ERRATA SHEET

Date: August 13, 2025
Document: Abbreviated Operating Permit Application – Grassy Mountain Closure Cover Borrow Areas Quarry

REVISION A Version: October 27, 2021
Author: Golder, Member of WSP

p. 3 of 17, Operating Permit Application, Section 1: Contact Information

Section 1a. Applicant / Proposed Permittee

- Name of Applicant typographical error ("h4") should be Calico Resources USA Corp.
- Telephone: 844-488-2233
- Email: rachel@paramountnevada.com

Section 1b. Primary Contact for the Application (update contact information)

- Name: Rachel Goldman
- Telephone: 844-488-2233
- Email: rachel@paramountnevada.com

October 27, 2021 1663241.073.L.REV0

Bob Brinkmann, RG
Oregon Department of Geology and Minerals Industries
229 Broadalbin St. SW
Albany, Oregon 97321

ABBREVIATED OPERATING PERMIT APPLICATION – GRASSY MOUNTAIN CLOSURE COVER BORROW AREAS QUARRY
REVISION A

Dear Mr. Brinkmann,

Golder Associates, Inc. (Golder) a member of WSP is pleased to submit this revised abbreviated Operating Permit Application (OPA) on behalf of Calico Resources USA Corp (Calico) for the closure cover borrow areas at the proposed Grassy Mountain Mine. Submittal of this abbreviated OPA was recommended by the Oregon Department of Geology and Minerals Industries (DOGAMI) because the closure cover borrow areas will be situated within the Division 37 permit area (Permit Area) for the proposed chemical process mine.

The information and responses provided in this abbreviated OPA are related to the closure cover borrow areas and not the entirety of the Division 37 Permit Area. This permit application specifically relates to surface mining operations under Division 30 Rules. We understand that this abbreviated OPA will be reviewed by DOGAMI; however, a Division 30 permit will not be issued. This OPA will be submitted as an appendix of the Consolidated Division 37 Permit Application for the entire Grassy Mountain Mine Project.

If you have any questions or require additional information, please contact the undersigned.

Respectfully,

Golder Associates Inc.

Tom Wythes
Associate, Senior Engineer

Christopher J. MacMahon, PE
Associate, Senior Consultant

TW/CJM/kgkg

Golder Associates Inc.
9 Monroe Parkway, Suite 270, Lake Oswego, Oregon, USA 97035 T: +1 503 607-1820 F: +1 503 607-1825

CC: Glen Van Treek (Calico)

Attachments: Operating Permit Application Form
Operating and Reclamation Plan Set (Figures 1-4)
Groundwater Supplemental Form
Wetland Supplemental Form

https://golderassociates.sharepoint.com/sites/17031g/1663241 grassy mountain tsf/500_reporting/510_report/524_closure cover opa/final/1663241.073.l.rev0 closure opa_cover letter.docx

Attachments

Operating Permit Application Form

Oregon Department of Geology and Mineral Industries
Mineral Land Regulation and Reclamation Program
229 Broadalbin Street SW
Albany, OR 97321-2246
(541) 967-2039
Fax (541) 967-2075

Operating Permit Application Form Division 30 & Division 35*

*DOGAMI may require additional information for Division 35 applications.

Primary Point of Contact

To ensure effective communications and timely processing, a Primary Point of Contact (PPC) is recommended for this application. The PPC should be a representative of the applicant with signature authority or a designated agent. Documentation of signature authority and/or designated agent is required for all applicants registered to do business in the state of Oregon. DOGAMI specific Designated Agent and Signature Authority forms are available on our website.

Section 1: Contact Information

1a. Applicant / Proposed Permittee

Name of Applicant: **h4**			
Mailing Address: **665 Anderson Street**	City: **Winnemucca**	State: **NV**	Zip: **89445**
Telephone: **775-625-3600**	Fax: **NA**	Email: **glen@paramountnevada.com**	
Preferred method of contact ☐ Telephone ☒ Email			

1b. Primary Contact for the Application

Name: **Glen Van Treek - Calico Resources USA Corp**			
Mailing Address: **665 Anderson Street**	City: **Winnemucca**	State: **NV**	Zip: **89445**
Telephone: **775-625-3600**	Fax: **NA**	Email: **glen@paramountnevada.com**	
Preferred method of contact ☐ Telephone ☒ Email			

1c. Application Prepared By

Name: **Tom Wythes**			
Mailing Address: **2000 SW 1st Avenue, Suite 220**	City: **Portland**	State: **OR**	Zip: **97201**
Telephone: **503-607-0786**	Fax: **NA**	Email: **tom_wythes@golder.com**	
Preferred method of contact ☐ Telephone ☒ Email			

1d. Operator Information

Name: **Calico Resources USA Corp**			
Mailing Address: **665 Anderson Street**	City: **Winnemucca**	State: **NV**	Zip: **89445**
Telephone: **775-625-3600**	Fax: **NA**	Email: **glen@paramountnevada.com**	

1e. Contact Person for Field Visits

Name: **Michael McGinnis**	Preferred method of contact ☐ Telephone ☒ Email	
Telephone: **719-332-8253**	Fax: **NA**	Email: **mmcginnis@paramountnevada.com**

1f. Landowner Information

Name of Landowner (1): **Bureau of Land Management, Vale District Office**			
Mailing Address: **100 Oregon Street**	City: **Vale**	State: **OR**	Zip: **89445**
Telephone: **541-473-3144**	Fax: **NA**	Email: **blm_or_vl_mail@blm.gov**	
Name of Landowner (2):			
Mailing Address:	City:	State:	Zip:
Telephone:	Fax:	Email:	

1g. Mineral Estate Owner Information – If Split Estate

Name of Mineral Estate Owner (1): **See Division 37 Consolidated Permit Application for complete mineral estate ownership information**			
Mailing Address:	City:	State:	Zip:
Telephone:	Fax:	Email:	
Name of Mineral Estate Owner (2):			
Mailing Address:	City:	State:	Zip:
Telephone:	Fax:	Email:	

Section 2: Project Description

2a. Location Information

Address and/or highway and milepost of surface mine:

See attached Operating and Reclamation Plan set for site location

Distance from the nearest named community: **22** mile(s) from **Vale, Oregon**

Directions to site (from the nearest town or major intersection):

See attached Operating and Reclamation Plan set for site location

Legal Description:

County: **Malheur**

Township:	22S	Range:	44E	Section:	8	Tax Lot(s):	_____
Township:	_____	Range:	_____	Section:	_____	Tax Lot(s):	_____
Township:	_____	Range:	_____	Section:	_____	Tax Lot(s):	_____
Township:	_____	Range:	_____	Section:	_____	Tax Lot(s):	_____

Latitude/Longitude: **43.67/-117.36**

Site Name: Grassy Mountain Closure Cover Borrow

Does this site have a current DOGAMI Operating Permit, Exploration Permit, Exclusion Certificate, or Grant of Limited Exemption, or has it been permitted in the past? ☐ yes ☒ no

If yes: Specify DOGAMI ID# _____

Is there an approved Limited Exemption Closure Plan on file with DOGAMI? ☐ yes ☒ no

2b. Application Type

Please indicate the purpose of this application:

☐ New Operating Permit – skip to 2c.

☐ Amendment to a current Operating Permit

If you are applying for an Amendment to a current Operating Permit, please describe in detail the intended modifications:

This is an abbreviated Operating Permit Application for closure cover borrow areas at the Grassy Mountain project. The closure cover borrow areas will be situated within the Division 37 permit boundary (Permit Area); however, this permit application specifically relates to surface mine operations under Division 30 regulations. This abbreviated application and Operating and Reclamation Plan set will be submitted as an appendix of the Consolidated Division 37 Permit Application. The Division 37 Permit Area and location of the closure cover borrow areas are shown on Figure 1.

The information and responses provided in this abbreviated application are related to the closure cover borrow areas and not the entirety of the Division 37 Permit Area.

The Proposed Operating and Reclamation Plans in this Amendment will (check one):

☐ Replace the existing approved plan(s) on file with DOGAMI and apply to the entirety of the site upon completion of this Amendment.

☐ Pertain only to the Amendment area and are in addition to the existing approved plan(s) on file with DOGAMI.

2c. Third Party Permits and Approvals

Do you know of any state, federal or local government permits or approvals that will be required for this mining operation? ☒ yes ☐ no

If yes: Please list any state, federal or local government permits or approvals and describe the status:

This is an abbreviated permit application in support of the closure cover borrow for the Consolidated Division 37 Permit Application. This application will be submitted as an appendix to the Consolidated Division 37 Permit Application.

*Note: DOGAMI can only issue an Operating Permit if all required state, federal, and local government approvals have been obtained, otherwise a Provisional Operating Permit will be issued. POP's are not applicable to Operating Permit Amendment applications.

2d. Permit Acreage and Boundaries

Specify the approximate total number of acres to be covered under the Operating Permit _____ acres

Does the proposed permitted acreage coincide with the area approved by the local land use jurisdiction? ☒ yes ☐ no

If no: Explain: **The Closure Cover borrow areas are located solely on BLM land within the Division 37 Permit Area (Figure 1).**

Have the boundaries of the proposed permit area been marked on the ground with temporary or permanent boundary markers? ☐ yes ☒ no

If yes: Describe boundary markers: **Permit boundary to be established as part of Division 37 Permit Area (Figure 1).**

What is the total number of acres to be affected by mining related activities in the 12 months following permit issuance (include excavation, processing, stockpiling and land clearing)? **Closure Cover borrow disturbance will occur at the completion of mining or during concurrent reclamation. 0** acres

2e. Site Conditions

General Topography in the vicinity of the permit area (check all that apply):

☐ mountains ☒ hills/buttes ☒ valleys ☐ plains ☐ badlands
☐ floodplain ☐ other: _____ ☐ other: _____

Site Specific Topography (describe the topography within the permit area): **The Closure Cover borrow areas will be located in the semiarid plateau of eastern Oregon and local landscape is typical of high mountain desert rnvironment and rangeland. The terrain is gentle to moderate with relatively low relief. Elevation ranges from approximately 3,800 feet east side of the property to 3,600 feet amsl on the west side.**

Current Land Use(s) for all tax lots or parcels within the permit area (check all that apply):

☒ range/open space ☐ forestry ☐ industrial ☐ wildlife/wetland ☐ recreation
☒ other: **C-A2 Exclusive Range Use (Malheur County)**
☐ residential ☐ commercial ☐ agriculture ☐ other: _____

Structures, Facilities & Surface Disturbances:

☐ none ☐ residential ☐ farm/ranch
☐ industrial/commercial ☒ roads ☐ overhead power lines or facilities
☐ underground utilities (e.g. electrical, fiber optic, water, sewer, etc.) ☐ oil/gas structures or pipelines ☐ other: _____

Additional Description (optional): **No structures currently present within the footprint of the Closure Cover borrow areas.**

Vegetation (general description of the dominant grasses, forbs, shrubs and trees located within the permit area):

Terrestrial vegetation is cold desert type. Vegetation communities include big sagebrush/bunchgrass community, crested wheat grass/annual community, and annual grassland community. Invasive species such as cheatgrass and/or medusahead dominate most of the vegetation communities (Terrestrial Vegetation Baseline Study, Grassy Mountain Exploration Project, Calico Resources USA Corp., Malheur County, Oregon prepared by EM Strategies, revised October 2018).

No wetlands occur in the vicinity of the closure cover borrow areas or within the Division 37 Permit Area (See attached Wetland Supplemental Form).

Listed sensitive, threatened or endangered fish and/or wildlife species (within the permit area and nearby water ways):

Wildlife species and encounters within the Study Area are discussed in the Wildlife Resources Baseline Report, EM Strategies, Inc., October 2018.

Surface Water Features within or near the permit area (includes features that may contain water at any time, including seasonal and stormwater runoff):

☐ none ☐ river _____ ☐ stream/creek _____ ☐ spring
☒ lake/pond ☐ irrigation ditch/canal ☒ ephemeral drainage ☐ wetlands*

***The DOGAMI Wetland Supplemental Form may be required to be submitted with this application package.**

2f. Surrounding Area Conditions

Land Use(s) within 1,500 feet of the permit area (check all that apply):

☒ range/open space ☐ forestry ☐ industrial ☐ wildlife/wetland ☐ recreation
☒ other: **C-A2 Exclusive Range Use (Malheur County)**
☐ residential ☐ commercial ☐ agriculture ☐ other: _____

Structures, Facilities & Surface Disturbances within 1,500 feet of the permit area (check all that apply):

☐ none ☐ residential ☐ farm
☐ industrial/commercial ☒ roads ☐ overhead power lines or facilities
☐ underground utilities (e.g. electrical, fiber optic, water, sewer, etc.) ☐ oil/gas structures or pipelines ☒ other: **Schweizer Reservoir (Cattle Pond)**

What is the distance to the nearest structure not owned by the permittee? **Approximately 200 feet south of the Division 37 Permit Area (overhead powerline right-of-way)** feet

Surface Water Features within 1,500 feet of the permit area (check all that apply):

☐ none ☐ river _____ ☐ stream/creek _____ ☐ spring
☒ lake/pond ☐ irrigation ditch/canal ☒ ephemeral drainage ☐ wetlands*

***The DOGAMI Wetland Supplemental Form may be required to be submitted with this application package.**

Section 3: Proposed Operating Plan

3a. Development Plans & Equipment

What type of surface mine will be developed?

- ☒ single bench
- ☐ multiple bench
- ☐ sidehill cut
- ☐ hilltop removal
- ☐ open pit
- ☐ pond excavation
- ☒ other: **Surface soil removal**
- ☐ other: _____

What is the primary commodity? (Select One)

- ☐ lava
- ☐ decomposed granite
- ☐ pumice
- ☐ topsoil
- ☐ borrow/fill
- ☐ diatomaceous earth
- ☐ sand and gravel
- ☐ bentonite
- ☐ cinder
- ☐ dredge tailings
- ☐ shale
- ☒ other: **Topsoil and Colluvial soils**

What is the primary use? (Select One)

- ☐ asphalt aggregate
- ☐ concrete aggregate
- ☐ landscaping materials
- ☒ other: **Closure Cover**
- ☐ base rock aggregate
- ☐ construction fill
- ☐ rip rap

What is the general deposit type?

- ☐ bedrock
- ☐ river/floodplain (alluvial)*
- ☐ river channel terrace
- ☐ talus
- ☒ other: **Top Soil and Colluvium**
- ☐ unknown

***The DOGAMI Floodplain Supplemental Form may be required to be submitted with this application package.**

Check all mining methods and on-site activities that apply:

- ☐ drilling and blasting
- ☐ ripping and loading
- ☐ crushing
- ☐ washing
- ☐ screening
- ☒ shovel/loader/scraper
- ☐ material recycling
- ☐ stockpiling
- ☐ other: _____
- ☐ other: _____

Equipment to be used for mining and processing includes (check all that apply):

- ☒ loaders
- ☒ dozers
- ☐ excavators
- ☒ trucks
- ☒ screeners
- ☐ crushers
- ☐ drilling equipment
- ☐ other: _____
- ☐ other: _____

Date to begin mining activities: **2028** Expected duration (in years): **3**

3b. Water Management

Indicate the proposed use(s) of water (check all that apply):

- ☐ wash plant
- ☐ asphalt plant
- ☐ concrete batch plant
- ☒ dust control
- ☐ crusher
- ☐ other: _____

Note: A DEQ permit will be required for process water generated and stored on site.

If applicable: Is the water source within 300 feet of the permit area? ☐ yes ☒ no

If yes: Identify the source of water to be used and show its location on a map:

- ☐ irrigation ditch
- ☐ pond
- ☐ pit
- ☐ groundwater well
- ☐ other: _____

Note: A water right may be required by the Oregon Water Resource Department.

Will water be stored on site? ☐ yes ☒ no

If yes: What will the water be stored in?

- ☐ detention/retention pond
- ☐ lined detention/retention pond
- ☐ water storage tank
- ☐ other: _____

What is the approximate depth that groundwater is first encountered? **>50** feet below ground surface

What source or method was used to determine depth to groundwater? **Measured groundwater depths in nearby monitoring wells (59760, 59761, 59772, 59763, 59764, 26-092-915, 57-1, GW-1, PW-1) as reported in the Revised Groundwater Resources Baseline Report and Comment Responses, Grassy Mountain Mine Project, prepared by SPF Engineering, LLC., revised September 2021. Groundwater Monitoring Wells are shown on the Closure Cover Operating and Reclamation Plan set.**

Have monitoring wells been constructed on site or are monitoring wells proposed? ☒ yes ☐ no

If yes: A DOGAMI Groundwater Supplemental Form must be submitted with this application.

Will excavation operations be conducted below groundwater level? ☐ yes ☒ no

Will dewatering be conducted at this site? ☐ yes ☒ no

If yes: A DOGAMI Groundwater Supplemental Form must be submitted with this application and a DEQ Permit may be required.

Has a DEQ water quality permit been obtained for the site?

If yes: DEQ Permit # **A DEQ water quality permit will be obtained for the Division 37 Permit Area which will cover the Closure Cover borrows.**

3c. Designated Setbacks

Will surface mining operations require crossing external property lines? ☐ yes ☒ no

What will be the minimum undisturbed property line setback for:

Excavation operations: **50** feet wide

Processing operations: **50** feet wide

Stockpiling operations: **50** feet wide

If proposing disturbances within the setbacks (such as visual berms or roads), explain:

Specify the minimum undisturbed setback(s) between mining operations and:

Overhead utilities (poles or towers): _____ feet wide

Underground utilities (e.g. electrical, fiber optic, water, sewer, etc.): _____ feet wide

Right-of-Way/Easement Road: _____ feet wide

Other: _____ _____ feet wide

☒ not applicable (none of the above-listed items are present within the proposed permit area)

Are setbacks shown on the attached map(s)? ☒ yes ☐ no

If no: Explain:

Have setbacks been marked on the ground with permanent or temporary boundary markers? ☐ yes ☒ no

If no: Explain: **Setbacks will be marked prior to the commencement of borrow operations. Mining setbacks will include minimum 50-foot setback from the Division 37 Permit boundary (see attached Closure Cover Operating and Reclamation Plan set)**

3d. Designated Buffers

Does a naturally vegetated area (buffer) exist along a river, stream or natural drainage? ☐ not applicable ☐ yes ☒ no

If no or not applicable, skip to 3e.

What are the minimum undisturbed buffers for the following:

River (Ordinary High Water Line): _____ feet wide

Stream (Ordinary High Water Line): _____ feet wide

Natural drainage: _____ feet wide

Riparian Vegetation: _____ feet wide

Have the undisturbed buffers been marked on the ground with permanent or temporary boundary markers? ☐ yes ☐ no

Have conservation/protection buffers been established? ☐ not applicable ☐ yes ☐ no

If yes: check all that apply:

☐ unstable slopes ☐ wildlife habitat ☐ water quality ☐ other: _____

Describe the nature and configuration of the conservation buffer(s):

3e. Visual Screening

Does a natural landform or vegetative screen currently exist?

Along the **permit** boundary ☐ yes ☒ no

Within the **permit** boundary ☐ yes ☒ no

Along the **property** boundary ☐ yes ☒ no

Within the **property** boundary ☐ yes ☒ no

If yes to any of the above: Describe:

Will a berm be constructed along the permit boundaries to develop a visual screen? ☐ yes ☒ no

If yes: The average height of the constructed screen/berm will be _____ feet tall and _____ feet wide.

Will a vegetative screen be established along the permit boundaries to develop a visual screen? ☐ yes ☒ no

If yes: If planting trees, what is the estimated height at maturity? _____ feet tall

Please describe (include species and planting densities):

Will a fence be installed along the permit boundary for safety or visual screening? ☐ yes ☒ no

Will the screening/fencing/berm be maintained for the life of the surface mine? ☐ not applicable ☐ yes ☒ no

If no: Explain:

3f. Vegetation

Will vegetation be removed sequentially from areas to be mined to prevent unnecessary erosion? ☒ yes ☐ no

If no: Explain:

Will small trees and other transplantable vegetation be salvaged for use in revegetating other phases? ☐ yes ☒ no

Wood and other organic debris will be (check all that apply):

☐ recycled ☐ removed from site ☐ chipped ☐ burned ☐ buried

☒ piled and composted on site for growth medium or mulch ☐ other: _____ ☐ other: _____

Note: A DEQ permit is generally required for burial of debris and may be required for burning.

Will coarse wood (logs, stumps) and other large debris be salvaged for fish and wildlife habitat? ☒ not applicable ☐ yes ☐ no

3g. Soil and Overburden Salvage and Stabilization

Identify and characterize the type(s) of soil present within the site area per NRCS Web Soil Survey:

NRCS Web Soil Survey data not available for Permit Area. Data obtained from Geology and Soils Baseline Report, Mark J. Abrams, October 2018. The Farmell-Chardodon, 8 to 15% slopes (30%), Farmell-Chardoton extremely stony soil, 4-15% slopes (37%), Farmell-Chardodon very cobbly soil, 15-13% slopes (32%) and Farmell-Chardodon outcrop complex, 8-30% slopes (1%) are present within the footprints of the cover borrow areas and are described as marginal to unsuitable for reclamation suitability (Geology and Soils Baseline Report, Mark J. Abrams, October 2018).

Golder excavated twelve test pits in the proposed borrow areas, logged the soils in each test pit, and had 8 laboratory sieve analyses (ASTM D6913), Atterberg limits (ASTM D4318), and moisture content (ASTM D4643) tests completed. The test pits show 1 to 3 feet of silt topsoil overlying a variable thickness of "alluvium" composed of predominantly sand with gravel and cobbles ranging in thickness from 2 ft to greater than 12 feet thick (limit of excavator reach). Weathered basalt bedrock underlies the alluvium in test pits completed within the designated borrow areas. Exploration logs and laboratory testing results are presented in the Grassy Mountain Tailings Storgae and Temporary Waste Rock Storage Facilities Design Report by Golder Associates Inc.,revised September 2021.

Will growth medium and overburden materials be salvaged? ☒ yes ☐ no

Explain: **Topsoil and colluvial soils will be excavated for use as reclamation cover. Sufficient colluvial soils will be left in cover borrows above the bedrock surface to support revegetation.**

Will growth medium and overburden materials be segregated and stored separately during stripping operations? ☐ yes ☒ no

Explain proposed stripping, handling, and storage of growth medium and overburden materials: **Growth medium and overburden will be excavated and placed directly as reclamation cover when needed without stockpiling. The Basalt Quarry growth medium stockpile (see separate operating permit application) will be utilized prior to excavation of the closure cover borrow and no setback is provided between the Closure Cover borrow and Basalt Quarry growth medium stockpile**

For the areas to be stripped:

Thickness of growth medium averages **18** ☒ inches ☐ feet

Thickness of overburden averages **8** ☐ inches ☒ feet

Depth to bedrock is approximately **10** ☐ inches ☒ feet (below ground surface).

Total volume of growth medium available within the permit area is **1,100,000** cubic yards.

Total volume of stored growth medium is **0** cubic yards and will require **0** acres for storage.

Total volume of stored overburden is **0** cubic yards and will require **0** acres for storage.

Will growth medium and overburden materials be moved directly to mined out portions of the site for concurrent reclamation? ☐ yes ☒ no

Will the storage areas be cleared of all vegetation and organic matter prior to stockpiling? ☐ yes ☒ no

If no: Explain: **Growth medium and overburden will be excavated when needed and placed directly as reclamation cover without stockpiling.**

Will subsurface drainage for the storage area be established prior to material placement? ☐ yes ☒ no

Explain: **Growth medium and overburden will be excavated when needed and placed directly as reclamation cover without stockpiling.**

Will growth medium and overburden materials be stabilized with vegetation to prevent water and wind erosion if stored for more than one season? ☐ yes ☒ no

If no: Explain: **Growth medium and overburden will be excavated when needed and placed directly as reclamation cover without stockpiling.**

Are the storage areas delineated on the attached map(s)? ☐ yes ☒ no

3h. Surface Mine Excavations

What is the total number of acres to be affected by mining related activities (include excavation, processing, stockpiling and land clearing)? **73** acres

What is the maximum vertical depth to be mined below the existing topographic grade? **15** feet

What will be the lowest elevation of the excavated mine relative to mean sea level? **3610** feet

What will be the highest elevation of the excavated mine relative to mean sea level? _____ feet

Will benches be developed as mining operations advance? ☐ yes ☒ no

If yes: The average dimensions of the benches will be approximately:

_____ foot vertical faces separated by _____ foot horizontal benches resulting in an interim sloping configuration of _____H: _____V (e.g. 1½H:1V, 2H:1V)

If no: The interim sloping configuration of the excavation slopes will be: **3**H: **1**V (e.g. 1½H:1V, 2H:1V).

Will excavation operations result in the creation of ponds/water-filled excavation areas? ☐ yes ☒ no

If yes: The interim sloping configuration of the in-water slopes will be _____H: _____V (e.g. 3H:1V).

Will oversize be generated on site? ☒ yes ☐ no

If yes: Specify the location for storage: **Incorporated with Basalt Quarry product**

Will any waste products such as tailings or crusher fines be generated during mining? ☐ yes ☒ no

If yes: Specify the location for storage:

Are the storage/stockpile areas delineated on the attached map(s)? ☐ yes ☒ no

3i. Best Management Practices and Stormwater Controls		
Will all stormwater runoff be contained on site? ☒ yes ☐ no **If no: A DEQ (NPDES)Permit may be required.**		
Methods to control erosion and minimize sedimentation within the permit area include (check all that apply):		
☒ minimize the areas stripped	☒ divert natural runoff around the site	☐ graveled roads and working areas
☐ internal sloping	☐ conveyance ditches	☐ rock check dams
☐ water bars	☐ settling/infiltration ponds	☐ retention berms
☒ seeding and mulching	☒ other: **Silt Fencing**	☒ other: **All Stormwater will be managed under the Site-Wide Surface Water Management Plan for the Division 37 Permit Area**

Section 4: Reclamation Plan

4a. Post-Mining Land Use

Subsequent Land Use(s) of the permit area (check all that apply):

☒ range/open space ☐ forestry ☐ industrial ☐ wildlife/wetland ☐ recreation
☐ residential ☐ commercial ☐ agriculture ☐ other: _____ ☐ other: _____

If more than one post-mining land use is selected provide a map delineating where each use is applicable.

What will be the average elevation of the reclaimed mine floor relative to mean sea level? **3,700** feet

Is the proposed post-mining land use compatible with the existing local land use jurisdiction? ☒ yes ☐ no

If no: Explain:

Is the final local land use approval for surface mining attached? ☐ yes ☒ no

If no: Explain: **BLM post-mining land use**

4b. Reclamation Schedule

Will reclamation activities be conducted concurrently with mining? ☐ yes ☒ no

If no: How many days after mining is completed will reclamation operations begin? **Per ORS 517.820(1), Reclamation to begin no greater than 3 years after mining is complete**

If yes: Has the permit area been divided into cells/phases for sequential mining? ☐ yes ☒ no

4c. Final Excavation Slopes

Will final excavation slopes be constructed using the benching method? ☐ yes ☒ no

If yes: The average dimensions of the final benches will be approximately _____ foot vertical faces separated by _____ foot horizontal benches resulting in an interim sloping configuration of _____H: _____V (e.g. 1½H:1V, 2H:1V).

Will final slopes be constructed via a continuous slope? ☒ yes ☐ no

If yes: The completion of Section 4d is required.

Will reclamation blasting be used to reduce the entire highwall to a scree or rubble slope less than 2H:1V? ☐ yes ☒ no

If yes: Will access to benches be maintained for reclamation blasting? ☐ yes ☐ no

Will selective blasting will be used to remove benches and walls and to create chutes, buttresses, spurs, scree slopes, and rough cliff faces that appear natural or blend in with surrounding topography? ☐ yes ☒ no

Will final excavation slopes be steeper than 1½H:1V? ☐ yes ☒ no

If yes: The DOGAMI Slope Stability Supplemental Form must be submitted with this application.

Will small portions of benches or vertical faces be left to provide habitat for raptors and other cliff-dwelling birds? ☐ yes ☒ no

Will the final excavation slopes vary in steepness? ☐ yes ☒ no

If yes: Explain:

Are cross-sections of the final excavation slopes attached? (may be required) ☒ yes ☐ no

Will measures be taken to limit access to the top and bottom of hazardous slopes? ☐ yes ☒ no

Explain: **No hazardous slopes will be developed**

4d. Final Fill Slopes

Will above-water final fill slopes be constructed on site? ☒ yes ☐ no

If no: Skip to 4e.

Will final fill slopes be steeper than 2H:1V or exceed 100 lineal feet in length? ☐ yes ☒ no

What will be the final sloping configuration of fill slopes? **3**H: **1**V (e.g. 2H:1V)

If yes: The DOGAMI Slope Stability Supplemental Form must be submitted with this application.

Will the final fill slopes vary in steepness?	☐ yes ☒ no
If yes: Explain:	
Will fill slopes have a sinuous appearance in both profile and plan view?	☒ yes ☐ no
If no: Explain: **They will generally conform with the existing natural slopes but will be lowered 3 to 15 feet**	
Will the final grouser tracks of equipment be preserved and oriented to trap moisture, growth medium, and seeds, to encourage seed germination and inhibit erosion (track walking)?	☒ yes ☐ no

4e. Working Floors	
Will flat working areas be formed into gently rolling hills to blend in with the surrounding area?	☒ yes ☐ no
If yes: Give details: **Flat working areas will generally not be developed. The excavation will involve stripping the upper several feet resulting in final slopes that conform with the existing natural slopes but will be lowered 3 to 15 feet.**	
Will the working floor be gently graded into sinuous drainage channels to preclude sheet-wash erosion during heavy rain events?	☐ yes ☒ no
If yes: Give details:	
Will the working floor and other compacted areas be, plowed, ripped, or blasted to decompact the upper surface prior to spreading growth mediums to foster revegetation?	☒ yes ☐ no
Explain (If yes, include depth of decompaction): **Suitable growth medium will be left in the bottom of the borrow excavations to support revegetation. Compacted areas will be ripped a minimum of 1-foot.**	

4f. Imported Fill	
Will imported materials be necessary to complete reclamation?	☐ yes ☒ no
If no: Skip to 4g.	
If yes: Give volumes needed to meet reclamation plan: _____	
Are the locations for fill stockpiling and permanent placement shown on the map(s)?	☐ yes ☐ no
How will the quality of imported fill be monitored to ensure it meets DEQ clean fill standards? _____	
Will the backfill materials be mixed or screened to ensure uniformity for compaction and stability?	☐ yes ☐ no

4g. Backfilling Operations	
Will an excavation area be located below natural grade requiring backfilling?	☐ yes ☒ no
If no: Skip to 4h	
What will be the total depth of backfilled materials? _____ feet.	
Will backfilling be conducted in lifts?	☐ yes ☐ no
If yes: Specify the average depth of the lifts: _____ feet.	
Will the backfilled slopes be compacted?	☐ yes ☐ no
Explain:	
Will compaction testing be conducted under supervision/direction of an Oregon Certified Engineering Geologist or Geotechnical Engineer to determine the compaction percentage? (may be required subject to post-mining land use)	☐ yes ☐ no
Will backfilling be completed utilizing on site overburden materials?	☐ yes ☐ no
If yes: Explain:	
Will you be backfilling into water?	☐ yes ☐ no
If no: Skip to 4h	
Will dewatering be necessary for the backfilling operations?	☐ yes ☐ no
If yes: A DOGAMI Groundwater Supplemental Form is required to be submitted with this application and a DEQ NPDES Permit may be required.	

Will backfilling be limited to the dry season or otherwise conducted under dry conditions? ☐ yes ☐ no
If no: A DOGAMI Slope Stability Supplemental Form may be required.

Will the excavation pit/pond be *entirely* backfilled to natural ground surface elevation? ☐ yes ☐ no
If no: The completion of Section 4h is required for in-water sloping configurations.

4h. Ponds and Wetlands

Will stormwater controls or excavation operations intersect the groundwater table resulting in the creation of ponds and/or wetlands? ☐ yes ☒ no
If no: Go to Section 4i.

Specify the construction method and dimensions for each settling/infiltration pond to remain on site:
Pond #1 will be approximately _____ acres in size and approximately _____ feet deep and constructed via:
☐ excavation ☐ retention berms ☐ combination of both
Pond #2 will be approximately _____ acres in size and approximately _____ feet deep and constructed via:
☐ excavation ☐ retention berms ☐ combination of both

All in-water sloping configurations will be constructed at _____ H: _____ V or flatter to a minimum depth of _____ feet below the low-water level of the ponds(s).
Per OAR 632-030-0027(5), all in-water sloping configurations must be established at 3H:1V or flatter from the ordinary high-water level to six feet below the ordinary low-water level for permanent water impoundments.

If not already present, will soils, silts, and clay-bearing materials be placed below water level to enhance revegetation for fish and wildlife habitat? ☐ yes ☐ no
If yes: Give details:

Will wetlands be constructed on site? ☐ yes ☐ no
If yes: Give details:

Will wildlife and fish habitat/enhancements be developed? ☐ yes ☐ no
If yes: Check all that apply:
☐ varied water depths ☐ islands ☐ peninsulas ☐ fish structures
☐ shallow areas (<18 inches deep) ☐ sinuous/irregular shorelines ☐ other: _____ ☐ other: _____
What species are the habitat/enhancements intended to benefit?

Will final pond(s) be utilized for agriculture, forestry or supply water (impoundment)? ☐ yes ☐ no
If no: Skip to 4i.

Has approval from other agencies with jurisdiction to regulate impoundment of water been obtained? ☐ yes ☐ no
If yes: Attach written approval.

What measures will be taken to prevent seepage from the site from adversely affecting the stability of impoundments and adjacent slopes? (check all that apply):
☐ monitoring ☐ relief drains ☐ weep holes
☐ compaction ☐ grouting ☐ installing upstream blanket
☐ none
Give details:
What measures have been taken to design impoundments to resist seismic hazards?

4i. Growth Medium Replacement

Will the importation of growth medium be required to complete reclamation? ☐ yes ☒ no
Explain (if yes, describe source):

Will growth medium materials be replaced on all above-water slopes and/or benches? ☒ yes ☐ no **If no:** Explain: **Sufficient (>1 feet) of suitable growth medium material will be left in the borrow above the bedrock surface to allow revegetation**
Will growth medium be distributed evenly over the site? ☒ yes ☐ no **If no:** Specify:
Soil will be replaced on the mine floor to an approximate depth of **12** ☒ inches ☐ feet Soil will be replaced on established benches to an approximate depth of **12** ☒ inches ☐ feet
If growth medium is in short supply, will it be strategically placed to conserve moisture and promote revegetation? ☐ yes ☒ no **If no:** Explain: **Growth medium is not expected to be in short supply**
Will growth medium be moved when conditions are exceptionally wet or dry? ☐ not applicable ☐ yes ☒ no **If yes:** Explain:
If applicable: will clay/silt from settling ponds be used to supplement the growth medium materials? ☐ yes ☒ no
Will any additional materials be utilized as a growth medium substitute to complete revegetation (e.g. reject fines)? ☐ not applicable ☐ yes ☒ no **If yes:** Explain:
Will all growth medium be replaced with equipment that will minimize compaction, or will growth medium be plowed, disced, or ripped following placement? ☒ yes ☐ no **If no:** Explain:
Will all replaced growth medium be stabilized in a timely manner with vegetation and/or mulch to prevent loss by erosion, slumping, or crusting? ☒ yes ☐ no **If no:** Explain:

4j. Revegetation
The average precipitation on site is **9.7 inches (average of climate data [Grassy Mountain Climate Data, May 21, 2018, Golder Associates Inc])** inches per year.
Will the site be revegetated? ☒ yes ☐ no **If no:** The site will not be revegetated because: ☐ Demonstration plots and areas will be used to show that active revegetation is not necessary. ☐ Revegetation is inappropriate for the approved subsequent use of this surface mine.
Will revegetation activities start during the first proper growing season (e.g. fall for grasses, fall or late winter for trees and shrubs) following restoration of slopes? ☒ yes ☐ no **If yes:** Give details: **Revegetation methods will be consistent with those provided in Section 5.7 of the Terrestrial Vegetation Baseline report for the Grassy Mountain Mine Project by EM Strategies, revised October 2018.** **If no:** Explain:
Will vegetation test plots be used to determine optimum vegetation plans? ☐ yes ☒ no

4k. Planting and/or Seeding Techniques and Specifications
Describe the method and time of year for planting and/or seeding: **Revegetation methods will be consistent with those provided in Section 5.7 of the Terrestrial Vegetation Baseline report for the Grassy Mountain Mine Project by EM Strategies, revised October 2018**
Give seeding details (lbs/acre of grass, legume, or forb mixture): **Revegetation methods will be consistent with those provided in Section 5.7 of the Terrestrial Vegetation Baseline report for the Grassy Mountain Mine Project by EM Strategies, revised October 2018**
Give planting details (stems/acre of trees and shrubs, size and type of plant stock): **N/A**

Additional planting/seeding techniques include:

- ☐ ripping, discing and/or tilling
- ☐ irrigation
- ☐ importation of clay or organic-rich growth medium
- ☐ other: _____
- ☐ blasting to create permeability
- ☐ fertilization
- ☐ other growth medium conditioners or amendments
- ☐ mulching
- ☐ planting dormant trees and shrubs
- ☐ seeds to be protected with growth medium or mulch

Describe the noxious weed and invasive plant control measures: **Noxious weed and invasive plant control measures are described in the Grassy Mountain Mine, Malheur County, Oregon, Noxious Weed Monitoring and Control Program, prepared by EM Strategies, revised June 2021**

4l. Drainage and Stormwater Controls				
Will the reclaimed surface mine site be internally drained?			☐ yes	☒ no
Will natural runoff be directed to a natural drainage or safe outlet upon completion of reclamation?	☐ not applicable	☒ yes	☐ no	
If applicable: Explain: **Final grading will generally conform to the native topography but will be 3 to 15 feet lower. Borrows will have free draining outlet at the downgradient sides of the excavations**				
Will the construction of ditches and channels be necessary to limit erosion and siltation?			☐ yes	☒ no
If applicable: Explain:				
Will conveyance ditches and channels be lined with vegetation or riprap?	☒ not applicable	☐ yes	☐ no	
If applicable: Explain:				
Will it be necessary to stabilize or rehabilitate stream channels or banks?			☐ yes	☒ no
If yes: Give details:				

4m. Site Cleanup		
Will all mining-related equipment be removed from the site?	☒ yes	☐ no
If no: Explain:		
Will all structures and buildings be removed from the site?	☒ yes	☐ no
If no: Explain:		
Will all visual and/or retention berms be removed from the site?	☒ yes	☐ no
If no: Explain:		
Will all debris, refuse, and/or hazardous material be removed from the site?	☒ yes	☐ no
If no: Explain:		
Will all stockpiles be sold, graded, and or removed from the site?	☒ yes	☐ no
If no: Explain:		
Will all oversize be sold, reduced, or removed from the site?	☒ yes	☐ no
If no: Explain:		

Signature Page

APPLICANT

I am applying for an Operating Permit under ORS 517.790. My signature below attests that the information provided in this application is accurate and true to the best of my knowledge. Any misrepresentation in these materials will be considered grounds for denial for an Operating Permit.

Glen van Treek
Applicant's Printed Name

Applicant's Signature

President
Title

12/15/2021
Date

PREPARED BY

I prepared this application for the applicant above. My signature below attests that the information provided in this application is accurate and true to the best of my knowledge. Any misrepresentation in these materials will be considered grounds for denial for an Operating Permit.

Christopher MacMahon
Preparer's Printed Name

Preparer's Signature

Associate and Senior Consultant
Title

12/15/2021
Date

LANDOWNER(S)

I have read, understand, and acknowledge receipt of all information provided in this application. By signing this form, I am granting consent to the mining activities as outlined in this application on my property.

Landowner (1) Printed Name

Landowner (1) Signature

Title

Date

Landowner (2) Printed Name

Landowner (2) Signature

Title

Date

MINERAL ESTATE OWNER(S)

I have read, understand, and acknowledge receipt of all information provided in this application. By signing this form, I am granting consent to the mining activities as outlined in this application on my property.

Mineral Estate Owner (1) Printed Name

Mineral Estate Owner (1) Signature

Title

Date

Mineral Estate Owner (2) Printed Name

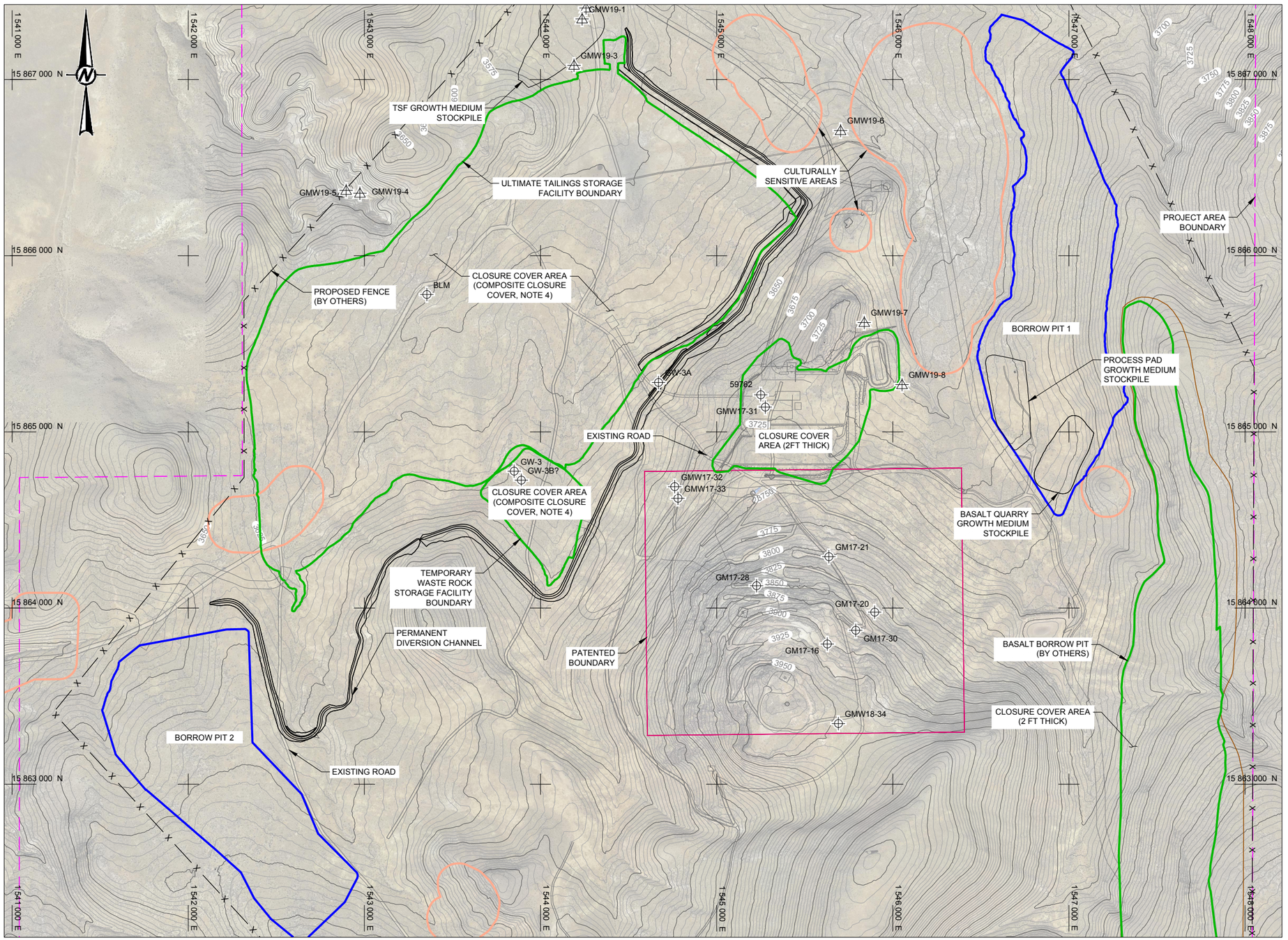
Mineral Estate Owner (2) Signature

Title

Date

Attach additional signature pages as necessary

Operating and Reclamation Plan Set (Figures 1-6)



LEGEND

- EXISTING GROUND (5 ft CONTOURS) (NOTES 2 AND 3)
- EXISTING ROAD
- PATENTED BOUNDARY
- CULTURALLY SENSITIVE AREAS
- BORROW PIT LIMITS
- PROJECT AREA BOUNDARY
- CLOSURE COVER AREA
- GROWTH MEDIUM STOCKPILE BOUNDARY
- BASALT BORROW PIT BOUNDARY
- PROPOSED FENCE (BY OTHERS)
- APPROXIMATE LOCATION OF PROPOSED MONITORING WELLS
- APPROXIMATE LOCATION OF EXISTING MONITORING WELLS

NOTE

1. PROJECT AREA BOUNDARY PROVIDED BY PARAMOUNT ON JANUARY 12, 2017 IN AN ELECTRONIC FILE TITLED "grassymtn_updated_permitareaboundary.dxf".
2. EXISTING GROUND CONTOURS AND TEST PIT LOCATIONS ARE IN NAD83 DATUM, ZONE 11.
3. EXISTING GROUND TOPOGRAPHY PROVIDED BY MDA ON MARCH 27, 2017 IN AN ELECTRONIC FILE TITLED "contours_2ft_expanded_project_area.dxf".
4. REFER TO DETAILED DESIGN REPORT FOR THE TAILINGS STORAGE FACILITY TITLED "DETAILED DESIGN, TAILINGS STORAGE FACILITY AND TEMPORARY WASTE ROCK STORAGE FACILITY, GRASSY MOUNTAIN MINE, MALHEUR COUNTY, OREGON." PREPARED BY GOLDER ASSOCIATES INC.

0 300 600
1" = 300' FEET

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
0	2021-10-27	OPERATING AND RECLAMATION PLAN	CPR	KAS	TJW	CJM

CLIENT
CALICO RESOURCES USA CORP
GRASSY MOUNTAIN PROJECT
MALHEUR COUNTY, OREGON

CALICO RESOURCES

CONSULTANT

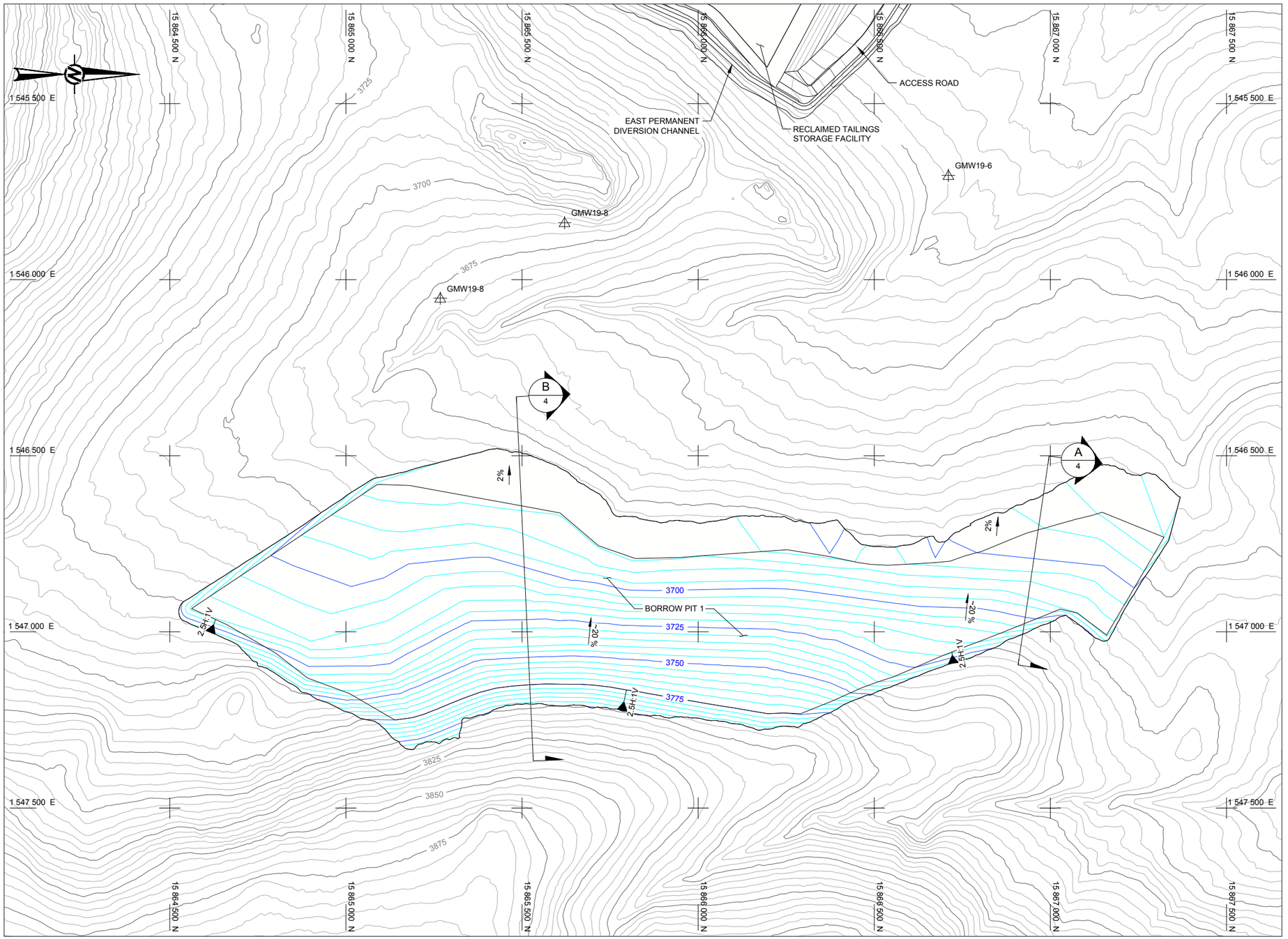
GOLDER
MEMBER OF WSP

GOLDER ASSOCIATES INC.
595 DOUBLE EAGLE COURT, SUITE 1000
RENO, NEVADA 89521
USA
[+1] (775) 828-9604
www.golder.com

PROJECT
OPERATING AND RECLAMATION PLAN
CLOSURE COVER BORROW PITS

TITLE
SITE LAYOUT PLAN

PROJECT NO.	REV.		FIGURE
1663241	0	1 of 4	1



LEGEND

- 3600 — EXISTING GROUND CONTOURS (5 FT CONTOURS) (NOTE 1)
- 3600 — PROPOSED CLOSURE COVER BORROW PIT GRADING (5 FT CONTOURS)
- GMW APPROXIMATE LOCATION OF EXISTING MONITORING WELLS

NOTE

1. EXISTING GROUND SHOWN COMPRISED OF TOPOGRAPHY PROVIDED BY CALICO RESOURCES USA CORP. ON MARCH 29, 2017 IN AN ELECTRONIC FILE TITLED "contours_2ft_expanded_project_ area.dxf" AND THE RECLAIMED TAILINGS STORAGE FACILITY.
2. PROJECT AREA BOUNDARY PROVIDED BY CALICO RESOURCES USA CORP. ON JANUARY 12, 2017 IN AN ELECTRONIC FILE TITLED "grassymtn_updated_ permitareaboundary.dxf".
3. DRAWINGS PRESENTED IN NAD83 DATUM, ZONE 11, VERTICAL DATUM (NAVD) 88.

0 150 300
1" = 150' FEET

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
0	2021-10-27	OPERATING AND RECLAMATION PLAN	CPR	KAS	TJW	CJM

CLIENT
CALICO RESOURCES USA CORP
GRASSY MOUNTAIN PROJECT
MALHEUR COUNTY, OREGON

CALICO RESOURCES

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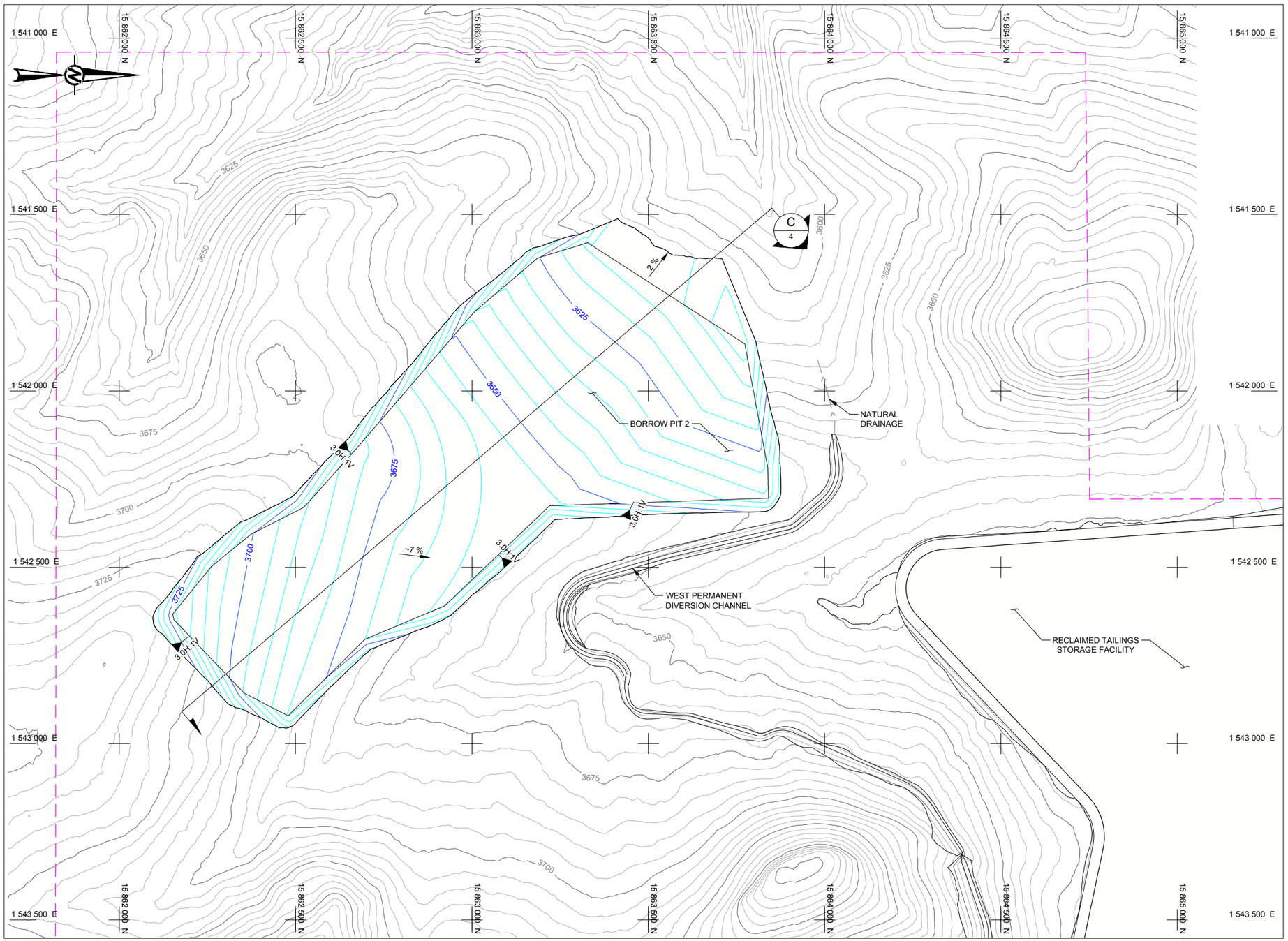
www.golder.com

PROJECT
OPERATING AND RECLAMATION PLAN
CLOSURE COVER BORROW PITS

TITLE
FINAL CLOSURE BORROW PIT GRADING PLAN
BORROW PIT 1

PROJECT NO.	REV.		FIGURE
1663241	0	2 of 4	2



LEGEND

- 3600 — EXISTING GROUND CONTOURS (5 FT CONTOURS) (NOTE 1)
- 3600 — PROPOSED CLOSURE COVER BORROW PIT GRADING (5 FT CONTOURS)
- —> — NATURAL DRAINAGE
- PROJECT BOUNDARY

NOTE

1. EXISTING GROUND SHOWN COMPRISED OF TOPOGRAPHY PROVIDED BY CALICO RESOURCES USA CORP. ON MARCH 29, 2017 IN AN ELECTRONIC FILE TITLED "contours_2ft_expanded_project_ area.dxf" AND THE RECLAIMED TAILINGS STORAGE FACILITY.
2. PROJECT AREA BOUNDARY PROVIDED BY CALICO RESOURCES USA CORP. ON JANUARY 12, 2017 IN AN ELECTRONIC FILE TITLED "grassymtn_updated_permitareaboundary.dxf".
3. DRAWINGS PRESENTED IN NAD83 DATUM, ZONE 11, VERTICAL DATUM (NAVD) 88.

0 150 300
1" = 150' FEET

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
0	2021-10-27	OPERATING AND RECLAMATION PLAN	CPR	KAS	TJW	CJM

CLIENT
CALICO RESOURCES USA CORP
GRASSY MOUNTAIN PROJECT
MALHEUR COUNTY, OREGON

CALICO RESOURCES

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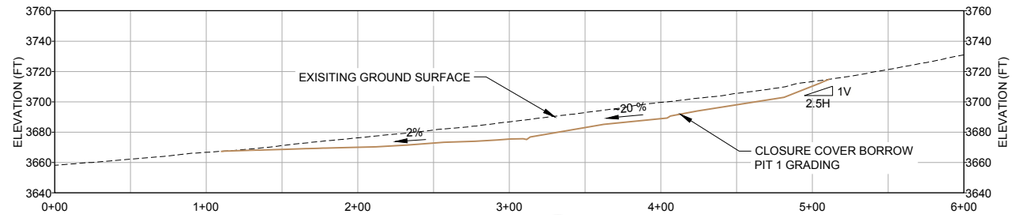
PROJECT
OPERATING AND RECLAMATION PLAN
CLOSURE COVER BORROW PITS

TITLE
FINAL CLOSURE BORROW PIT GRADING PLAN
BORROW PIT 2

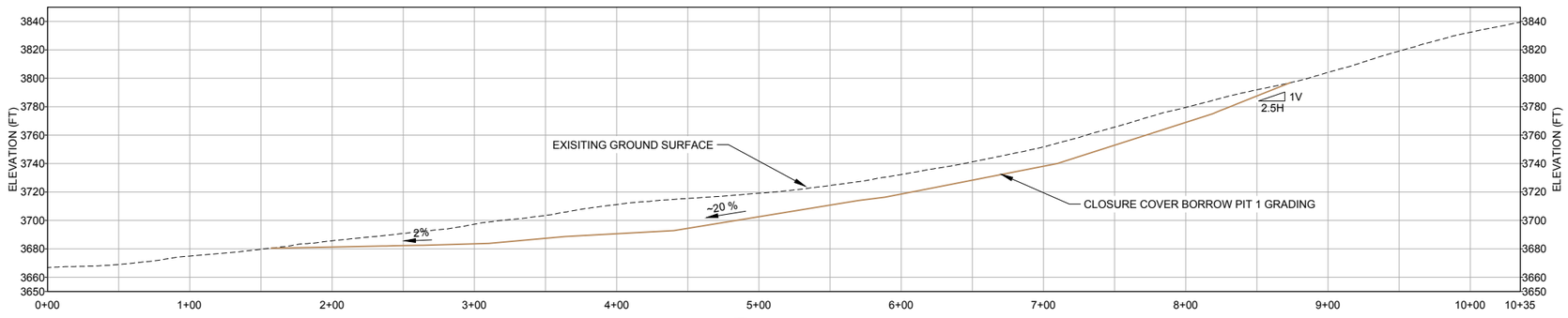
PROJECT NO.	REV.		FIGURE
1663241	0	3 of 4	3

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

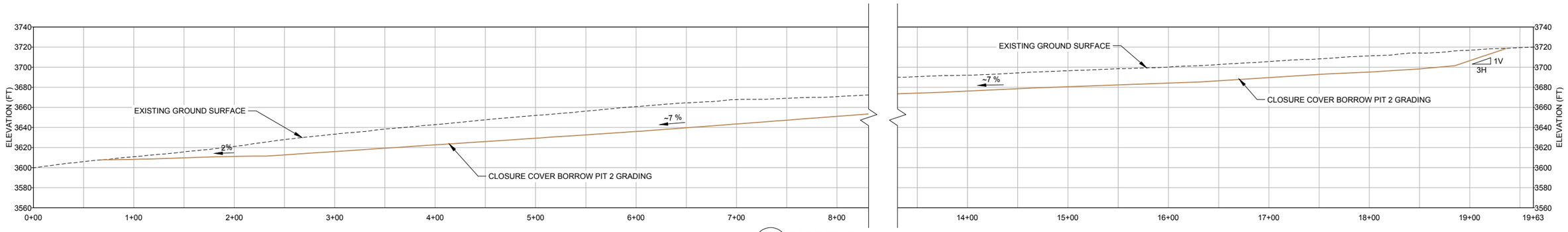
0 1 in



SCALE 1:50 A 2 SECTION A



SCALE 1:50 B 2 SECTION B



SCALE 1:50 C 3 SECTION C

LEGEND

- EXISTING GROUND SURFACE
- FINAL BORROW PIT GRADING

0 50 100
1" = 50' FEET

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
0	2021-10-27	OPERATING AND RECLAMATION PLAN	CPR	KAS	TJW	CJM

CLIENT
CALICO RESOURCES USA CORP
GRASSY MOUNTAIN PROJECT
MALHEUR COUNTY, OREGON

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PROJECT
OPERATING AND RECLAMATION PLAN
CLOSURE COVER BORROW PITS

TITLE
FINAL BORROW PIT GRADING CROSS SECTIONS

PROJECT NO. 1663241 | REV. 0 | 4 of 4 | FIGURE 4

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

Groundwater Supplemental Form

Oregon Department of Geology and Mineral Industries
Mineral Land Regulation and Reclamation Program
229 Broadalbin Street SW
Albany, OR 97321-2246
(541) 967-2039
Fax (541) 967-2075

Groundwater Supplemental Form

DOGAMI has a statutory directive to avoid or minimize adverse impacts to air, water, land, and wildlife resources from surface mining operations. Groundwater is a natural resource that can be affected by mining and as a result, dewatering is regulated by this department. Permittees should be aware that dewatering is generally allowed only if it is specified in their permit. DOGAMI defines dewatering to be the withdrawal of groundwater with a resultant decline in the water table or hydraulic head within an aquifer.

To ensure the protection of groundwater, it is necessary for permittees to consider certain issues prior to conducting this activity. These issues are both regulatory and technical in nature and include permitting, collection of baseline data, monitoring and/or modeling. This form is to be used as a component of a DOGAMI Operating Permit or Amendment application for proposed surface mining operations which will involve encountering and/or impacting groundwater resources.

Section 1: Contact & Site Information

1a. Applicant / Proposed Permittee

Name: **Calico Resources USA Corp**			
Mailing Address: **665 Anderson Street**	City: **Winnemucca**	State: **NV**	Zip: **89445**
Telephone: **775-625-3600**	Fax: **N/A**	Email: **glen@paramountnevada.com**	
Preferred method of contact ☐ Telephone ☒ Email			

1c. Site Identifier

Legal Description

County: **Malheur**

Township: **22S**	Range: **44E**	Section: **8**	Tax Lot(s): _____
Township: _____	Range: _____	Section: _____	Tax Lot(s): _____

Site Name: **Grassy Mountain Closure Cover Borrow**

DOGAMI ID# **This supplemental form is part of an abbreviated Operating Permit Application for the closure cover borrow at the Grassy Mountain mine. The closure cover borrow will be situated within the Division 37 permit boundary (Permit Area); however, this supplemental form specifically relates to surface mine operations under the Division 30 regulations. This supplemental form will be submitted with the abbreviated Operating Permit Application and Operating and Reclamation Plan set as an Appendix to the Consolidated Division 37 Permit Application. The Division 37 Permit Area and location of the closure cover borrows are shown on Figure 1.**

The information and responses provided in this supplemental form are related to the closure cover borrow and not the entirety of the Division 37 Permit Area.

The groundwater level information provided in this supplemental form is based on information presented in the *Revised Groundwater Resources Baseline Report and Comment Responses, Grassy Mountain Mine Project*, prepared by SPF Engineering, LLC., revised September 2021. Based on the report, two aquifer zones are identified in the vicinity of the Grassy Mountain Mine; shallow and deep aquifer zones. These zones are pertinent in the context of well completion depth; the current groundwater conceptual model identifies a single heterogeneous and locally complex aquifer system. This aquifer system is characterized by various water-bearing zones, with water levels strongly influenced by vertical gradients. The groundwater level information provided herein is focused on the data available for the shallow wells near the closure cover borrows as shown on Figure 1. The wells are screened at depths of less than 200 feet in a variety of lithologies.

Several wells are within the footprint of Borrow Areas 1 and 2 (57-10, GW-1, PW-3, 26-092-915) that indicate groundwater depths greater than 40 feet. There are no groundwater wells within the foorprint of Borrow Area 3. Based on modeled groundwater elevation contours (Appendix E of Groundwater Baseline Report) the groundwater elevations for the maximum are below 3,520 ft asl, greater than 150 feet below original ground surface.

Groundwater is not anticipated to be encountered in the proposed closure cover borrow excavations based on the resources reviewed.

Section 2: Groundwater Information

- The seasonal high water table is the highest level that water typically rises to each year.
- The seasonal low water table is the lowest level that water typically falls to each year.

The seasonal high water table level is: **3,654 (based on period of record for shallow aquifer wells nearest Borrows 1 and 2 [57-10, GW-1, PW-1, 26-092-915)** feet

☒ relative to mean sea level ☐ below original ground surface ☐ unknown

The seasonal low water table level is: **3,652 (based on period of record for shallow aquifer wells near quarry [57-10, GW-1, PW-1, 26-092-915)** feet

☒ relative to mean sea level ☐ below original ground surface ☐ unknown

Estimated annual fluctuation of water table is **3** feet from seasonal high to low ☐ unknown

Direction of groundwater flow: **Groundwater in the shallow aquifer generally follows surface topography and flows from topograhical highs to lows. Overall flow direction is to the northwest.** ☐ unknown

How did you determine the seasonal high and low water table levels?

☐ well logs ☒ piezometer ☐ other_____

☐ field observation(s)-Describe:

☐ landowner observation(s)-Describe:

Have monitoring wells been constructed on-site? ☐ yes ☒ no

If yes: What is the average depth of static groundwater measured in the well? **Depth to water measurements range from about 45 to 97 feet below top of casing (btoc) in shallow aquifer wells in the vicinity of Borrow Areas 1 and 2 (PW-1, GW-1, 57-10, 26-092-915) as shown on Figures 1 and 2. These wells are screened in the shallow aquifer in different lithologies (fractured basalt, sandstone, gravel) and in an area with significant fault structures. Depth to water in piezometers nearest to Borow Areas 1 and 2 (57-10, GW-1, PW-1, 26-092-915) ranges from about 45 to 76 feet bgs or (3,633 to 3,655 feet msl).**

Are there off-site groundwater supply wells within 1,500-feet of the permit boundary? ☒ yes ☐ no

Prod-1 is located approximately 100 feet outside the Division 37 Permit Area. Supply wells PW-1 and BLM are located within the Division 37 Permit Area.

☐ not applicable ☒ yes ☐ no

If yes: Are well logs attached?

The proposed surface mine site is in or within one mile of a:

☐ critical aquifer recharge area ☐ sole source aquifer ☐ public water supply watershed

☐ wellhead protection area ☐ special protection area ☐ designated aquifer protection area

☐ critical groundwater area ☐ vulnerable groundwater quantity resource area

☐ classified groundwater restricted area ☐ other_____ ☒ none

The site is underlain by: ☒ multiple aquifers ☐ complex hydrogeology ☐ neither ☐ unknown

The shallowest aquifer is: ☐ confined ☒ unconfined ☐ unknown

Section 3: Mining Information

The maximum depth of proposed mining is: **3,600** feet ☒ relative to mean sea level ☐ below original ground surface ☐ unknown

The site will be mined: ☐ wet ☒ dry ☐ both

Describe mining method (e.g. drilling and blasting, ripping and loading, etc.): **Ripping and Loading**
Will mining/excavation operations be sequenced/phased? ☐ yes ☒ no **If yes:** Please attach map.
Is dewatering necessary or proposed for the excavation operations? ☐ yes ☒ no **If yes:** Groundwater will be conveyed or pumped to: ☐ on-site trench ☐ on-site pond ☐ on-site ditch ☐ depleted cell ☐ off-site location ☐ waters of the state* ☐ other: _____ ☐ other: _____ *** A DEQ National Pollution Discharge Elimination System (NPDES) Permit may be required.**
Is the area receiving dewatering water shown on a map? ☒ not applicable ☐ yes ☐ no **If yes:** Please attach map.
Depth groundwater will be lowered to: _____ feet ☐ relative to mean sea level ☐ below original surface ☐ unknown ☒ not applicable
Has a Groundwater Study been completed? ☒ yes ☐ no **If yes:** Please attach report.

Dewatering Plan

If the proposed surface mining operations have the potential to impact water quality and quantity through a resultant decline in the water table or hydraulic head within an aquifer a written dewatering plan may be needed. The scope of the required information will be based on site characteristics and project scale. Basic elements of a dewatering plan may include collection of baseline data and analysis, mine plan sequence, development and restrictions, groundwater modeling, on-site or off-site monitoring and/or mitigation that the planned activity will not adversely affect other groundwater users. Information required may include:

1. Identification, review and submittal of adjacent well logs.
2. Inventory of adjacent water rights and water use.
3. Measure static water levels in adjacent wells and survey in well head locations.
4. Determination of the current potentiometric surface.
5. Drilling data and completion of one or more monitoring wells.
6. Definition and/or delineation of presence/absence of confining bed(s).
7. A groundwater monitoring program during mining.
8. Development of an area groundwater budget and projection of mining impacts thereon.
9. Design and construction of a groundwater recharge structure (i.e. trench) following approval by the department.

Please note that DOGAMI will review the information presented in the completed form to determine if a written dewatering plan is required for the proposed surface mining operations.

Well 1 (PROD-1)

STATE OF OREGON

WATER WELL REPORT

(as required by ORS 537.765)

RECEIVED MAY 1989 WATER RESOURCES DEPT. SALEM, OREGON

MAH 2511 22S/44E/5ab

(START CARD) # 9256

(1) OWNER:

Well Number: SALEM, OREGON

Name Atlas Precious Metals

Address 743 Horizin Ct. Suite 202

City Grand Junction State Co Zip 81506

(2) TYPE OF WORK:

☒ New Well ☐ Deepen ☒ Recondition ☐ Abandon

(3) DRILL METHOD

☒ Rotary Air ☐ Rotary Mud ☐ Cable

☒ Other Auger

(4) PROPOSED USE:

☒ Domestic ☐ Community ☐ Industrial ☐ Irrigation

☐ Thermal ☐ Injection ☐ Other

(5) BORE HOLE CONSTRUCTION:

Special Construction approval ☐ Yes ☐ No Depth of Completed Well ____ ft.

Explosives used ☐ Yes ☒ No Type ____ Amount ____

HOLE Diameter	From	To	SEAL Material	From	To	Amount sacks or pounds
12"	0	18				
10	18	425				
			Cement grout	0	26	19

How was seal placed: Method ☐ A ☐ B ☒ C ☐ D ☐ E

☐ Other

Backfill placed from ____ ft. to ____ ft. Material Ft. 's Cement Grout

Gravel placed from 100 ft. to 245 ft. Size of gravel No. 8

(6) CASING/LINER:

	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:	10"	+2	99	.250	☒	☐	☒	☐
	6"	+2	245	Sch 80	☐	☒	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
Liner:					☐	☐	☐	☐
					☐	☐	☐	☐

Final location of shoe(s)

(7) PERFORATIONS/SCREENS:

☐ Perforations Method

☒ Screens Type Aardvark Material PVC Sch 80

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
380	420	.020		6"		☐	☐
145	255	325-355				☐	☐
						☐	☐
						☐	☐
						☐	☐
						☐	☐

(8) WELL TESTS: Minimum testing time is 1 hour

☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
100	40'	300	1 hr.

Temperature of water ____ Depth Artesian Flow Found ____

Was a water analysis done? ☐ Yes By whom ____

Did any strata contain water not suitable for intended use? ☐ Too little

☐ Salty ☐ Muddy ☐ Odor ☐ Colored ☐ Other ____

Depth of strata: ____

(9) LOCATION OF WELL by legal description:

County Malheur Latitude ____ Longitude ____

Township 22S N or S, Range 44E E or W, WM.

Section 5 NW ¼ NE ¼

Tax Lot ____ Lot ____ Block ____ Subdivision ____

Street Address of Well (or nearest address) ____

(10) STATIC WATER LEVEL:

40' ft. below land surface. Date 12-8-88

Artesian pressure ____ lb. per square inch. Date ____

(11) WATER BEARING ZONES:

Depth at which water was first found 40'

From	To	Estimated Flow Rate	SWL
140-[illegible]	255	30 gpm	
320	355	50 gpm	
380	415	150 gpm	

(12) WELL LOG:

Ground elevation ____

Material	From	To	SWL
Overburden w/ boulders	0	17	0
Clay brown	17	140	0
Sandstone w/ blue clay	140	255	40
blue clay	255	320	40
Sandstone w/ blue clay	320	355	40
Blue clay	355	380	40
Fruited hard sandstone	380	415	40
Blue clay	415	425	40
=			
12-5-88 - 12-10-88			
+=			
Redone surface seal to 26 feet using method 2 referring to letter sent January 9, 1989			
Drilled around 10" casing to the depth of 26' using method C pumped 19 sacks of cement down hole			
3-30-89 - 3-31-89			
=			
Incorporated to singel log per state request			

Date started 12-5-88 Completed 3-31-89

(unbonded) Water Well Constructor Certification:

I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to my best knowledge and belief.

Signed Bob Doty WWC Number 1202

Date 4-10-89

(bonded) Water Well Constructor Certification:

I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. all work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief. WWC Number 325[illegible]

Signed Bob Doty for Bill Doty Date 4/15/89

ORIGINAL & FIRST COPY - WATER RESOURCES DEPARTMENT SECOND COPY - CONSTRUCTOR THIRD COPY - CUSTOMER 9809C 3/88

Wetland Supplemental Form

Oregon Department of Geology and Mineral Industries
Mineral Land Regulation and Reclamation Program
229 Broadalbin Street SW
Albany, OR 97321-2246
(541) 967-2039
Fax (541) 967-2075

Wetland Supplemental Form

DOGAMI has a statutory directive to avoid or minimize adverse impacts to air, water, land, and wildlife resources from surface mining operations. Wetlands are defined as areas where water covers the soil, or is present either at or near the surface of the soil all year or for varying periods of the year. Due to soil variations, topography, climate, hydrology, water chemistry, vegetation and other factors, including human disturbance, wetlands can vary widely. Non-tidal wetlands are most commonly found along rivers and streams, along the margins of ponds and lakes, within isolated depressions surrounded by dry land, or in other low-lying areas where the groundwater intercepts the soil surface or where precipitation saturates the soils.

Although many wetlands are seasonal and may only be wet periodically, the function of a wetland and its role in the environment is significant. Wetlands provide numerous benefits to both humans and the environment including improving water quality via filtering out pollutants and providing critical habitat for both terrestrial and aquatic wildlife species, some of which are adapted to breeding or living a portion of their life cycle exclusively in these environments. To ensure the protection of wetlands and any wildlife that reside or travel in those areas, it is necessary for applicants to consider certain issues prior to conducting surface mining activities within an area that may contain wetlands. These issues are both regulatory and technical in nature and include permitting, collection of baseline data, monitoring, mapping and/or mitigation. This form is to be used as a component of a DOGAMI Operating Permit or Amendment application for proposed surface mining operations which will involve any mining operations that contain wetlands.

Section 1: Contact & Site Information

1a. Applicant / Proposed Permittee

Name: **Calico Resources USA Corp**			
Mailing Address: **665 Anderson Street**	City: **Winnemucca**	State: **NV**	Zip: **89445**
Telephone: **775-625-3600**	Fax: **N/A**	Email: **glen@paramountnevada.com**	
Preferred method of contact ☐ Telephone ☒ Email			

1c. Site Identifier

Legal Description

County: **Malheur**

Township: **22S**	Range: **44E**	Section: **8**	Tax Lot(s): _____
Township: _____	Range: _____	Section: _____	Tax Lot(s): _____

Site Name: **Grassy Mountain Closure Cover Borrow**

DOGAMI ID# **This supplemental form is part of an abbreviated Operating Permit Application for the closure cover borrow at the Grassy Mountain mine. The closure cover borrow areas will be situated within the Division 37 permit boundary (Permit Area); however, this supplemental form specifically relates to surface mine operations under the Division 30 Rules. This supplemental form will be submitted with the abbreviated Operating Permit Application and Operating and Reclamation Plan set as an Appendix to the Consolidated Division 37 Permit Application. The Division 37 Permit Area and location of the closure cover borrows are shown on Figure 1.**

The information and responses provided in this supplemental form are related to the closure cover borrow areas and not the entirety of the Division 37 Permit Area.

The wetland information provided in this supplemental form is based on information presented in the *Wetland Delineation Report for the Grassy Mountain Mine Project, Malheur County, EM Strategies, Inc.* and the *Department of State Lands (DSL) concurrence letter (WD #2018-0115) dated May 3, 2018*. Based on the letter, no wetlands are present within the vicinity of the closure cover borrow areas. Tributary 2a and the Schweizer Reservoir are within the vicinity of the closure cover borrow areas, but are exempt from OAR 141-085-0515(3 and 7) and are not subject to Removal-Fill requirements per the DSL concurrence letter.

No wetlands are present within the vicinity of the closure cover borrow areas, and therefore no impacts are anticipated.

Section 2: Wetland Information

The proposed surface mine site is located along, within, or adjacent to the following:

- ☐ river or stream
- ☐ margin of a lake or pond
- ☐ floodplain*
- ☐ marsh or wet meadow
- ☐ swamp
- ☐ none
- ☒ other: **Tributary 2a and 3**
- ☒ other: **Schweizer Reservoir (cattle pond)**

***A DOGAMI Floodplain Supplemental Form may be required to be submitted with this application.**

Are there any known wetlands or wetland like features present within or adjacent to the proposed permit boundary? ☐ unknown ☐ yes ☒ no

How did you evaluate the site or otherwise determine if the site may contain wetlands?

- ☐ National Wetland Inventory (NWI) Map
- ☐ local wetland survey
- ☒ wetland delineation
- ☐ Environmental Impact Statement (EIS)
- ☐ stream gage data
- ☐ county soil surveys
- ☐ FEMA flood insurance rate map
- ☐ USGS quadrangle map
- ☐ other topographic map of the area
- ☐ local land use department
- ☐ other: _____
- ☐ other: _____

What is the general type of wetland found within the site?

- ☐ tidal
- ☐ freshwater forested
- ☐ shrub wetland
- ☐ bog
- ☐ fen
- ☐ freshwater springs
- ☐ freshwater emergent
- ☐ swamp
- ☐ geothermal
- ☐ alpine
- ☐ marsh
- ☐ human made
- ☐ other: _____
- ☐ other: _____
- ☒ none
- ☐ vernal pools

Section 3: Studies, Reports and Analyses

Has a Wetland Delineation been completed? ☒ yes ☐ no

If yes: A wetland delineation report including the following is attached:

- ☐ topography
- ☐ plant communities
- ☐ soils mapped and found
- ☐ hydrology information
- ☐ existing wetland mapping
- ☐ field data sheets
- ☒ types of wetlands identified
- ☒ aerial photography
- ☐ data collection point map
- ☒ evaluation area map
- ☐ other: _____
- ☐ other: _____

Has the wetland delineation been submitted to Department of State Lands (DSL) for concurrence? ☒ yes ☐ no

If yes: Provide DSL Concurrence # **WD #2018-0115**

If no: Explain:

Has the wetland delineation been submitted to the Army Corps of Engineers for concurrence? ☐ yes ☒ no

If yes: Provide USACE Concurrence #

If no: Explain: **Not submitted to USACE (no federal jurisdiction)**

Will any streams, creeks, or drainages be excavated, filled or relocated? ☒ yes ☐ no

Is the planned surface mining operation proposing to impact jurisdictional wetlands? ☒ not applicable* ☐ yes ☐ no

If yes: Has a DSL permit been ☐ applied for ☐ obtained ☐ yes ☐ no

If yes: Please attach approved permit, application or File#.

*No jurisdictional wetlands were identified during the delineation

Section 4: Mapping

Is a high resolution topographic or lidar map of the existing conditions and surrounding lands at an appropriate scale available? If yes: Please attach **See Figures 1 and 2** ☒ yes ☐ no

Is a soil survey map delineating the hydric soils attached? ☒ not applicable (no wetlands were identified during the delineation) ☐ yes ☐ no

Has any of the following information been mapped? If yes: Please attach ☒ yes ☐ no

	☐ plant communities	☐ soils mapped and found	☐ hydrology information
☐ existing wetland mapping	☐ field data sheets	☒ types of wetlands identified	☒ aerial photography
☐ data collection point map	☒ evaluation area map	☒ proposed permit boundary	☐ other: _____

Section 5: Mining Information

The maximum depth of proposed mining is: **3,675** feet: ☒ relative to mean sea level ☐ below original ground surface ☐ unknown

The site will be mined: ☐ wet ☒ dry ☐ both

Describe all proposed mining methods (e.g. drilling and blasting, ripping and loading, etc.): **Ripping and Loading**

Will mining/excavation operations be sequenced/phased? ☐ yes ☒ no

If yes: Attach map.

Is dewatering necessary or proposed for the excavation operations? ☐ yes ☒ no

If yes, a DOGAMI Groundwater Supplemental Form is required to be submitted with this application, and a DEQ National Pollution Discharge Elimination System (NPDES) Permit may be required.

Check all proposed on-site activities that apply:

☒ excavation	☐ filling	☒ grading
☐ crushing	☐ stockpiling	☐ washing
☐ material recycling	☐ other: _____	☐ other: _____

If applicable, will all interim and final *in-water* cut-slopes be constructed at sloping configurations of 3H:1V or flatter to a minimum depth of six feet below the low-water level of the pond(s)? ☐ yes ☐ no

If no: What will be the final sloping configuration of the *in-water* slopes? _____H:_____V (e.g. 5H:1V)

Per ORS 632-030-0027(3)(f): final above-water fill slopes can only be placed over cut slopes that are 3H:1V, or flatter, unless the Department agrees in writing to a different ratio based on a determination that the flood potential is very low.

Wetland Assessments and Reports

The scope of information required by DOGAMI will be based on site specific characteristics, the scale and configuration of the proposed mining operation, and the proposed reclamation plan. It is important to note that many mining operations require other state and federal permits; therefore, DOGAMI highly recommends a pre-application consultation and site visit with the applicable natural resource agencies be conducted, if possible. DOGAMI can only issue an Operating Permit if all required state, federal, and local government approvals have been obtained, otherwise a Provisional Operating Permit will be issued. All data collection and analysis techniques should be coordinated in advance with DOGAMI's Floodplain Reclamationist (Vaughn Balzer 541-967-2082; vaughn.balzer@oregon.gov).

Please note that DOGAMI will review the information presented in the completed form above to determine if additional reports, studies, maps and/or analysis are required for the proposed surface mining operations. Information required may include:

1. Preliminary data collection and synthesis.
2. Historic aerial photographs and surveys, including topographic and inventory maps.
3. County soil survey maps and site specific hydric soil characteristics, profiles, and classifications.
4. Site hydrology; including annual groundwater fluctuations, inundated or saturated soil conditions, precipitation, stratigraphy, soil permeability, and plant cover.
5. A description of hydrophytic vegetation, including classification and prevalence.
6. Indicators of wetland hydrology, including drainage patterns, drift lines, sediment deposition, water marks, stream gage data, historic records, and visual observations.