

# EXHIBIT L – RECLAMATION COSTS

## SECTIONS 1 AND 2

All information necessary to calculate the costs of reclamation must be submitted and broken down into the various major phases of reclamation. The information provided by the Operator/Applicant must be sufficient to calculate the cost of reclamation that would be incurred by the state.

The Office may request the Operator/Applicant to provide additional, reasonable data to substantiate said Operator/Applicant's estimate of the cost of reclamation for all Affected Lands.

## SUMMARY OF RECLAMATION COSTS, PARAMETERS, AND APPROACH

This reclamation cost estimate has been completed for the worst-case scenario for reclamation in the event of the default of current ongoing operations. This Exhibit L reflects the July 2025 site conditions, which were used as the basis for the Financial Warranty update that was approved by the DRMS on July 8, 2025; site conditions have not materially changed since the approval of the updated Financial Warranty. The supporting material and approval letter from the DRMS for the updated Financial Warranty from \$431,000 to \$2,571,871 are included as attachments.

A summary of project costs is presented below. Costs are separated into operational tasks (direct costs – Table 1) and insurance, bonding, project management, engineering, legal, and administration (indirect costs – Table 2). Indirect costs are calculated as a percentage of either the direct costs or the number of hours to complete tasks.

Table 1. Reclamation Direct Cost Summary

Task	Cost
<b>DIRECT COSTS</b>	
Tract A: Dewater pond - initial pumping	\$426,422
Tract A: Dewater pond - continual pumping	\$12,367
Tract A: Grade slope under liner	\$54,070
Tract A: Rip source material for liner	\$10,369
Tract A: Haul liner and backfill material from Tract A source	\$131,906
Tract A: Mix material for liner	\$33,881
Tract A: Compact liner	\$16,762
Tract B: Push sand stockpile into pit	\$211,774
Tract B: Haul backfill material from Tract A source to pit and pond	\$162,485
Tract C: Haul backfill material from Tract A source to pond	\$584,644
Tract D: Haul backfill material from Tract A source	\$17,674
Haul topsoil to all disturbed areas	\$111,190



Seed all disturbed areas	\$313,006
Demo and remove concrete and conveyor	\$324,612
Mobilization and Demobilization	\$11,154
<b>SUBTOTAL DIRECT COSTS:</b>	<b>\$1,983,797</b>

**Table 2. Reclamation Indirect Cost Summary**

Item	Percentage of [Cost/Hours]	Cost
<b>INDIRECT COSTS – OVERHEAD AND PROFIT</b>		
Liability Insurance	2.02% [DC]	\$40,073
Performance Bond	1.05% [DC]	\$20,830
Job Superintendent	50% [Total Job Hours]*	\$56,103
Profit	10% [DC]	\$198,380
<b>INDIRECT COSTS – LEGAL, ENGINEERING, PROJECT MANAGEMENT</b>		
Financial Warranty Processing (legal)	N/A	\$500
Engineering/contract/bid	4.25% [DC + O&P]	\$97,715
Reclamation Mgmt/Admin	4.5% [DC + O&P]	\$114,959
Contingency	3% [DC]	\$59,514
<b>SUBTOTAL INDIRECT COSTS:</b>		<b>\$588,074</b>

\*Job hours for this project are estimated at 1415 hrs, with a superintendent hourly rate of \$79.27, based on the September 2024 DRMS Cost Estimate for the P124 Two Rivers (M2022-013) project

**A rider for the Revised Grand Total Financial Warranty Amount – \$2,571,871 – was accepted by the DRMS in a letter dated July 29, 2025, which is attached to this Exhibit.**

For future reference, the ultimate project dimensions that will be used at the end of the current projected Life of Mine are summarized in Table 3.



Table 3. Total Proposed Affected Lands and Reclaimed Features Measurements

Entity	Tract A	Tract B	Tract C	Tract D	Combined
Extraction – finished basin (Acres)	132.9	N/A	N/A	N/A	132.9
Static Water Area – surface (Acres)	93.6	N/A	N/A	N/A	
Static Water Area – elevation (ft.)	4793	N/A	N/A	N/A	-
Basin Lands Above Static Water Level (Acres)	39.3	N/A	N/A	N/A	39.3
Basin Area Volume (cu.yds.)	5,018,171	N/A	N/A	N/A	5,018,171
Static Water Level Volume (Gallons)	1,013,540,070	N/A	N/A	N/A	1,013,540,070
Static Water Level Volume (Acre Feet)	3,110.4	N/A	N/A	N/A	3,110.4

**NOTE:** All lands within the 213.5± acre permit area are considered as affected lands under C.R.S. 34-32.5-103(1) respective of this permit application and any subsequent permit revisions or amendments to the permit as originally approved. Previously affected ground prior to the onset of Operations under this permit will not be reclaimed under the terms of this permit unless otherwise re-affected beyond their original state. Public Lands and other easements and rights-of-way are offset from operations and while they may fall within the 213.5± acre parcel – are excepted from the permit conditions to the extent of their approved setbacks.

The following estimates use assumptions based upon the current condition of the site as of July 2025 for purposes of determining estimated costs of reclamation and correlated financial warranty. Where appropriate, information is generalized and approximated from similar estimates determined by the Division of Reclamation, Mining and Safety (DRMS), as indicated.

Based upon the Extraction and Reclamation Plans of this application, the status and trend of activities and affected land, and related calculations to estimate reclamation liability, are determined as follows.

Please Note: Due to the difficulty of calculating heavy equipment costs similar to the Division's software program, unit costs from previous and reasonably current Division estimates of like or similar kind have been used to create a reasonably close estimate. The per unit basis from Division records are shown in the calculation tables throughout this Exhibit.

The Kurtz (P115) permit, #M-1999-006, is currently serving primarily as a central processing facility for sand and gravel extracted primarily from the adjacent Raptor Materials, Parcel 122 – Bearson Resource Development Project (DRMS Permit #M-2015-033) and intended in the future to process material from an adjacent property currently being permitted (Cogburn Sand, Gravel, and Reservoir Project, (DRMS Permit #M-2025-016). In addition, some material remains to be extracted and processed from the Kurtz permit area. The permit has 4 separate areas identified as Tracts A, B, C, and D labelled on map Exhibit C-2.

**Please note:** The graphic representation of Tracts in Exhibit C-2, which was updated in October 2025, may vary slightly from the July 2025 conditions used for calculation of the Financial Warranty. However, as



extraction activities are currently minimal and reclamation has continued since the time of the Financial Warranty calculation, the bond required to reclaim the site is expected to be equal to or less than the amount presented here within. Annual Reports will report on the nature and extent of affected lands and more properly reflect actual conditions on the ground in a given year of operations.

Tract A is an extraction area where a minor amount of material remains to be extracted. Tract A excavation will be reclaimed as a lined water storage reservoir. Much (~70%) of the Tract A excavation has been regraded and lined with this post mining land use in mind.

Tract B currently contains the dry processing plant with the wet processing plant currently situated in the northwest corner of Tract A. Material from the south adjacent Bearson permit (M-2015-033) is delivered to this area via a conveyor belt. Product stockpiles, including a large sand pile (approximately 200,000 cubic yards) exist in various locations within Tract B. Minor excavation is ongoing in Tract B and these excavations are proposed to be backfilled to no longer expose ground water as part of final reclamation.

Tract C contains an excavation currently being backfilled to no longer expose groundwater; backfilling is proposed to continue until groundwater is no longer exposed.

Tract D has minor excavations remaining to be backfilled to no longer expose groundwater. This area is currently in active use as part of the construction of a water pipeline by the City of Thornton.

A general approach to reclamation of the operation left in its current state assumes:

1. Tract A excavation will fill with water and require dewatering to complete grading and liner construction. A significant amount of fill material has been stored in the Tract A excavation and this will be used in backfilling excavations in Tracts B, C, and D to ensure groundwater is no longer exposed. Existing ponds in Tract A will be backfilled unless they can be shown to satisfy the State Engineer requirements for lined storage.
2. The large sand pile in Tract B will be pushed using tracked dozers into adjacent existing excavations. Additional fill material to ensure groundwater is no longer exposed will be sourced from Tract A.
3. The exposed groundwater in Tracts C and D will be eliminated through backfilling of those areas.
4. Topsoil is currently being stored on the adjacent Bearson property (DRMS Permit M-2015-033) and will be conveyed using the existing conveyor to Tract B from where it will be distributed to all areas of the Kurtz permit to a depth of six inches.
5. The conveyor will be removed and while likely to have salvage value greater than the cost of recovery, a cost has been included in the estimate for removal.
6. The processing plant is all portable equipment and is conservatively assumed to be salvaged with no residual value.
7. Other items including truck scales, concrete pads and small structures will be removed.

Estimates of the work required to complete the above reclamation of the Kurtz operation include material properties, material quantities, and material transport distances. Equipment productivity and fleet requirements are generally based on Cat Handbook and in some cases supported by previous DRMS methodology. The physical quantities and equipment requirements support cost estimates using rates either from recent DRMS reclamation cost estimates prepared in CIRCES, or other sources as noted.

Raptor will update this Exhibit L, the reclamation cost estimate, and any other exhibits as required for purposes of determining financial warranty prior to final reclamation if the reclamation plan deviates materially from that described herein.



In the following breakdown of components for estimating reclamation cost, various approaches to obtain the necessary quantities exist, but Raptor believes the approaches and quantities are reasonable and alternate approaches would be no more certain as to the accuracy obtained. This is simply due to the variable nature of the deposit and the need to field-fit the excavation to ensure safety in the conditions encountered.

## DEWATERING

At the time of reclamation, areas with exposed groundwater in Tracts B, C, and D will be backfilled and therefore will not require dewatering. Tract A will recharge to the static water level and will require dewatering to complete grading and liner construction. The reservoir volume for Tract A for the current condition was calculated using a 3D computer-aided design (CAD) program using the stage-storage curves for the static water surface elevation (WSEL) listed in Table 3. Determination of the static WSEL is detailed in Exhibit D – Extraction Plan.

Table 4. Initial Dewatering Cost Estimate

Pit	Reservoir Vol (WSEL = 4,793') [gal]	Unit Discharge Cost [\$]	Total Job Cost [\$]
Tract A	1,013,540,070	\$0.000421	\$426,422

Following initial dewatering, a 25-day dewatering need was assumed for completion of lining and regrading. A 25-day continuous dewatering volume was calculated based on the individual pit inflow estimate provided in the AWES Dewatering Estimate memo dated October 28, 2024 (attached as an addendum) for the P125B pit at the adjacent Cogburn (DRMS Permit M-2025-016) site. Inflow to the Cogburn P125B pit was calculated per linear foot; this same inflow rate per linear foot was applied to the Kurtz Tract A pit. As Tract A is currently partially reclaimed (~70%), inflow was reduced proportionally to the length of pit wall that is currently exposed, representing the worst-case scenario for inflow.

Table 5. 30-Day Continuous Dewatering Cost Estimate

Pit	Inflow [MGD]	Pit wall length [ft]	Pit wall length exposed [ft]	% of Tot Inflow	Inflow over 25 days [gal]
Tract A	3.89	10,680	2,535	23.74	23,062,846
Unit Cost:					\$0.000536
Total Job Cost:					\$12,367

The total dewatering cost (initial plus continuous) is estimated at \$438,790.

During dewatering, the basins will be lined or otherwise segregated from the area groundwater, to liberate the water otherwise retained to supplement loss from evaporation in the unlined state.

## LINER

At the time of reclamation, liner will have been keyed into at least 70% of the base of the Tract A side walls and installed up to the ground surface, as detailed in Exhibit E – Reclamation Plan. Any areas below static water surface elevation in Tracts B, C, and D will be backfilled. Liner installation was separated into five stages for



the purposes of cost estimation: grading the slope under the liner, ripping the liner source material, hauling liner material to the pit area, mixing material for the liner, and compacting the liner.

The surface required to be regraded was assumed to be from either the base of the pit where no liner exists, or above the existing base liner where installed, to the top of the pit wall, at a thickness of 1 foot. Additional liner material not already accounted for either in stockpiled material or as an existing liner in Tract A will be ripped from the base of Tract A. Liner material was assumed to be installed at a thickness of 4 feet on the slope with a 4-foot-by-4-foot keyway where applicable to the height of the existing ground surface. Half of the liner material was estimated to require mixing; all the liner material was assumed to require compaction.

Surface areas for wall to be regraded and liner installation were measured based on the above-described mining plan, further detailed in Exhibit D – Mining Plan, for the current condition surface in a 3D CAD program. Keyway was estimated to be required for all wall lengths requiring lining; these sections are indicated on the attached Kurtz Project 2024-2025 Annual Report map. As material is expected to expand during grading and mixing, a swell factor was applied to these volumes. Likewise, a shrinkage factor was applied to the material volume for compaction. Calculation of the regrade and liner material volumes required for reclamation is presented in Table 6 below.

Table 6. Regrade and Liner Volume Calculations

Activity	Wall Area [sq.ft]	Wall Depth [ft]	Keyway Length [ft]	XS Keyway Area [sq.ft]	Material Vol [cu.ft]	Material Vol [cu.yd]
Regrade	407,667	1	N/A	N/A	2,983,500	110,500
Liner	252,824	4	2,535	16	1,011,296	37,455

Haul distance was calculated as a weighted average of the of the distances from the liner source to the liner installation and backfill areas for Tract A. The source deposits contain extensive materials suitable for use in constructing the liner including shale, claystone, clay, sandstone-claystone-siltstone and sandstone-siltstone bedrock, clay lenses in the sand and gravel deposit, and overburden often comprised of low plasticity sandy silty clay to silty sand. Excess topsoil has also been successfully used as a liner construction material and could be used if excess material is available.

Typical liner installation as described in Exhibit E – Reclamation Plan is shown on Figure 1 below, which indicates dimensions used in the calculation of regrade area and liner and backfill volumes for this cost estimate.



## Typical Liner and Regrade for Extraction Limit Wall – Final Reclamation

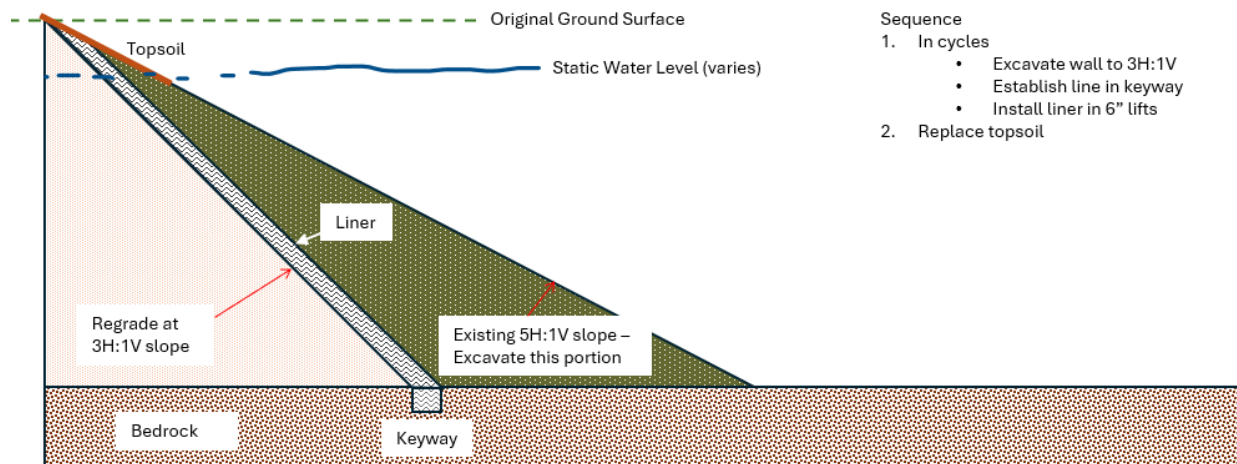


Figure 1. Typical Fully Reclaimed Liner and Backfill Construction

Calculations for the individual lining component costs are provided in Table 7 below. Unit costs were derived from the total cost, which was based on fleet production and rates for the calculated volumes, which were taken from the recent DRMS-provided P124 Two Rivers (M2022-013) cost estimate.

Table 7. Tract A Reclamation Liner Installation and Pond Backfill Cost Estimate

Activity	Initial Vol [cu.yd]	Swell/ Compaction Factor	Loose/ Compacted Vol [cu.yd]	Unit Cost	Unit	Total Job Cost
Grade	110,500	1.12	123,760	\$0.437	cu.yd	\$54,070
Rip	78,992	N/A	N/A	\$556.28	acre	\$10,639
Haul	126,621	1.00	126,621	\$1.042	cu.yd	\$131,906
Mix	63,311	1.163	73,599	\$0.460	cu.yd	\$33,881
Compact	126,621	0.91	115,225	\$0.145	cu.yd	\$16,762
Total Liner Cost:						\$247,258

### BACKFILL

In the current condition groundwater is exposed in Tracts B and D in active areas of fill and excavation. Additionally, unlined groundwater ponds in inactive area are present in Tracts A and C. All of these areas will be backfilled as part of the reclamation plan. The standing groundwater within the active extraction area of Tract A is within the area currently being lined and is planned for reclaimed use as a lined reservoir. Backfill was assumed to be hauled from the source area and progressively placed in the areas of exposed groundwater, with compaction achieved through the tracking of heavy equipment over the backfill and through weight of the backfill itself.



Surfaces were created for the existing and reclaimed conditions in a 3D CAD program for all tracts; backfill volume required for reclamation was determined to be the difference between these two surface volumes.

Backfill for all tracts will be achieved using the source material area within Tract A, with the exception of Tract B, which will achieve the majority of its backfill through pushing the existing sand pile into the adjacent pit. Haul distances are illustrated in the attached quantities supplement. Material hauled for backfill has already been excavated and therefore has not been assigned a swell factor for cost estimating purposes. The backfill concepts for lined walls in Tract A is portrayed in Figure 1 in the preceding subsection: Liner; backfill for the Tract A ponds was also accounted for in the previous section. The cost estimate for backfilling Tracts A, B, and C, summarized in Table 6 below, is, similar to the liner cost estimate, based on fleet production and rates for the calculated volumes, which were used to derive unit costs from the total backfill cost.

Table 8. Reclamation Backfill Cost Estimate

Activity	Tract	Initial Vol [cu.yd]	Unit Cost [\$ /cu.yd]	Total Job Cost
Haul Backfill	B	135,844	\$1.196	\$162,485
	C	317,211	\$1.843	\$584,644
	D	12,485	\$1.416	\$17,674
Push Sand	B	202,613	\$1.045	\$211,774
Total Backfill Cost:				\$976,577

## TOPSOIL

Topsoil will be applied to the cut basin slopes remaining above the static water level for pits reclaimed as reservoirs (Tract A) and to the entirety of the currently disturbed surface and areas of proposed backfill for Tracts B, C, and D. Topsoil will be placed at a depth of approximately 6 inches over both even ground and cut slopes and seeded with a cover of stabilizing vegetation, as detailed in Exhibit E – Reclamation Plan. Current disturbed surfaces in all tracts were measured from aerial imagery from a June 2025 drone flight. The cut slope surface area above the static WSEL was calculated from the Tract A reclaimed surface in a 3D CAD program.

Topsoil is currently being stored on the adjacent Bearson property (DRMS Permit M-2015-033) and will be conveyed using the existing conveyor to Tract B from where it will be distributed to all areas of the Kurtz permit to a depth of six inches.

Topsoil application was assumed to be covered under a hauling task, which is based on the haul distances from the topsoil stockpile location to the average application area for each tract. Topsoil is expected to swell during conveyor transport to its stockpile location, where it is proposed to be hauled soon thereafter for placement; therefore, no additional swell factor was applied for cost estimating purposes. Similar to backfill costs, topsoil hauling costs were based on fleet production and rates taken from the recent DRMS-provided P124 Two Rivers (M2022-013) cost estimate for the calculated volumes, which were used to derive unit costs from the total haul cost. The average haul route distances from the conveyor deposit area to each of the Tracts is documented in the attached quantities supplement.





Table 9. Topsoil Application Cost Estimate

Activity	Tract A [sf]	Tract B [sf]	Tract C [sf]	Tract D [sf]	Topsoil Depth [ft]	Initial Total Vol [cu.yd]	Unit Cost [\$/cu.yd]	Total Job Cost
Haul	1,711,908	2,269,476	527,076	466,092	0.5	92,121	\$1.207	\$111,190

## REVEGETATION

Revegetation will occur following placement of topsoil on disturbed areas remaining at the time of reclamation. As described in the above subsection, Topsoil, all disturbed areas remaining at the time of reclamation, including currently disturbed ground surface, current areas of groundwater to be backfilled, and reservoir slopes above the static groundwater level in the Tract A lined water storage, will be revegetated. Seeding will therefore occur over the same exposed area as described in more detail in Exhibit E – Reclamation Plan, and according to seed mixes and application methods presented in Table L, attached as an addendum to this Exhibit.

The cost estimate for revegetation, which assumes a 25% initial failure rate that will require re-seeding, is based on labor and machinery unit costs taken from the recent DRMS-provided P124 Two Rivers (M2022-013) cost estimate, and materials unit costs provided by Great Basin Seed<sup>1</sup>, and is presented in Table 10 below. This unit cost includes the cost of seed and fertilizer, their application, tilling, mulching, and nursery stock planting. Please note that seed costs are known to fluctuate seasonally and may vary noticeably from the unit cost used here.

Table 10. Revegetation Cost Estimate

Tract	Total Disturbed Area [ac]	Estimated Failure Rate	Initial + Reseeding Area [ac]	Seed Cost/Acre	Total Job Cost
All	114.2	25%	142.8	\$2,740.86	\$313,006

## CONVEYOR DECOMMISSIONING

An elevated conveyor currently transports raw material from the south adjacent Bearson property (DRMS Permit #M-2015-033) to be processed at the wet plant located on the Kurtz site's Tract B. This conveyor will be used during reclamation to transport topsoil stockpiled on the Bearson site to the Kurtz property. The conveyor, installed in modular 40-foot sections, is portable and will be decommissioned and transported offsite for use elsewhere following site reclamation. The span of conveyor to be removed starts at the south end at the bridge that spans County Road 28 and includes all conveyor segments on the Kurtz property, for an estimated total of 4,620 linear feet. Decommissioning will involve conveyor sections and belting, and demolition and on-site disposal of its supporting concrete blocks.

A cost estimate of \$269,000 for conveyor decommissioning was provided by Divide Construction in June 2025 and is attached to this Exhibit.

<sup>1</sup> <https://greatbasinseeds.com/>



## MOBILIZATION AND DEMOBILIZATION

Mobilization and demobilization costs are based upon the Division's estimates, which are pending – but estimated in the summary at the beginning of this Exhibit L at \$11,154.

## DEMOLITION OF STRUCTURES

Table 11 lists on-site structures that are proposed to be removed to return the site to a reclaimed condition. The weigh station at the north site entrance contains truck scales with concrete pads and wingwalls, as well as a scale house with a concrete foundation. A materials storage area in the western portion of Tract A contains a Quonset hut and 10,000-gallon fuel tank, both with concrete pads. Concrete culverts have been temporarily stored in the southern portion of the Tract C pond and would be removed as part of reclamation.

Cost estimates for all structures were taken from the CDOT 2025 Cost Data Book, with the exception of the 10,000-gallon tank removal, which used as a basis the 2024 Eagle-Gypsum Mine (DRMS Permit #M-1984-041) financial warranty cost estimate.

Table 11. Structure Demolition or Removal Cost Estimate

Tract	Structure	Dimensions	Quantity	Unit	Unit Cost	Total Cost
B	Wingwalls	5 x 25' at Truck Scales	125.00	LF	\$148.74	\$18,592
A, B	Concrete Pads	Quonset Hut: 267 SY Fuel Tank: 21 SY Truck Scale 1: 101 SY Truck Scale 2: 72 SY Scale House: 16 SY	376.00	SY	\$124.15	\$46,680
A	Quonset Hut	60' x 40'	1.00	EA	\$11466.74	\$11,467
C	Culverts	8'L x 2.5'-5'D RCP	300.00	LF	\$57.25	\$17,176
A	Fuel tank	10,000 gallons	1.00	EA	\$1,000.00	\$1,000
Total Demolition Cost:						\$94,915

**Please Note:** Since there is no possibility of the applicant in fully reproducing the Division's methods, using similarities from past DRMS calculations is the most viable and accurate means available for the applicant to derive reasonable estimates of per unit costs and should result in estimates very reliable with that of the Division.

