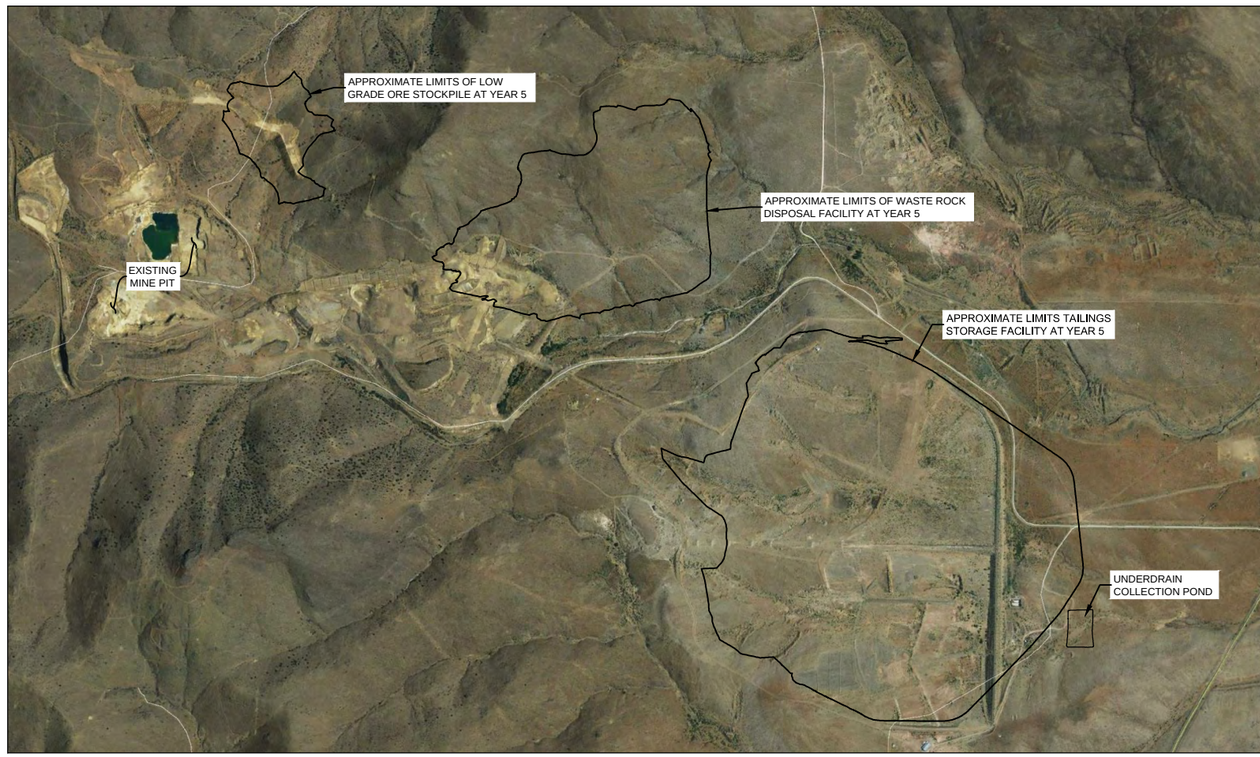
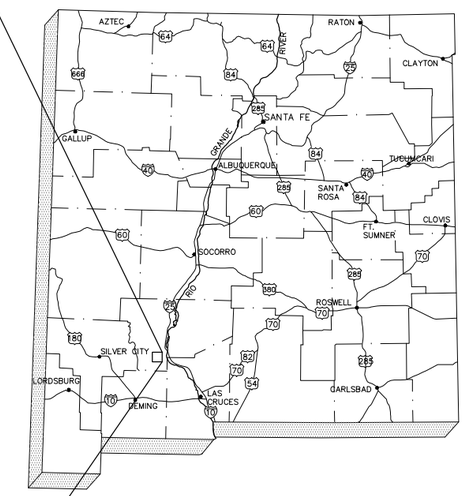
COPPER FLAT PROJECT
WASTE ROCK DUMP, LOW GRADE ORE STOCKPILE, AND TAILINGS DISPOSAL FACILITIES
YEAR 5 CLOSURE PLAN
SIERRA COUNTY, NEW MEXICO
JULY 2012



LOCATION MAP
NOT TO SCALE



STATE OF NEW MEXICO
NOT TO SCALE

LIST OF DRAWINGS

	No.	Title
	1	TITLE SHEET AND LOCATION MAP
	2	YEAR 5 WASTE ROCK, LOW GRADE ORE STOCKPILE, AND TAILINGS DISPOSAL FACILITIES PLAN
	3	YEAR 5 TAILINGS STORAGE FACILITY PLAN
	4	YEAR 5 TAILINGS STORAGE FACILITY REGRADE PLAN
PENDING	5	TAILINGS STORAGE FACILITY CROSS-SECTIONS AND DETAILS
PENDING	6	TAILINGS STORAGE FACILITY SPILLWAY PLAN
	7	YEAR 5 LOW GRADE ORE STOCKPILE PLAN
	8	YEAR 5 LOW GRADE ORE STOCKPILE REGRADE PLAN
PENDING	9	LOW GRADE ORE STOCKPILE CROSS-SECTIONS AND DETAILS
	10	YEAR 5 WASTE ROCK DISPOSAL FACILITY PLAN
	11	YEAR 5 WASTE ROCK DISPOSAL FACILITY REGRADE PLAN
PENDING	12	WASTE ROCK DISPOSAL FACILITY CROSS-SECTIONS AND DETAILS

GENERAL REFERENCES

1. 2-FOOT TOPOGRAPHY DEVELOPED BY COOPER AERIAL SURVEY CO. BASED ON JUNE 18, 2011 AERIAL SURVEY AND PROVIDED BY THEMAC RESOURCES.
2. COORDINATE SYSTEM IS UTM ZONE 13 HARN IN FEET.
3. YEAR 5 LOW GRADE ORE STOCKPILE AND WASTE ROCK DISPOSAL FACILITY PLAN BY INDEPENDENT MINING CONSULTANTS.

REV	DATE	REVISION DESCRIPTION	DES	CADD	CHK	RVW
1	07/13/12	ISSUED DRAFT FOR CLIENT REVIEW	DW	NIL	GM	RN

DRAWING USE
PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

DRAFT

PROJECT
COPPER FLAT PROJECT
WASTE ROCK DUMP, LOW GRADE ORE STOCKPILE, AND TAILINGS DISPOSAL FACILITIES
YEAR 5 CLOSURE PLAN
SIERRA COUNTY, NEW MEXICO

TITLE
TITLE SHEET AND LOCATION MAP

PROJECT No.		123-80002A	FILE No.	12380002AB001
DESIGN	DW	07/02/12	SCALE	NOT TO SCALE
CADD	NIL	07/02/12	DRAWING	
CHECK	GM	07/06/12		1
REVIEW	RN	07/10/12		

Golder Associates

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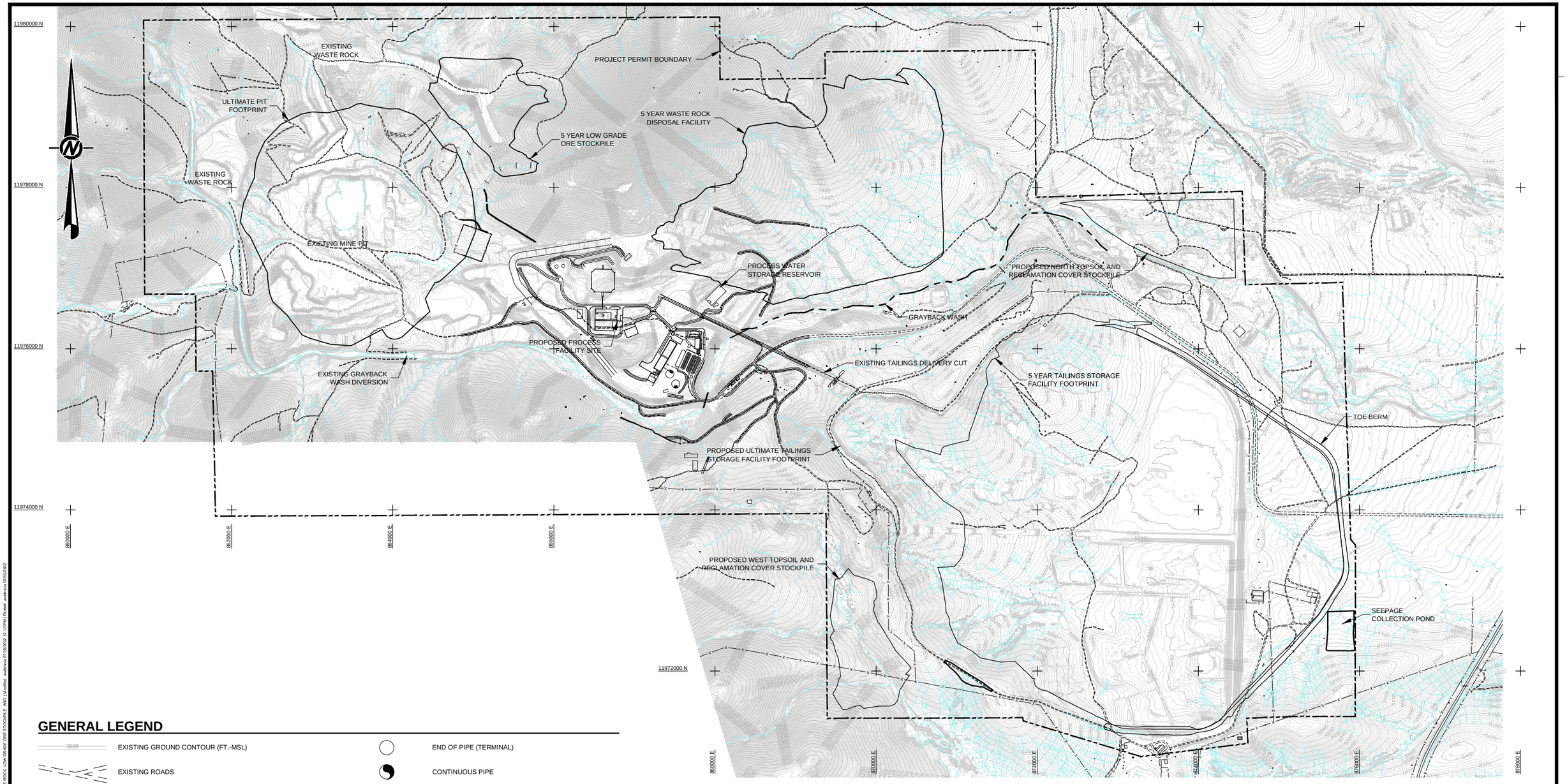

GENERAL LEGEND

- EXISTING GROUND CONTOUR (FT.-MSL)
- EXISTING ROADS
- EXISTING DRAINAGE
- EXISTING FENCELINE
- PROJECT PERMIT BOUNDARY
- PROPOSED DESIGN CONTOURS (FT.-MSL)
- GRADE BREAK
- SLOPE INDICATOR
- 3H:1V or 3 HORIZONTAL TO 1 VERTICAL SLOPE
- 5% GRADE INDICATOR
- END OF PIPE (TERMINAL)
- CONTINUOUS PIPE
- BREAK IN PIPE
- X FT. BREAK IN DIMENSION
- DETAIL CALLOUT: DETAIL ID / DRAWING SHEET LOCATION
- CROSS-SECTION CALLOUT: SECTION ID / DRAWING SHEET LOCATION

600 0 600 1200
SCALE FEET

REV	DATE	REVISION DESCRIPTION	DES	CADD	CHK	RVW
2	07/13/12	ISSUED DRAFT FOR CLIENT REVIEW	DW	NIL	GM	RN

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PROJECT
THEMAC RESOURCES
COPPER FLAT PROJECT
WASTE ROCK DUMP, LOW GRADE ORE STOCKPILE, AND TAILINGS DISPOSAL FACILITIES
YEAR 5 CLOSURE PLAN
SIERRA COUNTY, NEW MEXICO

TITLE
YEAR 5 WASTE ROCK, LOW GRADE ORE STOCKPILE, AND TAILINGS DISPOSAL FACILITIES PLAN

Golder Associates

PROJECT No.		123-80002A	FILE No.	12380002AB002
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REVIEW	RN	07/10/12		

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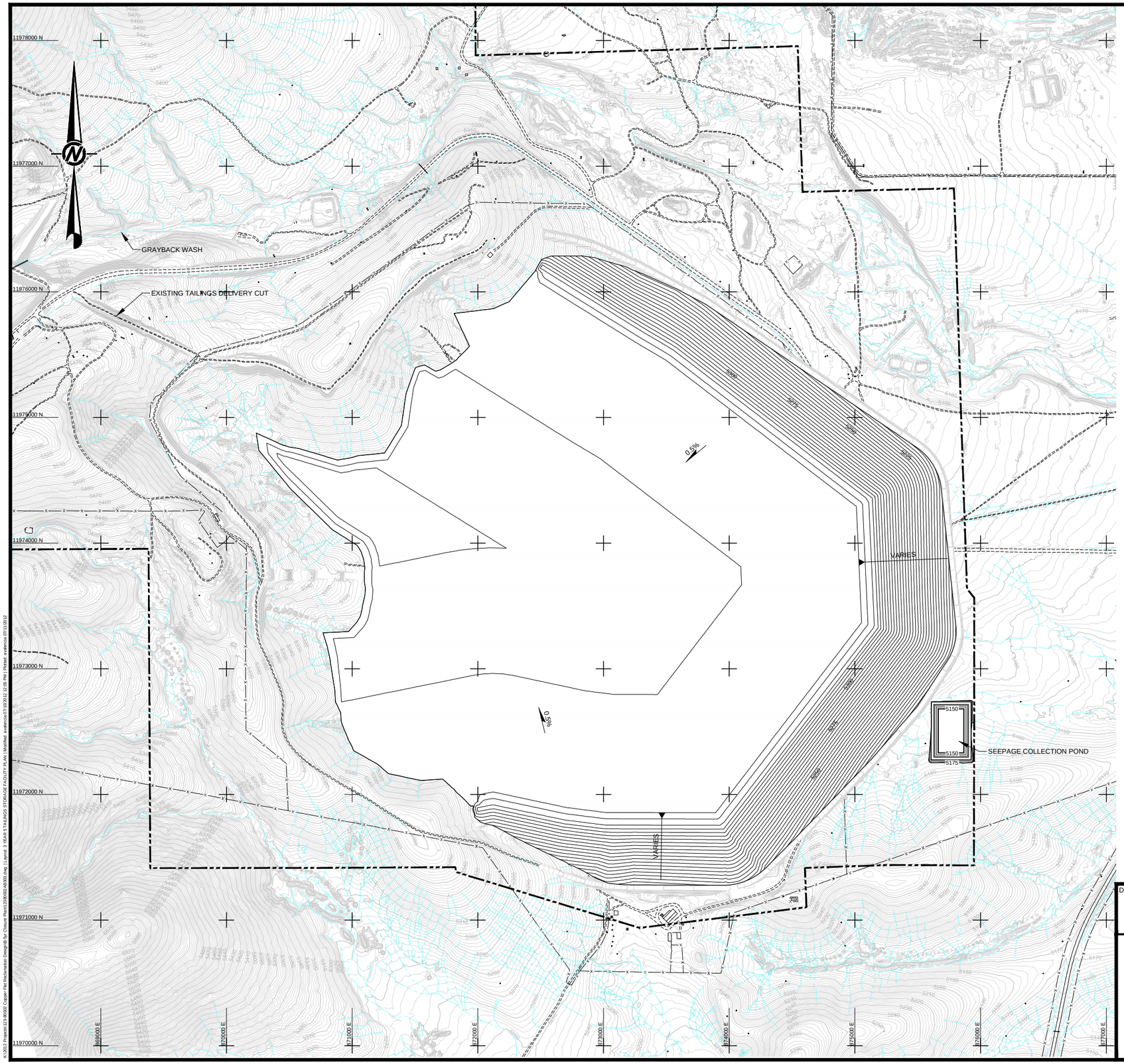

LEGEND

- EXISTING GROUND CONTOUR (FT.-MSL)
- EXISTING ROADS
- EXISTING DRAINAGE
- EXISTING FENCELINE
- PROJECT PERMIT BOUNDARY
- PROPOSED DESIGN CONTOURS (FT.-MSL)
- GRADE BREAK
- SLOPE INDICATOR
- 3H:1V or 3 HORIZONTAL TO 1 VERTICAL SLOPE
- 5% GRADE INDICATOR
- 1/6 DETAIL CALLOUT — DETAIL ID, DRAWING SHEET LOCATION
- A/6 CROSS-SECTION CALLOUT — SECTION ID, DRAWING SHEET LOCATION

400 0 400 800
SCALE FEET

REV	DATE	REVISION DESCRIPTION	DES	CADD	CHK	RVW
2	07/13/12	ISSUED DRAFT FOR CLIENT REVIEW	DW	NIL	GM	RN

DRAWING USE
PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

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PROJECT
THEMAC RESOURCES
COPPER FLAT PROJECT
WASTE ROCK DUMP, LOW GRADE ORE STOCKPILE, AND TAILINGS DISPOSAL FACILITIES
YEAR 5 CLOSURE PLAN
SIERRA COUNTY, NEW MEXICO

TITLE
YEAR 5 TAILINGS STORAGE FACILITY PLAN

Golder Associates

PROJECT No.		123-80002A	FILE No.	12380002AB003
DESIGN	DW	07/02/12	SCALE	AS SHOWN
CADD	NIL	07/02/12	DRAWING	3
CHECK	GM	07/06/12		
REVIEW	RN	07/10/12		

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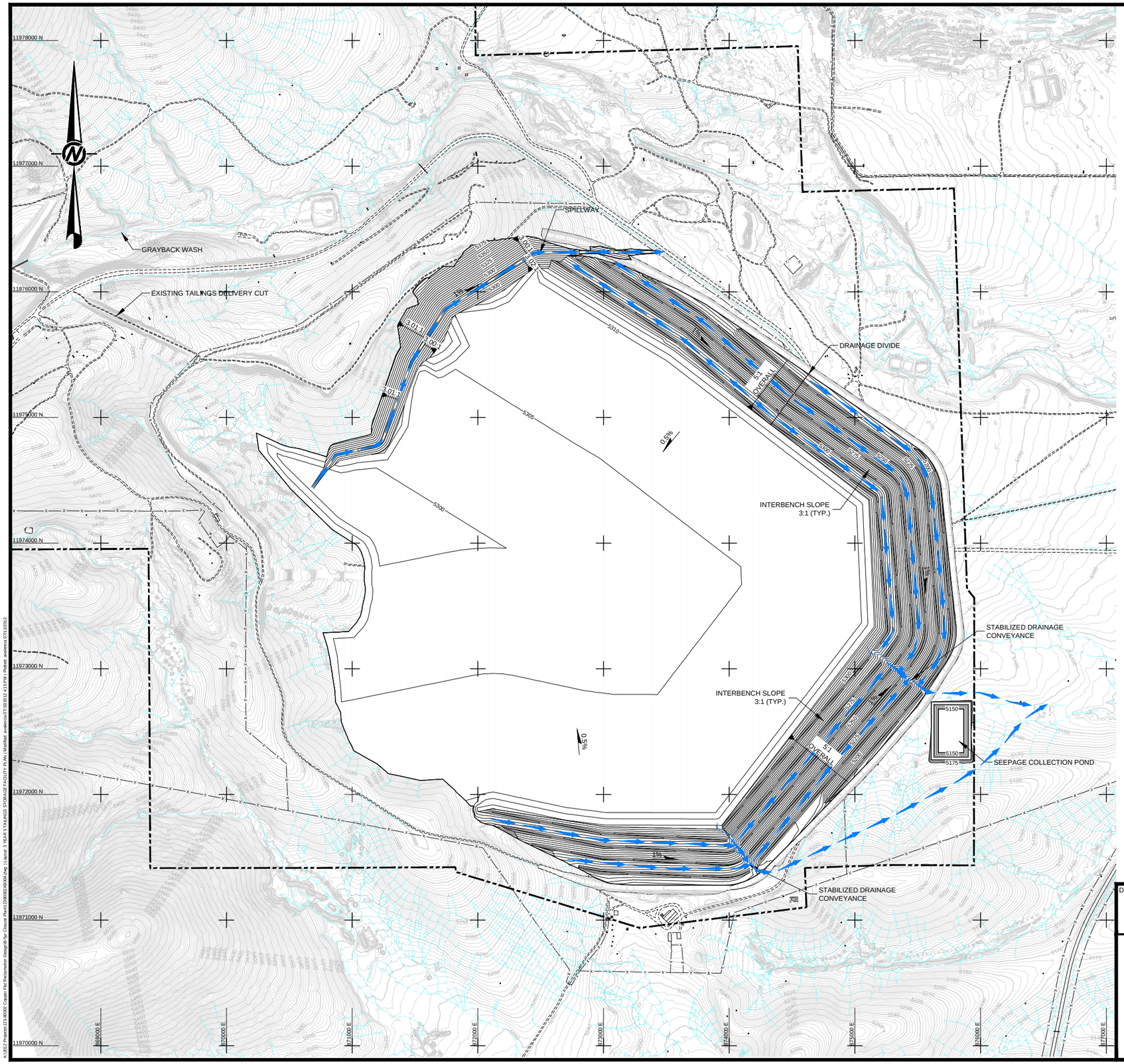

LEGEND

- EXISTING GROUND CONTOUR (FT.-MSL)
- EXISTING ROADS
- EXISTING DRAINAGE
- EXISTING FENCELINE
- PROJECT PERMIT BOUNDARY
- PROPOSED DESIGN CONTOURS (FT.-MSL)
- GRADE BREAK
- DRAINAGE
- CONVEYANCE DITCH
- SLOPE INDICATOR
- 3H:1V or 3 HORIZONTAL TO 1 VERTICAL SLOPE
- 5% GRADE INDICATOR
- DETAIL CALLOUT — DETAIL ID / DRAWING SHEET LOCATION
- CROSS-SECTION CALLOUT — SECTION ID / DRAWING SHEET LOCATION

NOTE

1. STABILZED CONVEYANCE TO CONSIST OF GROUTED RIPRAP, ARTICULATED CONCRETE MATS OR SIMILAR EROSION PROTECTION MEASURES.

400 0 400 800
SCALE FEET

REV	DATE	REVISION DESCRIPTION	DES	CADD	CHK	RVW
2	07/13/12	ISSUED DRAFT FOR CLIENT REVIEW	DW	NIL	GM	RN

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PROJECT
THEMAC RESOURCES
COPPER FLAT PROJECT
WASTE ROCK DUMP, LOW GRADE ORE STOCKPILE, AND TAILINGS DISPOSAL FACILITIES
YEAR 5 CLOSURE PLAN
SIERRA COUNTY, NEW MEXICO

TITLE
YEAR 5 TAILINGS STORAGE FACILITY REGRADE PLAN

Golder Associates

PROJECT No.		123-80002A	FILE No.	12380002AB004
DESIGN	DW	07/02/12	SCALE	AS SHOWN
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CHECK	GM	07/06/12		4
REVIEW	RN	07/10/12		

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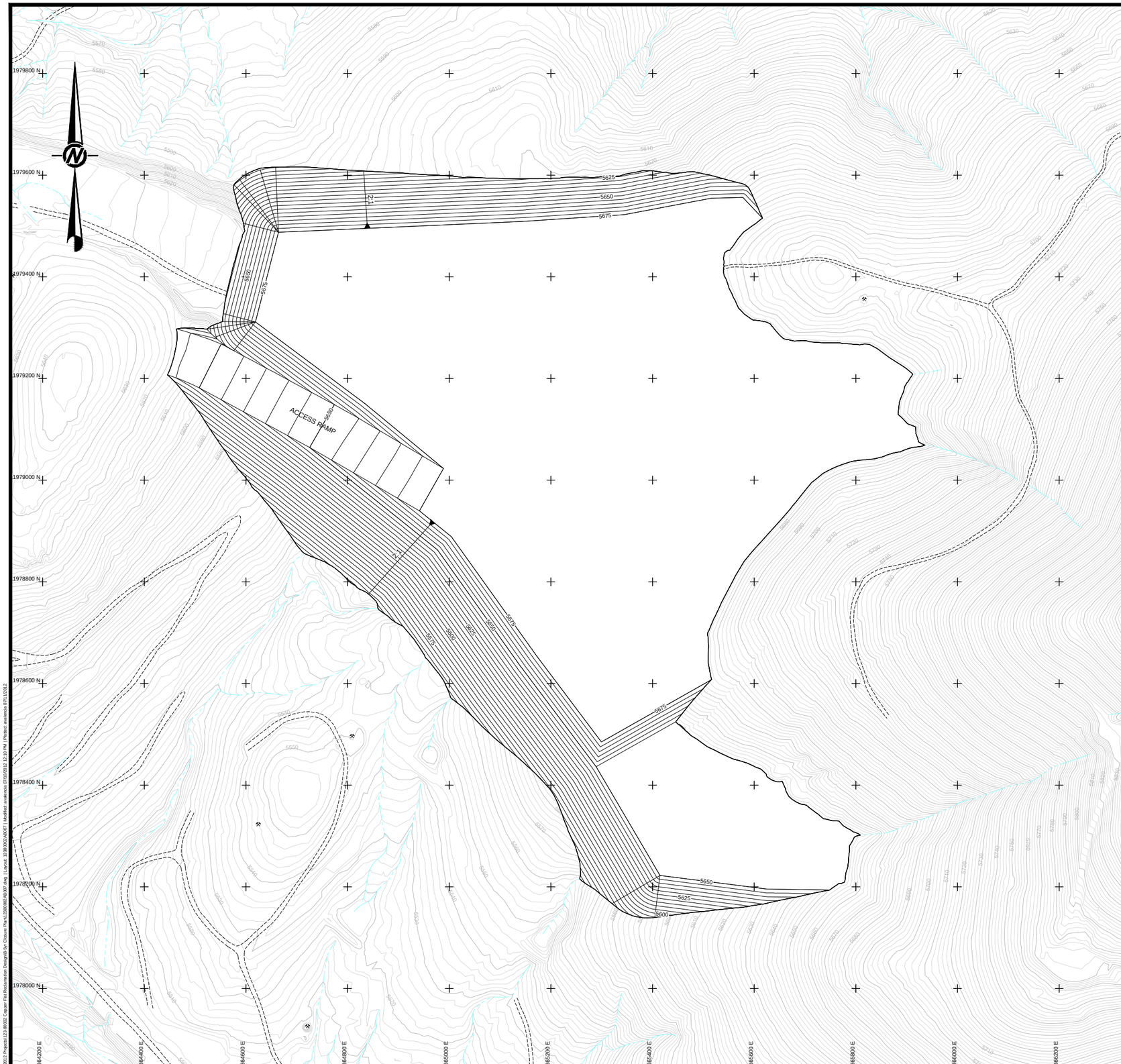

LEGEND

- EXISTING GROUND CONTOUR (FT.-MSL)
- EXISTING ROADS
- EXISTING DRAINAGE
- EXISTING FENCELINE
- PROJECT PERMIT BOUNDARY
- PROPOSED DESIGN CONTOURS (FT.-MSL)
- GRADE BREAK
- SLOPE INDICATOR
- 3H:1V or 3 HORIZONTAL TO 1 VERTICAL SLOPE
- 5% GRADE INDICATOR
- DETAIL CALLOUT — DETAIL ID 1, DRAWING SHEET LOCATION 6
- CROSS-SECTION CALLOUT — SECTION ID A, DRAWING SHEET LOCATION 6

SCALE 100 0 100 200 FEET

REV	DATE	REVISION DESCRIPTION	DES	CADD	CHK	RVW
A	07/13/12	ISSUED DRAFT FOR CLIENT REVIEW	DW	NIL	GM	RN

DRAWING USE

PRELIMINARY DESIGN
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PROJECT

THEMAC RESOURCES

COPPER FLAT PROJECT
WASTE ROCK DUMP, LOW GRADE ORE STOCKPILE, AND TAILINGS DISPOSAL FACILITIES
YEAR 5 CLOSURE PLAN
SIERRA COUNTY, NEW MEXICO

TITLE

YEAR 5 LOW GRADE ORE STOCKPILE PLAN

Golder Associates

PROJECT No.		123-80002A	FILE No.	12380002AB007
DESIGN	DW	07/02/12	SCALE	AS SHOWN
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CHECK	GM	07/06/12		
REVIEW	RN	07/10/12		

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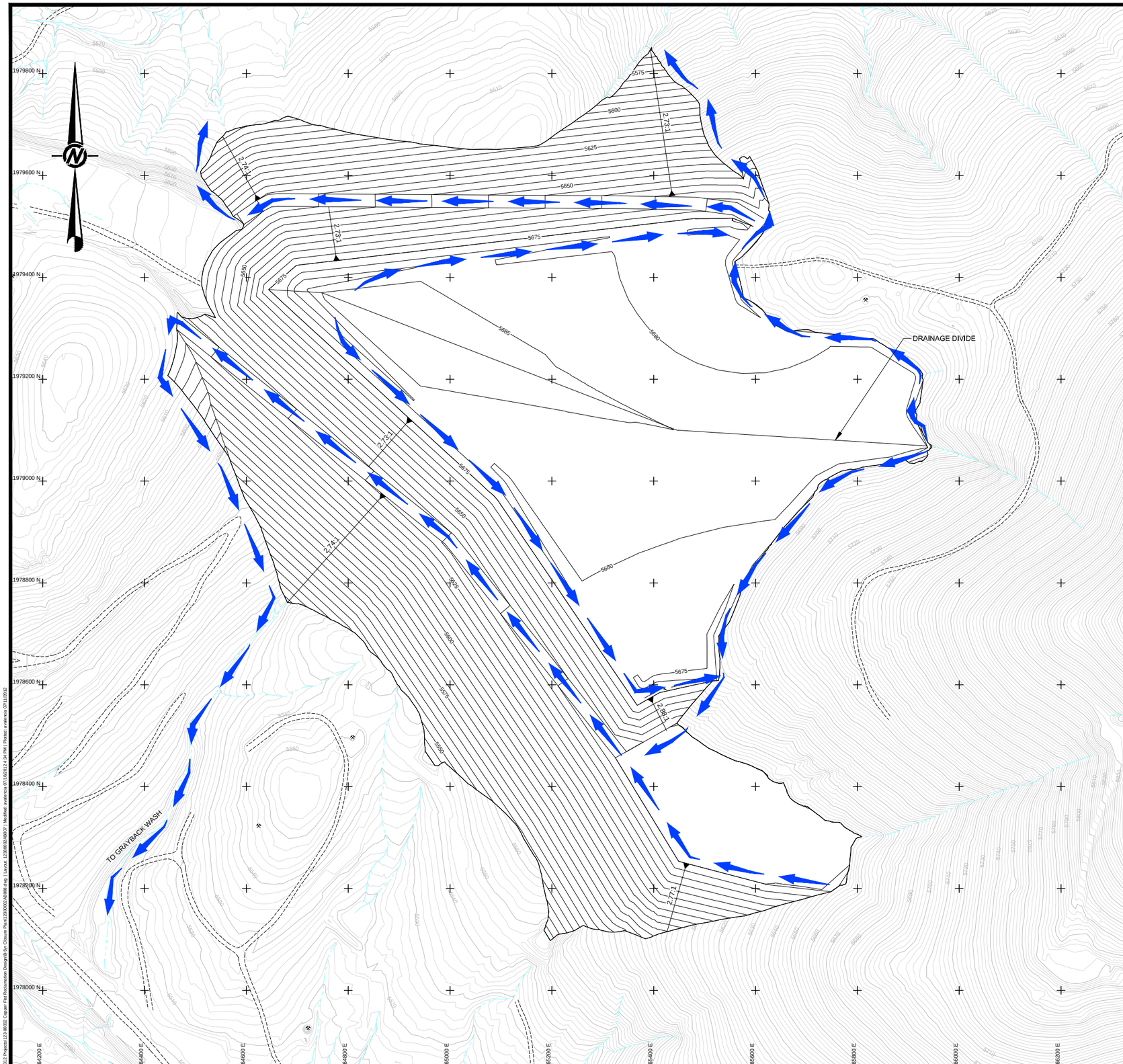

LEGEND

- EXISTING GROUND CONTOUR (FT.-MSL)
- EXISTING ROADS
- EXISTING DRAINAGE
- EXISTING FENCELINE
- PROJECT PERMIT BOUNDARY
- PROPOSED DESIGN CONTOURS (FT.-MSL)
- GRADE BREAK
- DRAINAGE
- CONVEYANCE DITCH
- SLOPE INDICATOR
- 3H:1V or 3 HORIZONTAL TO 1 VERTICAL SLOPE
- 5% GRADE INDICATOR
- DETAIL CALLOUT: DETAIL ID / DRAWING SHEET LOCATION
- CROSS-SECTION CALLOUT: SECTION ID / DRAWING SHEET LOCATION

NOTE

1. RUN-OFF CONVEYANCE DITCH ROUTING TO GRAYBACK WASH SUBJECT TO FACILITIES AREA REGRADE PLAN.

100 0 100 200
SCALE FEET

REV	DATE	REVISION DESCRIPTION	DES	CADD	CHK	RVW
1	07/13/12	ISSUED DRAFT FOR CLIENT REVIEW	DW	NIL	GM	RN

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PROJECT
THEMAC RESOURCES
COPPER FLAT PROJECT
WASTE ROCK DUMP, LOW GRADE ORE STOCKPILE, AND TAILINGS DISPOSAL FACILITIES
YEAR 5 CLOSURE PLAN
SIERRA COUNTY, NEW MEXICO

TITLE
YEAR 5 LOW GRADE ORE STOCKPILE REGRADE PLAN

Golder Associates

PROJECT No.		123-80002A	FILE No.	12380002AB008
DESIGN	DW	07/02/12	SCALE	AS SHOWN
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CHECK	GM	07/06/12		
REVIEW	RN	07/10/12		

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LEGEND

- EXISTING GROUND CONTOUR (FT.-MSL)
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- PROPOSED DESIGN CONTOURS (FT.-MSL)
- GRADE BREAK
- DRAINAGE
- CONVEYANCE DITCH
- SLOPE INDICATOR
- 3H:1V or 3 HORIZONTAL TO 1 VERTICAL SLOPE
- 5% GRADE INDICATOR
- DETAIL CALLOUT: DETAIL ID / DRAWING SHEET LOCATION
- CROSS-SECTION CALLOUT: SECTION ID / DRAWING SHEET LOCATION

400 0 400 800
SCALE FEET

REV	DATE	REVISION DESCRIPTION	DES	CADD	CHK	RVW
2	07/13/12	ISSUED DRAFT FOR CLIENT REVIEW	DW	NIL	GM	RN

DRAWING USE
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PROJECT
THEMAC RESOURCES
COPPER FLAT PROJECT
WASTE ROCK DUMP, LOW GRADE ORE STOCKPILE, AND TAILINGS DISPOSAL FACILITIES
YEAR 5 CLOSURE PLAN
SIERRA COUNTY, NEW MEXICO

TITLE
YEAR 5 WASTE ROCK DISPOSAL FACILITY PLAN

Golder Associates

PROJECT No.		123-80002A	FILE No.	12380002AB010
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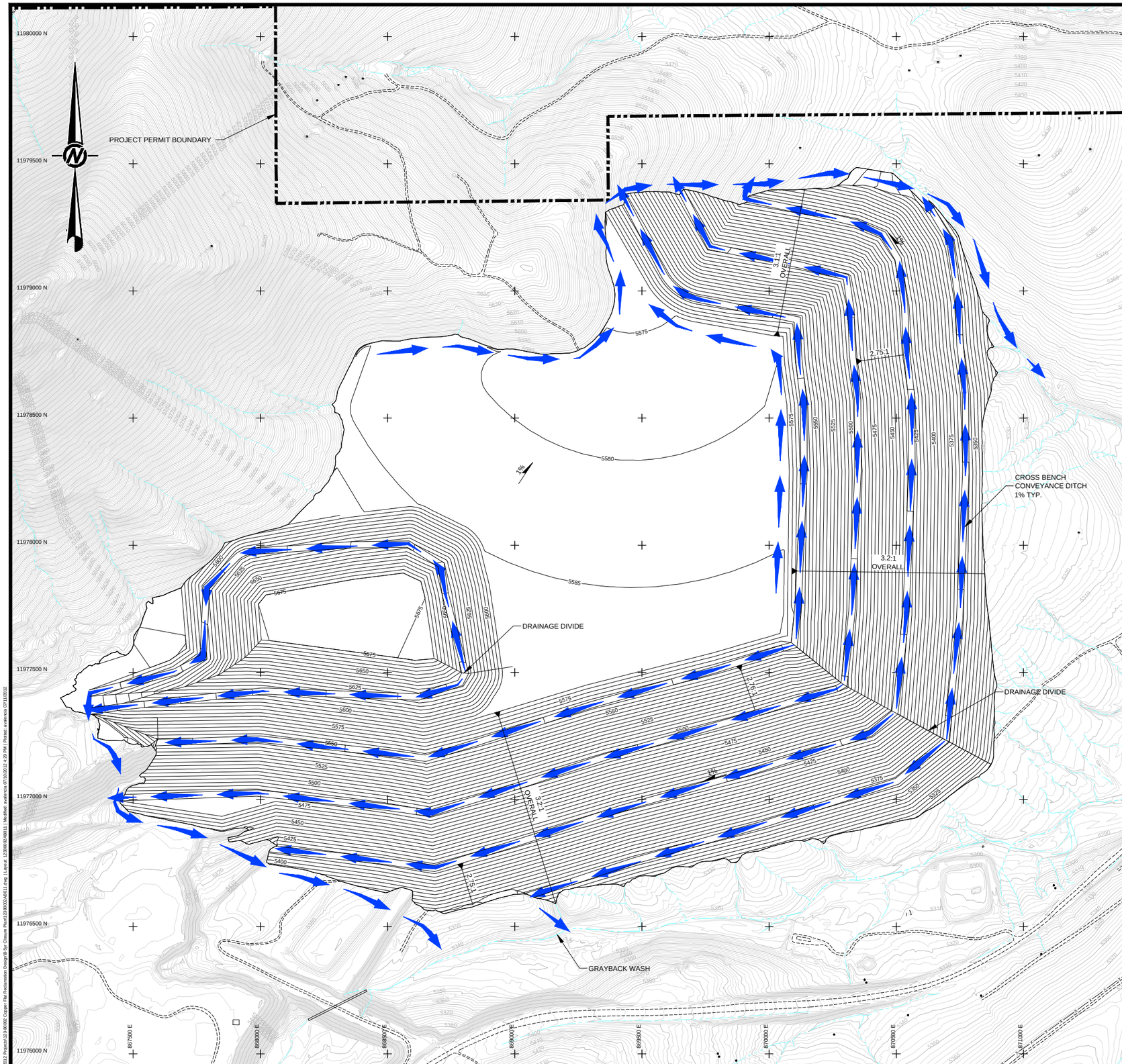

LEGEND

- EXISTING GROUND CONTOUR (FT.-MSL)
- EXISTING ROADS
- EXISTING DRAINAGE
- EXISTING FENCELINE
- PROJECT PERMIT BOUNDARY
- PROPOSED DESIGN CONTOURS (FT.-MSL)
- GRADE BREAK
- DRAINAGE
- CONVEYANCE DITCH
- SLOPE INDICATOR
- 3H:1V or 3:1 — 3 HORIZONTAL TO 1 VERTICAL SLOPE
- 5% — GRADE INDICATOR
- DETAIL CALLOUT (1/6) — DETAIL ID, DRAWING SHEET LOCATION
- CROSS-SECTION CALLOUT (A/6) — SECTION ID, DRAWING SHEET LOCATION

400 0 400 800
SCALE FEET

REV	DATE	REVISION DESCRIPTION	DES	CADD	CHK	RVW
1	07/13/12	ISSUED DRAFT FOR CLIENT REVIEW	DW	NIL	GM	RN

DRAWING USE
PRELIMINARY DESIGN
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PROJECT
THEMAC RESOURCES
COPPER FLAT PROJECT
WASTE ROCK DUMP, LOW GRADE ORE
STOCKPILE, AND TAILINGS DISPOSAL FACILITIES
YEAR 5 CLOSURE PLAN
SIERRA COUNTY, NEW MEXICO

TITLE
YEAR 5 WASTE ROCK DISPOSAL FACILITY REGRADE PLAN

Golder Associates

PROJECT No.		123-80002A	FILE No.	12380002AB011
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