



STATE OF  
COLORADO

Lennberg - DNR, Patrick <patrick.lennberg@state.co.us>

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## Request for approval Surface Reclamation

1 message

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**Daniel Takami** <danieltakami@gmail.com>

Wed, Jun 22, 2022 at 9:14 AM

To: Patrick Lennberg - DNR <patrick.lennberg@state.co.us>

Cc: Sergio Rivera <sergio.rivera@novametallix.com>, Richard Mittasch <rmittasch@nedmining.com>

Patrick,

Enclosed is the response to the questions posed concerning our Cross Shaft Remediation. Please let me know if you have any questions.

Respectfully,

***Daniel J. Takami***

President, Sustainable Metal Solutions, LLC

President, Nederland Mining Consultants Inc.

President, Grand Island Resources, LLC

[danieltakami@gmail.com](mailto:danieltakami@gmail.com)

501.256.4444

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### 2 attachments



**06-15-22 - Responses to DRMS Comments from 06-09-22 - Request for Approval - Surface Reclamation - v1r0.pdf**

595K



**05-15-22 Maps Response to Request for Information - Depression Backfill.pdf**

1365K



Division of Reclamation, Mining & Safety  
c/o Mr. Patrick Lennberg  
1001 E 62nd Ave,  
Room 215  
Denver, CO 80216

June 15, 2022

**RE: Responses to DRMS Cross Shaft Remediation Additional Information Request, in response to GIR Cross Gold Mine, Permit No. M-1977-410, Request for Approval for Cross Shaft Surface Depression Remediation.**

Mr. Lennberg,

Grand Island Resources (GIR) herewith provide responses to your letter dated June 13, 2022 regarding the topic on reference:

**DMRS Comment #1**

Please provide a location map of the shaft that is to be remediated along with other permit features.

**GIR response to Comment #1**

Map 4 from Amendment application #2 (AM-02) depicting the shaft to be remediated along with other permit features is attached.

**DMRS Comment #2**

In the operator's May 25, 2021 Response to Preliminary Adequacy Review for Amendment 2, Exhibit D, page 2 the operator states how shafts and adits will be reclaimed, including the Cross Shaft. In Exhibit D it is stated that "All shafts, adits, portals, and ventilation shafts will be closed according to the Colorado Inactive Mine Program standards and specifications (DRMS 2009). Shafts and portals will be plugged with concrete except for the Potosi Shaft, which will be closed with a bat gate (Figure 2). We anticipate that a 40 ft concrete plug will seal the shafts and portals. Shafts and portals will be gated to prevent access. Fences will be 3 feet from the concreted opening and will be 8 feet high with barbed wire. Ventilation and escape way shafts will also utilize either one of the following approved standard methods shown on Figure 3 (DRMS 2009).".



Please clarify the discrepancy between the proposed Cross Shaft remediation and the approved remediation from AM-2.

**GIR response to Comment #2**

The Final Revised Version of Amendment application #2 (AM-02), filed by GIR with Division of Reclamation, Mining and Safety (Division), on February 8, 2022, and subsequently approved by the Division on the same date; Section 1.2.6 The Historic Shaft Disturbance, of the approved Amendment, indicates the following: *“The historic shaft disturbance, shown in Exhibit E, maps 5 and 8, will be reclaimed using waste rock. The depression in this area will be regraded to 2:1, re-vegetated using local topsoil, and covered with a sub- alpine seed mix.”*

Maps 5 and 8 from Amendment application #2 (AM-02) are attached.

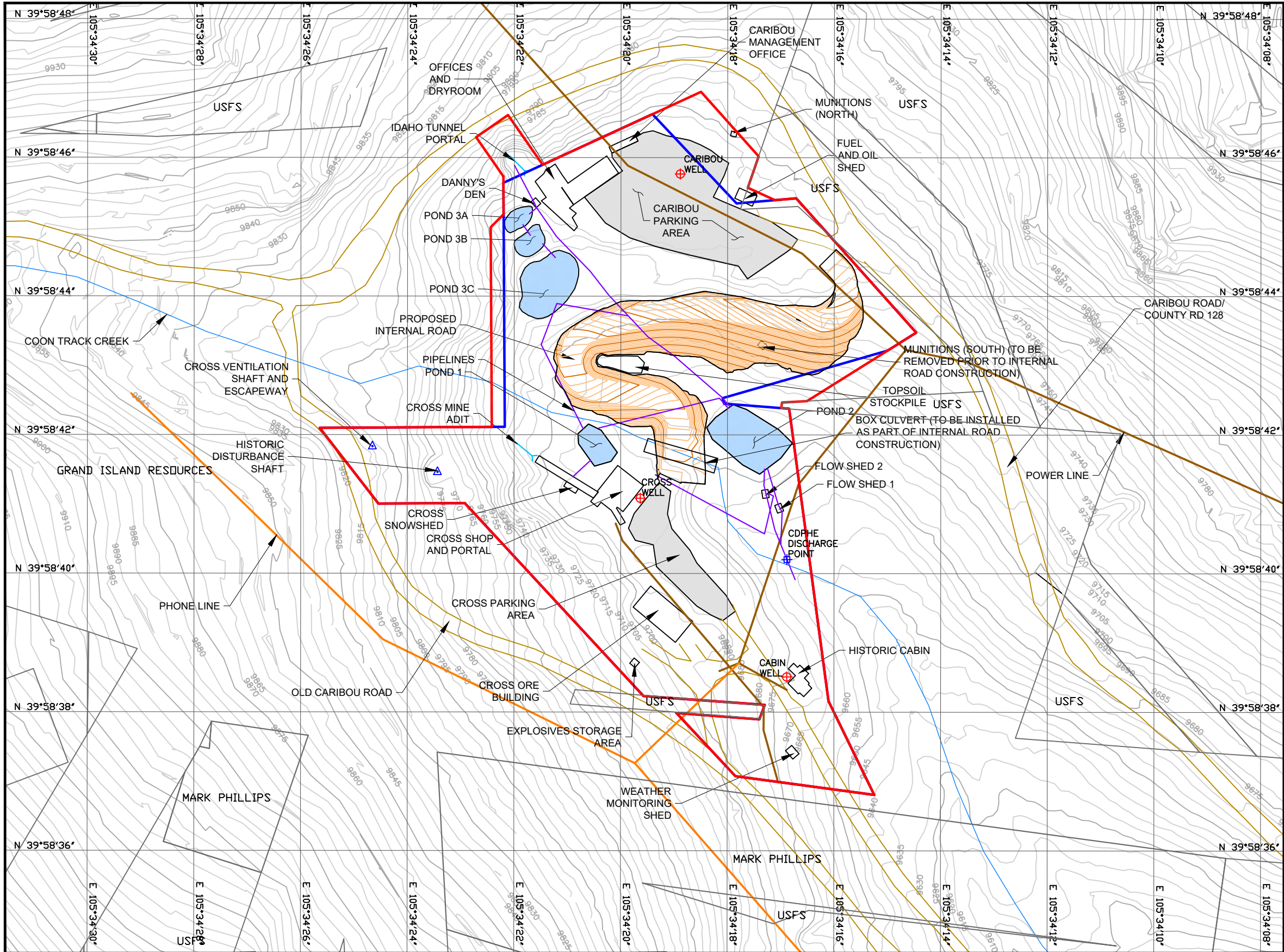
GIR trusts that the information included in this response letter meet DRMS’ request for clarification.

Respectfully Submitted,

Daniel J. Takami  
President Grand Island Resources LLC  
[danieltakami@gmail.com](mailto:danieltakami@gmail.com)  
501.256.4444



LOCATION: Z:\Projects\21-1306 Cross and Caribou Permitting\ACAD\21-1306\_Cross and Caribou\_20220201.dwg DATE: 2/1/2022 2:33 PM PLOT SCALE = 1:4.587 PLOTTED BY: SOPHIE SWANSON



LEGEND

EXISTING 5ft TOPOGRAPHY CONTOURS (REF. 1)

SITE GRADING CUT AND FILL SURFACES, RESPECTIVELY

SITE FACILITIES

PROPOSED PERMIT BOUNDARY (9.99 ACRES)

CURRENT PERMIT BOUNDARY (8.95 ACRES)

POWER LINE (OWNED BY XCEL ENERGY)

PHONE LINE (OWNED BY CENTURY LINK/AT&T)

PIPELINES

NATURAL DRAINAGES

EXISTING ROADS

MINE PORTAL

MINE VENTILATION SHAFT

GROUNDWATER WELL

CHPHE DISCHARGE POINT

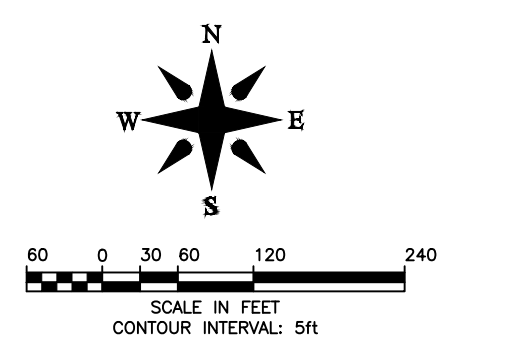
- NOTES
1. THIS MAP IS A VISUAL REPRESENTATION OF LEGAL DESCRIPTIONS AND SURVEYED SITE FEATURES.

2. PROPOSED ACCESS ROAD ALIGNMENT IS PRELIMINARY DUE TO ONGOING DESIGN.

3. BOX CULVERT ALIGNMENT IS APPROXIMATE.

4. MUNITIONS (SOUTH) IS SHOWN ON MAP DUE TO PRELIMINARY NATURE OF ROAD DESIGN. MUNITIONS (SOUTH) WILL BE REMOVED PRIOR TO CONSTRUCTION OF THE ROAD.

5. THE MAJORITY OF THE WASTE ROCK DUMP WILL BE CONSUMED DURING THE CONSTRUCTION OF THE ROAD.



	REFERENCE	REVISIONS	By	Date
7	PROPOSED ROAD DESIGN RECEIVED OCTOBER 2021			
6	WETLAND/PLANT SPECIES RECEIVED NOVEMBER 2021			
5	MINE FEATURES RECEIVED NOVEMBER 2021			
4	EXISTING ROADS RECEIVED APRIL 2021			
3	POND BOUNDARIES RECEIVED NOVEMBER 2021			
2	SITE FACILITIES RECEIVED NOVEMBER 2021			
1	TOPO RECEIVED NOVEMBER 2021			

Scale: As Shown
Designed by: --
Drawn by: GRE
Checked by: GIR
Approved by: GIR

Prepared by:

Prepared for:

EXHIBIT E: CROSS AND CARIBOU MINES MINING PLAN MAP PROPOSED INTERNAL ROAD

Project: CROSS AND CARIBOU MINE - AM 2 APPLICATION

Location: NEDERLAND, COLORADO, USA

Project No.: 21-1306

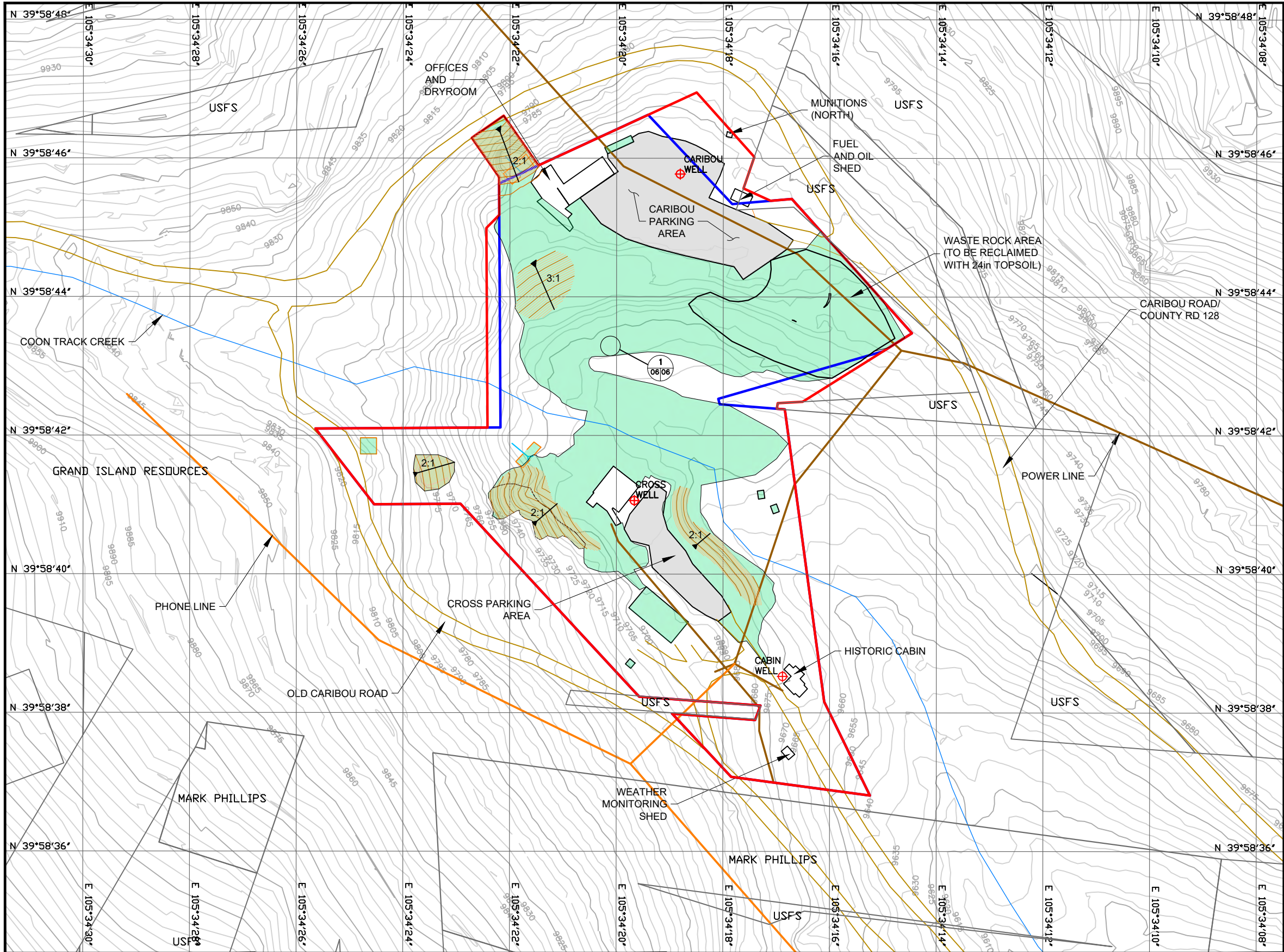
Date: FEB. 2022

MAP

04



LOCATION: Z:\Projects\21-1306 Cross and Caribou Permitting\ACAD\21-1306\_Cross and Caribou\_20220201.dwg DATE: 2/1/2022 2:33 PM PLOT SCALE = 1:4,587 PLOTTED BY: SOPHIE SWANSON



**LEGEND**

EXISTING 5ft TOPOGRAPHY CONTOURS (REF. 1)

SITE GRADING CUT AND FILL SURFACES, RESPECTIVELY

RECLAIMED AND REVEGETATED

SITE FACILITIES

PROPOSED PERMIT BOUNDARY (9.99 ACRES)

CURRENT PERMIT BOUNDARY (8.95 ACRES)

POWER LINE (OWNED BY XCEL ENERGY)

PHONE LINE (OWNED BY CENTURY LINK/AT&T)

NATURAL DRAINAGES

EXISTING ROADS

MINE PORTAL

MINE VENTILATION SHAFT

GROUNDWATER WELL

FENCING (RECLAMATION)

**NOTES**

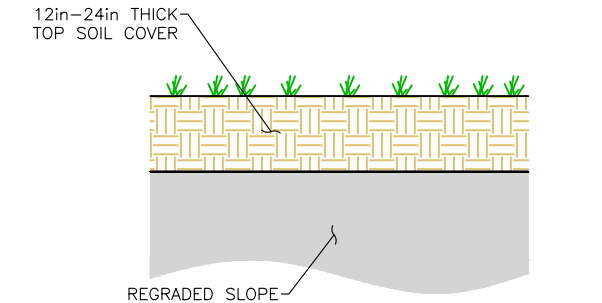
1. THIS MAP IS A VISUAL REPRESENTATION OF LEGAL DESCRIPTIONS AND SURVEYED SITE FEATURES.

2. PORTALS AND ADITS WILL BE CLOSED ACCORDING TO RECLAMATION PLAN. THEY ARE SHOWN AFTER RECLAMATION BECAUSE SURFACE FEATURES WILL STILL EXIST.

3. 12 INCHES OF TOPSOIL WILL BE PLACED ON ALL RECLAIMED AREAS. 24 INCHES OF TOPSOIL WILL BE PLACED ON THE WASTE ROCK STORAGE AREA.

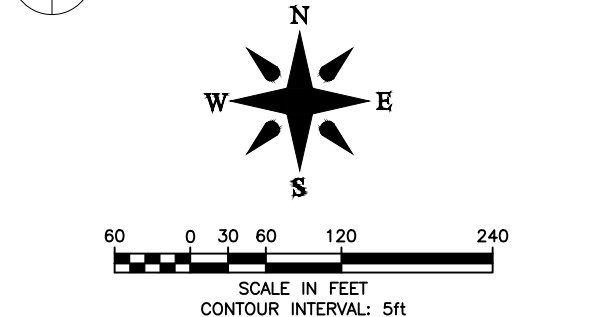
12in THICK TOPSOIL COVER: 152,380.9 sq ft, 3.498 acres

24in THICK TOPSOIL COVER: 31,583.8 sq ft, 0.725 acres



**1**  
06/06  
N.T.S.

**TYPICAL TOP SOIL COVER DETAIL**



Rev	Description	By	Date
7	PROPOSED ROAD DESIGN RECEIVED OCTOBER 2021		
6	WETLAND/PLANT SPECIES RECEIVED NOVEMBER 2021		
5	MINE FEATURES RECEIVED NOVEMBER 2021		
4	EXISTING ROADS RECEIVED APRIL 2021		
3	POND BOUNDARIES RECEIVED NOVEMBER 2021		
2	SITE FACILITIES RECEIVED NOVEMBER 2021		
1	TOPO RECEIVED NOVEMBER 2021		
	REFERENCE		

Rev	Description	By	Date
1	ISSUED TO CLIENT FOR REVIEW	GRE	11/12/2021
2	REVISED PER CLIENT'S COMMENTS	GRE	11/19/2021
3	SUBMITTED TO DRMS	GRE	11/22/2021
4	REVISED PER ADEQUACY REVIEW 3 COMMENTS	GRE	01/21/2022
5	REVISED PER ADEQUACY REVIEW 4 COMMENTS	GRE	02/01/2022

Scale: As Shown

Designed by: --

Drawn by: GRE

Checked by: GIR

Approved by: GIR



**EXHIBIT E - CROSS AND CARIBOU MINES RECLAMATION PLAN MAP CROSS/CARIBOU**

Project: CROSS AND CARIBOU MINE - AM 2 APPLICATION

Location: NEDERLAND, COLORADO, USA

Project No.: 21-1306

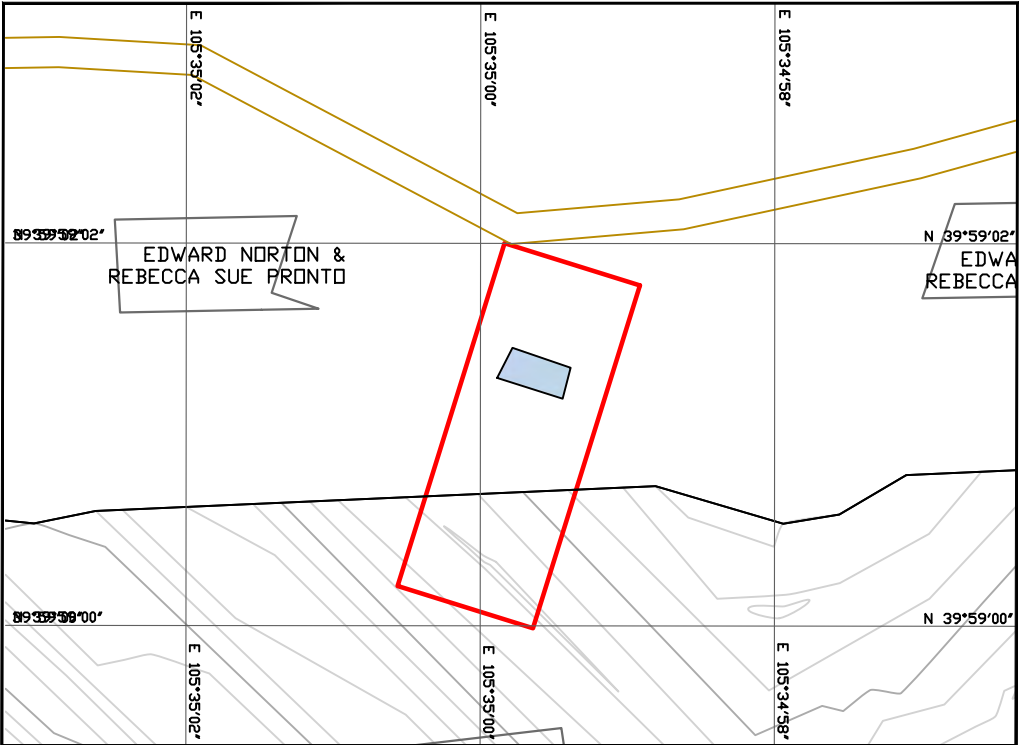
Date: FEB. 2022

MAP

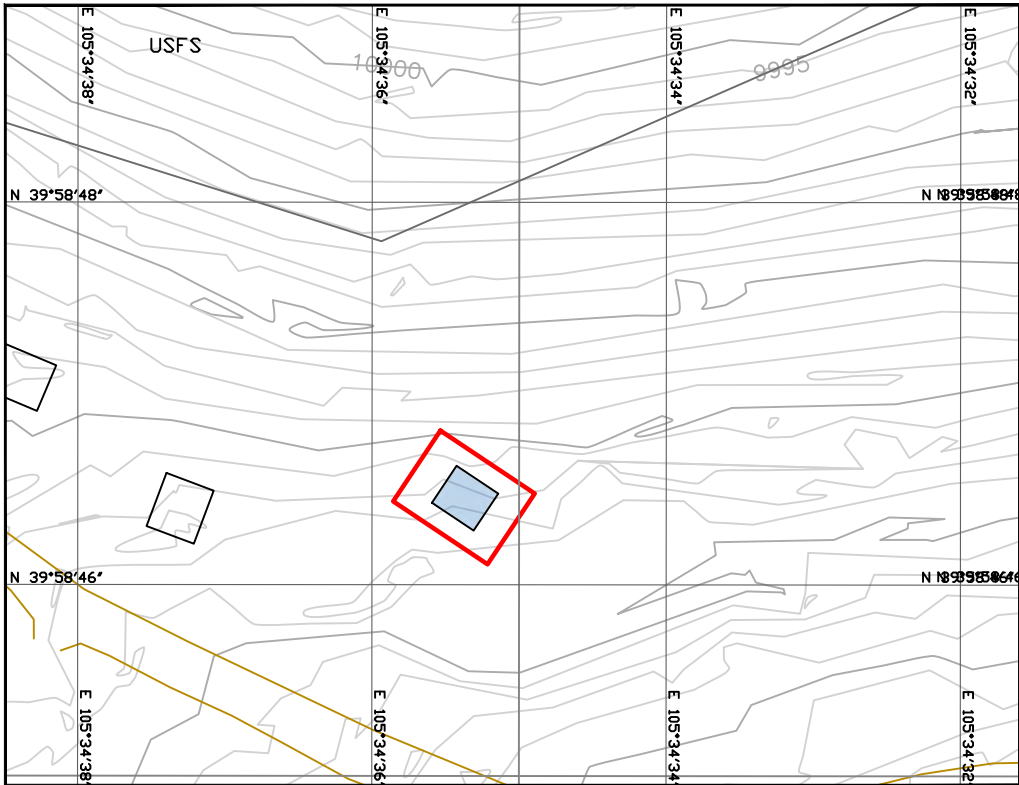
05



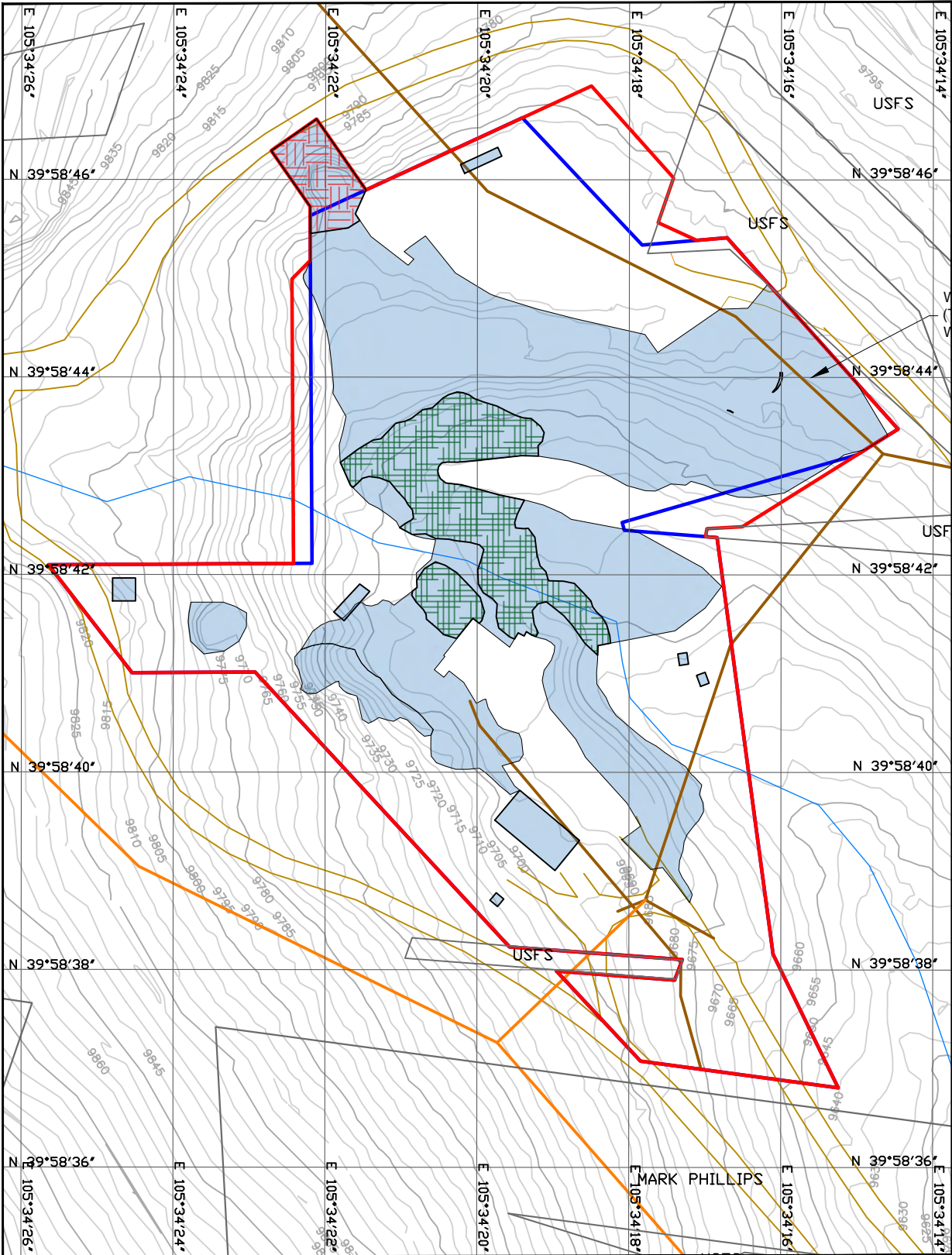
LOCATION: Z:\Projects\21-1306 Cross and Caribou Permitting\ACAD\21-1306\_Cross and Caribou\_20220201.dwg DATE: 2/1/2022 2:34 PM PLOT SCALE = 1:4,587 PLOTTED BY: SOPHIE SWANSON



CARIBOU 300 LEVEL



POTOSI SHAFT



CROSS/CARIBOU

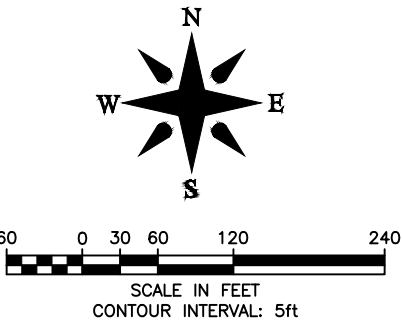
LEGEND

- EXISTING 5ft TOPOGRAPHY CONTOURS (REF. 1)
- SEED MIX: SUBALPINE VEGETATION AREAS (9,000' to TREE LINE)
- RECLAMATION MIX: WETLAND
- RECLAMATION MIX: UPLAND TREE AND SHRUB
- PROPOSED PERMIT BOUNDARY (9.99 ACRES)
- CURRENT PERMIT BOUNDARY (8.95 ACRES)
- NATURAL DRAINAGES
- EXISTING ROADS
- POWER LINE (OWNED BY XCEL ENERGY)
- PHONE LINE (OWNED BY CENTURY LINK/AT&T)

NOTES

- THIS MAP IS A VISUAL REPRESENTATION OF LEGAL DESCRIPTIONS AND SURVEYED SITE FEATURES.
- THE SUB-ALPINE VEGETATION MIX WILL BE APPLIED TO ALL DISTURBED AREAS. THE DISTURBED WETLAND AREAS WILL BE SUPPLEMENTED WITH A WETLAND RECLAMATION MIX. THE DISTURBED IDAHO TUNNEL SLOPE WILL BE SUPPLEMENTED WITH AN UPLAND TREE AND SHRUB RECLAMATION MIX.

SUBALPINE SEED MIX: 185,153.7 sq ft, 4.249 acres  
WETLAND RECLAMATION MIX: 28,351.8 sq ft, 0.651 acres  
UPLAND TREE & SHRUB RECLAMATION MIX: 6,051.8 sq ft, 0.139 acres



Rev	Description	By	Date
7	PROPOSED ROAD DESIGN RECEIVED OCTOBER 2021		
6	WETLAND/PLANT SPECIES RECEIVED NOVEMBER 2021		
5	MINE FEATURES RECEIVED NOVEMBER 2021		
4	EXISTING ROADS RECEIVED APRIL 2021		
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2	SITE FACILITIES RECEIVED NOVEMBER 2021		
1	TOPO RECEIVED NOVEMBER 2021		
	REFERENCE		

Rev	Description	By	Date
4	REVISED PER ADEQUACY REVIEW 4 COMMENTS	GRE	02/01/2022
3	REVISED PER ADEQUACY REVIEW 3 COMMENTS	GRE	01/21/2022
2	SUBMITTED TO DRMS	GRE	11/22/2021
1	REVISED PER CLIENT'S COMMENTS	GRE	11/19/2021
0	ISSUED TO CLIENT FOR REVIEW	GRE	11/12/2021
	REVISIONS		

Scale: As Shown  
Designed by: --  
Drawn by: GRE  
Checked by: GIR  
Approved by: GIR



EXHIBIT E CROSS AND CARIBOU MINES RECLAMATION MIX MAP		4 REVISION
Project: CROSS AND CARIBOU MINE - AM 2 APPLICATION	Project No.: 21-1306	MAP 08
Location: NEDERLAND, COLORADO, USA	Date: FEB. 2022	