

## **APPENDIX A**

### **DRAWINGS**

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MT13-AC-01	General Site Plan and Drawing Index
MT13-AC-02	Mine Water Treatment Unit Upgrades
MT13-AC-03	MWTU - Sedimentation Ponds
MT13-AC-03A	MWTU Typical Pond Layout
MT13-AC-04	MWTU - IX Plant and Radium Removal Ponds
MT13-AC-05	MWTU - Clean Water Holding Ponds and Distribution
MT13-AC-06	Pond Liner Details
MT13-AC-07	Hydraulic Control Structures Modification Details
MT13-AC-08	South Waste Rock Pile Buildout Plan view
MT13-AC-09	South Waste Rock Pile Buildout Sections
MT13-AC-10	North Waste Pile Plan View
MT13-AC-11	North Waste Pile Section View
MT13-AC-12	Ore Pad and Appurtenant Facilities Plan View
MT13-AC-13	Ore Pad and Appurtenant Facilities Sections
MT13-AC-14	Surface Grading and Drainage Upgrades
MT13-AC-15	Ore Pad Runoff Retention Pond
MT13-AC-16	South Storm Water Retention Pond

DRAWING INDEX

DRAWING NUMBER	DRAWING TITLE
MT13-AC-01	GENERAL SITE PLAN AND DRAWING INDEX
MT13-AC-02	MINE WATER TREATMENT UNIT (MWTU) UPGRADES
MT13-AC-03	MWTU - SEDIMENTATION PONDS
MT13-AC-03A	MWTU - TYPICAL POND LAYOUT
MT13-AC-04	MWTU - IX PLANT AND RADIUM REMOVAL PONDS
MT13-AC-05	MWTU - CLEAN WATER HOLDING PONDS AND DISTRIBUTION
MT13-AC-06A	POND LINER DETAILS-A
MT13-AC-06B	POND LINER DETAILS-B
MT13-AC-07	HYDRAULIC CONTROL STRUCTURES MODIFICATION DETAILS
MT13-AC-08	SOUTH WASTE ROCK PILE BUILDOUT - PLAN VIEW
MT13-AC-09	SOUTH WASTE ROCK PILE BUILDOUT - SECTIONS
MT13-AC-10	NORTH WASTE PILE - PLAN VIEW
MT13-AC-11	NORTH WASTE PILE - SECTIONS
MT13-AC-12	ORE PAD AND APPURTENANT FACILITIES - PLAN VIEW
MT13-AC-13	ORE PAD AND APPURTENANT FACILITIES - SECTIONS
MT13-AC-14	SURFACE GRADING AND DRAINAGE UPGRADES
MT13-AC-15	ORE PAD RUNOFF COLLECTION AND RETENTION
MT13-AC-16	SOUTH STORM WATER RETENTION POND

LEGEND

- Mine Permit Boundary
- Dewatering Wells
- Ponds
- Support Buildings
- Mine Shaft

NOT FOR CONSTRUCTION



500' GRID = NAD 83 NEW MEXICO WEST

REV	DESCRIPTION	DATE	DRAWN BY	ENGINEER	APPROVED	<div><div></div><div><b>RIO GRANDE RESOURCES CORPORATION</b></div><div>MOUNT TAYLOR MINE - Grants, NM 87020</div></div>	PROJECT TITLE: <b>MT. TAYLOR MINE MINE REACTIVATION PLAN</b>		SHEET TITLE: <b>GENERAL SITE PLAN AND DRAWING INDEX</b>	REV <b>0</b>
<b>0</b>	Final	3-15-13	EL	AK	AK		Prepared By: Alan Kuhn Associates LLC	SIZE <b>B</b> DWG NO. <b>MT13-AC-01</b>	SCALE: As Shown	



MARQUEZ CANYON

EXISTING STORM WATER DIVERSION CHANNEL

COUNTY ROAD 334

Ore Pad  
6

Truck Wash

Pond 1

Ore Pad Runoff Retention Pond  
1

Pond 2  
1

Pond 3  
1

IX BUILDING

MIXING TANKS

Pond 8  
1

Pond 5  
1

Pond 4  
1

Ponds 6 & 7  
1

TREATED WATER DISCHARGE PIPE

PUMP HOUSE

South Storm Water Retention Pond

## UPGRADES

- 1 ALL MINE WATER TREATMENT PONDS (PONDS 1-8) AND ORE PAD RUNOFF RETENTION POND  
REMOVE ALL BRUSH, VEGETATION, AND EXISTING CONCRETE SPILLWAYS  
BOTTOM OF PONDS TO SLOPE 1% TOWARDS SUMP  
POND SLOPES TO BE 3H TO 1V  
PONDS 1-5 AND 8 TO RECEIVE A DOUBLE LINER SYSTEM  
PONDS 6 AND 7 TO RECEIVE A SINGLE LINER
- 2 REMOVE 48" CONCRETE PIPE  
AND REDIRECT STORM WATER TO SOUTH STORM WATER RETENTION POND
- 3 INSTALL NEW 36" CMP PIPE AND MANHOLES
- 4 PIPING, PUMPING AND MECHANICAL SYSTEMS UPGRADE AS NEEDED
- 5 POND HYDRAULIC STRUCTURES (ALL PONDS) (MT13-AC-07)  
REPAIR DAMAGED CONCRETE  
ADD NEW CONCRETE SPILLWAYS AND CURB FOR LINER CONNECTIONS  
APPLY POLIBRID COATING ON ALL CONCRETE SURFACES  
REPLACE STEEL STRUCTURES WITH NEW CONCRETE STRUCTURES AS NEEDED
- 6 ORE PAD WITH TRUCK WASH (MT13-AC-12)  
GRADED TO DRAIN TO COLLECTION POINTS - INSTALL LINER
- 7 STORM WATER SYSTEM TO CONVEY ORE PAD AND TRUCK WASH RUNOFF TO ORE PAD RUNOFF RETENTION POND
- 8 ADDITIONAL BYPASS PIPING AROUND POND 5

NOT FOR  
CONSTRUCTION

0 100 200 400 800 FT

GRAPHIC SCALE

500' GRID = NAD 83 NEW MEXICO WEST

REV	DESCRIPTION	DATE	DRAWN BY	ENGINEER	APPROVED
0	FINAL	3-15-13	EL	AK	AK



**RIO GRANDE RESOURCES CORPORATION**  
MOUNT TAYLOR MINE - Grants, NM 87020

Prepared By:  
Alan Kuhn Associates LLC

SIZE  
**B**  
DWG  
NO. **MT13-AC-02**

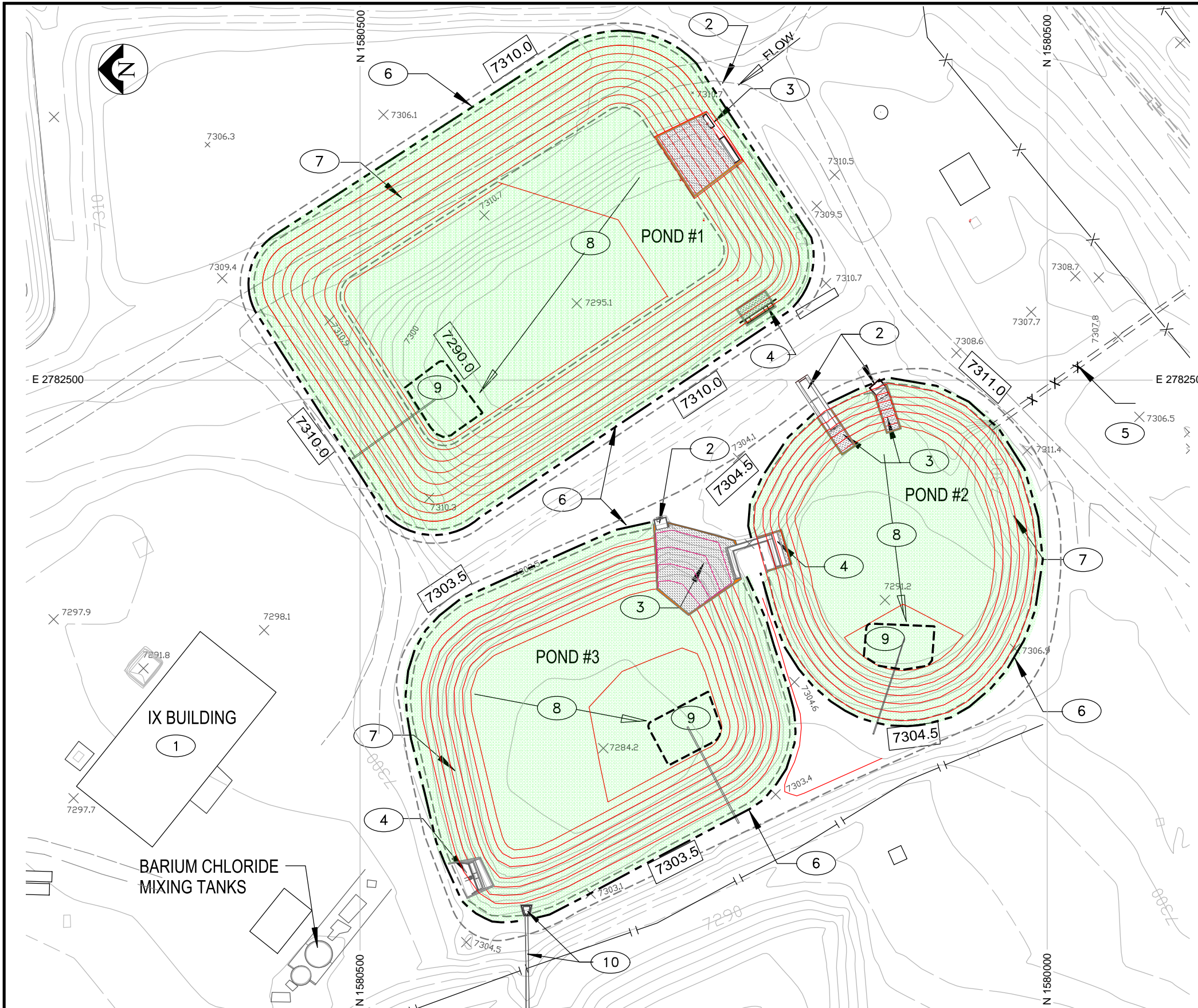
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As Shown

PROJECT TITLE:  
**MT. TAYLOR MINE  
MINE REACTIVATION PLAN**

SHEET TITLE:  
**MINE WATER TREATMENT UNIT  
(MWTU) UPGRADES**

REV  
**0**





NOTES

- 1 SEE APPENDIX D FOR IX PLANT DESIGN
- 2 EXISTING INLET HYDRAULIC STRUCTURES  
SEE SHEET MT13-AC-07
- 3  $\frac{A}{07}$  NEW INLET CONCRETE CURB AND SPILLWAYS
- 4 EXISTING OUTLET HYDRAULIC STRUCTURE WITH  
NEW CONCRETE CURB AND APRON
- 5 48" DIA RCP STORM WATER PIPE TO BE REMOVED-  
STORM WATER FLOW TO BE REDIRECTED TO  
SOUTH STORM WATER RETENTION POND
- 6  $\frac{A}{06A}$  MINIMUM 8' WIDE LEVEL BERM AT TOP OF POND  
FOR ANCHORING LINER - SLOPE TOP OF BERM 1% AWAY FROM  
ANCHOR TRENCH
- 7 POND SLOPES = 3H TO 1V
- 8 BOTTOM OF POND SLOPE 1% TOWARDS SUMP
- 9 LEAK DETECTION AND COLLECTION SYSTEM SUMP AND PIPE  
SEE DRAWING MT13-AC-06B FOR DETAILS
- 10 EXISTING OVERFLOW PROTECTION PIPE  
26" DIA STEEL PIPE - FLOW TO POND #4  
NMDOT STANDARD CONCRETE END SECTION

LEGEND


- 0000.0 DESIGN ELEVATION
- X 0000.0 EXISTING SPOT ELEVATION
- TOP OF LINER - ANCHOR TRENCH
- - - TOP AND BOTTOM OF PONDS
- DOUBLE LINER AREA
- DESIGN TOPO LINES - TWO FOOT INTERVALS

NOT FOR CONSTRUCTION

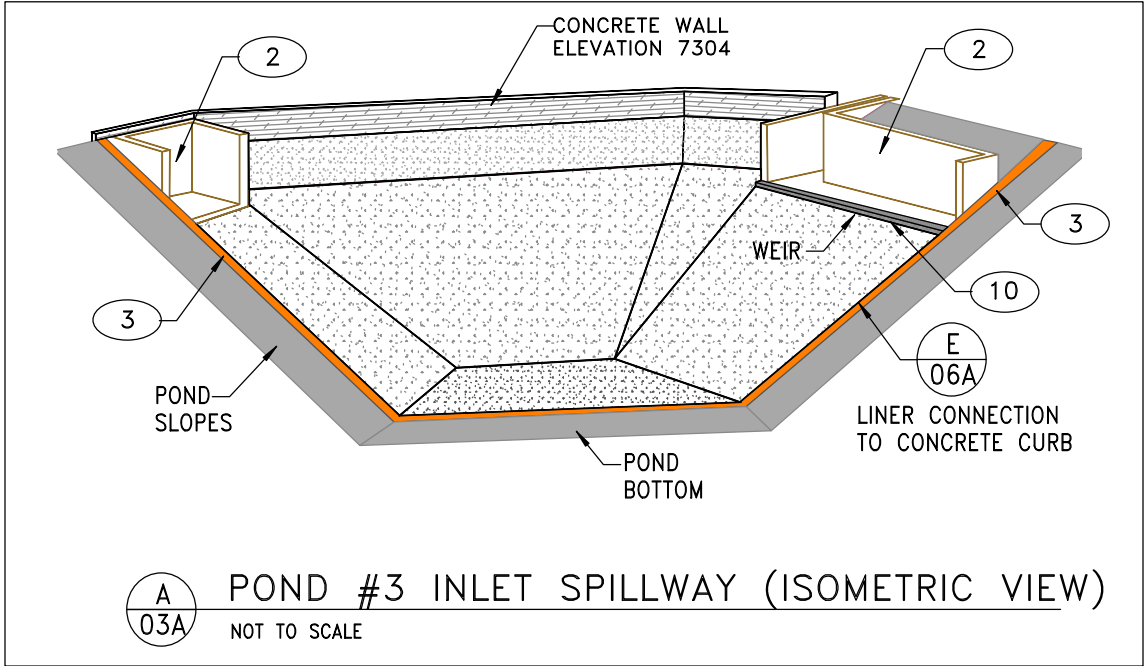
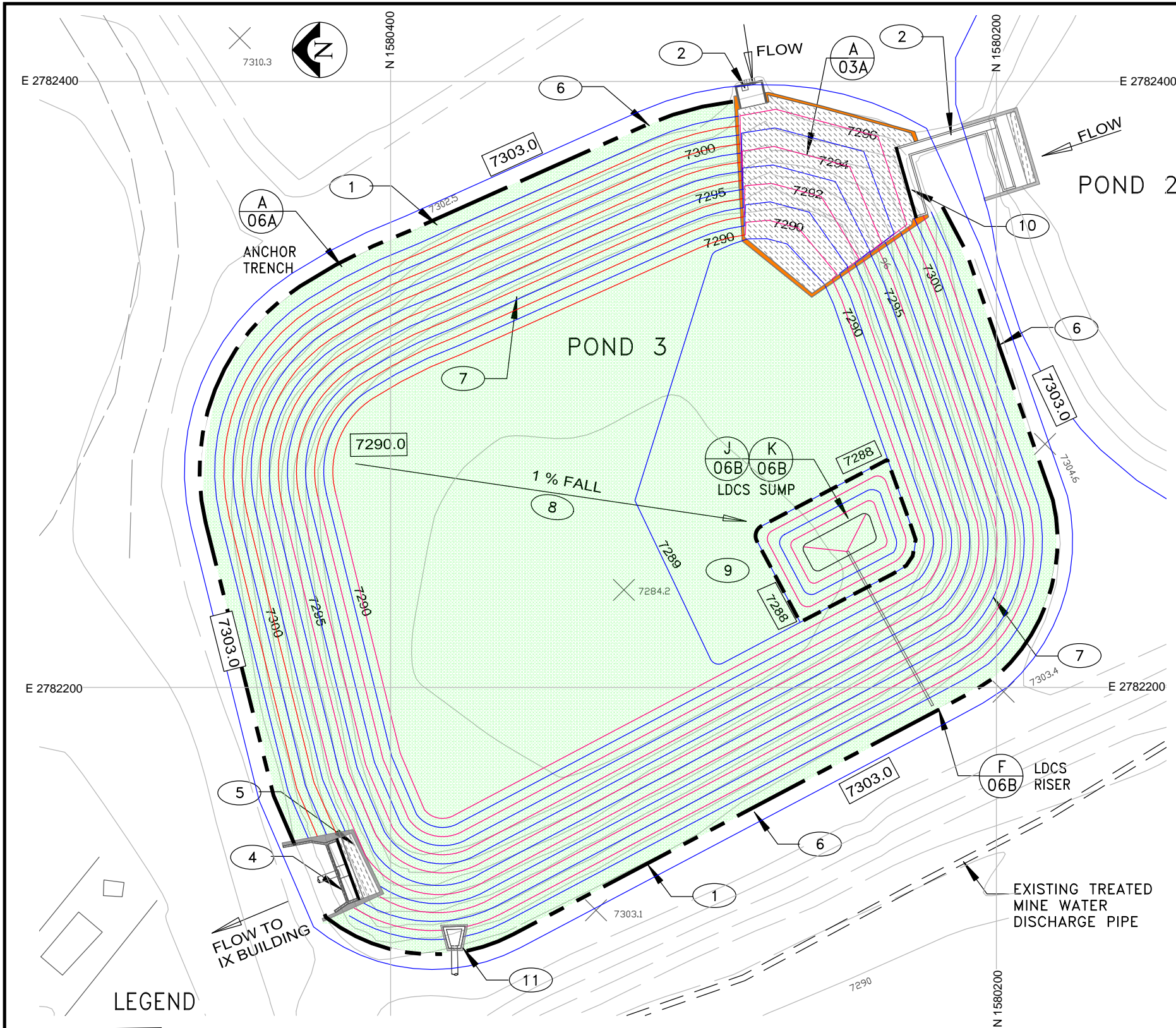
MINE WATER TREATMENT SEDIMENTATION PONDS  
(POND 1, 2, AND 3)

500' GRID = NAD 83 NEW MEXICO WEST

0 40 80 120 160 FT  
GRAPHIC SCALE

REV	DESCRIPTION	DATE	DRAWN BY	ENGINEER	APPROVED	 <b>RIO GRANDE RESOURCES CORPORATION</b> MOUNT TAYLOR MINE - Grants, NM 87020			PROJECT TITLE: <b>MT. TAYLOR MINE MINE REACTIVATION PLAN</b>			
0	FINAL	03-15-13	EL	AK	AK							
						Prepared By:		SIZE	SCALE:		SHEET TITLE: <b>MWTU SEDIMENTATION PONDS</b>	REV <b>0</b>
						Alan Kuhn Associates LLC		B	As Shown			
								DWG NO.	<b>MT13-AC-03</b>			





**A 03A** POND #3 INLET SPILLWAY (ISOMETRIC VIEW)  
NOT TO SCALE

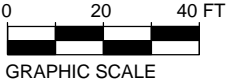
NOTES

- 1 EXTENT OF LINER AND ANCHOR TRENCH
- 2 EXISTING INLET HYDRAULIC STRUCTURES (MT13-AC-07)
- 3 NEW INLET CONCRETE CURB AND SPILLWAY  
SPILLWAY EXTENDS TO BOTTOM OF POND
- 4 EXISTING OUTLET HYDRAULIC STRUCTURE
- 5 NEW CONCRETE CURB AND APRON AROUND OUTLET STRUCTURES.  
EXTEND APRON TO ACCOMMODATE NEW GRADES
- 6 8'-10' WIDE LEVEL BERM AT TOP OF POND FOR ANCHORING LINER  
SLOPE TOP 1% AWAY FROM ANCHOR TRENCH
- 7 SLOPES 3H TO 1V
- 8 BOTTOM OF POND SLOPE 1% TOWARDS SUMP
- 9 LEAK DETECTION AND COLLECTION SYSTEM (LDCS)  
SUMP AND RISER PIPE  
SEE DRAWING MT13-AC-06B FOR DETAILS
- 10 SPILLWAY ELEVATION AT TOP = 6" BELOW EXISTING WEIR ELEVATION
- 11 EXISTING OVERFLOW PROTECTION PIPE  
26" DIA STEEL PIPE - FLOW TO POND #4  
NMDOT STANDARD CONCRETE END SECTION

LEGEND

- 0000.0 DESIGN ELEVATION
- × 0000.0 EXISTING SPOT ELEVATION
- TOP OF LINER - ANCHOR TRENCH
- DOUBLE LINER AREA
- DESIGN TOPO LINES - ONE FOOT INTERVALS  
EVEN ELEVATIONS=RED, ODD = BLUE

(POND #3 SHOWN AS EXAMPLE)

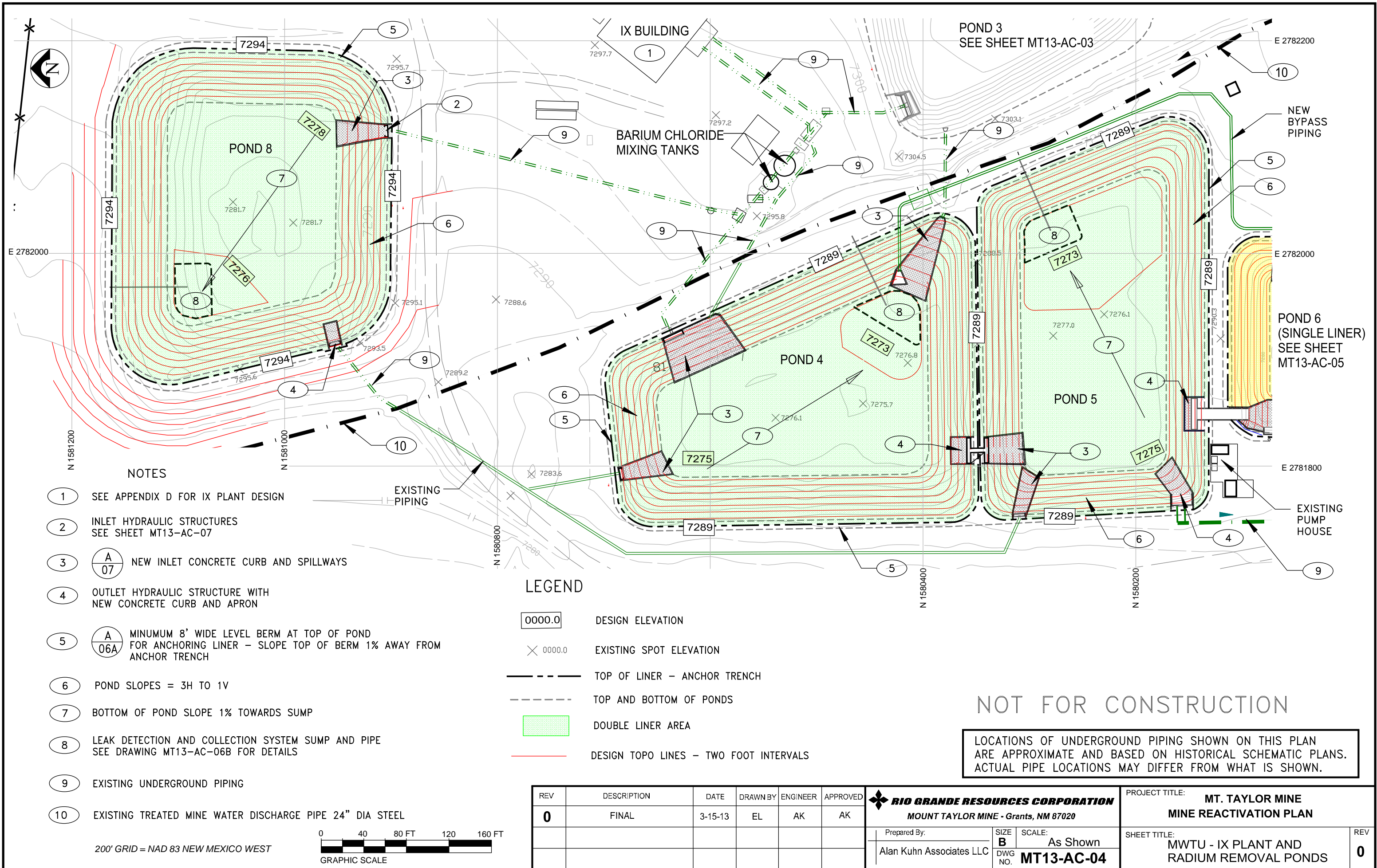


200' GRID = NAD 83 NEW MEXICO WEST

NOT FOR CONSTRUCTION

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0	FINAL	03-15-13	EL	AK	AK				SHEET TITLE: <b>MWTU - PONDS TYPICAL POND LAYOUT</b>	
						Prepared By: Alan Kuhn Associates LLC	SIZE B	SCALE: As Shown		
						DWG NO. MT13-AC-03A				REV 0





NOTES

- 1 SEE APPENDIX D FOR IX PLANT DESIGN
- 2 INLET HYDRAULIC STRUCTURES  
SEE SHEET MT13-AC-07
- 3 

A
07

 NEW INLET CONCRETE CURB AND SPILLWAYS
- 4 OUTLET HYDRAULIC STRUCTURE WITH  
NEW CONCRETE CURB AND APRON
- 5 

A
06A

 MINIMUM 8' WIDE LEVEL BERM AT TOP OF POND  
FOR ANCHORING LINER - SLOPE TOP OF BERM 1% AWAY FROM  
ANCHOR TRENCH
- 6 POND SLOPES = 3H TO 1V
- 7 BOTTOM OF POND SLOPE 1% TOWARDS SUMP
- 8 LEAK DETECTION AND COLLECTION SYSTEM SUMP AND PIPE  
SEE DRAWING MT13-AC-06B FOR DETAILS
- 9 EXISTING UNDERGROUND PIPING
- 10 EXISTING TREATED MINE WATER DISCHARGE PIPE 24" DIA STEEL

LEGEND


- |        |
|--------|
| 0000.0 |
|--------|

 DESIGN ELEVATION
- X 0000.0 EXISTING SPOT ELEVATION
- TOP OF LINER - ANCHOR TRENCH
- TOP AND BOTTOM OF PONDS
- |  |
|--|
|  |
|--|

 DOUBLE LINER AREA
- DESIGN TOPO LINES - TWO FOOT INTERVALS

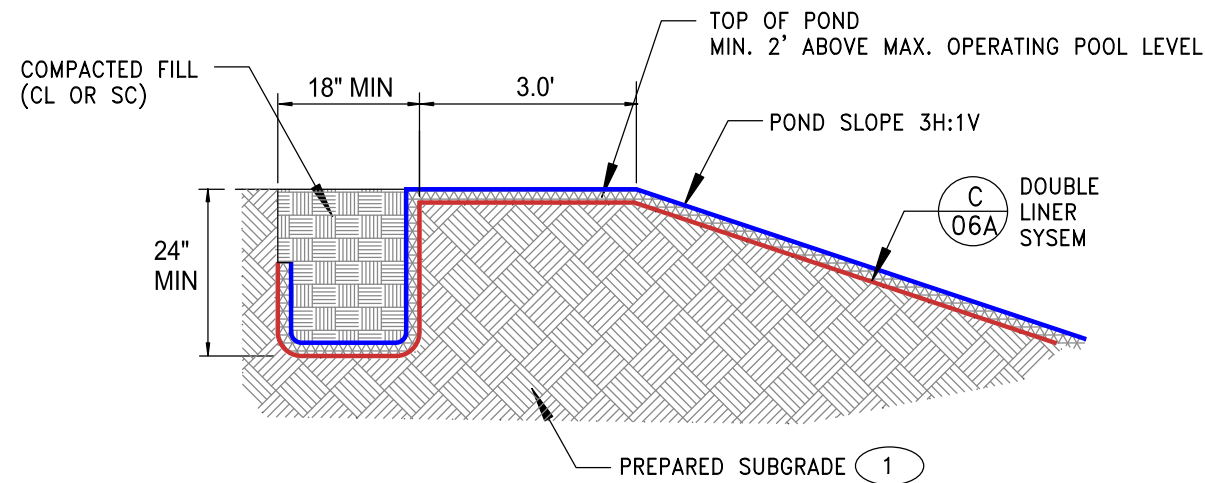
NOT FOR CONSTRUCTION

LOCATIONS OF UNDERGROUND PIPING SHOWN ON THIS PLAN  
ARE APPROXIMATE AND BASED ON HISTORICAL SCHEMATIC PLANS.  
ACTUAL PIPE LOCATIONS MAY DIFFER FROM WHAT IS SHOWN.

REV	DESCRIPTION	DATE	DRAWN BY	ENGINEER	APPROVED	<div><b>RIO GRANDE RESOURCES CORPORATION</b> <i>MOUNT TAYLOR MINE - Grants, NM 87020</i></div>	PROJECT TITLE: <b>MT. TAYLOR MINE MINE REACTIVATION PLAN</b>		
<b>0</b>	FINAL	3-15-13	EL	AK	AK		SHEET TITLE: <b>MWTU - IX PLANT AND RADIUM REMOVAL PONDS</b>		
						Prepared By:	SIZE <b>B</b>	SCALE: <b>As Shown</b>	<b>0</b>
						Alan Kuhn Associates LLC	DWG NO. <b>MT13-AC-04</b>		



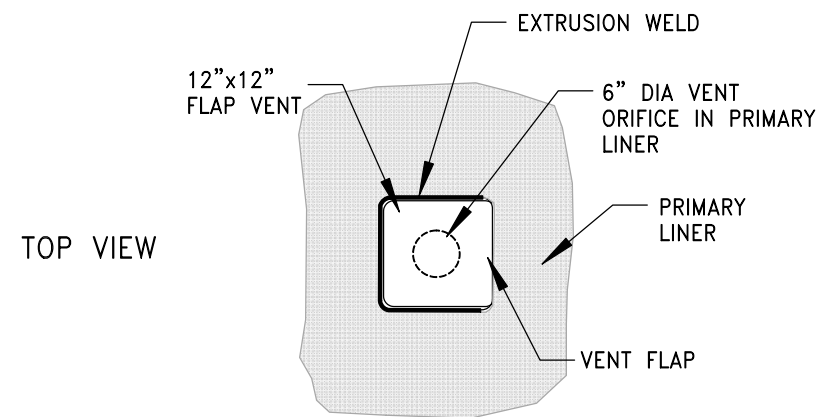
PROJECT TITLE:		MT. TAYLOR MINE MINE REACTIVATION PLAN
SHEET TITLE:		REV
MWTU- CLEAN WATER HOLDING PONDS AND DISTRIBUTION		0



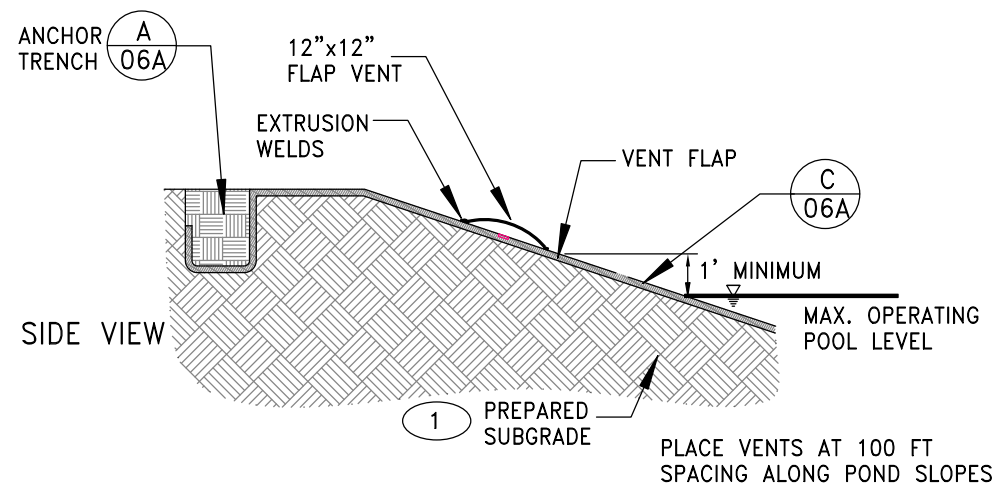
**A** TYPICAL INSLOPE AND ANCHOR TRENCH  
NOT TO SCALE

GENERAL NOTES

- 1 SUBGRADE TO BE GRADED AS SHOWN ON MT13-AC-03A TO PROVIDE A SMOOTH STABLE SURFACE FOR INSTALLATION OF THE LINER SYSTEM

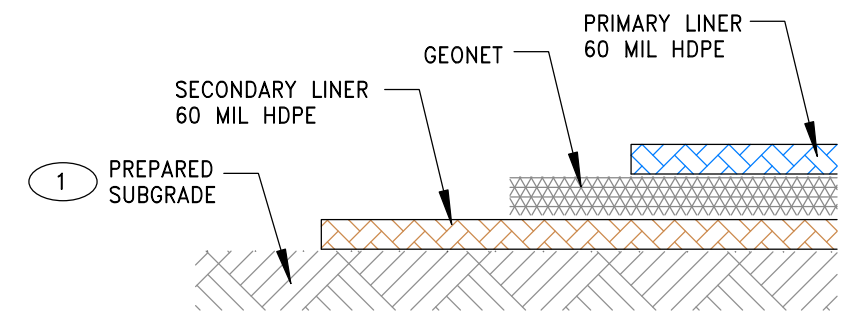


TOP VIEW

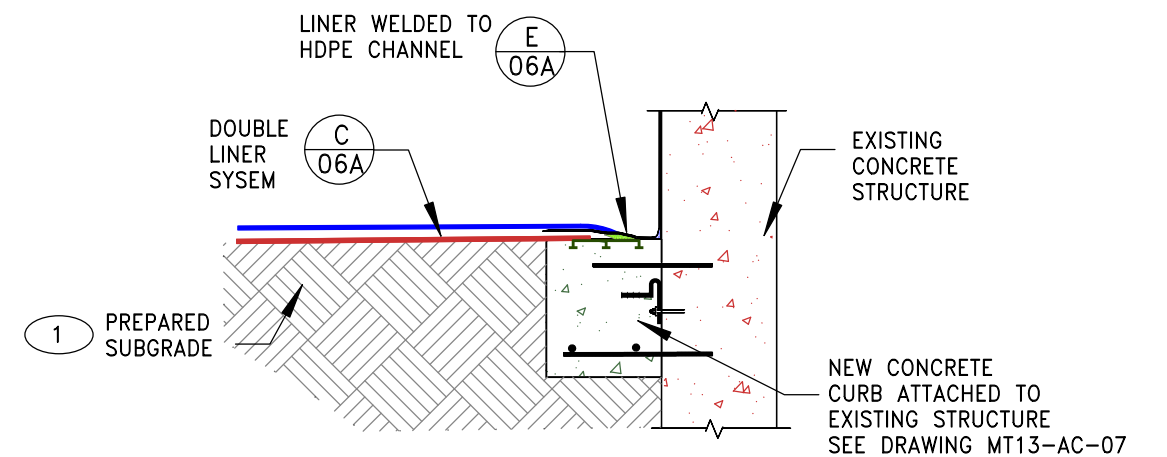


SIDE VIEW

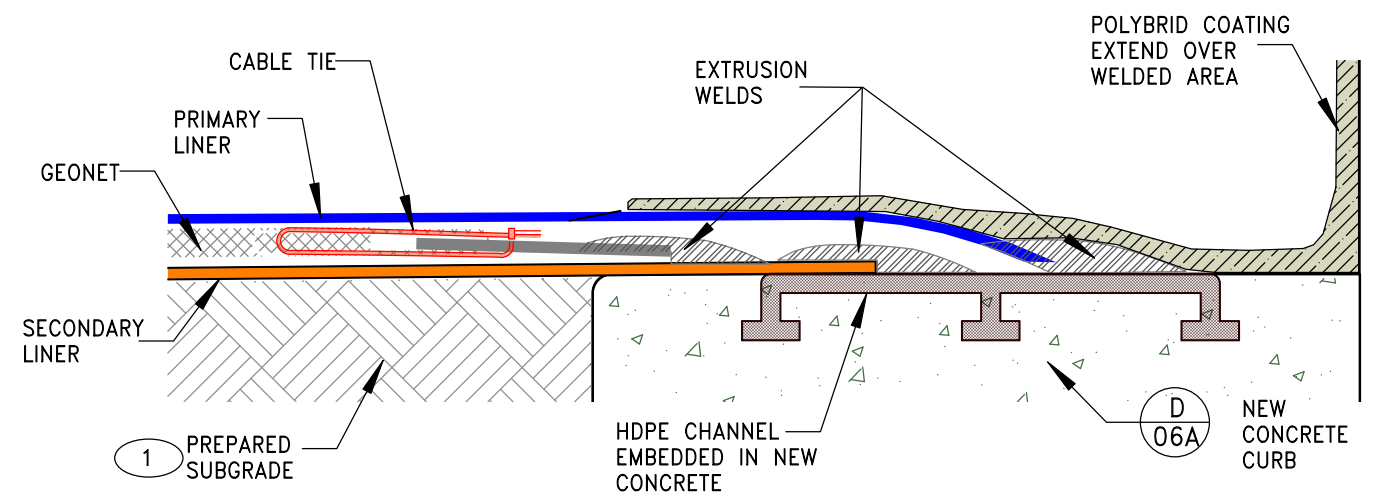
**B** LINER VENT DETAILS  
NOT TO SCALE



**C** DOUBLE LINER SYSTEM  
NOT TO SCALE



**D** LINER CONNECTION TO CONCRETE STRUCTURES  
NOT TO SCALE

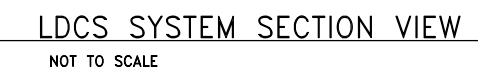
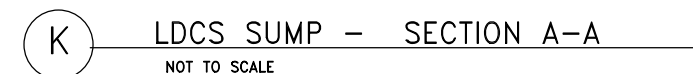
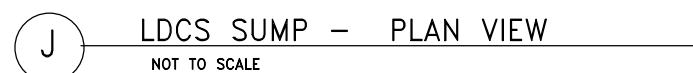


**E** LINER CONNECTION TO HDPE CONCRETE INSERT  
NOT TO SCALE

NOT FOR CONSTRUCTION

REV	DESCRIPTION	DATE	DRAWN BY	ENGINEER	APPROVED	RIO GRANDE RESOURCES CORPORATION			PROJECT TITLE: MT. TAYLOR MINE MINE REACTIVATION PLAN	
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						Prepared By:	SIZE	SCALE:	REV	
						Alan Kuhn Associates LLC	B	Not To Scale	0	
						DWG NO.	MT13-AC-06A			





NOT FOR CONSTRUCTION

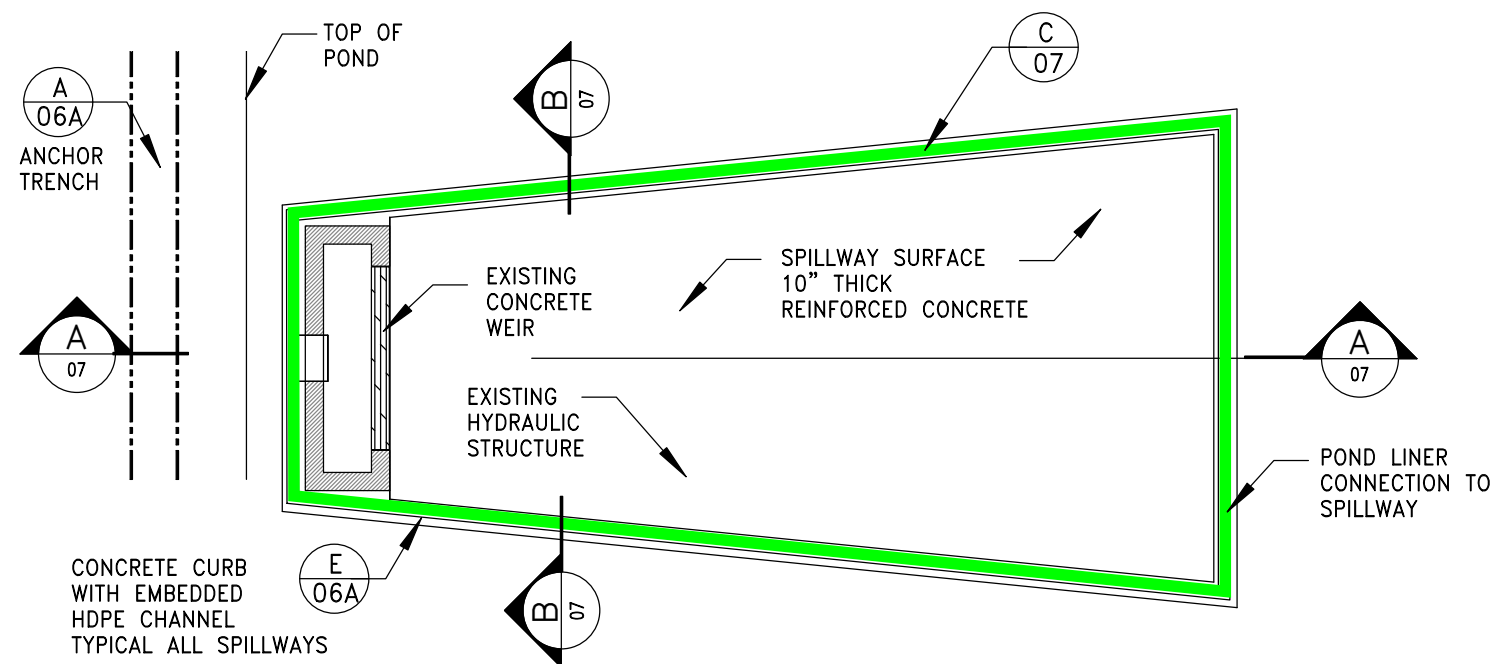
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<b>0</b>	FINAL	3-15-13	EL	AK	AK

Prepared By:	SIZE <b>B</b>	SCALE: Not To Scale
Alan Kuhn Associates LLC	DWG NO. <b>MT13-AC-06B</b>	

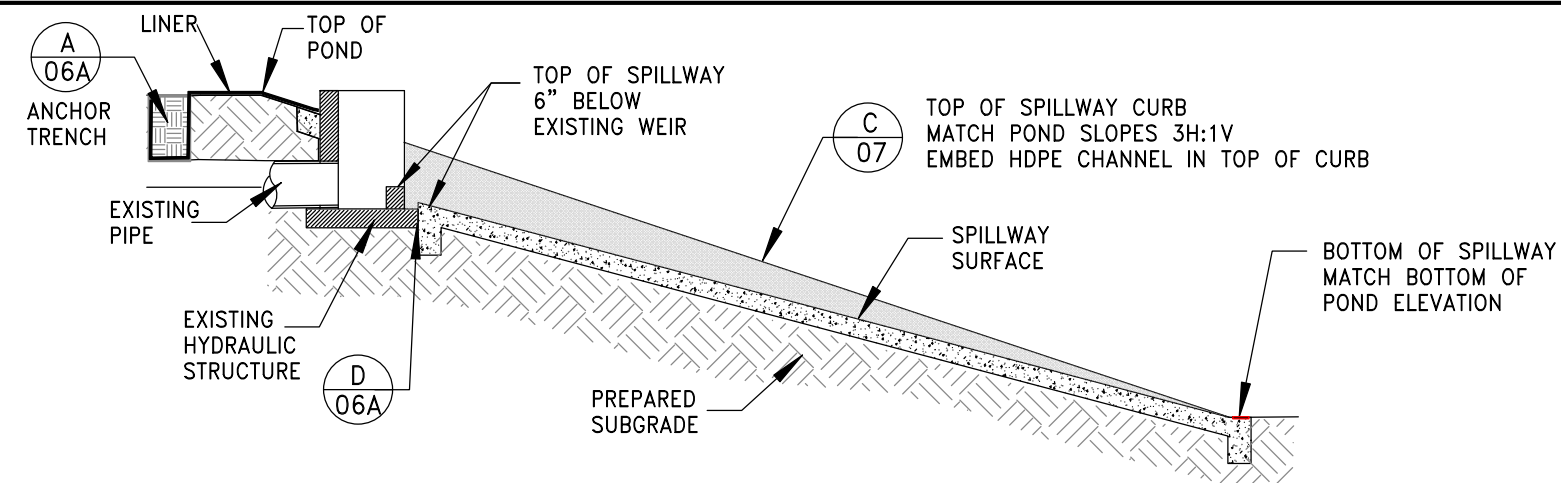
SHEET TITLE:

POND LINER DETAILS - B

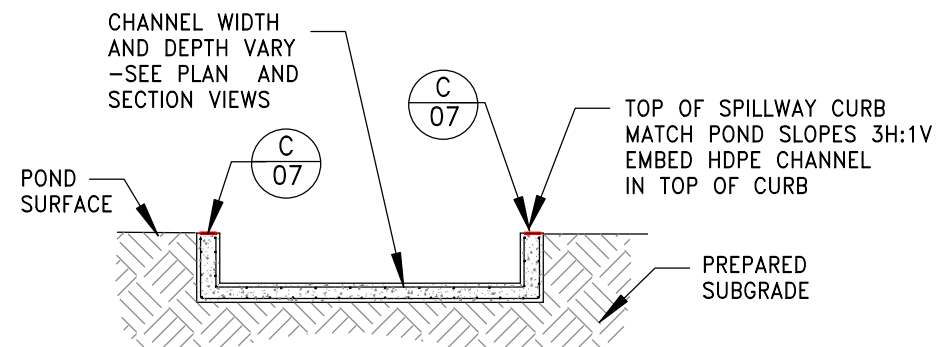
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**A** TYPICAL SPILLWAY AT EXISTING HYDRAULIC STRUCTURE  
NOT TO SCALE



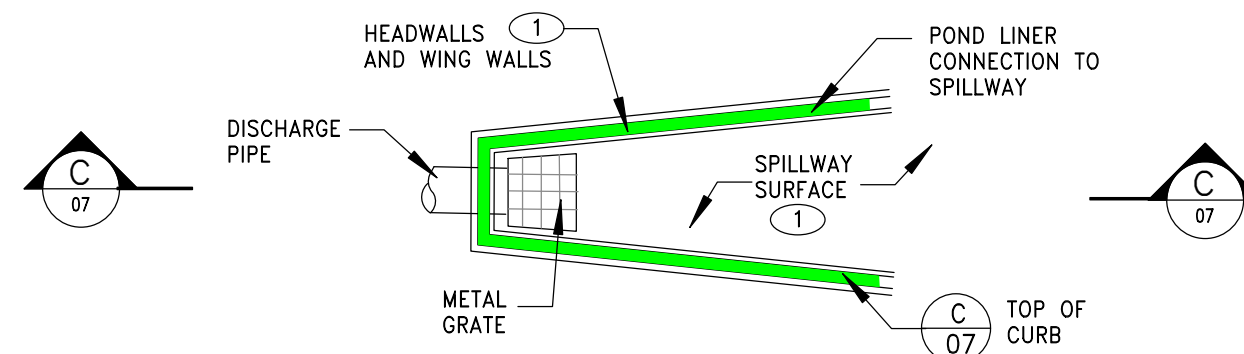
**SECTION AA** TYPICAL SPILLWAY  
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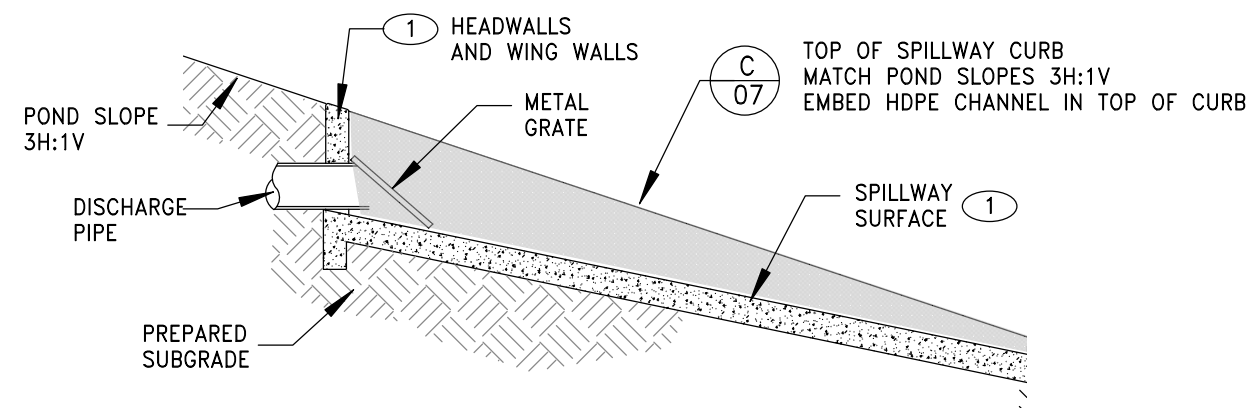
**SECTION BB** – TYPICAL SPILLWAY CROSS SECTION

① FOR CONSTRUCTION DETAILS ON ALL SPILLWAYS, HEADWALLS AND WINGWALLS FOLLOW NMDOT STANDARD DETAILS

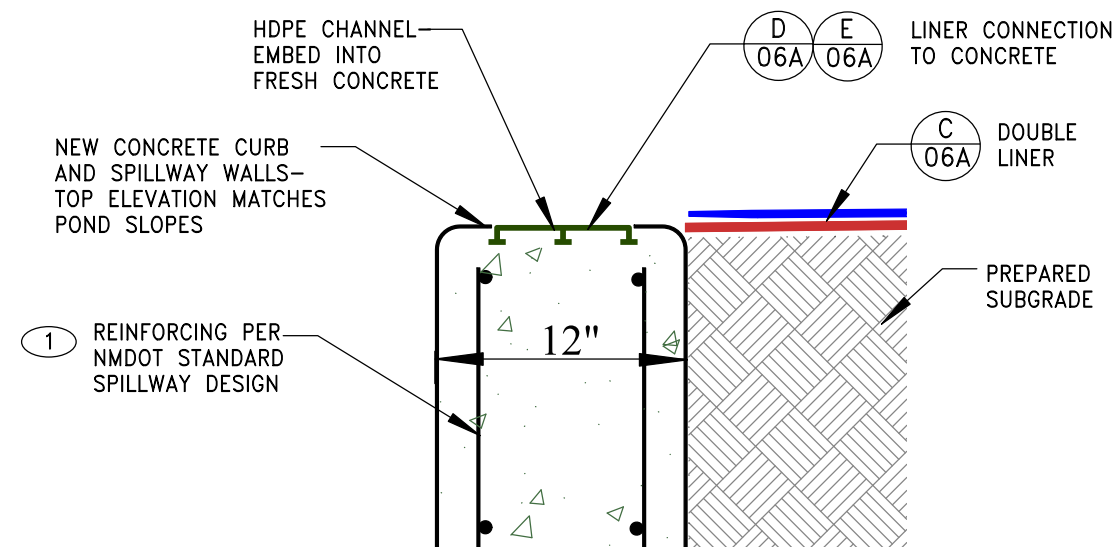
NOT FOR CONSTRUCTION



**B** TYPICAL SPILLWAY AT SINGLE PIPE ENTRANCE  
NOT TO SCALE



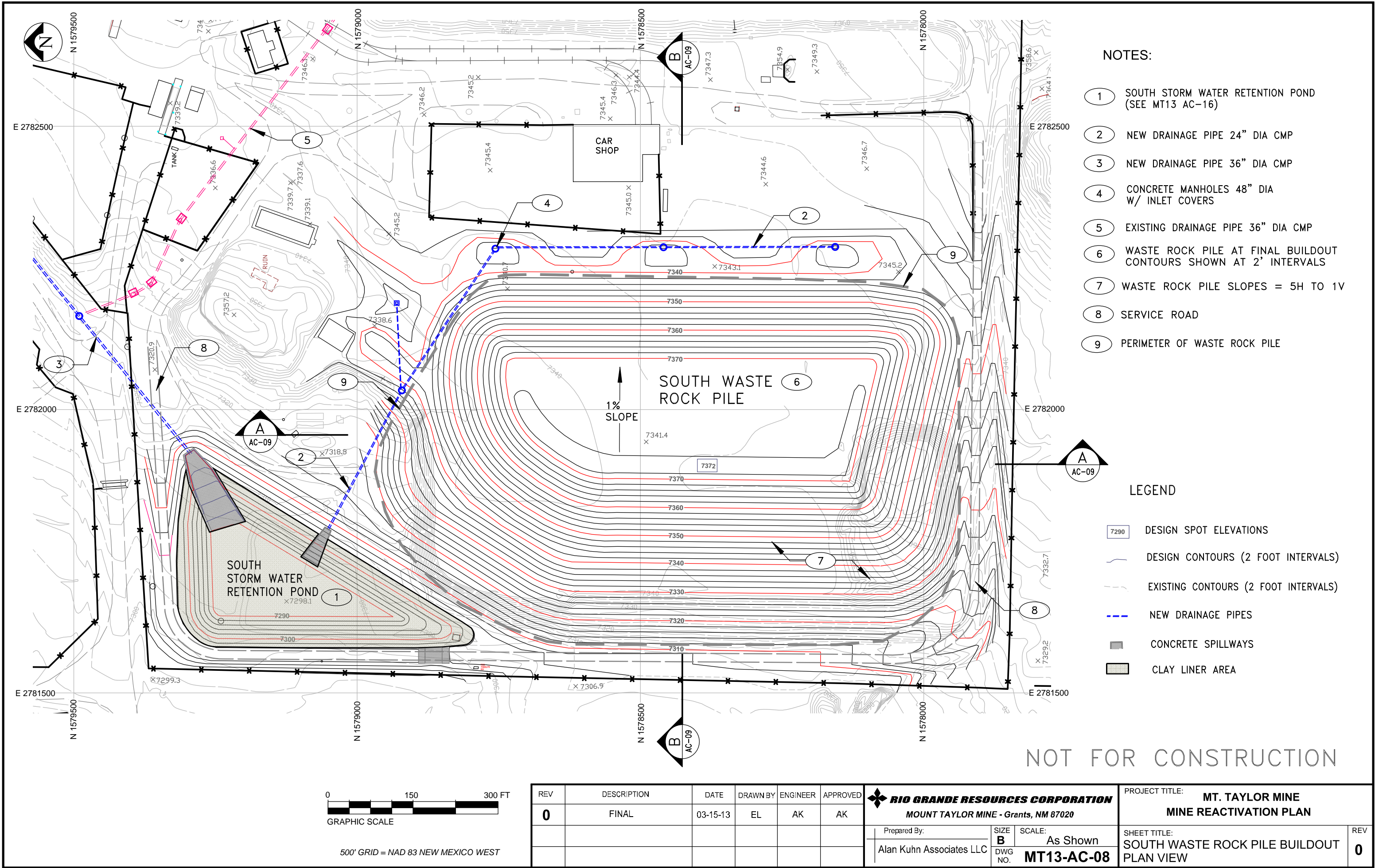
**SECTION CC** TYPICAL SPILLWAY AT SINGLE PIPE ENTRANCE  
NOT TO SCALE



**C** TYPICAL CONCRETE CURB AND SPILLWAY WALL  
NOT TO SCALE

REV	DESCRIPTION	DATE	DRAWN BY	ENGINEER	APPROVED	<b>RIO GRANDE RESOURCES CORPORATION</b> MOUNT TAYLOR MINE - Grants, NM 87020			PROJECT TITLE: <b>MT. TAYLOR MINE MINE REACTIVATION PLAN</b>	
<b>0</b>	FINAL	3-15-13	EL	AK	AK	Prepared By:	SIZE <b>B</b>	SCALE: <b>As Shown</b>	SHEET TITLE: <b>HYDRAULIC CONTROL STRUCTURES MODIFICATION DETAILS</b>	REV <b>0</b>
						Alan Kuhn Associates LLC	DWG NO. <b>MT13-AC-07</b>			





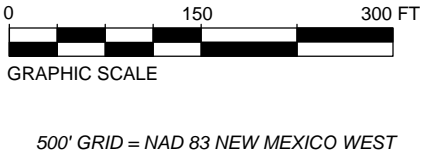
NOTES:


- 1 SOUTH STORM WATER RETENTION POND (SEE MT13 AC-16)
- 2 NEW DRAINAGE PIPE 24" DIA CMP
- 3 NEW DRAINAGE PIPE 36" DIA CMP
- 4 CONCRETE MANHOLES 48" DIA W/ INLET COVERS
- 5 EXISTING DRAINAGE PIPE 36" DIA CMP
- 6 WASTE ROCK PILE AT FINAL BUILDOUT CONTOURS SHOWN AT 2' INTERVALS
- 7 WASTE ROCK PILE SLOPES = 5H TO 1V
- 8 SERVICE ROAD
- 9 PERIMETER OF WASTE ROCK PILE

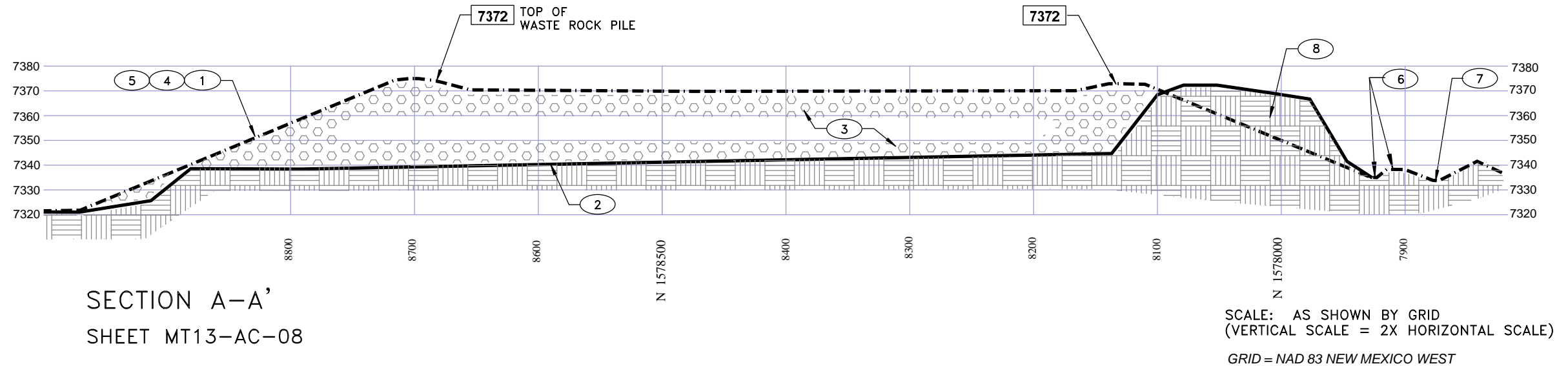
LEGEND

- 7290 DESIGN SPOT ELEVATIONS
- DESIGN CONTOURS (2 FOOT INTERVALS)
- EXISTING CONTOURS (2 FOOT INTERVALS)
- NEW DRAINAGE PIPES
- CONCRETE SPILLWAYS
- CLAY LINER AREA

NOT FOR CONSTRUCTION

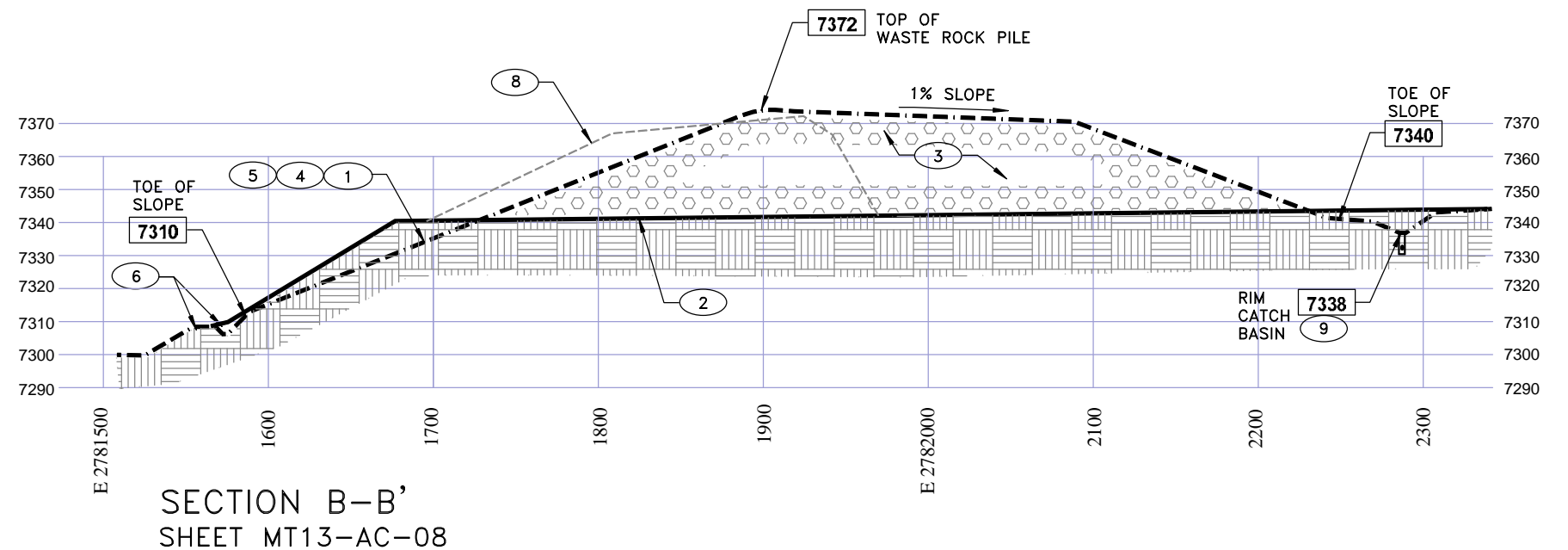


REV	DESCRIPTION	DATE	DRAWN BY	ENGINEER	APPROVED	<div><b>RIO GRANDE RESOURCES CORPORATION</b> MOUNT TAYLOR MINE - Grants, NM 87020</div>			PROJECT TITLE: <b>MT. TAYLOR MINE MINE REACTIVATION PLAN</b>	
0	FINAL	03-15-13	EL	AK	AK				SHEET TITLE: <b>SOUTH WASTE ROCK PILE BUILDOUT PLAN VIEW</b>	
						Prepared By: Alan Kuhn Associates LLC	SIZE B DWG NO.	SCALE: As Shown <b>MT13-AC-08</b>	REV <b>0</b>	



NOTES:


- 1 FINAL GRADES
- 2 EXISTING GRADES
- 3 WASTE ROCK FROM MINE
- 4 FINISH SLOPES OF WASTE ROCK PILE - 5H TO 1V MAXIMUM.
- 5 TWO FEET OF CLEAN SOIL COVER PLACED CONTEMPORANEOUSLY ON PILE SLOPES
- 6 EXISTING CONTAINMENT BERM AND DRAINAGE CHANNEL
- 7 EXISTING DIVERSION CHANNEL
- 8 EXISTING CLEAN SOIL STOCKPILE ON SOUTHWEST CORNER
- 9 NEW STORM WATER DRAINAGE SYSTEM MANHOLES AND DRAINAGE PIPES



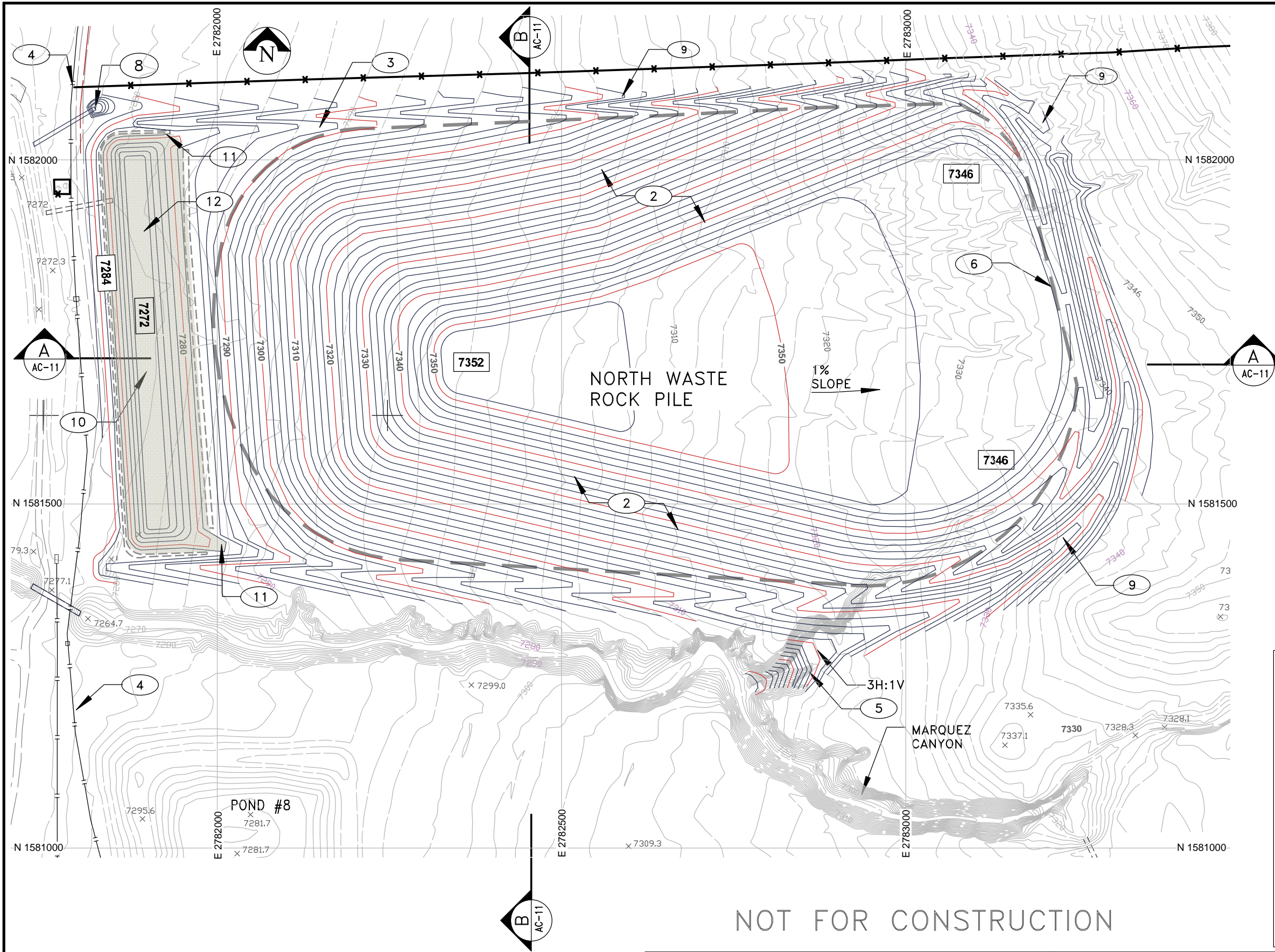
LEGEND

- 0000 DESIGN SPOT ELEVATION
- EXISTING GRADE
- FINAL GRADE
- WASTE ROCK

NOT FOR CONSTRUCTION

REV	DESCRIPTION	DATE	DRAWN BY	ENGINEER	APPROVED	 <b>RIO GRANDE RESOURCES CORPORATION</b> <b>MOUNT TAYLOR MINE - Grants, NM 87020</b>			PROJECT TITLE: <b>MT. TAYLOR MINE MINE REACTIVATION PLAN</b>			
0	FINAL	3-15-13	EL	AK	AK				SHEET TITLE: <b>SOUTH WASTE ROCK PILE BUILDOUT - SECTIONS</b>		REV	
						Prepared By:		SIZE <b>B</b>			SCALE: <b>AS NOTED</b>	0
						Alan Kuhn Associates LLC		DWG NO. <b>MT13-AC-09</b>				

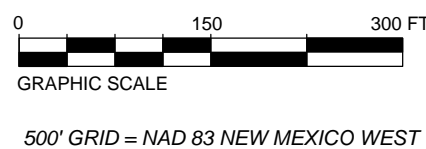




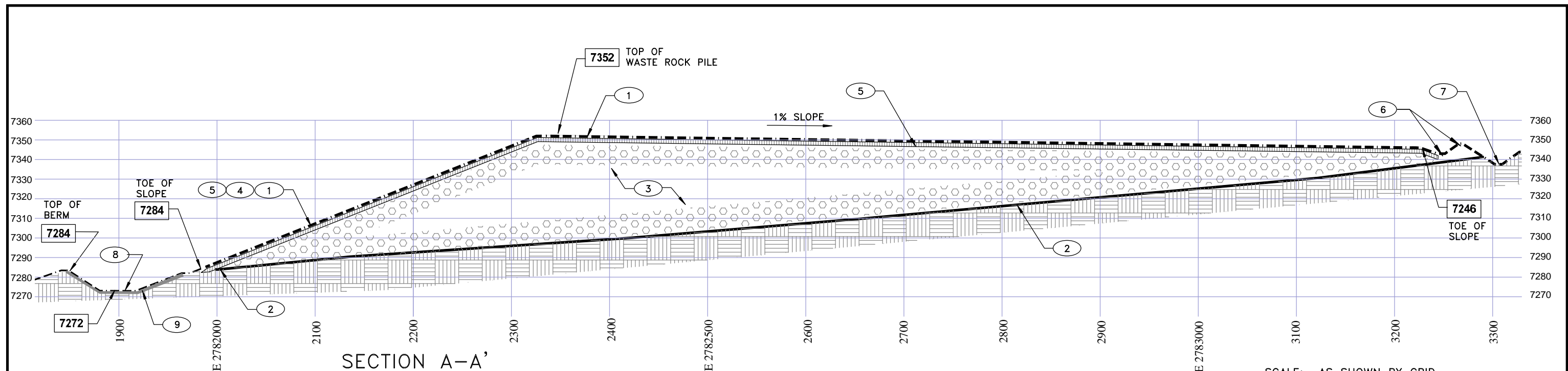
- NOTES:
- 1 WASTE ROCK PILE AT FINAL BUILDOUT CONTOURS SHOWN AT 2' INTERVALS
  - 2 WASTE ROCK PILE SLOPES = 5H TO 1V
  - 3 DRAINAGE SWALE AT TOE OF SLOPE
  - 4 TREATED WATER PIPELINE
  - 5 RIP RAP WHERE DRAINAGE SWALES FLOW INTO MARQUEZ CANYON
  - 6 PERIMETER OF WASTE ROCK PILE
  - 7 WASTE ROCK PILE TO RECEIVE 2' MIN. CLEAN SOIL COVER CONTEMPORANEOUSLY
  - 8 NEW 2' DIA CMP CULVERT INVERT = 7273
  - 9 OUTER DRAINAGE SWALES TO DIVERT RUNOFF FROM MESA
  - 10 STORM WATER RETENTION BASIN FOR RUNOFF FROM WASTE ROCK PILE - TOP OF EMBANKMENT ELEVATION = 7284' HIGH WATER ELEVATION = 7282' BOTTOM OF POND ELEVATION = 7272'
  - 11 RIP RAP AT CHANNEL ENTRANCE TO STORM WATER RETENTION BASIN
  - 12 CLAY LINER - 1 FT THICK MINIMUM

LEGEND

- 0000 DESIGN SPOT ELEVATIONS
- DESIGN CONTOURS (2 FOOT INTERVALS)
- - - EXISTING CONTOURS (2 FOOT INTERVALS)
- x - FENCELINE
- | - TREATED WATER PIPELINE
- = - = - TOP OF STORM WATER RETENTION BASIN
- CLAY LINER



REV						DESCRIPTION			DATE	DRAWN BY	ENGINEER	APPROVED	RIO GRANDE RESOURCES CORPORATION			PROJECT TITLE:		
0						FINAL			03-15-13	EL	AK	AK	MOUNT TAYLOR MINE - Grants, NM 87020			MT. TAYLOR MINE MINE REACTIVATION PLAN		
													Prepared By:			SHEET TITLE:		
													Alan Kuhn Associates LLC			NORTH WASTE ROCK PILE BUILDOUT PLAN VIEW		
													SIZE B			SCALE:		
													DWG NO.			As Shown		
													MT13-AC-10			REV		
																0		

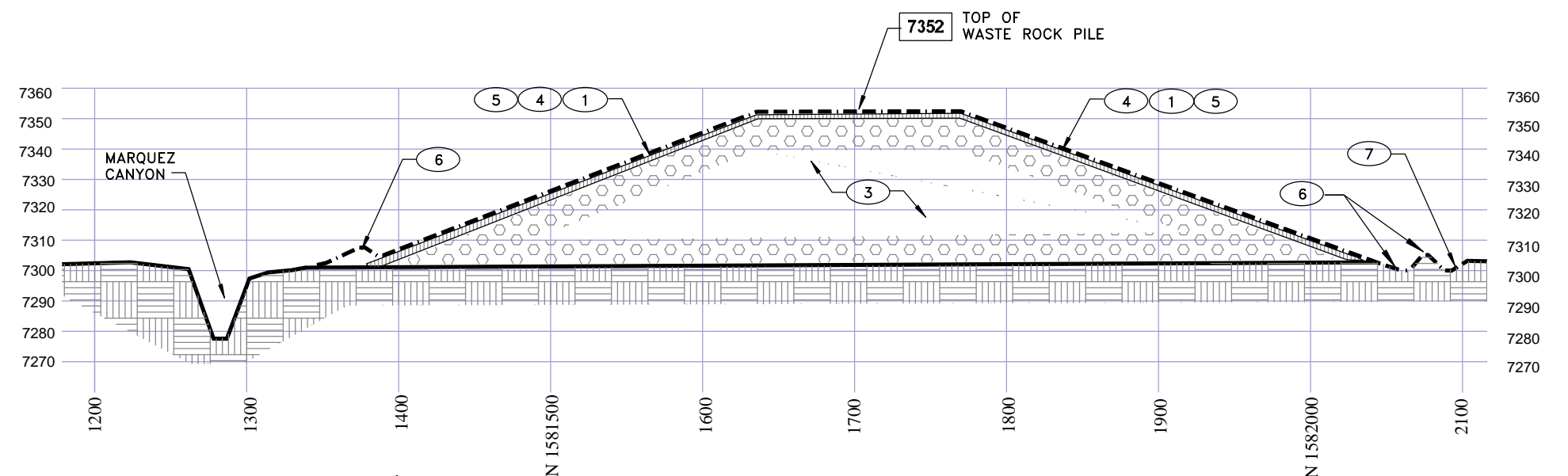


NOTES: SCALE: AS SHOWN BY GRID (VERTICAL SCALE = 2X HORIZONTAL SCALE)  
GRID = NAD 83 NEW MEXICO WEST

- 1 FINAL GRADES AT FULL BUILDOUT
- 2 EXISTING GRADES
- 3 WASTE ROCK FROM MINE
- 4 FINISH SLOPES OF WASTE ROCK PILE - 5H TO 1V MAXIMUM.
- 5 TWO FEET OF CLEAN SOIL COVER PLACED CONTEMPORANEOUSLY ON PILE SLOPES
- 6 CONTAINMENT BERM AND DRAINAGE SWALE
- 7 DIVERSION CHANNEL TO DIVERT MESA RUNOFF AWAY FROM PILE
- 8 STORM WATER RETENTION BASIN FOR RUNOFF FROM WASTE ROCK PILE - TOP OF BERM ELEVATION = 7284' BOTTOM OF BASIN ELEVATION = 7272'
- 9 CLAY LINER - 1FT THICK MINIMUM

#### LEGEND


- 0000 DESIGN SPOT ELEVATION
- EXISTING GRADE
- FINAL GRADE
- WASTE ROCK



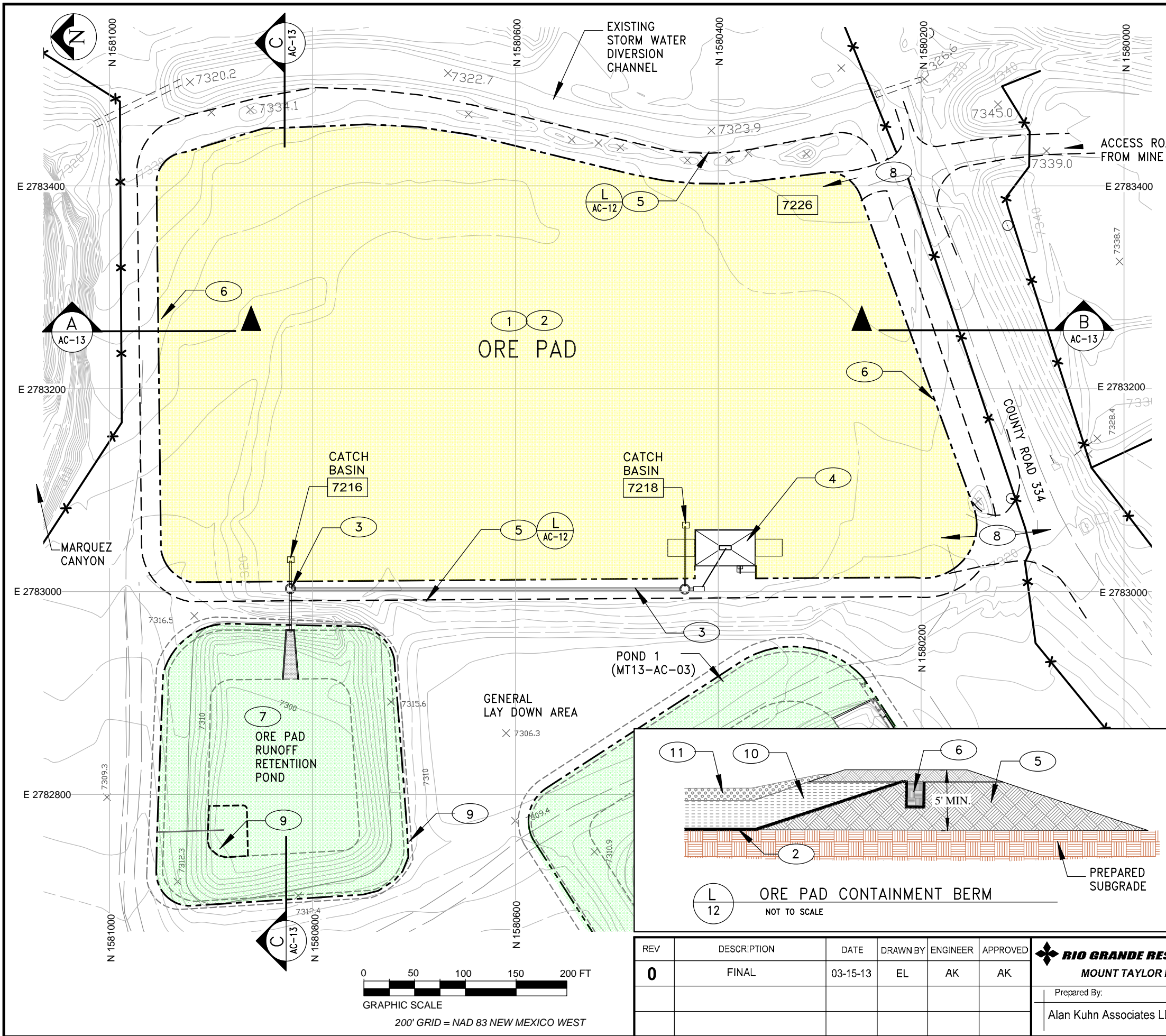
SECTION B-B'  
SHEET MT13-AC-10

SCALE: AS SHOWN BY GRID (VERTICAL SCALE = 2X HORIZONTAL SCALE)  
GRID = NAD 83 NEW MEXICO WEST

NOT FOR CONSTRUCTION

REV	DESCRIPTION	DATE	DRAWN BY	ENGINEER	APPROVED	<div> <b>RIO GRANDE RESOURCES CORPORATION</b> MOUNT TAYLOR MINE - Grants, NM 87020</div>			PROJECT TITLE: <b>MT. TAYLOR MINE MINE REACTIVATION PLAN</b>		
0	FINAL	3-15-13	EL	AK	AK				SHEET TITLE: NORTH WASTE ROCK PILE BUILDOUT SECTIONS		REV 0
						Prepared By: Alan Kuhn Associates LLC		SIZE B DWG NO.	SCALE: AS NOTED MT13-AC-11		



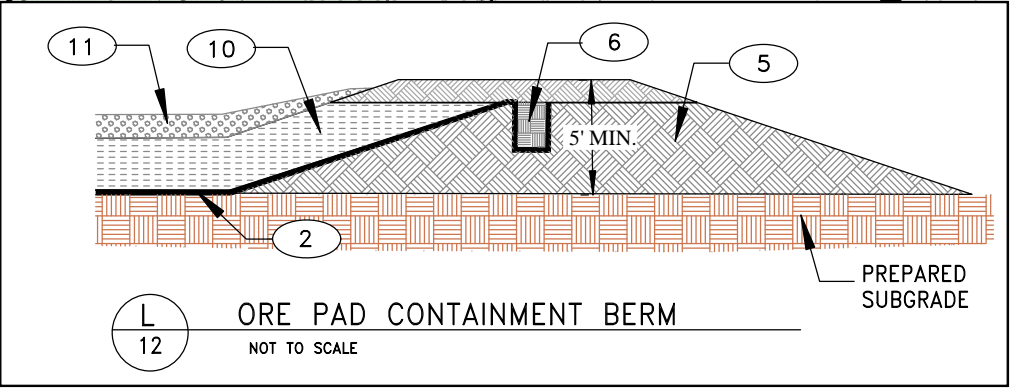


NOTES

- 1 ORE PAD FINAL GRADED TO SLOPE 1% TOWARDS CATCH BASINS
- 2 ORE PAD LINER - 60 MIL HDPE
- 3 STORM WATER SYSTEM- PIPING AND MANHOLES SEE DRAWING MT13-AC-15
- 4 TRUCK WASH AREA  
CONCRETE PAVED AREA TO DRAIN TO CENTER DRAIN  
SEE DRAWING MT13-AC-15
- 5 L 12 CONTAINMENT BERM AROUND PERIMETER OF ORE PAD - COMPACTED FILL
- 6 A 06A PERIMETER OF ORE PAD LINER / ANCHOR TRENCH
- 7 ORE PAD RUNOFF RETENTION POND  
SEE DRAWING MT13-AC-15
- 8 ORE TRUCK ENTRY AND EXIT LOCATIONS
- 9 TOP ELEVATION 7314  
BOTTOM OF POND ELEVATION 7300
- 10 1.5 FT. MINIMUM COMPACTED FILL (CL OR SC)
- 11 1.0 FT. MINIMUM CRUSHED SANDSTONE OR GRAVEL

LEGEND

- 0000.0 DESIGN ELEVATION
- X 0000.0 EXISTING SPOT ELEVATION
- PERIMETER OF ORE PAD CONTAINMENT BERM
- - - - - TOP OF LINER - ANCHOR TRENCH
- - - - - TOP AND BOTTOM OF PONDS
- C 06A DOUBLE LINER AREA
- SINGLE LINER AREA



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REV	DESCRIPTION	DATE	DRAWN BY	ENGINEER	APPROVED	RIO GRANDE RESOURCES CORPORATION MOUNT TAYLOR MINE - Grants, NM 87020			PROJECT TITLE: MT. TAYLOR MINE MINE REACTIVATION PLAN	
0	FINAL	03-15-13	EL	AK	AK	Prepared By:	SIZE B	SCALE: As Shown	SHEET TITLE: ORE PAD AND APPURTENANT FACILITIES - PLAN VIEW	
						Alan Kuhn Associates LLC	DWG NO. MT13-AC-12			REV 0

NOTES

- 1

ORE PAD FINAL GRADED TO SLOPE 1% TOWARDS CATCH BASINS
- 2

ORE PAD LINER - 60 MIL HDPE
- 3

NEW STORM WATER SYSTEM- PIPING AND MANHOLES- SEE DRAWING MT13-AC-15
- 4

EXISTING DIVERSION CHANNEL AND BERM
- 5

L

12

CONTAINMENT BERM AROUND PERIMETER OF ORE PAD
- 6

A

06A

PERIMETER OF ORE PAD LINER AND ANCHOR TRENCH
- 7

ORE PAD RUNOFF RETENTION POND SEE DRAWING MT13-AC-15
- 8

BERM ELEVATION = 7314  
BOTTOM OF POND ELEVATION = 7298
- 9

1.5 FT. MINIMUM COMPACTED FILL (CL OR SC)
- 10

1.0 FT. MINIMUM CRUSHED SANDSTONE OR GRAVEL
- 11

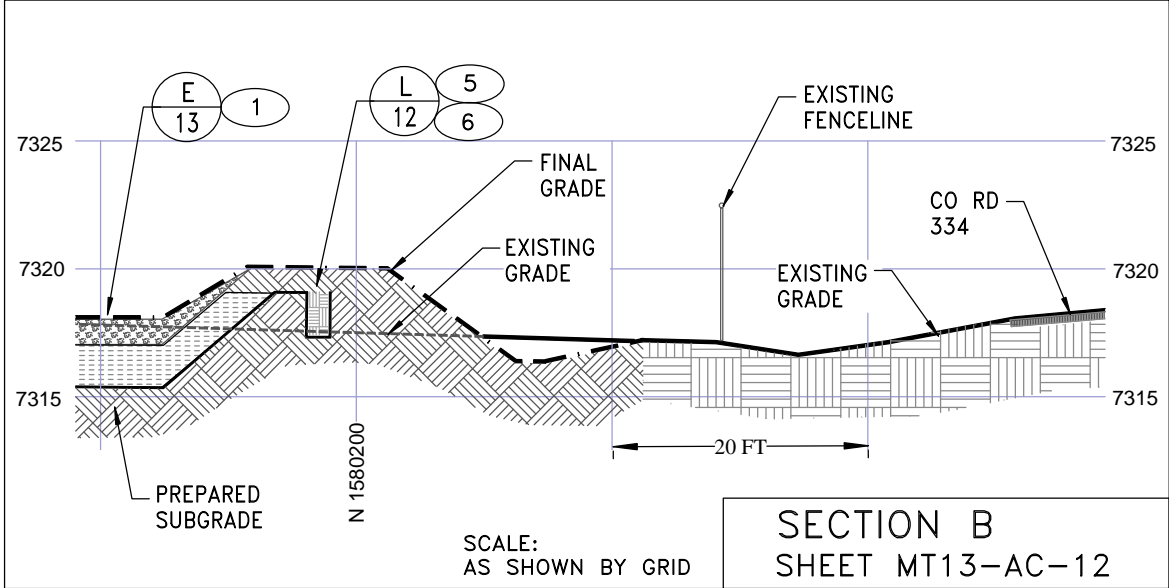
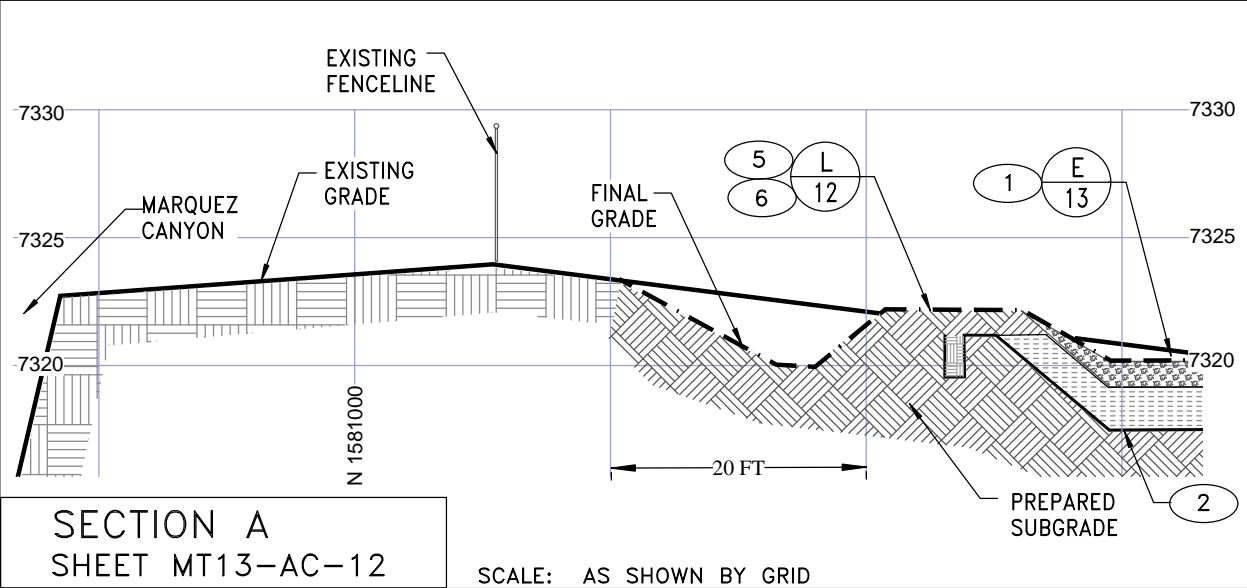
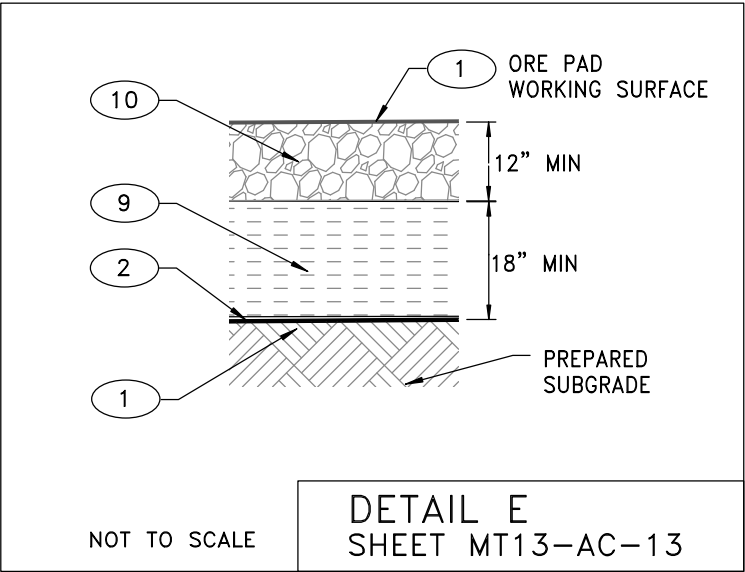
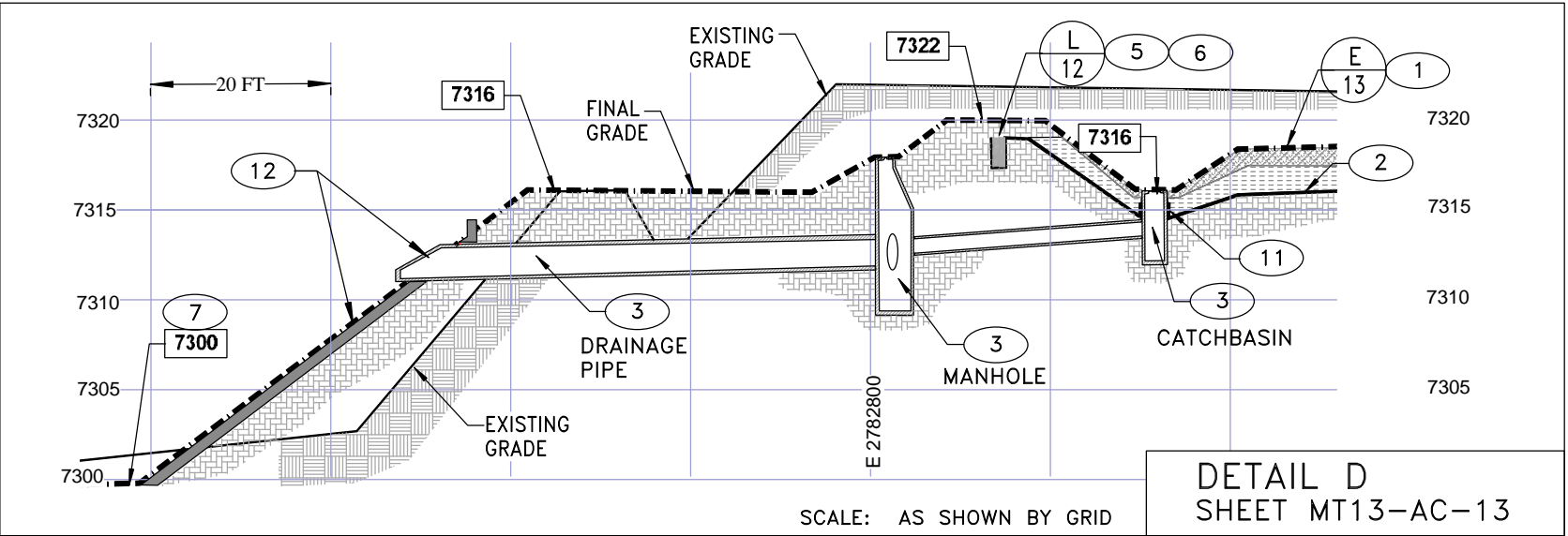
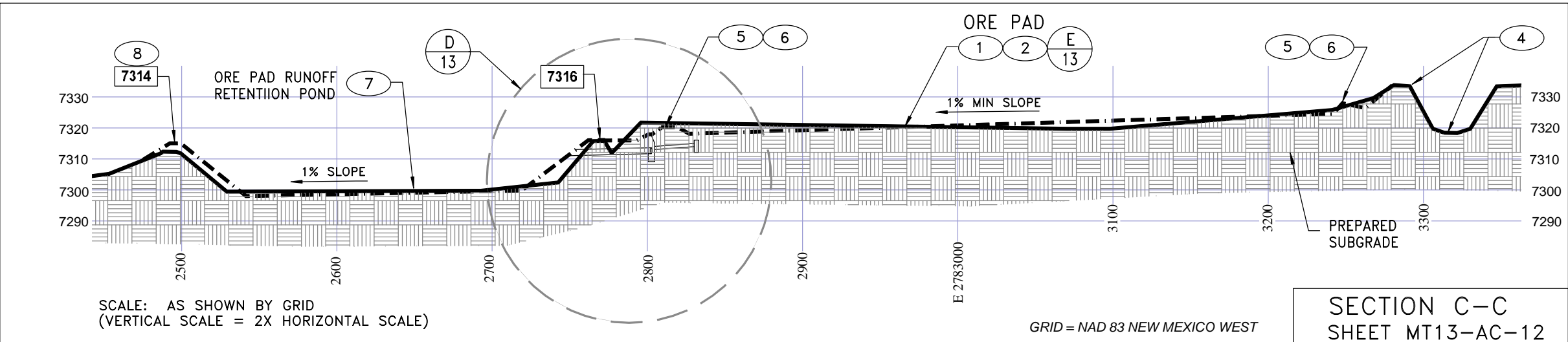
HDPE LINER TO BE WELDED TO CATCHBASIN WALLS
- 12

NEW END SECTION AND SPILLWAY

LEGEND

- 0000

DESIGN SPOT ELEVATION
- EXISTING GRADE
- FINAL GRADE



NOT FOR  
CONSTRUCTION

REV	DESCRIPTION	DATE	DRAWN BY	ENGINEER	APPROVED
0	FINAL	3-15-13	EL	AK	AK

RIO GRANDE RESOURCES CORPORATION

MOUNT TAYLOR MINE - Grants, NM 87020

Prepared By:

Alan Kuhn Associates LLC

SIZE

B

SCALE:

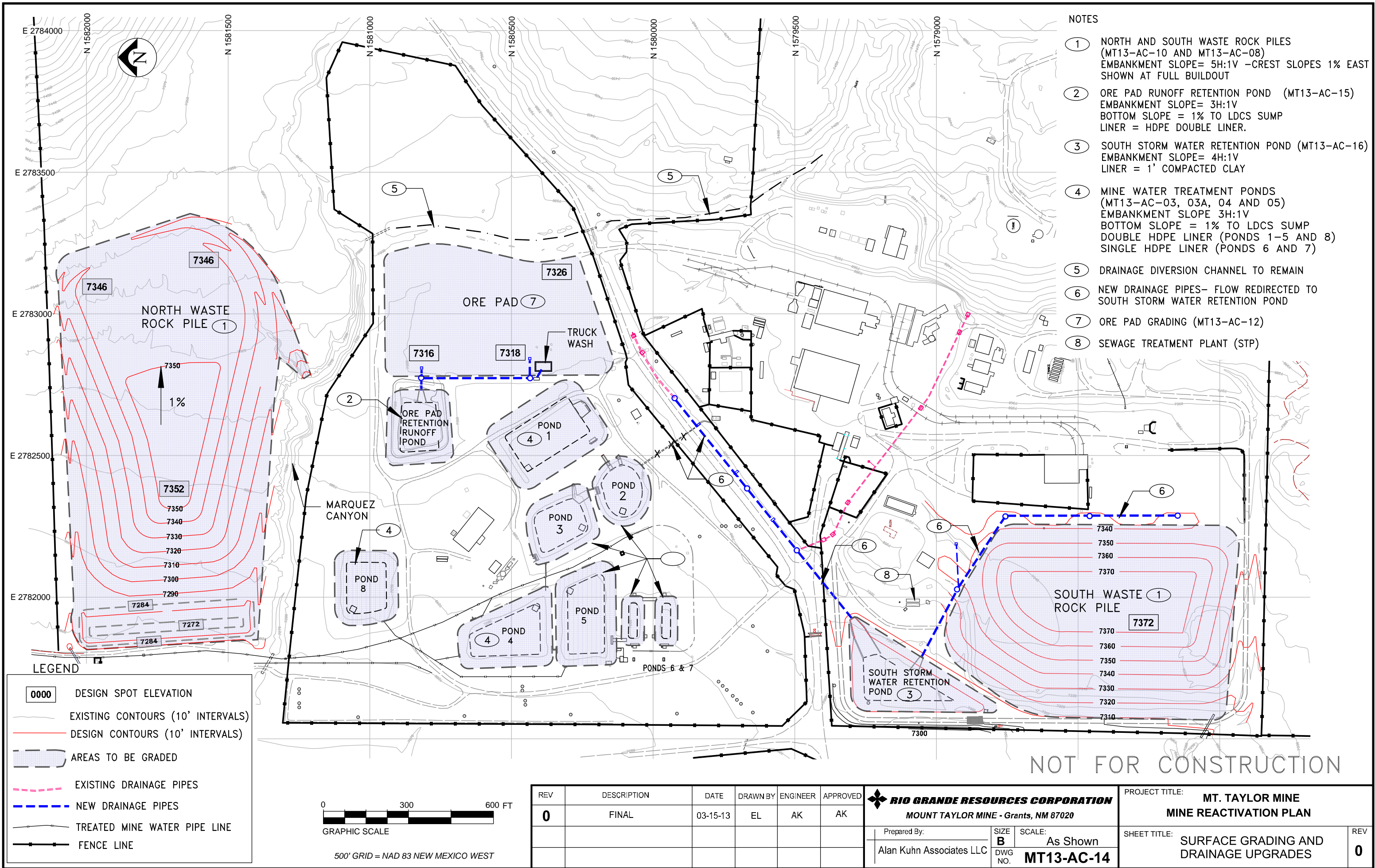
AS NOTED

DWG NO.

MT13-AC-13

PROJECT TITLE:	MT. TAYLOR MINE MINE REACTIVATION PLAN
SHEET TITLE:	ORE PAD AND APPURTENANT FACILITIES - SECTIONS
REV	0



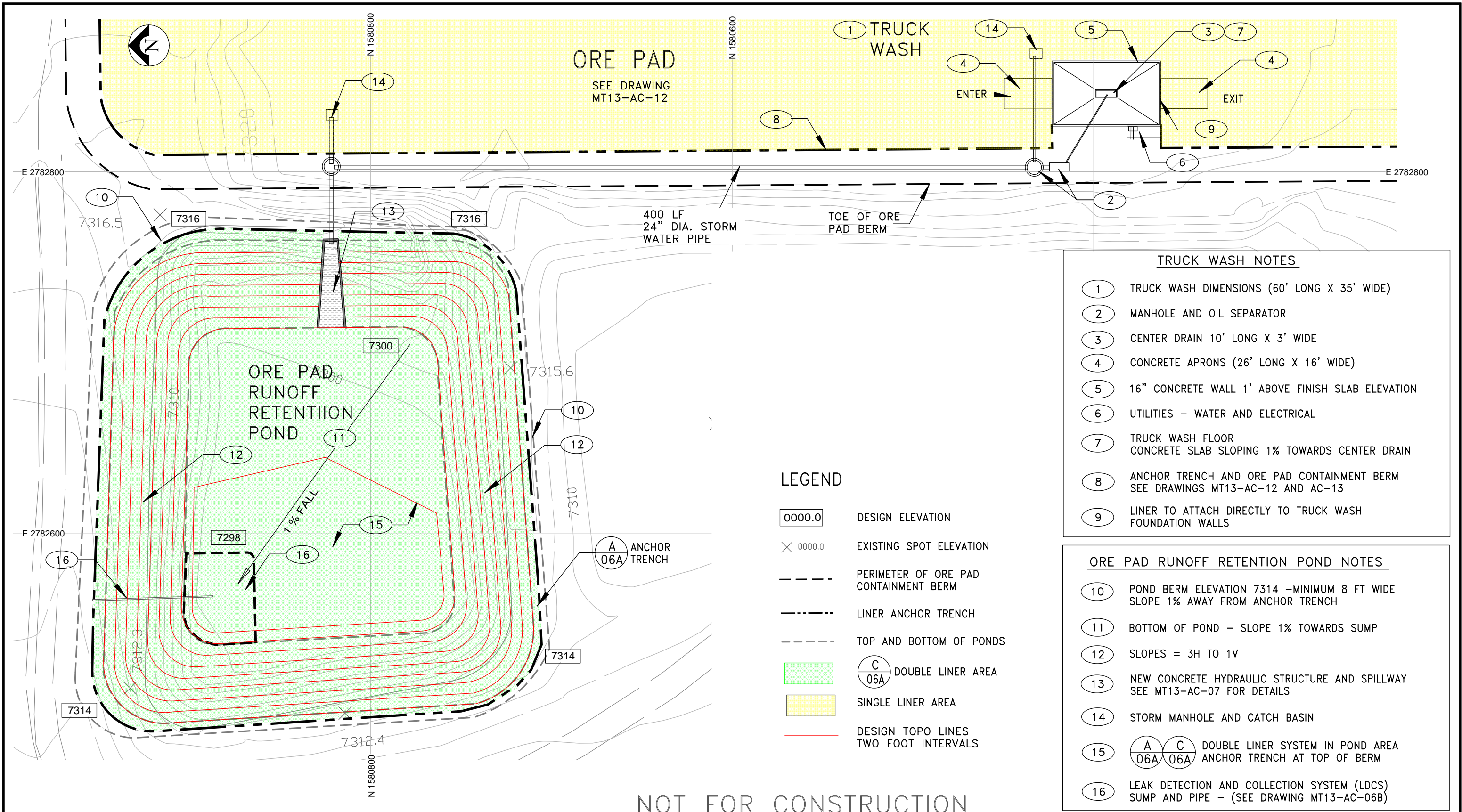


REV	DESCRIPTION	DATE	DRAWN BY	ENGINEER	APPROVED
0	FINAL	03-15-13	EL	AK	AK

<b>RIO GRANDE RESOURCES CORPORATION</b> MOUNT TAYLOR MINE - Grants, NM 87020					
Prepared By:		SIZE	SCALE:		
Alan Kuhn Associates LLC		B	As Shown		
		DWG NO.	MT13-AC-14		

PROJECT TITLE: <b>MT. TAYLOR MINE MINE REACTIVATION PLAN</b>		REV
SHEET TITLE: <b>SURFACE GRADING AND DRAINAGE UPGRADES</b>		0





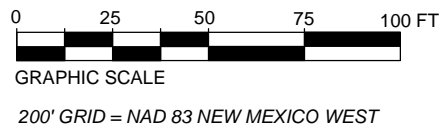
- TRUCK WASH NOTES**
- 1 TRUCK WASH DIMENSIONS (60' LONG X 35' WIDE)
  - 2 MANHOLE AND OIL SEPARATOR
  - 3 CENTER DRAIN 10' LONG X 3' WIDE
  - 4 CONCRETE APRONS (26' LONG X 16' WIDE)
  - 5 16" CONCRETE WALL 1' ABOVE FINISH SLAB ELEVATION
  - 6 UTILITIES – WATER AND ELECTRICAL
  - 7 TRUCK WASH FLOOR  
CONCRETE SLAB SLOPING 1% TOWARDS CENTER DRAIN
  - 8 ANCHOR TRENCH AND ORE PAD CONTAINMENT BERM  
SEE DRAWINGS MT13-AC-12 AND AC-13
  - 9 LINER TO ATTACH DIRECTLY TO TRUCK WASH  
FOUNDATION WALLS

- ORE PAD RUNOFF RETENTION POND NOTES**
- 10 POND BERM ELEVATION 7314 –MINIMUM 8 FT WIDE  
SLOPE 1% AWAY FROM ANCHOR TRENCH
  - 11 BOTTOM OF POND – SLOPE 1% TOWARDS SUMP
  - 12 SLOPES = 3H TO 1V
  - 13 NEW CONCRETE HYDRAULIC STRUCTURE AND SPILLWAY  
SEE MT13-AC-07 FOR DETAILS
  - 14 STORM MANHOLE AND CATCH BASIN
  - 15 


A	C
06A	06A

 DOUBLE LINER SYSTEM IN POND AREA  
ANCHOR TRENCH AT TOP OF BERM
  - 16 LEAK DETECTION AND COLLECTION SYSTEM (LDGS)  
SUMP AND PIPE – (SEE DRAWING MT13-AC-06B)

NOTE:  
ORE PAD RUNOFF RETENTION POND STORAGE CAPACITY  
AT HIGH WATER ELEVATION 7312 = 13.9 ACRE FEET



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REV	DESCRIPTION	DATE	DRAWN BY	ENGINEER	APPROVED	 <div><b>RIO GRANDE RESOURCES CORPORATION</b> <b>MOUNT TAYLOR MINE - Grants, NM 87020</b></div>	PROJECT TITLE: <b>MT. TAYLOR MINE MINE REACTIVATION PLAN</b>		
<b>0</b>	FINAL	03-15-13	EL	AK			SHEET TITLE: <b>ORE PAD RUNOFF COLLECTION AND RETENTION</b>	REV <b>0</b>	
						Prepared By: Alan Kuhn Associates LLC	SIZE <b>B</b> DWG NO. <b>MT13-AC-15</b>	SCALE: <b>As Shown</b>	



