



November 20, 2023

ELECTRONIC DELIVERY

Mr. Elliott Russell
Environmental Protection Specialist
Colorado Department of Natural Resources
Division of Reclamation, Mining and Safety
Office of Mined Land Reclamation
1313 Sherman Street, Room 215
Denver, Colorado 80203

Re: Permit No. M-1980-244; Cripple Creek & Victor Gold Mining Company; Cresson Project;
VLF2 Phase 3 Stage B Revised Grading Plan

Dear Mr. Russell:

Newmont Corporation's Cripple Creek and Victor Gold Mining Company (CC&V) hereby submits for your review the VLF2 Phase 3 Stage B revised grading plan.

Should you require further information, please do not hesitate to contact Johnna Gonzalez at (719) 313-0447, Johnna.Gonzalez@Newmont.com, or myself at Katie.Blake@newmont.com.

Sincerely,

DocuSigned by:

5A3D013B629844B...

Katie Blake
Sustainability & External Relations Manager
Cripple Creek & Victor Gold Mining Co

EC:

M. Cunningham – DRMS
J. McBryde – Teller County
J. Gonzalez – CC&V
K. Blake – CC&V
N. Townley – CC&V

TECHNICAL MEMORANDUM

9450 Maroon Circle
Suite 300
Englewood, CO 80112

T: 720.508.3300
F: 720.508.3339

To: Evan Fonger, Manager
From: Jay Janney-Moore, P.E., Project Manager II
Reviewed By: Keith Williams P.E., Principal II
Project: VLF2 Phase 3
Project No: 475.0106.060
Subject: Draft Revised Stage 3B Grading Plan – Final
Date: 16 November 2023

At the request of Newmont' Cripple Creek and Victor Gold Mining Company, Inc. (CC&V), NewFields Mining Design and Technical Services, LLC (NewFields) has issued this Technical Memorandum to document the revisions to the proposed grading plan associated with the Valley Leach Facility 2 (VLF2) Phase 3 Stage B. The proposed changes in the grading plan were requested by CC&V for the following reasons:

- CC&V constructed a haul road on the west side of Mazon Overburden Storage Area (Dump 1) to access the top of the facility.
- Reduce the volume of cut/fill earthwork quantities as a result of the change in the Dump 1's topography with the construction of the haul road.
- Flatten the overall slope of the Stage B limits to improve safety and constructability.
- Adjust Dump 1's slope around the Explosive Magazine Storage Area.

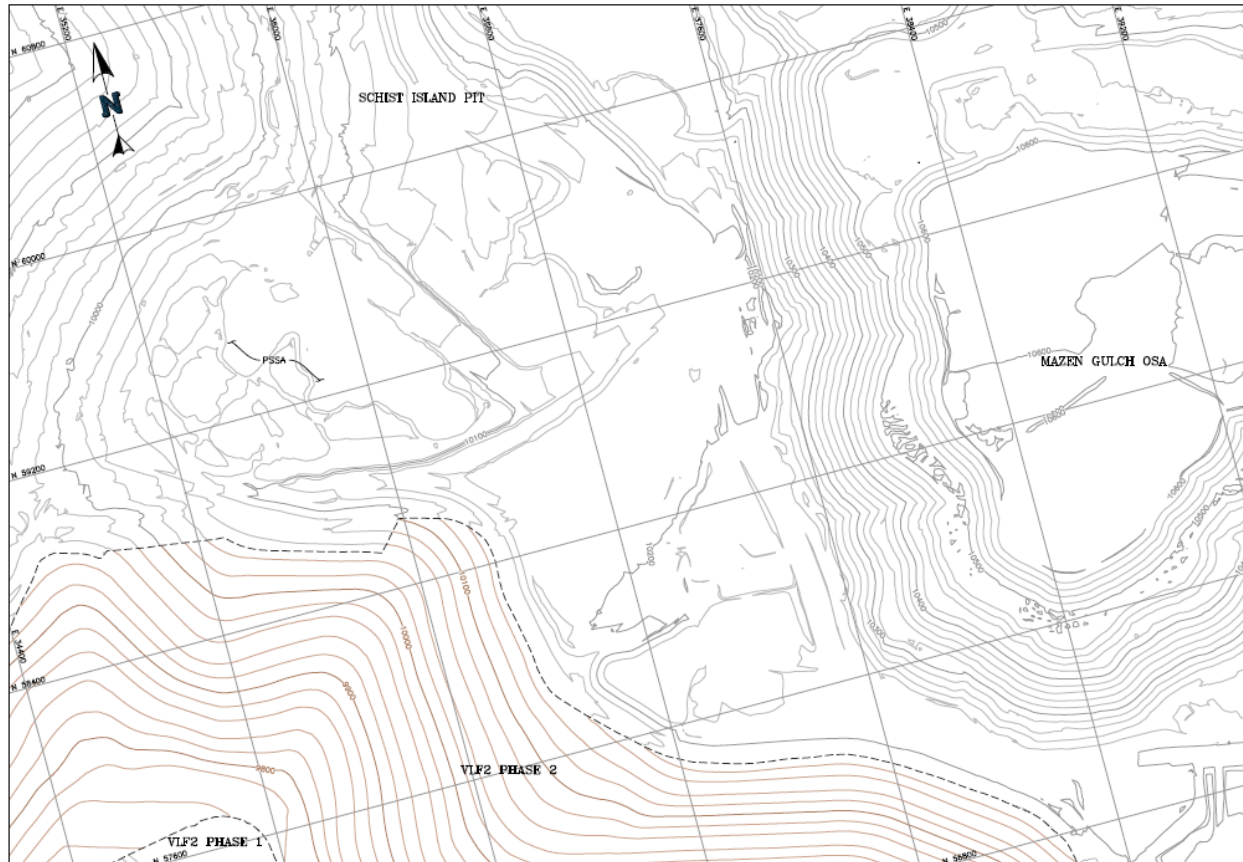
1.0 ISSUED FOR CONSTRUCTION DESIGN

After VLF2 Phase 3's design was approved by Colorado Division of Reclamation, Mine and Safety (DRMS), NewFields updated the permit design and developed Issued for Construction (IFC) Drawings, dated August 27, 2021. The proposed design contours and quantities were developed utilizing the existing ground contours provided to NewFields in a file called "5ft topo 9-1-20.dwg", and a proposed pit design provided to NewFields on July 1, 2020, in a file called "CCG3-DGN_35ft_09B_TOPO.dwg". It is worth noting that the design for the Schist Island Pit was still in progress at the time the IFC's were issued the pit was shown in the IFC's was from the permit



design. **Figure 1** illustrates the existing ground conditions that the IFC drawings were developed from.

FIGURE 1 – EXISTING GROUND (2021)



The IFC Stage B grading plan has the following elements:

- Pad slope of 2(H):1(V) between constitution bench,
- Construction benches spaced every 100' vertically,
- Construction Bench and Perimeter Bench have a width of 25',
- Daylight slopes of 2(H):1(V) in cut areas and 2.5(H):1(V) in fill areas were used outside the perimeter bench to tie into the existing ground surface.

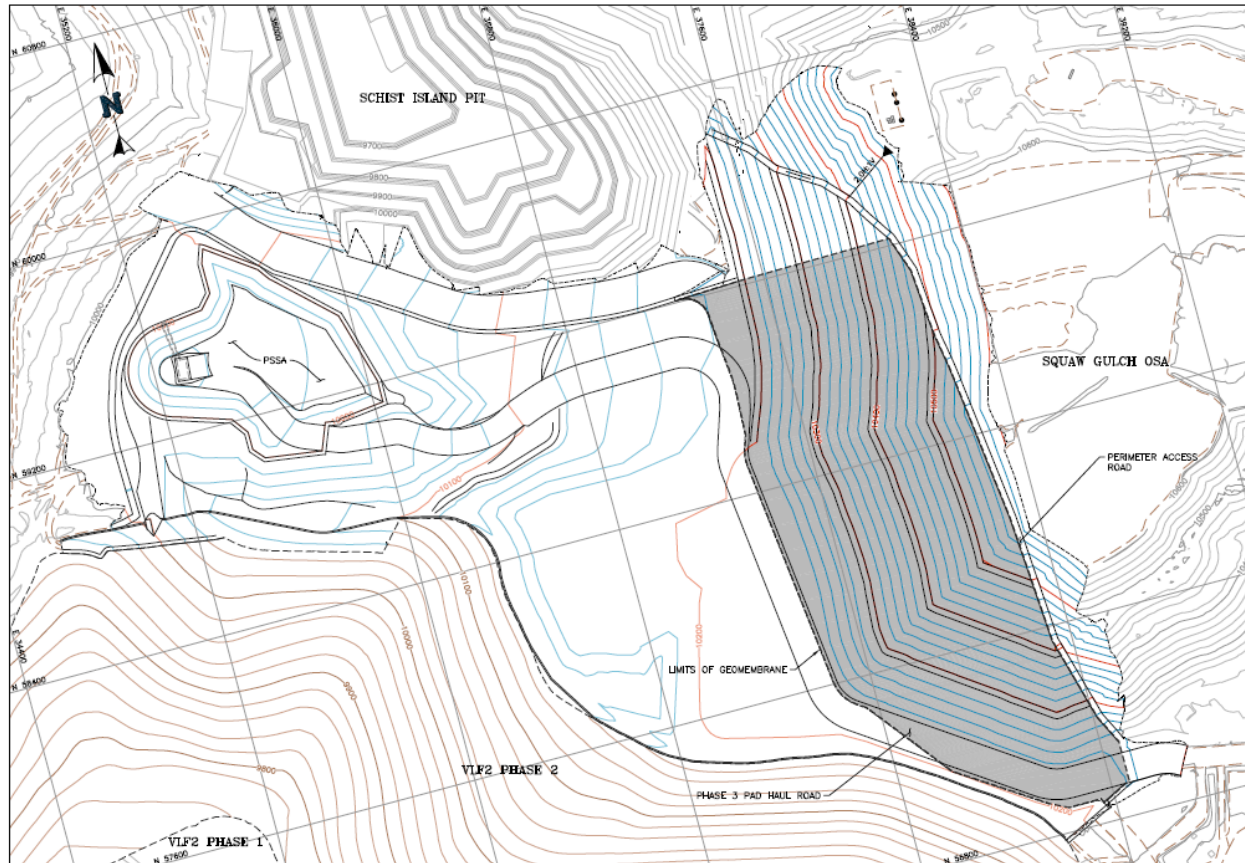
In **Figure 2** shows the proposed Stage B grading plan from the IFC drawing. The IFC drawings listed the following estimated earthwork quantities:

- Cut = 2,211,830 cubic yards



- Fill = 518,150 cubic yards

FIGURE 2 – PROPOSED GRADING (8/27/2021)

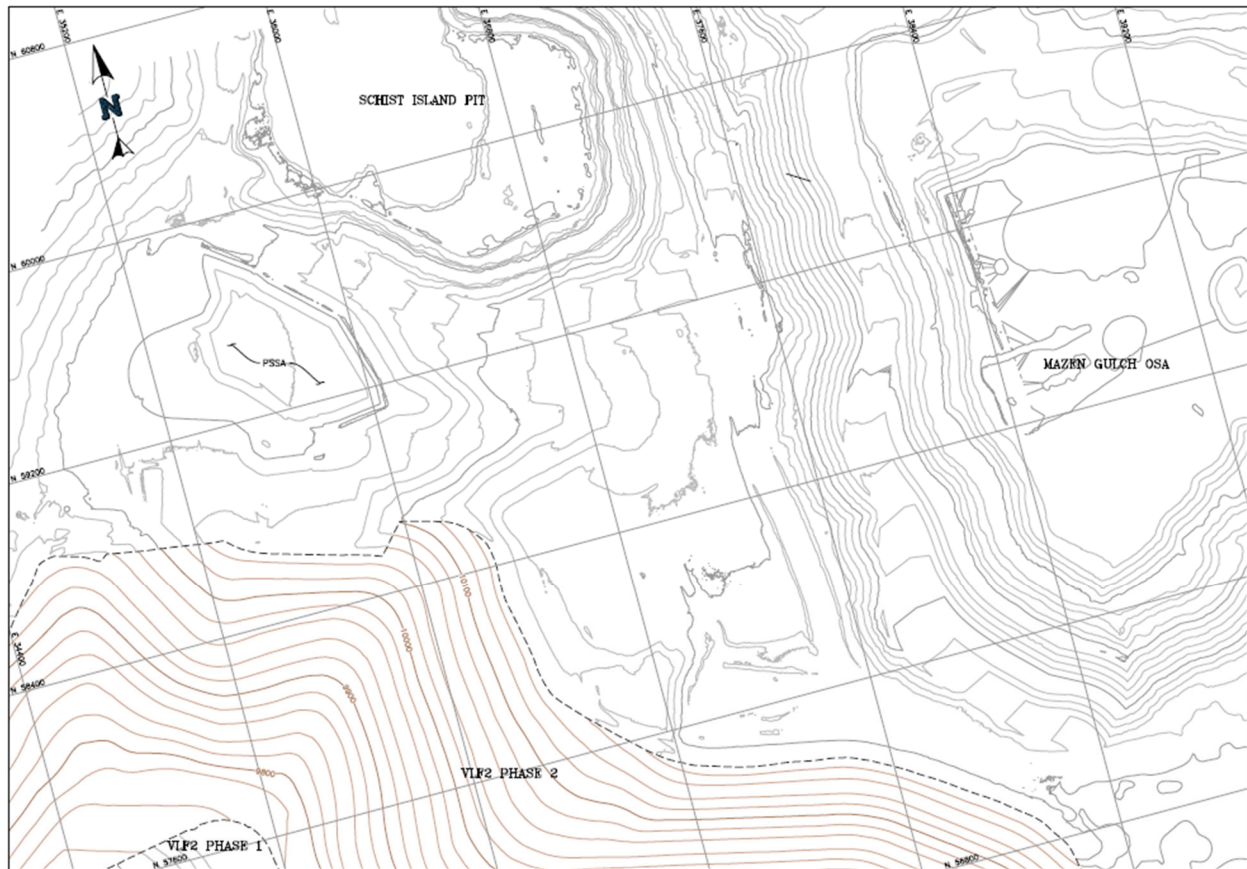


2.0 REVISED GRADING PLAN

CC&V provided NewFields with an updated topography file of Dump 1 on June 14, 2023, in a file called "Dump 1 Mined out Top 06142023 ft.dxf" and requested the Stage B grading be optimized to minimize the required fill needing to be placed and compacted. CC&V and NewFields agreed to not change the limits and footprint of the geomembrane lined area for Stage B as this may be considered a major deviation from the permit and would require review and approval from DRMS. **Figure 3** shows the updated contours of Dump 1 after CC&V had constructed a haul road to the top of the dump.



FIGURE 3 – JUNE 14, 2023 EXISTING TOPOGRAPHY



After several iterations, NewFields has developed a revised proposed grading plan, shown in **Figure 4**. Additionally, **Figure 6**, shows the revised grading plan tying into Stage C in the future. As agreed on, the revised grading plan includes the following design changes:

2.1 Pad slope of 2.5(H):1(V) between Benches

Although, a 2(H):1(V) slope is constructable, CC&V request the slope between the benches be flattened. NewFields and CC&V evaluated the earthwork volume for a 2(H):1, 2.5(H):1 and 3(H):1(V). Based upon the effort required to move the overburden material, the 2.5:1 slope was selected because it provided the best balance of minimizing earthworks while improving the constructability of the expansion. The shallower slopes are also safer for operating construction equipment on and having people on the slopes during construction. A typical section of the proposed slopes is shown in Figure 5.



2.2 Bench Spacing and Width Adjustments

The average roll length of 80-mil double sided textured LLDPE is approximately 410 feet. In the interest of minimizing geomembrane waste, the spacing of the internal construction benches was increased from 100 vertical feet to 125 vertical feet. With the proposed bench spacing and slope in the revised grading plan, the length of the installed geomembrane panel between construction benches is now approximately 375 feet, reducing the amount of waste per roll. Additionally, the revised bench spacing, and shallower slope, eliminated one construction bench from the grading plan resulting in reducing the cut volume from Dump 1.

Another request from CC&V which was incorporated into the design, the perimeter bench was widened from 25 feet to 30 feet.

2.3 Explosive Storage Area

Upon review of the existing building and infrastructure on top of Dump 1, it was determined that the existing Explosive Magazine Storage Area was located within the proposed slope reshaping. Limits of the slope excavation were revised to maintain the daylight limits a minimum of 50' from storage perimeter fence.



FIGURE 4 – REVISED STAGE B GRADING PLAN

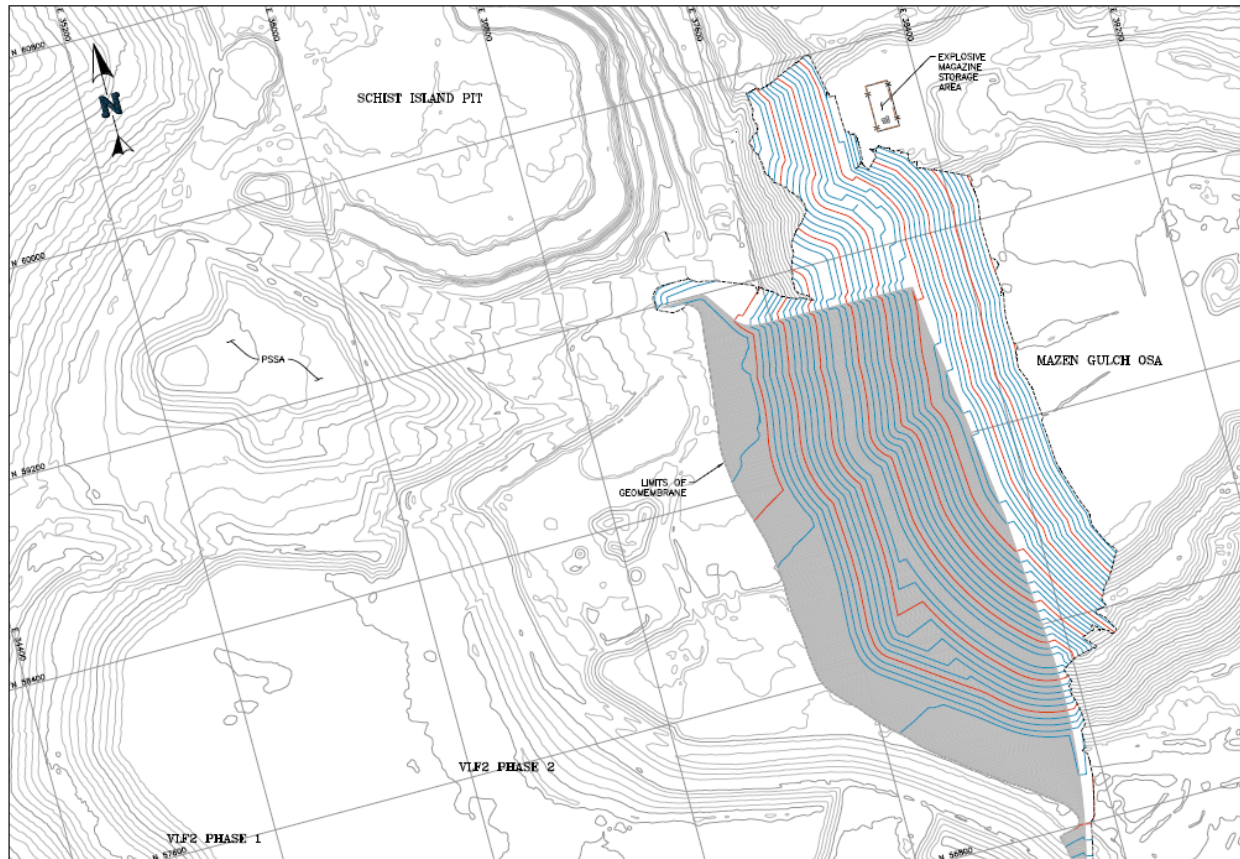


FIGURE 5 – TYPICAL CROSS-SECTION

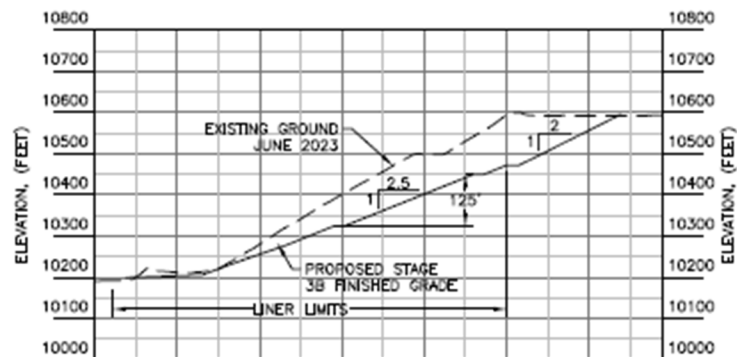
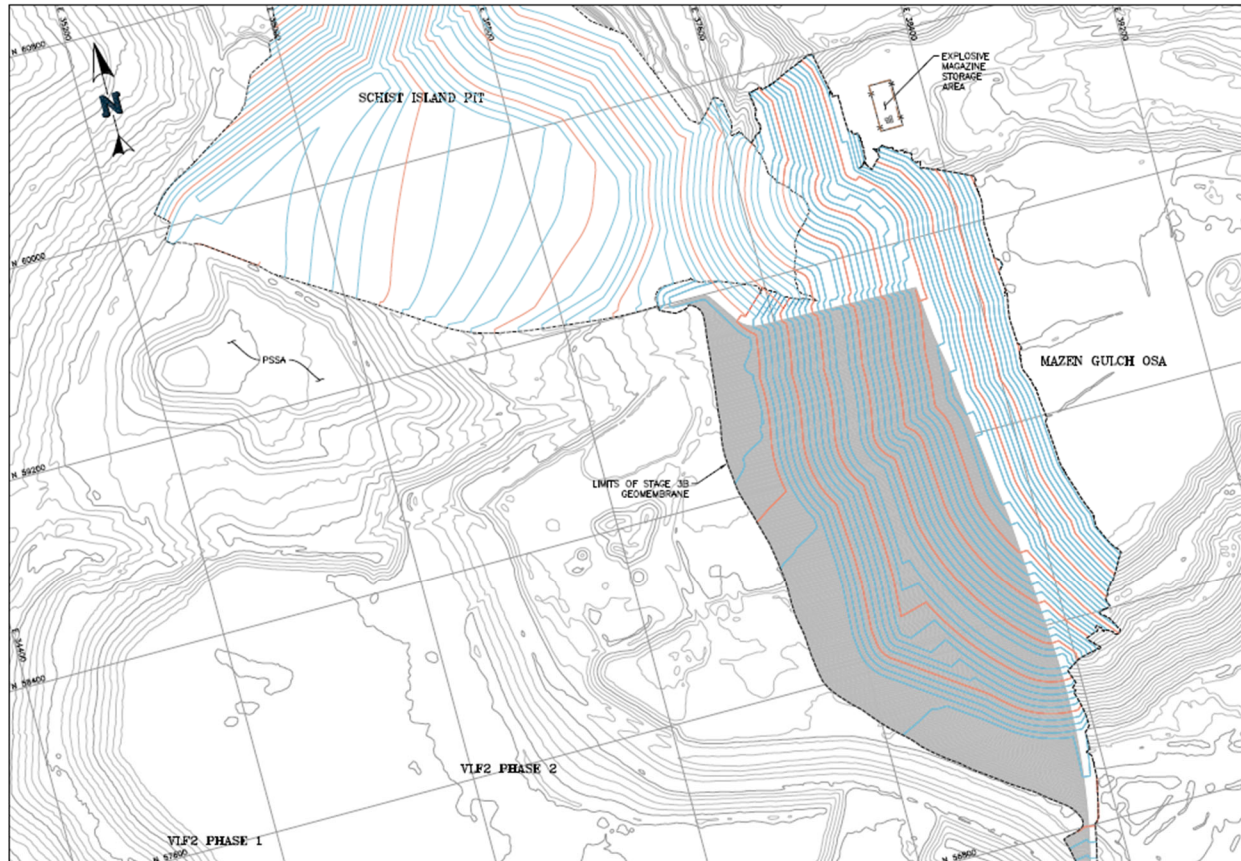




FIGURE 6 – REVISED STAGE B AND STAGE C GRADING PLAN



In the **Table 1** summarizes the approximate earthwork volume based on the June 14, 2023 existing ground.

TABLE 1 - EARTHWORK VOLUME

	Cut	Fill
Earthworks Volume Based on Finished Grade		
Stage B Finished Grade (8/27/2021) vs Existing Ground (6/14/2023)	620,833 yd ³	2,336,686 yd ³
Stage B Finished Grade (9/18/2023) vs Existing Ground (6/14/2023)	2,745,006 yd ³	230,399 yd ³
Earthwork Volume Based on Top of Subgrade		
Stage B (Bottom of SLF) (9/18/2023) vs Existing Ground (6/14/2023)	992,845 yd ³	150,309 yd ³
Stage B (Finished Grade outside SLF) (9/18/2023) vs Existing Ground (6/14/2023)	1,469,848 yd ³	34,872 yd ³
Stage B (9/18/2023) vs Existing Ground (6/14/2023)	2,462,693 yd ³	185,181 yd ³

P:\Projects\0106.060 CC&V 2023 Q1 On-Site Support\J-REPORTS\stage b grading\Stage B revised grading 20231110.docx



VLF 2 Phase 3 Stage B Revised Grading Plan

Norma Townley <Norma.Townley2@newmont.com>

Tue, Nov 21, 2023 at 9:13 AM

To: Elliott Russell - DNR <elliott.russell@state.co.us>

Cc: "Cunningham - DNR, Michael" <Michaela.Cunningham@state.co.us>, Justin McBryde <McBrydeJ@tellercounty.gov>, Johnna Gonzalez <Johnna.Gonzalez@newmont.com>, Katie Blake <Katie.Blake@newmont.com>, Norma Townley <Norma.Townley2@newmont.com>

Elliott, attached please find correspondence regarding the VLF 2 Phase 3 Stage B Revised Grading Plan. If you have any questions or comments, please reach out to Johnna.Gonzalez@Newmont.com or Katie.Blake@Newmont.com. Thank you.



Newmont
CRIPPLE CREEK & VICTOR

Norma Townley

Business Assistant | Newmont | T 719-851-4255

Newmont

Cripple Creek & Victor Gold Mine

PO Box 191

100 N.3rd Street

Victor CO 80860

www.newmont.com

Email: Norma.Townley2@Newmont.com

****Office hours Monday-Thursday, 6:00 AM-4:30PM MT****

Please consider the environment before printing this e-mail

2 attachments



20Nov2023_VLF2 Phase 3 Revised Grading Plan.docx.pdf

509K



Stage B revised grading final 20231116.pdf

3707K