CLIENT COMMENTS & ISSUE FOR CLIENT REVIEW	DET	DET	TMF	BRB

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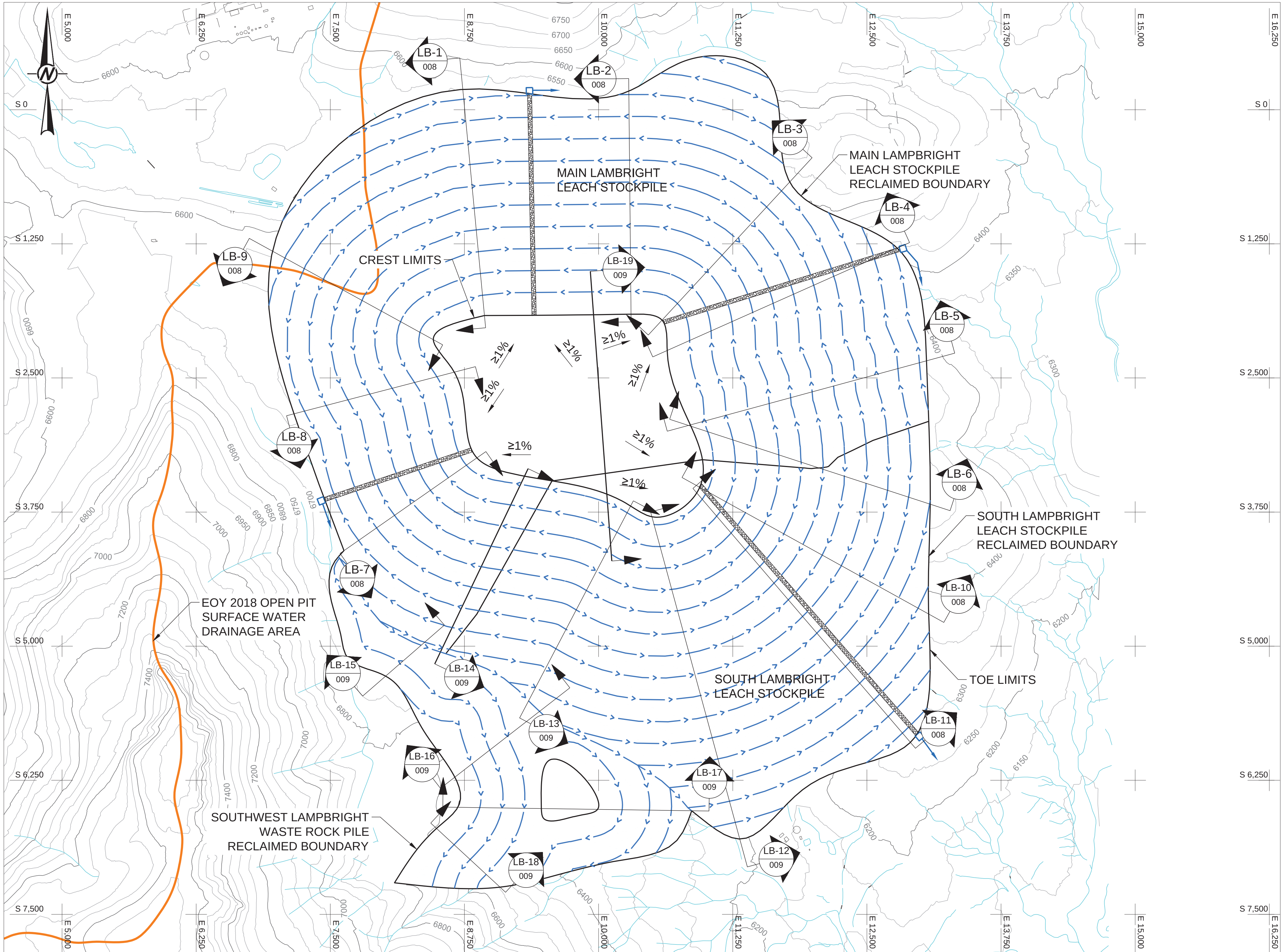
PROJECT
CLOSURE/CLOSEOUT PLAN UPDATE
CHINO MINES COMPANY
GRANT COUNTY, NEW MEXICO

TITLE
SOUTH STOCKPILE, STS2 STOCKPILE AND TRIANGLE STOCKPILE DESIGN SECTIONS (2 OF 2)

PROJECT No. 1401129 | CONTROL | Rev. C | 5 of 30 | FIGURE 006



LEGEND

- 5600 — EOY 2018 TOPO
- BUILDINGS
- PAVED ROAD
- DOWNDRAIN OUTFLOW
- EXISTING DRAINAGE
- BENCH CHANNEL
- DOWNDRAIN
- TOE AND TOP SURFACE OUTLINE
- EOY 2018 OPEN PIT SURFACE WATER DRAINAGE AREA
- ENERGY DISSIPATOR
- LB-1 — CROSS SECTION LETTER
- 008 — SHEET WHERE SECTION IS REFERENCED

REFERENCE

1. END OF YEAR 2018 TOPOGRAPHY PROVIDED BY CHINO MINES CO.

0 500 1000
SCALE FEET

Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED
C	2016-04-12	INCORPORATE CLIENT COMMENTS & ISSUE FOR CLIENT REVIEW	DET	DET	TMF	BRB

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PROJECT
CLOSURE/CLOSEOUT PLAN UPDATE
CHINO MINES COMPANY
GRANT COUNTY, NEW MEXICO

TITLE
LAMPBRIGHT STOCKPILE GRADING AND DRAINAGE PLAN

PROJECT No. 1401129 — Rev. C — 6 of 30 — FIGURE 007

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

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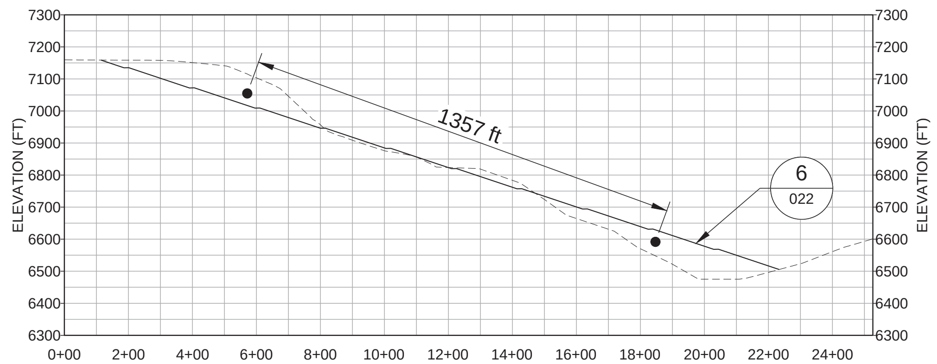

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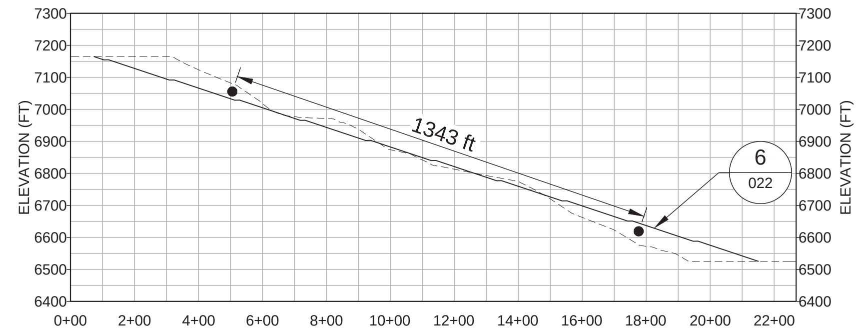

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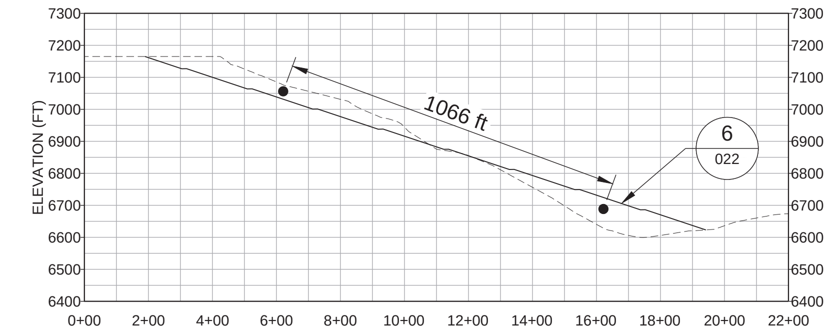

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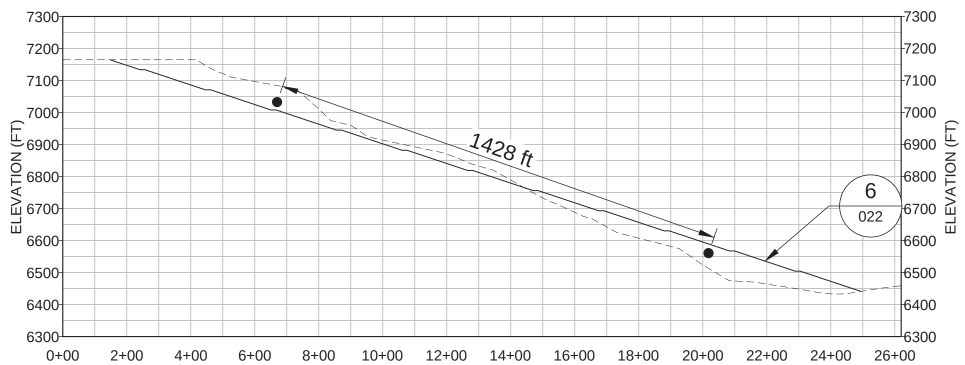

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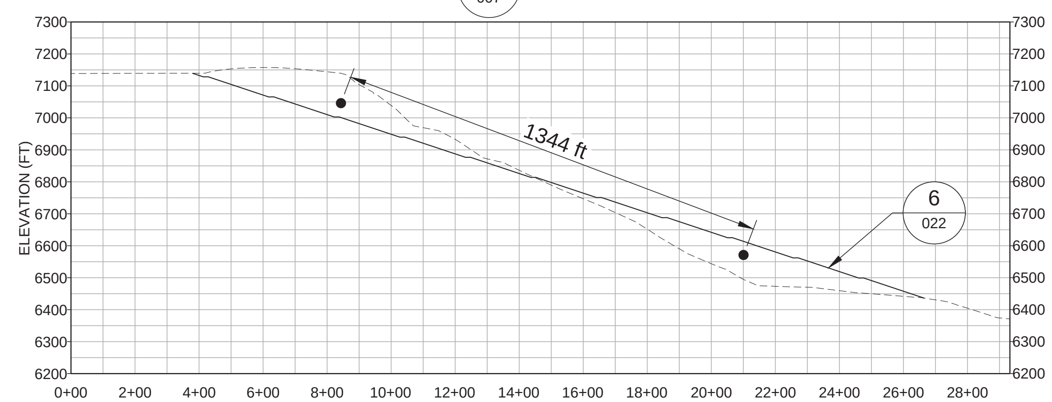

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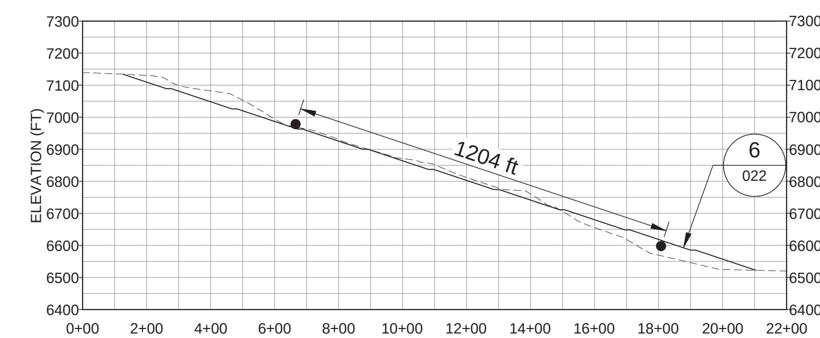

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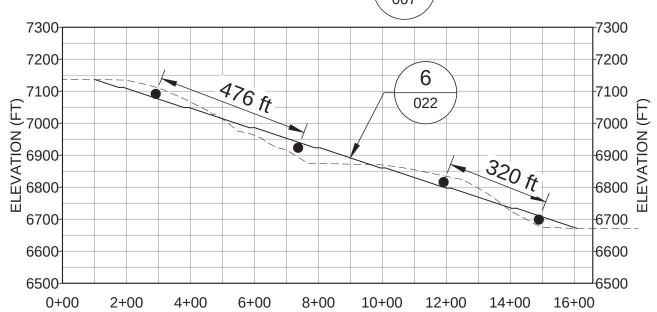

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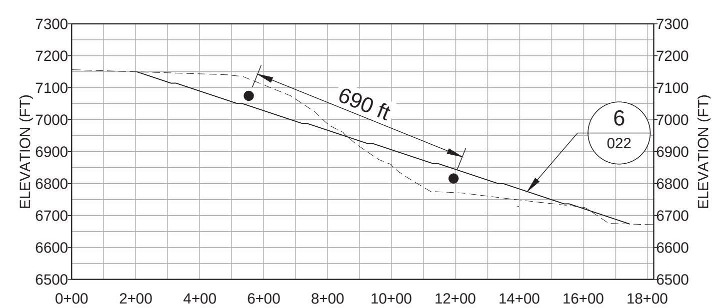

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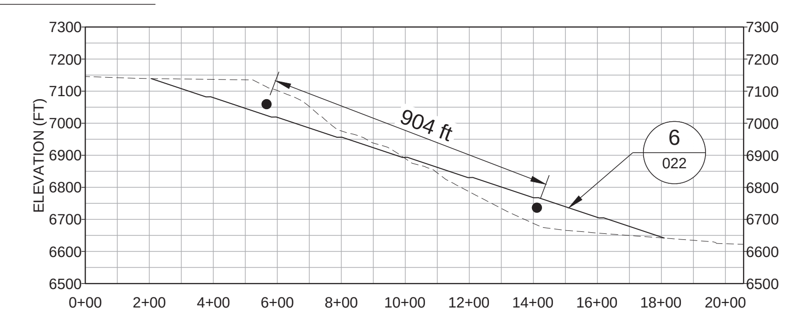

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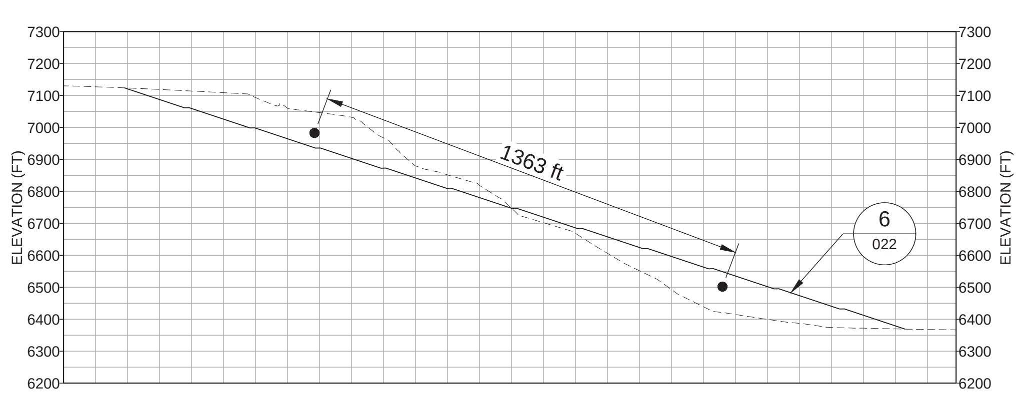

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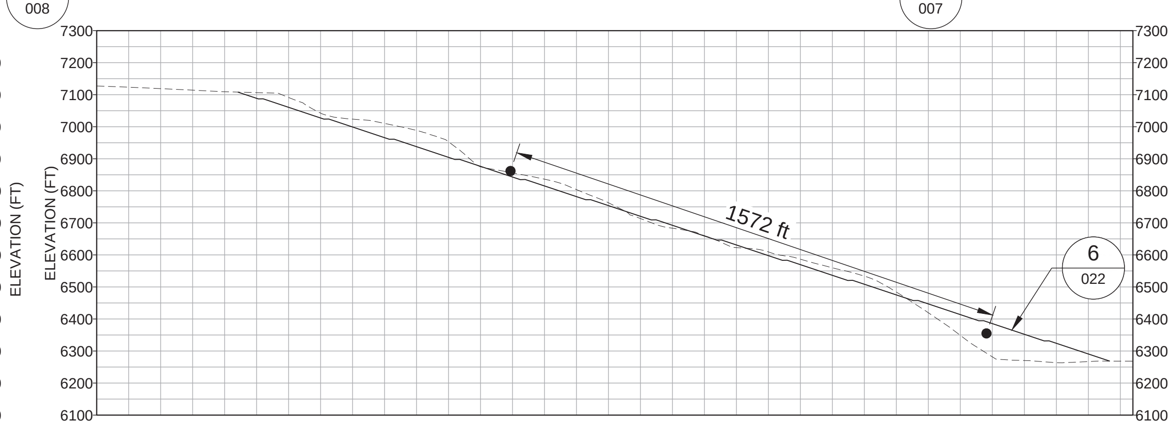

SCALE A LB-11 007 SECTION LB-11

LEGEND

EOY 2018 TOPOGRAPHY

CCP GRADING DESIGN

CENTROID OF CUT/FILL AREA

REFERENCE

1. END OF YEAR 2018 TOPOGRAPHY PROVIDED BY CHINO MINES CO.

0 300 600
SCALE A FEET

Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED
C	2016-04-12	INCORPORATE CLIENT COMMENTS & ISSUE FOR CLIENT REVIEW	DET	DET	TMF	BRB

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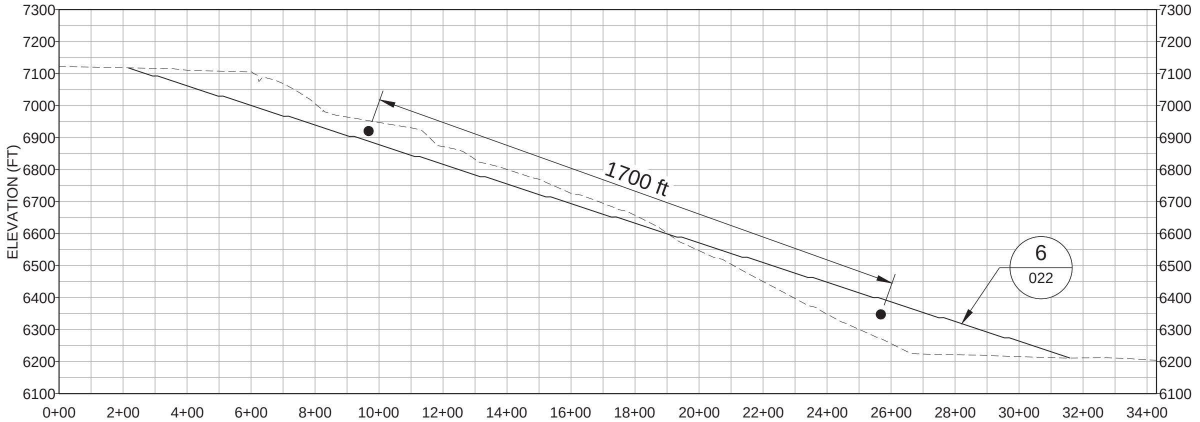
PROJECT
CLOSURE/CLOSEOUT PLAN UPDATE
CHINO MINES COMPANY
GRANT COUNTY, NEW MEXICO

TITLE
LAMPBRIGHT STOCKPILE DESIGN SECTIONS (1 OF 2)

PROJECT No. 1401129 | Rev. C | 7 of 30 | FIGURE 008



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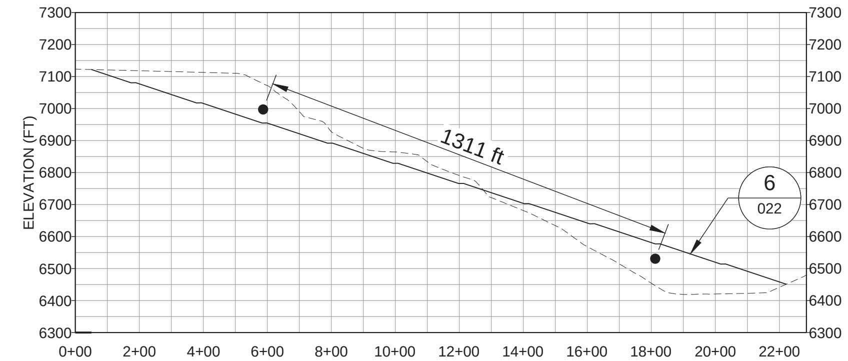

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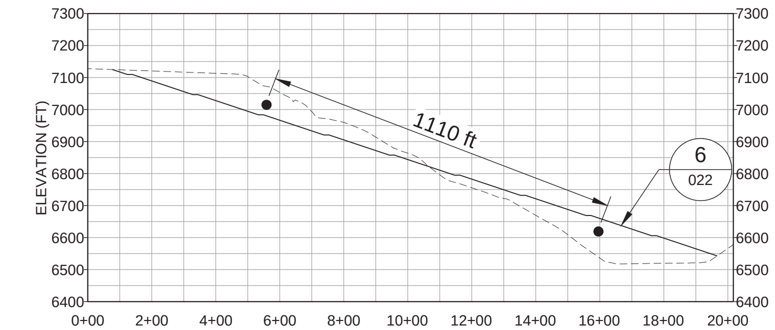

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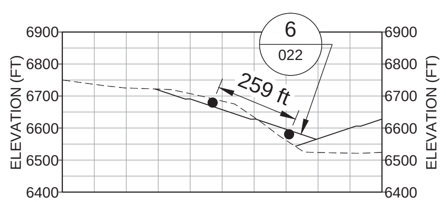

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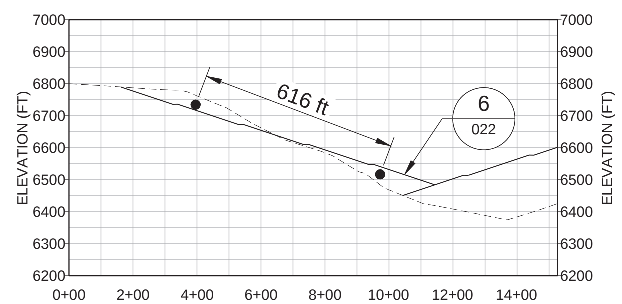

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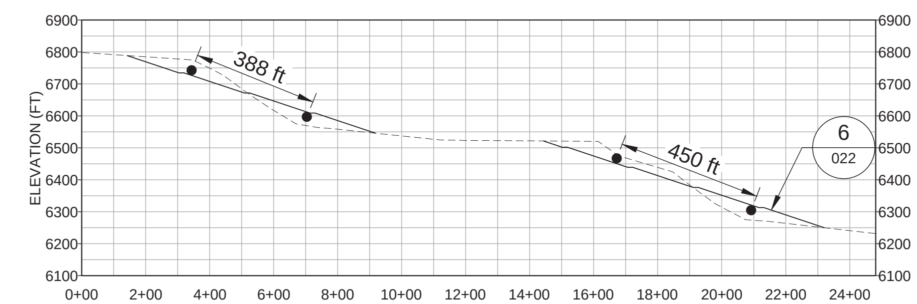

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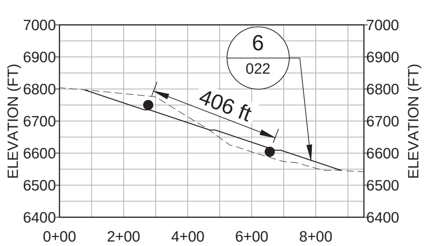
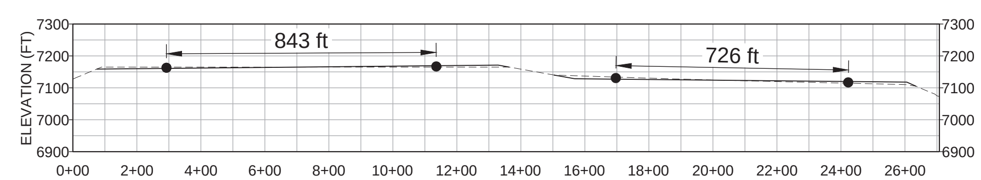


SCALE A LB-18 / 007 SECTION LB-18



SCALE A LB-19 / 007 SECTION LB-19

LEGEND

- EOY 2018 TOPOGRAPHY
- CCP GRADING DESIGN
- CENTROID OF CUT/FILL AREA

REFERENCE

1. END OF YEAR 2018 TOPOGRAPHY PROVIDED BY CHINO MINES CO.

0 300 600
SCALE FEET

Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED
C	2016-04-12	INCORPORATE CLIENT COMMENTS & ISSUE FOR CLIENT REVIEW	DET	DET	TMF	BRB

SEAL

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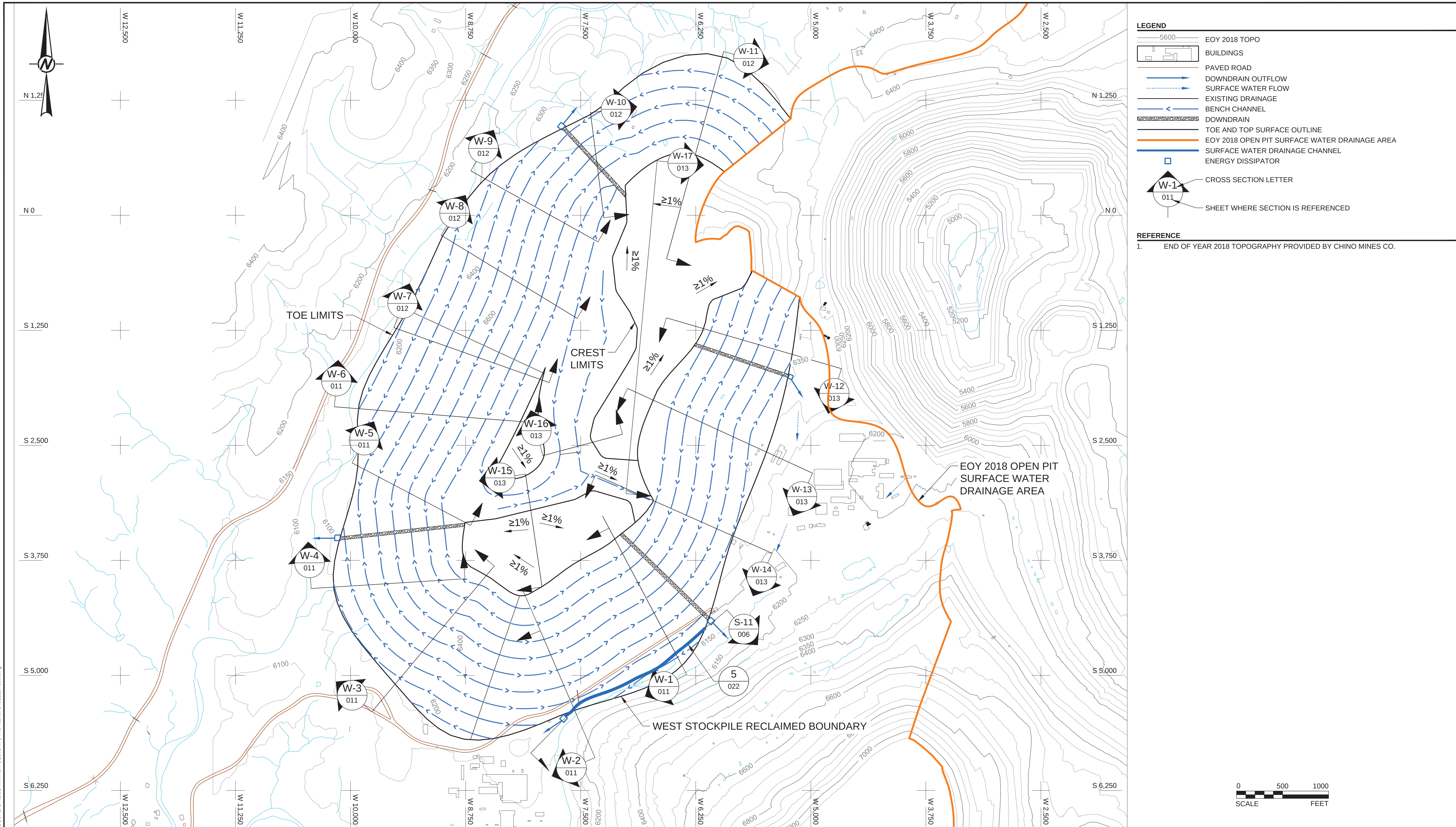
www.golder.com

PROJECT
CLOSURE/CLOSEOUT PLAN UPDATE
CHINO MINES COMPANY
GRANT COUNTY, NEW MEXICO

TITLE
LAMPBRIGHT STOCKPILE DESIGN SECTIONS (2 OF 2)

PROJECT No. 1401129 | Rev. C | 9 of 30 | FIGURE 009



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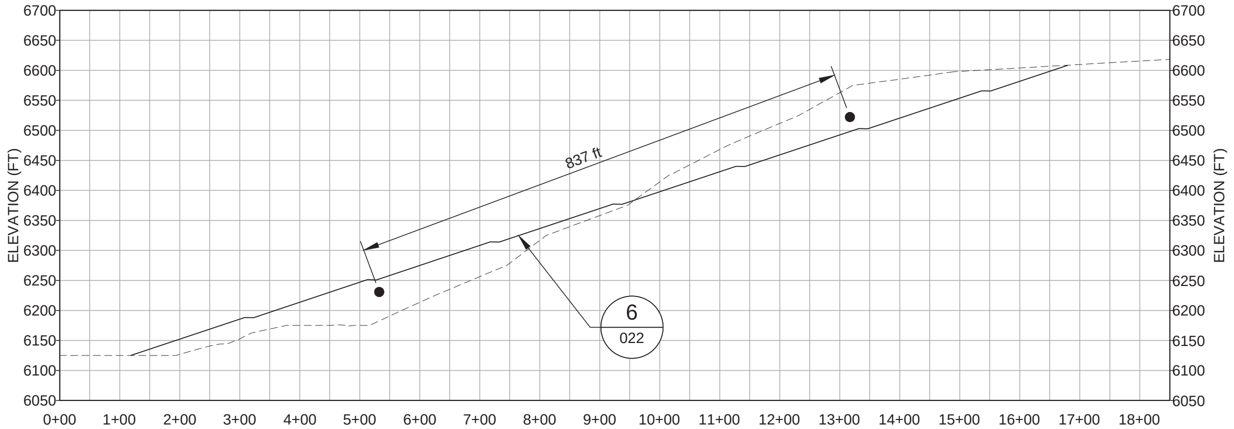
PROJECT
CLOSURE/CLOSEOUT PLAN UPDATE
CHINO MINES COMPANY
GRANT COUNTY, NEW MEXICO

TITLE
WEST STOCKPILE GRADING AND DRAINAGE PLAN

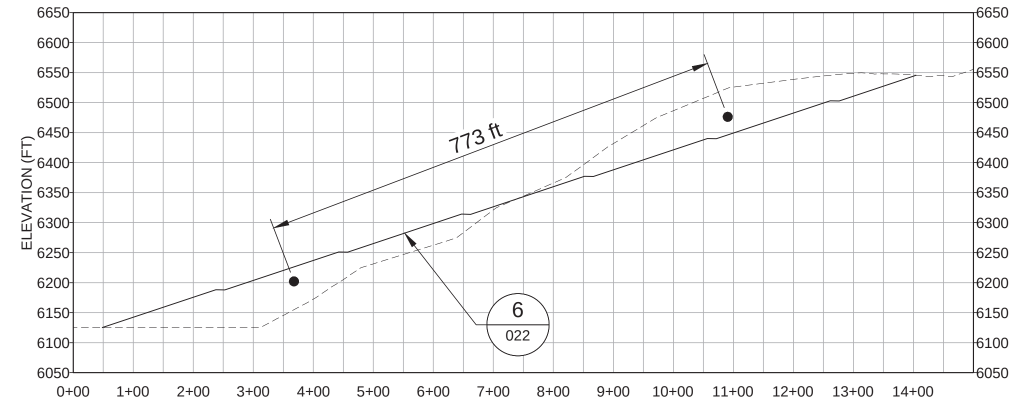
Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED
C	2016-04-12	INCORPORATE CLIENT COMMENTS & ISSUE FOR CLIENT REVIEW	DET	DET	TMF	BRB

PROJECT No.	Rev.		FIGURE
1401129	C	10 of 30	010

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D



SCALE A W-1 010 SECTION W-1



SCALE A W-2 010 SECTION W-2

LEGEND

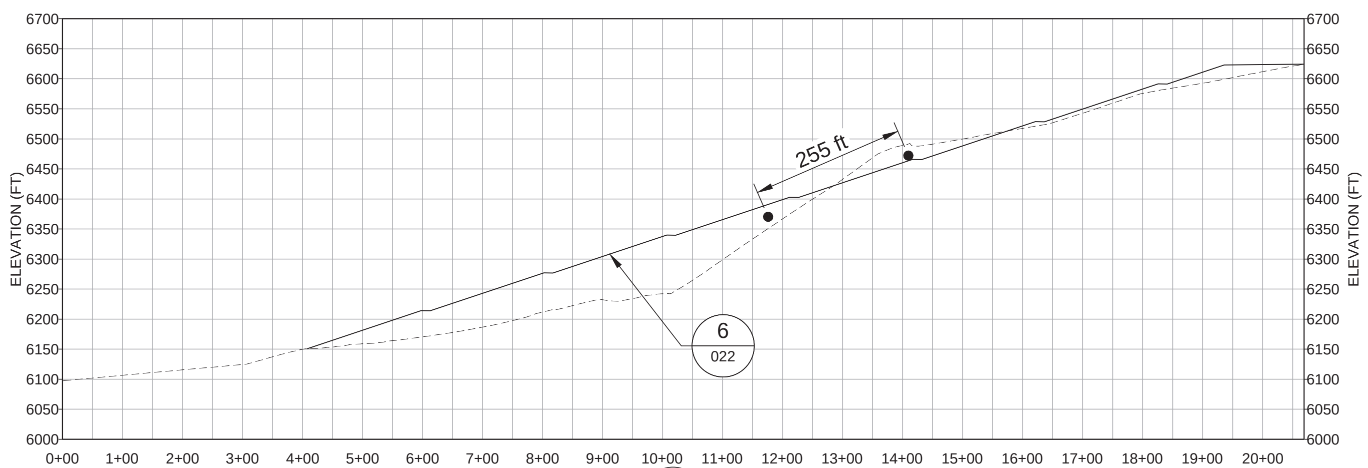
- - - - - EOY 2018 TOPOGRAPHY

——— CCP GRADING DESIGN

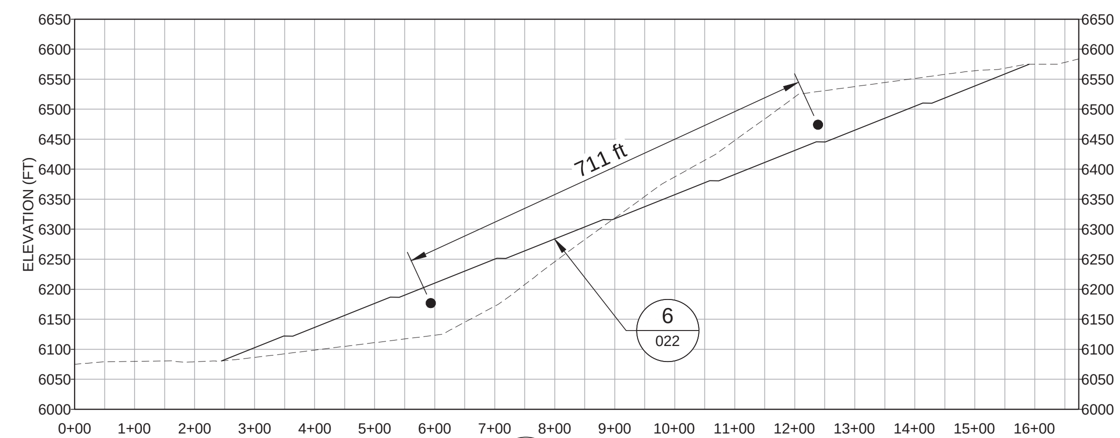
● CENTROID OF CUT/FILL AREA

REFERENCE

1. END OF YEAR 2018 TOPOGRAPHY PROVIDED BY CHINO MINES CO.



SCALE A W-3 010 SECTION W-3



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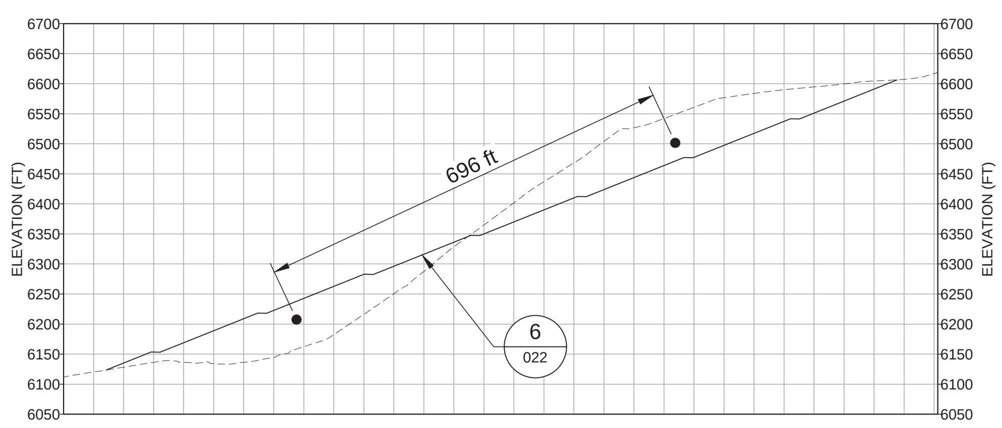

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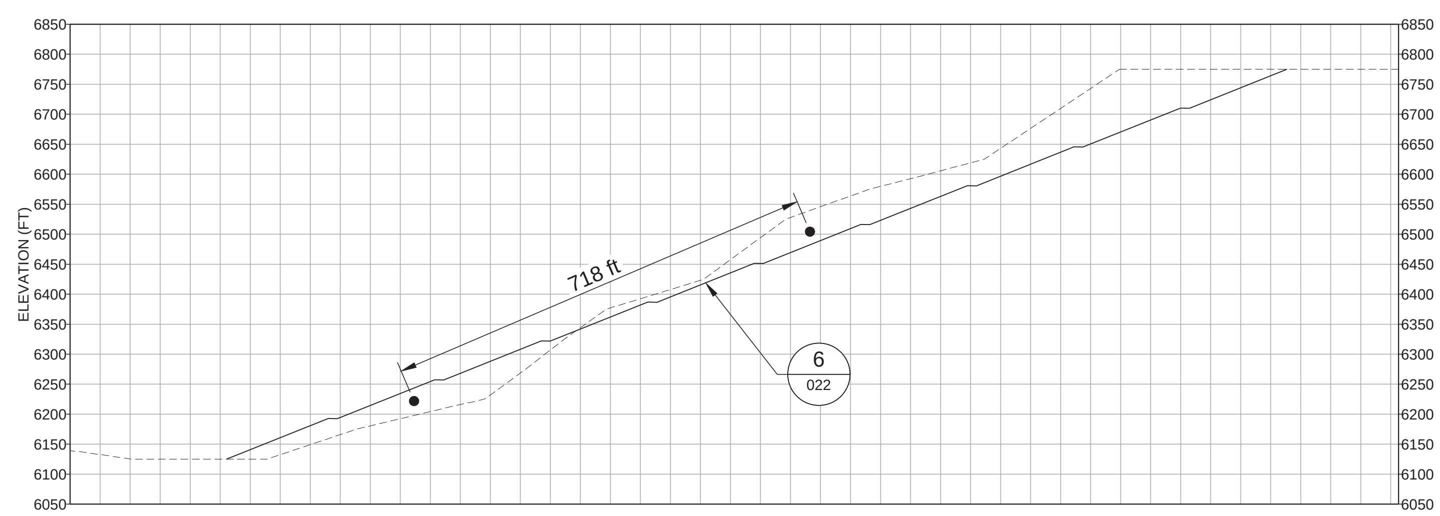

SCALE A W-6 010 SECTION W-6

0 160 320
SCALE A FEET

Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED
C	2016-04-12	INCORPORATE CLIENT COMMENTS & ISSUE FOR CLIENT REVIEW	DET	DET	TMF	BRB

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PROJECT

CLOSURE/CLOSEOUT PLAN UPDATE
CHINO MINES COMPANY
GRANT COUNTY, NEW MEXICO

TITLE

WEST STOCKPILE DESIGN SECTIONS (1 OF 3)

PROJECT No. 1401129 | Rev. C | 11 of 30 | FIGURE 011

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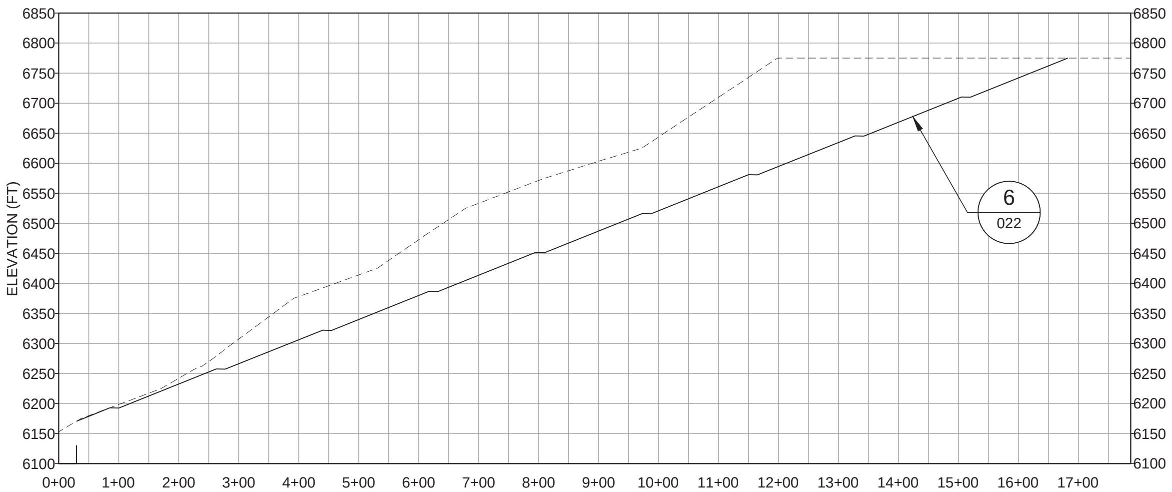
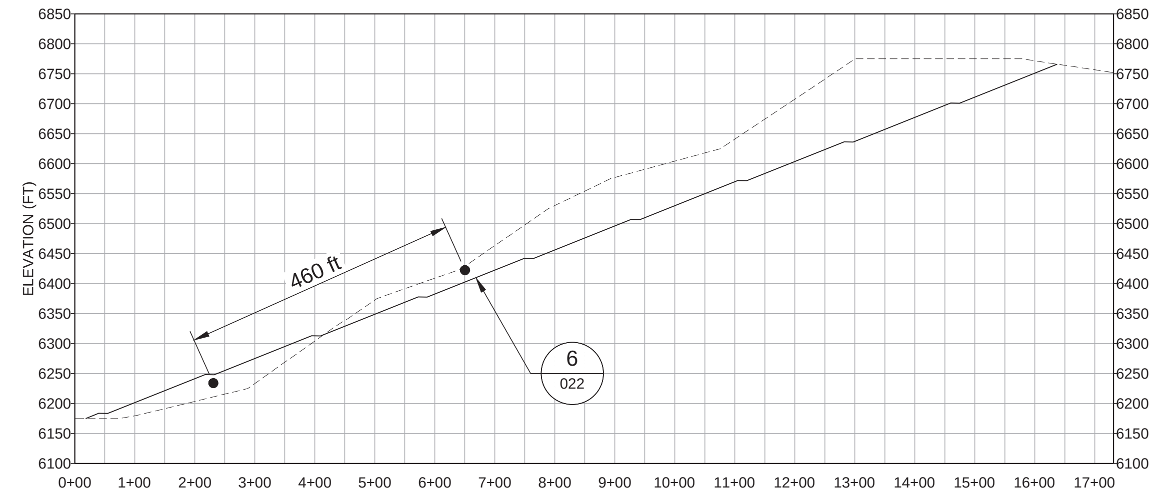


SCALE A W-7 010 SECTION W-7



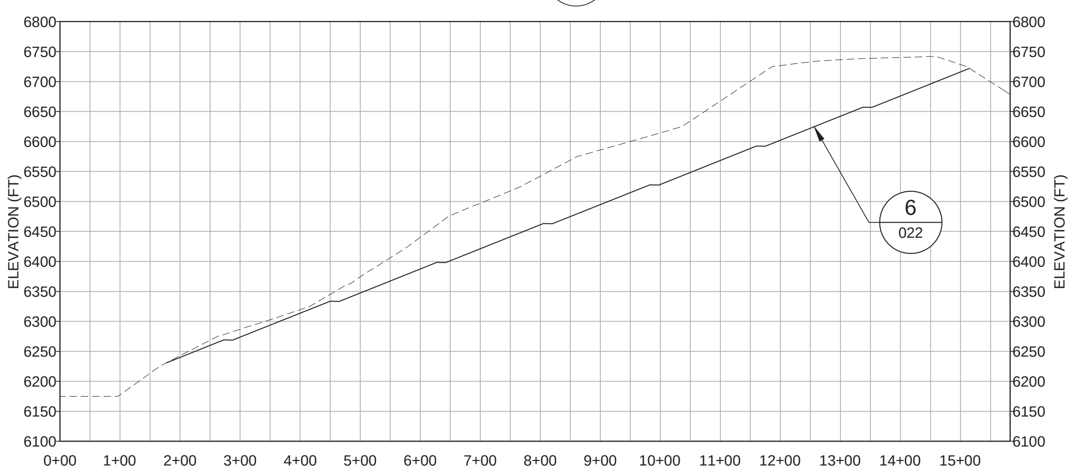
SCALE A W-8 010 SECTION W-8

LEGEND

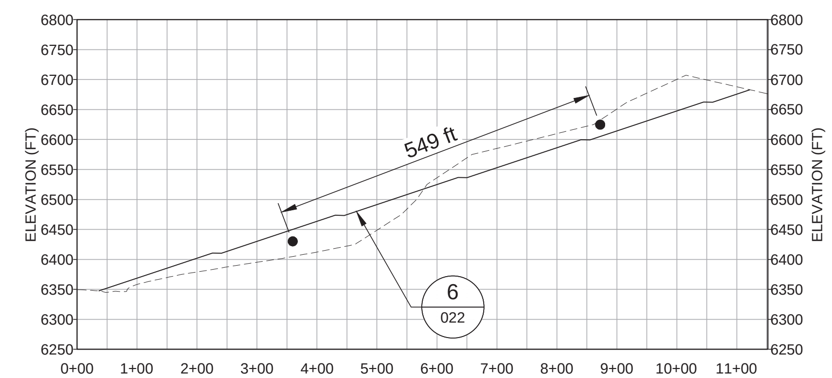
- EOY 2018 TOPOGRAPHY
- CCP GRADING DESIGN
- CENTROID OF CUT/FILL AREA

REFERENCE

1. END OF YEAR 2018 TOPOGRAPHY PROVIDED BY CHINO MINES CO.



SCALE A W-9 010 SECTION W-9



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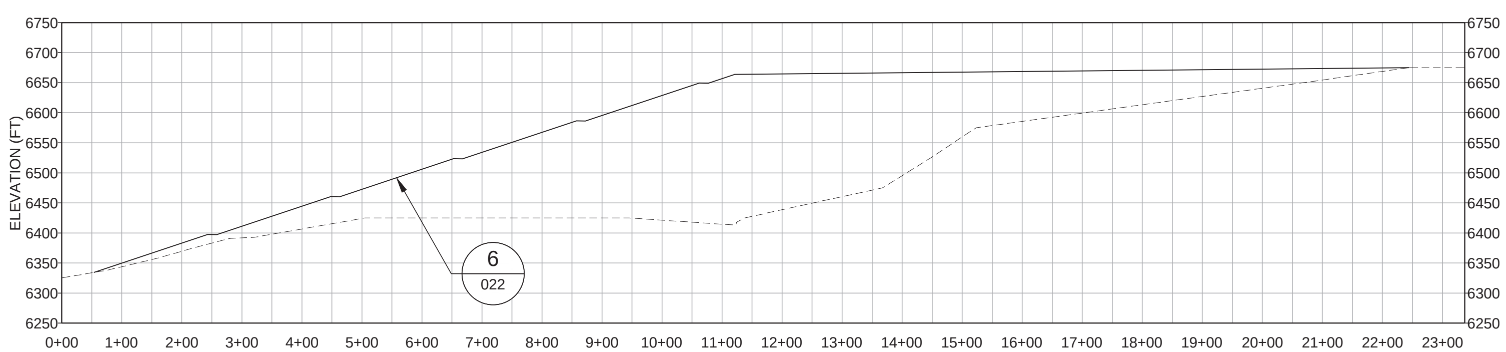
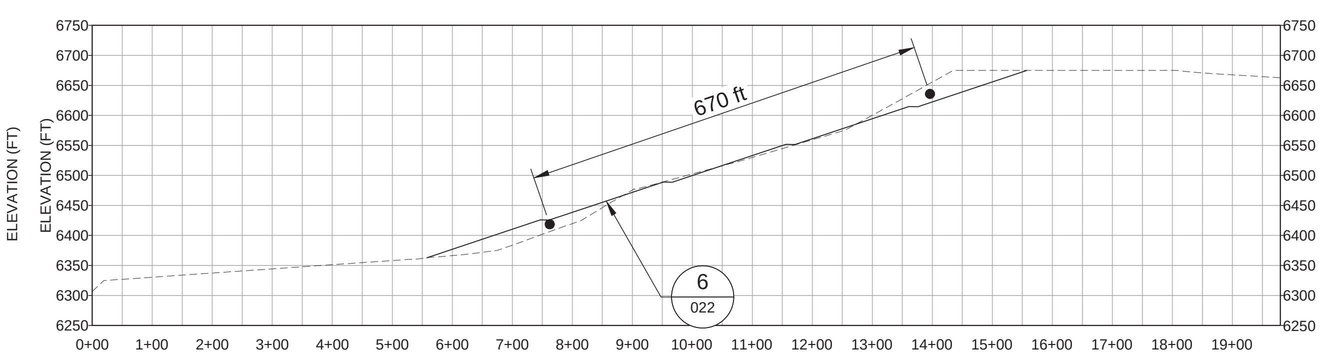


SCALE A W-11 010 SECTION W-11



SCALE A W-12 010 SECTION W-12

0 160 320
SCALE A FEET

Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED
C	2016-04-12	INCORPORATE CLIENT COMMENTS & ISSUE FOR CLIENT REVIEW	DET	DET	TMF	BRB

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PROJECT

CLOSURE/CLOSEOUT PLAN UPDATE
CHINO MINES COMPANY
GRANT COUNTY, NEW MEXICO

TITLE

WEST STOCKPILE DESIGN SECTIONS (2 OF 3)

PROJECT No. 1401129 | Rev. C | 12 of 30 | FIGURE 012

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IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

LEGEND

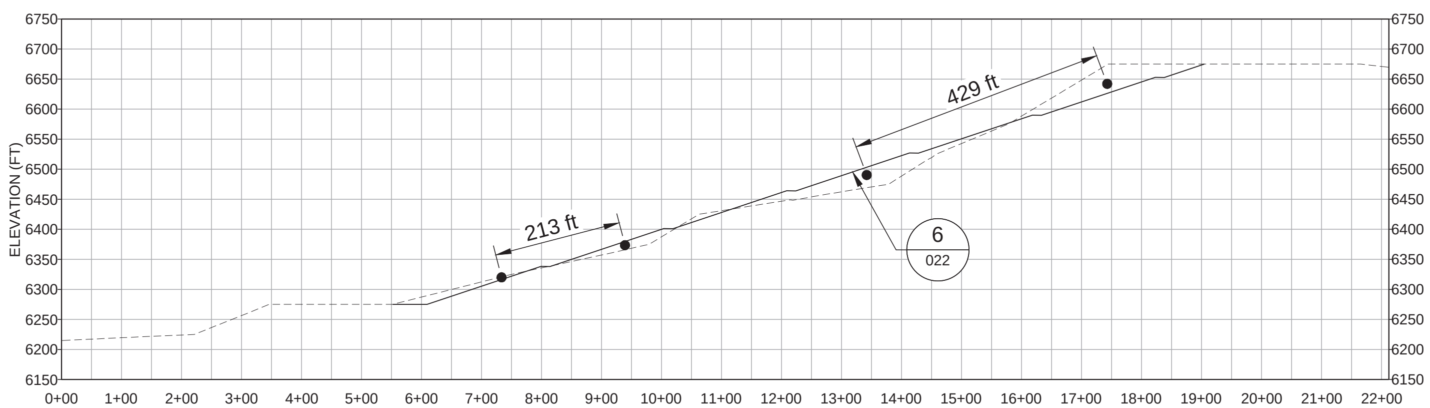
- - - - - EOY 2018 TOPOGRAPHY

——— CCP GRADING DESIGN

● CENTROID OF CUT/FILL AREA

REFERENCE

1. END OF YEAR 2018 TOPOGRAPHY PROVIDED BY CHINO MINES CO.



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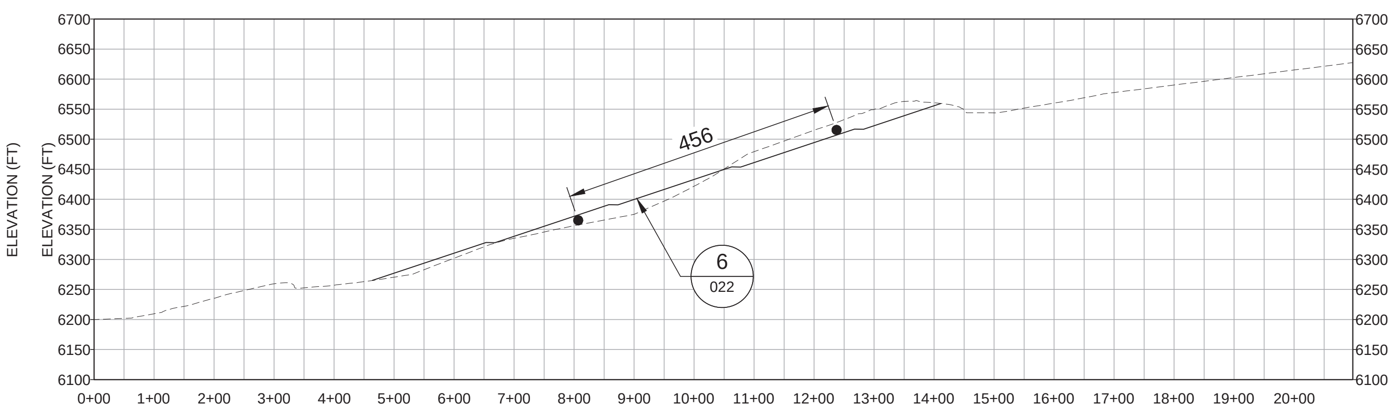
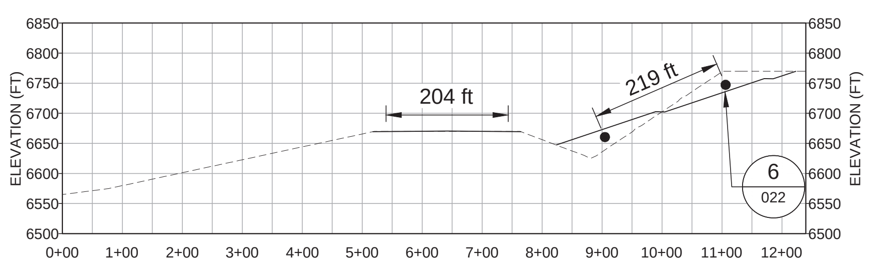


SCALE A W-14 010 SECTION W-14



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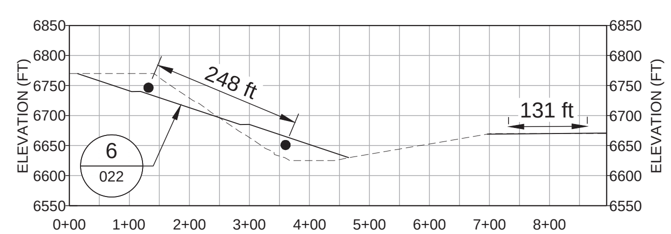
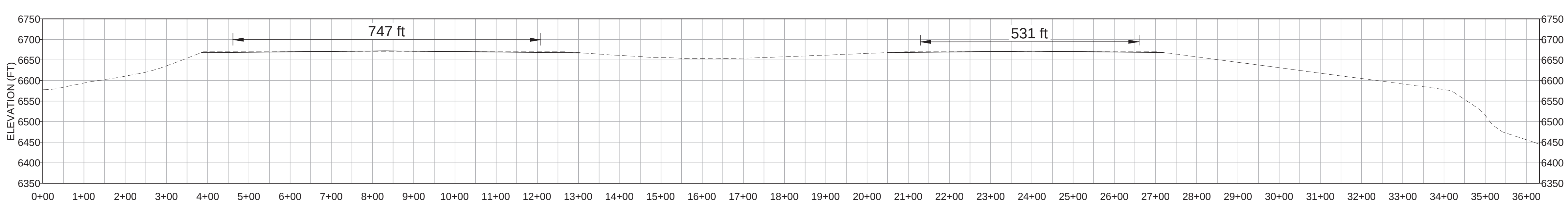


SCALE A W-16 010 SECTION W-16



SCALE A W-17 010 SECTION W-17

0 160 320

SCALE A FEET

Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED
C	2016-04-12	INCORPORATE CLIENT COMMENTS & ISSUE FOR CLIENT REVIEW	DET	DET	TMF	BRB

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PROJECT

CLOSURE/CLOSEOUT PLAN UPDATE
CHINO MINES COMPANY
GRANT COUNTY, NEW MEXICO

TITLE

WEST STOCKPILE DESIGN SECTIONS (3 OF 3)

PROJECT No. 1401129 | Rev. C | 13 of 30 | FIGURE 013

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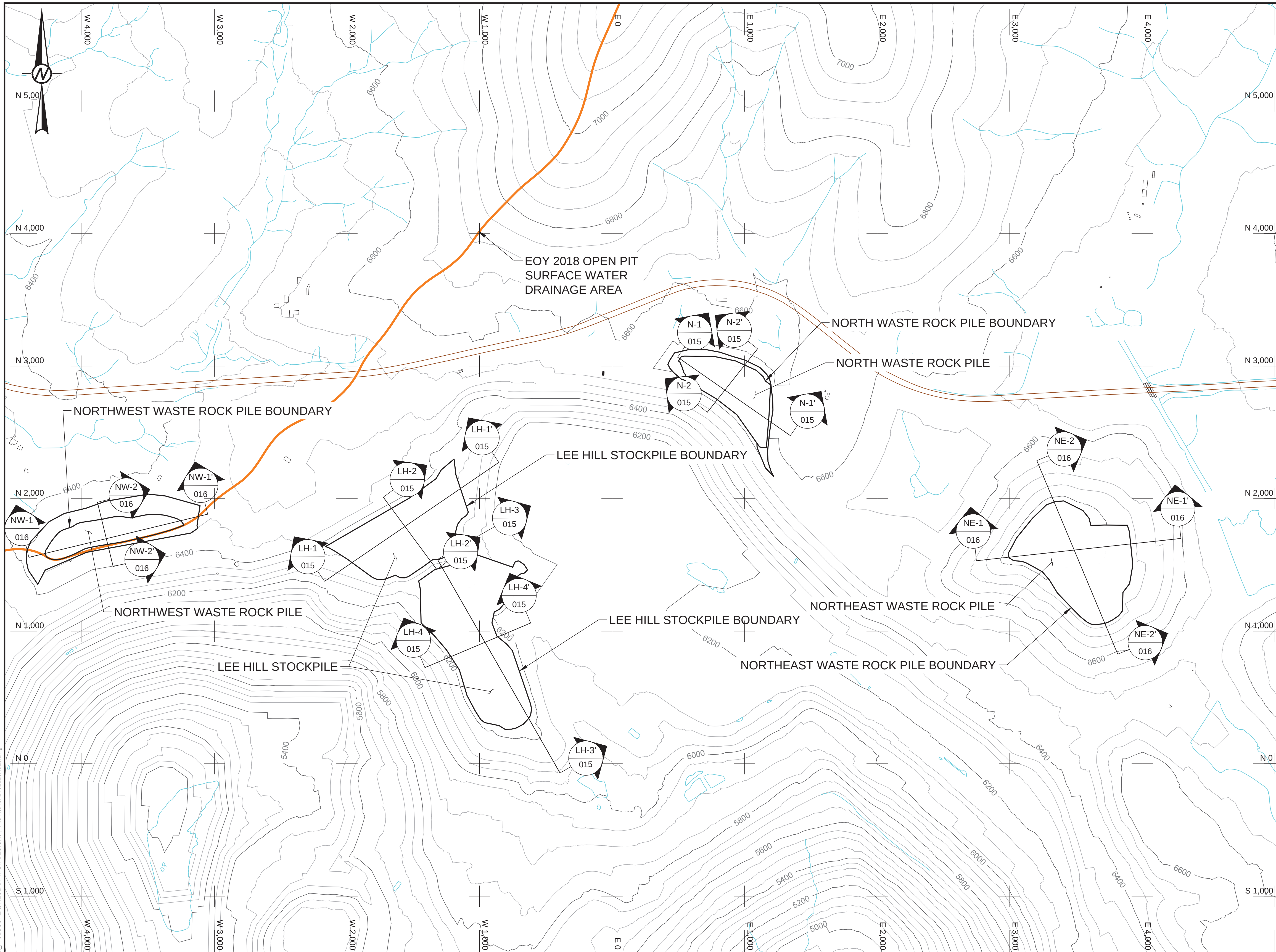

LEGEND

5600 EOY 2018 TOPO

BUILDINGS

EXISTING DRAINAGE

TOE AND TOP SURFACE OUTLINE

EOY 2018 OPEN PIT SURFACE WATER DRAINAGE AREA

NE-1 CROSS SECTION LETTER

015 SHEET WHERE SECTION IS REFERENCED

REFERENCE

1. END OF YEAR 2018 TOPOGRAPHY PROVIDED BY CHINO MINES CO.

0 400 800

SCALE FEET

Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED
C	2016-04-12	INCORPORATE CLIENT COMMENTS & ISSUE FOR CLIENT REVIEW	DET	DET	TMF	BRB

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PROJECT

CLOSURE/CLOSEOUT PLAN UPDATE
CHINO MINES COMPANY
GRANT COUNTY, NEW MEXICO

TITLE

NORTH PIT AREA STOCKPILES GRADING AND DRAINAGE PLAN

PROJECT No. 1401129 Rev. C 14 of 30 FIGURE 014

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

Path: \\Denver.golder.gds\acad\14\1401129\PRODUCTION_A CLOSURE & RECLAMATION DESIGN | File Name: 1401129A010.dwg

LEGEND

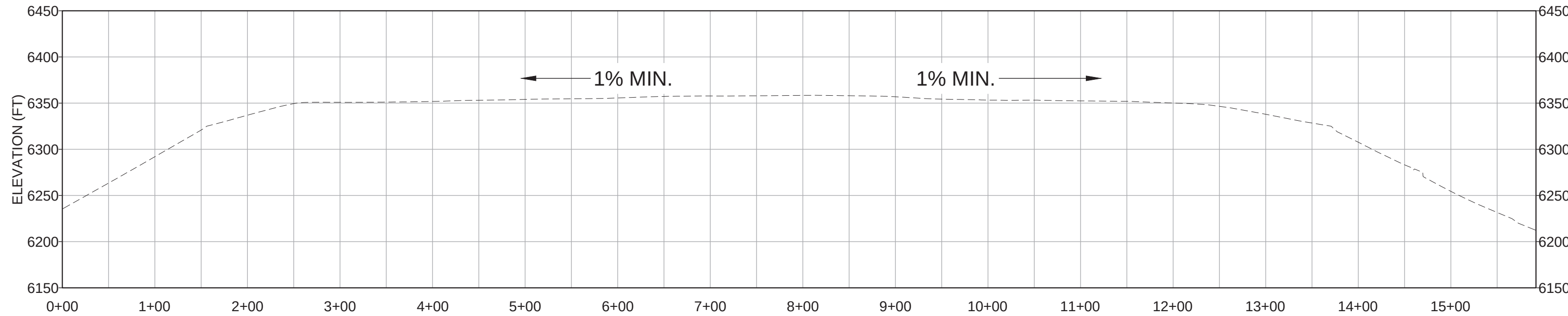
EOY 2018 TOPOGRAPHY

CCP DESIGN

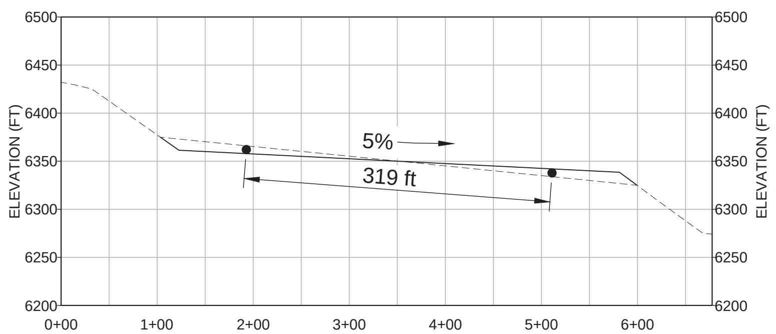
CENTROID OF CUT/FILL AREA

REFERENCE

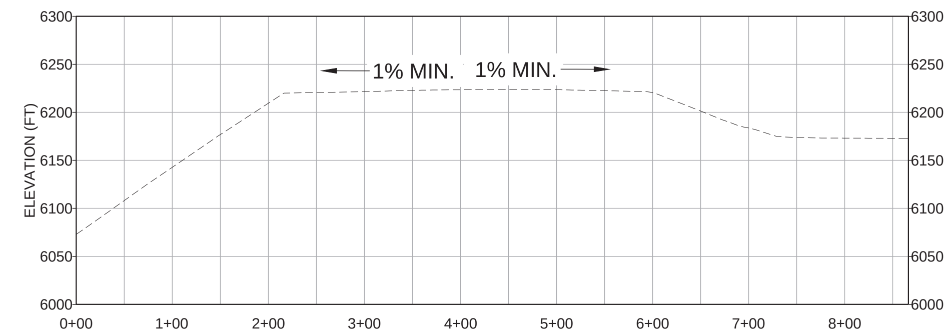
1. END OF YEAR 2018 TOPOGRAPHY PROVIDED BY CHINO MINES CO.



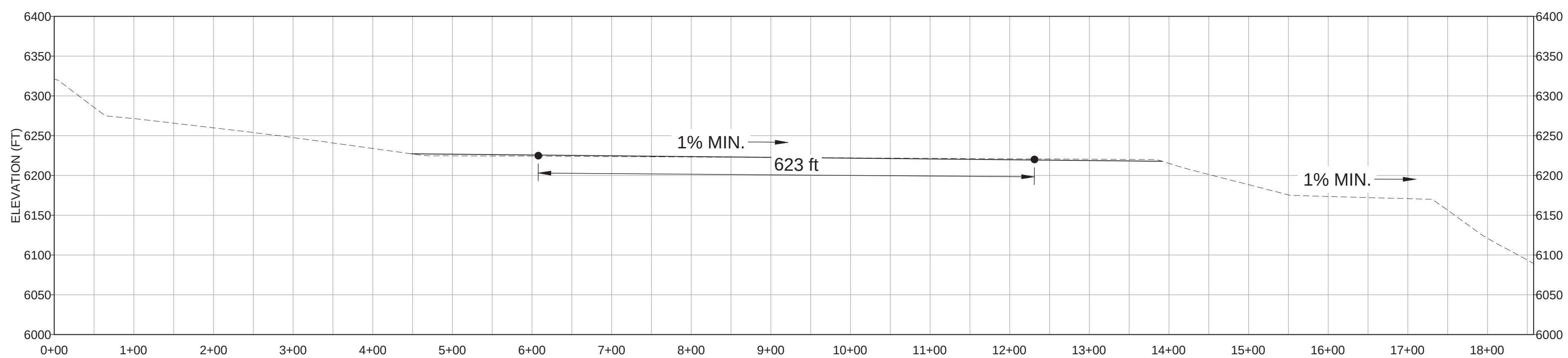
SCALE A LH-1 014 SECTION LH-1



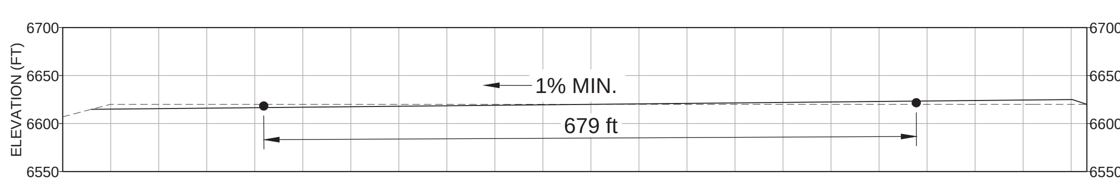
SCALE A LH-2 014 SECTION LH-2



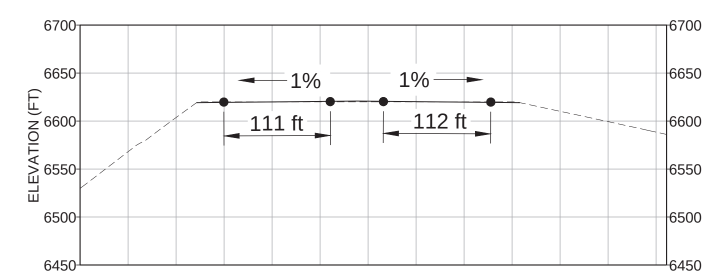
SCALE A LH-4 014 SECTION LH-4



SCALE A LH-3 014 SECTION LH-3



SCALE A N-1 014 SECTION N-1



SCALE A N-2 014 SECTION N-2

0 100 200
SCALE A FEET

Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED
C	2016-04-12	INCORPORATE CLIENT COMMENTS & ISSUE FOR CLIENT REVIEW	DET	DET	TMF	BRB

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CLIENT

CHINO MINES COMPANY

CONSULTANT

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PROJECT

CLOSURE/CLOSEOUT PLAN UPDATE
CHINO MINES COMPANY
GRANT COUNTY, NEW MEXICO

TITLE

NORTH PIT AREA STOCKPILES DESIGN SECTIONS (1 OF 2)

PROJECT No. 1401129 | Rev. C | 15 of 30 | FIGURE 015

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

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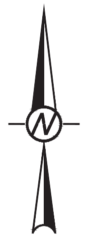
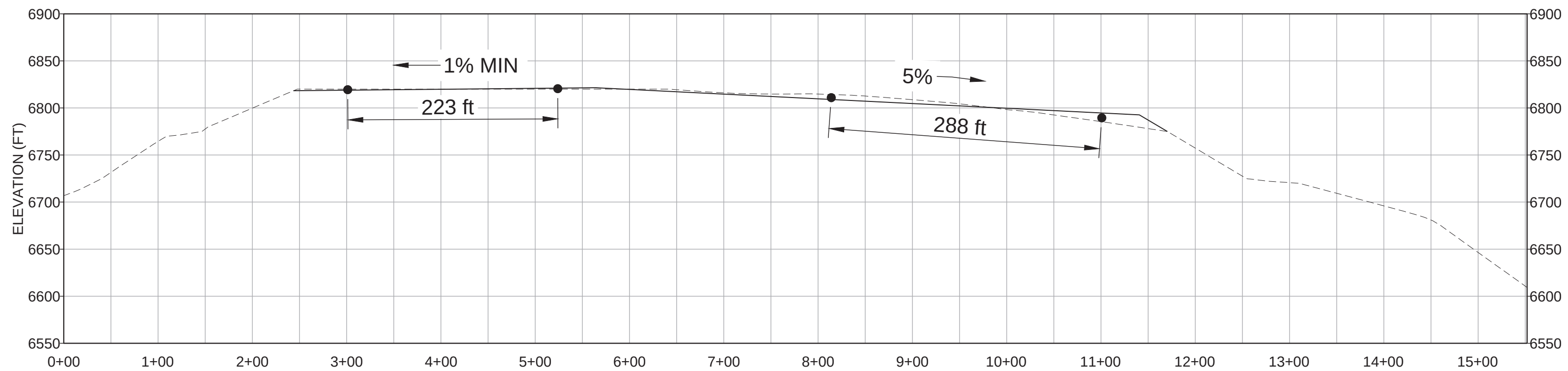
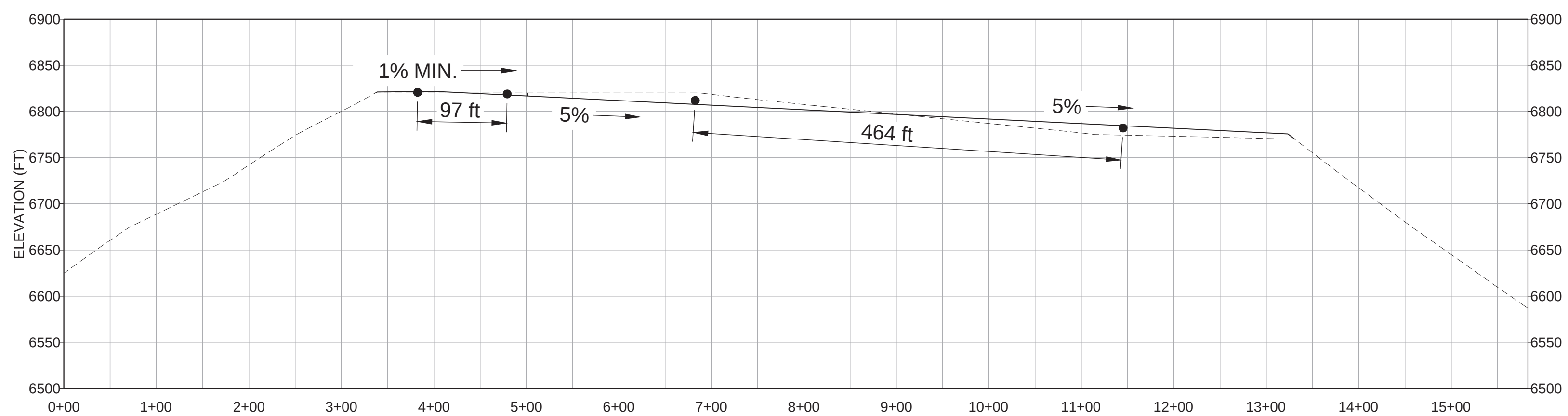
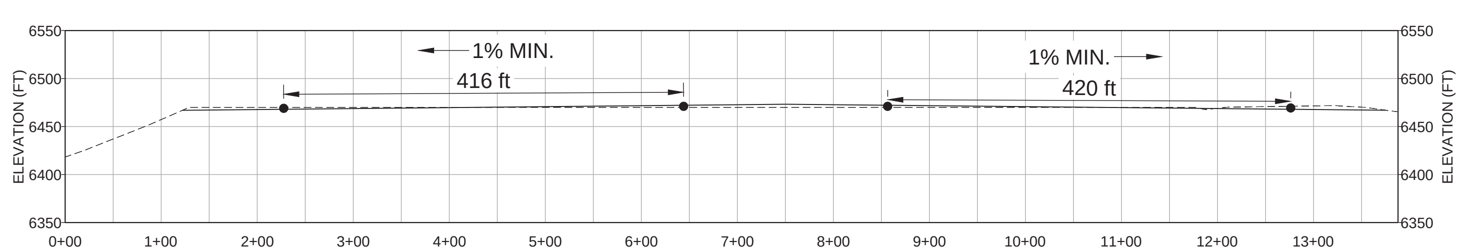




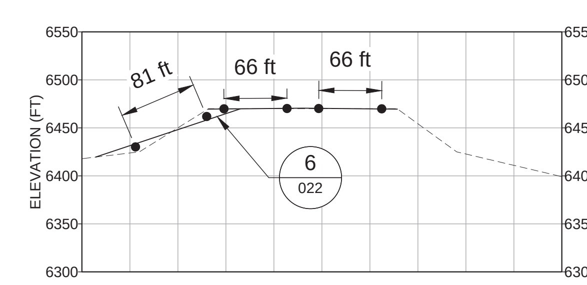
SCALE A NE-1 014 SECTION NE-1



SCALE A NE-2 014 SECTION NE-2



SCALE A NW-1 014 SECTION NW-1



SCALE A NW-2 014 SECTION NW-2

LEGEND

- EOY 2018 TOPOGRAPHY
- CCP DESIGN
- CENTROID OF CUT/FILL AREA

REFERENCE

1. END OF YEAR 2018 TOPOGRAPHY PROVIDED BY CHINO MINES CO.

0 100 200
SCALE A FEET

C	2016-04-12	INCORPORATE CLIENT COMMENTS & ISSUE FOR CLIENT REVIEW	DET	DET	TMF	BRB
Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED

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PROJECT
CLOSURE/CLOSEOUT PLAN UPDATE
CHINO MINES COMPANY
GRANT COUNTY, NEW MEXICO

TITLE
NORTH PIT AREA STOCKPILES DESIGN SECTIONS (2 OF 2)

PROJECT No. 1401129 | Rev. C | 16 of 30 | FIGURE 016

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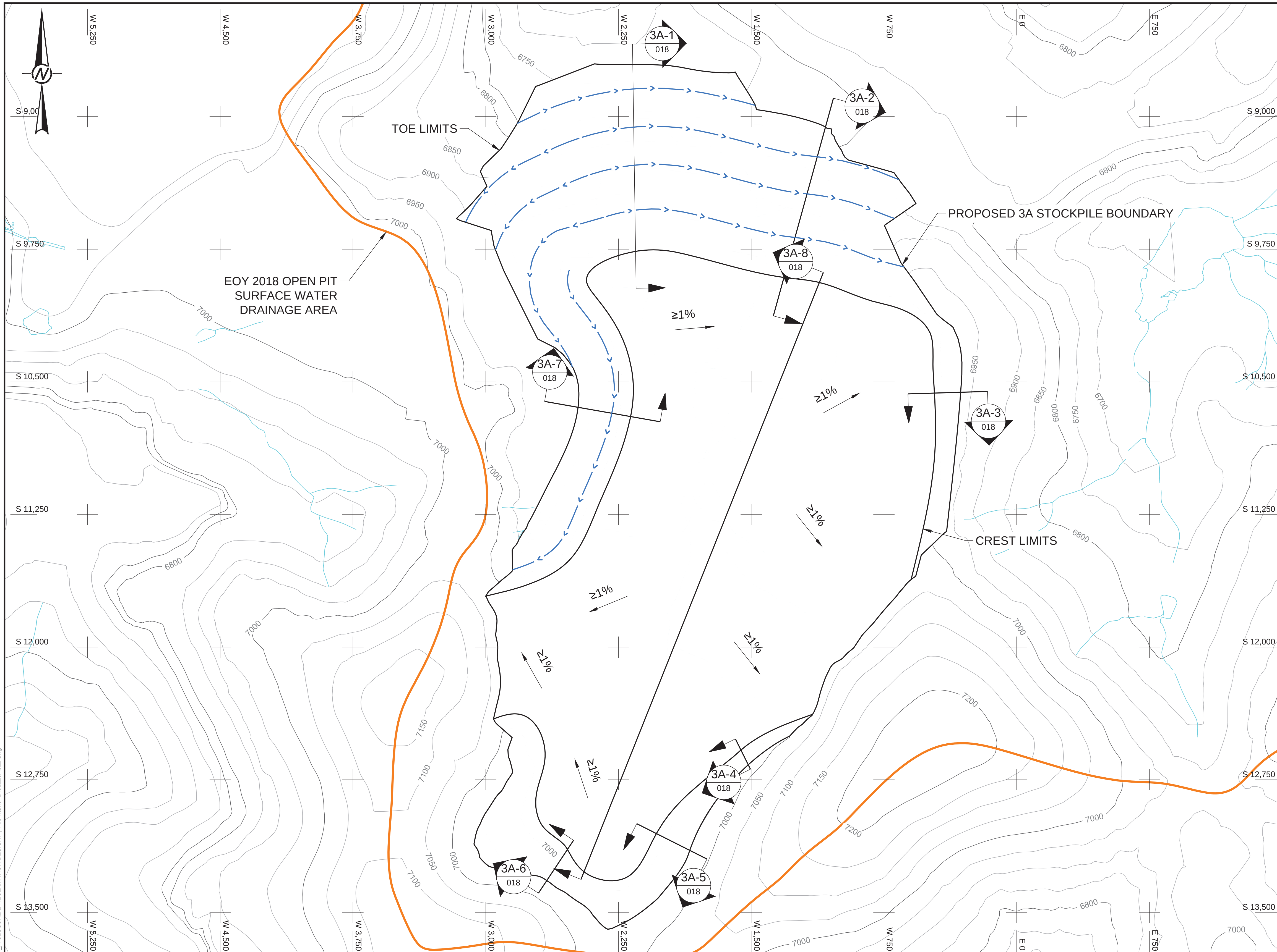

LEGEND

- 5600 EOY 2018 TOPO
- EXISTING DRAINAGE
- BENCH CHANNEL
- DOWNDRAIN
- TOE AND TOP SURFACE OUTLINE
- EOY 2018 OPEN PIT SURFACE WATER DRAINAGE AREA
- 3A-1 CROSS SECTION LETTER
- 018 SHEET WHERE SECTION IS REFERENCED

REFERENCE

1. END OF YEAR 2018 TOPOGRAPHY PROVIDED BY CHINO MINES CO.

0 300 600
SCALE FEET

Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED
C	2016-04-12	INCORPORATE CLIENT COMMENTS & ISSUE FOR CLIENT REVIEW	DET	DET	TMF	BRB

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PROJECT
CLOSURE/CLOSEOUT PLAN UPDATE
CHINO MINES COMPANY
GRANT COUNTY, NEW MEXICO

TITLE
PROPOSED 3A STOCKPILE GRADING AND DRAINAGE PLAN

PROJECT No. 1401129 | Rev. C | 17 of 30 | FIGURE 017

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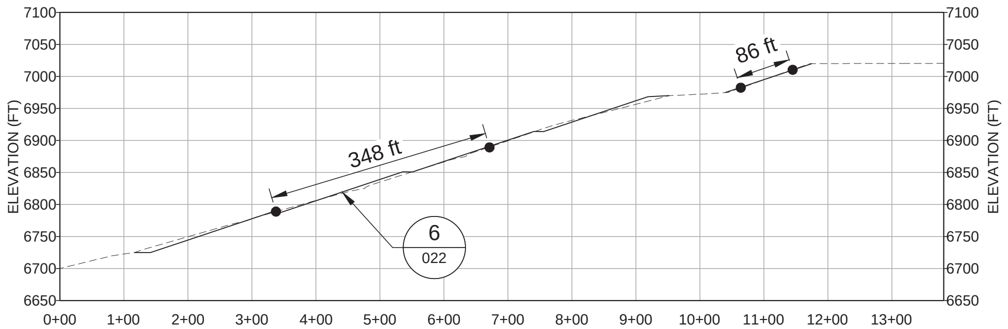
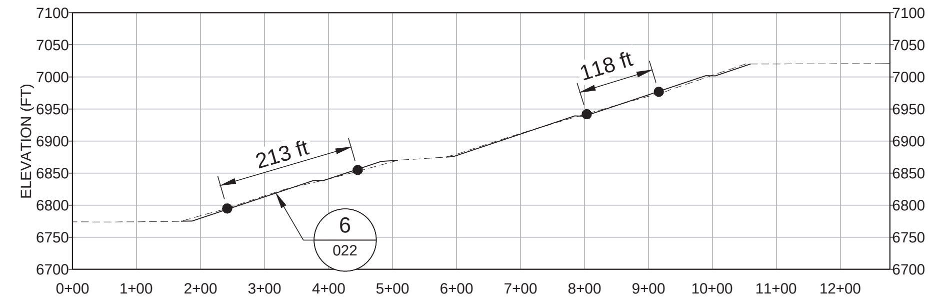
IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D



SCALE C 3A-1 017 SECTION 3A-1



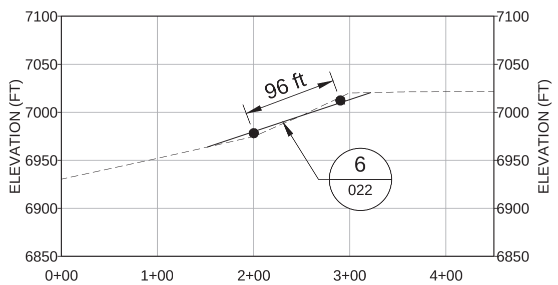
SCALE C 3A-2 017 SECTION 3A-2

LEGEND

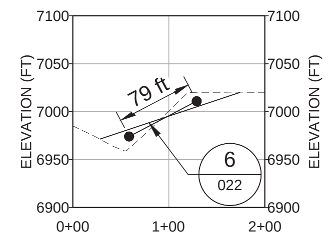
- EOY 2018 TOPOGRAPHY
- CCP GRADING DESIGN
- CENTROID OF CUT/FILL AREA

REFERENCE

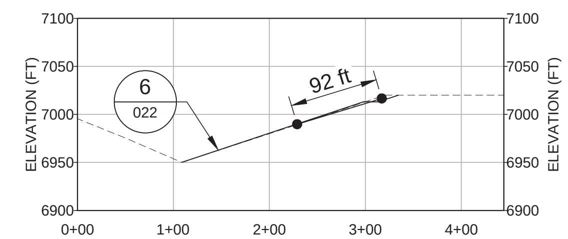
1. END OF YEAR 2018 TOPOGRAPHY PROVIDED BY CHINO MINES CO.



SCALE A 3A-3 017 SECTION 3A-3



SCALE A 3A-4 017 SECTION 3A-4



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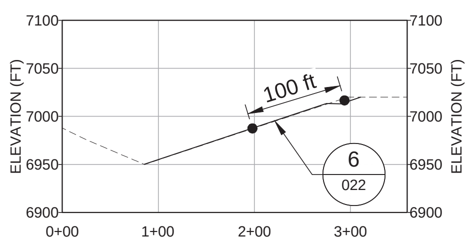

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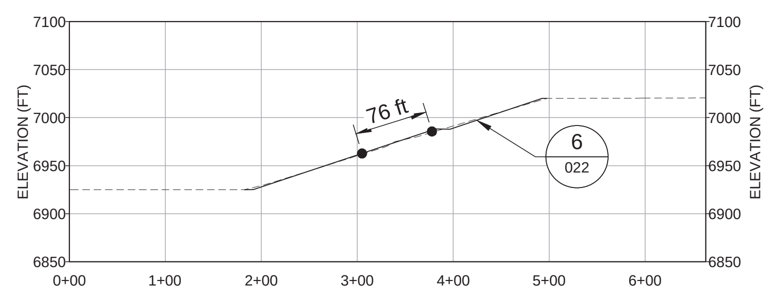
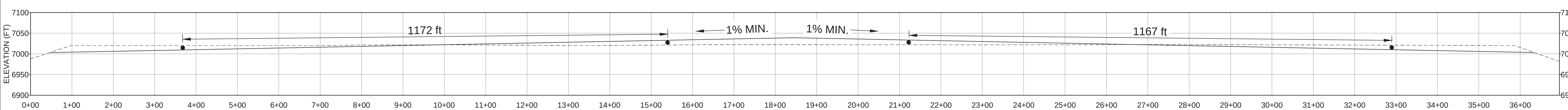


SCALE A 3A-7 017 SECTION 3A-7



SCALE B 3A-8 017 SECTION 3A-8

0 100 200
SCALE A FEET

0 120 240
SCALE B FEET

0 150 300
SCALE C FEET

Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED
C	2016-04-12	INCORPORATE CLIENT COMMENTS & ISSUE FOR CLIENT REVIEW	DET	DET	TMF	BRB

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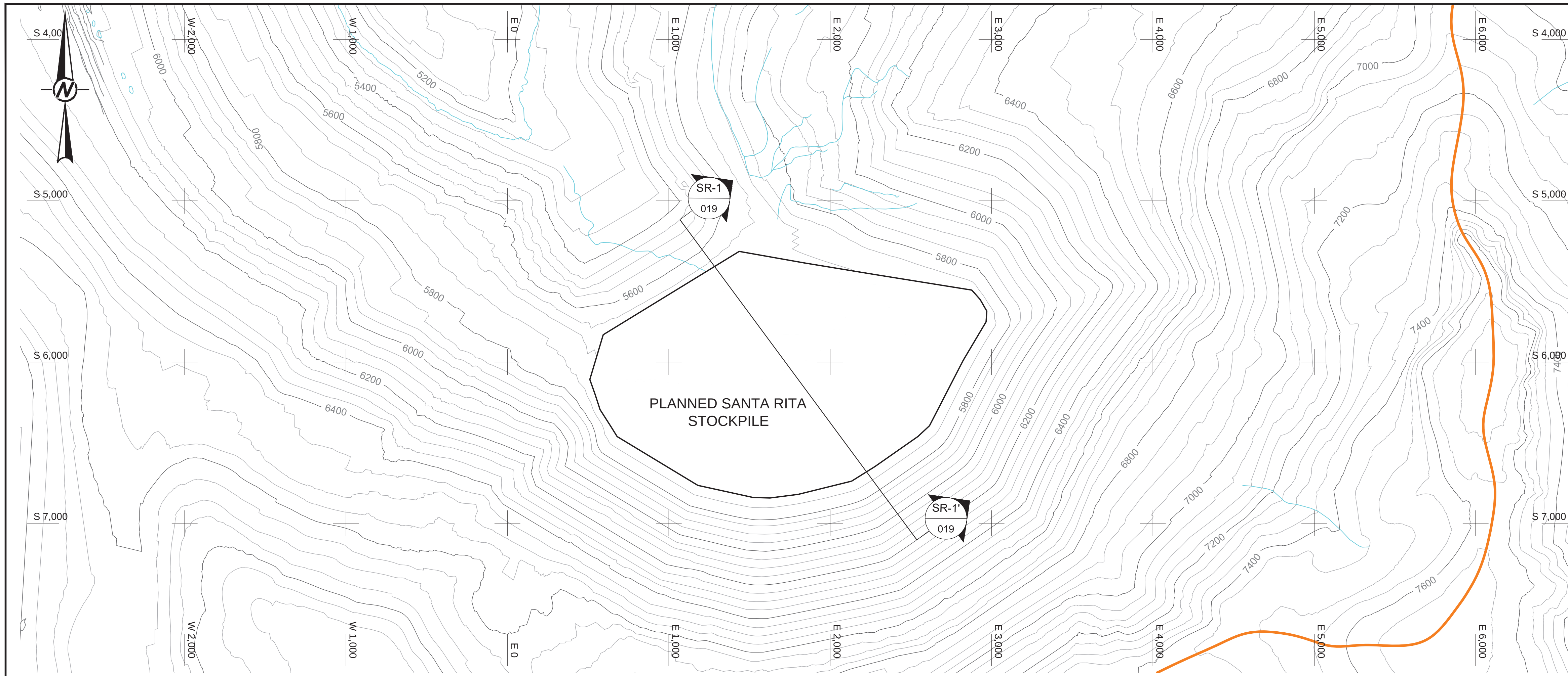
PROJECT
CLOSURE/CLOSEOUT PLAN UPDATE
CHINO MINES COMPANY
GRANT COUNTY, NEW MEXICO

TITLE
PROPOSED 3A STOCKPILE DESIGN SECTIONS

PROJECT No. 1401129 | Rev. C | 18 of 30 | FIGURE 018



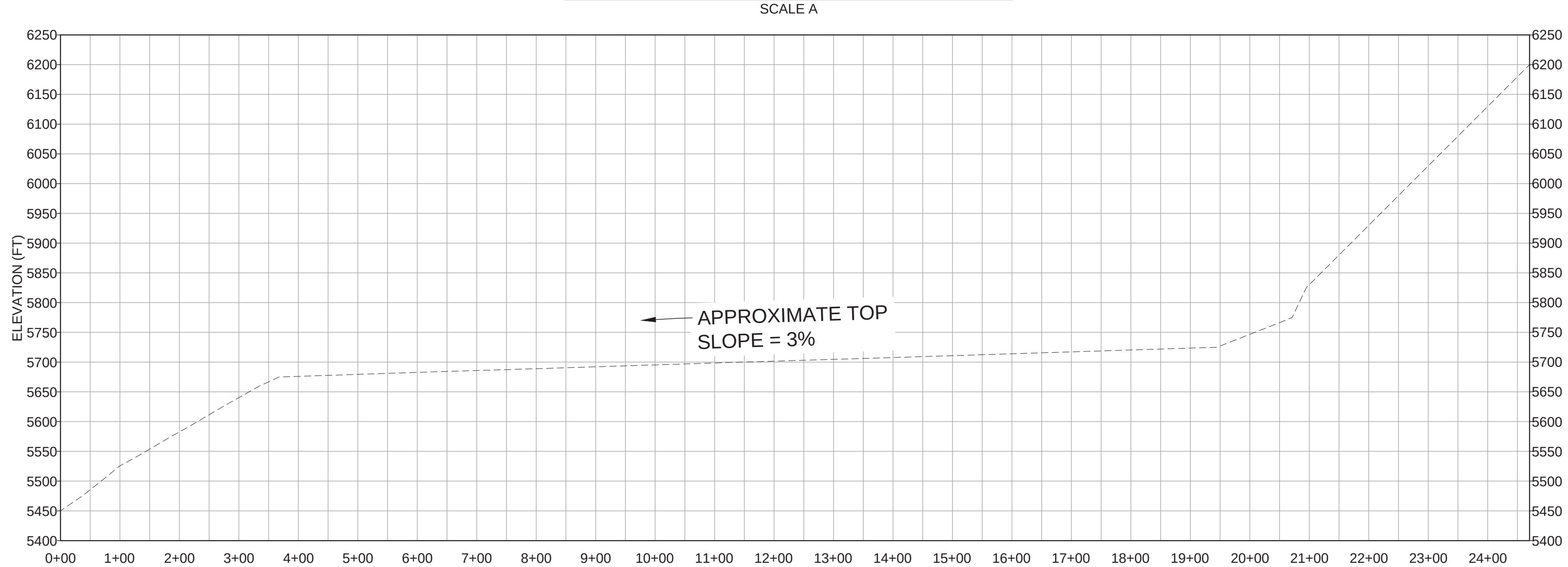
PLANNED SANTA RITA STOCKPILE PLAN VIEW
SCALE A

LEGEND

- 5600 — EOY 2018 TOPO
- BUILDINGS
- EXISTING DRAINAGE
- TOE AND TOP SURFACE OUTLINE
- EOY 2018 OPEN PIT SURFACE WATER DRAINAGE AREA
- SR-1 — CROSS SECTION LETTER
- 019 — SHEET WHERE SECTION IS REFERENCED

REFERENCE

1. END OF YEAR 2018 TOPOGRAPHY PROVIDED BY CHINO MINES CO.



SCALE B SR-1 019 SECTION SR-1

0 400 800
SCALE A FEET

0 150 300
SCALE B FEET

Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED
C	2016-04-12	INCORPORATE CLIENT COMMENTS & ISSUE FOR CLIENT REVIEW	JWR	JWR	TMF	BRB

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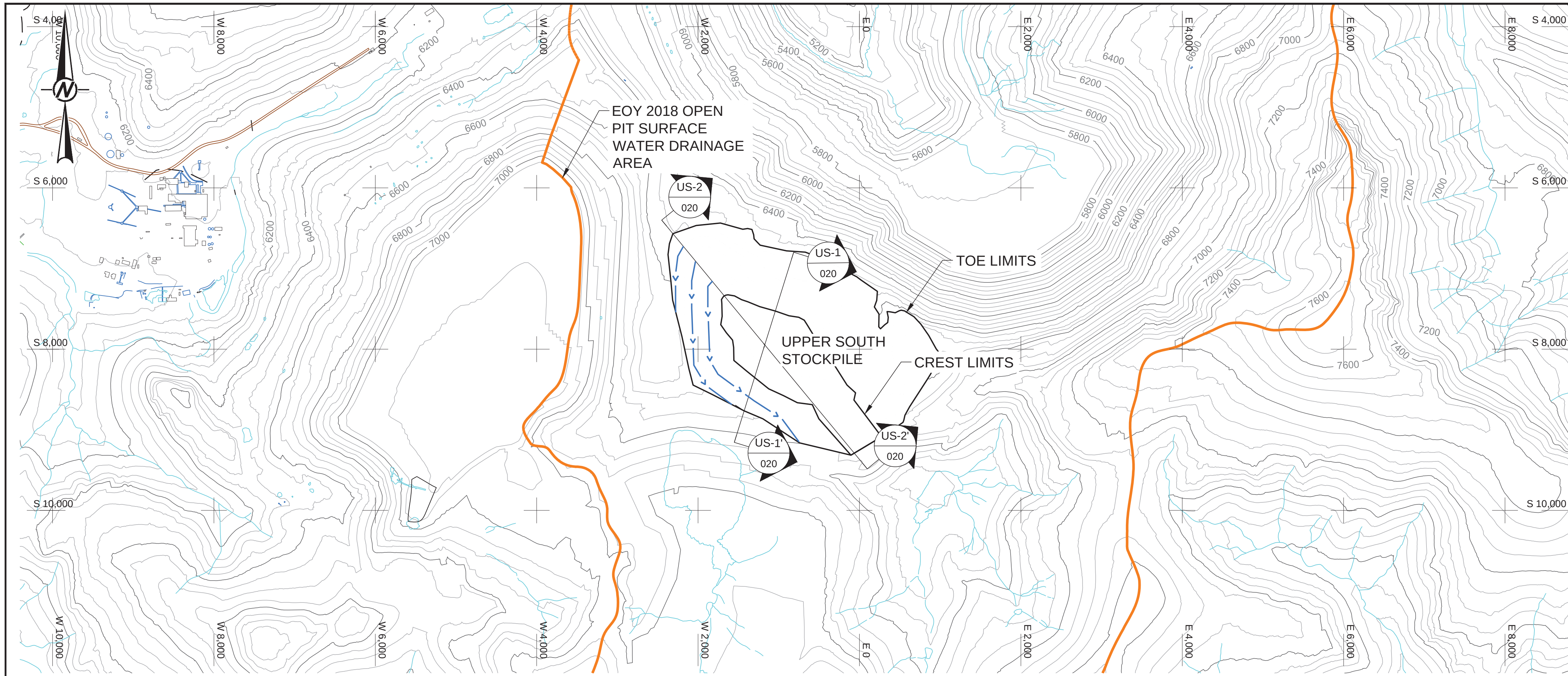
PROJECT
CLOSURE/CLOSEOUT PLAN UPDATE
CHINO MINES COMPANY
GRANT COUNTY, NEW MEXICO

TITLE
PLANNED SANTA RITA STOCKPILE GRADING AND DRAINAGE PLAN

PROJECT No. 1401129 | Rev. C | 19 of 30 | FIGURE 019



UPPER SOUTH STOCKPILE PLAN VIEW

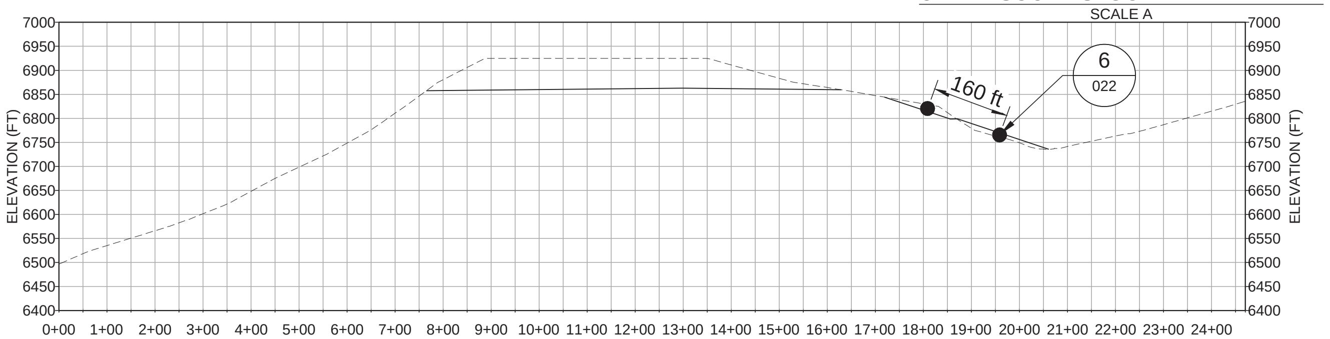
SCALE A

LEGEND

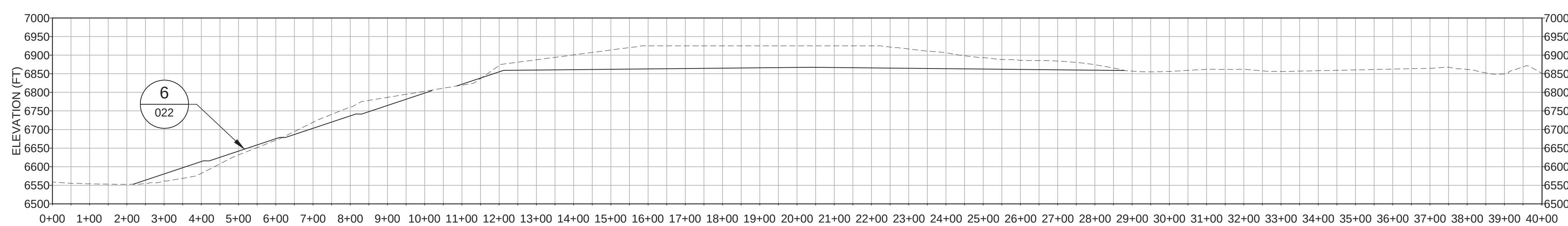
- 5600 — EOY 2018 TOPO
- BUILDINGS
- EXISTING DRAINAGE
- TOE AND TOP SURFACE OUTLINE
- EOY 2018 OPEN PIT SURFACE WATER DRAINAGE AREA
- US-1 — CROSS SECTION LETTER
- 020 — SHEET WHERE SECTION IS REFERENCED

REFERENCE

1. END OF YEAR 2018 TOPOGRAPHY PROVIDED BY CHINO MINES CO.



SCALE B US-1 020 SECTION US-1



SCALE B US-2 020 SECTION US-2

0 800 1600
SCALE A FEET

0 200 400
SCALE B FEET

Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED
C	2016-04-12	INCORPORATE CLIENT COMMENTS & ISSUE FOR CLIENT REVIEW	DET	DET	TMF	BRB

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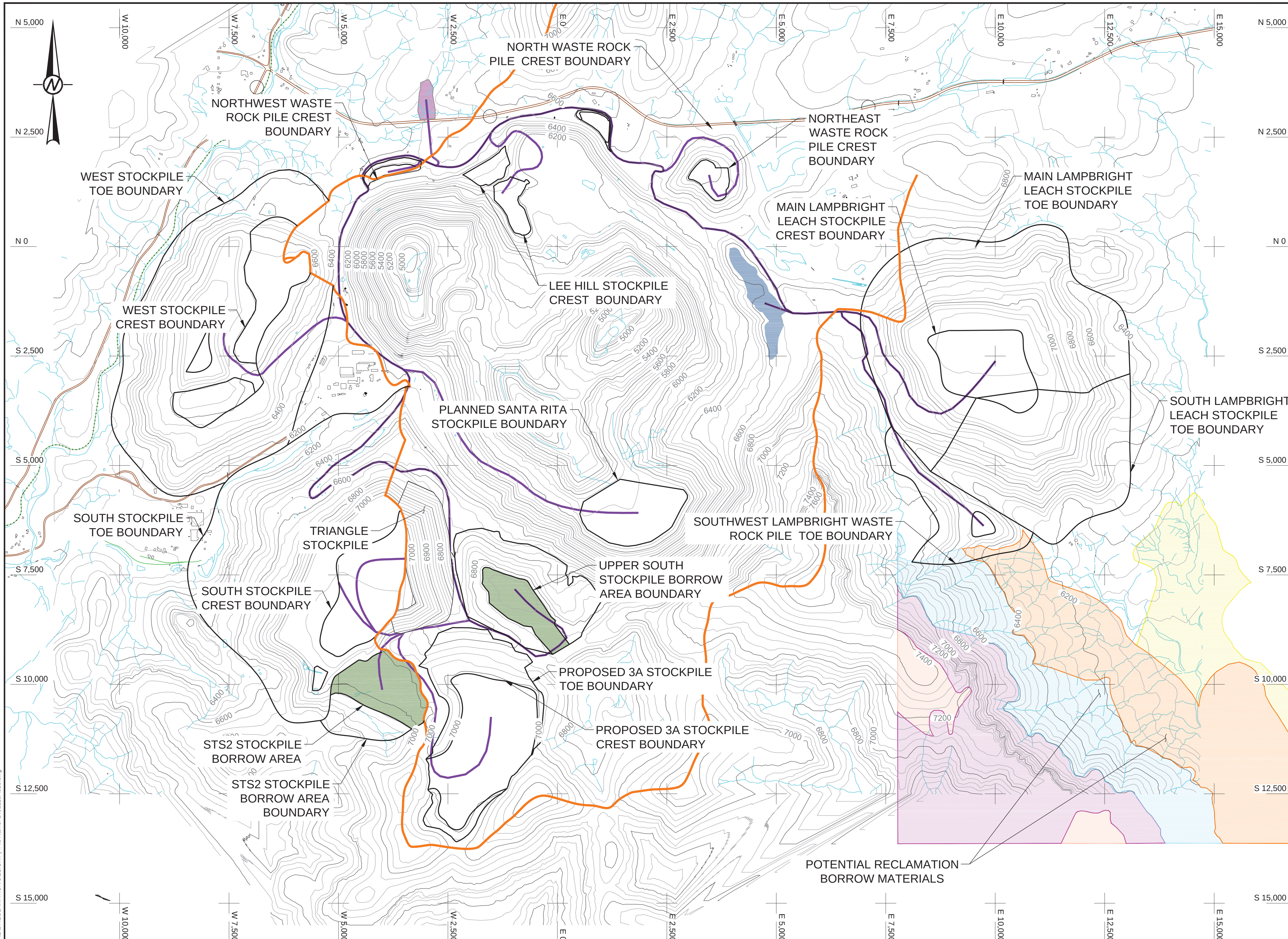
PROJECT
CHINO MINES AREA RECLAMATION
HURLEY, NEW MEXICO

TITLE
UPPER SOUTH STOCKPILE GRADING AND DRAINAGE PLAN

PROJECT No. 1401129 | CONTROL | Rev. C | 20 of 30 | FIGURE 020



LEGEND

5600	EOY 2018 TOPO
	BUILDINGS
	PAVED ROAD
	TOE AND TOP SURFACE OUTLINE
	EOY 2018 OPEN PIT SURFACE WATER DRAINAGE AREA
	COVER MATERIAL HAUL ROUTE
	RUBIO PEAK CONGLOMERATE
	RUBIO PEAK FLOWS (RIPRAP)
	SUGARLUMP TUFF (COVER BORROW AREA)
	BEAR SPRINGS BASALT (RIPRAP)
	KNEELING NUN TUFF (RIPRAP)
	UPPER SOUTH AND STS2 STOCKPILE COVER BORROW AREAS
	KEARNEY CULVERT FILL MATERIAL
	WHITE HOUSE TEMPORARY COVER STAGING AREA

REFERENCE

1. END OF YEAR 2018 TOPOGRAPHY 50 FOOT INTERVAL PROVIDED BY CHINO MINES CO.

Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED
E	2018-08-24	ADD TRIANGLE STOCKPILE	SAF	SAF	TMF	BRB
D	2018-08-13	ADDRESS AGENCY COMMENTS	SAF	SAF	TMF	BRB
C	2016-04-12	INCORPORATE CLIENT COMMENTS & ISSUE FOR CLIENT REVIEW	DET	DET	TMF	BRB

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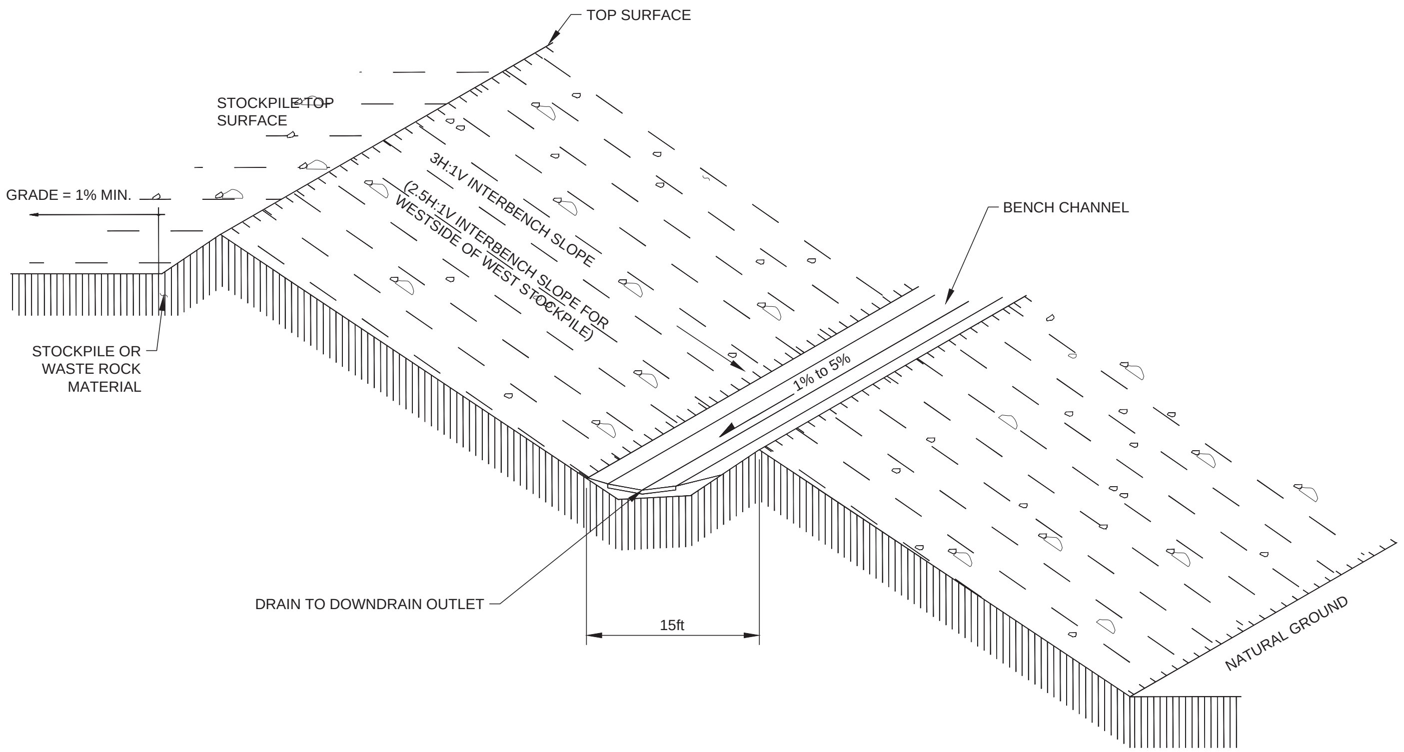
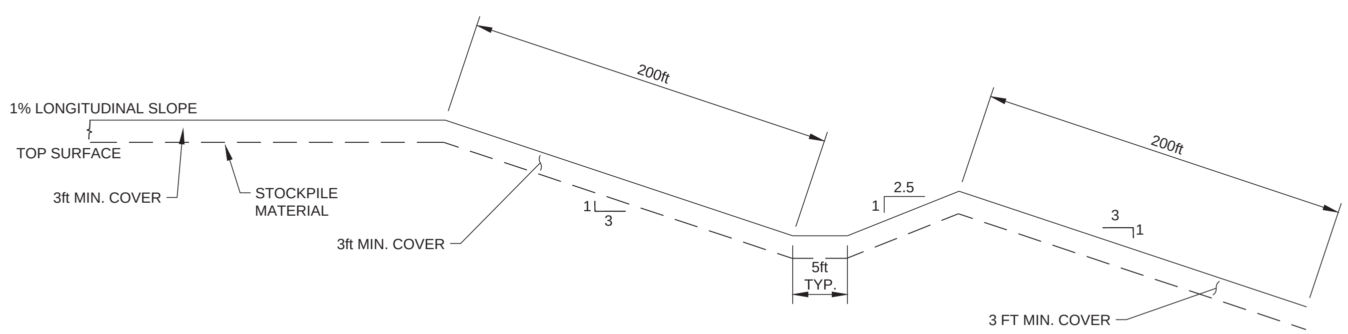
PROJECT
CHINO MINES AREA RECLAMATION
HURLEY, NEW MEXICO

TITLE
NORTH MINE AREA BORROW LOCATIONS AND HAUL ROUTES

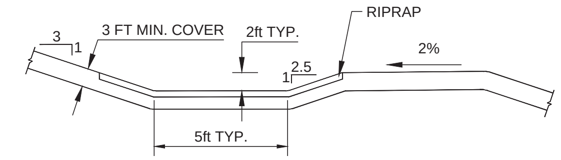
PROJECT No.	CONTROL	Rev.		FIGURE
1401129		D	21 of 30	021



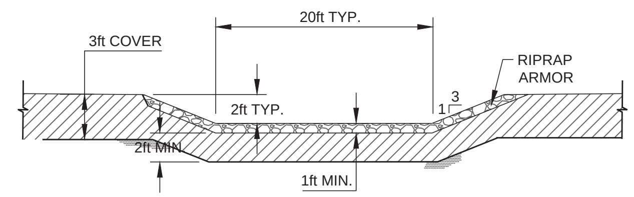
SCALE N.T.S. 1 022 TYPICAL OUTSLOPE PLAN



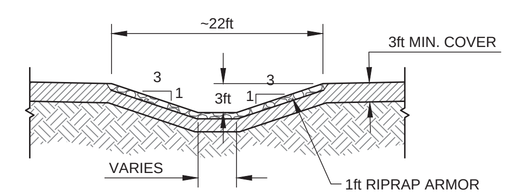
SCALE N.T.S. 2 022 TYPICAL RECLAIMED OUTSLOPE SECTION



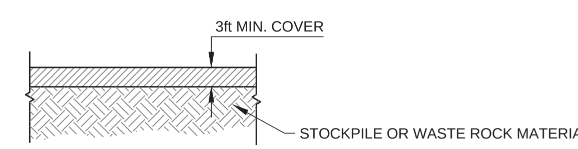
SCALE N.T.S. 3 022 TYPICAL OUTSLOPE BENCH



SCALE N.T.S. 4 022 DOWNDRAIN DETAIL



SCALE N.T.S. 5 022 WEST STOCKPILE - SOUTH STOCKPILE CONTACT SURFACE WATER CHANNEL



SCALE N.T.S. 6 022 RECLAMATION COVER DESIGN DETAIL

Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED
E	2018-08-24	ADD DETAIL	SAF	SAF	TMF	BRB
D	2018-08-13	ADDRESS AGENCY COMMENTS & CORRECT DETAILS 1 AND 2	SAF	SAF	TMF	BRB
C	2016-04-12	INCORPORATE CLIENT COMMENTS & ISSUE FOR CLIENT REVIEW	DET	DET	TMF	BRB

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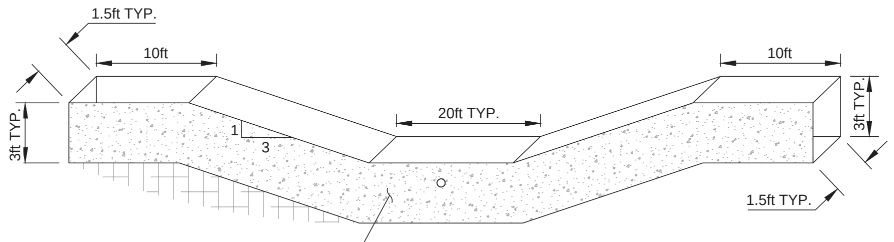
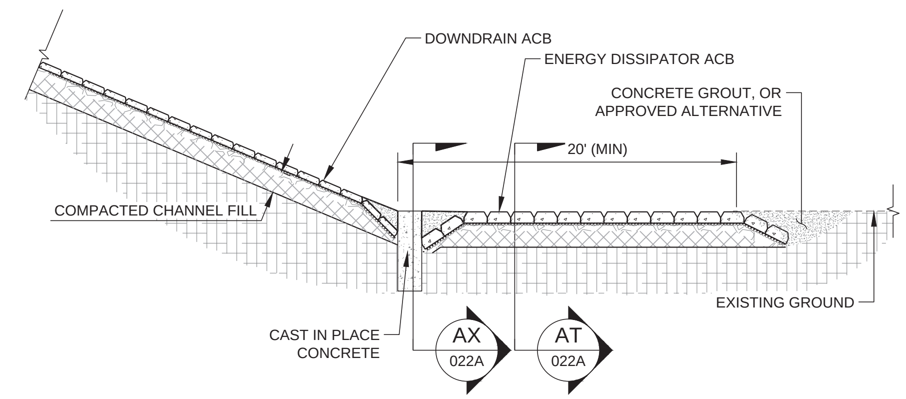
PROJECT
CHINO MINES AREA RECLAMATION
HURLEY, NEW MEXICO

TITLE
TYPICAL RECLAMATION GRADING DETAILS

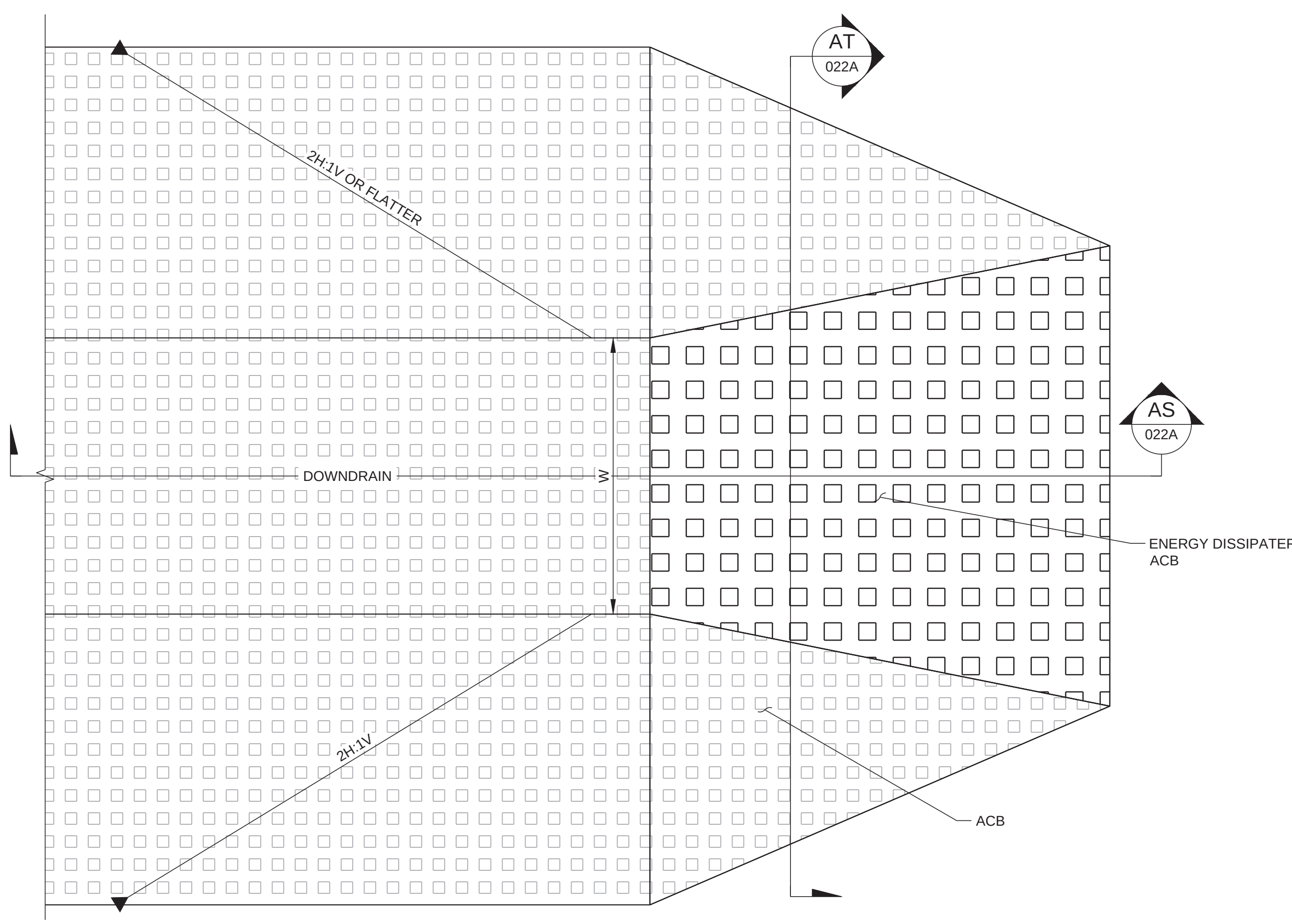
PROJECT No. 1401129 | CONTROL | Rev. D | 22 of 30 | FIGURE 022



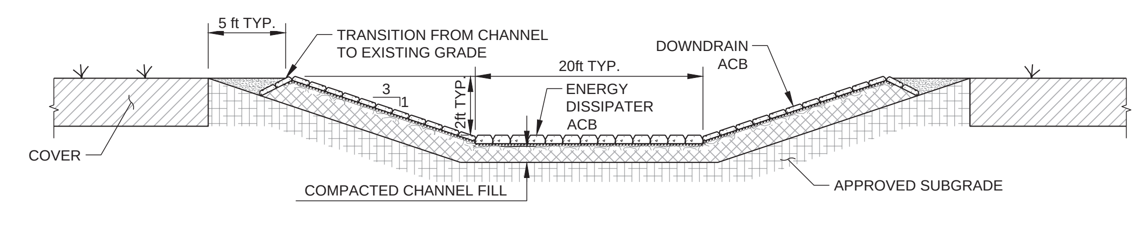
N.T.S. AX 022A TYPICAL CUTTOFF WALL SECTION



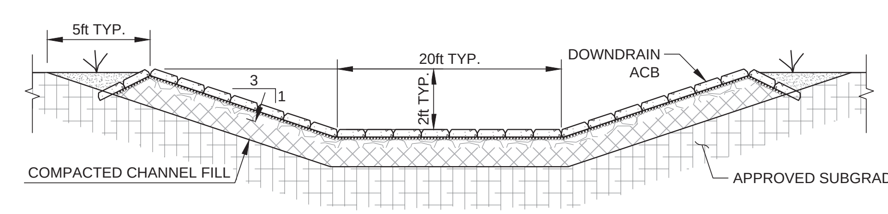
N.T.S. AS 022A TYPICAL TOE ENERGY DISSIPATER PROFILE



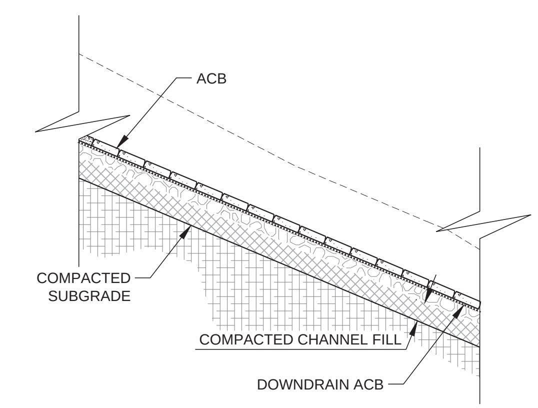
N.T.S 8 022A TYPICAL TOE ENERGY DISSIPATOR PLAN DETAIL



N.T.S. AT 022A TYPICAL TOE ENERGY DISSIPATER SECTION



N.T.S AU 022A TYPICAL DOWNDRAIN SECTION



N.T.S 7 022A DOWNDRAIN PROFILE DETAIL

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
B	2018-08-24	ADD DETAIL	SAF	SAF	TMF	BRB
A	2018-08-14	ADDRESS AGENCY COMMENTS	SAF	SAF	TMF	BRB

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PROJECT
CHINO MINES AREA RECLAMATION
HURLEY, NEW MEXICO

TITLE
TOE ENERGY DISSIPATER - TYPICAL SECTIONS AND DETAILS

PROJECT NO.	CONTROL	REV.	22A of 30	FIGURE
1401129		A		022A

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

LEGEND

5600 EOY 2018 TOPO

BUILDINGS

PAVED ROAD

EXISTING DRAINAGE

REFERENCE

1. END OF YEAR 2018 TOPOGRAPHY 5 FOOT INTERVAL PROVIDED BY CHINO MINES CO.

Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED
C	2016-04-12	INCORPORATE CLIENT COMMENTS & ISSUE FOR CLIENT REVIEW	CM	CM	TMF	BRB

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PROJECT

CHINO MINES AREA RECLAMATION
HURLEY, NEW MEXICO

TITLE

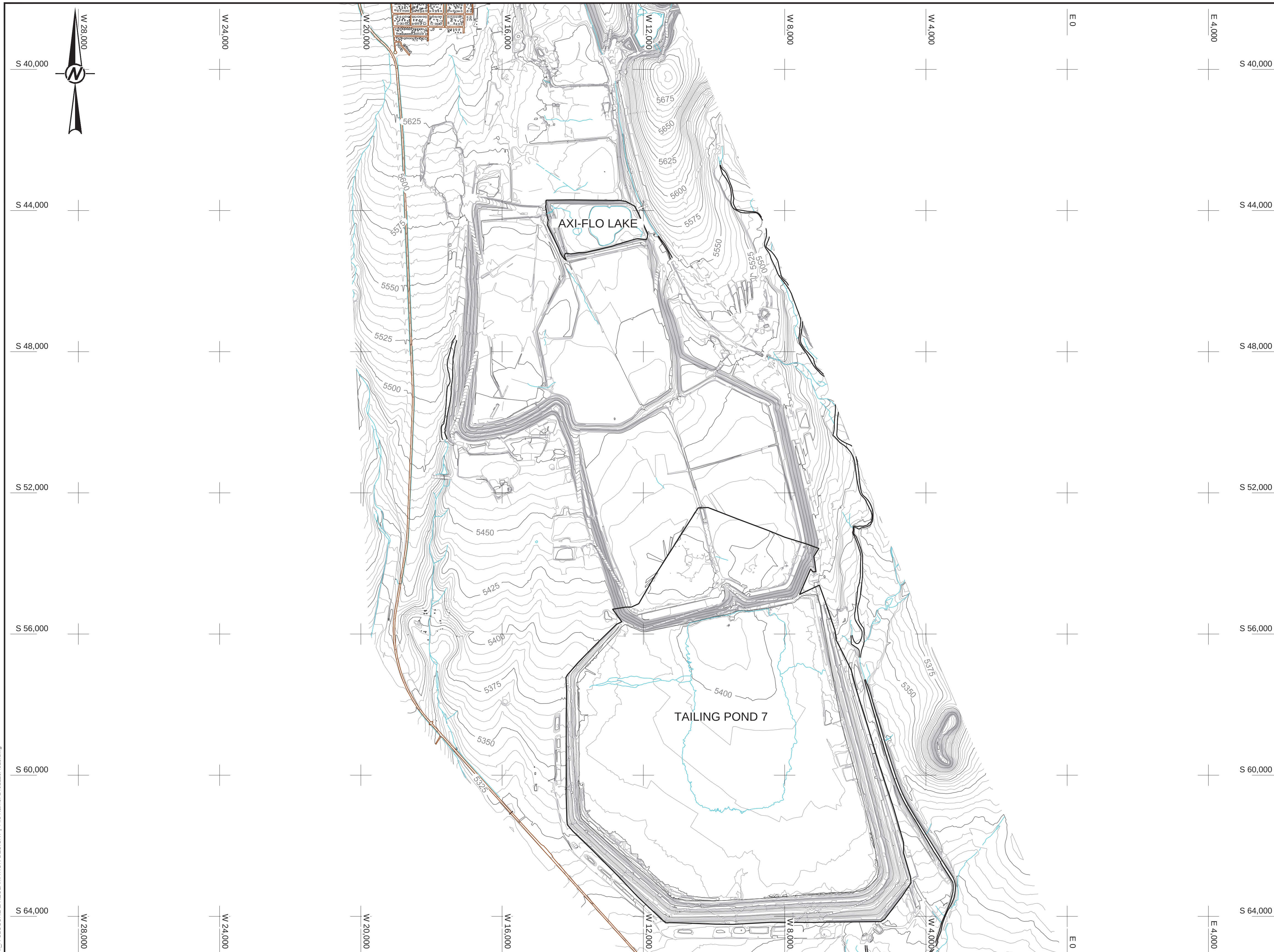
SOUTH MINE AREA END OF YEAR 2018 PRE-RECLAMATION TOPOGRAPHY

PROJECT No.	CONTROL	Rev.		FIGURE
1401129		C	23 of 30	023

Path: \\Denver.golder.gds\gal\cad\1401129\PRODUCTION_A CLOSURE & RECLAMATION DESIGN\ | File Name: 1401129A014.dwg

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

0 1 in



LEGEND

- 5600 — EOY 2018 TOPO
- BUILDINGS
- PAVED ROAD
- EXISTING DRAINAGE
- FACILITY TOE LIMITS

REFERENCE

1. END OF YEAR 2018 TOPOGRAPHY PROVIDED BY CHINO MINES CO.

0 1500 3000
SCALE FEET

Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED
A	2016-04-12	INCORPORATE CLIENT COMMENTS & ISSUE FOR CLIENT REVIEW	LRS	DET	TMF	BRB

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PROJECT
CHINO MINES AREA RECLAMATION
HURLEY, NEW MEXICO

TITLE
SOUTH MINE AREA POST-RECLAMATION TOPOGRAPHY

PROJECT No. 1401129 | CONTROL | Rev. A | 24 of 30 | FIGURE 024

LEGEND

5600 EOY 2018 TOPO

BUILDINGS

OUTLET CHANNEL FLOW

AREA TO BE RECLAIMED

BENCH CHANNEL

A-1 CROSS SECTION LETTER

026 SHEET WHERE SECTION IS REFERENCED

REFERENCE

1. END OF YEAR 2018 TOPOGRAPHY PROVIDED BY CHINO MINES CO.

0 150 300
SCALE FEET

Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED
C	2016-04-12	INCORPORATE CLIENT COMMENTS & ISSUE FOR CLIENT REVIEW	DET	DET	TMF	BRB

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PROJECT

CHINO MINES AREA RECLAMATION
HURLEY, NEW MEXICO

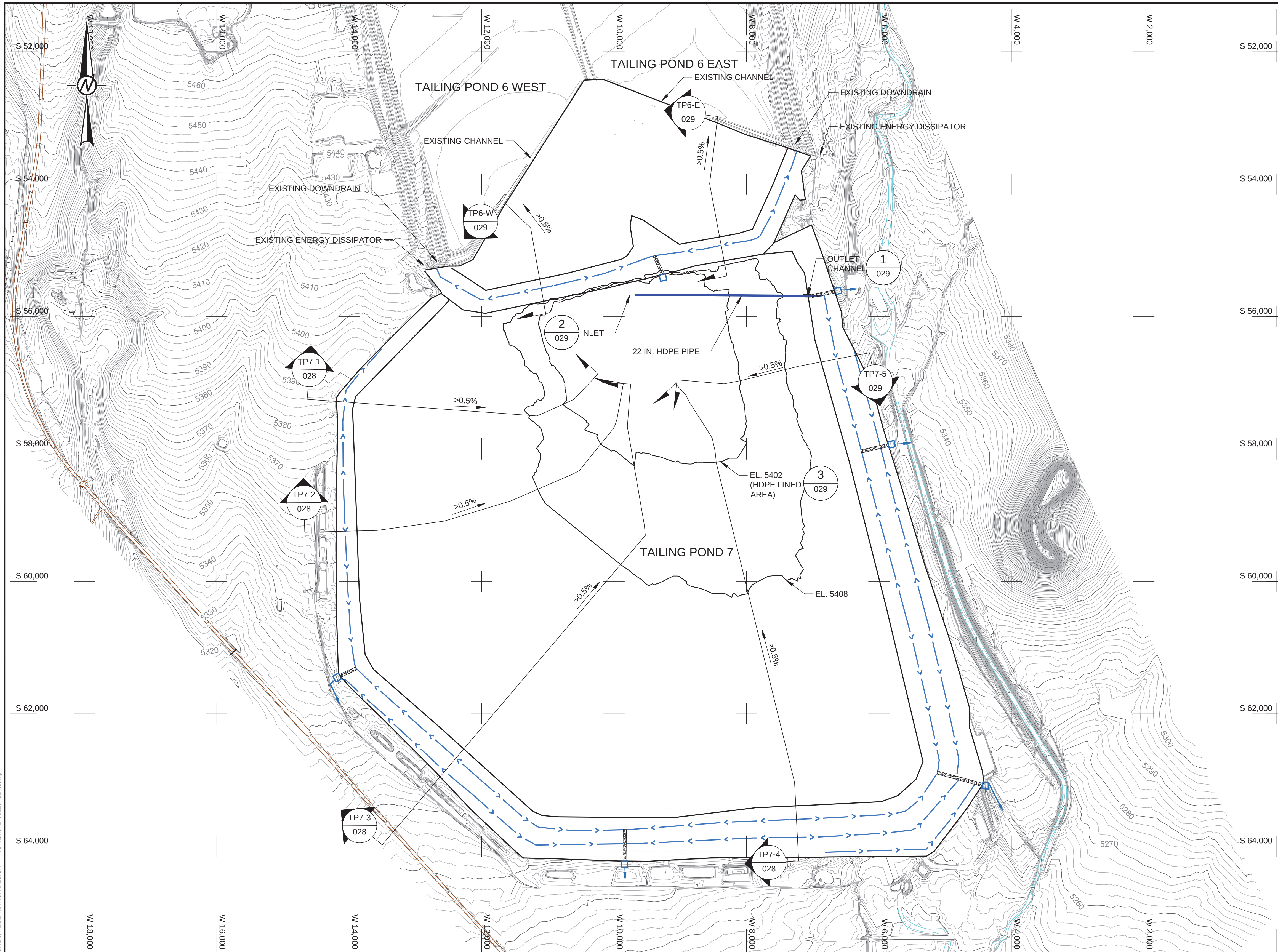
TITLE

AXI-FLO LAKE GRADING AND DRAINAGE PLAN

PROJECT No. 1401129 | CONTROL | Rev. C | 25 of 30 | FIGURE 025

1 in
IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

Path: \\Denver.golder.gds\acad\14\1401129\PRODUCTION_A CLOSURE & RECLAMATION DESIGN\ | File Name: 1401129A008.dwg



LEGEND

- 5600 EOY 2018 TOPO
- BUILDINGS
- PAVED ROAD
- DOWNDRAIN OUTFLOW
- EXISTING DRAINAGE
- BENCH CHANNEL
- DOWNDRAIN
- ENERGY DISSIPATOR
- TP7-1 / 028 — CROSS SECTION LETTER; SHEET WHERE SECTION IS REFERENCED
- 1 / 025 — DETAIL NUMBER; SHEET WHERE DETAIL IS REFERENCED

REFERENCE

1. END OF YEAR 2018 TOPOGRAPHY 5 FOOT INTERVAL PROVIDED BY CHINO MINES CO.

0 800 1600
SCALE FEET

Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED
D	2018-08-13	ADDRESS AGENCY COMMENTS	SAF	SAF	TMF	BRB
C	2016-04-12	INCORPORATE CLIENT COMMENTS & ISSUE FOR CLIENT REVIEW	DET	DET	TMF	BRB

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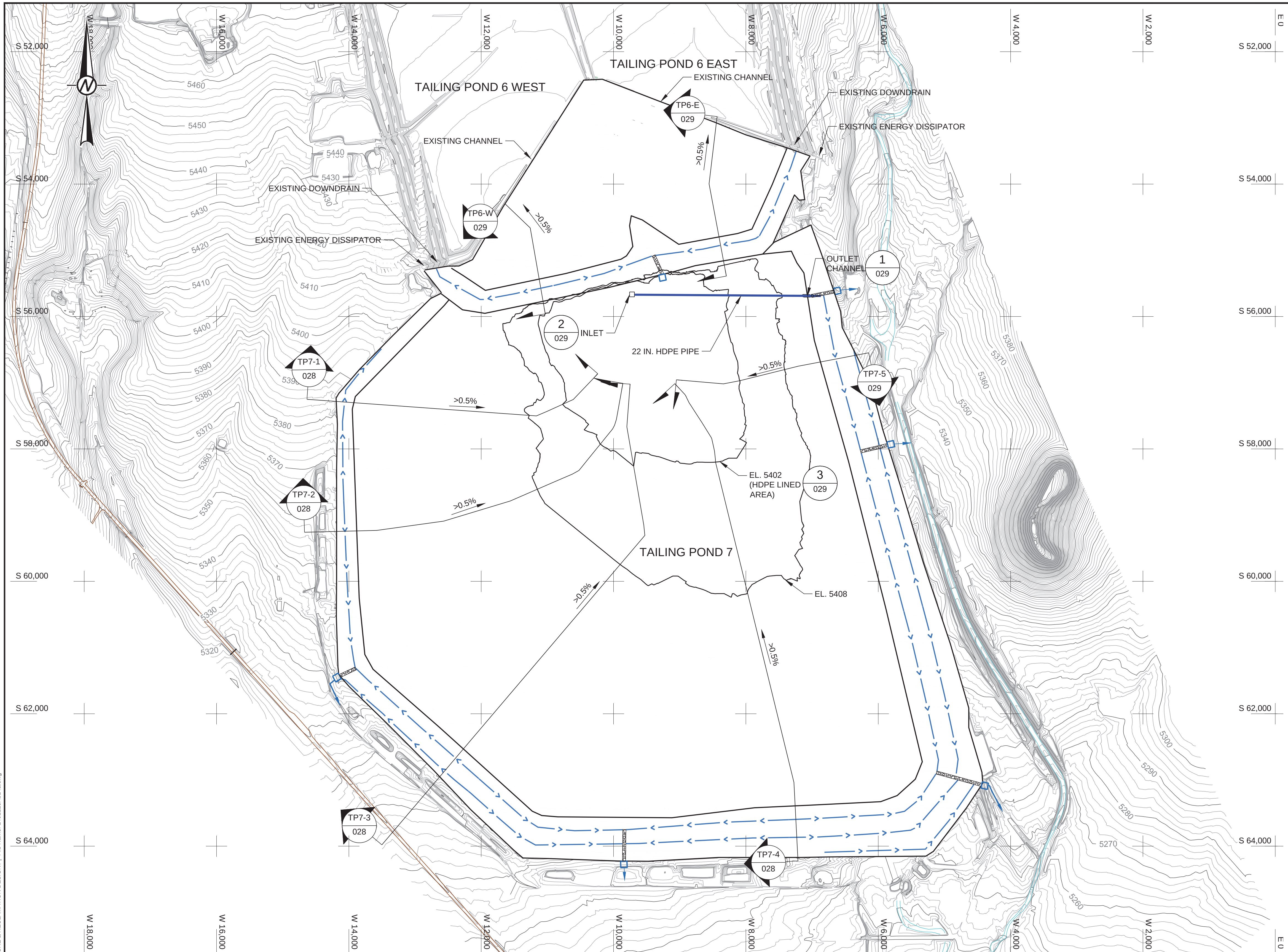
PROJECT
CHINO MINES AREA RECLAMATION
HURLEY, NEW MEXICO

TITLE
TAILING POND 6 EAST, 6 WEST AND 7 GRADING AND DRAINAGE PLAN

PROJECT No. 1401129 | CONTROL | Rev. D | 27 of 30 | FIGURE 027

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

Path: \\Denver\acad\14\1401129\PRODUCTION_A CLOSURE & RECLAMATION DESIGN\ | File Name: 1401129A014a.dwg



LEGEND

5600	EOY 2018 TOPO
	BUILDINGS
	PAVED ROAD
	DOWNDRAIN OUTFLOW
	EXISTING DRAINAGE
	BENCH CHANNEL
	DOWNDRAIN
	ENERGY DISSIPATOR
TP7-1 / 028	CROSS SECTION LETTER; SHEET WHERE SECTION IS REFERENCED
1 / 025	DETAIL NUMBER; SHEET WHERE DETAIL IS REFERENCED

REFERENCE

1. END OF YEAR 2018 TOPOGRAPHY 5 FOOT INTERVAL PROVIDED BY CHINO MINES CO.

0 800 1600
SCALE FEET

Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED
D	2018-08-13	ADDRESS AGENCY COMMENTS	SAF	SAF	TMF	BRB
C	2016-04-12	INCORPORATE CLIENT COMMENTS & ISSUE FOR CLIENT REVIEW	DET	DET	TMF	BRB

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PROJECT
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HURLEY, NEW MEXICO

TITLE
TAILING POND 6 EAST, 6 WEST AND 7 GRADING AND DRAINAGE PLAN

PROJECT No.	CONTROL	Rev.		FIGURE
1401129		D	27 of 30	027

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IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

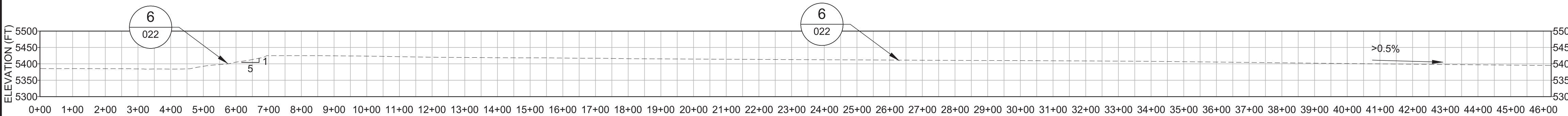
0 1 in

LEGEND

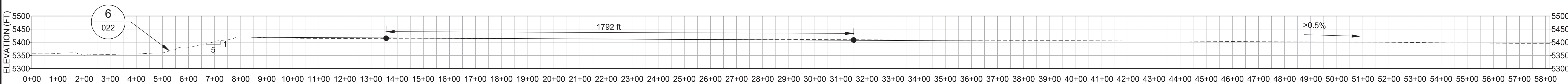
- EOY 2018 TOPOGRAPHY (dashed line)
- CCP GRADING DESIGN (solid line)
- CENTROID OF CUT/FILL AREA (dot)

REFERENCE

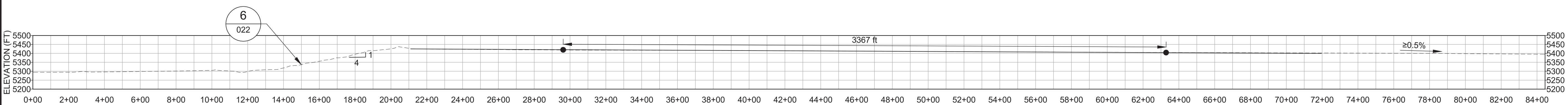
1. END OF YEAR 2018 TOPOGRAPHY PROVIDED BY CHINO MINES CO.



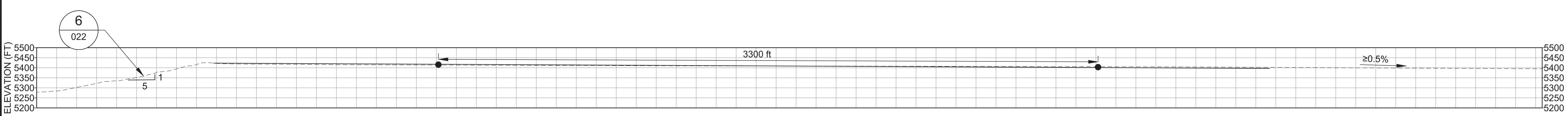
SCALE A TP7-1 027 SECTION TP7-1



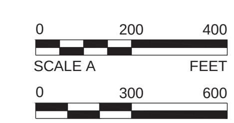
SCALE A TP7-2 027 SECTION TP7-2



SCALE B TP7-3 027 SECTION TP7-3



SCALE B TP7-4 027 SECTION TP7-4



Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED
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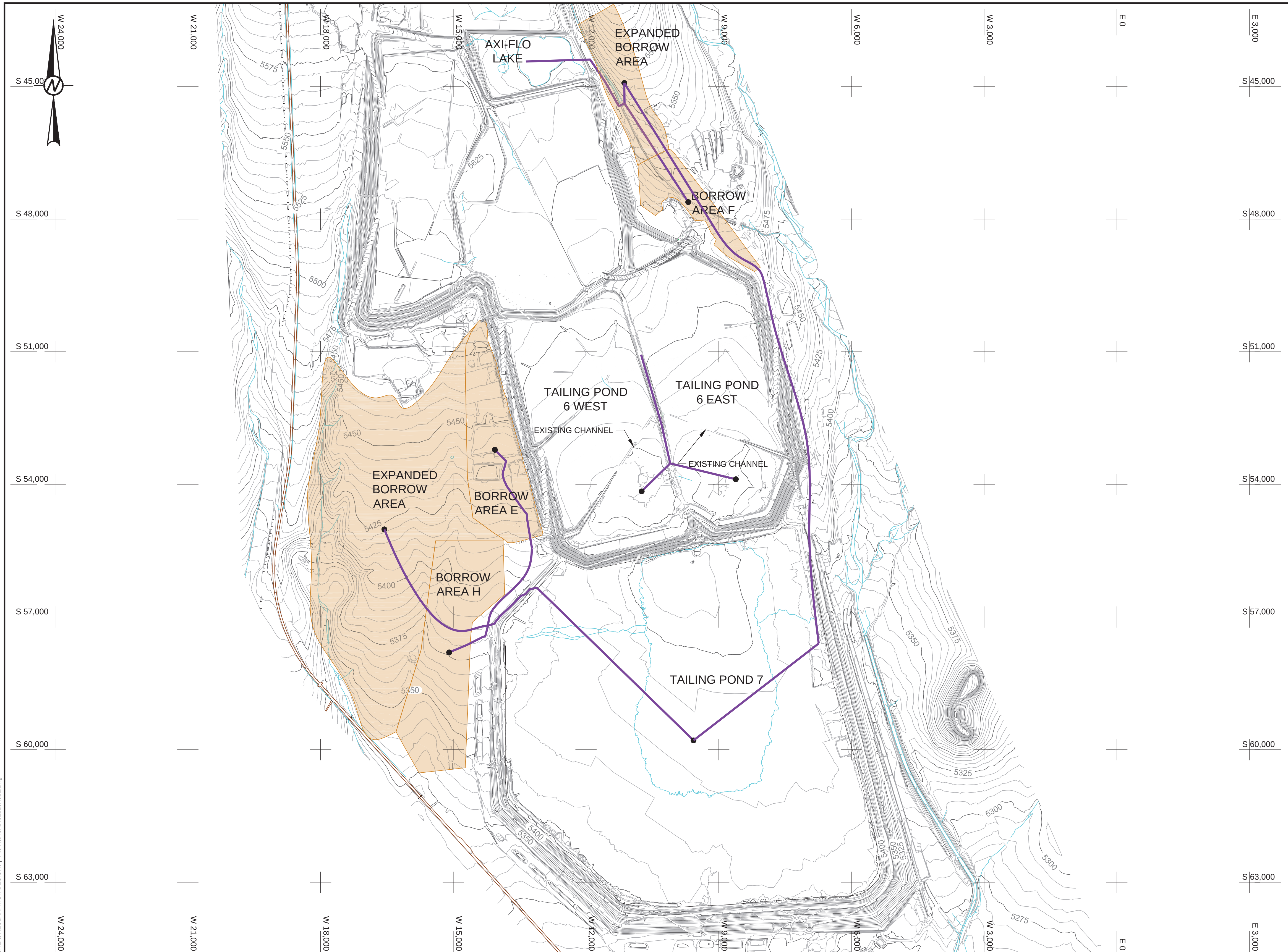
PROJECT

CHINO MINES AREA RECLAMATION
HURLEY, NEW MEXICO

TITLE

TAILING POND 6 EAST, 6 WEST AND 7 DESIGN SECTIONS (1 OF 2)

PROJECT No.	CONTROL	Rev.		FIGURE
1401129		C	28 of 30	028



LEGEND

5600	EOY 2018 TOPO
	BUILDINGS
	PAVED ROAD
	COVER MATERIAL HAUL ROUTE
	BORROW AREA

REFERENCE

1. END OF YEAR 2018 TOPOGRAPHY 5 FOOT INTERVAL PROVIDED BY CHINO MINES CO.

0 1200 2400
SCALE FEET

Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED
D	2018-08-13	ADDRESS AGENCY COMMENTS	SAF	SAF	TMF	BRB
C	2016-04-12	INCORPORATE CLIENT COMMENTS & ISSUE FOR CLIENT REVIEW	DET	DET	TMF	BRB

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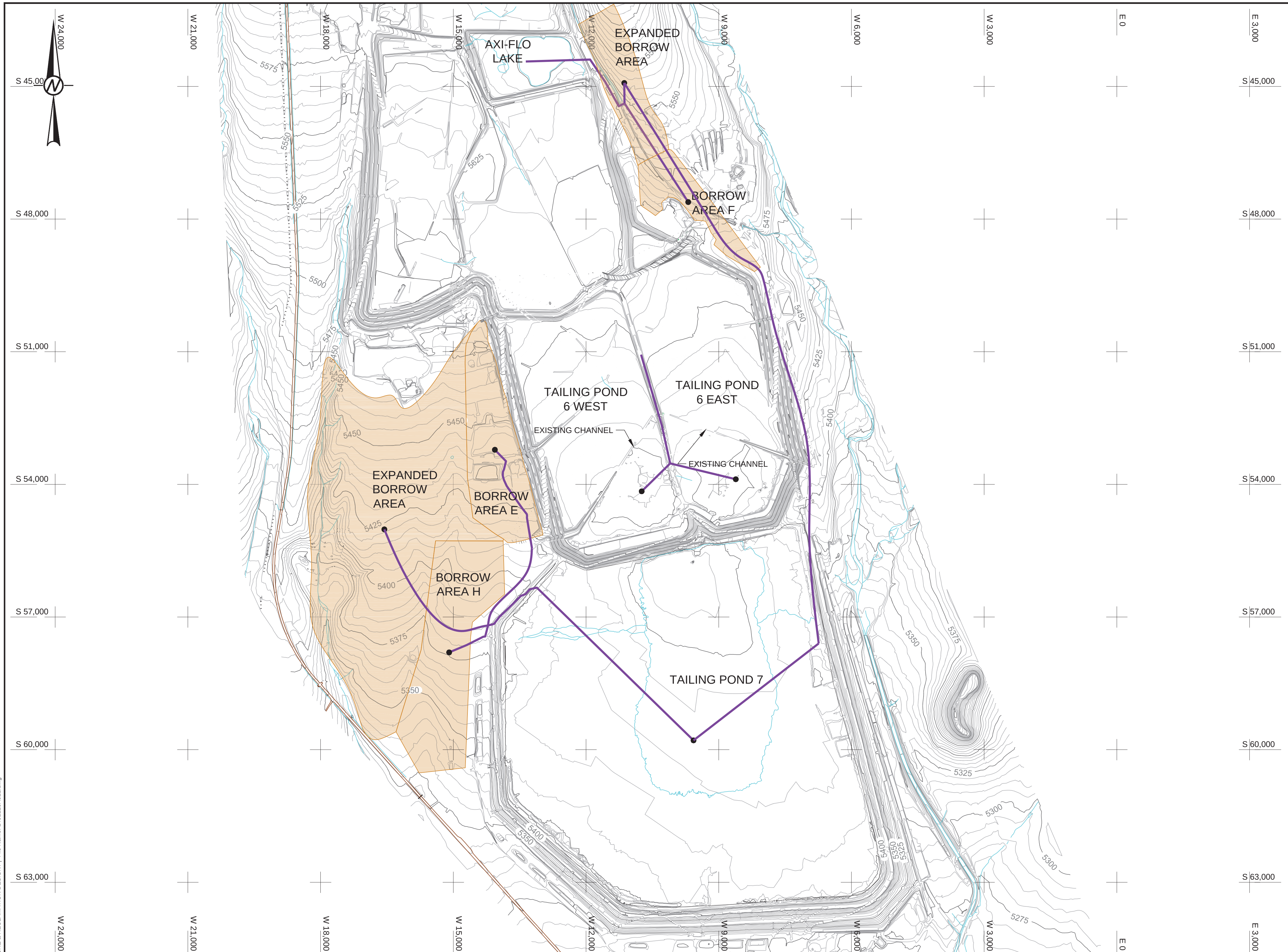
PROJECT
CHINO MINES AREA RECLAMATION
HURLEY, NEW MEXICO

TITLE
SOUTH MINE AREA BORROW AREAS & HAUL ROUTES

PROJECT No.	CONTROL	Rev.		FIGURE
1401129		D	30 of 30	030

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

Path: \\Denver\acad\14\1401129\PRODUCTION_A CLOSURE & RECLAMATION DESIGN\ | File Name: 1401129A021.dwg



LEGEND

5600	EOY 2018 TOPO
	BUILDINGS
	PAVED ROAD
	COVER MATERIAL HAUL ROUTE
	BORROW AREA

REFERENCE

1. END OF YEAR 2018 TOPOGRAPHY 5 FOOT INTERVAL PROVIDED BY CHINO MINES CO.

0 1200 2400

SCALE FEET

Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED
D	2018-08-13	ADDRESS AGENCY COMMENTS	SAF	SAF	TMF	BRB
C	2016-04-12	INCORPORATE CLIENT COMMENTS & ISSUE FOR CLIENT REVIEW	DET	DET	TMF	BRB

SEAL

CLIENT

CHINO MINES COMPANY

CONSULTANT

GOLDER

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Lakewood, Colorado
USA 80228
[+1] (303) 980 0540
www.golder.com

PROJECT

CHINO MINES AREA RECLAMATION
HURLEY, NEW MEXICO

TITLE

SOUTH MINE AREA BORROW AREAS & HAUL ROUTES

PROJECT No.	CONTROL	Rev.		FIGURE
1401129		D	30 of 30	030

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IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

0 1 in

Chino Mine Earthwork Quantities

Section	Cut (ft2)	Fill (ft2)	Avg (ft2)	Width (ft)	Volume (cy)	Push Dist (ft)	Push Grade (%)
S-1	8,130	8,149	8,140	1,155	348,051	389	-37.4%
S-2	119,445	119,487	119,466	1,060	4,690,126	1,550	-38.5%
S-3	102,563	102,565	102,564	1,080	4,101,997	1,840	-36.9%
S-4	53,554	53,536	53,545	1,031	2,044,550	1,204	-35.5%
S-5	135,459	135,457	135,458	889	4,461,300	2,025	-37.0%
S-6	150,461	150,458	150,460	883	4,922,868	2,017	-37.4%
S-7	64,463	64,472	64,467	1,077	2,572,155	1,206	-37.2%
S-8	62,615	62,620	62,617	1,578	3,660,779	893	-41.3%
S-9	-	-	-	-	-	-	-
(1)	2,194	2,197	2,195	1,693	137,679	158	-43.8%
(2)	1,835	1,837	1,836	1,693	115,155	809	-0.5%
(3)	1,592	1,594	1,593	1,693	99,907	648	-0.2%

Down Drains (ft)	Down Drain Excavation (cy)	Down Drain Compacted Fill (sy)	Downdrain ACB (sf)	Bench Channels (ft)	Bench Channel Compacted Fill (sy)	Bench Channel Riprap (cy)	Top Area (ft2)	Outslope Area (ft2)
6,474	12,469	22,452	202,067	95,487	125,270	17,399	3,729,480	21,735,774

West - South SW Channel (ft)	Channel Excavation (cy)	Channel Riprap (cy)
1,818	2,626	1,547

Not all quantities are used in the RCE

Section	Cut (ft2)	Fill (ft2)	Avg (ft2)	Width (ft)	Volume (cy)	Push Dist (ft)	Push Grade (%)
S-10	-	-	-	-	-	-	-
(1)	225	226	226	1,523	12,730	157	35.4%
(2)	3,994	3,994	3,994	1,523	225,294	189	44.2%

Down Drains (ft)	Down Drain Excavation (cy)	Down Drain Compacted Fill (sy)	Downdrain ACB (sf)	Bench Channels (ft)	Bench Channel Compacted Fill (sy)	Bench Channel Riprap (cy)	Top Area (ft2)	Outslope Area (ft2)
-	-	-	-	6,218	8,158	1,133	2,294,867	1,354,480

Not all quantities are used in the RCE

Section	Cut (ft2)	Fill (ft2)	Avg (ft2)	Width (ft)	Volume (cy)	Push Dist (ft)	Push Grade (%)
LB-1	47,235	47,235	47,235	1,482	2,592,130	1,357	-36.3%
LB-2	30,109	30,109	30,109	1,248	1,391,371	1,343	-34.4%
LB-3	37,886	37,887	37,887	858	1,204,331	1,066	-36.8%
LB-4	51,252	51,252	51,252	797	1,511,967	1,428	-35.0%
LB-5	71,443	71,443	71,443	792	2,096,307	1,344	-37.8%
LB-6	18,876	18,876	18,876	736	514,292	1,204	-33.3%
LB-7	-	-	-	-	-	-	-
(1)	8,433	13,755	11,094	976	400,870	476	-37.9%
(2)	9,612	4,290	6,951	976	251,168	320	-39.4%
LB-8	33,711	33,711	33,711	1,032	1,287,895	690	-40.4%
LB-9	37,515	37,514	37,515	1,240	1,723,541	904	-38.2%
LB-10	82,787	82,787	82,787	717	2,199,892	1,363	-37.7%
LB-11	37,875	37,875	37,875	913	1,280,563	1,572	-34.1%
LB-12	91,830	91,830	91,830	1,273	4,330,838	1,700	-35.8%
LB-13	70,247	70,247	70,247	1,168	3,039,282	1,311	-38.1%
LB-14	54,893	54,893	54,893	922	1,875,436	1,110	-38.2%
LB-15	4,838	4,837	4,837	1,694	303,576	259	-41.3%
LB-16	13,517	13,517	13,517	1,062	531,879	616	-37.8%
LB-17	-	-	-	-	-	-	-
(1)	10,763	10,763	10,763	1,018	405,644	388	-40.5%
(2)	11,848	11,848	11,848	1,018	446,539	450	-38.7%
LB-18	9,524	9,524	9,524	1,276	450,060	406	-38.4%
LB-19	-	-	-	-	-	-	-
(1)	1,998	1,997	1,998	2,069	153,058	843	0.5%
(2)	2,406	2,425	2,416	2,069	185,110	726	-1.9%

	Down Drains (ft)	Down Drains Excavation (cy)	Down Drain Compacted Fill (sy)	Downdrain ACB (sf)	Bench Channels (ft)	Bench Channel Compacted Fill (sy)	Bench Channel Riprap (cy)	Top Area (ft2)	Outslope Area (ft2)
Main LB	9,299	17,909	32,247	290,226	157,574	206,721	28,711	3,380,426	30,830,458
Main LB	-	-	-	-	-	-	-	-	-
South LB	-	-	-	-	-	-	-	227,835	3,879,770

Not all quantities are used in the RCE

Section	Cut (ft2)	Fill (ft2)	Avg (ft2)	Width (ft)	Volume (cy)	Push Dist (ft)	Push Grade (%)	Haul 1 (ft)	Grade 1 (ft)	
W-1	30,683	30,683	30,683	1,063	1,208,008	837	-37.2%			
W-2	28,600	28,601	28,601	1,114	1,179,800	773	-38.4%			
W-3	4,646	49,901	27,274	918	927,306	255	-40.2%			
W-4	32,067	32,111	32,089	745	885,787	711	-46.1%			
W-5	38,016	28,337	33,176	944	1,159,889	696	-46.6%			
W-6	54,291	19,819	37,055	822	1,128,263	718	-41.7%			
W-7	144,007	-	72,003	843	2,249,293	-	-	3,238	1%	<<Truck / Shovel
W-8	-	-	-	-	-	-	-			
(1)	10,702	10,702	10,702	877	347,445	460	-43.0%			
(2)	69,311	-	69,311	877	2,250,301	-	-	2,333	3%	<<Truck / Shovel
W-9	83,086	-	41,543	777	1,195,526	-	-	1,711	2%	<<Truck / Shovel
W-10	16,631	16,638	16,635	1,040	640,632	549	-38.0%			
W-11	-	210,100	105,050	1,155	4,495,590	-	-			
W-12	6,082	6,095	6,089	889	200,360	670	-34.2%			
W-13	-	-	-	-	-	-	-			
(1)	2,148	1,985	2,066	1,005	76,881	213	-26.0%			
(2)	7,907	8,052	7,980	1,005	296,870	429	-37.8%			
W-14	6,825	6,825	6,825	987	249,433	456	-34.9%			
W-15	-	-	-	-	-	-	-			
(1)	3,960	3,920	3,940	1,143	166,736	219	-43.3%			
(2)	38	37	38	1,143	1,591	204	0.0%			
W-16	-	-	-	-	-	-	-			
(1)	4,523	4,593	4,558	987	166,583	248	-41.8%			
(2)	50	47	48	987	1,767	131	-0.5%			
W-17	-	-	-	-	-	-	-			
(1)	527	485	506	763	14,301	747	0.0%			
(2)	280	236	258	763	7,289	531	0.0%			

Down Drains (ft)	Down Drains Excavation (cy)	Down Drain Compacted Fill (sy)	Downdrain ACB (sf)	Bench Channels (ft)	Bench Channel Compacted Fill (sy)	Bench Channel Riprap (cy)	Top Area (ft2)	Outslope Area (ft2)
4,493	8,654	15,582	140,239	108,831	142,776	19,830	4,230,866	23,056,450

Not all quantities are used in the RCE

Section	Cut (ft2)	Fill (ft2)	Avg (ft2)	Width (ft)	Volume (cy)	Push Dist (ft)	Push Grade (%)
NW-1	-	-	-	-	-	-	-
(1)	468	508	488	205	3,698	416	-0.5%
(2)	543	508	525	205	3,982	420	0.4%
NW-2	-	-	-	-	-	-	-
(1)	389	390	390	1,346	19,428	81	-42.6%
(2)	12	12	12	1,346	605	66	-0.5%
(3)	12	12	12	1,346	604	66	0.5%
LH-2	1,448	1,443	1,445	1,007	53,906	319	-7.6%
LH-3	510	501	506	392	7,349	623	-0.8%
NE-1	-	-	-	-	-	-	-
(1)	139	139	139	335	1,726	223	-0.5%
(2)	1,145	1,148	1,146	335	14,243	288	-7.5%
NE-2	-	-	-	-	-	-	-
(1)	110	110	110	822	3,364	97	-1.8%
(2)	2,820	2,822	2,821	822	85,894	464	-6.8%
N-1	1,294	1,302	1,298	958	46,035	679	-0.5%
N-2	-	-	-	-	-	-	-
(1)	35	34	35	823	1,053	111	-0.5%
(2)	36	34	35	823	1,072	112	-0.5%

Section	Top Area (ft2)	Outslope Area (ft2)
NW	174,504	183,527
LH	1,106,676	-
NE	533,461	-
N	237,112	63,822

Not all quantities are used in the RCE

Section	Cut (ft2)	Fill (ft2)	Avg (ft2)	Width (ft)	Volume (cy)	Push Dist (ft)	Push Grade (%)
3A-1	-	-	-	-	-	-	-
(1)	1,123	1,118	1,121	1,374	57,034	348	-30.1%
(2)	44	44	44	1,374	2,242	86	-34.4%
3A-2	-	-	-	-	-	-	-
(1)	422	420	421	1,195	18,634	213	-31.0%
(2)	373	374	374	1,195	16,533	118	-29.4%
3A-3	253	252	253	1,616	15,129	96	-37.8%
3A-4	733	733	733	772	20,981	79	-52.4%
3A-5	98	98	98	758	2,750	92	-30.3%
3A-6	92	91	92	1,509	5,121	100	-30.4%
3A-7	146	150	148	2,157	11,831	76	-31.4%
3A-8	14,926	14,920	14,923	1,825	1,008,696	1,172	-1.1%

Down Drains (ft)	Down Drains Excavation (cy)	Down Drain Compacted Fill (sy)	Downdrain ACB (sf)	Bench Channels (ft)	Bench Channel Compacted Fill (sy)	Bench Channel Riprap (cy)	Top Area (ft2)	Outslope Area (ft2)
-	-	-	-	11,398	14,953	2,077	5,427,636	3,840,247

Not all quantities are used in the RCE

Section	Cut (ft2)	Fill (ft2)	Avg (ft2)	Width (ft)	Volume (cy)	Push Dist (ft)	Push Grade (%)
SR-1	Santa Rita Stockpile is at approx. 3% grade. No regrade needed						

Down Drains (ft)	Down Drains Excavation (cy)	Down Drain Compacted Fill (sy)	Downdrain ACB (sf)	Bench Channels (ft)	Bench Channel Compacted Fill (sy)	Bench Channel Riprap (cy)	Top Area (ft2)	Outslope Area (ft2)
-	-	-	-	-	-	-	2,637,618	-

Not all quantities are used in the RCE

Section	Cut (ft2)	Fill (ft2)	Avg (ft2)	Width (ft)	Volume (cy)	Push Dist (ft)	Push Grade (%)
US-1	43,042	1,413	22,228	2,014	1,657,692	160	36.8%

Down Drains (ft)	Down Drains Excavation (cy)	Down Drain Compacted Fill (sy)	Downdrain ACB (sf)	Bench Channels (ft)	Bench Channel Compacted Fill (sy)	Bench Channel Riprap (cy)	Top Area (ft2)	Outslope Area (ft2)	Cover (cy)	Haul 1 (ft)	Grade 1 (ft)
-	-	-	-	5,348	7,017	975	1,570,313	4,643,954	-	-	-

Not all quantities are used in the RCE

Section	Cut (ft2)	Fill (ft2)	Avg (ft2)	Width (ft)	Volume (cy)	Push Dist (ft)	Push Grade (%)
T-1	19,870	28,142	24,006	3,458	3,074,286	703	-

Down Drains (ft)	Down Drain Excavation (cy)	Down Drain Compacted Fill (sy)	Downdrain ACB (sf)	Bench Channels (ft)	Bench Channel Compacted Fill (sy)	Bench Channel Riprap (cy)	Top Area (ft2)	Outslope Area (ft2)
-	-	-	-	13,831	18,145	2,520	209,232	3,342,355

Not all quantities are used in the RCE

Section	Cut (ft2)	Fill (ft2)	Avg (ft2)	Width (ft)	Volume (cy)	Push Dist (ft)	Push Grade (%)
A-1	-	-	-	-	-	-	-
A-2	224	224	224	1,501	12,440	109	36.9%
A-3	110	110	110	1,194	4,850	87	35.9%
A-4	7	7	7	901	222	11	40.8%
A-5	-	-	-	-	-	-	-
A-6	24	24	24	958	850	25	40.3%
A-7	18	18	18	925	608	14	46.8%
A-9	7,005	7,005	7,005	1,261	327,069	1,131	-4.3%

Down Drains (ft)	Down Drains Excavation (cy)	Down Drain Compacted Fill (sy)	Downdrain ACB (sf)	Bench Channels (ft)	Bench Channel Compacted Fill (sy)	Bench Channel Riprap (cy)	Btm Area (ft2)	Sideslope Area (ft2)
-	-	-	-	-	-	-	2,598,413	1,631,151

Not all quantities are used in the RCE

Section	Cut (ft2)	Fill (ft2)	Avg (ft2)	Width (ft)	Volume (cy)	Push Dist (ft)	Push Grade (%)
TP7-2	2,323	2,321	2,322	1,887	162,303	1,792	-0.4%
TP7-3	1,912	1,885	1,899	2,793	196,403	3,367	-0.5%
TP7-4	8,516	8,517	8,516	3,868	1,220,078	3,300	-0.4%
TP7-5	-	-	-	-	-	-	-
TP-6W	945	946	945	3,262	114,240	188	-20.6%
TP-6E	-	-	-	-	-	-	-
(1)	45	45	45	3,309	5,553	24	-45.9%
(2)	1,771	1,771	1,771	3,309	217,033	952	-0.2%
(3)	467	468	468	3,309	57,328	97	-33.5%

Section	Down Drains (ft)	Down Drains Excavation (cy)	Down Drain Compacted Fill (sy)	Downdrain ACB (sf)	Bench Channels (ft)	Bench Channel Compacted Fill (sy)	Bench Channel Riprap (cy)	Top Area (ft2)	Outslope Area (ft2)
TP7	2,280	4,392	7,908	3,370	42,224	55,393	7,693	57,014,017	15,316,705
TP-6W	319	615	1,107	414	3,498	4,589	637	4,148,184	1,447,374
TP-6E	-	-	-	-	2,999	3,935	547	4,405,555	1,396,710

Not all quantities are used in the RCE

Reclamation Cover Material Requirements for the North Mine Area

Stockpile	Top Area (ft^2)	Top Area (acres)	Outslope Area (ft^2)	Outslope Area (acres)	Required RCM Vol. (CY)	Cover Source	Segment 1 Elev Start (ft)	Segment 1 Elev End (ft)	Segment 1 Distance (ft)	Segment 1 Average Grade (%)	Segment 2 Elev Start (ft)	Segment 2 Elev End (ft)	Segment 2 Distance (ft)	Segment 2 Average Grade (%)	Segment 3 Elev Start (ft)	Segment 3 Elev End (ft)	Segment 3 Distance (ft)	Segment 3 Average Grade (%)
Triangle Stockpile	209,232	4.8	3,342,355	76.7	2,829,473	Upper South	6,920	6,824	2,515	-3.8%	6,824	7,120	4,066	7.3%	7,120	6,748	3,367	-11.1%
South Stockpile	3,729,480	85.6	21,735,774	499.0	1,031,506	Upper South	-	-	8,173	2.3%	-	-	-	-	-	-	-	-
					1,797,967	STS2	-	-	3,746	2.3%	-	-	-	-	-	-	-	-
West Stockpile	4,230,866	97.1	22,204,645	509.7	2,937,279	Upper South	-	-	22,486	1.0%	-	-	-	-	-	-	-	-
3A Stockpile	5,427,636	124.6	3,840,247	88.2	1,029,765	Upper South	-	-	11,873	0.9%	-	-	-	-	-	-	-	-
Santa Rita Stockpile	2,637,618	60.6	---	---	293,069	Upper South	-	-	21,949	5.5%	-	-	-	-	-	-	-	-
Northwest Stockpile	174,504	4.0	183,527	4.2	39,781	Upper South	-	-	23,749	1.9%	-	-	-	-	-	-	-	-
Lee Hill Stockpile	1,106,676	25.4	---	---	122,964	Upper South	-	-	25,168	0.8%	-	-	-	-	-	-	-	-
North In-Pit Stockpile	---	---	---	---	---	Upper South	-	-	-	-	-	-	-	-	-	-	-	-
North Stockpile	237,112	5.4	63,822	1.5	33,437	Upper South	-	-	19,215	3.0%	-	-	-	-	-	-	-	-
Northeast Stockpile	533,461	12.2	---	---	59,273	Upper South	-	-	21,255	3.6%	-	-	-	-	-	-	-	-
Lampbright Stockpile[1]	3,608,260	82.8	34,710,227	796.8	3,262,610	Upper South	6,920	6,173	14,976	-5.0%	6,173	6,622	20,272	2.2%	6,622	7,165	5,390	10.1%
					995,000	Whitehouse	6,622	6,671	667	7.3%	6,671	6,622	1,111	-4.4%	6,622	7,165	5,390	10.1%
Southwest Lampbright	227,835	5.2	3,879,770	89.1	456,400	Upper South	6,920	6,173	14,976	-5.0%	6,173	6,622	20,272	2.2%	6,622	6,542	6,231	-1.3%
					N/A	Whitehouse	6,622	6,671	667	7.3%	6,671	6,622	1,111	-4.4%	6,622	6,542	6,231	-1.3%
STS2 Stockpile	2,294,867	52.7	1,354,480	31.1	405,483	STS2	-	-	-	-	-	-	-	-	-	-	-	-
Upper South Stockpile	1,570,313	36.0	4,643,954	106.6	690,474	Upper South	-	-	-	-	-	-	-	-	-	-	-	-
Total:	**25,778,628**	**592**	**92,616,446**	**2,126**	**13,155,008**													

Notes:

[1] - Lampbright Stockpile includes the Main and South Lampbright Leach Stockpiles

		Available	Used	Not used
STS2		2,203,450	2,203,450	0
Upper South		13,943,641	12,786,031	1,157,610
Whitehouse		995,000	995,000	0
		17,142,091	15,984,481	1,157,610

Not all quantities are used in the RCE

Reclamation Cover Material Requirements for the South Mine Area					Segment 1				Segment 2				Segment 3			
Stockpile	Top Area	Outslope Area	Required RCM Vol.	Cover Source	Elev Start (ft)	Elev End (ft)	Distance (ft)	Average Grade (%)	Elev Start (ft)	Elev End (ft)	Distance (ft)	Average Grade (%)	Elev Start (ft)	Elev End (ft)	Distance (ft)	Average Grade (%)
	(ft^2)	(ft^2)	(CY)													
Axi-flow Lake	2,598,413	1,631,151	388,575	Borrow Area F	5,511	5,547	2,660	1.3%	5,547	5,545	1,390	-0.1%	5,545	5,500	1,459	-3.1%
			81,376	Area to the North of Borrow Area F	5,559	5,547	459	-2.7%	5,547	5,545	1,390	-0.1%	5,545	5,500	1,459	-3.1%
TP6-W	4,148,184	1,447,374	621,729	Borrow Area F	5,511	5,563	5,336	1.0%	5,563	5,540	3,742	-0.6%	5,540	5,520	906	-2.2%
TP6-E	4,405,555	1,396,710	644,696	Borrow Area F	5,511	5,563	5,336	1.0%	5,563	5,540	3,742	-0.6%	5,540	5,525	1,528	-1.0%
TP7	57,014,017	15,316,705	2,685,000	Borrow Areas E	5,435	5,407	2,627	-1.1%	5,407	5,420	570	2.3%	5,420	5,407	6,919	-0.2%
			1,035,000	Borrow Areas H	5,376	5,382	1,307	0.4%	5,382	5,422	1,184	3.4%	5,424	5,422	8,824	0.0%
			3,790,000	Area to the West of Borrow Areas E & H	5,421	5,407	3,683	-0.4%	5,407	5,420	570	2.3%	5,420	5,407	3,688	-0.3%
			526,747	Area to the North of Borrow Area F	5,559	5,503	10,781	-0.5%	5,503	5,413	7,621	-1.2%	5,413	5,407	-5,340	0.1%
Total:			**9,773,123**													

		Available	Used	Not used
Borrow Areas E		2,688,816	2,685,000	3,816
Borrow Area F		1,657,136	1,655,000	2,136
Borrow Areas H		1,037,000	1,035,000	2,000
Area to the West of Borrow Areas E & H		3,792,590	3,790,000	2,590
Area to the North of Borrow Area F		1,232,590	608,123	624,467
		10,408,132	9,773,123	635,009

Not all quantities are used in the RCE

Table 2. Reclamation Cover Material Balance for the North Mine Area

Borrow Source	Available (CY)	RCM Used in Reclamation Plan (CY)
STS2	2,203,450	2,203,450
Upper South	13,943,641	9,956,558
Whitehouse	995,000	995,000
Rubio Peak	Not Yet Approved for RCM	0
Kearney Culvert Fill	Not Yet Approved for RCM	0
Total Availabe RCM (CY):	17,142,091	
Total Required RCM (CY)	13,155,008	
Excess RCM (CY):	3,987,083	

STS2:

- Available: = 2,203,450 CY
- STS2:
- Top Area = 2,294,867 ft2
- 3D Outslope Area = 1,354,480 ft2
- STS2 Cover Volume required = 405,483 CY
- 1,797,967 CY available for use elsewhere
- 1,797,967 CY = 2,203,450 CY - 405,483 CY

Upper South:

- Available: = 13,943,641 CY
- Used: 4,299,894 CY

Not all quantities are used in the RCE

Table 4. Reclamation Cover Material Balance for the South Mine Area

Borrow Source	Available (CY)	RCM Used in Reclamation Plan (CY)
Borrow Area E	2,688,816	2,685,000
Borrow Area F	1,657,136	1,655,000
Borrow Area H	1,037,000	1,035,000
Expanded Borrow Area West of Borrow Areas E and H	3,792,590	3,790,000
Expanded Borrow Area North of Borrow Area F	1,232,590	608,123
Total Availabe RCM (CY):	10,408,132	
Total Required RCM (CY)	9,773,123	
Excess RCM (CY):	635,009	

STS2:

- Available: = 2,203,450 CY
- STS2:
- Top Area = 2,294,867 ft2

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- STS2 Cover Volume required = 405,483 CY
- 1,797,967 CY available for use elsewhere
- 1,797,967 CY = 2,203,450 CY - 405,483 CY

Upper South:

- Available: = 13,943,641 CY
- Used: 4,299,894 CY

assuming 4' exc depth

assuming 4' exc depth

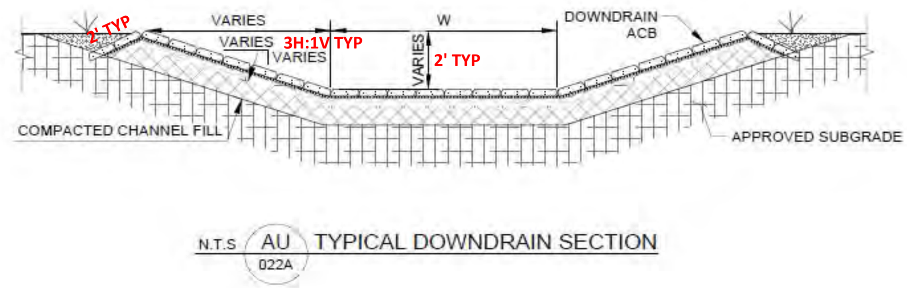
assuming 4' exc depth

Not all quantities are used in the RCE

DOWNDRAIN

Dimensions:

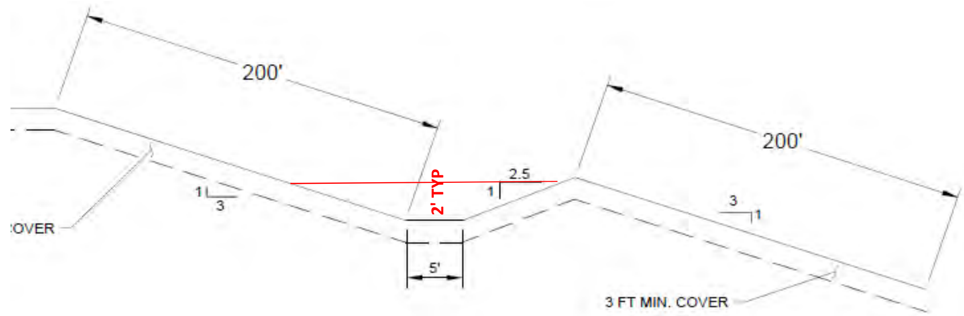
Left Side Slope:	3 H:1V
Left Side Slope:	3 H:1V
Depth:	2 ft
Left Side Slope Length:	3.6
Right Side Slope Length:	3.6
Bottom Width:	20 ft
Left Anchor	2 ft
Right Anchor	2 ft
Perimeter:	31 ft
Area:	52 ft2



BENCH CHANNELS

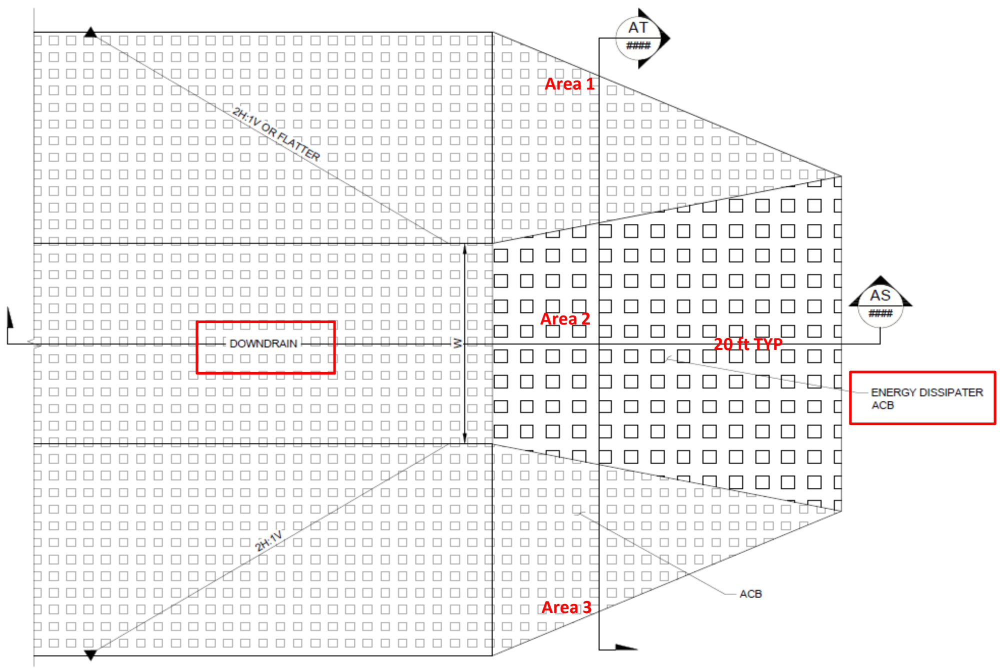
Dimensions:

Left Side Slope:	3 H:1V
Left Side Slope:	2.5 H:1V
Depth:	2 ft
Left Side Slope Length:	3.6
Right Side Slope Length:	3.2
Bottom Width:	5 ft
Left Anchor	0 ft
Right Anchor	0 ft
Perimeter:	12 ft
Area:	21 ft2

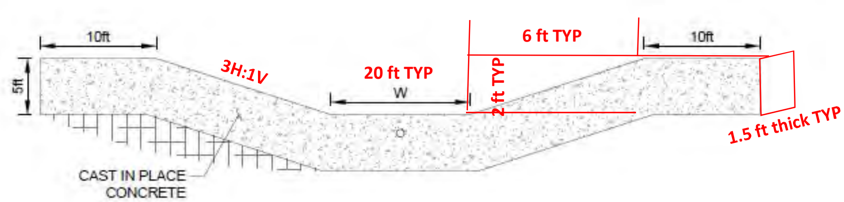


Not all quantities are used in the RCE

		ACB				Cutoff Wall		
		Area 1	Area 2	Area 3	Total	Area	Depth	Volume
		(ft2)	(ft2)	(ft2)	(ft2)	(ft2)	(ft)	(cy)
Main Lampbright Stockpile	1	253	320	253	825	260	1.5	14
	2	253	320	253	825	260	1.5	14
	3	253	320	253	825	260	1.5	14
	4	253	320	253	825	260	1.5	14
West Stockpile	1	253	320	253	825	260	1.5	14
	2	253	320	253	825	260	1.5	14
	3	253	320	253	825	260	1.5	14
	4	253	320	253	825	260	1.5	14
South Stockpile	1	253	320	253	825	260	1.5	14
	2	253	320	253	825	260	1.5	14



N.T.S 8 022A TYPICAL TOE ENERGY DISSIPATOR PLAN DETAIL



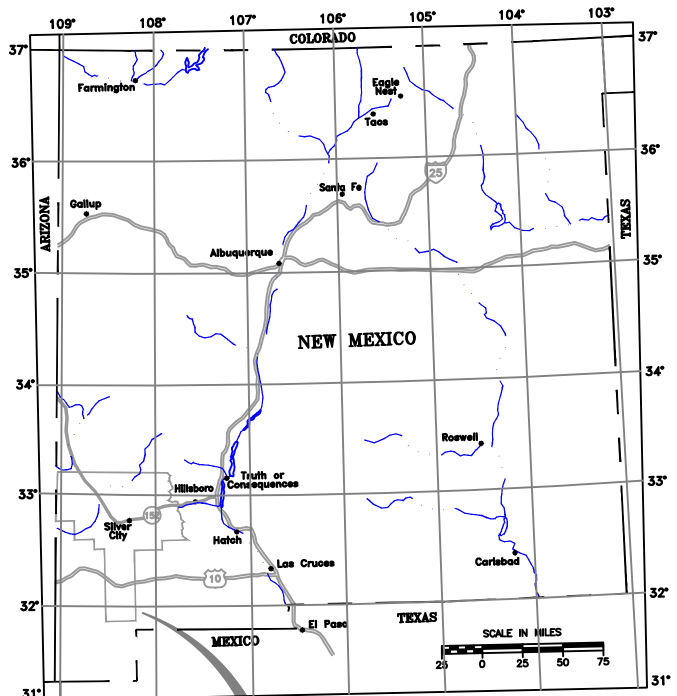
N.T.S. AX 022A TYPICAL CUTTOFF WALL SECTION

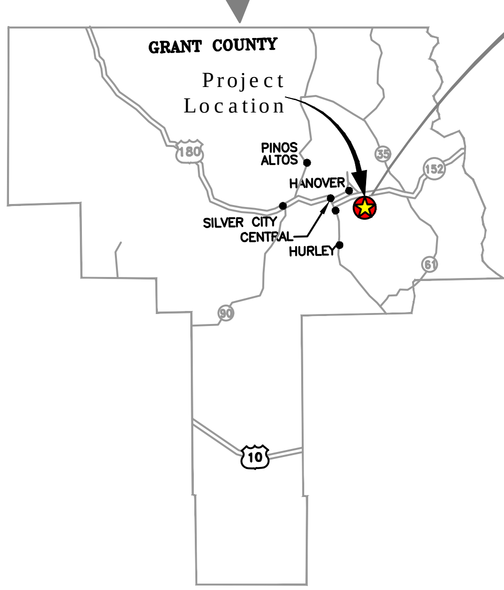
Not all quantities are used in the RCE

Proposed Reclamation Plan for the 9 Stockpile

PROPOSED RECLAMATION PLAN FOR THE 9 STOCKPILE

ISSUED FOR FINANCIAL ASSURANCE RECLAMATION COST ESTIMATE





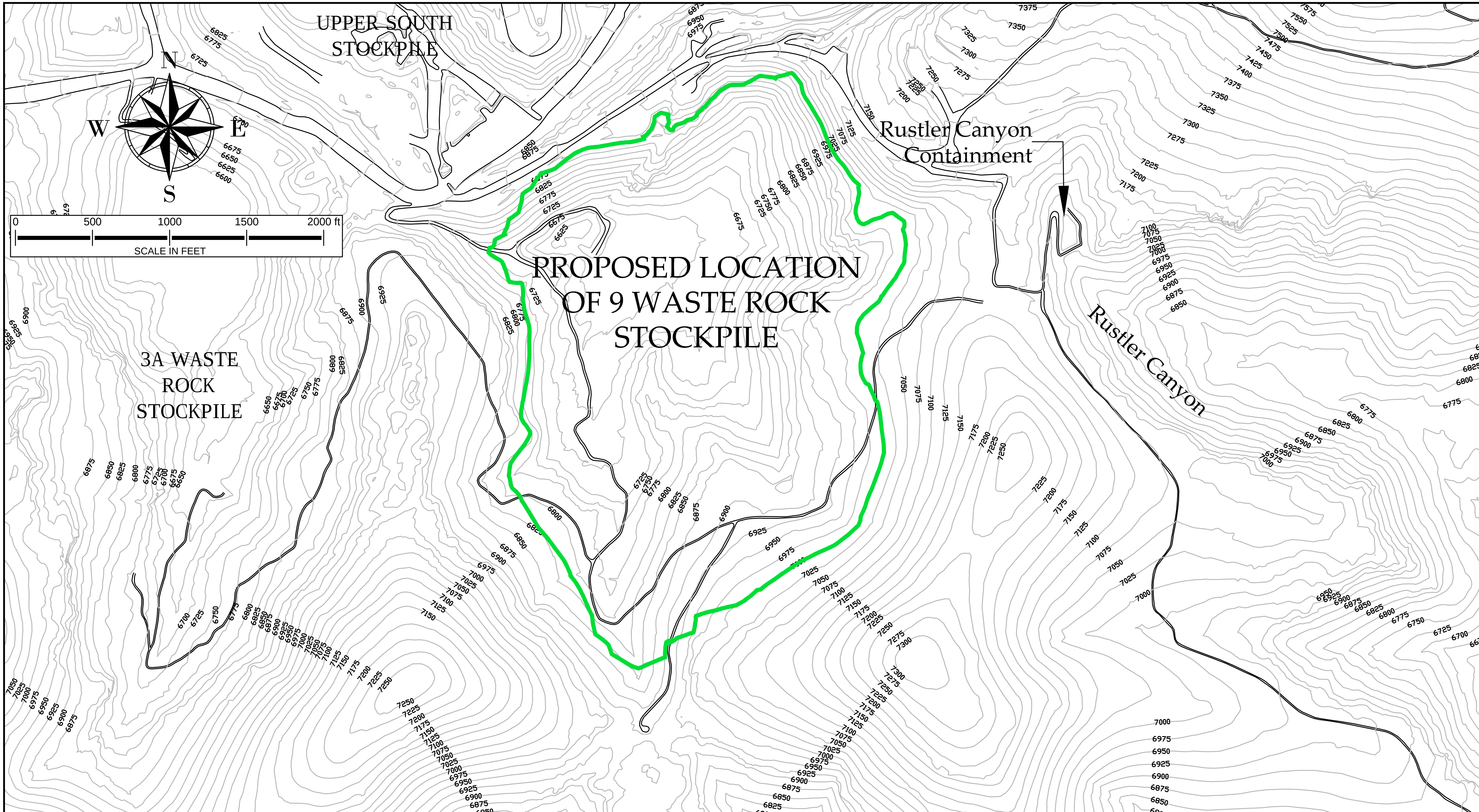
Sheet List Table	
Sheet Number	**Sheet Title**
1	COVER SHEET
2	EXISTING TOPOGRAPHY
3	CONCEPTUAL PRE-RECLAMATION STOCKPILE
4	CONCEPTUAL RECLAIMED STOCKPILE
5	CROSS SECTIONS
6	DETAILS
7	CONCEPTUAL HAUL PATHS

N
W
E
S

FREEPORT-MCMORAN
CHINO MINES COMPANY

Sheet: 1 Cover Sheet

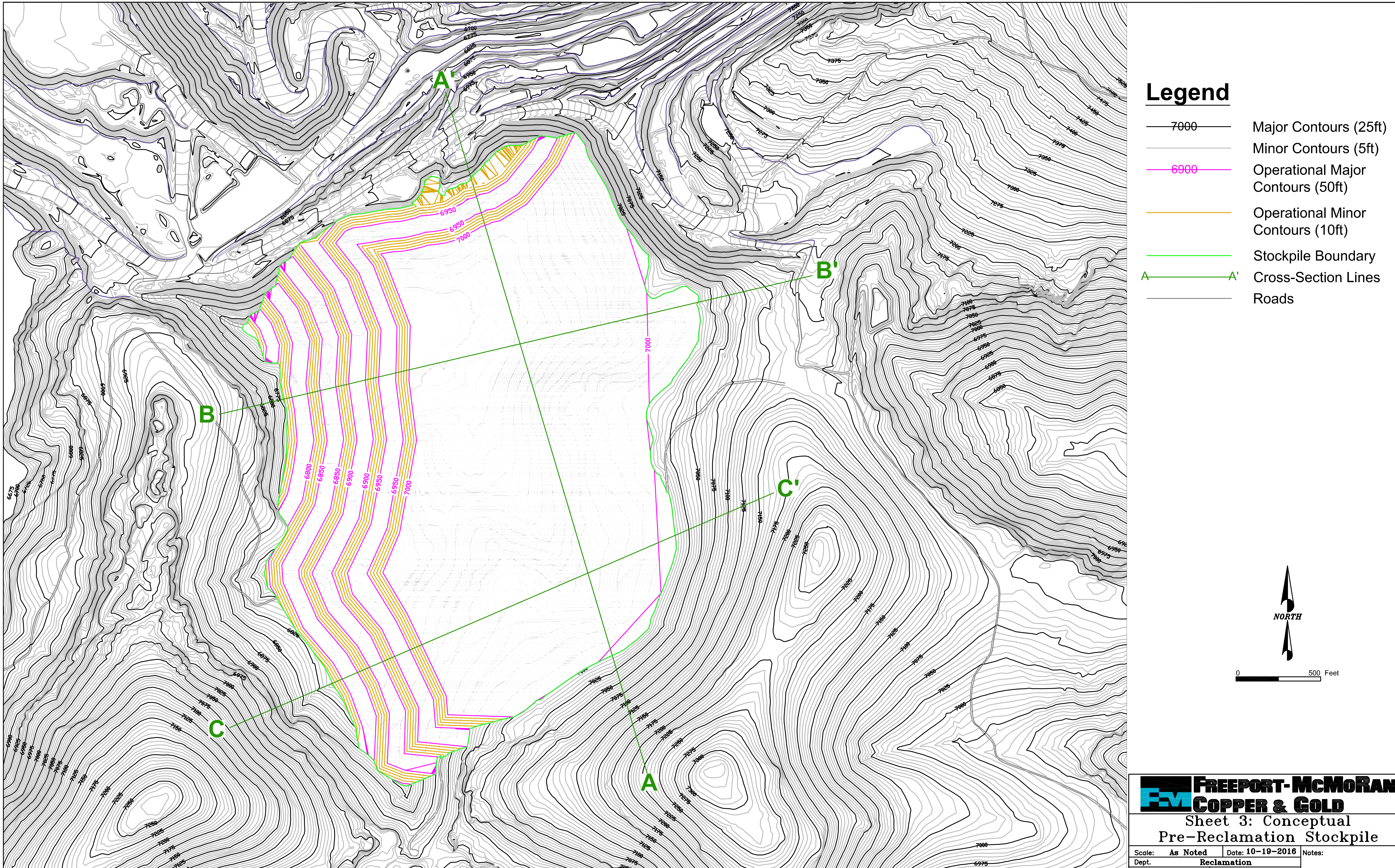
Scale: As Noted	Date: 10/19/2016	Notes:
Dept. Environmental Services		
Drawn By: SMG	Checked By: RLM	

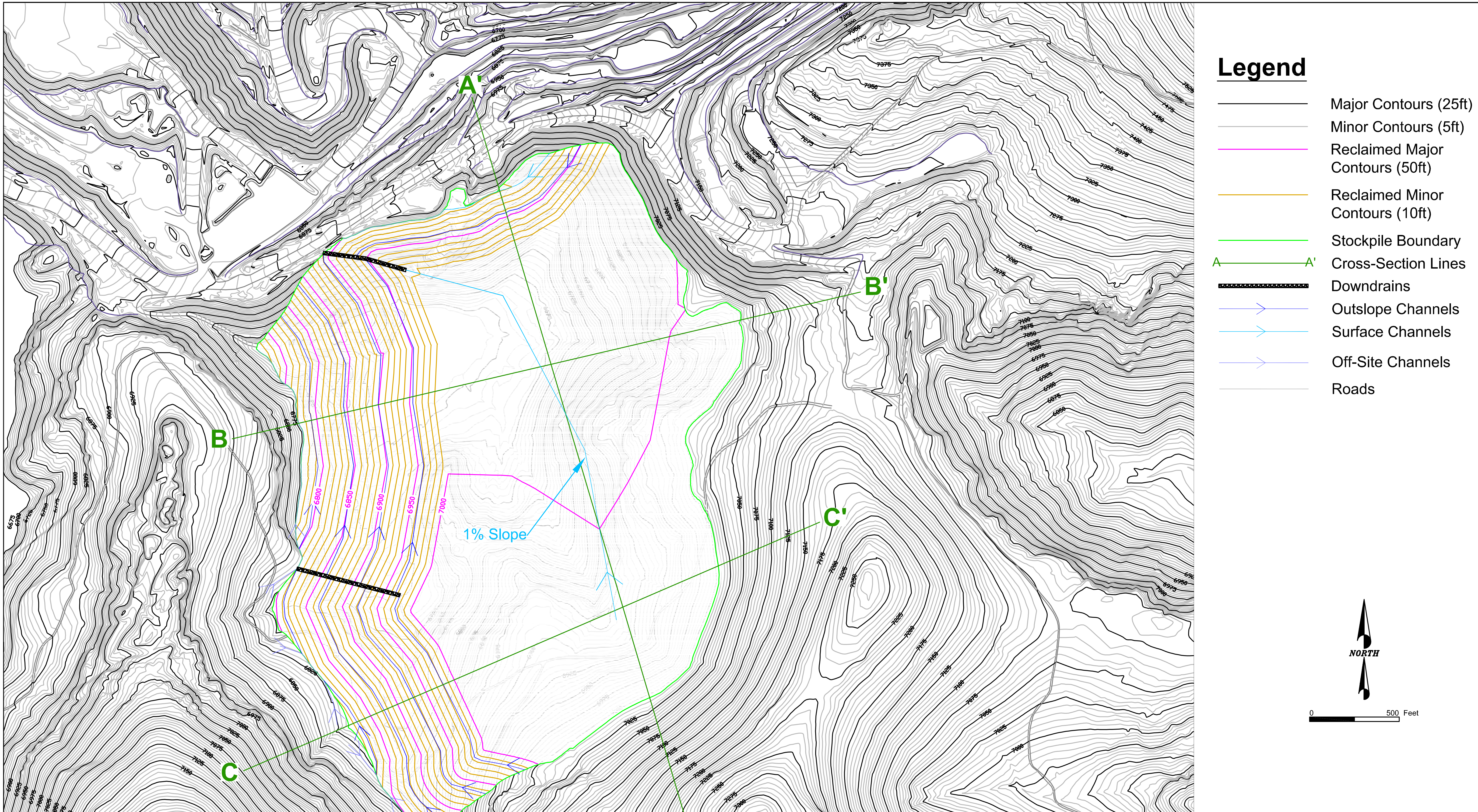


FREEPORT-McMoRAN
CHINO MINES COMPANY

Sheet: 2 Existing Topography

Scale: As Noted	Date: 11/17/2016	Notes:
Dept. Environmental Services		Base Map: 2014 Topography
Drawn By: SMG	Checked By: RLM	

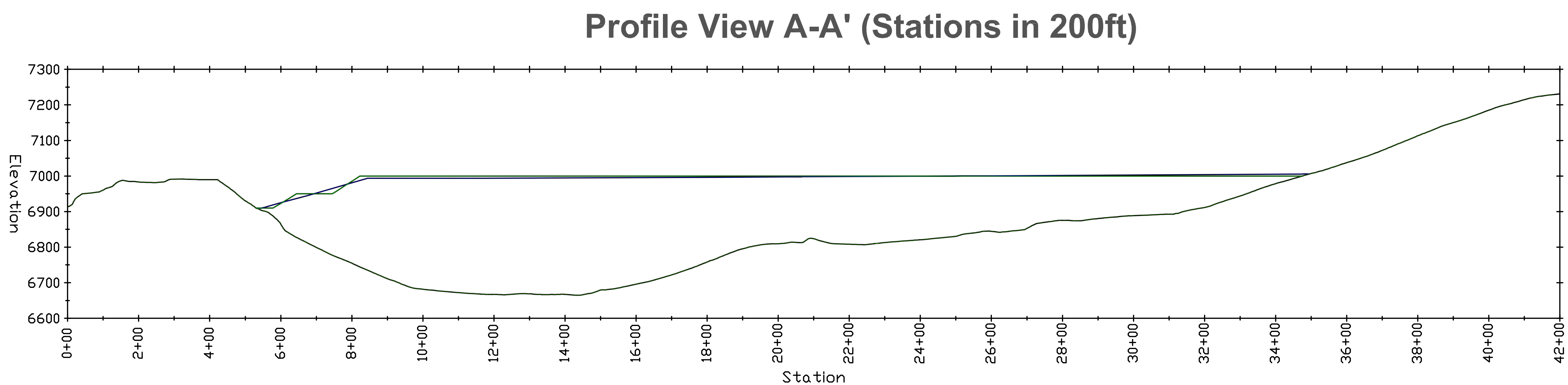

A'
A
B'
B
C'
C
Legend
7000 Major Contours (25ft)
Minor Contours (5ft)
6900 Operational Major Contours (50ft)
Operational Minor Contours (10ft)
Stockpile Boundary
A A' Cross-Section Lines
Roads
NORTH
0 500 Feet
FREEPORT-McMoRAN COPPER & GOLD
Sheet 3: Conceptual Pre-Reclamation Stockpile
Scale: As Noted
Date: 10-19-2016
Notes:
Dept. Reclamation
Drawn By: MJL
Checked By: MJL

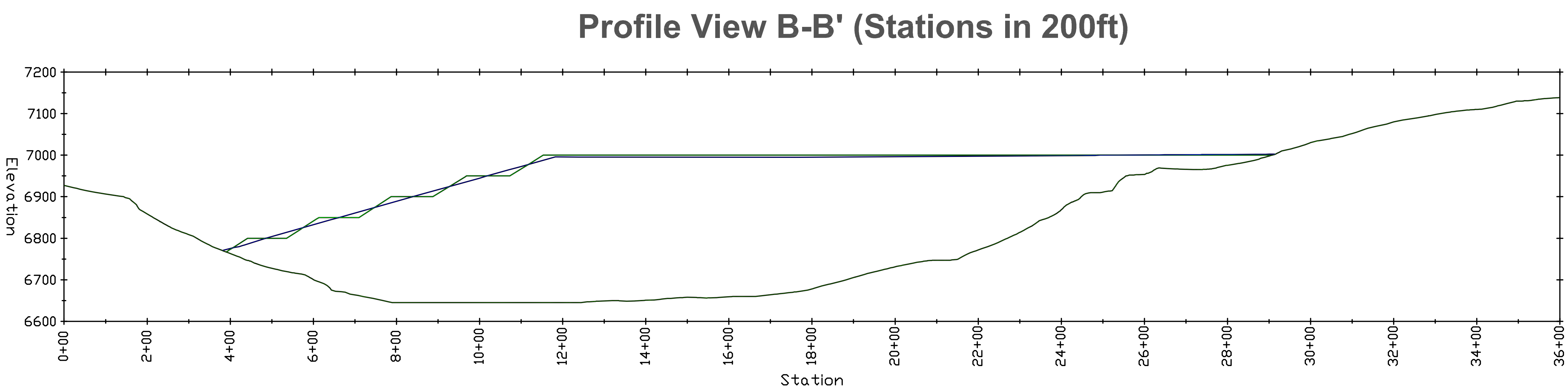


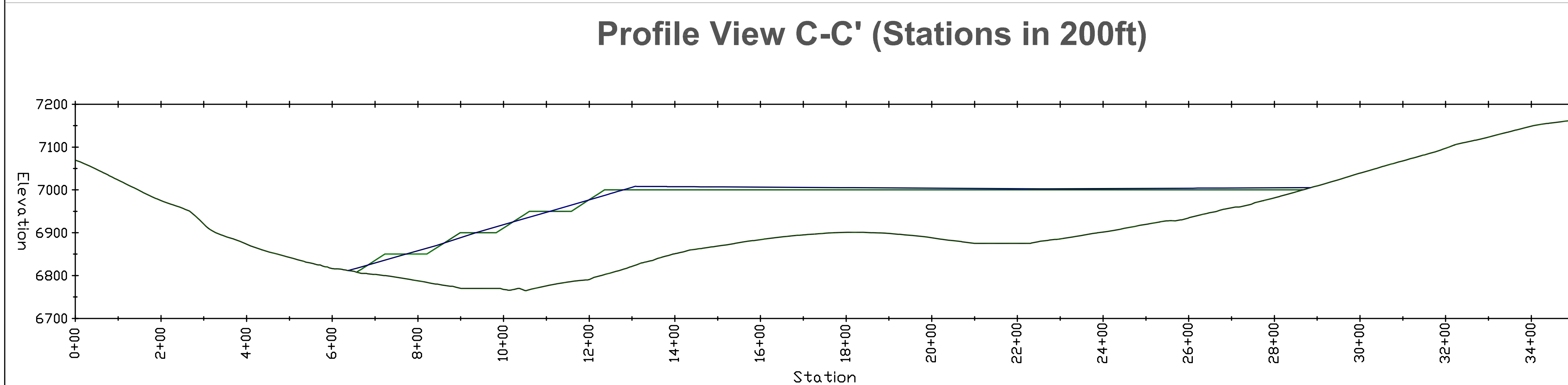
FREEPORT-McMoRAN COPPER & GOLD

Sheet 4: Conceptual Reclaimed Stockpile

Scale: As Noted	Date: 10-19-2016	Notes:
Dept. Reclamation		
Drawn By: MJL	Checked By: DV	







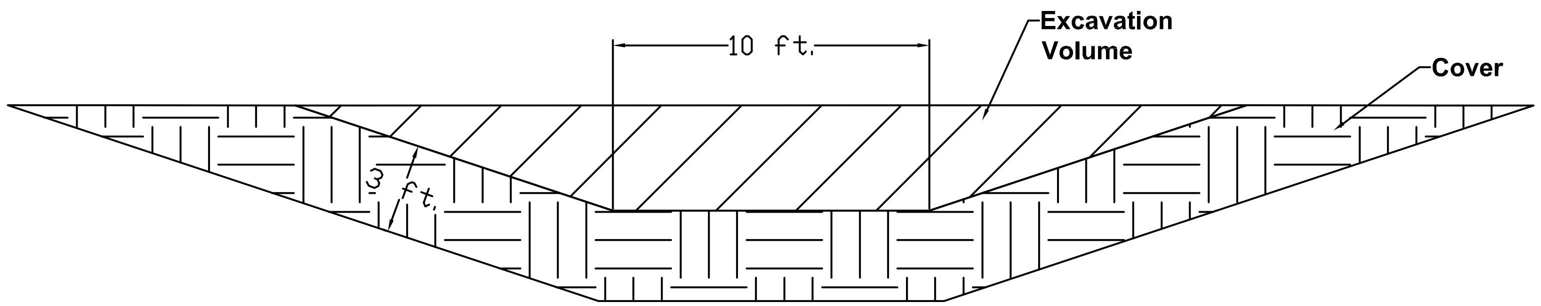
Legend

- Existing Topo
- Operational Stockpile
- Reclaimed Stockpile

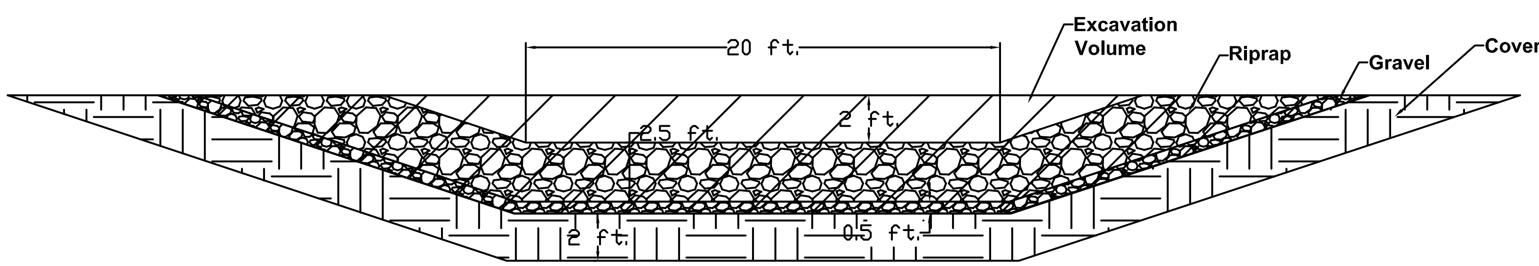
FREEPORT-MCMORAN COPPER & GOLD

Sheet 5: Cross Sections

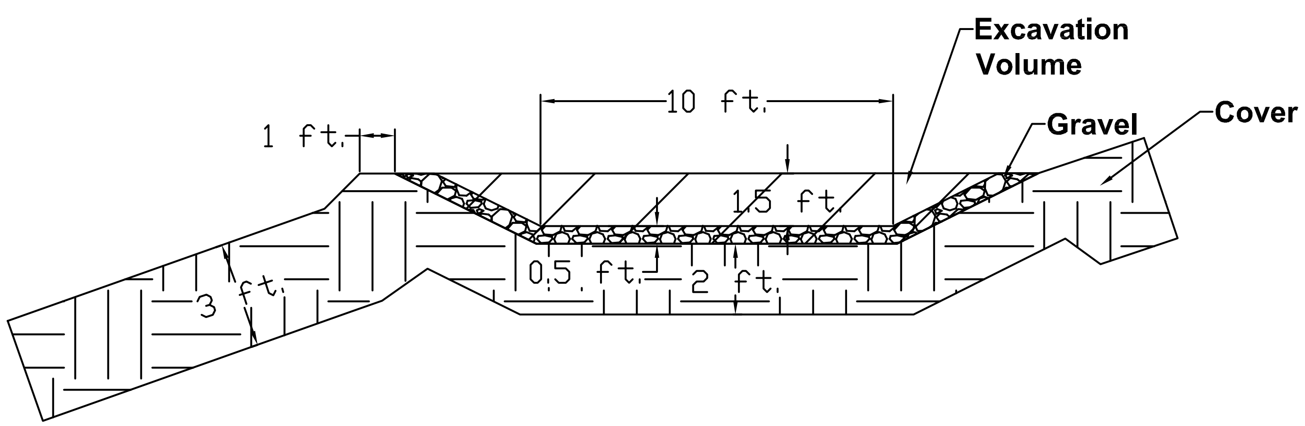
Scale: As Noted	Date: 10-19-2016	Notes:
Dept. Reclamation		
Drawn By: MJL	Checked By: MJL	



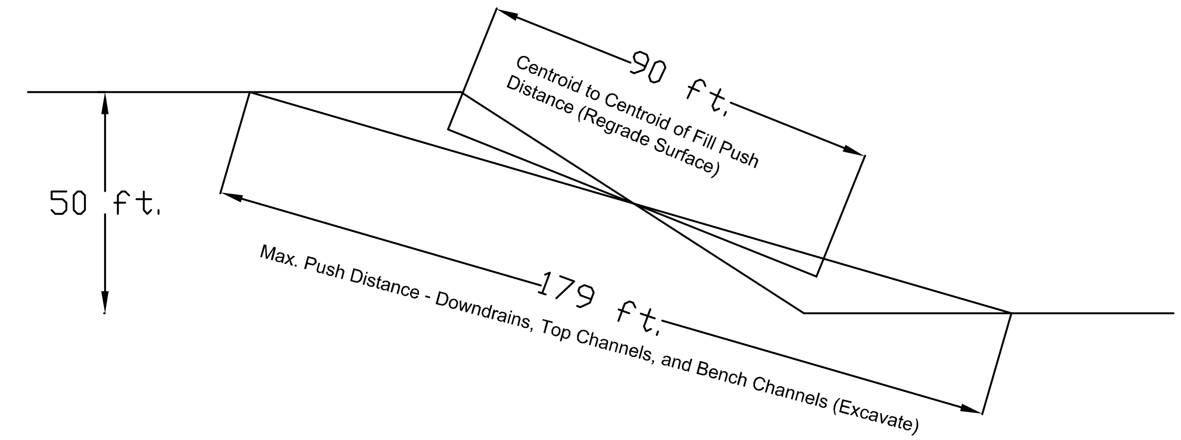
Typical Top Channel (Reclamation Area)



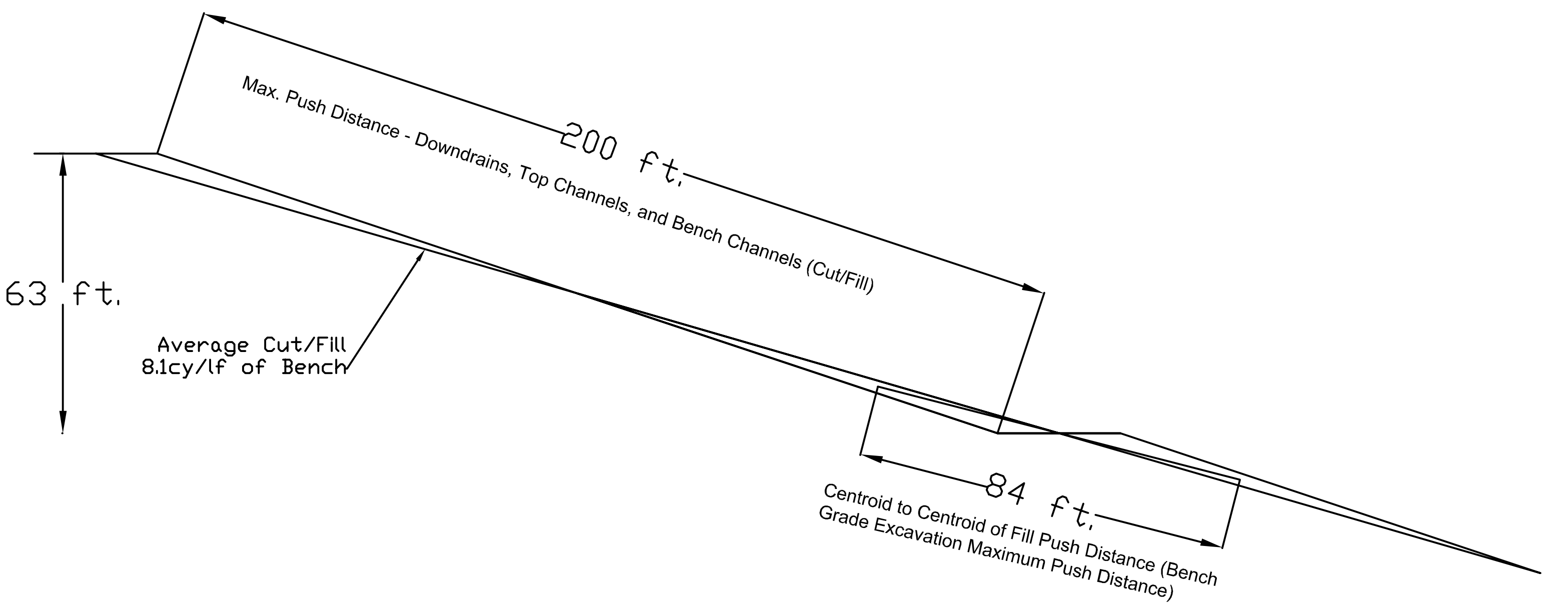
Typical Down Chute/ Down Drain Channel



Outslope Terrace Channel



Typical Operational Bench Regrade for 3.5H:1V

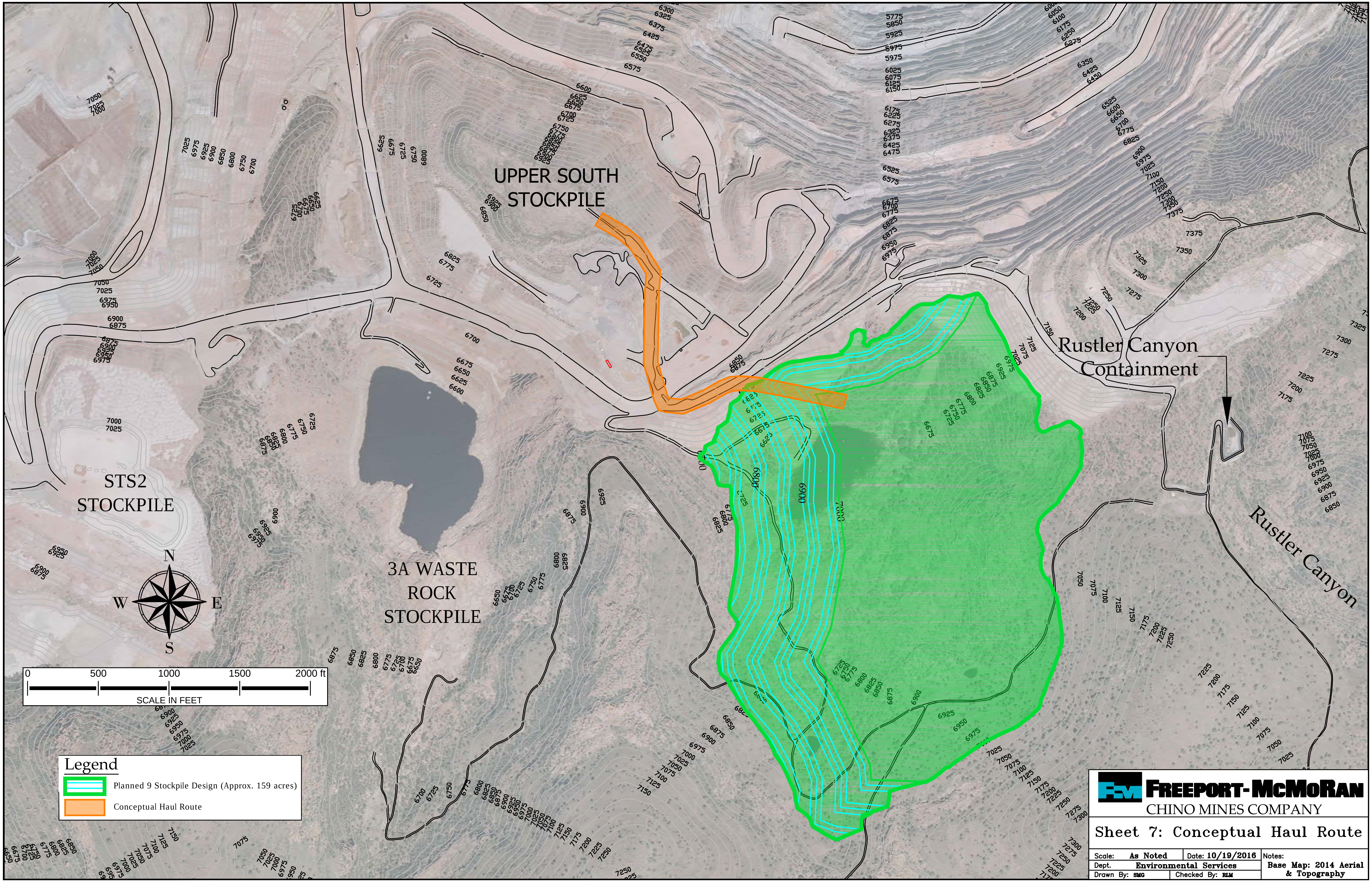


Typical Reclamation Outslope Bench for 3.5H:1V

FREEPORT-MCMORAN COPPER & GOLD

Sheet 6: Details

Scale: As Noted	Date: 10-19-2016	Notes: NTS
Dept. Reclamation		
Drawn By: MJL	Checked By: DV	


UPPER SOUTH STOCKPILE
STS2 STOCKPILE
3A WASTE ROCK STOCKPILE
Rustler Canyon Containment
Rustler Canyon
N
S
E
W
0
500
1000
1500
2000 ft
SCALE IN FEET
Legend
Planned 9 Stockpile Design (Approx. 159 acres)
Conceptual Haul Route
FREEPORT-McMoRAN
CHINO MINES COMPANY
Sheet 7: Conceptual Haul Route
Scale: As Noted
Date: 10/19/2016
Notes:
Dept. Environmental Services
Base Map: 2014 Aerial & Topography
Drawn By: SMG
Checked By: RLM

9 Stockpile Quantity Definitions

3801 Automation Way, Suite 201
Fort Collins, Colorado 80525
970-484-7704 / 970-484-7789 (FAX)

TECHNICAL MEMORANDUM

DATE: March 4, 2019 **Telesto #** 200414a

TO: Chino Mining Company

FROM: Taryn Tigges/Fred Charles

SUBJECT: Earthwork Cost Estimate Takeoff Summary Quantity Definitions

This technical memorandum presents a summary discussion of the engineering quantities used in developing the reclamation earthwork cost estimate for the 9 Waste Rock Stockpile (WRS) for the anticipated reclamation/closure topography, based on the 9 Waste Rock Stockpile Closure/Closeout Plan (CCP) by Golder Associates (2017). The reclamation earthwork quantities are summarized in Table 1. The quantities were separated into sections of uniform slope, and matching reclamation criteria. A summary description of each item shown in Table 1 is presented below which includes the basis for determining each particular quantity.

Item 1.1 Outslope Cut/Fill Pushdown Distance

This item is the average sloped distance between the approximate centroids of the cut and fill blocks for regrading the stockpile and tailings outslopes.

Item 1.2 Outslope Surface Grade

This item is the final overall grade of the regraded outslope, prior to cutting in any benches. For locations where benches are not required it is equal to the final slope.

Item 2.1 Top Surface Grade %

This item is the final overall grade of the regraded top surface. The grading is done by area, Item 4.1, to obtain a smooth finish at the grade specified.

Item 3.1 Outslope Surface Approximate Sloped Area

This item includes the outslope area that will receive cover, and revegetation. Revegetation costs include chiseling or ripping, scarifying, discing, rangeland drill seeding, mulching, and crimping.

Item 3.2 Outslope Stockpile Volume

This item is the estimated stockpile volume used to calculate rough grading with a dozer.

Item 3.3 Outslope Surface Cover Depth

This item is the depth of cover, measured normal to the slope, to be placed over the stockpile outslopes.

Item 4.1 Top Surface Area

This item includes the top surface area of the stockpile. The stockpile will receive grading, cover, and revegetation where indicated. Grading involves making one pass with a blade over the surface to obtain a smooth finished grade. Revegetation costs include chiseling or ripping, scarifying, discing, rangeland drill seeding, mulching, crimping, and mobilization.

Item 4.2 Top Surface Cover Depth

This item is the depth of cover to be placed over the stockpile.

Item 5.1 Cover Source

Borrow location is used to determine haul distances and grades in Items 5.2 through 5.6.

Item 5.2 - 5.4 Cover Haul Distance

These items describe the two-dimensional haul distance between the approximate centroid of the borrow source and cover areas. The haul route has been divided into two segments, based on grade.

Item 5.5 - 5.6 Cover Haul Grades

These items represent the grades of the haul segments described in Items 5.2-5.4.

Item 6.1 Outslope Bench Length

This item represents the length of benches to be cut into the stockpile outslopes. The length of benches is equal to the length of the outslope channels. Bench cross sections are shown in the 9 WRS and Chino CCP Drawings.

Item 6.2 Outslope Channel Length

This item represents the length of surface water channels to be constructed on benches of the stockpile outslopes. It was assumed that channels will be located on each outslope bench. The conceptual channel locations and channel cross sections are shown on the 9 WRS and Chino CCP Drawings.

Item 7.1 Channel Length

This item represents the length of surface water channels to be constructed on the stockpile top surface. The conceptual channel locations and channel cross-sections are shown on the 9 WRS and Chino CCP drawings.

Item 8.1 Downdrain Length

This item represents the length of the downdrains to be constructed on the stockpiles and tailings. The conceptual downdrain locations, and channel cross-sections are shown on the drawings in the 9 WRS and Chino CCP's.

TELESTO SOLUTIONS INCORPORATED	9 Waste Rock Stockpile Closure/Closeout Plan	Made By: TMT	Date: 4-Mar-19
	Quantity Summary Sheet		

TABLE 1 - STOCKPILE QUANTITY SUMMARY[1]

Facility Type	Item	Outslope Cut/Fill Pushdown Distance (ft)	Outslope Surface Grade %	Top Surface Grade %	Outslope Surface Area (Acres)	Outslope Stockpile Volume (Acres)	Outslope Surface Cover depth Depth (Inches)	Top Surface Surface Area (Acres)	Top Surface Cover depth Depth (Inches)
		Item 1.1	Item 1.2	Item 2.1	Item 3.1	Item 3.2	Item 3.3	Item 4.1	Item 4.2
Stockpiles	9 Waste Rock Stockpile	90	-28.6%	-1%	65.7	399,767	36	95.5	36

Facility Type	Item	Cover Source	Cover Fill Haul Dist. Distance Total (ft)	Cover Fill Haul Dist. Distance Leg 1 (ft)	Cover Fill Haul Dist. Distance Leg 2 (ft)	Cover Fill Haul Grade Grade Leg 1 (%)	Cover Fill Haul Grade Grade Leg 2 (%)
		Item 5.1	Item 5.2	Item 5.3	Item 5.4	Item 5.5	Item 5.6
Stockpiles	9 Waste Rock Stockpile	Upper South	5,132	2,712	2,420	0.8%	8.5%

Facility Type	Item	Bench	Outslope Channel	Channel Area	Downdrain
		Length (ft)	Length (ft)	Length (ft)	Length (ft)
		Item 6.1	Item 6.2	Item 7.1	Item 8.1
Stockpiles	9 Waste Rock Stockpile	14,085	14,085	6,767	1,067

[1]Quantities were developed by Chino Mining Company in accordance with standard engineering practice