Climax Molybdenum
A Freeport-McMoRan Company

COLORADO OPERATIONS
Henderson Mine
1746 County Road 202
Empire, CO 80438
Phone (303) 569-3221

December 30, 2024

Via Email

Ms. Nikie Gagnon
State of Colorado
Division of Reclamation, Mining and Safety
1313 Sherman St., Rm. 215
Denver, CO 80203

Re: Reclamation Cost Estimate Update - Climax Molybdenum Company, Henderson Operations, Permit No. M-1977-342

Dear Ms. Gagnon:

Climax Molybdenum Company, Henderson Operations is providing the enclosed 2024 Reclamation Cost Estimate update. This 2024 update increases the reclamation costs from approximately $171MM in the 2019 estimate to $271MM currently. The $100MM increase is primarily associated with:

- Updates to 2024 unit rates for Labor, Equipment, and Materials.
- Costs for water treatment, previously-approved by DRMS, have been updated according to the Building Cost Index and actual costs for operating the URAD water treatment plant.
- Costs are now included for site maintenance over a 30-year period, for reseeding 10% of the tailings storage facility and PC3 Overland Conveyor corridor, and for a 20% project contingency.
- Continued incremental increase in surface area of tailings storage facility through life of mine.

If you have any questions, please feel free to contact me at (720) 942-3255.

Sincerely,

Miguel Hamarat
Environmental Manager
Climax Molybdenum Company
Henderson Operations

Attachments:
1. 2024 Reclamation Cost Estimate Update

Climax Molybdenum Company – Henderson Mine & Mill
Permit M-1977-342
2024 Reclamation Cost Estimate Update

Table of Contents

1 General Reclamation Update

The Henderson Mine and Mill (Henderson) have been in operation for almost 50 years, and the facilities are near anticipated life of mine (LOM) buildout. This reclamation cost estimate update for Henderson continues to utilize all existing and anticipated new disturbances through the life of mine (LOM) as its basis, and includes water management and treatment.

The Henderson reclamation cost estimate includes the following key elements which have been evaluated for this update:

- LOM site conditions.
- Repurposed facilities, as approved previously by DRMS, remain unchanged as listed in Section 3.2.
- Current reclamation approaches have changed little for most facilities including access roads and reservoirs, utilities and utility corridors, yards and storage areas, demolition of buildings and superstructures, the Tailing Deposition Area (TDA), and for long-term water management and treatment in both the underground mine and at the Mill site.
- Updated unit rates, production calculations, and correction factors use past Henderson Mine and Mill project experience, DRMS previously-approved reclamation approaches, specific industry quotes, EquipmentWatch (2024), the Caterpillar Handbook (various editions), and RS Means (2024).
- Costs for the water treatment, previously-approved by DRMS, have been updated according to the higher Building Cost Index and actual costs for operating the URAD treatment plant.
- Costs are now included for site maintenance over a 30-year period, for reseeding 10% of the TDA and PC3 Overland Conveyor corridor, and for a project Contingency (Indirect Cost category).
- In accordance with previous cost updates, since material typically swells from bank to loose but then shrinks from loose to compacted at a greater rate, Henderson has conservatively assumed a swell factor of 1.0 for all earthmoving activities. Further, as experience has shown at the Henderson Mine and Mill, most often contractors utilize sideboards to better optimize hauled quantities and so the calculated production rates in the cost model using the final compacted (and regulatory-required) soil depths are considered conservative. Other Correction Factors have been applied to the spread specifics according to Caterpillar Handbook guidance and include those for Operator Experience, Material Consistency, Dozing Method, Spoil Pile Factor, Push Gradient, Altitude Duration, Weight Correction, Blade Type, and Job Efficiency.
- Similarly, the load-haul equipment set utilizes the previous and Henderson-proven partnership between the Caterpillar 938M Wheel Loader and the Caterpillar 740B Articulated Haul Truck. As shown on the attached specification sheets the bucket will fit comfortably over (up to 13.0 feet) and inside (11.0 feet, load over height) the bed of the 740B (10.6 feet) during the unloading activity.

In general, during the past 5 years, no new reclamation has been needed and little has changed to the LOM plan and so facilities have not been expanded beyond the footprints shown in the 2019 update. The slight increase to the affected land boundary to the east of 1-Dam which effectively straightened the boundary is shown on Figures 1 and 3.

2 Site Specific Reclamation Planning

As specified in previous permit submittals, specific reclamation strategies have been outlined for all areas of the Mine and Mill. The following narrative is provided to give a basis for the reclamation cost estimate, and is not intended to modify the reclamation requirements approved in the reclamation permit, as amended and revised. This narrative describes reclamation approaches for all areas including the Tailing Deposition Area (TDA), access roads and reservoirs, utilities and utility corridors, yards and storage areas, surface and underground pumping systems, shafts, and bulkhead construction. It also refers to the long-term strategy for site-wide water management and treatment, and for the demolition or repurposing of structures upon cessation of mining. Note that #2 shaft at the mine will be kept for access and intake air; #5 shaft for exhaust. The attached Figures 1 through 4 have been utilized as the basis for the proposed final reclamation design and illustrate the final facility layout with respect to post-mine land use.

2.1 Vent Shaft

Sealing and demolition of the Vent Shaft (aka #4 Shaft) to prevent long-term access is covered under Mine Site General Reclamation task. The Vent Shaft surface area will be revegetated by the broadcast seed method (approximately 1 acre).

2.2 Mine Site Demolition

Several structures at the Mine site not being repurposed post mining will no longer be required during the post-reclamation period and will be demolished. These structures include the Compressor Building, Plant Services Building, #1 Shaft, #1 Shaft Hoist House, #3 Shaft, #3 Shaft Heater Building, Aggregate Stacking Building and the building adjacent to it, Batch Plant, Bulk Oil Storage Building and the building adjacent to the Used Oil Tank, the Fan Control/Switchgear Building, and the Natural Gas Building. Additionally, there will be a significant amount of asphalt to be demolished across roadways and parking areas. To the extent possible, the salvageable and recyclable materials obtained from these structures and facilities will be retrieved and sold, or recycled, and so a corresponding direct cost credit will apply against the site's closure cost (but not included in this estimate).

Material that is not retrievable or practicably recycled will be disposed of by burial. Buried pipe, wire, etc. will be left in place during reclamation if it does not interfere with regrading activities and is non-toxic or not hazardous. Foundations deeper than 3 feet from the reclaimed surface that will not interfere with regrading activities will also be left in place. Concrete floors, walls, equipment pedestals, and foundations which are at or near grade will be pulverized in place and buried as part of the mass regrade and revegetation which is included under the Mine Site General Reclamation task described below in Section 2.3.

2.3 Mine Site General Reclamation

The surface area at the Mine site will be regraded and reclaimed, including 3 ponds (Ponds 1, 1.1, 1.2), the roads and parking areas, and culverts and drainage channels. Additionally, 3 shafts (Shafts 1, 3, 4) will be permanently sealed with structural plugs. The total area of disturbance to be reclaimed will be approximately 100 acres. Total earthmoving associated with the Mine site reclamation will exceed 500,000 cy. Seeding and signage will complete the reclamation activity. Finally, 5 monitoring wells will be plugged and abandoned.

2.4 Portal Area

The portal area will be reclaimed in accordance with a standard regrading and revegetation approach. Regrading of the portal will incorporate both ripping (approximately 100,000 cy) to allow for long-term, stable slopes and regrading of the general area (approximately 33,000 cy). This will be followed with revegetation by drill seeding and the planting of trees and shrubs over 25 acres.

2.5 Conveyor Access Road

Roads not to be retained for post-mining land use will be reclaimed after they are no longer needed for mining and reclamation purposes. As such, and following demolition of the conveyor and associated infrastructure (covered under the Mill Site Demo task), the Conveyor Access Road will be regraded (approximately 116,000 cy) to blend with the adjacent terrain and to meet natural drainage patterns.

Following regrading, the disturbed area will be revegetated by the drill seed method and plants and trees will be planted across approximately 110 acres.

2.6 Mill Yard and Access Road

The Mill Yard and Access Road will be regraded and reclaimed. As such, and following demolition of the Mill buildings and associated infrastructure (covered under the Mill Site Demo task), the Mill Yard and (site) Access Road will be regraded (approximately 182,000 cy and 60,000 cy, respectively) to blend with the adjacent terrain and to meet natural drainage patterns. Following regrading, the disturbed area of over 120 acres will be revegetated by the drill seed method and plants and trees will be planted.

2.7 East Branch, Horseshoe and Ute Creek Reservoirs

The East Branch Reservoir is currently used for reclaim water storage, but it will be reclaimed after it is no longer needed for production operations and converted to a fresh water reservoir. Final reclamation will involve excavation of up to 20,000 cy of sediment. For all 3 reservoirs, it is anticipated that a nominal amount of maintenance fertilization will be required for the access roads to the facilities, approximately 5 acres total.

2.8 Tailing Deposition Area

The TDA will be reclaimed when it is no longer required for production operations using a dry cover. The entire top surface will be capped and revegetated.

The borrow areas, roads, and tailing dams will be regraded. Additional fill may be required for the tailing impoundment to account for any settlement. Rock armor will be placed over the embankment/dam area, as required. A new spillway will be excavated through native ground to the north which will drain to Ranger Gulch or down the left tailing dam abutment.

The dry beach area, 1Dam, and 3Dam will be capped with a minimum of 24 inches of cover material over 878 acres for a total of approximately 2,833,000 cy. The wet slimes and pond footprint (wet beach) area will be capped with a multi-layer system likely to include a geogrid layer under a minimum of 24 inches of cover material over 542 acres for a total of approximately 1,749,000 cy. The two dams will also receive a 12 inch rock cover over the soil medium to mitigate erosion. All reclaimed areas (1,420 acres) will be hydroseeded and trees and shrubs will be planted.

Additional reclamation tasks include the construction of an inlet structure for the new spillway and removal of the barge and its associated systems. Diversion channels will be constructed to convey stormwater around and off the reclaimed top surface of the TDA. The diversion channels will include nonwoven geotextile and riprap liners. The Ultimate Canal will likely remain post closure to assist with the diversion of large stormwater events around the reclaimed TDA.

The 4 tasks for which lump sum costs were previously approved by DRMS (spillway inlet structure, barge relocation, embankment rock cover, bench channels) have each been escalated consistent with other reclamation activities and unit rates according to the CPI, approximately 4% per year or 22% overall since the previous closure cost model update.

2.9 Main Gravel Pit below 1-Dam

The gravel pit below 1-Dam will be reclaimed in accordance with a standard regrade, cover and revegetation approach. Regrading of the quarry will result in slopes no steeper than 2H:1V with some areas considerably less steep, for a total of approximately 64,000 cy. This will be followed by the haulage and placement of approximately 15,000 cy of topsoil. Revegetation by drill seeding and the planting of trees and shrubs will occur over the 40-acre footprint.

2.10 Laydown Yard at Rectifier 6

The Laydown Yard at Rectifier 6 will be reclaimed in accordance with a standard regrade and revegetation approach. Regrading of the yard will require a total quantity of approximately 27,000 cy. This will be followed with revegetation of the regraded surface by drill seeding and the planting of trees and shrubs over the 5-acre footprint.

2.11 Mill Site Demolition

Structures at the Mill site not to be used post mining will no longer be required during the post-reclamation period and will be demolished. These structures include the Primary Conveyor 2 (PC2)/PC3 Transfer Building, PC3/SC1 Transfer Building, Conveyor (Loci) Maintenance Shop, Tailing and Transportation Building, Mill Building, Ore Storage and Conveyor Terminus, Concentrate Thickener, Mobile Equipment Shop, Nokes Storage Building, Acid House, Hazardous Waste/Flammables Building, Bulk Storage Warehouse, Truck Scale Building, Electric Switchgear Building, Sewage Treatment Building, Process and Potable Water Tanks, Topsoil Shop, Tailing Operations/Maintenance Shop, Ute Park Pump Station, East Branch Pump Station, West Portal Building, Rectifier Station 5, Power Line Spurs and Lighting, Williams Fork and South Williams Fork bridges, Tailing Distribution System including Drop Towers, and the Overland Conveyor Superstructure. Additionally, there will be a significant amount of asphalt to be demolished across roadways and parking areas. To the extent possible, the salvageable and recyclable materials obtained from these structures and facilities will be retrieved and sold, or recycled, and so a corresponding direct cost credit will apply against the site's closure cost (but not included in this estimate).

Material that is not retrievable or practicably recycled will be disposed of by burial. Buried pipe, wire, etc. will be left in place during reclamation if it does not interfere with regrading activities and is non-toxic or not hazardous. Foundations deeper than 3 feet from the reclaimed surface that will not interfere with regrading activities will also be left in place. Concrete floors, walls, equipment pedestals, and foundations which are at or near grade will be pulverized in place and buried as part of the mass regrade and revegetation which is included under the Mill Yard and Access Road task described above in Section 2.6, amongst others.

2.12 Williams Fork Pump System

The Williams Fork Pump System will remain post closure for continuation of water management. However, a limited amount of basic reclamation will be required at closure of the Mill site to include approximately 5,000 cy of regrading and up to 8 acres of revegetation.

2.13 Tailings Line and Power Line

Several linear facilities at Henderson will not be needed following cessation of production operations. These include the tailings pipeline and power line alignments. Following facility demolition (covered under the Mill Site Demo task), disturbed footprints will be regraded and revegetated. Up to 56,000 cy of regrading is anticipated for these alignments and 50 acres of reclaimed area will be drill seeded, planted with trees and shrubs and/or applied with maintenance fertilizer.

2.14 Tailing Facility Structures

Reclamation at the Tailing Operations/Maintenance Shop, Topsoil Shop, Pump Station, etc. will involve regrading and revegetation (demolition of these structures is included in the Mill Site Demolition section). Up to 52,000 cy of regrading is anticipated and 14 acres of regraded area will be drill seeded, planted with trees and shrubs and/or applied with maintenance fertilizer. Demolition of these facilities is included in Mill Site Demo. Finally, 35 MLGW monitoring wells, 15 THP monitoring wells along the old extraction wellfield line, 7 MLEX interceptor wells, and 9 HMEX extraction wells from the old extraction wellfield line will be plugged and abandoned.

2.15 Mill Water Return Pipeline

The Mill Water Return Pipeline and Access Road alignments will be reclaimed involving the regrading of approximately 18,000 cy and 32,000 cy of material, respectively, followed with revegetation by the drill seed method and the planting of trees and shrubs on up to approximately 31 acres.

2.16 Topsoil Stockpiles and Haul Roads

Again, haul roads not to be retained for post-mining land use will be reclaimed after they are no longer needed for reclamation purposes. As such, and following depletion of the topsoil stockpiles, the haul roads and stockpile footprints will be reclaimed. Reclamation will involve regrading of up to approximately 160,000 cy followed with revegetation by the drill seed method and the planting of trees and shrubs on up to approximately 50 acres of total reclaimed surface.

2.17 PC3 Overland Surface Conveyor

In line with the Conveyor Access Road task and following demolition of the conveyor and associated infrastructure (covered under the Mill Site Demo task), the PC3 overland surface conveyor corridor will be reclaimed. The corridor for the overland conveyor will be revegetated by the hydroseed method and plants and trees will be planted across more than 60 acres.

2.18 Water Management and Treatment

Water management and site-wide water treatment will continue at Henderson after the cessation of production operations. This cost for water treatment has been updated using a concept for constructing a long-term downstream water treatment facility in the vicinity of the Ute Park Pump House at the Mill site. The water treatment facility is anticipated to incorporate a 2-stage high density sludge (HDS) operation, designed for an inflow rate of approximately 1,200 gpm. Similar to the base assumption for the approved closure cost for water treatment at URAD, the Henderson Mill treatment basis also covers a 10-year O&M period for all treatment and pumping systems. The URAD treatment plant O&M costs are associated with the active Henderson mining operations as well as the pre-1977 mining activities at the historic URAD mine operation, which account for approximately 40% of average annual flows through the treatment plant. The estimate also includes capital costs to construct the Mill site water treatment plant, underground pumping systems to pump from the 7025-7500 Levels and from the 7500-8100 Levels, and structural bulkheads at two locations (at the West (conveyor) Portal and at the bottom of #4 (Vent) Shaft). URAD WTP O&M costs for the 10-yr period are based on the actual costs for O&M for 2023. The other 5 tasks utilize the Building Cost Index (BCI) escalation adjustment.

2.19 Maintenance and Environmental Control

Site-wide general maintenance and environmental control activities during the post-closure 30-year period have been included. Costs for annual reseeding of most of the smaller disturbed areas were previously approved under a "Maintenance Fertilization" activity for the 2015 and 2020 closure cost estimates. For this update, they are now also included for the TDA and PC3 Overland Conveyor corridor using a reseeding rate of 10% of the total facility disturbed acreage. It has been assumed that this reseeding will occur annually for the first 5 years post-closure.

Additional costs are included for Tailings Stewardship at an annual cost of $100,000 based on similar Freeport mine sites. General site O&M assumes 30 days of work per year during years 1-10 post-closure; 15 days/year during years 11-20; and, 10 days/year during years 21-30.

2.20 Mobilize-Demobilize

Prior reclamation cost estimates included a minimal total cost for total project equipment mobilization and demobilization. For this cost estimate update, we have assumed annual mobilization and demobilization lump sum costs based on historic Henderson reclamation projects for a period of 3 years. For this update, we have utilized the higher annual cost proposed by DRMS and escalated according to the published CPI inflation rates.

3 Reclamation Costs

The estimated costs for the reclamation activities include the Direct Costs associated with each of the sites described above and the Indirect Costs as discussed below, most of which are a percentage of Direct Costs as required by DRMS.

3.1 Indirect Costs

Indirect Cost allocations for Insurances, Bonds, and Contractor Profits are fixed DRMS Direct Cost percentages at 2.02%, 1.05%, and 10%, respectively. An Indirect Cost for project Contingency at 20% of Direct Cost has also been included. The cost for a Job Superintendent “team” was calculated using the labor rates for a period of 3 years. The Financial Warranty Fee of $500 was a rate fixed by DRMS. The final two Indirect Cost categories for Engineering, Bidding, Contracts and Management, Administration have been set to 2% and 5%, respectively, of the total of Direct Costs, Overhead, and Profit, per DRMS requirements.

3.2 Repurposing

Certain structures at the Henderson Mine have been approved for repurposing for use by other entities post closure (AM-04). These include the Main Office, Dry Room, West Warehouse, Surface Maintenance Shop and Warehouse, Potable Water Facilities, Fire Water Tank, Fuel Island and Sewage Treatment Plant. As such, closure costs are not required.

Figures:

1 – Tailings Facility Map, 10/2024

2 – Mill Facility Map, 10/2024

3 – Mill to West Portal Facility Map, 10/2024

4 – Mine Site Facility Map, 10/2024

Model Outputs

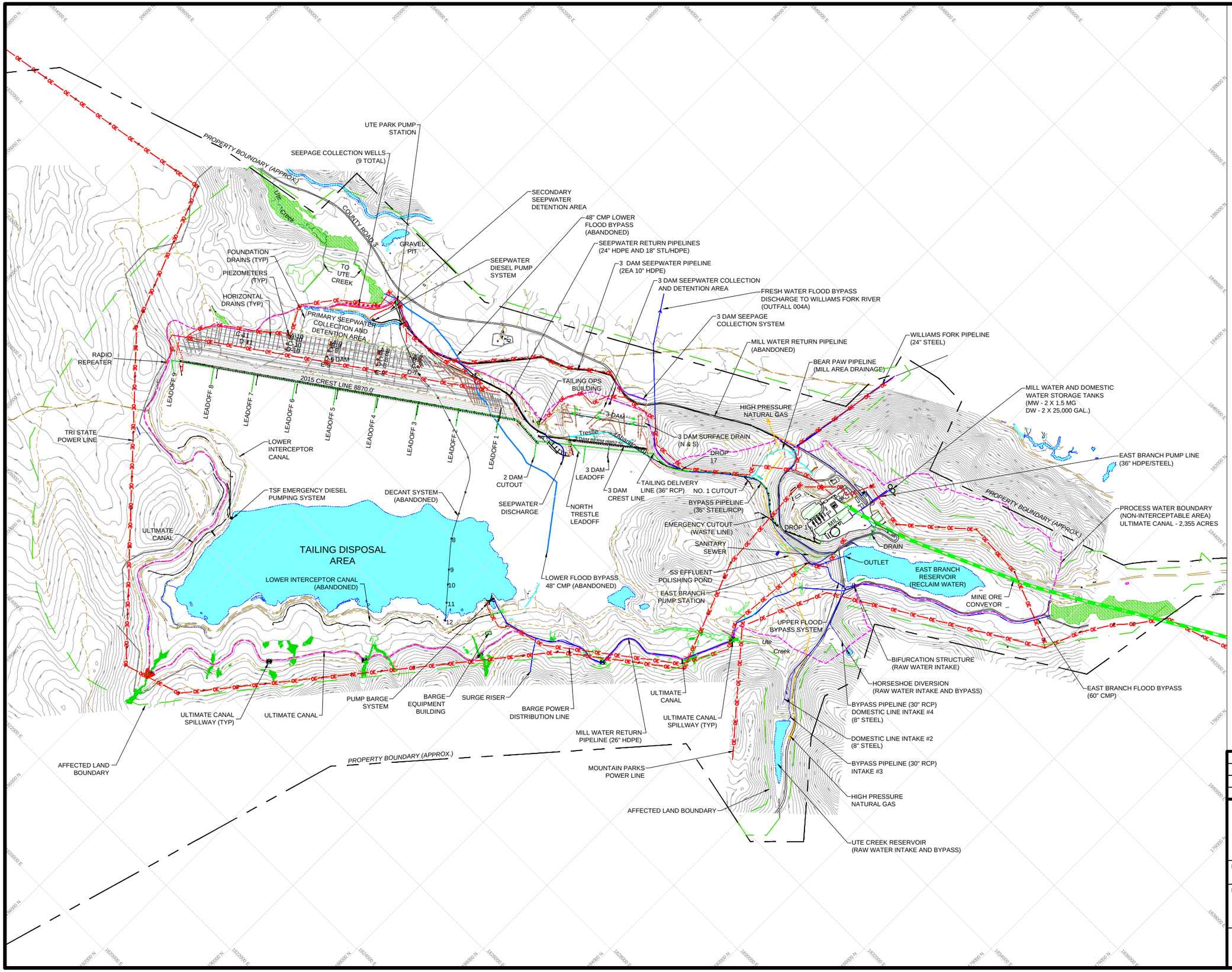
Data Backup:

Equipment retail rental rate inquiry – EquipmentWatch March 2024 prices, 6/10/2024

Caterpillar equipment specifications and Handbook guidance, various

Geogrid unit rate – Tensar quote, 6/12/2024

Davis Bacon rates for Colorado – DOL, published 1/5/2024



LEGEND

- PROPERTY BOUNDARY
- AFFECTED LAND BOUNDARY
- PROCESS WATER BOUNDARY
- PAVED ROADS
- IMPROVED DIRT ROADS
- UNIMPROVED DIRT ROADS
- TRAIL
- FENCE
- HIGH PRESSURE NATURAL GAS PIPELINE
- ACTIVE OVERHEAD ELECTRIC POWER LINE
- **TDL**
- EXISTING CONVEYANCE PIPELINE
- EXISTING ORE CONVEYOR (TO BE REMOVED)
- EXISTING DRAIN PIPELINE
- EXISTING CULVERT
- POWER POLE
- ULTIMATE CANAL SPILLWAY
- WETLAND DELINEATION
- RESERVOIR/POND
- PAVEMENT TO BE REMOVED
- BUILDING / STRUCTURE TO BE REMOVED

SCALE

1000' 0 1000' 2000'

CONTOUR INTERVAL 5 FT.

NOTES:

1. 2011 BASE TOPOGRAPHY PROVIDED BY HENDERSON.

REV.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY	
2	DRMS SUBMITTAL	10/2024	OTHERS	RLM	AJH	
1	DRMS SUBMITTAL	12/2/2019	OTHERS	RLM	AJH	
0	DRAFT	10/1/2019	OTHERS	RLM	AJH	

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PROJECT: HENDERSON RECLAMATION PLAN

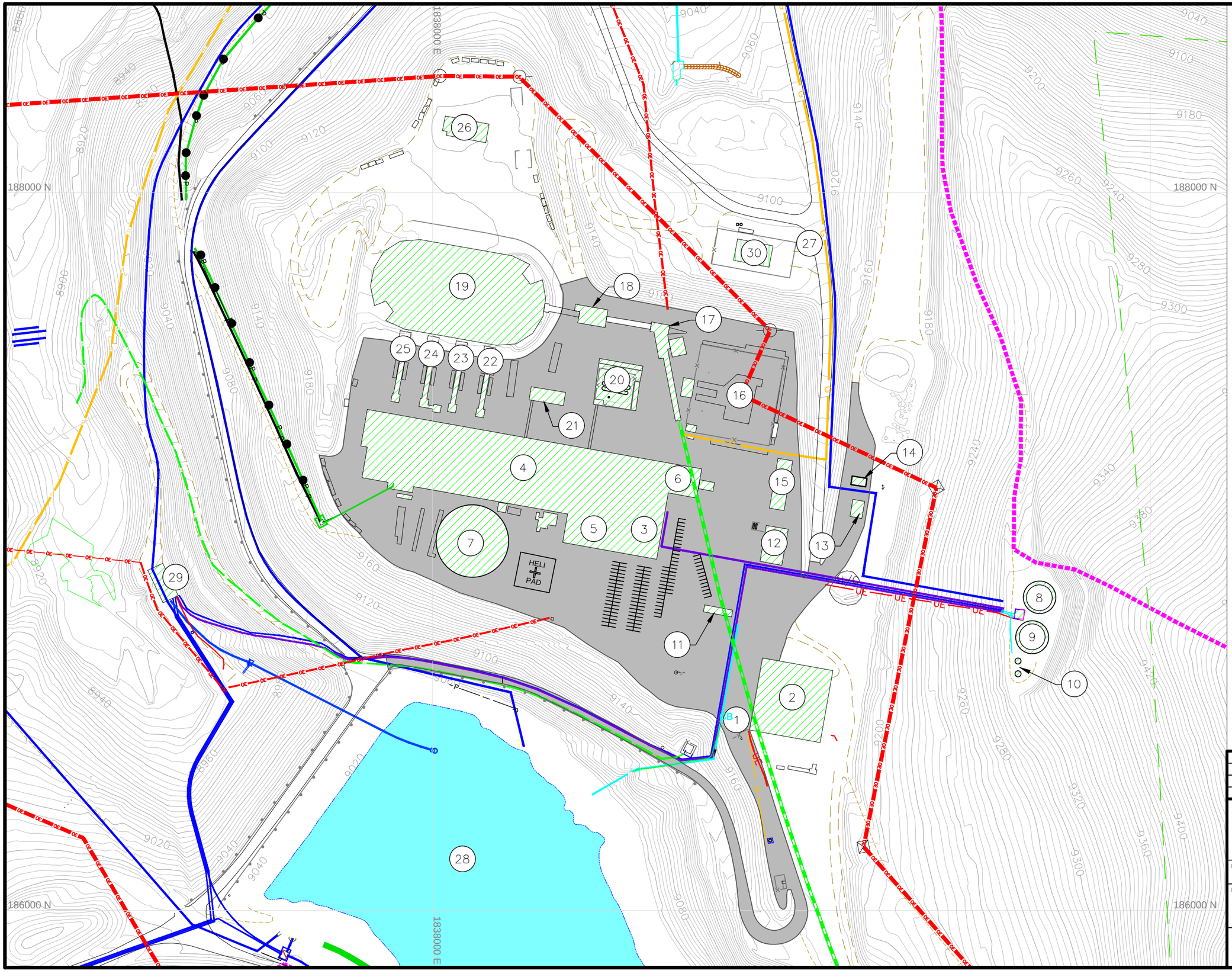
DRAWING TITLE: TAILINGS FACILITY MAP

AJA mining group

PROJ. NO. 12050

FIGURE: 01

SHEET 1 OF 1



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- ACTIVE UNDERGROUND ELECTRIC POWER LINE
- ACTIVE SANITARY SEWER PIPELINE
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- EXISTING DRAIN PIPELINE
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- EXISTING CULVERT
- POWER POLE
- WETLANDS
- RESERVOIR/POND
- PAVEMENT TO BE REMOVED
- BUILDING / STRUCTURE TO BE REMOVED

1. MAIN GATE
2. LOCI SHOP
3. MILL OFFICES
4. MILL BUILDING
5. MILL WAREHOUSE
6. PACKING DOCK
7. THICKENER
8. MILL WATER TANK
9. MILL WATER TANK
10. DOMESTIC WATER STORAGE TANKS
11. SCALE HOUSE
12. TAILING & TRANSPORTATION BUILDING
13. HAZARDOUS WASTE BUILDING
14. FUEL TANKS
15. OIL & BULK STORAGE
16. PUBLIC SERVICE SUB-STATION
17. PC3/SC1 TRANSFER
18. DRIVE HOUSE
19. ORE PILES
20. ACID STORAGE
21. NOKES BUILDING
22. RECLAIM #1
23. RECLAIM #2
24. RECLAIM #3
25. RECLAIM #4
26. MOBILE EQUIPMENT SHOP
27. NORTH ACCESS GATE
28. EAST BRANCH RESERVOIR
29. EAST BRANCH PUMP HOUSE
30. SAND SHED

N

SCALE

125' 0 125' 250'

CONTOUR INTERVAL 5 FT.

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PROJECT: HENDERSON RECLAMATION PLAN

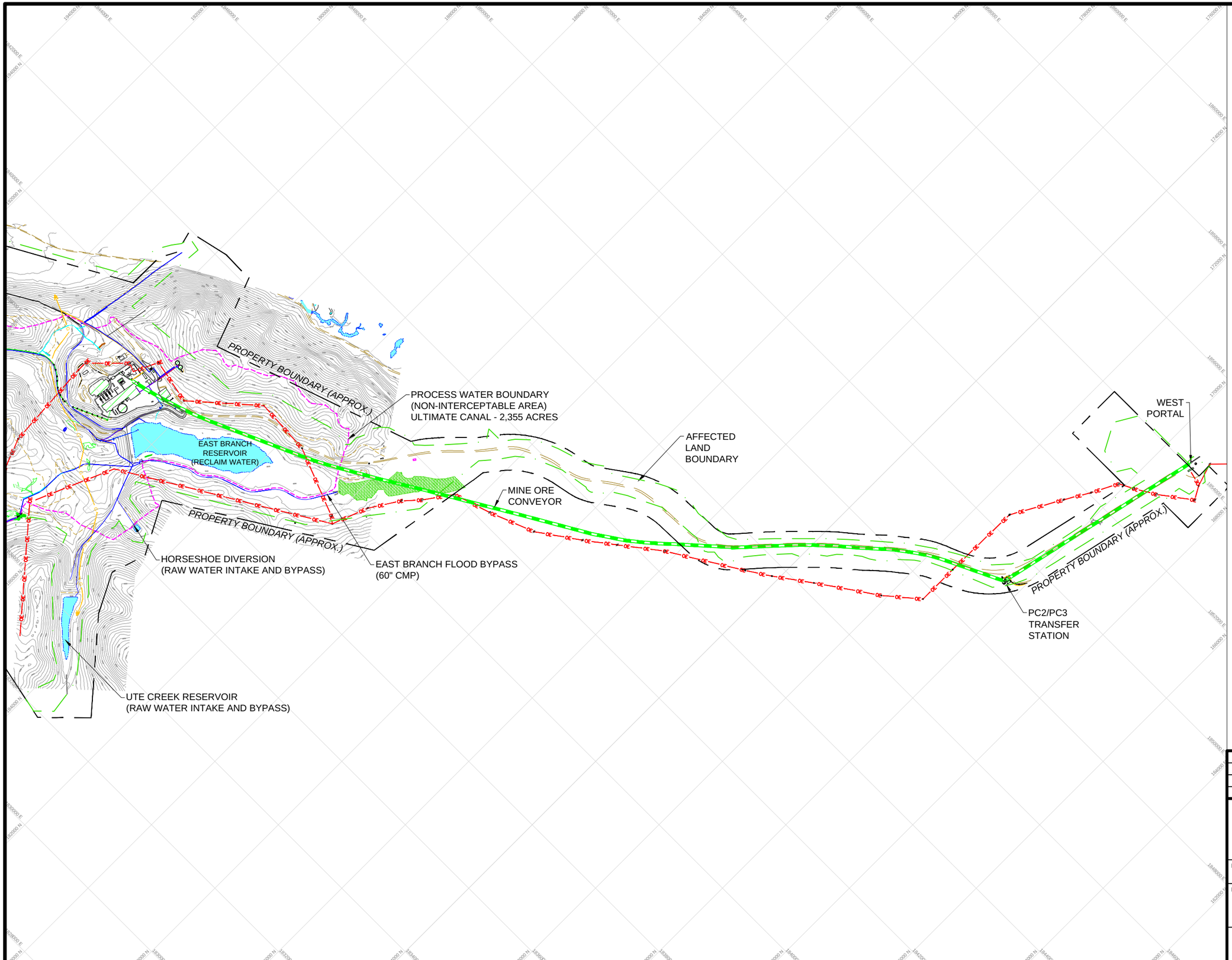
DRAWING TITLE: MILL FACILITY MAP

AJA mining group

PROJ. NO. 12050

FIGURE: 02

SHEET 1 OF 1



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- RESERVOIR/POND
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SCALE

1000' 0 1000' 2000'

CONTOUR INTERVAL 5 FT.

NOTES:

1. BASE MAPPING PREPARED BY AEROMETRIC USING 2010 AERIAL PHOTOGRAPHY.

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PROJECT: HENDERSON RECLAMATION PLAN

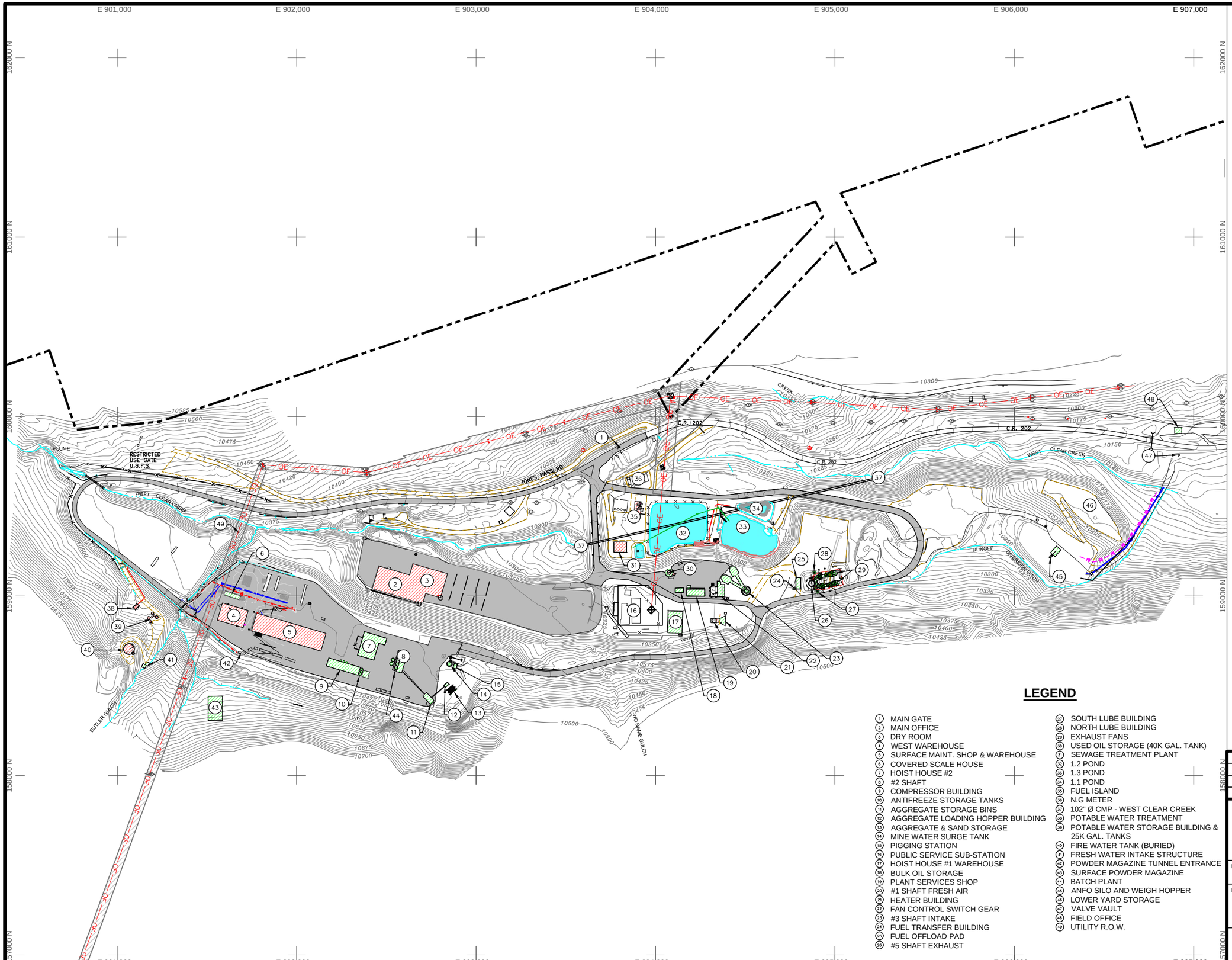
DRAWING TITLE: MILL TO WEST PORTAL FACILITY MAP

AJA mining group

PROJ. NO. 12050

FIGURE: 03

SHEET 1 OF 1



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- DRAINAGE
- FENCE
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- ACTIVE OVERHEAD ELECTRIC POWER LINE
- UTILITY R.O.W.
- ACTIVE UNDERGROUND ELECTRIC POWER LINE
- ACTIVE UNDERGROUND FIBER OPTIC LINE
- EXISTING CONVEYANCE PIPELINE
- EXISTING CULVERT
- POWER POLE
- ELECTRICAL TOWER
- RESERVOIR/POND
- PAVEMENT
- BUILDING / STRUCTURE TO BE REMOVED
- BUILDING / STRUCTURE TO BE REPURPOSED

LEGEND

1. MAIN GATE
2. MAIN OFFICE
3. DRY ROOM
4. WEST WAREHOUSE
5. SURFACE MAINT. SHOP & WAREHOUSE
6. COVERED SCALE HOUSE
7. HOIST HOUSE #2
8. #2 SHAFT
9. COMPRESSOR BUILDING
10. ANTIFREEZE STORAGE TANKS
11. AGGREGATE STORAGE BINS
12. AGGREGATE LOADING HOPPER BUILDING
13. AGGREGATE & SAND STORAGE
14. MINE WATER SURGE TANK
15. PIGGING STATION
16. PUBLIC SERVICE SUB-STATION
17. HOIST HOUSE #1 WAREHOUSE
18. BULK OIL STORAGE
19. PLANT SERVICES SHOP
20. #1 SHAFT FRESH AIR
21. HEATER BUILDING
22. FAN CONTROL SWITCH GEAR
23. #3 SHAFT INTAKE
24. FUEL TRANSFER BUILDING
25. FUEL OFFLOAD PAD
26. #5 SHAFT EXHAUST
27. SOUTH LUBE BUILDING
28. NORTH LUBE BUILDING
29. EXHAUST FANS
30. USED OIL STORAGE (40K GAL. TANK)
31. SEWAGE TREATMENT PLANT
32. 1.2 POND
33. 1.3 POND
34. 1.1 POND
35. FUEL ISLAND
36. N.G METER
37. 102" Ø CMP - WEST CLEAR CREEK
38. POTABLE WATER TREATMENT
39. POTABLE WATER STORAGE BUILDING & 25K GAL. TANKS
40. FIRE WATER TANK (BURIED)
41. FRESH WATER INTAKE STRUCTURE
42. POWDER MAGAZINE TUNNEL ENTRANCE
43. SURFACE POWDER MAGAZINE
44. BATCH PLANT
45. ANFO SILO AND WEIGH HOPPER
46. LOWER YARD STORAGE
47. VALVE VAULT
48. FIELD OFFICE
49. UTILITY R.O.W.

N

SCALE

250' 0 250' 500'

CONTOUR INTERVAL 5 FT.

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2	DRMS SUBMITTAL	10/2024	OTHERS	RLM	AJH
1	DRMS SUBMITTAL	12/2/2019	OTHERS	RLM	AJH
0	DRAFT	2/1/2019	OTHERS	RLM	AJH

Climax Molybdenum
A Freeport-McMoRan Company

PROJECT: HENDERSON RECLAMATION PLAN

DRAWING TITLE: MINE SITE FACILITY MAP

AJA mining group

PROJ. NO. 12050

FIGURE: 04

SHEET 1 OF 1

Climax Molybdenum Company, Henderson Mine & Mill

SUMMARY		2024	2019	(under)/over		
Directs						
R&R	Vent Shaft	$ 3,466	$ 1,953	$ 1,513	77%	reveg unit rate ~doubled (now RSMeans)
	Mine Site Demo	$ 984,538	$ 716,019	$ 268,519	38%	large increase in demolition unit rates
R&R	Mine Site Gen Rec	$ 1,714,627	$ 1,390,852	$ 323,775	23%	all chemicals will be consumed
R&R	Portal Area	$ 616,870	$ 549,797	$ 67,073	12%	
R&R	Conveyor Access Road	$ 406,446	$ 347,398	$ 59,048	17%	
R&R	Mill Yard And Access Road	$ 958,109	$ 802,889	$ 155,220	19%	all chemicals will be consumed
R&R	EB HS UC Reservoirs	$ 44,839	$ 38,479	$ 6,360	17%	
	Tailing Deposition Area	$ 69,230,349	$ 54,080,539	$ 15,149,810	28%	largest impacts from labor cost and acreage increases
R&R	Main Gravel Pit Below 1-Dam	$ 287,231	$ 241,425	$ 45,806	19%	
R&R	Laydown Yard at Rectifier 6	$ 73,593	$ 64,228	$ 9,365	15%	
	Mill Site Demo	$ 7,078,299	$ 4,854,039	$ 2,224,260	46%	large increase in demolition unit rates
R&R	Williams Fork Pump System	$ 15,053	$ 13,068	$ 1,985	15%	
R&R	Tailing Line And Power Line	$ 160,087	$ 138,897	$ 21,190	15%	
R&R	Tailing Facility Structures	$ 181,604	$ 136,946	$ 44,658	33%	
R&R	Mill Water Return Pipe Line	$ 170,731	$ 145,417	$ 25,314	17%	
R&R	Topsoil Stockpiles & Roads	$ 514,877	$ 440,717	$ 74,160	17%	
R&R	Pc3 Overland Surface Conveyor	$ 322,001	$ 205,601	$ 116,400	57%	reveg unit rate ~doubled (now RSMeans)
	Wtr Trtmnt Capex O&M (10y)	$ 99,582,630	$ 76,215,765	$ 23,366,865	31%	basis for large increase from BCI (see detail sheet)
	Maint & Enviro Control	$ 7,218,946	$ -	$ 7,218,946		30-year post-closure site maint. schedule, re-seeding for TSF and PC3 only
	Mobilize-Demobilize	$ 824,774	$ 600,000	$ 224,774	37%	3-year construction schedule, 2019 DRMS basis plus inflation
Subtotal		**$ 190,389,069**	**$ 140,984,029**	$ 49,405,040	35%	
Indirects	Public Liab. Ins. (2.02% of Direct)	$ 3,845,859	$ 2,847,877	$ 997,982	35%	DRMS requirement
	Bond (1.05% of Direct)	$ 1,999,085	$ 1,480,332	$ 518,753	35%	DRMS requirement
	Profit (10% of Direct)	$ 19,038,907	$ 14,098,403	$ 4,940,504	35%	DRMS requirement
	Contingency (20% of Direct)	$ 38,077,814	$ -	$ 38,077,814		FMI requirement
	Job Superintendent (DRMS factor)	$ 580,058	$ 519,033	$ 61,025	12%	based on a 3-year construction schedule at 50 hours/week for 50 weeks
	Subtotal OH & Profit	**$ 63,541,724**	**$ 18,945,646**	$ 44,596,078	235%	
	Financial Warranty Fee	$ 500	$ 500	$ -	0%	DRMS requirement
	Engineering/Bidding/Contracts (2% of Direct, OH&P)	$ 5,038,634	$ 3,198,594	$ 1,840,040	58%	DRMS requirement
	Management/Administration (5% of Direct, OH&P)	$ 12,596,585	$ 7,996,484	$ 4,600,101	58%	DRMS requirement
Subtotal		**$ 81,177,443**	**$ 30,141,224**	$ 51,036,219	169%	
TOTAL		**$ 271,566,513**	**$ 171,125,253**	$ 100,441,260	59%	

Model Inputs for Reclamation Cost Model

Year of Cost Data		2024	Year of Cost Data (Mar-31)
Public Liability Insurance		2.02%	% of Direct
Bond		1.05%	% of Direct
Profit (10% of Direct)		10.00%	% of Direct
Contingency (20% of Direct)		20.00%	% of Direct
Financial Warranty Fee	$	500.00	Flat Fee in dollars
Engineering/Bidding/Contracts (2% of Direct, OH&P)		2.00%	% of Direct, OH&P
Management/Administration (5% of Direct, OH&P)		5.00%	% of Direct, OH&P
Sitewide Efficiency Correction Factor		0.83	0 to 1

Labor Inputs for Reclamation Cost Model

FICA, % of Base Rate =	[2]	7.65%	Source: www.ssa.gov/OACT/ProgData/TaxRates.html
SIIS, % of Base Rate =	[3]	6.33%	Source: [Avg of Colorado Contractor's Assn. 1999 & 2001 Surveys + Previous Henderson Cost Model Updates]
Unemployment, % of Base Rate =	[4]	3.08%	Source: https://cdle.colorado.gov/employers (2024 General Construction combined rate)
Workers Comp, % of Base Rate =	[5]	16.00%	Source: [Avg of Colorado Contractor's Assn. 1999 & 2001 Surveys + Previous Henderson Cost Model Updates]
CPI Inflation Factor	[1]	1.355	Inflation Factor based on Consumer Price Index from inputs below:
Annual CPI as of 12/31/2024		304.702	Source: InflationData.com website; historical Consumer Price Index values from the Bureau of Labor Statistics.
Annual CPI for 2011 =		224.939	Base CPI = 100 in 1982. Therefore, a CPI of 224.939 indicates a 124.939% increase since 1982.
FICA, % of Base Rate		7.65%	
SIIS, % of Base Rate		6.33%	
Unemployment, % of Base Rate		3.08%	
Workers Comp, % of Base Rate		16.00%	

Worker Classification		Base Hourly Rate 2011	
Dozer Operator	$	26.78	
Loader Operator	$	24.07	
Scraper Operator	$	20.60	
Grader Operator	$	23.05	
Backhoe Operator	$	22.92	
Water Truck Driver	$	20.39	
Truck Driver	$	17.79	
Laborer	$	12.44	
Mechanic/Welder	$	23.31	
Foreman	$	42.50	
Crane Operator	$	23.82	
Job Superintendent (DRMS factor)	$	58.13	3.0 years to include Superintendent "team" expense

Equipment List for Reclamation Cost Model

equipmentwatch.com Colorado Average Retail Rental Rates 3/1/2024	Equipment	Operator Class	Cost/Unit Equip	Cost/Unit Labor	Units of Measure	Units	OPERATED Cost/Unit Equip	Effective Load Capacity (cu yds)	Average Push (LF)
$8,850	D6N LGP Dozer	Dozer Operator	$ 50.28	$ 57.84	cuyd	cuyd/hr	$ 108.12	235	150
$11,701	D7E Dozer	Dozer Operator	$ 66.48	$ 57.84	cuyd	cuyd/hr	$ 124.32	320	200
$20,126	D8T Dozer	Dozer Operator	$ 114.36	$ 57.84	cuyd	cuyd/hr	$ 172.19	320	250
$30,471	D9T Dozer	Dozer Operator	$ 173.13	$ 57.84	cuyd	cuyd/hr	$ 230.97	500	250
$6,295	938M Loader	Loader Operator	$ 35.77	$ 54.13	cuyd	cuyd/hr	$ 89.90	3.25	
$18,393	740B EJ Artic. Haul Truck	Truck Driver	$ 104.50	$ 36.83	cuyd	cuyd/hr	$ 141.33	25.8	
$10,514	336 EL/FL 88K lb Excavator	Backhoe Operator	$ 59.74	$ 49.66	cuyd	cuyd/hr	$ 109.39	100	
$6,081	4000G Water Truck, 4000 gal	Water Truck Driver	$ 34.55	$ 41.41	gallons	gal/hr	$ 75.96	4000	
$9,837	621G Water Wagon, 8000 gal	Truck Driver	$ 55.89	$ 36.83	gallons	gal/hr	$ 92.72	8000	
$9,146	12M3 Grader AWD	Grader Operator	$ 51.96	$ 50.30	acres	acres/hr	$ 102.26		
RS Means 01 54 33 4900	Pump-4" Submers., 560 gpm		$ 17.24	$ -	gallons	gal/hr	$ 17.24		

Material List for Reclamation Cost Model

Material	Cost/Unit Materials	Units of Measure	Source
Excavate rock	$ 4.30	cuyd	RSMeans 2024 / 31 23 16.13 6110
Drain rock	$ 22.40	cuyd	RSMeans 2024 / 33 41 23.19 0300
Perforated pipe 8" dia.	$ 15.80	LF	RSMeans 2024 / 33 41 16.35 0080
Geotextile	$ 2.50	sqyd	RSMeans 2024 / 33 41 23.19 0110
Signs	$ 74.20	each	RSMeans 2024 / 10 14 53.20 0600, 1500
30" corrugated HDPE	$ 53.40	LF	RSMeans 2024 / 33 42 11.50 1080
Rip Rap Armoring (12-24" D50)	$ 98.00	cuyd	RSMeans 2024 / 31 37 13.10 0350 (135# 12" D_{50})
42" HDPE pipe and bedding	$ 315.00	LF	RSMeans 2024 / 22 11 13.78 0174 (42" dia. DR26)
Geogrid	$ 4.85	sqyd	Tensar quote, 6/12/2024
Seeding-Drill Seed	$ 1,363.00	acre	RSMeans 2024 / 32 92 19.14 4500
Reveg-Drill Seed	$ 1,595.00	acre	RSMeans 2024 / 32 92 19.14 4500, 7025
Reveg-Hydroseeding	$ 3,234.00	acre	RSMeans 2024 / 32 92 19.14 4600 (slope mix w/ mulch + fert.)
Seeding-Tree&Shrub	$ 1,359.13	acre	previous estimate, escalated by ~4%/yr (see CPI Inflation rates to right)
Reveg-Tree&Shrub	$ 1,359.13	acre	previous estimate, escalated by ~4%/yr (see CPI Inflation rates to right)
Well plug and abandon	$ 5.60	LF	RSMeans 2024 / 02 41 13.76 0900 (per Climax closure cost model 2024)
Shaft plug	$ 183,000.00	each	previous estimate, escalated by ~4%/yr (see CPI Inflation rates to right)
Spillway Inlet Structure	$ 122,000.00	each	estimate by others, escalated by ~4%/yr (see CPI Inflation rates to right)
Maintenance Fertilization	$ 231.90	acre	RSMeans 2024 / 32 92 19.14 7025

CPI Inflation Calculator (bls.gov)

DEMOLITION Material List for Reclamation Cost Model

Material	Cost/Unit Materials	Units	Source	Section
steel	$ 0.43	cuft	RSMeans 2024	02 41 16.13 0020
concrete floor	$ 0.79	sqft	RSMeans 2024	02 41 16.17 0240
concrete footing	$ 13.20	LF	RSMeans 2024	02 41 16.17 1000
asphalt	$ 5.20	sqyd	RSMeans 2024	02 41 13.17 5010
pipe grouting	$ 31.00	cuft	RSMeans 2024	31 73 13.10 0800
landfill fee	$ 0.68	EA	1% x demolition quantities	
72"+ dia. CMP	$ 55.50	LF	RSMeans 2024	02 41 13.40 0200
steel bridge	$ 12.40	sqft	RSMeans 2024	02 41 16.33 0200
power poles, x-arms	$ 386.50	EA	RSMeans 2024	02 41 13.80 0100, 0300
TDL concrete pipe	$ 57.50	LF	RSMeans 2024	02 41 13.38 0100
Overland conveyor	$ 0.40	sqft	RSMeans 2024	05 05 05.10 0500

Financial Reporting Unit Rates

12/31/2024 Henderson Reclamation Labor Rates

Source of Base Rates: Source: https://cdle.colorado.gov/employers (2024 General Construction combined rate)
Foreman (use Jr. Engr.), Superintendent: RS Means 01 31 13.20 0260 Highway Construction 2024

Worker Classification	Base Hourly Rate	Fringe	FICA[2]	SIIS[3]	Unemploy[4]	Workers Comp[5]	Total-Dollars	Inflation Factor[1]	**Labor 12/31/2024 Dollars**
Dozer Operator	$26.78	$7.05	$2.05	$1.70	$0.82	$4.28	$42.68	1.3550	**$57.84**
Loader Operator	$24.07	$7.92	$1.84	$1.52	$0.74	$3.85	$39.95	1.3550	**$54.13**
Scraper Operator	$20.60	$7.99	$1.58	$1.30	$0.63	$3.30	$35.40	1.3550	**$47.97**
Grader Operator	$23.05	$6.45	$1.76	$1.46	$0.71	$3.69	$37.12	1.3550	**$50.30**
Backhoe Operator	$22.92	$6.15	$1.75	$1.45	$0.71	$3.67	$36.65	1.3550	**$49.66**
Water Truck Driver	$20.39	$3.43	$1.56	$1.29	$0.63	$3.26	$30.56	1.3550	**$41.41**
Truck Driver	$17.79	$3.51	$1.36	$1.13	$0.55	$2.85	$27.18	1.3550	**$36.83**
Laborer	$12.44	$3.10	$0.95	$0.79	$0.38	$1.99	$19.65	1.3550	**$26.63**
Mechanic/Welder	$23.31	$3.93	$1.78	$1.48	$0.72	$3.73	$34.95	1.3550	**$47.35**
Foreman	$42.50	$0.00	$3.25	$2.69	$1.31	$6.80	$56.55	1.0000	**$56.55**
Crane Operator	$23.82	$9.22	$1.82	$1.51	$0.73	$3.81	$40.91	1.3550	**$55.44**
Job Superintendent (DRMS factor)	$58.13	$0.00	$4.45	$3.68	$1.79	$9.30	$77.34	1.0000	**$77.34**

Financial Reporting Unit Rates

Vent Shaft

Assumptions

Tasks

Surface reclamation at the Vent Shaft (aka #4 Shaft) to consist primarily of broadcast seeding (use higher hydroseeding unit rate)

Timing

LOM

Total Costs

$3,466

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
Vent Shaft reclamation, post demo.	MATERIALS	Vent Shaft-Seeding	Reveg-Hydroseeding		1.00	1.00	acre								$ 3,234.00	$ 3,234.00	$ 3,234.00	
	MATERIALS	Vent Shaft-Reveg	Maintenance Fertilization		1.00	1.00	acre								$ 232	$ 232	$ 232	
TOTAL COSTS												**$ -**		**$ -**		**$ 3,466**	**Total Cost $ 3,466**	

Financial Reporting Unit Rates

Mine Site Demo

Assumptions

Structures being repurposed include Main Office, Dry Room, West Warehouse, Surface Maintenance Shop and Warehouse, Potable Water Facilities, Fire Water Tank, Fuel Island, Sewage Treatment Plant

Tasks

Demolition of structures not being repurposed

Timing

LOM

Total Costs

$984,538

Calculations

Specific Tasks	BLDG	Area	Material	Length	Width	Height	Volume	Units	Cost/Unit Materials	Total Cost	Comment
Demolish SUPERSTRUCTURE	COMPRESSOR BUILDING	Various	steel	1.00	8,465.00	19.00	160,835.00	cuft	$ 0.43	$ 48,411.34	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	COMPRESSOR BUILDING	Various	concrete floor	1.00	8,465.00	1.00	8,465.00	sqft	$ 0.79	$ 6,687.35	
Demolish SUPERSTRUCTURE	PLANT SERVICES BUILDING	Various	steel	1.00	3,975.00	15.00	59,625.00	cuft	$ 0.43	$ 17,947.13	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	PLANT SERVICES BUILDING	Various	concrete floor	1.00	3,975.00	1.00	3,975.00	sqft	$ 0.79	$ 3,140.25	
Demolish SUPERSTRUCTURE	#1-SHAFT	Various	steel	1.00	5,382.00	93.00	500,526.00	cuft	$ 0.43	$ 150,658.33	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	#1-SHAFT	Various	concrete floor	1.00	5,382.00	1.00	5,382.00	sqft	$ 0.79	$ 4,251.78	
Demolish SUPERSTRUCTURE	#1-SHAFT HOISTHOUSE	Various	steel	1.00	9,669.00	30.00	290,070.00	cuft	$ 0.43	$ 87,311.07	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	#1-SHAFT HOISTHOUSE	Various	concrete floor	1.00	9,669.00	1.00	9,669.00	sqft	$ 0.79	$ 7,638.51	
Demolish SUPERSTRUCTURE	#3-SHAFT	Various	steel	1.00	5,382.00	93.00	500,526.00	cuft	$ 0.43	$ 150,658.33	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	#3-SHAFT	Various	concrete floor	1.00	5,382.00	1.00	5,382.00	sqft	$ 0.79	$ 4,251.78	
Demolish SUPERSTRUCTURE	#3-SHAFT HEATER BUILDING	Various	steel	1.00	7,248.00	30.00	217,440.00	cuft	$ 0.43	$ 65,449.44	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	#3-SHAFT HEATER BUILDING	Various	concrete floor	1.00	7,248.00	1.00	7,248.00	sqft	$ 0.79	$ 5,725.92	
Demolish SUPERSTRUCTURE	AGGREGATE STACKING BUILDING	Various	steel	1.00	1,855.00	15.00	27,825.00	cuft	$ 0.43	$ 8,375.33	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	AGGREGATE STACKING BUILDING	Various	concrete floor	1.00	1,855.00	1.00	1,855.00	sqft	$ 0.79	$ 1,465.45	
Demolish SUPERSTRUCTURE	BUILDING ADJACENT TO STACKING BUILDING	Various	steel	1.00	200.00	13.00	2,600.00	cuft	$ 0.43	$ 782.60	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	BUILDING ADJACENT TO STACKING BUILDING	Various	concrete floor	1.00	200.00	1.00	200.00	sqft	$ 0.79	$ 158.00	
Demolish SUPERSTRUCTURE	BATCH PLANT	Various	steel	1.00	1,458.00	15.00	21,870.00	cuft	$ 0.43	$ 6,582.87	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	BATCH PLANT	Various	concrete floor	1.00	1,458.00	1.00	1,458.00	sqft	$ 0.79	$ 1,151.82	
Demolish SUPERSTRUCTURE	BULK OIL STORAGE BUILDING	Various	steel	1.00	1,200.00	15.00	18,000.00	cuft	$ 0.43	$ 5,418.00	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	BULK OIL STORAGE BUILDING	Various	concrete floor	1.00	1,200.00	1.00	1,200.00	sqft	$ 0.79	$ 948.00	
Demolish SUPERSTRUCTURE	BUILDING ADJACENT TO USED OIL TANK	Various	steel	1.00	126.00	10.00	1,260.00	cuft	$ 0.43	$ 379.26	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	BUILDING ADJACENT TO USED OIL TANK	Various	concrete floor	1.00	126.00	1.00	126.00	sqft	$ 0.79	$ 99.54	
Demolish SUPERSTRUCTURE	FAN CONTROL, SWITCH GEAR BUILDING	Various	steel	1.00	2,928.00	13.00	38,064.00	cuft	$ 0.43	$ 11,457.26	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	FAN CONTROL, SWITCH GEAR BUILDING	Various	concrete floor	1.00	2,928.00	1.00	2,928.00	sqft	$ 0.79	$ 2,313.12	
Demolish SUPERSTRUCTURE	PROPANE BUILDING	Various	steel	1.00	628.00	10.00	6,280.00	cuft	$ 0.43	$ 1,890.28	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	PROPANE BUILDING	Various	concrete floor	1.00	628.00	1.00	628.00	sqft	$ 0.79	$ 496.12	
Asphalt Demolition		Various	asphalt	1.00	72,600.00	1.00	72,600.00	sqyd	$ 5.20	$ 377,520.00	
1% of Structures to landfill		Various	Landfill Fee	1.00	19,660.37	1.00	19,660.00	EA	$ 0.68	$ 13,368.80	

	Total Cost
TOTAL COSTS	**$ 984,537.66**

Financial Reporting Unit Rates

Mine Site Gen Rec

Assumptions

Tasks

Surface reclamation across mine site

Timing

LOM

Total Costs

$1,714,627

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
Backfill and grade Pond 1	HAUL_LOAD	Pond 1	740B EJ Artic. Haul Truck	5.00	7,650	7,650.00	cuyd	114.61	cuyd/hr	66.70	$ 104.50	$ 6,970.15	$ 36.83	$ 2,456.56	$ -	$ -	$ 9,426.71	
	HAUL_LOAD		D8T Dozer			-	cuyd		cuyd/hr	13.30	$ 114.36	$ 1,520.99	$ 57.84	$ 769.27	$ -	$ -	$ 2,290.26	
Backfill and grade Pond 1.1	HAUL_LOAD	Pond 1.1	740B EJ Artic. Haul Truck	5.00	2,722	2,722.00	cuyd	114.61	cuyd/hr	23.80	$ 104.50	$ 2,487.10	$ 36.83	$ 876.55	$ -	$ -	$ 3,363.65	
	HAUL_LOAD		D8T Dozer			-	cuyd		cuyd/hr	4.80	$ 114.36	$ 548.93	$ 57.84	$ 277.63	$ -	$ -	$ 826.56	
Backfill and grade Pond 1.2	HAUL_LOAD	Pond 1.2	740B EJ Artic. Haul Truck	5.00	9,562	9,562.00	cuyd	114.61	cuyd/hr	83.40	$ 104.50	$ 8,715.30	$ 36.83	$ 3,071.62	$ -	$ -	$ 11,786.92	
	HAUL_LOAD		D8T Dozer			-	cuyd		cuyd/hr	16.70	$ 114.36	$ 1,909.81	$ 57.84	$ 965.93	$ -	$ -	$ 2,875.74	
Haul and spread cap on Pond 1.2	HAUL_LOAD	Pond 1.2a	740B EJ Artic. Haul Truck	4.00	4,260	4,260.00	cuyd	97.52	cuyd/hr	43.70	$ 104.50	$ 4,566.65	$ 36.83	$ 1,609.47	$ -	$ -	$ 6,176.12	
	HAUL_LOAD		938M Loader			-	cuyd		cuyd/hr	10.90	$ 35.77	$ 389.89	$ 54.13	$ 590.02	$ -	$ -	$ 979.91	
Rip roads	GRADING	Mine site	D8T Dozer		25	25.00	acres	0.50	acres/hr	50.00	$ 114.36	$ 5,718.00	$ 57.84	$ 2,892.00	$ -	$ -	$ 8,610.00	
Finish grade Mine site	GRADING	Finish grade Mine site	12M3 Grader AWD		100	100.00	acres	0.50	acres/hr	200.00	$ 51.96	$ 10,392.00	$ 50.30	$ 10,060.00	$ -	$ -	$ 20,452.00	
Mix sludge and chips	HAUL_LOAD	Mix sludge and chips	D8T Dozer	1.00	322,667	322,667.00	cuyd	445.07	cuyd/hr	725.00	$ 114.36	$ 82,911.00	$ 57.84	$ 41,934.00	$ -	$ -	$ 124,845.00	
	HAUL_LOAD		938M Loader			-	cuyd		cuyd/hr	725.00	$ 35.77	$ 25,933.25	$ 54.13	$ 39,244.25	$ -	$ -	$ 65,177.50	
Mine site reclamation	MATERIALS	Drill Seed	Seeding-Drill Seed		15	15.10	acre								$ 1,363.00	$ 20,581.30	$ 20,581.30	
	MATERIALS	Drill Seed-Reveg	Reveg-Drill Seed		60	60.40	acre								$ 1,595.00	$ 96,338.00	$ 96,338.00	
	MATERIALS	Hydroseeding-Seeding	Reveg-Hydroseeding		11	11.03	acre								$ 3,234.00	$ 35,671.02	$ 35,671.02	
	MATERIALS	Hydroseeding-Reveg	Reveg-Hydroseeding		44	44.10	acre								$ 3,234.00	$ 142,619.40	$ 142,619.40	
	MATERIALS	Tree & Shrub Planting-Seeding	Seeding-Tree&Shrub		25	25.00	acre								$ 1,359.13	$ 33,978.25	$ 33,978.25	
	MATERIALS	Tree & Shrub Planting-Reveg	Reveg-Tree&Shrub		100	100.00	acre								$ 1,359.13	$ 135,913.00	$ 135,913.00	
	MATERIALS	Maintenance Fertilization	Maintenance Fertilization		100	100.00	acre								$ 231.90	$ 23,190.00	$ 23,190.00	
Culvert Removal	HAUL_LOAD	Clear Creek Channel				2,000.00	LF								$ 55.50	$ 111,000.00	$ 111,000.00	
Excavate channel	HAUL_LOAD	Clear Creek Channel	740B EJ Artic. Haul Truck	4.00	183,488	183,488.00	cuyd	97.52	cuyd/hr	1,881.50	$ 104.50	$ 196,616.75	$ 36.83	$ 69,295.65	$ -	$ -	$ 265,912.40	
	HAUL_LOAD	Clear Creek Channel	938M Loader			-	cuyd		cuyd/hr	470.40	$ 35.77	$ 16,826.21	$ 54.13	$ 25,462.75	$ -	$ -	$ 42,288.96	
Place safety hazard signs around Glory Hole	MATERIALS	Urad Glory Hole	Signs		10	10.00	each								$ 74.20	$ 742.00	$ 742.00	
Construct plug incl. demo. remaining surf. collar	MATERIALS	#1,3,4(Vent) Shafts	Shaft plug		3	3.00	each								$ 183,000.00	$ 549,000.00	$ 549,000.00	
	MATERIALS	Mine 5 Monitoring Wells	Well plug and abandon			104.00	LF								$ 5.60	$ 582.40	$ 582.40	
TOTAL COSTS												**$ 365,506**		**$ 199,506**		**$ 1,149,615**	**Total Cost $ 1,714,627**	

Financial Reporting Unit Rates

Portal Area

Assumptions

Tasks

Surface reclamation at the portal area

Timing

LOM

Total Costs

$616,870

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
Regrading	SPREAD	Rip portal area	D8T Dozer		101,640	101,640.00	cuyd	86.40	cuyd/hr	1,176.40	$ 114.36	$ 134,533.10	$ 57.84	$ 68,042.98	$ -	$ -	$ 202,576.08	
	SPREAD	Backfill and grade	D8T Dozer		33,880	33,880.00	cuyd	86.40	cuyd/hr	392.10	$ 114.36	$ 44,840.56	$ 57.84	$ 22,679.06	$ -	$ -	$ 67,519.62	
	GRADING	Reestablish Williams Fork drainage	12M3 Grader AWD		1,294	1,294.00	acres	0.50	acres/hr	2,588.00	$ 51.96	$ 134,472.48	$ 50.30	$ 130,176.40	$ -	$ -	$ 264,648.88	
Revegetation	MATERIALS	Seeding-Drill Seed	Seeding-Drill Seed		5	5.25	acre								$ 1,363.00	$ 7,155.75	$ 7,155.75	
	MATERIALS	Reveg-Drill Seed	Reveg-Drill Seed		21	21.00	acre								$ 1,595.00	$ 33,495.00	$ 33,495.00	
	MATERIALS	Tree & Shrub-Seeding	Seeding-Tree&Shrub		5	5.25	acre								$ 1,359.13	$ 7,135.43	$ 7,135.43	
	MATERIALS	Tree & Shrub-Revegetation	Reveg-Tree&Shrub		21	21.00	acre								$ 1,359.13	$ 28,541.73	$ 28,541.73	
	MATERIALS	Maintenance Fertilization	Maintenance Fertilization		25	25.00	acre								$ 231.90	$ 5,797.50	$ 5,797.50	
TOTAL COSTS												**$ 313,846**		**$ 220,898**		**$ 82,125**	**Total Cost $ 616,870**	

Financial Reporting Unit Rates

Conveyor Access Road

Assumptions

Tasks

Reclamation of the conveyor access road following demolition

Timing

LOM

Total Costs

$406,446

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
Regrading	SPREAD	Surface Railroad	D8T Dozer		116,160	116,160.00	cuyd	86.40	cuyd/hr	1,344.40	$ 114.36	$ 153,745.58	$ 57.84	$ 77,760.10	$ -	$ -	$ 231,505.68	
	GRADING	Reestablish Williams Fork Drainage	12M3 Grader AWD		92	92.00	acres	0.50	acres/hr	184.00	$ 51.96	$ 9,560.64	$ 50.30	$ 9,255.20	$ -	$ -	$ 18,815.84	
Revegetation	MATERIALS	Seeding-Drill Seed	Seeding-Drill Seed		9	9.00	acre								$ 1,363.00	$ 12,267.00	$ 12,267.00	
	MATERIALS	Reveg-Drill Seed	Reveg-Drill Seed		36	36.00	acre								$ 1,595.00	$ 57,420.00	$ 57,420.00	
	MATERIALS	Seeding-Tree & Shrub	Seeding-Tree&Shrub		9	9.00	acre								$ 1,359.13	$ 12,232.17	$ 12,232.17	
	MATERIALS	Reveg-Tree & Shrub	Reveg-Tree&Shrub		36	36.00	acre								$ 1,359.13	$ 48,928.68	$ 48,928.68	
	MATERIALS	Maintenance Fertilization	Maintenance Fertilization		109	109.00	acre								$ 231.90	$ 25,277.10	$ 25,277.10	
TOTAL COSTS												**$ 163,306**		**$ 87,015**		**$ 156,125**	**Total Cost $ 406,446**	

Financial Reporting Unit Rates

Mill Yard And Access Road

Assumptions

Tasks

Reclamation of the mill area and access road following demolition

Timing

LOM

Total Costs

$958,109

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
Regrading	SPREAD	Backfill & Grade Mill Site	D8T Dozer		182,021	182,021.00	cuyd	86.40	cuyd/hr	2,106.70	$ 114.36	$ 240,922.21	$ 57.84	$ 121,851.53	$ -	$ -	$ 362,773.74	
	SPREAD	Reclaim Mill Access Road	D8T Dozer		60,080	60,080.00	cuyd	86.40	cuyd/hr	695.40	$ 114.36	$ 79,525.94	$ 57.84	$ 40,221.94	$ -	$ -	$ 119,747.88	
Revegetation	MATERIALS	Seeding-Drill Seed	Seeding-Drill Seed		31	30.75	acre								$ 1,363.00	$ 41,912.25	$ 41,912.25	
	MATERIALS	Reveg-Drill Seed	Reveg-Drill Seed		123	123.00	acre								$ 1,595.00	$ 196,185.00	$ 196,185.00	
	MATERIALS	Seeding-Tree & Shrub	Seeding-Tree&Shrub		31	30.75	acre								$ 1,359.13	$ 41,793.25	$ 41,793.25	
	MATERIALS	Reveg-Tree & Shrub	Reveg-Tree&Shrub		123	123.00	acre								$ 1,359.13	$ 167,172.99	$ 167,172.99	
	MATERIALS	Maintenance Fertilization	Maintenance Fertilization		123	123.00	acre								$ 231.90	$ 28,523.70	$ 28,523.70	
																	Total Cost	
TOTAL COSTS												**$ 320,448**		**$ 162,073**		**$ 475,587**	**$ 958,109**	

Financial Reporting Unit Rates

EB HS UC Reservoirs

Assumptions

Tasks

Reclamation at the E. Branch Reservoir for fresh water storage consisting of sediment excavation and footprint revegetation
Reclamation of the access roads into the East Branch, Horseshoe and Ute Creek Reservoirs

Timing

LOM

Total Costs

$44,839

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
Excavation	HAUL_LOAD	Excavate Sediment	740B EJ Artic. Haul Truck	4	18,796	18,796.00	cuyd	97.52	cuyd/hr	192.70	$ 104.50	$ 20,137.15	$ 36.83	$ 7,097.14	$ -	$ -	$ 27,234.29	
	HAUL_LOAD	Excavate Sediment	938M Loader			-	cuyd		cuyd/hr	48.20	$ 35.77	$ 1,724.11	$ 54.13	$ 2,609.07	$ -	$ -	$ 4,333.18	
Revegetation	MATERIALS	Reveg-Drill Seed	Reveg-Drill Seed		4.1	4.10	acre								$ 1,595.00	$ 6,539.50	$ 6,539.50	
	MATERIALS	Reveg-Tree & Shrub	Reveg-Tree&Shrub		4.1	4.10	acre								$ 1,359.13	$ 5,572.43	$ 5,572.43	
	MATERIALS	Maintenance Fertilization	Maintenance Fertilization		5	5.00	acre								$ 231.90	$ 1,159.50	$ 1,159.50	
TOTAL COSTS												**$ 21,861**		**$ 9,706**		**$ 13,271**	**Total Cost $ 44,839**	

Financial Reporting Unit Rates

Tailings Deposition Area

Assumptions
See notes below

Tasks
Closure of the TDA

Timing
LOM

Total Costs
$69,230,349

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
Cover soil haul and placement	HAUL_LOAD	From Stockpile/Borrow Area to Dams, Dry beach	740B EJ Artic. Haul Truck	3	2,833,013	3,442,111.20	cuyd	84.84	cuyd/hr	40,571.80	$ 104.50	$ 4,239,753.10	$ 36.83	$ 1,494,259.39	$ -	$ -	$ 5,734,012.49	
	HAUL_LOAD	From Stockpile/Borrow Area to Dams, Dry beach	938M Loader			-	cuyd		cuyd/hr	13,523.90	$ 35.77	$ 483,749.90	$ 54.13	$ 732,048.71	$ -	$ -	$ 1,215,798.61	
	SPREAD	Spread cover on Dams, Dry Beach	D8T Dozer		2,833,013	2,833,013.33	cuyd	86.40	cuyd/hr	32,789.50	$ 114.36	$ 3,749,807.22	$ 57.84	$ 1,896,544.68	$ -	$ -	$ 5,646,351.90	
Cover soil haul and placement	HAUL_LOAD	From Stockpile/Borrow Area to Pond, Wet Beach	740B EJ Artic. Haul Truck	3	1,748,853	2,124,856.80	cuyd	83.73	cuyd/hr	25,377.50	$ 104.50	$ 2,651,948.75	$ 36.83	$ 934,653.33	$ -	$ -	$ 3,586,602.08	
	HAUL_LOAD	From Stockpile/Borrow Area to Pond, Wet Beach	938M Loader			-	cuyd		cuyd/hr	8,459.20	$ 35.77	$ 302,585.58	$ 54.13	$ 457,896.50	$ -	$ -	$ 760,482.08	
	SPREAD	Spread cover on Pond, Wet Beach	D8T Dozer		1,748,853	1,748,853.33	cuyd	86.40	cuyd/hr	20,241.40	$ 114.36	$ 2,314,806.50	$ 57.84	$ 1,170,762.58	$ -	$ -	$ 3,485,569.08	
Rock armor haul and placement	HAUL_LOAD	From West Portal	740B EJ Artic. Haul Truck	1	335,573	335,573.33	cuyd	24.16	cuyd/hr	13,889.60	$ 104.50	$ 1,451,463.20	$ 36.83	$ 511,553.97	$ -	$ -	$ 1,963,017.17	
	HAUL_LOAD	From West Portal	938M Loader			-	cuyd		cuyd/hr	13,889.60	$ 35.77	$ 496,830.99	$ 54.13	$ 751,844.05	$ -	$ -	$ 1,248,675.04	
	SPREAD	Spread on Embankment, from Spillway exc.	D8T Dozer		335,573	335,573.33	cuyd	86.40	cuyd/hr	3,884.00	$ 114.36	$ 444,174.24	$ 57.84	$ 224,650.56	$ -	$ -	$ 668,824.80	
Regrade borrows, roads, buttresses	GRADING	Finish grade soil borrow areas	12M3 Grader AWD		200	200.00	acres	0.50	acres/hr	400.00	$ 51.96	$ 20,784.00	$ 50.30	$ 20,120.00	$ -	$ -	$ 40,904.00	
	SPREAD	Grade Ultimate Canal	D8T Dozer		55,000	55,000.00	cuyd	86.40	cuyd/hr	636.60	$ 114.36	$ 72,801.58	$ 57.84	$ 36,820.94	$ -	$ -	$ 109,622.52	
	SPREAD	Rio Haul Roads	D8T Dozer		55,000	55,000.00	cuyd	86.40	cuyd/hr	636.60	$ 114.36	$ 72,801.58	$ 57.84	$ 36,820.94	$ -	$ -	$ 109,622.52	
Revegetation	MATERIALS	Revego-Hydroseeding TDA	Revego-Hydroseeding		1,420	1,420.00	acre								$ 3,234.00	$ 4,592,280.00	$ 4,592,280.00	
	MATERIALS	Revego-Hydroseeding Spillway	Revego-Hydroseeding		34	33.80	acre								$ 3,234.00	$ 109,309.20	$ 109,309.20	
	MATERIALS	Revego-Tree & Shrub Planting	Revego-Tree&Shrub		2	1.69	acre								$ 1,359.13	$ 2,296.93	$ 2,296.93	
	MATERIALS	Reseeding	Maintenance Fertilization		34	33.80	acre								$ 231.90	$ 7,838.22	$ 7,838.22	
Buttresses 1 and 3	SPREAD	Reshape and fill	D9T Dozer		338,889	338,889.00	cuyd	135.00	cuyd/hr	2,510.30	$ 173.13	$ 434,608.24	$ 57.84	$ 145,195.75	$ -	$ -	$ 579,803.99	
Wet Beach Cover Support	MATERIALS	Geogrid	Geogrid		2,623,280	2,623,280.00	sqyd								$ 4.85	$ 12,722,908.00	$ 12,722,908.00	
Diversion Channels - excavation	GENERAL	Channels	Channel exc.		384,480		cuyd				$ 4.30	$ 1,653,264.00					$ 1,653,264.00	
Diversion Channels - geotextile lining	MATERIALS	Geotextile	Geotextile		42,720	42,720.00	sqyd								$ 2.50	$ 106,800.00	$ 106,800.00	
Diversion Channels - riprap armoring	MATERIALS	Riprap Armoring	Rip Rap Armoring (12-24" D50)		28,480	28,480.00	cuyd								$ 98.00	$ 2,791,040.00	$ 2,791,040.00	
Spillway - riprap armoring	MATERIALS	Riprap Armoring	Rip Rap Armoring (12-24" D50)		20,915	20,915.00	cuyd								$ 98.00	$ 2,049,670.00	$ 2,049,670.00	
Spillway to discharge into Ranger Gulch	SPREAD	Spillway Excavation	D9T Dozer		2,664,480	3,237,343.20	cuyd	135.00	cuyd/hr	23,980.30	$ 173.13	$ 4,151,709.34	$ 57.84	$ 1,387,020.55	$ -	$ -	$ 5,538,729.89	
Pond settlement	HAUL_LOAD	Sacrificial Fill in Former Pond	740B EJ Artic. Haul Truck	1	800,000	800,000.00	cuyd	24.16	cuyd/hr	33,112.60	$ 104.50	$ 3,460,266.70	$ 36.83	$ 1,219,537.06	$ -	$ -	$ 4,679,803.76	
	HAUL_LOAD	Sacrificial Fill in Former Pond	938M Loader			-	cuyd		cuyd/hr	33,112.60	$ 35.77	$ 1,184,437.70	$ 54.13	$ 1,792,385.04	$ -	$ -	$ 2,976,822.74	
Spillway - inlet structure	MATERIALS	Spillway - inlet structure	Spillway - inlet structure			-	ea									$ 100,000.00	$ 122,000.00	(a)
Barge relocation	MATERIALS	Barge relocation	Barge relocation			-	ea									$ 1,000,000.00	$ 1,220,000.00	(a)
Embankment rock cover	MATERIALS	Embankment rock cover	Crush and screen			-	ea									$ 3,520,000.00	$ 4,294,400.00	(a)
Bench channels	MATERIALS	Bench channels	Channel exc., lining			-	ea									$ 995,000.00	$ 1,213,900.00	(a)
TOTAL COSTS												**$ 27,185,793**		**$ 12,812,114**		**$ 27,997,142**	**Total Cost $ 69,230,349**	

(a) Previous estimate, escalated by ~4%/yr (see CPI Inflation rates on Material List tab)

Notes:
Embankment: no benches; runoff will be conveyed off the embankment at the break in slope above the buttress.; 1' rock cover over 2' soil cover;208 ac.
Dry Beach: 2 ft. of vegetated soil; 670 ac.
Wet Beach: 2 ft. vegetated soil over geogrid; 542 ac.
Pond: drain pond; use spillway invert to keep pond area drained; incl. in wet beach calcs
Spillway: discharge in Ranger Gulch
Other: keep East Branch and Upper Ute Creek reservoirs, Ultimate Canal

Financial Reporting Unit Rates

Main Gravel Pit Below 1-Dam

Assumptions

Tasks

Reclamation at the main gravel pit below 1-Dam

Timing

LOM

Total Costs

$287,231

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
Pit regrading	SPREAD	Backfill and grade	D8T Dozer		63,524	63,524.00	cuyd	86.40	cuyd/hr	735.20	$ 114.36	$ 84,077.47	$ 57.84	$ 42,523.97	$ -	$ -	$ 126,601.44	
Cover material haul and placement	HAUL_LOAD	Replace topsoil	740B EJ Artic. Haul Truck	5	15,740	15,740.00	cuyd	114.61	cuyd/hr	137.30	$ 104.50	$ 14,347.85	$ 36.83	$ 5,056.76	$ -	$ -	$ 19,404.61	
	HAUL_LOAD	Replace topsoil	D8T Dozer			-	cuyd		cuyd/hr	27.50	$ 114.36	$ 3,144.90	$ 57.84	$ 1,590.60	$ -	$ -	$ 4,735.50	
Revegetation	MATERIALS	Seeding-Drill Seed	Seeding-Drill Seed		9	8.75	acre								$ 1,363.00	$ 11,926.25	$ 11,926.25	
	MATERIALS	Reveg-Drill Seed	Reveg-Drill Seed		35	35.00	acre								$ 1,595.00	$ 55,825.00	$ 55,825.00	
	MATERIALS	Seeding-Tree & Shrub	Seeding-Tree&Shrub		9	8.75	acre								$ 1,359.13	$ 11,892.39	$ 11,892.39	
	MATERIALS	Reveg-Tree & Shrub	Reveg-Tree&Shrub		35	35.00	acre								$ 1,359.13	$ 47,569.55	$ 47,569.55	
	MATERIALS	Maintenance Fertilization	Maintenance Fertilization		40	40.00	acre								$ 231.90	$ 9,276.00	$ 9,276.00	
TOTAL COSTS												**$ 101,570**		**$ 49,171**		**$ 136,489**	**Total Cost $ 287,231**	

Financial Reporting Unit Rates

Laydown Yard at Rectifier 6

Assumptions

Tasks

Reclamation at the Laydown Yard at Rectifier 6

Timing

LOM

Total Costs

$73,593

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
Regrading	SPREAD	Backfill and grade	D8T Dozer		27,225	27,225.00	cuyd	86.40	cuyd/hr	315.10	$ 114.36	$ 36,034.84	$ 57.84	$ 18,225.38	$ -	$ -	$ 54,260.22	
Revegetation	MATERIALS	Seeding-Drill Seed	Seeding-Drill Seed		1.25	1.25	acre								$ 1,363.00	$ 1,703.75	$ 1,703.75	
	MATERIALS	Reveg-Drill Seed	Reveg-Drill Seed		5.00	5.00	acre								$ 1,595.00	$ 7,975.00	$ 7,975.00	
	MATERIALS	Seeding-Tree & Shrub	Seeding-Tree&Shrub		1.25	1.25	acre								$ 1,359.13	$ 1,698.91	$ 1,698.91	
	MATERIALS	Reveg-Tree & Shrub	Reveg-Tree&Shrub		5.00	5.00	acre								$ 1,359.13	$ 6,795.65	$ 6,795.65	
	MATERIALS	Maintenance Fertilization	Maintenance Fertilization		5.00	5.00	acre								$ 231.90	$ 1,159.50	$ 1,159.50	
TOTAL COSTS												**$ 36,035**		**$ 18,225**		**$ 19,333**	**Total Cost $ 73,593**	

Financial Reporting Unit Rates

Mill Site Demo

Assumptions

Structures remaining post closure include Williams Fork Pump House

Tasks

Demolition of structures not being used for ongoing water management

Timing

LOM

Total Costs

$7,078,299

Calculations

Specific Tasks	BLDG	Area	Material	Length	Width	Height	Volume	Units	Cost/Unit Materials	Total Cost	Comment
Demolish SUPERSTRUCTURE	PC2/PC3 TRANSFER BUILDING	Conveyor	steel	1.00	14,280.00	63.00	899,640.00	cuft	$ 0.43	$ 270,791.64	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	PC2/PC3 TRANSFER BUILDING	Conveyor	concrete floor	1.00	14,280.00	3.00	42,840.00	sqft	$ 0.79	$ 11,281.20	
Demolish SUPERSTRUCTURE	PC3/SC1 TRANSFER BUILDING	Conveyor	steel	1.00	5,651.00	82.00	463,382.00	cuft	$ 0.43	$ 139,477.98	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	PC3/SC1 TRANSFER BUILDING	Conveyor	concrete floor	1.00	5,651.00	3.00	16,953.00	sqft	$ 0.79	$ 4,464.29	
Demolish SUPERSTRUCTURE	CONVEYOR MAINT. SHOP (LOCI) - SUPERSTRUCTURE	Mill	steel	1.00	43,632.00	34.00	1,483,488.00	cuft	$ 0.43	$ 446,529.89	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	CONVEYOR MAINT. SHOP (LOCI) - SUPERSTRUCTURE	Mill	concrete floor	1.00	43,632.00	1.00	43,632.00	sqft	$ 0.79	$ 34,469.28	
Demolish SUPERSTRUCTURE	TAILING & TRANSPORTATION BUILDING - SUPERSTRUCTURE	Mill	steel	1.00	6,100.00	19.00	115,900.00	cuft	$ 0.43	$ 34,885.90	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	TAILING & TRANSPORTATION BUILDING - SUPERSTRUCTURE	Mill	concrete floor	1.00	6,100.00	1.00	6,100.00	sqft	$ 0.79	$ 4,819.00	
Demolish SUPERSTRUCTURE	MILL BUILDING - SUPERSTRUCTURE	Mill	steel	1.00	242,640.00	39.29	9,532,900.00	cuft	$ 0.43	$ 2,869,402.90	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	MILL BUILDING - SUPERSTRUCTURE	Mill	concrete floor	1.00	242,640.00	1.00	242,640.00	sqft	$ 0.79	$ 191,685.60	
Demolish SUPERSTRUCTURE	ORE STORAGE & CONV. TERMINUS - SUPERSTRUCTURE	Mill	steel	1.00	30,910.00	17.52	541,600.00	cuft	$ 0.43	$ 163,021.60	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	ORE STORAGE & CONV. TERMINUS - SUPERSTRUCTURE	Mill	concrete floor	1.00	30,910.00	1.00	30,910.00	sqft	$ 0.79	$ 24,418.90	
Footing	ORE STORAGE & CONV. TERMINUS - SUPERSTRUCTURE	Mill	concrete footing	640.00	1.00	1.00	640.00	LF	$ 13.20	$ 8,448.00	
Demolish SUPERSTRUCTURE	CONCENTRATE THICKENER - SUPERSTRUCTURE	Mill	steel	1.00	31,416.00	11.00	345,576.00	cuft	$ 0.43	$ 104,018.38	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	CONCENTRATE THICKENER - SUPERSTRUCTURE	Mill	concrete floor	1.00	31,416.00	1.00	31,416.00	sqft	$ 0.79	$ 24,818.64	
Demolish SUPERSTRUCTURE	MOBILE EQUIP. SHOP - SUPERSTRUCTURE	Mill	steel	1.00	6,879.00	32.00	220,128.00	cuft	$ 0.43	$ 66,258.53	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	MOBILE EQUIP. SHOP - SUPERSTRUCTURE	Mill	concrete floor	1.00	6,879.00	1.00	6,879.00	sqft	$ 0.79	$ 5,434.41	
Demolish SUPERSTRUCTURE	ACID HOUSE/STORAGE - SUPERSTRUCTURE	Mill	steel	1.00	6,705.00	31.00	207,855.00	cuft	$ 0.43	$ 62,564.36	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	ACID HOUSE/STORAGE - SUPERSTRUCTURE	Mill	concrete floor	1.00	15,625.00	1.00	15,625.00	sqft	$ 0.79	$ 12,343.75	
Demolish SUPERSTRUCTURE	NOKES STORAGE BLDG. - SUPERSTRUCTURE	Mill	steel	1.00	5,274.00	31.00	163,494.00	cuft	$ 0.43	$ 49,211.69	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	NOKES STORAGE BLDG. - SUPERSTRUCTURE	Mill	concrete floor	1.00	5,274.00	1.00	5,274.00	sqft	$ 0.79	$ 4,166.46	
Demolish SUPERSTRUCTURE	HAZ. WASTE/FLAMMABLE BLDG - SUPERSTRUCTURE	Mill	steel	1.00	1,466.00	17.00	24,922.00	cuft	$ 0.43	$ 7,501.52	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	HAZ. WASTE/FLAMMABLE BLDG - SUPERSTRUCTURE	Mill	concrete floor	1.00	1,466.00	1.00	1,466.00	sqft	$ 0.79	$ 1,158.14	
Demolish SUPERSTRUCTURE	BULK STORAGE WHSE - SUPERSTRUCTURE	Mill	steel	1.00	5,600.00	17.00	95,200.00	cuft	$ 0.43	$ 28,655.20	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	BULK STORAGE WHSE - SUPERSTRUCTURE	Mill	concrete floor	1.00	5,600.00	1.00	5,600.00	sqft	$ 0.79	$ 4,424.00	
Demolish SUPERSTRUCTURE	TRUCK SCALE BLDG - SUPERSTRUCTURE	Mill	steel	1.00	1,482.00	19.00	28,158.00	cuft	$ 0.43	$ 8,475.56	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	TRUCK SCALE BLDG - SUPERSTRUCTURE	Mill	concrete floor	1.00	1,482.00	1.00	1,482.00	sqft	$ 0.79	$ 1,170.78	
Demolish SUPERSTRUCTURE	ELECTRIC SWITCHGEAR BLDG - SUPERSTRUCTURE	Mill	steel	1.00	1,530.00	16.00	24,480.00	cuft	$ 0.43	$ 7,368.48	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	ELECTRIC SWITCHGEAR BLDG - SUPERSTRUCTURE	Mill	concrete floor	1.00	1,530.00	1.00	1,530.00	sqft	$ 0.79	$ 1,208.70	
Demolish SUPERSTRUCTURE	SEWAGE TREATMENT BLDG - SUPERSTRUCTURE	Mill	steel	1.00	500.00	1.00	500.00	cuft	$ 0.43	$ 150.50	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	SEWAGE TREATMENT BLDG - SUPERSTRUCTURE	Mill	concrete floor	1.00	500.00	1.00	500.00	sqft	$ 0.79	$ 395.00	
Demolish SUPERSTRUCTURE	PROCESS/POTABLE WATER TANKS - SUPERSTRUCTURE	Mill	steel	1.00	6,705.00	32.00	214,560.00	cuft	$ 0.43	$ 64,582.56	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	PROCESS/POTABLE WATER TANKS - SUPERSTRUCTURE	Mill	concrete floor	1.00	6,705.00	1.00	6,705.00	sqft	$ 0.79	$ 5,296.95	
Asphalt Demolition		Mill	asphalt	1.00	159,976.00	1.00	159,976.00	sqyd	$ 5.20	$ 831,875.20	
1% of Structures to landfill		Mill	Landfill Fee	1.00	159832.00	1.00	159,832.00	EA	$ 0.68	$ 108,685.76	
Demolish SUPERSTRUCTURE	Topsoil Shop	Tailing	steel	130.00	60.00	24.00	187,200.00	cuft	$ 0.43	$ 56,347.20	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	Topsoil Shop	Tailing	concrete floor	1.00	10,680.00	1.00	10,680.00	sqft	$ 0.79	$ 8,437.20	
Demolish SUPERSTRUCTURE	Tailing Operations/Maintenance Shop	Tailing	steel	1.00	3,320.00	20.00	66,400.00	cuft	$ 0.43	$ 19,986.40	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	Tailing Operations/Maintenance Shop	Tailing	concrete floor	1.00	3,320.00	1.00	3,320.00	sqft	$ 0.79	$ 2,622.80	
Demolish SUPERSTRUCTURE	Ute Park Pump Station	Tailing	steel	108.00	47.00	16.00	81,216.00	cuft	$ 0.43	$ 24,446.02	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	Ute Park Pump Station	Tailing	concrete floor	1.00	5,076.00	1.00	5,076.00	sqft	$ 0.79	$ 4,010.04	
Demolish SUPERSTRUCTURE	East Branch Pump Station	Tailing	steel	1.00	4,653.00	18.00	83,754.00	cuft	$ 0.43	$ 25,209.95	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	East Branch Pump Station	Tailing	concrete floor	1.00	4,653.00	1.00	4,653.00	sqft	$ 0.79	$ 3,675.87	
Demolish SUPERSTRUCTURE	West Portal Building	W. Portal	steel	1.00	25,752.00	1.00	25,752.00	cuft	$ 0.43	$ 7,751.35	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	West Portal Building	W. Portal	concrete floor	1.00	1,133.00	1.00	1,133.00	sqft	$ 0.79	$ 895.07	
Demolish SUPERSTRUCTURE	Rectifier Station 5	W. Portal	steel	1.00	75,411.00	1.00	75,411.00	cuft	$ 0.43	$ 22,698.71	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	Rectifier Station 5	W. Portal	concrete floor	1.00	3,969.00	1.00	3,969.00	sqft	$ 0.79	$ 3,135.51	
Demolish POWER LINE	Gravel Pit Spur (200-ft spacing)	Power	power poles, x-arms	1.00	3.00	1.00	3.00	EA	$ 386.50	$ 1,159.50	
Demolish POWER LINE	Pond Shop Spur (200-ft spacing)	Power	power poles, x-arms	1.00	11.20	1.00	11.20	EA	$ 386.50	$ 4,328.80	
Demolish POWER LINE	1-Dam Lighting (200-ft spacing)	Power	power poles, x-arms	1.00	66.70	1.00	66.70	EA	$ 386.50	$ 25,779.55	
Bridge Removal	Williams Fork	Mill	bridge	1.00	1,600	1.00	1,600.00	sqft	$ 12.40	$ 19,840.00	
Bridge Removal	S. Branch Williams Fork	Mill	bridge	1.00	1,600	1.00	1,600.00	sqft	$ 12.40	$ 19,840.00	
Demolish Tailing Line	Tailing Distribution System (incl. drop towers)	Tailing	TDL concrete pipe	1.00	18,300.00	1.00	18,300.00	LF	$ 57.50	$ 1,052,250.00	
Demolish Overland Conveyor	OVERLAND CONVEYOR - SUPERSTRUCTURE (incl. supports)	Conveyor	Overland conveyor	1.00	431,060.00	1.00	431,060.00	sqft	$ 0.40	$ 172,424.00	

	Total Cost
TOTAL COSTS	**$ 7,078,298.72**

Financial Reporting Unit Rates

Williams Fork Pump System

Assumptions

Tasks
Reclamation at the Williams Fork Pump System

Timing
LOM

Total Costs
$15,053

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
Regrading	SPREAD	Backfill and grade Williams Fork pumphouse	D8T Dozer		5,650	5,650.00	cuyd	86.40	cuyd/hr	65.40	$ 114.36	$ 7,479.14	$ 57.84	$ 3,782.74	$ -	$ -	$ 11,261.88	
Revegetation	MATERIALS	Seeding-Drill Seed	Seeding-Drill Seed		0.25	0.25	acre								$ 1,363.00	$ 340.75	$ 340.75	
	MATERIALS	Reveg-Drill Seed	Reveg-Drill Seed		1.00	1.00	acre								$ 1,595.00	$ 1,595.00	$ 1,595.00	
	MATERIALS	Maintenance Fertilization	Maintenance Fertilization		8.00	8.00	acre								$ 231.90	$ 1,855.20	$ 1,855.20	
TOTAL COSTS												**$ 7,479**		**$ 3,783**		**$ 3,791**	**Total Cost $ 15,053**	

Financial Reporting Unit Rates

Tailings Line And Power Line

Assumptions

Tasks

Reclamation along the Tailings and Power Line Alignments

Timing

LOM

Total Costs

$160,087

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
Regrading	SPREAD	Backfill and grade tailing line/power line	D8T Dozer		56,386	56,386.00	cuyd	86.40	cuyd/hr	652.60	$ 114.36	$ 74,631.34	$ 57.84	$ 37,746.38	$ -	$ -	$ 112,377.72	
Revegetation	MATERIALS	Seeding-Drill Seed	Seeding-Drill Seed		2.5	2.50	acre								$ 1,363.00	$ 3,407.50	$ 3,407.50	
	MATERIALS	Reveg-Drill Seed	Reveg-Drill Seed		10.0	10.00	acre								$ 1,595.00	$ 15,950.00	$ 15,950.00	
	MATERIALS	Seeding-Tree & Shrub	Seeding-Tree&Shrub		2.5	2.50	acre								$ 1,359.13	$ 3,397.83	$ 3,397.83	
	MATERIALS	Reveg-Tree & Shrub	Reveg-Tree&Shrub		10.0	10.00	acre								$ 1,359.13	$ 13,591.30	$ 13,591.30	
	MATERIALS	Maintenance Fertilization	Maintenance Fertilization		49	49.00	acre								$ 231.90	$ 11,363.10	$ 11,363.10	
TOTAL COSTS												**$ 74,631**		**$ 37,746**		**$ 47,710**	**Total Cost $ 160,087**	

Financial Reporting Unit Rates

Tailing Facility Structures

Assumptions

Tasks

Reclamation at the Tailing Operations/Maintenance Shop, Topsoil Shop, Pump Stations, etc.

Timing

LOM

Total Costs

$181,604

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
Regrading	SPREAD	Backfill and grade pond shop/road area	D8T Dozer		52,627	52,627.00	cuyd	86.40	cuyd/hr	609.10	$ 114.36	$ 69,656.68	$ 57.84	$ 35,230.34	$ -	$ -	$ 104,887.02	
Revegetation	MATERIALS	Seeding-Drill Seed	Seeding-Drill Seed		3.5	3.50	acre								$ 1,363.00	$ 4,770.50	$ 4,770.50	
	MATERIALS	Reveg-Drill Seed	Reveg-Drill Seed		14	14.00	acre								$ 1,595.00	$ 22,330.00	$ 22,330.00	
	MATERIALS	Seeding-Tree & Shrub	Seeding-Tree&Shrub		3.5	3.50	acre								$ 1,359.13	$ 4,756.96	$ 4,756.96	
	MATERIALS	Reveg-Tree & Shrub	Reveg-Tree&Shrub		14	14.00	acre								$ 1,359.13	$ 19,027.82	$ 19,027.82	
	MATERIALS	Maintenance Fertilization	Maintenance Fertilization		14	14.00	acre								$ 231.90	$ 3,246.60	$ 3,246.60	
	MATERIALS	Mill 35 MLGW Monitoring Wells	Well plug and abandon			2,670.00	LF								$ 5.60	$ 14,952.00	$ 14,952.00	
	MATERIALS	Mill 15 THP Monitoring Wells	Well plug and abandon			381.00	LF								$ 5.60	$ 2,133.60	$ 2,133.60	
	MATERIALS	Mill 7 MLEX Interceptor Wells	Well plug and abandon			657.00	LF								$ 5.60	$ 3,679.20	$ 3,679.20	
	MATERIALS	Mill 9 HMEX Extraction Wells	Well plug and abandon			325.00	LF								$ 5.60	$ 1,820.00	$ 1,820.00	
																	Total Cost	
TOTAL COSTS												**$ 69,657**		**$ 35,230**		**$ 76,717**	**$ 181,604**	

Financial Reporting Unit Rates

Mill Water Return Pipe Line

Assumptions

Tasks

Reclamation along the Mill Water Return Pipe Line Alignment

Timing

LOM

Total Costs

$170,731

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
Regrading	SPREAD		D8T Dozer		18,783	18,783.00	cuyd	86.40	cuyd/hr	217.40	$ 114.36	$ 24,861.86	$ 57.84	$ 12,574.42	$ -	$ -	$ 37,436.28	
	SPREAD	Rip access road	D8T Dozer		32,267	32,267.00	cuyd	86.40	cuyd/hr	373.50	$ 114.36	$ 42,713.46	$ 57.84	$ 21,603.24	$ -	$ -	$ 64,316.70	
Revegetation	MATERIALS	Seeding-Drill Seed	Seeding-Drill Seed		4.25	4.25	acre								$ 1,363.00	$ 5,792.75	$ 5,792.75	
	MATERIALS	Reveg-Drill Seed	Reveg-Drill Seed		17	17.00	acre								$ 1,595.00	$ 27,115.00	$ 27,115.00	
	MATERIALS	Seeding-Tree & Shrub	Seeding-Tree&Shrub		4.25	4.25	acre								$ 1,359.13	$ 5,776.30	$ 5,776.30	
	MATERIALS	Reveg-Tree & Shrub	Reveg-Tree&Shrub		17	17.00	acre								$ 1,359.13	$ 23,105.21	$ 23,105.21	
	MATERIALS	Maintenance Fertilization	Maintenance Fertilization		31	31.00	acre								$ 231.90	$ 7,188.90	$ 7,188.90	
TOTAL COSTS												**$ 67,575**		**$ 34,178**		**$ 68,978**	**Total Cost $ 170,731**	

Financial Reporting Unit Rates

Topsoil Stockpiles & Roads

Assumptions

Tasks

Reclamation at the Topsoil Stockpiles and Haul Roads

Timing

LOM

Total Costs

$514,877

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
Regrading	SPREAD	Rip topsoil stockpile area/road	D8T Dozer		161,333	161,333.00	cuyd	86.40	cuyd/hr	1,867.30	$ 114.36	$ 213,544.43	$ 57.84	$ 108,004.63	$ -	$ -	$ 321,549.06	
Revegetation	MATERIALS	Seeding-Drill Seed	Seeding-Drill Seed		13	12.50	acre								$ 1,363.00	$ 17,037.50	$ 17,037.50	
	MATERIALS	Reveg-Drill Seed	Reveg-Drill Seed		50	50.00	acre								$ 1,595.00	$ 79,750.00	$ 79,750.00	
	MATERIALS	Seeding-Tree & Shrub	Seeding-Tree&Shrub		13	12.50	acre								$ 1,359.13	$ 16,989.13	$ 16,989.13	
	MATERIALS	Reveg-Tree & Shrub	Reveg-Tree&Shrub		50	50.00	acre								$ 1,359.13	$ 67,956.50	$ 67,956.50	
	MATERIALS	Maintenance Fertilization	Maintenance Fertilization		50	50.00	acre								$ 231.90	$ 11,595.00	$ 11,595.00	
TOTAL COSTS												**$ 213,544**		**$ 108,005**		**$ 193,328**	**Total Cost $ 514,877**	

Financial Reporting Unit Rates

PC3 Overland Surface Conveyor

Assumptions

Tasks

Reclamation along the PC3 Overland Conveyor Alignment

Timing

LOM

Total Costs

$322,001

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
Haul impacted material spillage	HAUL_LOAD	Haul ore spilled from conveyor to TDA	740B EJ Artic. Haul Truck	1	110	110.00	cuyd	14.19	cuyd/hr	7.80	$ 104.50	$ 815.10	$ 36.83	$ 287.27	$ -	$ -	$ 1,102.37	
	HAUL_LOAD	Haul ore spilled from conveyor to TDA	938M Loader			-	cuyd		cuyd/hr	7.80	$ 35.77	$ 279.01	$ 54.13	$ 422.21	$ -	$ -	$ 701.22	
Revegetation	MATERIALS	Seeding-Hydroseeding	Reveg-Hydroseeding		13.3	13.34	acre								$ 3,234.00	$ 43,141.56	$ 43,141.56	
	MATERIALS	Reveg-Hydroseeding	Reveg-Hydroseeding		53.4	53.36	acre								$ 3,234.00	$ 172,566.24	$ 172,566.24	
	MATERIALS	Seeding-Tree & Shrub	Seeding-Tree&Shrub		15.4	15.38	acre								$ 1,359.13	$ 20,903.42	$ 20,903.42	
	MATERIALS	Reveg-Tree & Shrub	Reveg-Tree&Shrub		61.5	61.50	acre								$ 1,359.13	$ 83,586.50	$ 83,586.50	
TOTAL COSTS												**$ 1,094**		**$ 709**		**$ 320,198**	**Total Cost $ 322,001**	

Financial Reporting Unit Rates

Wtr Trtmnt Capex O&M (10y)

Tasks

Mine: flood underground workings, construct 2 concrete bulkheads, pump to existing Urad WTP; assumes max. water level is 10,830-ft amsl.
CCI: Construction Cost Index (for ref. only); BCI: Building Cost Index (utilized for 5 of the 6 tasks listed); URAD actual O&M costs used for 2023

Timing

Mill WTP constructed prior to mine closure; O&M at LOM for 10 years
Bulkheads, pumping systems constructed prior to mine closure; O&M at LOM for 10 years

Total Costs

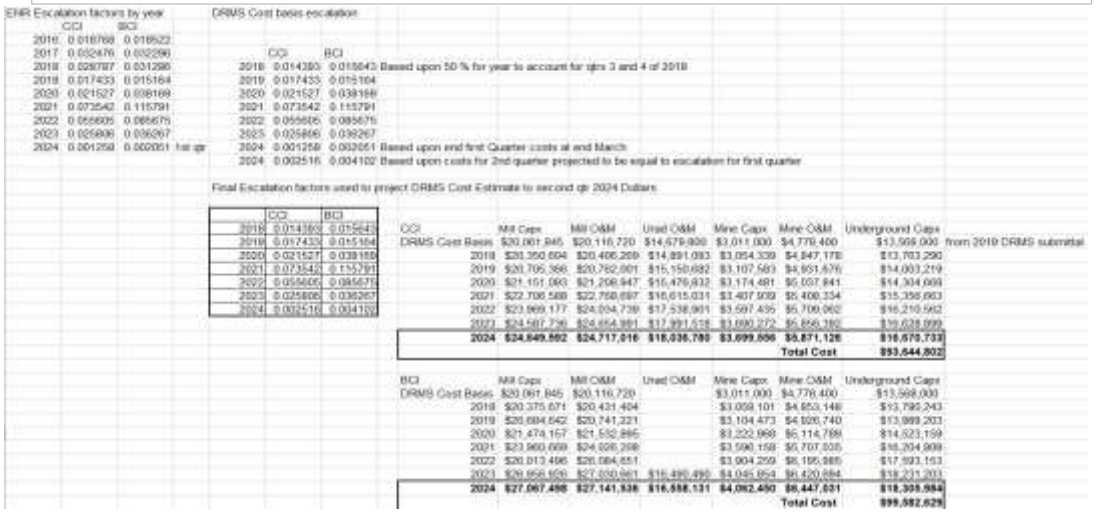
$99,582,630

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	Total Cost	Comment
WTP construction	CAPEX	Mill		$ 27,067,498.00	
WTP operation	O&M	Mill		$ 27,141,536.00	
WTP operation	O&M	Urad		$ 16,558,131.00	
Underground pumping system construction	CAPEX	Mine		$ 4,062,450.00	
Pumping from flooded underground workings	O&M	Mine		$ 6,447,031.00	
Bulkhead construction	CAPEX	Underground		$ 18,305,984.00	

	Total Cost
TOTAL COSTS	**$ 99,582,630**

Notes:
Construct Bulkhead #1 at the conveyor portal (West Portal):
- Located 100-ft inside the portal, 75-ft thick, Elev. 8,945.5 ft.
Construct Bulkhead #2 at the bottom of No. 4 Shaft (Ventilation Shaft):
- Located 55-ft on the cross drift, 105-ft thick, Elev. 8,228.5 ft.
Construct UG pumping systems Phase 1 & 2
- Pump from Level 7025-7500 (Ph 1) and from 7500-8100 (Ph 2)



ENR Escalation factors by year

	CCI	BCI	
2016	0.016768	0.018522	
2017	0.032476	0.032296	
2018	0.029787	0.031290	
2019	0.017433	0.015164	
2020	0.021527	0.038169	
2021	0.073542	0.115791	
2022	0.056605	0.085675	
2023	0.025808	0.036267	
2024	0.001258	0.002051	1st qtr

DRMS Cost basis escalation

	CCI	BCI	
2018	0.014383	0.015843	Based upon 50 % for year to account for qtrs 3 and 4 of 2018
2019	0.017433	0.015164	
2020	0.021527	0.038169	
2021	0.073542	0.115791	
2022	0.056605	0.085675	
2023	0.025808	0.036267	
2024	0.001258	0.002051	Based upon end first Quarter costs at end March
2024	0.002516	0.004102	Based upon costs for 2nd quarter projected to be equal to escalation for first quarter

Final Escalation factors used to project DRMS Cost Estimate to second qtr 2024 Dollars

	CCI	BCI
2018	0.014383	0.015843
2019	0.017433	0.015164
2020	0.021527	0.038169
2021	0.073542	0.115791
2022	0.056605	0.085675
2023	0.025808	0.036267
2024	0.002516	0.004102

CCI	Mill Capx	Mill O&M	Urad O&M	Mine Capx	Mine O&M	Underground Capx	
DRMS Cost Basis	$20,061,845	$20,116,720	$14,679,800	$3,011,000	$4,778,400	$13,568,000	from 2019 DRMS submittal
2018	$20,350,604	$20,406,269	$14,891,083	$3,054,339	$4,847,178	$13,763,290	
2019	$20,705,366	$20,762,001	$15,150,682	$3,107,583	$4,931,676	$14,003,219	
2020	$21,151,063	$21,208,947	$15,476,832	$3,174,481	$5,037,841	$14,304,699	
2021	$22,706,589	$22,768,697	$16,615,031	$3,407,909	$5,408,334	$15,358,663	
2022	$23,969,177	$24,034,739	$17,538,901	$3,597,435	$5,709,062	$16,210,562	
2023	$24,587,736	$24,654,991	$17,991,518	$3,690,272	$5,856,392	$16,628,899	
2024	$24,849,592	$24,717,016	$18,036,780	$3,699,696	$5,871,126	$16,670,733	
					Total Cost	$93,644,802	

BCI	Mill Capx	Mill O&M	Urad O&M	Mine Capx	Mine O&M	Underground Capx
DRMS Cost Basis	$20,061,845	$20,116,720		$3,011,000	$4,778,400	$13,568,000
2018	$20,375,671	$20,431,404		$3,058,101	$4,853,148	$13,790,243
2019	$20,684,642	$20,741,221		$3,104,473	$4,926,740	$13,999,203
2020	$21,474,157	$21,532,885		$3,222,998	$5,114,789	$14,533,159
2021	$23,960,669	$24,026,268		$3,596,158	$5,707,035	$16,204,909
2022	$26,013,496	$26,084,651		$3,904,259	$6,195,985	$17,593,153
2023	$26,956,509	$27,030,961	$16,490,496	$4,045,854	$6,420,884	$18,231,203
2024	$27,067,498	$27,141,536	$16,558,131	$4,062,450	$6,447,031	$18,305,984
					Total Cost	$99,582,629

Financial Reporting Unit Rates

Maint & Enviro Control

Assumptions

Tasks

General maintenance and environmental control tasks

Timing

30 years post-closure

Total Costs

$7,218,946

Calculations

Specific Tasks		Total Cost	Comment
	$	-	
Tailings Stewardship	$	3,000,000.00	
Operations and Maintenance first 10-year period	$	2,068,395.12	
Operations and Maintenance second 10-year period	$	1,034,197.56	
Operations and Maintenance third 10-year period	$	689,465.04	
Reseeding (132 acres)	$	426,888.00	
		Total Cost	
TOTAL COSTS	**$**	**7,218,946**	

Notes:
Tailings Stewardship annual cost $100K based on similar Freeport mine sites.
Assume 30 days per year, years 1-10; 15 days/year, years 11-20; 10 days/year, years 21-30.
Assume 10% of seeded area of TDA and PC3 corridor will require reseeding during first 5 years post-closure (other disturbed areas include an equivalent "Maintenance Fertilization" activity

Maintenance and Repair Crew

Man Hours	Members					
Member Crew	9		90		90	hrs/day
Equipment	Quantity	Rate				
CAT D6N	1	$	502.82	$	502.82	per day
CAT 938M LOADER	1	$	357.69	$	357.69	per day
CAT 740B HAUL TRUCK	2	$	1,045.04	$	2,090.08	per day
12M GRADER	1	$	519.63	$	519.63	per day
				$	3,470.23	
Labor	Quantity	Rate				
CAT D6	1	$	578.36	$	578.36	per day
CAT 938 LOADER	1	$	541.29	$	541.29	per day
CAT 470B HAUL TRUCK	2	$	368.31	$	736.62	per day
12M GRADER	1	$	502.98	$	502.98	per day
Laborer	4	$	266.29	$	1,065.17	per day
TOTAL LABOR COST				$	3,424.42	
Total Daily Maintenance Cost				**$**	**6,894.65**	per day

Financial Reporting Unit Rates

Mobilize-Demobilize

Assumptions
Construction duration is 3 years

Tasks
Costs to mobilize and demobilize **EACH YEAR** (used DRMS value in 2019 plus CPI inflation)

Timing
LOM
Total Costs
$824,774

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
	Year 1											$ 274,924.56		$ -		$ -	$ 274,924.56	
	Year 2											$ 274,924.56		$ -		$ -	$ 274,924.56	
	Year 3											$ 274,924.56		$ -		$ -	$ 274,924.56	
																	$ -	
TOTAL COSTS												**$ 824,774**		**$ -**		**$ -**	**Total Cost $ 824,774**	

All prices shown in US dollars ($)

Adjustments for 10020 in Ajax

June 10, 2024

Miscellaneous DSL 6X4 4000
On-Highway Water Tankers

Size Class:
200 hp & Over
Weight:
14000 lbs

Configuration for DSL 6X4 4000

Horsepower	**250.0**	Power Mode	**Diesel**
Tank Capacity	**4000.0 gal**		

AED Rental Rates

These rental rates reflect an average for equipment of this type and size. Rates shown for specific brands or models are provided for convenience only. Rates charged by rental companies for specific brands or models will vary depending on many factors

	Monthly	Weekly	Daily
Published Rates	USD $5,622.00	USD $2,262.00	USD $741.00
Adjustments			
Region (Colorado: 108.16%)	USD $458.60	USD $184.52	USD $60.44
User Defined			
Rental Rates (100%)	-	-	-
Total:	**USD $6,080.60**	**USD $2,446.52**	**USD $801.44**

Date Last Updated: Mar 01, 2024

Adjustments for 155353 in Ajax

June 10, 2024

Caterpillar 621G (disc. 2007)
Off-Highway Water Tanker Trucks

Size Class:
300 - 399 hp
Weight:
N/A

Configuration for 621G (disc. 2007)

Horsepower	**365 hp**	Power Mode	**Diesel**

AED Rental Rates

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	Monthly	Weekly	Daily
Published Rates	USD $9,646.00	USD $3,421.00	USD $1,328.00
Adjustments			
Region (Colorado: 101.98%)	USD $191.01	USD $67.74	USD $26.30
User Defined			
Rental Rates (100%)	-	-	-
Total:	**USD $9,837.01**	**USD $3,488.74**	**USD $1,354.30**

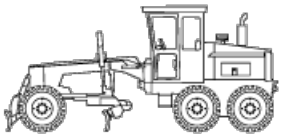
Date Last Updated: Mar 01, 2024

Adjustments for 201298 in Ajax

June 10, 2024

Caterpillar 12M3 AWD (disc. 2019)
Articulated Frame Graders

Size Class:
170 - 199 hp
Weight:
N/A



Configuration for 12M3 AWD (disc. 2019)

Horsepower	**179.0 hp**

AED Rental Rates

These rental rates reflect an average for equipment of this type and size. Rates shown for specific brands or models are provided for convenience only. Rates charged by rental companies for specific brands or models will vary depending on many factors

	Monthly	Weekly	Daily
Published Rates	USD $10,965.00	USD $4,313.00	USD $1,436.00
Adjustments			
Region (Colorado: 83.41%)	(USD $1,819.45)	(USD $715.67)	(USD $238.28)
User Defined			
Rental Rates (100%)	-	-	-
Total:	**USD $9,145.55**	**USD $3,597.33**	**USD $1,197.72**

Date Last Updated: Mar 01, 2024

Adjustments for 305021 in Ajax

June 10, 2024

Caterpillar 938M
4-Wd Articulated Wheel Loaders

Size Class:
175 - 199 hp
Weight:
N/A

Configuration for 938M

Horsepower	**168.0 hp**	Operator Protection	**ROPS/FOPS**
Power Mode	**Diesel**		

AED Rental Rates

These rental rates reflect an average for equipment of this type and size. Rates shown for specific brands or models are provided for convenience only. Rates charged by rental companies for specific brands or models will vary depending on many factors

	Monthly	Weekly	Daily
Published Rates	USD $6,303.00	USD $2,359.00	USD $817.00
Adjustments			
Region (Colorado: 99.88%)	(USD $7.63)	(USD $2.86)	(USD $0.99)
User Defined			
Rental Rates (100%)	-	-	-
Total:	**USD $6,295.37**	**USD $2,356.14**	**USD $816.01**

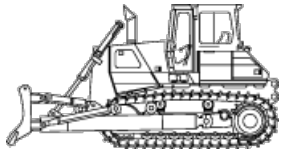
Date Last Updated: Mar 01, 2024

Adjustments for 32902 in Ajax

June 10, 2024

Caterpillar D6N LGP (disc. 2019)
Lgp Crawler Dozers

Size Class:
130 - 159 hp
Weight:
39222 lbs



Configuration for D6N LGP (disc. 2019)

Dozer Type	**VPAT**	Horsepower	**145.0 hp**
Operator Protection	**EROPS**	Power Mode	**Diesel**

AED Rental Rates

These rental rates reflect an average for equipment of this type and size. Rates shown for specific brands or models are provided for convenience only. Rates charged by rental companies for specific brands or models will vary depending on many factors

	Monthly	Weekly	Daily
Published Rates	USD $8,466.00	USD $3,169.00	USD $1,155.00
Adjustments			
Region (Colorado: 104.53%)	USD $383.69	USD $143.62	USD $52.35
User Defined			
Rental Rates (100%)	-	-	-
Total:	**USD $8,849.69**	**USD $3,312.62**	**USD $1,207.35**

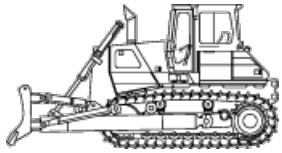
Date Last Updated: Mar 01, 2024

Adjustments for 33584 in Ajax

June 10, 2024

Caterpillar D9T (disc. 2023)
Standard Crawler Dozers

Size Class:
360 - 519 hp
Weight:
105600 lbs



Configuration for D9T (disc. 2023)

Dozer Type	**Semi-U**	Horsepower	**410.0 hp**
Operator Protection	**ROPS/FOPS**	Power Mode	**Diesel**

AED Rental Rates

These rental rates reflect an average for equipment of this type and size. Rates shown for specific brands or models are provided for convenience only. Rates charged by rental companies for specific brands or models will vary depending on many factors

	Monthly	Weekly	Daily
Published Rates	USD $27,202.00	USD $9,408.00	USD $3,320.00
Adjustments			
Region (Colorado: 112.02%)	USD $3,269.45	USD $1,130.76	USD $399.04
User Defined			
Rental Rates (100%)	-	-	-
Total:	**USD $30,471.45**	**USD $10,538.76**	**USD $3,719.04**

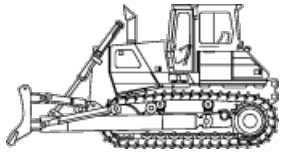
Date Last Updated: Mar 01, 2024

Adjustments for 33682 in Ajax

June 10, 2024

Caterpillar D8T (disc. 2023)
Standard Crawler Dozers

Size Class:
260 - 359 hp
Weight:
75845 lbs



Configuration for D8T (disc. 2023)

Dozer Type	**Semi-U**	Horsepower	**310.0 hp**
Operator Protection	**EROPS**	Power Mode	**Diesel**

AED Rental Rates

These rental rates reflect an average for equipment of this type and size. Rates shown for specific brands or models are provided for convenience only. Rates charged by rental companies for specific brands or models will vary depending on many factors

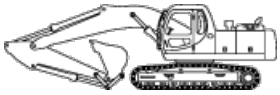
	Monthly	Weekly	Daily
Published Rates	USD $17,967.00	USD $6,634.00	USD $2,359.00
Adjustments			
Region (Colorado: 112.02%)	USD $2,159.48	USD $797.35	USD $283.53
User Defined			
Rental Rates (100%)	-	-	-
Total:	**USD $20,126.48**	**USD $7,431.35**	**USD $2,642.53**

Date Last Updated: Mar 01, 2024

Adjustments for 366228 in Ajax

June 10, 2024

Caterpillar 336F L (disc. 2019)
Crawler Mounted Hydraulic Excavators



Size Class:
33.5 - 40.4 mt
Weight:
N/A

Configuration for 336F L (disc. 2019)

Horsepower	**303.0 hp**

AED Rental Rates

These rental rates reflect an average for equipment of this type and size. Rates shown for specific brands or models are provided for convenience only. Rates charged by rental companies for specific brands or models will vary depending on many factors

	Monthly	Weekly	Daily
Published Rates	USD $10,311.00	USD $3,707.00	USD $1,260.00
Adjustments			
Region (Colorado: 101.97%)	USD $202.81	USD $72.91	USD $24.78
User Defined			
Rental Rates (100%)	-	-	-
Total:	**USD $10,513.81**	**USD $3,779.91**	**USD $1,284.78**

Date Last Updated: Mar 01, 2024

Adjustments for 50037 in Ajax

June 10, 2024

Caterpillar 740B EJ (disc. 2015)
Articulated Rear Dumps

Size Class:
34.5 mt & Over
Weight:
N/A

Configuration for 740B EJ (disc. 2015)

Axle Configuration	**6 X 6**	Body Capacity	**23.3 cu yd**
Horsepower	**474.0 hp**	Power Mode	**Diesel**
Rated Payload	**38.0 mt**		

AED Rental Rates

These rental rates reflect an average for equipment of this type and size. Rates shown for specific brands or models are provided for convenience only. Rates charged by rental companies for specific brands or models will vary depending on many factors

	Monthly	Weekly	Daily
Published Rates	USD $16,254.00	USD $5,574.00	USD $1,875.00
Adjustments			
Region (Colorado: 113.16%)	USD $2,138.72	USD $733.43	USD $246.71
User Defined			
Rental Rates (100%)	-	-	-
Total:	**USD $18,392.72**	**USD $6,307.43**	**USD $2,121.71**

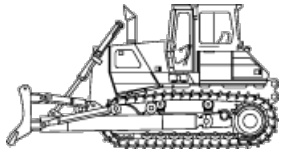
Date Last Updated: Mar 01, 2024

Adjustments for 51991 in Ajax

June 10, 2024

Caterpillar D7E (disc. 2019)
Standard Crawler Dozers

Size Class:
190 - 259 hp
Weight:
56669 lbs



Configuration for D7E (disc. 2019)

Dozer Type	**Semi-U**	Horsepower	**235.0 hp**
Operator Protection	**EROPS**	Power Mode	**Diesel**

AED Rental Rates

These rental rates reflect an average for equipment of this type and size. Rates shown for specific brands or models are provided for convenience only. Rates charged by rental companies for specific brands or models will vary depending on many factors

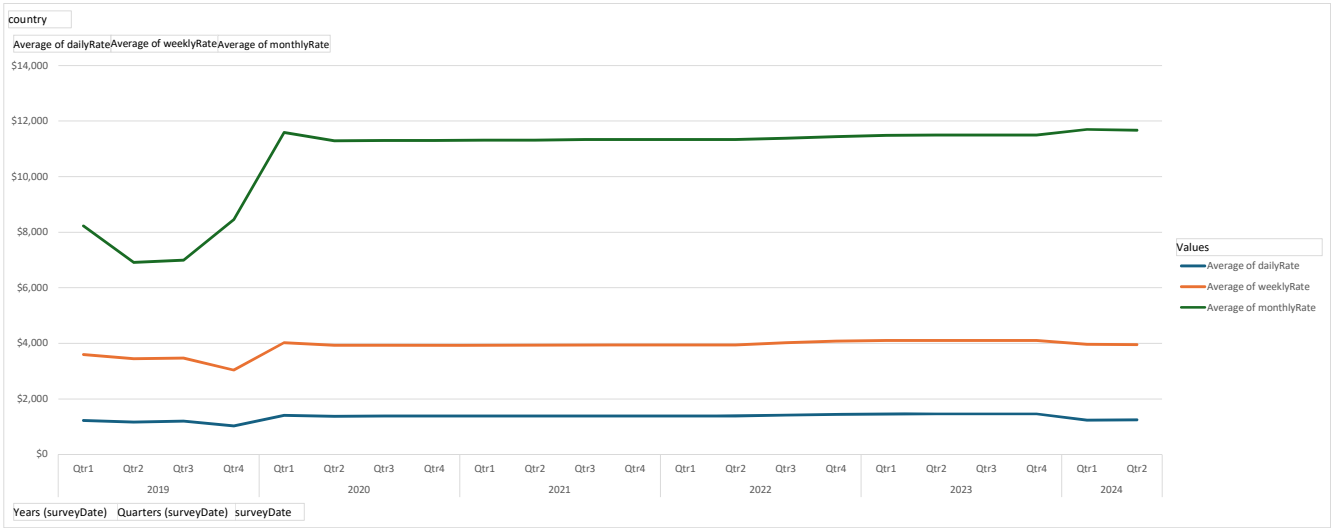
	Monthly	Weekly	Daily
Published Rates	USD $11,722.00	USD $3,969.00	USD $1,248.00
Adjustments			
Region (Colorado: 112.02%)	USD $1,408.88	USD $477.04	USD $150.00
User Defined			
Rental Rates (100%)	-	-	-
Total:	**USD $13,130.88**	**USD $4,446.04**	**USD $1,398.00**

Date Last Updated: Mar 01, 2024

The equipment represented in this report has been exclusively prepared for NICK HOLSINGER (nickholsinger@randallreilly.com)

country	US

Row Labels	Average of dailyRate	Average of weeklyRate	Average of monthlyRate
2019	$1,193	$3,489	$7,241
Qtr1	$1,219	$3,601	$8,232
Qtr2	$1,171	$3,451	$6,914
Qtr3	$1,197	$3,468	$6,989
Qtr4	$1,029	$3,040	$8,452
2020	$1,380	$3,944	$11,324
Qtr1	$1,408	$4,028	$11,585
Qtr2	$1,373	$3,936	$11,293
Qtr3	$1,379	$3,936	$11,300
Qtr4	$1,379	$3,936	$11,300
2021	$1,382	$3,938	$11,324
Qtr1	$1,379	$3,936	$11,317
Qtr2	$1,379	$3,936	$11,317
Qtr3	$1,385	$3,941	$11,331
Qtr4	$1,385	$3,941	$11,331
2022	$1,410	$3,996	$11,372
Qtr1	$1,385	$3,941	$11,331
Qtr2	$1,385	$3,941	$11,331
Qtr3	$1,422	$4,025	$11,388
Qtr4	$1,447	$4,080	$11,439
2023	$1,460	$4,106	$11,494
Qtr1	$1,459	$4,104	$11,487
Qtr2	$1,460	$4,106	$11,496
Qtr3	$1,460	$4,106	$11,496
Qtr4	$1,460	$4,106	$11,496
2024	$1,242	$3,957	$11,688
Qtr1	$1,240	$3,965	$11,701
Qtr2	$1,244	$3,949	$11,675
Grand Total D7E	$1,319	$3,888	$10,675



Cat®
938M

Wheel Loader

M Series – Making Your Choice Easy:

- **Enjoy All Day Comfort** – Have a seat in the new M Series Small Wheel Loader and enjoy automatic temperature control, class leading sound levels, excellent all around visibility and low-effort joystick controls that move with you on a fully adjustable seat suspension. A large spacious operator environment combined with Caterpillar's hydraulic cylinder damping and smooth predictable controls make this the most comfortable seat on your job site.
- **Work Made Easy** – Move more with Caterpillar's patented quick loading Performance Series buckets and optimized Z-bar linkage with enhanced forward visibility that combines the digging efficiency of a traditional Z-bar with tool carrier capabilities. The parallel lift and high tilt forces throughout the working range allow you to confidently handle loads with precise control.

  Multi-function work has never been easier with dedicated pumps for each system and a flow sharing implement valve governed by an intelligent power management system. Simultaneously lift, steer and drive without compromise. The M Series Small Wheel Loader simply does what you ask it to do.
- **Efficiently Powerful** – Experience hybrid like fuel efficiency with an intelligent hydrostatic power train and industry leading fuel savings through a lower maximum engine speed of just 1,600 rpm in Standard Mode. Power when you need it with Caterpillar's exclusive Power-by-Range technology that increases power in Range 4 for improved speed on grade. For your toughest and most demanding applications a new Performance Mode will allow you to boost the power and hydraulic speed in all Ranges to get the job done even quicker. Meets U.S. EPA Tier 4 Final/EU Stage V emission standards with a Cat® C7.1 engine that is designed to manage itself so you can concentrate on your work.
- **Customize Your Experience** – Meet your application requirements and individual preferences with Caterpillar's industry first Hystat™ Operator Modes featuring four unique power train settings. Select classic Torque Converter for smooth rollout, conventional Hystat for aggressive engine braking, an Ice Mode that maximizes your control on slippery underfoot, or default mode which blends the best of Hystat and Torque Converter characteristics. Fine tune machine performance with adjustments at your fingertips through the soft touch buttons and optional secondary display. Quickly set hydraulic response along with linkage kick-out positions, maximum wheel torque, and peak ground speed to efficiently perform a multitude of tasks.

Specifications

Engine

Engine Model	Cat C7.1	
Power Mode	Standard Mode	Performance Mode
Speed Range	Range 1-3*	Range 1-4
Maximum Gross Power		
Maximum Engine Speed	1,600 rpm	1,800 rpm
ISO 14396	129 kW 173 hp	140 kW 188 hp
ISO 14396 (DIN)	176 mhp	190 mhp
Rated Net Power	1,600 rpm	1,800 rpm
SAE J1349 at Minimum Fan Speed	127 kW 170 hp	137 kW 183 hp
ISO 9249 at Minimum Fan Speed	127 kW 170 hp	137 kW 184 hp
ISO 9249 (DIN) at Minimum Fan Speed	172 mhp	186 mhp

Engine (continued)

	Standard Mode		Performance Mode	
Maximum Gross Torque				
ISO 14396	870 N·m	642 lbf-ft	900 N·m	664 lbf-ft
Maximum Net Torque				
SAE J1349	850 N·m	627 lbf-ft	880 N·m	649 lbf-ft
ISO 9249:2007	852 N·m	628 lbf-ft	882 N·m	650 lbf-ft
Displacement	7.01 L	427 in^3	7.01 L	427 in^3

- Net power ratings are tested at the reference conditions for the specified standard and denote power available at the flywheel when the engine is equipped with alternator, air cleaner, emission components and fan at specified speed.

*Range 4 power and torque is equal to Performance Mode with Caterpillar Power by Range technology.

**The Cat C7.1 engine meets Tier 4 Final/Stage V off-highway emission standards.

Buckets

Bucket Capacities – General Purpose	2.5-3.2 m^3	3.2-4.2 yd^3
Bucket Capacities – Light Material	3.1-5.0 m^3	4.0-6.5 yd^3

Steering

Steering Articulation Angle (each direction)	40°	
Maximum Flow – Steering Pump	130 L/min	34 gal/min
Maximum Working Pressure – Steering Pump	24 130 kPa	3,500 psi
Maximum Steering Torque:		
0 degrees (straight machine)	57 630 N·m	42,506 lbf-ft
40 degrees (full turn)	42 570 N·m	31,398 lbf-ft
Steering Cycle Times (full left to full right):		
At 1,800 rpm: 90 rpm steering wheel speed	2.3 seconds	
Number of Steering Wheel Turns – full left to full right or full right to full left	3.3 turns	

Loader Hydraulic System

Maximum Flow – Implement Pump	190 L/min	50 gal/min
3rd Function Maximum Flow*	190 L/min	50 gal/min
4th Function Maximum Flow*	160 L/min	42 gal/min
Maximum Working Pressure – Implement Pump	28 000 kPa	4,061 psi
Relief Pressure – Tilt Cylinder	30 000 kPa	4,351 psi
3rd and 4th Function Maximum Working Pressure	28 000 kPa	4,061 psi
3rd and 4th Function Relief Pressure	30 000 kPa	4,351 psi

Hydraulic Cycle Times:	Standard Mode	Performance Mode
	At 1,600 rpm	At 1,800 rpm
Raise (ground level to maximum lift)	6.2 seconds	5.5 seconds
Dump (at maximum lift height)	1.7 seconds	1.5 seconds
Float Down (maximum lift to ground level)	2.7 seconds	2.7 seconds
Total Cycle Time	10.6 seconds	9.7 seconds

*3rd and 4th function flow is fully adjustable from 20% to 100% of maximum flow through the secondary display, when equipped.

Service Refill Capacities

Fuel Tank	195 L	51.5 gal
Cooling System	32 L	7.9 gal
Engine Crankcase	20 L	5.3 gal
Transmission (gearbox)	11 L	2.9 gal
Axles:		
Front	35 L	9.2 gal
Rear	35 L	9.2 gal
Hydraulic System (including tank)	170 L	44.9 gal
Hydraulic Tank	90 L	23.8 gal
Diesel Exhaust Fluid (DEF) Tank	19 L	5 gal

- DEF used in Cat SCR systems must meet the requirements outlined in the International Organization for Standardization (ISO) standard 22241-1.

Transmission

Forward and Reverse:		
Range 1*	1-13 km/h	0.6-8 mph
Range 2	13 km/h	8 mph
Range 3	27 km/h	17 mph
Range 4	40 km/h	25 mph

*Creeper control allows maximum speed range adjustability from 1 km/h (0.6 mph) to 13 km/h (8 mph) in Range 1 through the secondary display, when equipped. Factory default is 7 km/h (4.4 mph).

Tires

Standard Size	20.5 R25, radial (L-3)	
Other Choices Include:	20.5 R25, radial (L-2)	23.5 R25, radial (L-3)
	20.5 R25, radial (L-5)	650/65 R25 radial (L-3)
	20.5-25 12PR (L-2)	Skidder/Agriculture
	20.5-25 12PR (L-3)	Solid Tires
	20.5-25 16PR (L-5)	

- Other tire choices are available. Contact your Cat dealer for details.
- In certain applications, the loader's productive capabilities may exceed the tire's tonnes-km/h (ton-mph) capabilities.
- Caterpillar recommends that you consult a tire supplier to evaluate all conditions before selecting a tire model.

Cab

ROPS	ISO 3471:2008
FOPS	ISO 3449:2008 Level II

- Cab and Rollover Protective Structures (ROPS) are standard in North America and Europe.
- The declared dynamic operator sound pressure levels per ISO 6396:2008*, when properly installed and maintained, are:
  – Standard cab: 68 ±3 dB(A)
  – Deluxe cab: 66 ±2 dB(A)

*The measurements were conducted with the cab doors and windows closed and at 70% of the maximum engine cooling fan speed. The sound level may vary at different engine cooling fan speeds.

Sound

Operator Sound Pressure (ISO 6396:2008)	72 dB(A)
Average Exterior Sound Pressure (ISO 6395:2008)	101 dB(A)

- European Union Directive "2000/14/EC"

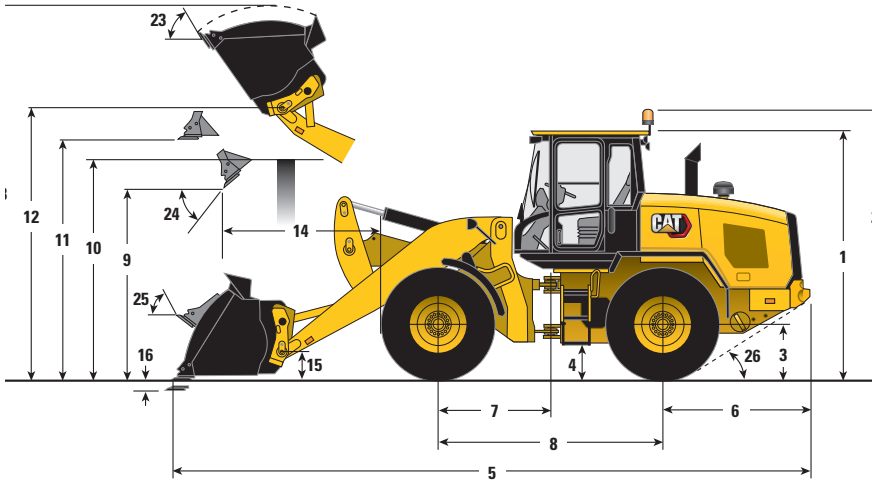
Axles

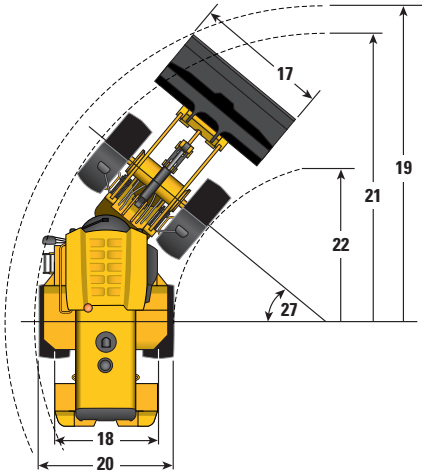
Front	Fixed
	Locking differential (standard)
Rear	Oscillating ±11 degrees
	Open differential (standard)
	Limited slip differential (optional)

Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.9 kg of refrigerant which has a CO_2 equivalent of 2.717 metric tonnes.

Dimensions and Operating Specifications (All dimensions are approximate. Dimensions vary with bucket and tire choice.)





		Standard Lift		High Lift	
** 1	Height: Ground to Cab	3340 mm	10'11"	3340 mm	10'11"
** 2	Height: Ground to Beacon	3707 mm	12'2"	3707 mm	12'2"
** 3	Height: Ground Axle Center	685 mm	2'3"	685 mm	2'3"
** 4	Height: Ground Clearance	386 mm	1'3"	386 mm	1'3"
* 5	Length: Overall	7656 mm	25'1"	8397 mm	27'7"
6	Length: Rear Axle to Bumper	1968 mm	6'5"	1968 mm	6'5"
7	Length: Hitch to Front Axle	1525 mm	5'0"	1525 mm	5'0"
8	Length: Wheel Base	3050 mm	10'0"	3050 mm	10'0"
* 9	Clearance: Bucket at 45 degrees	2834 mm	9'4"	3415 mm	11'2"
** 10	Clearance: Load Over Height	3354 mm	11'0"	3561 mm	11'8"
** 11	Clearance: Level Bucket	3641 mm	11'11"	4222 mm	13'10"
** 12	Height: Bucket Pin	3969 mm	13'0"	4550 mm	14'11"
** 13	Height: Overall	5273 mm	17'4"	5853 mm	19'2"
* 14	Reach: Bucket at 45 degrees	1146 mm	3'9"	1413 mm	4'8"
15	Carry Height: Bucket Pin	394 mm	1'4"	612 mm	2'0"
** 16	Dig Depth	101 mm	4.0"	135 mm	5.3"
17	Width: Bucket	2750 mm	9'0"	2750 mm	9'0"
18	Width: Tread Center	2083 mm	6'10"	2083 mm	6'10"
19	Turning Radius: Over Bucket	6120 mm	20'1"	6483 mm	21'3"
20	Width: Over Tires	2693 mm	8'10"	2693 mm	8'10"
21	Turning Radius: Outside of Tires	5546 mm	18'2"	5546 mm	18'2"
22	Turning Radius: Inside of Tires	2843 mm	9'4"	2843 mm	9'4"
23	Rack Angle at Full Lift	54 degrees		53 degrees	
24	Dump Angle at Full Lift	49 degrees		47 degrees	
25	Rack Angle at Carry	43 degrees		48 degrees	
26	Departure Angle	33 degrees		33 degrees	
27	Articulation Angle	40 degrees		40 degrees	
*	Tipping Load – Straight (ISO 14397-1)	11 729 kg	25,857 lb	8660 kg	19,091 lb
*	Tipping Load – Full Turn (ISO 14397-1)	9949 kg	21,934 lb	7271 kg	16,030 lb
*	Breakout	13 167 kg	29,028 lb	12 660 kg	27,910 lb
*	Operating Weight	16 229 kg	35,778 lb	16 556 kg	36,499 lb

*Vary with bucket.

**Vary with tire.

Dimensions listed are for a machine configured with 2.5 m^3 (3.2 yd^3) general purpose Fusion™ bucket, bolt-on cutting edge, heavy counterweights, additional guarding, 80 kg (176 lb) operator and Michelin 20.5 R25 (L-3) XHA2 tires.

938M Wheel Loader

STANDARD EQUIPMENT

POWER TRAIN

- Axle Duo-Cone™ seal guards
- Auto idle shut down feature
- Cat C7.1 engine
  - Power modes (Standard and Performance)
  - Power by range (High Power in Range 4)
  - Turbocharged and aftercooled
  - Diesel particulate filter (Fit for Life)
- Coded start (requires secondary display)
- Differential lock in front axle
- Enclosed wet disc full hydraulic brakes
- Hydraulically driven demand cooling fan
- Hydrostatic transmission with electronic control
  - Operator modes (Default, TC, Hystat, and Ice)
  - Directional Shift Aggressiveness (fast, medium, slow)
  - Rimpull control, adjust wheel torque
  - Creeper control, adjust ground speed
- Parking brake, electric
- Single plane cooling package wide six fins per inch density
- Oil sampling ports
- Throttle lock and max speed limiter

HYDRAULICS

- Automatic lift lower and tilt kickouts, adjustable in-cab
- Bucket and fork modes, adjustable in-cab
- Cylinder damping at kickout and mechanical end stops
- Fine mode control (fast, medium, slow)
- Hydraulic response setting (fast, medium, slow)
- Load sensing hydraulics and steering
- Seat-mounted hydraulic joystick controls

ELECTRICAL

- Alternator, 115 amp, heavy duty
- Batteries, 1,000 CCA (2) 24V system, disconnect switch
- Back-up alarm
- Emergency shutdown switch
- Halogen work and roading lights, LED rear tail lights
- Product Link™ PRO with three year subscription
- Remote jump start post
- Resettable main and critical function breakers

OPERATOR ENVIRONMENT

- 75 mm (3 in) High-Vis retractable seat belt, with audible alarm and indicator
- Automatic temperature control
- Cab, pressurized
- Camera, rearview, with dedicated display
- External heated mirrors with lower parabolic
- Ground level cab door release
- Hydraulic control lockout
- Mirror, single
- Lunch box storage
- Radio ready speakers
- Rear window defrost, electric
- Column mounted multi function control – lights, wipers, turn signal
- Tilt and telescopic steering wheel
- Tinted front glass
- Wet arm wiper/washer, 2-speed and intermittent, front, lights, wipers, turn signal
- Suspension seat, fabric

OTHER STANDARD EQUIPMENT

- Large-access enclosure doors with adjustable close/open force
- Cat optimized Z-bar linkage with parallel lift
- Recovery hitch, with pin
- Remote mounted lubrication points
- Lockable compartments and enclosures

OPTIONAL EQUIPMENT

- Autolube, integrated in secondary display
- Auxiliary flow, third and fourth function
- Differential, limited slip, rear
- Beacon light, strobe
- Cab, deluxe (standard in Europe)
  - Camera, rearview integrated into advanced display
  - Electrically adjustable external heated mirrors (2)
  - Secondary display to enable features and adjust parameters
  - LED interior lighting
  - Sunscreen, front and rear
  - Touchscreen secondary display
  - Ride control adjustable speed activation
  - Preventative maintenance reminders
  - Integrated help function (26 languages)
- Camera, roof mounted, front view with separate display
- Cold start package
  - Ether starting aid, block heater and additional batteries, 1,000 CCA (4 total)
- Counterweight, additional options
- Coupler, (Fusion and ISO 23727)
- Debris packages (low, medium, high)
- Fenders (extended cover and full coverage)
- Guarding packages
- Linkage, high lift
- Lights, auxiliary, halogen or LED with engine and DEF compartment lights
- Payload Technology
  - Cat Production Measurement (CPM)
  - CPM Printer
- Product Link ELITE with capabilities for software push, data logging, histogram and trend mapping
- Radio packages
- Rear Object Detection
- Ride Control System, adjustable through secondary display
- Seats
  - Deluxe seat – fully adjustable fabric air suspension seat with mid seat backrest
  - Premium seat – fully adjustable leather and fabric air suspension with high backrest and air lumbar support. Seat is heated and ventilated on bottom cushion and backrest.
- Steering
  - Dual mode and secondary
- Tire Pressure Monitoring (TPM)

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at **www.cat.com**

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

AEHQ7363-02 (08-2020)
Replaces AEHQ7363-01
(NACD, ANZP, Europe)

740B

Articulated Truck

Engine		
Engine Model Tier 4 Interim/EU Stage IIIB	Cat® C15 ACERT™	
Gross Power – SAE J1995	365 kW	489 hp
Net Power – ISO 14396	361 kW	484 hp

Weights		
Rated Payload	39.5 tonnes	43.5 tons
Body Capacities		
Heaped SAE 2:1	24 m^3	31.4 yd^3

New Features

C15 Engine with ACERT™ Technology meeting Tier 4 Interim/EU Stage IIIB engine emission regulations

Cat "on-the-go" Regeneration System

Controlled Throttle Shift (CTS) Transmission

Automatic Traction Control (ATC)

Passenger grab handles

Floor-mounted accelerator pedal

Park brake switch – guarded by raised dash moldings

Dash dimmer switch

Headliner with radio mounting

Machine width position lamps

Electric hood switch mounted in-cab

External grab rail around cab roof

Improved fuse panel

Color Multi-Purpose Display (CMPD) incorporating the rearview camera screen and cycle counter

Machine Security System Tornado-ready (optional)

External roof-level work lights (optional)

Motorized heated mirrors (optional)

Contents

The new Cat® 740B with 39.5 tonnes (43.5 tons) rated payload offers proven reliability and durability, high productivity, superior operator comfort and lower operating costs.

The spacious two-person cab with forward facing passenger seat and off road oil/nitrogen front suspension cylinders keep the operator comfortable through out the working day.

The true "on-the-go" Automatic Traction Control (ATC) automatically modulates the correct level of Inter-Axle and Cross-Axle differential lock engagement which will improve cycle times and productivity. No operator interaction.

Strong, durable Cat ACERT™ engines with the Tier 4 Interim/EU Stage IIIB exhaust emission solution and electronically controlled smooth shifting transmissions deliver high productivity with low fuel consumption. There are significant changes/improvements to the engine/transmission software that result in smoother gear changes.

Engine with ACERT™ Technology

Innovative technologies optimize performance.

ACERT Technology

The Cat® C15 ACERT™ engine continues the evolutionary, incremental improvements that provide breakthrough engine technology built on systems and components developed by Caterpillar with proven reliability.

Cat Clean Emissions Module (CEM)

CEM is an exhaust aftertreatment package consisting of a diesel particulate filter, and control systems. The CEM reduces particulate emissions using passive and active regeneration during normal engine operation.

Cat NOx Reduction System (NRS)

The Cat NOx Reduction System (NRS) captures and cools a small quantity of exhaust gas, then routes it into the combustion chamber where it drives down combustion temperatures and reduces NOx emissions.

Fuel Delivery

Mechanically actuated Electronic Unit Injection (MEUI-C) multiple injection fuel delivery involves a high degree of precision. Precisely shaping the combustion cycle lowers combustion chamber temperatures, generating fewer emissions and optimizing fuel combustion. This translates into more work output for your fuel cost.

Diesel Particulate Filter Regeneration

Regeneration

Regeneration is the removal of soot from the Diesel Particulate Filter (DPF). The Aftertreatment Regeneration Device (ARD) is used to regenerate the DPF.

The DPF traps both particulates and ash, the ash is removed at regular service intervals.

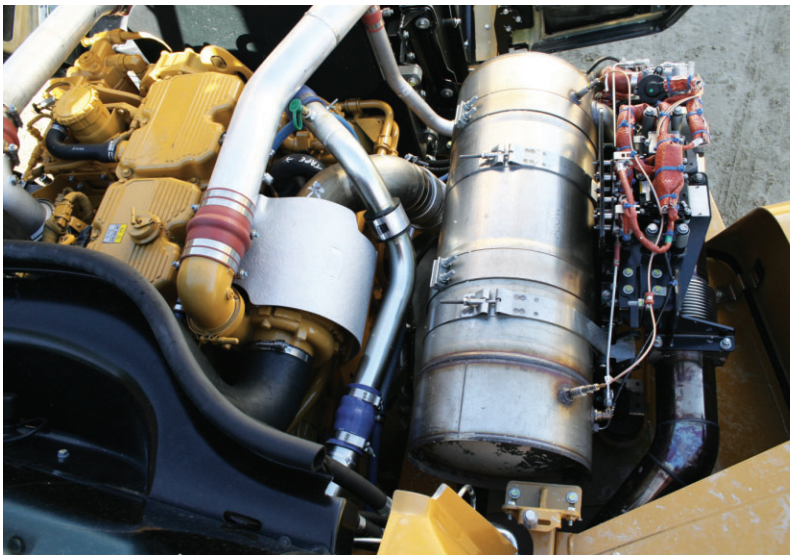
Modes of Regeneration

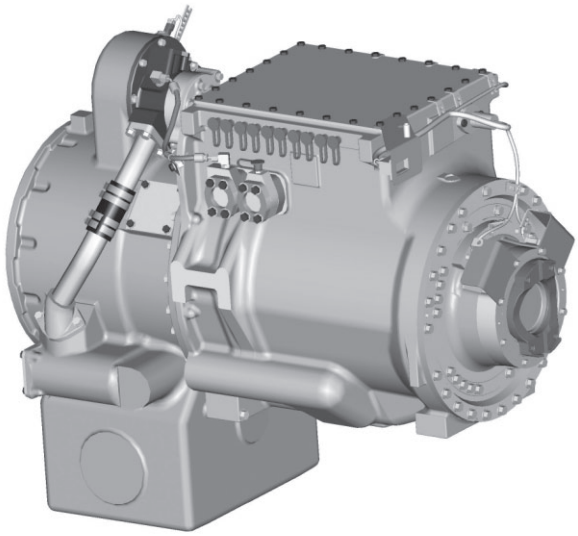
When set to automatic, regeneration will occur without any interaction from the operator. The three modes of regeneration shown below allow the articulated truck to adapt to specific site conditions in the most efficient manner.

Automatic "On-the-go" regeneration is initiated when the engine control module determines conditions are acceptable. The articulated truck is not required to stop working.

Automatic: Low Idle regeneration is initiated when the machine is in a reduced operating mode for a predetermined period of time, and a number of conditions are met. The system is designed so that the operator can interrupt regeneration at any time.

Manual: A manual regeneration is initiated by pressing the regeneration switch for 5 seconds. The machine must be brought to a non-operating mode in order to perform a manual regeneration.





Transmission

Proven Reliability.

Electronic Transmission

The Cat seven-speed forward two-speed reverse Electronic Clutch Pressure Controlled (ECPC) transmission features enhanced shift control logic with anti-hunt shift strategy for speed continuity, and to ensure constant shift times.

Min-max Governor Control

ECPC control is matched to the min-max governor control for precise smooth shifting.

Two Reverse Gears

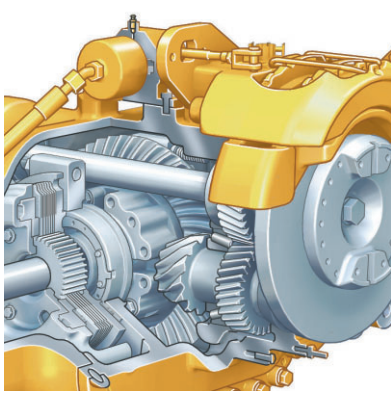
The transmission arrangement provides a second reverse gear for improved performance when operating in longer rear hauling applications.

Smooth Transmission Gear Shifting

The 740B features ECPC Shift Torque Management (STM), with improved Shift Control Logic (SCL) and Part Throttle Shifting (PTS). These features allow smoother shifting and greater acceleration on grades while torque is maintained through the shift changes. SCL also provides automatic shift selection that is more specific to the desired machine operation, and downshifts when needed for maximum acceleration when increased throttle is applied. PTS allows shifting at lower speeds during part throttle operation, resulting in improved part throttle fuel economy, quieter machine operation, and better maneuvering in reduced speed operating conditions.

Suspension and Automatic Traction Control (ATC)

Performance and Productivity.



Front Suspension

The three-point front suspension oscillates ±6° to provide a smooth ride, allowing the operator to travel at speed over rough terrain and softening impact loads on structures and components. Large bore, low pressure cylinders are purpose designed for tough applications and offer a soft, smooth ride.

Rear Suspension

Features a walking beam geometry with Caterpillar designed rear suspension mounts which provide a reliable and stable ride for excellent load retention.

Automatic Traction Control

Fully Automatic Traction Control (ATC). Inter-Axle-Differential lock (IAD) and Cross-Axle-Differential locks (XAD) feature oil immersed clutches that require no operator input. Operation is seamless and smooth, and it eliminates wheel slip for maximum traction.

Sensors monitor the machine and wheel speeds, enabling instant response in low traction conditions.

Fully automatic, independent, IAD and XAD clutches are engaged on-the-go to optimize machine performance and control in all conditions. Clutches are automatically disengaged when ground conditions dictate, maximizing efficiency when steering or on uneven ground.

ATC eliminates wheel spin in soft under foot extreme ground conditions where little traction is available. It also reduces tire and driveline abuse eliminating lost efficiency caused by improper manual operation of the differential clutches.

Retardation Control

The Cat engine compression brake control lever is positioned on the right-hand side of the steer column.

Four modes of operation with three steps of retardation, provide an optimum match between operating conditions and retarding power.

Operator Comfort

High productivity from a comfortable, confident operator.

Ride Comfort

The three-point front suspension with its oscillating axle and low-pressure ride struts, combined with the center-mounted cab, offers unrivaled levels of ride comfort for the operator in all driving conditions. The operator remains comfortable and productive throughout the day.

Spacious Two-Person Cab

The 740B features a large two-person cab, offering comfortable working space for both the operator and passenger. The 735B, 740B and 740B EJ articulated trucks use the same spacious cab design.

Air Suspension Seat

The air suspension seat enhances operator comfort with a cushioned upper high back, adjustable damping with three settings, ride zone indicator and adjustable lumbar settings. It is fully adjustable to provide the optimal driving position.

Passenger Seat

Full-size passenger seat features a fully padded seat with a backrest and a wide, retractable seatbelt for a secure and comfortable ride. The passenger seat is positioned next to the operator seat, giving both the operator and passenger a clear view of the instrument panel, controls and the road.

Steering Column

A comfortable driving position is provided by a telescopic and tilt adjustable steering column.

Ease of Operation

Designed for ease of use – allows the operator to focus on production.

Ergonomic Layout

The controls and layout of the cab are designed to make it as easy to operate as your car. Quick, easy to read and simple to operate, the controls and gauges on the 740B allow the operator to concentrate on production.

Dash

The integrated wrap-around dash puts all controls within easy reach of the operator. Featuring LED illuminated rocker switches for the dash dimmer, rear wash wiper, hazard warning, head lamp, work lamp, heated mirrors (optional), diff-lock, secondary steer, heated seat (optional), machine security system (optional), A/C and cigar lighter. Color Multi-Purpose Display (CMPD) unit incorporating the messenger and rearview display. Provides an automotive feel with the industrial strength you would expect from Caterpillar.

Color Multi Purpose Display (CMPD)

A multi screen display unit showing various levels of machine warning categories, performance and condition pages, including: Performance, Settings, Totals, Service, Machine Status, Operator, and Rearview Camera.

Warning Categories

The monitoring system provides four warning categories.

The first warning category requires only operator awareness.

The second warning category requires a change in machine operation or maintenance to the system.

The third warning category requires an immediate change of the machine operation.

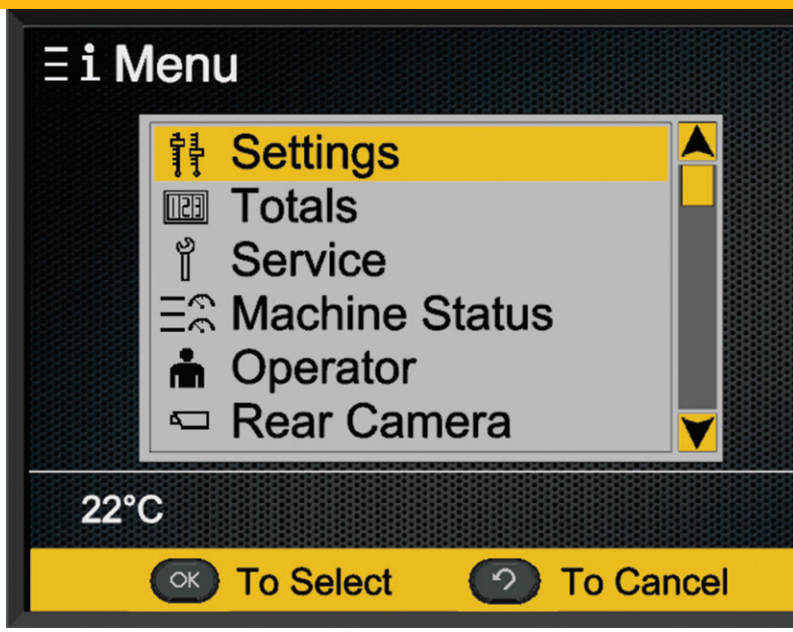
The fourth category requires the operator to immediately stop the machine. The fourth category also requires the operator to immediately shut down the engine.

Viewing Area

The low sloping hood and placement of the cooling package behind the cab give the operator excellent all-around visibility. The large glass area and central operator position also provide excellent visibility.

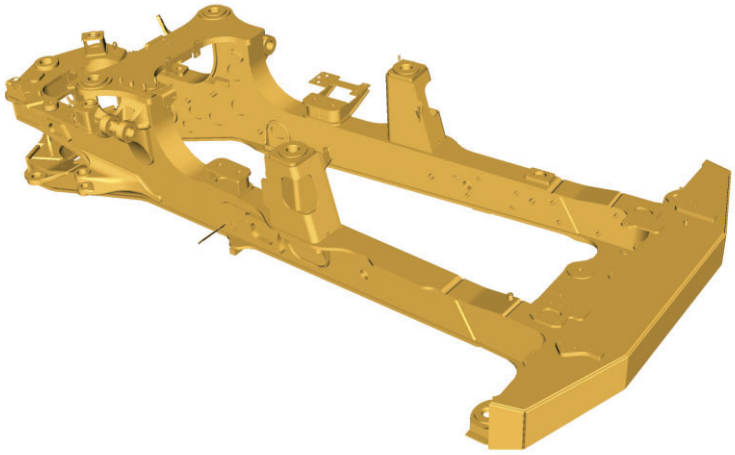
Transmission and Hoist Levers

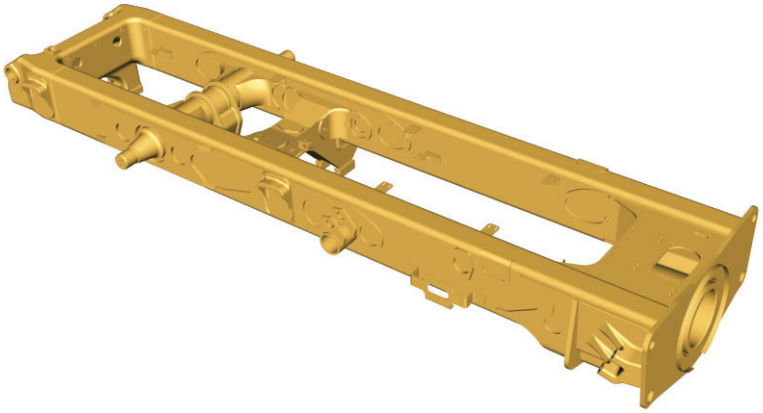
The hoist lever provides easy, comfortable operation. The transmission lever offers excellent comfort, and control for top gear limit, transmission hold and neutral lock.

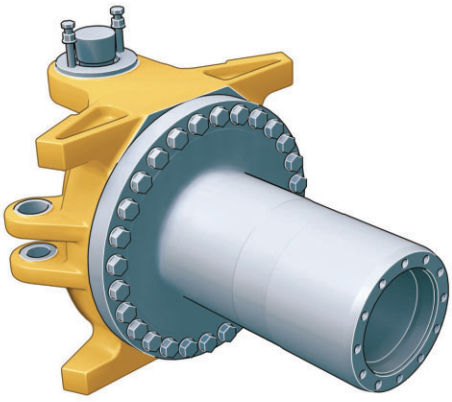


Durability and Reliability

High machine availability maximizes productivity and lowers costs.







Front Frame

The front frame design features a large box section and wide, stiff frame beams to handle torque loads. The divergent frame design decreases stress in the hitch area and optimizes suspension geometry. The frame design makes maximum use of robotic welding for increased durability.

Rear Frame

Twin-box construction minimizes stress concentrations and provides low weight with long service life.

Suspension

The three-point oscillating axle front suspension provides unparalleled ride quality. It also protects the truck from adverse road conditions by absorbing shock loads that would reach the frame.

Articulating/Oscillating Hitch

The articulating hitch provides the truck with steering articulation, and the oscillation ensures all-wheel ground contact in rough terrain.

Hitch Construction

Two-piece construction features a durable cast steel head bolted to a hard-wearing forged steel tube.

Fast Hoist Cycle Times

Fast body raise and lower times mean less time spent in the dump area.

Load-Carrying Capacity

The 740B has a large target area to provide consistently high load-carrying capacity. Its diverging flow design gives clean load ejection, which maximizes production and avoids the waste of material carry-back.

Output Transfer Gear

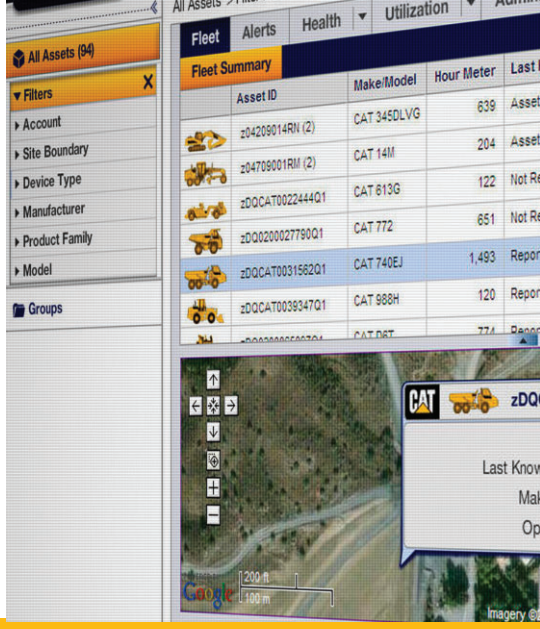
Provides lubrication of all bearings and clutches using a distributed-pressure lubricated and filtered system.

Enclosed, Oil-Cooled Brakes

High performance multi-plate, oil-immersed brakes are only required on front and center axles. These brakes provide outstanding stopping capability, while maintaining maximum durability and low wear characteristics.

Parking Brake

Fitted to the center axle in an elevated position, spring applied and hydraulically released.



Product Link

A secure and user-friendly application.

Cat Product Link*

Cat Product Link allows remote monitoring of the Articulated Truck to improve overall fleet-management effectiveness. Product Link is deeply integrated into machine systems. Events and diagnostic codes, as well as hours, fuel, idle time and other detailed information are transmitted to a secure web based application, VisionLink™. VisionLink includes powerful tools to convey information to users and dealers, including mapping, working/idle time, fuel level and more.

** Product Link licensing not available in all areas. Please consult your Cat dealer for availability.*

Key Points

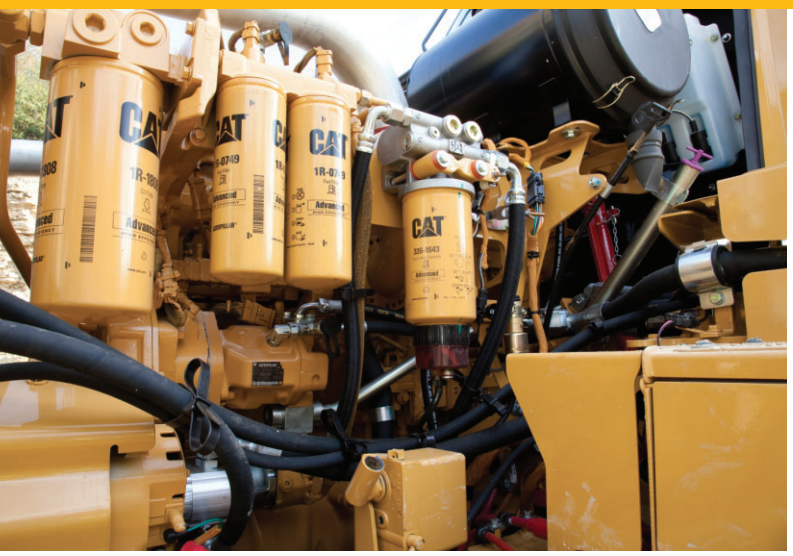
- See your entire fleet at a glance
- Monitor fuel usage
- Set up site boundaries and security alerts
- Click through to your Cat dealer for service and parts
- Customize the alerts and displays that matter to you
- Compare working time versus idle time
- Reduce owning and operating costs
- Get the right information to the right people at the right time
- Vital Information Maintenance System (VIMS™) upgrades available

New Features

- Completely updated
- Robust new hardware
- Remarkably intuitive web-based interface
- Satellite and cellular coverage
- Open-system design for mixed-fleet use

Serviceability

More time on production.



Long Service Intervals

Long engine oil change and hydraulic oil change intervals reduce maintenance costs and downtime. Wheel-bearing adjustment is completely eliminated.

Lubrication Points

Lubrication points are grouped at the rear of the front frame and the front of the rear frame. Universal joints are lubricated for life, eliminating servicing. Autolube is optional.

Service Points

Engine and transmission dipstick and fill caps, air and fuel filters, and the fuel priming pump are all mounted on the left side of the engine under the electrically raised hood. Coolant level indicator and fill cap are outside the cab.

Radiator

The radiator package is located behind the cab, which provides protection from frontal impacts and offers easy access to the inlet and outlet sides of the radiator. The Air To Air After Cooler (ATAAC) radiator is located at the front of the truck.

Extended Life Coolant

Extends the change interval and improves component life by reducing aluminum corrosion.

Electrical Service Center

Located inside the cab, this service center provides a power port, diagnostic connector and Cat Data Link connector.

Cat Data Link Connector

The Cat Data Link connector provides a plug-in using a laptop computer with Electronic Technician (ET) software.

Service Access

The cab tilts to the side to provide easy access underneath, which simplifies access to the transmission, drive shafts and hydraulic pumps. Machine electrical and hydraulic interfaces are located on the right side of the cab, behind a removable cab body panel for easy access.

Truck Transport

The suspension system eliminates the need to lower the suspension when transporting the truck, reducing maintenance and downtime.

Complete Customer Support

Cat® dealer services help you operate longer with lower costs.

Selection

Make comparisons of the machines you are considering before you buy. Your Cat® dealer can help.

Purchase

Consider the resale value, compare productivity and day-to-day operating costs and fuel consumption.

Operation

For the best operating techniques to increase productivity and your profit, turn to your Cat dealer for the latest training literature and trained staff.

Maintenance

Repair option programs guarantee the cost of repairs up front. Diagnostic programs such as S·O·S℠ and Technical Analysis help you avoid unscheduled repairs.

Replacement

Repair or rebuild? Your Cat dealer can help you evaluate the costs so you can make the right choice.

Product Support

Your local Cat dealership will be with you every step of the way with its unsurpassed worldwide parts support, trained technicians and customer support agreements.

cat.com

For more complete information on Cat products, dealer services and industry solutions, visit us on the Web at www.cat.com

Safety

Designed with safety as the first priority.

Product Safety

Caterpillar has been and continues to be proactive in developing machines that meet or exceed safety standards. Safety is an integral part of all machines and system designs.

Safety Features

- Cab integral ROPS (Roll Over Protection System) and FOPS (Falling Object Protection System)
- Rearview camera system provides a continuous panoramic rear view or when reverse gear is selected
- The secondary and parking brake functions are spring applied and hydraulically released
- Electro-hydraulic secondary steering system, automatically activates in forward/reverse or when stationary if low pressure is sensed. Can be manually selected for machine recovery purposes.
- External engine fuel cut off switch for easy access from outside of the machine
- External electrical system disconnect switch for easy access from outside of the machine
- Slip resistant surfaces – punched steel plate
- Hood raise and lower switch fitted at the LHS of dash
- 75 mm (3 in) wide retractable seat belts for operator and passenger/trainee
- Cab roof mounted work lights
- Wide angled mirrors for excellent rear visibility
- Sweeping hood design for panoramic forward visibility
- Extensive hand rails
- Body raised alarm
- Heated motorized mirrors (optional)
- LED flashing beacon

Sustainability

Resourceful in every way.

The 740B is designed to maximize efficiency and productivity while conserving natural resources.

Air Quality

The C15 ACERT engine incorporating the Cat Clean Emission Module (CEM) meets EPA Tier 4 Interim/Stage IIIB emissions requirements and is designed to incorporate Tier 4 Final/EU Stage IV emissions systems at future machine product introduction.

The C15 ACERT engine has the flexibility of running on either ultra-low-sulphur diesel (ULSD) fuel or bio-diesel blended with ULSD. All fuels must have no more than 15 ppm sulfur.

Re-cycle Waste

The Caterpillar Design, Manufacturing, Assembly and Test Site at Peterlee in England re-cycle 90% of all waste produced.

The 740B is manufactured to be rebuilt and remanufactured to reduce waste and replacement costs.

The 740B is an efficient, productive machine that is designed to conserve our natural resources for generations ahead.

740B Articulated Truck Specifications

Engine

Engine Model	Cat® C15 ACERT™	
Gross Power – SAE J1995	365 kW	489 hp
Net Power – SAE J1349	354 kW	474 hp
Net Power – ISO 14396	361 kW	484 hp
Bore	137 mm	5.4 in
Stroke	171.5 mm	6.75 in
Displacement	15.2 L	926 in^3

- The power ratings apply at rated speed of 1,700 rpm when tested under the conditions for the specified standard.
- The net power advertised is the power available at the flywheel when the engine is equipped with alternator, air cleaner, muffler and fan at minimum speed.
- Net power when the fan is at maximum speed is 321 kW (435 hp) per the SAE reference conditions.
- The 740B meets EPA Tier 4 Interim/ EU Stage IIIB emission specifications for the U.S. and Europe through 2013
- No engine derating required below 2438 m (8,000 ft).
- Peak engine torque gross (SAE J1995) 2510 N-m (1,850 lb-ft)
- Peak engine torque net (SAE J1349) 2466 N-m (1,819 lb-ft)
- Peak engine torque speed (1,200 rpm)

Weights

Rated Payload	39.5 tonnes	43.5 tons

Body Capacities

Heaped SAE 2:1	24 m^3	31.4 yd^3
Struck	18.5 m^3	24.2 yd^3
Tailgate Heaped SAE 2:1	25.5 m^3	33.5 yd^3
Tailgate Struck	19.5 m^3	25.5 yd^3

Transmission

Forward 1	8.9 km/h	5.5 mph
Forward 2	12.1 km/h	7.5 mph
Forward 3	16.4 km/h	10.2 mph
Forward 4	22 km/h	13.7 mph
Forward 5	30 km/h	18.6 mph
Forward 6	40 km/h	25.1 mph
Forward 7	54.7 km/h	34 mph
Reverse 1	8.4 km/h	5.2 mph
Reverse 2	11.6 km/h	7.2 mph

Sound Levels

Interior Cab	79 dB(A)

- The operator sound exposure Leq (equivalent sound pressure level) measured according to the work cycle procedures specified in ANSI/SAE J1166 OCT 98 is 79 dB(A), for the cab offered by Caterpillar, when properly installed and maintained and tested with the doors and windows closed.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in noisy environments.

Operating Weights

Front Axle – Empty	20 664 kg	45,556 lb
Center Axle – Empty	7229 kg	15,937 lb
Rear Axle – Empty	6499 kg	14,328 lb
Total – Empty	34 393 kg	75,824 lb
Front Axle – Rated Load	5211 kg	11,488 lb
Center Axle – Rated Load	17 186 kg	37,889 lb
Rear Axle – Rated Load	17 186 kg	37,889 lb
Total – Rated Load	39 582 kg	87,263 lb
Front Axle – Loaded	25 875 kg	57,045 lb
Center Axle – Loaded	24 415 kg	53,826 lb
Rear Axle – Loaded	23 685 kg	52,216 lb
Total – Loaded	73 975 kg	163,087 lb

Body Plate Thickness

Front	8 mm	0.31 in
Scow	16 mm	0.63 in
Side	12 mm	0.47 in
Base	16 mm	0.63 in

Service Refill Capacities

Fuel Tank	560 L	148 gal
Cooling System	80 L	21.1 gal
Hydraulic System	328 L	86.6 gal
Engine Crankcase	38 L	9.5 gal
Transmission	72 L	19 gal
Final Drives/ Differential	72 L	19 gal
Output Transfer Gear Box	18 L	4.8 gal

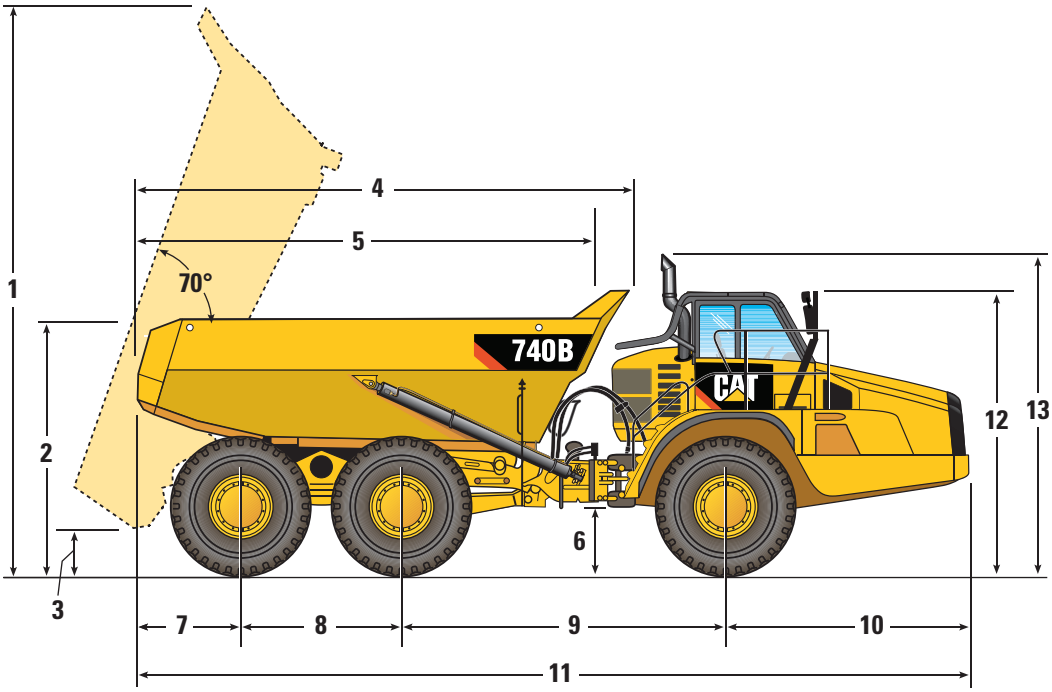
Body Hoist

Raise time	12 Seconds
Lower time	7 Seconds

Standards

Brakes	ISO 3450 – 1996
Cab/FOPS	ISO 3449 Level II – 2005
Cab/ROPS	ISO 3471 – 2008
Steering	ISO 5010 – 2007

Dimensions



	mm	ft
1	7092	23.4
2	3239	10.6
3	697	2.3
4	6288	20.6
5*	5734	18.8
6	577	1.8
7	1458	4.7
8	1966	6.4
9	4246	13.9
10	3330	10.9

	mm	ft
11	11 000	36.1
12	3745	12.3
13**	4039	13.3
14	4160	13.6
15***	3770	12.4
16	3418	11.2
17	2687	8.8
18	3430	11.2
19****	3520	11.5

*Inside of body.
**Exhaust stack can be removed for transportation.
***If equipped with a scissor tailgate.
****Max-unladen over tire bulge.

740B Articulated Truck Specifications

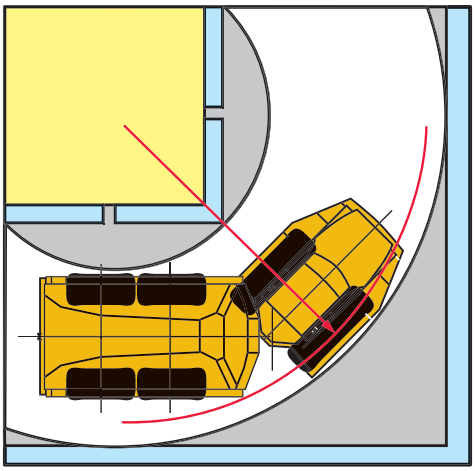
Turning Circle

Dimensions are for machines equipped with 29.5R25 tires.

Turning dimensions		
Steer angle – left/right	45°	
SAE turning radius	8138 mm	320.4 in
Clearance radius	8595 mm	338.4 in
Inside radius	4101 mm	161.5 in
Aisle width	5694 mm	224.2 in

Steering

Lock to Lock	4.6 seconds @ 60 rpm



Optimal Loader/Truck Pass Matching

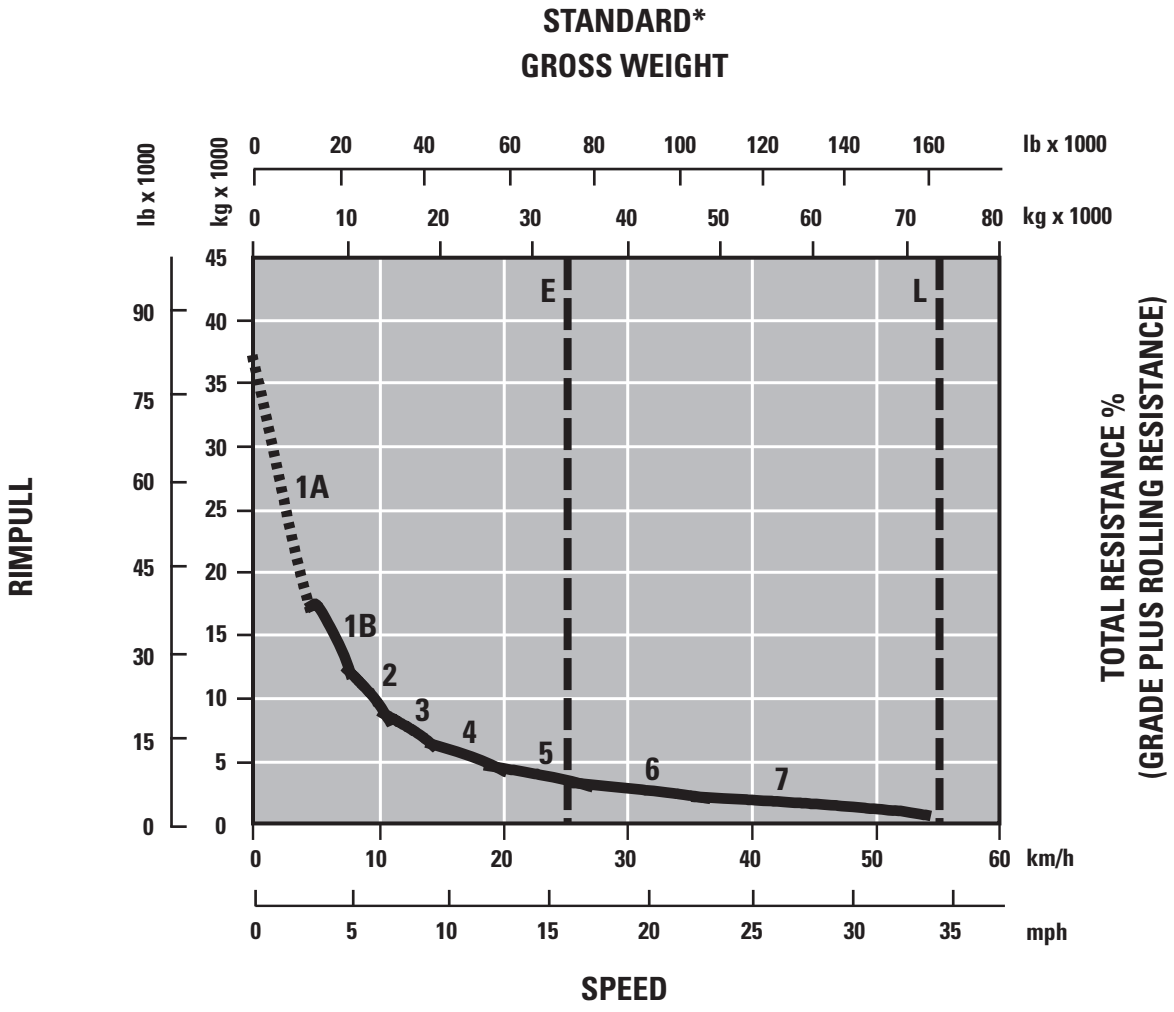
Hydraulic Excavators	385C	365C	345D
Loader Capacity (Tonnes) – 50 min hr	954-1193	750-1100	665-805
Loader Capacity (Tons) – 50 min hr	1049-1314	825-1210	735-885
Passes	3-4	5	6

Wheel Loaders	988H	980H	972H	966H
Loader Capacity (Tonnes) – 50 min hr	565-790	590-650	490-565	400-535
Loader Capacity (Tons) – 50 min hr	625-870	650-717	540-625	440-590
Passes	3-4	4	5	5-6

An optimum system match gives you a major productivity advantage. The 740B is an excellent match for the Cat 385C, 365C and 345D Hydraulic Excavators; and 966H, 972H, 980H and 988H Wheel Loaders. This results in increased production and lower system costs per unit of volume moved.

Gradeability/Speed/Rimpull

To determine performance, read from Gross Weight down to % Total Resistance. Total Resistance equals actual % grade plus 1% for each 10 kg/metric ton (20 lb/ton) of Rolling Resistance. From this point, read horizontally to the curve with the highest attainable speed range. Then, go down to Maximum Speed. Usable Rimpull depends on traction available.

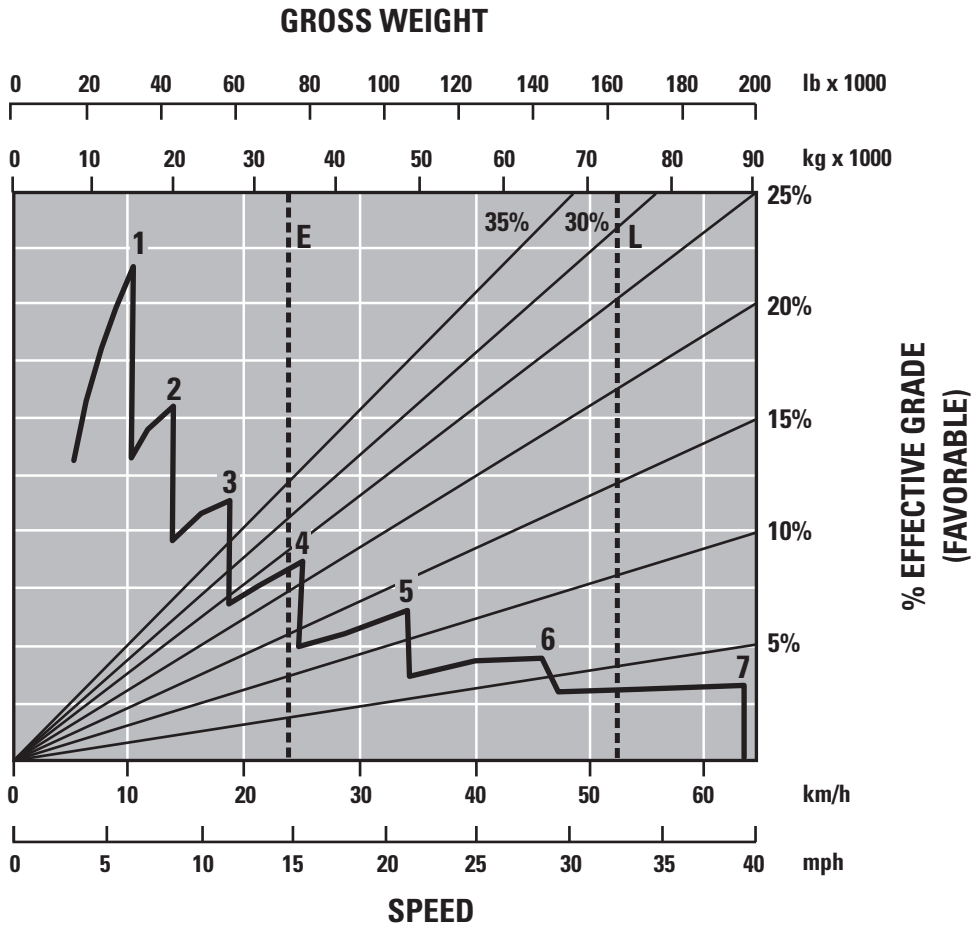


1A – 1st Gear (Converter Drive)
1B – 1st Gear (Direct Drive)
2 – 2nd Gear
3 – 3rd Gear
4 – 4th Gear
5 – 5th Gear
6 – 6th Gear
7 – 7th Gear

E – Empty 34 393 kg (75,824 lb)
L – Loaded 73 975 kg (163,087 lb)
* at sea level

Retarding Performance

To determine performance, read from Gross Weight down to % Effective Grade. Effective Grade equals actual % favorable grade plus 1% for each 10 kg/metric ton (20 lb/ton) of Rolling Resistance. From this point, read horizontally to the curve with the highest attainable speed range. Then, go down to Maximum Speed. Retarding effect on these curves represents full application of the retarder.



1 – 1st Gear
2 – 2nd Gear
3 – 3rd Gear
4 – 4th Gear
5 – 5th Gear
6 – 6th Gear
7 – 7th Gear

E – Empty 34 393 kg (75,824 lb)
L – Loaded 73 975 kg (163,087 lb)

740B Standard Equipment

Standard equipment may vary. Consult your Cat dealer for details.

Air conditioning with R134A refrigerant
Air vents, adjustable
Automatic Traction Control (ATC)
Auto shift seven-speed forward and two-speed reverse transmission
Back up alarm
Body, adapted for exhaust heat
Cat® C15 engine with ACERT™ Technology
Cat Clean Emission Module (CEM) an exhaust aftertreatment package
Color Multi-Purpose Display (CMPD) incorporating the Cycle Counter and rearview Camera Screen
CD/Radio, heavy duty ready
Differentials, standard with automatic clutched cross-axle and inter-axle differential locks for all axles
Electrical system: 24 volt, 5A 24- to 12-volt converter
Electro hydraulic hoist control
Ether starting aid
Glass windows, laminated and tinted, front
Glass windows, toughened and tinted, sides and rear
Guards: rear window, radiator, crankcase and axle
Headlights, four
Heater and defroster with four-speed fan
Horn, electric
Lights: cab interior, front, side, rear, two reversing/working lights, two stop/tail lights, side width marker, front and rear direction indicators
Mirrors, main and auxiliary, left and right
Mud flaps, wheel arch and body mounted, with transportation tie backs
Oil-cooled brakes, enclosed
Operator and passenger grab hand rails
Product Link
Retarder, Engine compression brake
ROPS/FOPS cab, with full instrumentation, including:
– Instrument cluster display module
– Indicator lamps: left turn, secondary steering, primary steering loss, front and center axle brake temp (735B/740B and 740B Ejector only), brake oil pressure, action lamp, transmission fault, park brake, charging system status, differential lock fault, body not in float, right turn, high beam, transmission hold, machine filter warning, retarder, retarder up shift warning
– Gauges: engine oil pressure, engine coolant temperature, torque converter oil temperature, fuel level, fuel tank level gauge
– LCD warnings/indicators: Gear, Alert, Speed, Soot, DPF Regeneration, Engine hours, Primary Steer, 2nd Steer, Machine Security (MSS), Retarder
– Meters: service hour meter, speedometer, tachometer
Seat, fully adjustable, air suspension
Seat, padded passenger
Secondary steering – electronic
S·O·S℠ sampling valves
Spill guard, front, integral part of fabricated body
Starting receptacle, electric, remote
Storage – two cup holders, flask receptacle, under seat storage, door pocket, behind seat storage, coat hook
Sun visor
Three-axle, six wheel drive
Tilt and telescopic steering wheel
Tires, 29.5R25, radial
Towing eyes, front and rear tow pin
Two seat belts, retractable
Vandalism protection: lockable caps for fuel tank and hydraulic oil tank
Windows opening side, tinted
Windshield wiper and washer, two speed, intermittent (front)
Windshield wiper and washer, two speed, (rear)

740B Optional Equipment

Optional equipment may vary. Consult your Cat dealer for details.

Autolube installation for automatic greasing of bearings
Body liners
CD/Radio, heavy duty with auxiliary input
Cold Weather Coolant (–51° C/–59.8° F)
Cold weather start attachment
Engine Block Heater
Exhaust heated body
Extensions, fender
Fast fuel fill
Flashing LED Beacon
Fuel Additive – Anti-Waxing
Heated rearview motorized mirrors
Heated seats
Product Link PL 321, PL 522 and PL 523 (where available)
Roof mounted work lights
Long wheel base rear chassis (OEM)
Machine Security System (MSS)
Tailgate:
– Scissor-type

740B Articulated Truck

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at **www.cat.com**

AEHQ6072 (2-2011)

Andrew Hardy

From: Campbell, Shawn A <Shawn.Campbell2@cmc.com>
Sent: Wednesday, June 12, 2024 7:54 AM
To: Andrew Hardy
Subject: RE: Quote inquiry

Hi Andrew,

I have taken over the role as manager of the Rocky Mountain Region for Tensar, and I would be happy to help. In the years that have passed since this quote was provided, the TX product line has been replaced by the higher performing InterAx (NX) line of geogrids. The price point, however, has been retained, so the prices below are respectively what TX160 and TX7 would be today. Here is an estimate of the installed cost for the two updated products:

TX160 would be replaced by NX650. Installed cost: ~$4.85/SY (grid & Installation)
TX7 would be replaced by NX750. Installed cost: ~$5.85/SY (grid & Installation)

We also introduced the highest performing Geogrid, NX850. This geogrid will be more efficient and cost-effective when soils are very soft, or traffic loads are very heavy. NX850 Installed cost: ~$6.85/SY (grid & Installation).

I hope that helps. Please let me know if you have any other questions.

Thank you!

Shawn Campbell, PE (UT, CO, & WY)
Regional Manager – Rocky Mountain Region (UT, CO, & WY)

mobile: 385.272.0801

TENSAR, A DIVISION OF CMC
Salt Lake City, UT
tensarcorp.com

From: Andrew Hardy <ahardy@ajax-mg.com>
Sent: Tuesday, June 11, 2024 6:34 PM
To: TensarOrders <TensarOrders@cmc.com>
Subject: Quote inquiry

Hello,

As you will read below, I previously received the following 2 quotes for your products. Can you please provide current 2024 rates?

"General Decision Number: CO20240013 01/05/2024

Superseded General Decision Number: CO20230013

State: Colorado

Construction Type: Highway

Counties: Eagle, Garfield, Grand, Jackson, Lake, Moffat, Pitkin, Rio Blanco, Routt and Summit Counties in Colorado.

HIGHWAY CONSTRUCTION PROJECTS

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	. Executive Order 14026 generally applies to the contract. . The contractor must pay all covered workers at least $17.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2024.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	. Executive Order 13658 generally applies to the contract. . The contractor must pay all covered workers at least $12.90 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2024.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at http://www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/05/2024

CARP9901-009 11/01/2019

	Rates	Fringes
CARPENTER (Excludes Form Work)	$ 26.50	10.32

ELEC0068-017 03/01/2011

SUMMIT COUNTY

	Rates	Fringes
TRAFFIC SIGNALIZATION:		
Traffic Signal Installation		
Zone 1	$ 26.42	4.75%+8.68
Zone 2	$ 29.42	4.75%+8.68

TRAFFIC SIGNAL INSTALLER ZONE DEFINITIONS

Zone 1 shall be a 35 mile radius, measured from the following addresses in each of the following cities:
Colorado Springs - Nevada & Bijou
Denver - Ellsworth Avenue & Broadway
Ft. Collins - Prospect & College
Grand Junction - 12th & North Avenue
Pueblo - I-25 & Highway 50
All work outside of these areas shall be paid Zone 2 rates.

ENGI0009-013 05/01/2023

	Rates	Fringes
POWER EQUIPMENT OPERATOR:		
(3)- Drill Rig Caisson (smaller than Watson 2500 and similar)	$ 33.14	14.20
(5)-Drill Rig Caisson (Watson 2500 similar or larger)	$ 33.48	14.20

IRON0024-006 11/01/2023

Garfield County Only

	Rates	Fringes
IRONWORKER, STRUCTURAL	$ 37.23	12.50

SUCO2011-008 09/15/2011

	Rates	Fringes
CARPENTER (Form Work Only)		
Eagle, Grand, Jackson, Lake, Moffatt, Pitkin, Rio Blanco, Routt, Summit	$ 15.92 **	5.38
Garfield	$ 19.55	4.09
CEMENT MASON/CONCRETE FINISHER		
Eagle	$ 17.59	2.85
Garfield	$ 17.27	2.16
Grand, Jackson, Lake, Moffatt, Pitkin, Rio		

Blanco, Routt	$ 18.23	2.85
Summit	$ 15.55 **	2.85
ELECTRICIAN		
Excludes Traffic Signalization	$ 28.06	8.76
Traffic Signalization Electrician		
Eagle, Garfield, Grand, Jackson, Lake, Moffatt, Pitkin, Rio Blanco, Routt	$ 28.24	8.52
Traffic Signalization Groundsman		
Eagle, Garfield, Grand, Jackson, Lake, Moffatt, Pitkin, Rio Blanco, Routt	$ 15.93 **	4.01
Summit	$ 16.75 **	4.10
GUARDRAIL INSTALLER		
Eagle	$ 12.78 **	3.46
Garfield, Grand, Jackson, Lake, Moffatt, Pitkin, Rio Blanco, Routt, Summit	$ 12.78 **	3.31
HIGHWAY/PARKING LOT STRIPING: Truck Driver (Line Striping Truck)	$ 14.60 **	3.49
HIGHWAY/PARKING LOT STRIPING:Painter		
Eagle	$ 13.85 **	3.07
Garfield, Grand, Jackson, Lake, Moffatt, Pitkin, Rio Blanco, Routt, Summitt	$ 13.97 **	3.07
IRONWORKER, REINFORCING (Excludes Guardrail Installation)	$ 16.94 **	6.77
IRONWORKER, STRUCTURAL (Excludes Guardrail Installation)	$ 22.22	6.01
LABORER		
Asphalt Raker		
Eagle	$ 16.36 **	3.26
Garfield	$ 18.66	3.53
Grand	$ 17.90	3.02
Jackson, Lake, Moffat, Routt	$ 17.75	3.75
Pitkin	$ 17.50	3.75
Rio Blanco	$ 18.97	3.75
Summit	$ 16.77 **	3.26
Common or General		
Eagle, Garfield, Jackson, Lake, Moffatt, Pitkin, Rio Blanco. Routt, Summitt	$ 12.44 **	3.53
Grand	$ 19.14	3.53
Concrete Saw (Hand Held)	$ 16.00 **	6.14
Landscape and irrigation		
Eagle	$ 14.84 **	3.16
Landscape and Irrigation		
Garfield, Grand, Jackson, Lake, Moffatt, Rio Blanco, Routt	$ 13.54 **	3.16

Pitkin	$ 14.16 **	3.16
Summit	$ 13.09 **	3.16
Mason Tender-Cement/Concrete		
Eagle, Grand, Jackson, Lake, Moffatt, Pitkin, Rio Blanco, Routt, Summitt.	$ 12.44 **	3.10
Garfield	$ 14.87 **	3.10
Traffic Control (Flagger)	$ 9.42 **	3.21
Traffic Control (Sets Up/Moves Barrels, Cones, Install Signs, Arrow Boards and Place Stationary Flags)(Excludes Flaggers)		
Eagle, Garfield, Grand, Lake, Moffatt, Pitkin, Rio Blanco, Routt, Summit.	$ 12.39 **	3.20
Jackson	$ 12.93 **	3.22
PAINTER (Spray Only)		
Eagle	$ 17.49	3.52
Garfield, Grand. Jackson, lake, Moffatt, Pitkin, Rio Blanco, Routt	$ 17.54	3.52
Summit	$ 19.96	3.52
POWER EQUIPMENT OPERATOR:		
Asphalt Laydown		
Eagle, Summit	$ 22.67	8.72
Garfield, Grand, Jackson, Lake, Moffatt, Pitkin, Routt	$ 24.09	7.93
Rio Blanco	$ 23.67	9.22
Asphalt Paver	$ 22.67	8.72
Asphalt Plant	$ 19.27	4.47
Asphalt Roller		
Eagle	$ 23.01	8.72
Garfield, Jackson, Lake, Moffatt, Pitkin, Rio Blanco, Routt, Summit	$ 23.15	8.07
Grand	$ 22.67	8.72
Asphalt Spreader	$ 25.61	6.96
Backhoe/Trackhoe		
Eagle	$ 22.56	7.02
Garfield	$ 19.40	4.42
Grand, Jackson, Lake, Moffatt, Pitkin, Rio Blanco, Routt	$ 22.92	6.15
Summit	$ 24.30	5.75
Bobcat/Skid Loader		
Eagle	$ 18.25	4.32
Garfield	$ 24.63	0.00
Grand, Jackson, Lake, Moffatt, Pitkin, Rio Blanco, Routt	$ 21.04	5.18
Summit	$ 19.77	4.28
Broom/Sweeper		
Eagle	$ 23.35	7.78
Garfield, Jackson, Lake, Moffatt, Pitkin, Routt	$ 21.92	7.66
Grand	$ 21.67	8.22
Rio Blanco	$ 21.66	0.00
Summit	$ 22.67	8.72
Bulldozer	$ 26.78	7.05

Chipper	$ 22.04	8.26
Crane	$ 23.82	9.22
Drill	$ 20.84	2.66
Forklift	$ 18.30	5.01
Grade Checker	$ 23.82	9.22
Grader/Blade	$ 23.05	6.45
Guardrail/Post Driver	$ 16.07 **	4.41
Loader (Front End)		
Eagle	$ 24.98	7.55
Garfield	$ 21.93	9.22
Grand, Pitkin	$ 22.67	8.72
Jackson, Lake, Moffatt, Routt	$ 24.07	7.92
Rio Blanco	$ 23.67	9.22
Summit	$ 25.88	7.01
Mechanic		
Eagle, Grand, Jackson, Lake, Moffatt, Pitkin, Rio Blanco, Routt, Summit	$ 23.31	3.93
Garfield	$ 19.80	4.20
Oiler		
Eagle	$ 23.82	7.62
Garfield, Grand, Jackson, Lake, Moffatt, Pitkin, Rio Blanco, Routt, Summit	$ 24.04	7.77
Roller/Compactor (Dirt and Grade Compaction)		
Eagle, Garfield, Grand, Jackson, Lake, Moffat, Pitkin, Routt	$ 22.72	5.98
Rio Blanco	$ 23.67	9.22
Summit	$ 24.38	6.11
Rotomill		
Eagle	$ 18.86	4.41
Garfield, Jackson, Lake, Moffatt, Pitkin, Rio Blanco, Routt	$ 20.70	4.41
Grand	$ 23.48	4.41
Summit	$ 16.28 **	4.41
Scraper	$ 20.60	7.99
Screed		
Eagle	$ 17.04 **	3.98
Garfield, Jackson, Lake, Moffatt, Pitkin, Rio Blanco, Summit	$ 23.76	5.05
Grand	$ 23.29	4.05
Tractor	$ 15.08 **	2.95
TRUCK DRIVER		
Distributor		
Eagle, Garfield, Grand, Jackson, Lake, Moffat, Pitkin, Routt, Summit	$ 19.07	4.35
Rio Blanco	$ 15.80 **	5.27
Dump Truck		
Eagle	$ 16.17 **	3.83
Garfield	$ 16.29 **	3.83
Grand, Jackson, Lake, Moffatt, Routt	$ 17.79	4.02
Pitkin	$ 20.13	4.15
Rio Blanco	$ 17.26	4.63
Summit	$ 15.27 **	5.27
Lowboy Truck		
Eagle	$ 18.89	4.56
Garfield, Grand, Jackson,		

Lake, Moffatt, Pitkin,		
Rio Blanco, Routt, Summit	$ 18.43	4.56
Mechanic	$ 17.79	3.51
Multi-Purpose Specialty &		
Hoisting Truck	$ 14.60 **	3.49
Pickup and Pilot Car	$ 14.04 **	3.49
Semi	$ 20.72	0.00
Water Truck		
Eagle	$ 23.05	2.90
Garfield	$ 21.00	5.88
Grand	$ 21.19	3.01
Jackson, Lake, Moffatt,		
Ptikin, Routt, Summit	$ 20.39	3.43
Rio Blanco	$ 17.25	3.75

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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** Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 ($17.20) or 13658 ($12.90). Please see the Note at the top of the wage determination for more information. Please also note that the minimum wage requirements of Executive Order 14026 are not currently being enforced as to any contract or subcontract to which the states of Texas, Louisiana, or Mississippi, including their agencies, are a party.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at https://www.dol.gov/agencies/whd/government-contracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate

(weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"

Climax Molybdenum Company, Henderson Mine & Mill

SUMMARY		2024	2019	(under)/over		
Directs						
R&R	Vent Shaft	$ 3,466	$ 1,953	$ 1,513	77%	reveg unit rate ~doubled (now RSMeans)
	Mine Site Demo	$ 984,538	$ 716,019	$ 268,519	38%	large increase in demolition unit rates
R&R	Mine Site Gen Rec	$ 1,714,627	$ 1,390,852	$ 323,775	23%	all chemicals will be consumed
R&R	Portal Area	$ 616,870	$ 549,797	$ 67,073	12%	
R&R	Conveyor Access Road	$ 406,446	$ 347,398	$ 59,048	17%	
R&R	Mill Yard And Access Road	$ 958,109	$ 802,889	$ 155,220	19%	all chemicals will be consumed
R&R	EB HS UC Reservoirs	$ 44,839	$ 38,479	$ 6,360	17%	
	Tailing Deposition Area	$ 69,230,349	$ 54,080,539	$ 15,149,810	28%	largest impacts from labor cost and acreage increases
R&R	Main Gravel Pit Below 1-Dam	$ 287,231	$ 241,425	$ 45,806	19%	
R&R	Laydown Yard at Rectifier 6	$ 73,593	$ 64,228	$ 9,365	15%	
	Mill Site Demo	$ 7,078,299	$ 4,854,039	$ 2,224,260	46%	large increase in demolition unit rates
R&R	Williams Fork Pump System	$ 15,053	$ 13,068	$ 1,985	15%	
R&R	Tailing Line And Power Line	$ 160,087	$ 138,897	$ 21,190	15%	
R&R	Tailing Facility Structures	$ 181,604	$ 136,946	$ 44,658	33%	
R&R	Mill Water Return Pipe Line	$ 170,731	$ 145,417	$ 25,314	17%	
R&R	Topsoil Stockpiles & Roads	$ 514,877	$ 440,717	$ 74,160	17%	
R&R	Pc3 Overland Surface Conveyor	$ 322,001	$ 205,601	$ 116,400	57%	reveg unit rate ~doubled (now RSMeans)
	Wtr Trtmnt Capex O&M (10y)	$ 99,582,630	$ 76,215,765	$ 23,366,865	31%	basis for large increase from BCI (see detail sheet)
	Maint & Enviro Control	$ 7,218,946	$ -	$ 7,218,946		30-year post-closure site maint. schedule, re-seeding for TSF and PC3 only
	Mobilize-Demobilize	$ 824,774	$ 600,000	$ 224,774	37%	3-year construction schedule, 2019 DRMS basis plus inflation
Subtotal		**$ 190,389,069**	**$ 140,984,029**	$ 49,405,040	35%	
Indirects	Public Liab. Ins. (2.02% of Direct)	$ 3,845,859	$ 2,847,877	$ 997,982	35%	DRMS requirement
	Bond (1.05% of Direct)	$ 1,999,085	$ 1,480,332	$ 518,753	35%	DRMS requirement
	Profit (10% of Direct)	$ 19,038,907	$ 14,098,403	$ 4,940,504	35%	DRMS requirement
	Contingency (20% of Direct)	$ 38,077,814	$ -	$ 38,077,814		FMI requirement
	Job Superintendent (DRMS factor)	$ 580,058	$ 519,033	$ 61,025	12%	based on a 3-year construction schedule at 50 hours/week for 50 weeks
	Subtotal OH & Profit	**$ 63,541,724**	**$ 18,945,646**	$ 44,596,078	235%	
	Financial Warranty Fee	$ 500	$ 500	$ -	0%	DRMS requirement
	Engineering/Bidding/Contracts (2% of Direct, OH&P)	$ 5,038,634	$ 3,198,594	$ 1,840,040	58%	DRMS requirement
	Management/Administration (5% of Direct, OH&P)	$ 12,596,585	$ 7,996,484	$ 4,600,101	58%	DRMS requirement
Subtotal		**$ 81,177,443**	**$ 30,141,224**	$ 51,036,219	169%	
TOTAL		**$ 271,566,513**	**$ 171,125,253**	$ 100,441,260	59%	

Model Inputs for Reclamation Cost Model

Year of Cost Data		2024	Year of Cost Data (Mar-31)
Public Liability Insurance		2.02%	% of Direct
Bond		1.05%	% of Direct
Profit (10% of Direct)		10.00%	% of Direct
Contingency (20% of Direct)		20.00%	% of Direct
Financial Warranty Fee	$	500.00	Flat Fee in dollars
Engineering/Bidding/Contracts (2% of Direct, OH&P)		2.00%	% of Direct, OH&P
Management/Administration (5% of Direct, OH&P)		5.00%	% of Direct, OH&P
Sitewide Efficiency Correction Factor		0.83	0 to 1

Labor Inputs for Reclamation Cost Model

FICA, % of Base Rate =	[2]	7.65%	Source: www.ssa.gov/OACT/ProgData/TaxRates.html
SIIS, % of Base Rate =	[3]	6.33%	Source: [Avg of Colorado Contractor's Assn. 1999 & 2001 Surveys + Previous Henderson Cost Model Updates]
Unemployment, % of Base Rate =	[4]	3.08%	Source: https://cdle.colorado.gov/employers (2024 General Construction combined rate)
Workers Comp, % of Base Rate =	[5]	16.00%	Source: [Avg of Colorado Contractor's Assn. 1999 & 2001 Surveys + Previous Henderson Cost Model Updates]
CPI Inflation Factor	[1]	1.355	Inflation Factor based on Consumer Price Index from inputs below:
Annual CPI as of 12/31/2024		304.702	Source: InflationData.com website; historical Consumer Price Index values from the Bureau of Labor Statistics.
Annual CPI for 2011 =		224.939	Base CPI = 100 in 1982. Therefore, a CPI of 224.939 indicates a 124.939% increase since 1982.
FICA, % of Base Rate		7.65%	
SIIS, % of Base Rate		6.33%	
Unemployment, % of Base Rate		3.08%	
Workers Comp, % of Base Rate		16.00%	

Worker Classification		Base Hourly Rate 2011
Dozer Operator	$	26.78
Loader Operator	$	24.07
Scraper Operator	$	20.60
Grader Operator	$	23.05
Backhoe Operator	$	22.92
Water Truck Driver	$	20.39
Truck Driver	$	17.79
Laborer	$	12.44
Mechanic/Welder	$	23.31
Foreman	$	42.50
Crane Operator	$	23.82
Job Superintendent (DRMS factor)	$	58.13

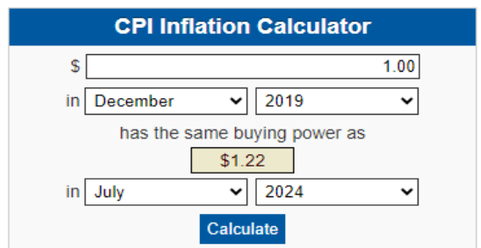
3.0 years to include Superintendent "team" expense

Equipment List for Reclamation Cost Model

equipmentwatch.com Colorado Average Retail Rental Rates 3/1/2024	Equipment	Operator Class	Cost/Unit Equip	Cost/Unit Labor	Units of Measure	Units	OPERATED Cost/Unit Equip	Effective Load Capacity (cu yds)	Average Push (LF)
$8,850	D6N LGP Dozer	Dozer Operator	$ 50.28	$ 57.84	cuyd	cuyd/hr	$ 108.12	235	150
$11,701	D7E Dozer	Dozer Operator	$ 66.48	$ 57.84	cuyd	cuyd/hr	$ 124.32	320	200
$20,126	D8T Dozer	Dozer Operator	$ 114.36	$ 57.84	cuyd	cuyd/hr	$ 172.19	320	250
$30,471	D9T Dozer	Dozer Operator	$ 173.13	$ 57.84	cuyd	cuyd/hr	$ 230.97	500	250
$6,295	938M Loader	Loader Operator	$ 35.77	$ 54.13	cuyd	cuyd/hr	$ 89.90	3.25	
$18,393	740B EJ Artic. Haul Truck	Truck Driver	$ 104.50	$ 36.83	cuyd	cuyd/hr	$ 141.33	25.8	
$10,514	336 EL/FL 88K lb Excavator	Backhoe Operator	$ 59.74	$ 49.66	cuyd	cuyd/hr	$ 109.39	100	
$6,081	4000G Water Truck, 4000 gal	Water Truck Driver	$ 34.55	$ 41.41	gallons	gal/hr	$ 75.96	4000	
$9,837	621G Water Wagon, 8000 gal	Truck Driver	$ 55.89	$ 36.83	gallons	gal/hr	$ 92.72	8000	
$9,146	12M3 Grader AWD	Grader Operator	$ 51.96	$ 50.30	acres	acres/hr	$ 102.26		
RS Means 01 54 33 4900	Pump-4" Submers., 560 gpm		$ 17.24	$ -	gallons	gal/hr	$ 17.24		

Material List for Reclamation Cost Model

Material	Cost/Unit Materials	Units of Measure	Source
Excavate rock	$ 4.30	cuyd	RSMeans 2024 / 31 23 16.13 6110
Drain rock	$ 22.40	cuyd	RSMeans 2024 / 33 41 23.19 0300
Perforated pipe 8" dia.	$ 15.80	LF	RSMeans 2024 / 33 41 16.35 0080
Geotextile	$ 2.50	sqyd	RSMeans 2024 / 33 41 23.19 0110
Signs	$ 74.20	each	RSMeans 2024 / 10 14 53.20 0600, 1500
30" corrugated HDPE	$ 53.40	LF	RSMeans 2024 / 33 42 11.50 1080
Rip Rap Armoring (12-24" D50)	$ 98.00	cuyd	RSMeans 2024 / 31 37 13.10 0350 (135# 12" D_{50})
42" HDPE pipe and bedding	$ 315.00	LF	RSMeans 2024 / 22 11 13.78 0174 (42" dia. DR26)
Geogrid	$ 4.85	sqyd	Tensar quote, 6/12/2024
Seeding-Drill Seed	$ 1,363.00	acre	RSMeans 2024 / 32 92 19.14 4500
Reveg-Drill Seed	$ 1,595.00	acre	RSMeans 2024 / 32 92 19.14 4500, 7025
Reveg-Hydroseeding	$ 3,234.00	acre	RSMeans 2024 / 32 92 19.14 4600 (slope mix w/ mulch + fert.)
Seeding-Tree&Shrub	$ 1,359.13	acre	previous estimate, escalated by ~4%/yr (see CPI Inflation rates to right)
Reveg-Tree&Shrub	$ 1,359.13	acre	previous estimate, escalated by ~4%/yr (see CPI Inflation rates to right)
Well plug and abandon	$ 5.60	LF	RSMeans 2024 / 02 41 13.76 0900 (per Climax closure cost model 2024)
Shaft plug	$ 183,000.00	each	previous estimate, escalated by ~4%/yr (see CPI Inflation rates to right)
Spillway Inlet Structure	$ 122,000.00	each	estimate by others, escalated by ~4%/yr (see CPI Inflation rates to right)
Maintenance Fertilization	$ 231.90	acre	RSMeans 2024 / 32 92 19.14 7025



CPI Inflation Calculator (bls.gov)

DEMOLITION Material List for Reclamation Cost Model

Material	Cost/Unit Materials	Units	Source	Section
steel	$ 0.43	cuft	RSMeans 2024	02 41 16.13 0020
concrete floor	$ 0.79	sqft	RSMeans 2024	02 41 16.17 0240
concrete footing	$ 13.20	LF	RSMeans 2024	02 41 16.17 1000
asphalt	$ 5.20	sqyd	RSMeans 2024	02 41 13.17 5010
pipe grouting	$ 31.00	cuft	RSMeans 2024	31 73 13.10 0800
landfill fee	$ 0.68	EA	1% x demolition quantities	
72"+ dia. CMP	$ 55.50	LF	RSMeans 2024	02 41 13.40 0200
steel bridge	$ 12.40	sqft	RSMeans 2024	02 41 16.33 0200
power poles, x-arms	$ 386.50	EA	RSMeans 2024	02 41 13.80 0100, 0300
TDL concrete pipe	$ 57.50	LF	RSMeans 2024	02 41 13.38 0100
Overland conveyor	$ 0.40	sqft	RSMeans 2024	05 05 05.10 0500

Financial Reporting Unit Rates

12/31/2024 Henderson Reclamation Labor Rates

Source of Base Rates: Source: https://cdle.colorado.gov/employers (2024 General Construction combined rate)
Foreman (use Jr. Engr.), Superintendent: RS Means 01 31 13.20 0260 Highway Construction 2024

Worker Classification	Base Hourly Rate	Fringe	FICA[2]	SIIS[3]	Unemploy[4]	Workers Comp[5]	Total-Dollars	Inflation Factor[1]	**Labor 12/31/2024 Dollars**
Dozer Operator	$26.78	$7.05	$2.05	$1.70	$0.82	$4.28	$42.68	1.3550	**$57.84**
Loader Operator	$24.07	$7.92	$1.84	$1.52	$0.74	$3.85	$39.95	1.3550	**$54.13**
Scraper Operator	$20.60	$7.99	$1.58	$1.30	$0.63	$3.30	$35.40	1.3550	**$47.97**
Grader Operator	$23.05	$6.45	$1.76	$1.46	$0.71	$3.69	$37.12	1.3550	**$50.30**
Backhoe Operator	$22.92	$6.15	$1.75	$1.45	$0.71	$3.67	$36.65	1.3550	**$49.66**
Water Truck Driver	$20.39	$3.43	$1.56	$1.29	$0.63	$3.26	$30.56	1.3550	**$41.41**
Truck Driver	$17.79	$3.51	$1.36	$1.13	$0.55	$2.85	$27.18	1.3550	**$36.83**
Laborer	$12.44	$3.10	$0.95	$0.79	$0.38	$1.99	$19.65	1.3550	**$26.63**
Mechanic/Welder	$23.31	$3.93	$1.78	$1.48	$0.72	$3.73	$34.95	1.3550	**$47.35**
Foreman	$42.50	$0.00	$3.25	$2.69	$1.31	$6.80	$56.55	1.0000	**$56.55**
Crane Operator	$23.82	$9.22	$1.82	$1.51	$0.73	$3.81	$40.91	1.3550	**$55.44**
Job Superintendent (DRMS factor)	$58.13	$0.00	$4.45	$3.68	$1.79	$9.30	$77.34	1.0000	**$77.34**

Financial Reporting Unit Rates

Vent Shaft

Assumptions

Tasks

Surface reclamation at the Vent Shaft (aka #4 Shaft) to consist primarily of broadcast seeding (use higher hydroseeding unit rate)

Timing

LOM

Total Costs

$3,466

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
Vent Shaft reclamation, post demo.	MATERIALS	Vent Shaft-Seeding	Reveg-Hydroseeding		1.00	1.00	acre								$ 3,234.00	$ 3,234.00	$ 3,234.00	
	MATERIALS	Vent Shaft-Reveg	Maintenance Fertilization		1.00	1.00	acre								$ 232	$ 232	$ 232	
																	Total Cost	
TOTAL COSTS												**$ -**		**$ -**		**$ 3,466**	**$ 3,466**	

Financial Reporting Unit Rates

Mine Site Demo

Assumptions

Structures being repurposed include Main Office, Dry Room, West Warehouse, Surface Maintenance Shop and Warehouse, Potable Water Facilities, Fire Water Tank, Fuel Island, Sewage Treatment Plant

Tasks

Demolition of structures not being repurposed

Timing

LOM

Total Costs

$984,538

Calculations

Specific Tasks	BLDG	Area	Material	Length	Width	Height	Volume	Units	Cost/Unit Materials	Total Cost	Comment
Demolish SUPERSTRUCTURE	COMPRESSOR BUILDING	Various	steel	1.00	8,465.00	19.00	160,835.00	cuft	$ 0.43	$ 48,411.34	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	COMPRESSOR BUILDING	Various	concrete floor	1.00	8,465.00	1.00	8,465.00	sqft	$ 0.79	$ 6,687.35	
Demolish SUPERSTRUCTURE	PLANT SERVICES BUILDING	Various	steel	1.00	3,975.00	15.00	59,625.00	cuft	$ 0.43	$ 17,947.13	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	PLANT SERVICES BUILDING	Various	concrete floor	1.00	3,975.00	1.00	3,975.00	sqft	$ 0.79	$ 3,140.25	
Demolish SUPERSTRUCTURE	#1-SHAFT	Various	steel	1.00	5,382.00	93.00	500,526.00	cuft	$ 0.43	$ 150,658.33	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	#1-SHAFT	Various	concrete floor	1.00	5,382.00	1.00	5,382.00	sqft	$ 0.79	$ 4,251.78	
Demolish SUPERSTRUCTURE	#1-SHAFT HOISTHOUSE	Various	steel	1.00	9,669.00	30.00	290,070.00	cuft	$ 0.43	$ 87,311.07	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	#1-SHAFT HOISTHOUSE	Various	concrete floor	1.00	9,669.00	1.00	9,669.00	sqft	$ 0.79	$ 7,638.51	
Demolish SUPERSTRUCTURE	#3-SHAFT	Various	steel	1.00	5,382.00	93.00	500,526.00	cuft	$ 0.43	$ 150,658.33	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	#3-SHAFT	Various	concrete floor	1.00	5,382.00	1.00	5,382.00	sqft	$ 0.79	$ 4,251.78	
Demolish SUPERSTRUCTURE	#3-SHAFT HEATER BUILDING	Various	steel	1.00	7,248.00	30.00	217,440.00	cuft	$ 0.43	$ 65,449.44	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	#3-SHAFT HEATER BUILDING	Various	concrete floor	1.00	7,248.00	1.00	7,248.00	sqft	$ 0.79	$ 5,725.92	
Demolish SUPERSTRUCTURE	AGGREGATE STACKING BUILDING	Various	steel	1.00	1,855.00	15.00	27,825.00	cuft	$ 0.43	$ 8,375.33	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	AGGREGATE STACKING BUILDING	Various	concrete floor	1.00	1,855.00	1.00	1,855.00	sqft	$ 0.79	$ 1,465.45	
Demolish SUPERSTRUCTURE	BUILDING ADJACENT TO STACKING BUILDING	Various	steel	1.00	200.00	13.00	2,600.00	cuft	$ 0.43	$ 782.60	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	BUILDING ADJACENT TO STACKING BUILDING	Various	concrete floor	1.00	200.00	1.00	200.00	sqft	$ 0.79	$ 158.00	
Demolish SUPERSTRUCTURE	BATCH PLANT	Various	steel	1.00	1,458.00	15.00	21,870.00	cuft	$ 0.43	$ 6,582.87	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	BATCH PLANT	Various	concrete floor	1.00	1,458.00	1.00	1,458.00	sqft	$ 0.79	$ 1,151.82	
Demolish SUPERSTRUCTURE	BULK OIL STORAGE BUILDING	Various	steel	1.00	1,200.00	15.00	18,000.00	cuft	$ 0.43	$ 5,418.00	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	BULK OIL STORAGE BUILDING	Various	concrete floor	1.00	1,200.00	1.00	1,200.00	sqft	$ 0.79	$ 948.00	
Demolish SUPERSTRUCTURE	BUILDING ADJACENT TO USED OIL TANK	Various	steel	1.00	126.00	10.00	1,260.00	cuft	$ 0.43	$ 379.26	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	BUILDING ADJACENT TO USED OIL TANK	Various	concrete floor	1.00	126.00	1.00	126.00	sqft	$ 0.79	$ 99.54	
Demolish SUPERSTRUCTURE	FAN CONTROL, SWITCH GEAR BUILDING	Various	steel	1.00	2,928.00	13.00	38,064.00	cuft	$ 0.43	$ 11,457.26	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	FAN CONTROL, SWITCH GEAR BUILDING	Various	concrete floor	1.00	2,928.00	1.00	2,928.00	sqft	$ 0.79	$ 2,313.12	
Demolish SUPERSTRUCTURE	PROPANE BUILDING	Various	steel	1.00	628.00	10.00	6,280.00	cuft	$ 0.43	$ 1,890.28	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	PROPANE BUILDING	Various	concrete floor	1.00	628.00	1.00	628.00	sqft	$ 0.79	$ 496.12	
Asphalt Demolition		Various	asphalt	1.00	72,600.00	1.00	72,600.00	sqyd	$ 5.20	$ 377,520.00	
1% of Structures to landfill		Various	Landfill Fee	1.00	19,660.37	1.00	19,660.00	EA	$ 0.68	$ 13,368.80	

	Total Cost
TOTAL COSTS	**$ 984,537.66**

Financial Reporting Unit Rates

Mine Site Gen Rec

Assumptions

Tasks
Surface reclamation across mine site

Timing
LOM
Total Costs
$1,714,627

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
Backfill and grade Pond 1	HAUL_LOAD	Pond 1	740B EJ Artic. Haul Truck	5.00	7,650	7,650.00	cuyd	114.61	cuyd/hr	66.70	$ 104.50	$ 6,970.15	$ 36.83	$ 2,456.56	$ -	$ -	$ 9,426.71	
	HAUL_LOAD		D8T Dozer			-	cuyd		cuyd/hr	13.30	$ 114.36	$ 1,520.99	$ 57.84	$ 769.27	$ -	$ -	$ 2,290.26	
Backfill and grade Pond 1.1	HAUL_LOAD	Pond 1.1	740B EJ Artic. Haul Truck	5.00	2,722	2,722.00	cuyd	114.61	cuyd/hr	23.80	$ 104.50	$ 2,487.10	$ 36.83	$ 876.55	$ -	$ -	$ 3,363.65	
	HAUL_LOAD		D8T Dozer			-	cuyd		cuyd/hr	4.80	$ 114.36	$ 548.93	$ 57.84	$ 277.63	$ -	$ -	$ 826.56	
Backfill and grade Pond 1.2	HAUL_LOAD	Pond 1.2	740B EJ Artic. Haul Truck	5.00	9,562	9,562.00	cuyd	114.61	cuyd/hr	83.40	$ 104.50	$ 8,715.30	$ 36.83	$ 3,071.62	$ -	$ -	$ 11,786.92	
	HAUL_LOAD		D8T Dozer			-	cuyd		cuyd/hr	16.70	$ 114.36	$ 1,909.81	$ 57.84	$ 965.93	$ -	$ -	$ 2,875.74	
Haul and spread cap on Pond 1.2	HAUL_LOAD	Pond 1.2a	740B EJ Artic. Haul Truck	4.00	4,260	4,260.00	cuyd	97.52	cuyd/hr	43.70	$ 104.50	$ 4,566.65	$ 36.83	$ 1,609.47	$ -	$ -	$ 6,176.12	
	HAUL_LOAD		938M Loader			-	cuyd		cuyd/hr	10.90	$ 35.77	$ 389.89	$ 54.13	$ 590.02	$ -	$ -	$ 979.91	
Rip roads	GRADING	Mine site	D8T Dozer		25	25.00	acres	0.50	acres/hr	50.00	$ 114.36	$ 5,718.00	$ 57.84	$ 2,892.00	$ -	$ -	$ 8,610.00	
Finish grade Mine site	GRADING	Finish grade Mine site	12M3 Grader AWD		100	100.00	acres	0.50	acres/hr	200.00	$ 51.96	$ 10,392.00	$ 50.30	$ 10,060.00	$ -	$ -	$ 20,452.00	
Mix sludge and chips	HAUL_LOAD	Mix sludge and chips	D8T Dozer	1.00	322,667	322,667.00	cuyd	445.07	cuyd/hr	725.00	$ 114.36	$ 82,911.00	$ 57.84	$ 41,934.00	$ -	$ -	$ 124,845.00	
	HAUL_LOAD		938M Loader			-	cuyd		cuyd/hr	725.00	$ 35.77	$ 25,933.25	$ 54.13	$ 39,244.25	$ -	$ -	$ 65,177.50	
Mine site reclamation	MATERIALS	Drill Seed	Seeding-Drill Seed		15	15.10	acre								$ 1,363.00	$ 20,581.30	$ 20,581.30	
	MATERIALS	Drill Seed-Reveg	Reveg-Drill Seed		60	60.40	acre								$ 1,595.00	$ 96,338.00	$ 96,338.00	
	MATERIALS	Hydroseeding-Seeding	Reveg-Hydroseeding		11	11.03	acre								$ 3,234.00	$ 35,671.02	$ 35,671.02	
	MATERIALS	Hydroseeding-Reveg	Reveg-Hydroseeding		44	44.10	acre								$ 3,234.00	$ 142,619.40	$ 142,619.40	
	MATERIALS	Tree & Shrub Planting-Seeding	Seeding-Tree&Shrub		25	25.00	acre								$ 1,359.13	$ 33,978.25	$ 33,978.25	
	MATERIALS	Tree & Shrub Planting-Reveg	Reveg-Tree&Shrub		100	100.00	acre								$ 1,359.13	$ 135,913.00	$ 135,913.00	
	MATERIALS	Maintenance Fertilization	Maintenance Fertilization		100	100.00	acre								$ 231.90	$ 23,190.00	$ 23,190.00	
Culvert Removal	HAUL_LOAD	Clear Creek Channel				2,000.00	LF								$ 55.50	$ 111,000.00	$ 111,000.00	
Excavate channel	HAUL_LOAD	Clear Creek Channel	740B EJ Artic. Haul Truck	4.00	183,488	183,488.00	cuyd	97.52	cuyd/hr	1,881.50	$ 104.50	$ 196,616.75	$ 36.83	$ 69,295.65	$ -	$ -	$ 265,912.40	
	HAUL_LOAD	Clear Creek Channel	938M Loader			-	cuyd		cuyd/hr	470.40	$ 35.77	$ 16,826.21	$ 54.13	$ 25,462.75	$ -	$ -	$ 42,288.96	
Place safety hazard signs around Glory Hole	MATERIALS	Urad Glory Hole	Signs		10	10.00	each								$ 74.20	$ 742.00	$ 742.00	
Construct plug incl. demo. remaining surf. collar	MATERIALS	#1,3,4(Vent) Shafts	Shaft plug		3	3.00	each								$ 183,000.00	$ 549,000.00	$ 549,000.00	
	MATERIALS	Mine 5 Monitoring Wells	Well plug and abandon			104.00	LF								$ 5.60	$ 582.40	$ 582.40	

					Total Cost
TOTAL COSTS	**$ 365,506**	**$ 199,506**	**$ 1,149,615**	**$ 1,714,627**	

Financial Reporting Unit Rates

Portal Area

Assumptions

Tasks

Surface reclamation at the portal area

Timing

LOM

Total Costs

$616,870

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
Regrading	SPREAD	Rip portal area	D8T Dozer		101,640	101,640.00	cuyd	86.40	cuyd/hr	1,176.40	$ 114.36	$ 134,533.10	$ 57.84	$ 68,042.98	$ -	$ -	$ 202,576.08	
	SPREAD	Backfill and grade	D8T Dozer		33,880	33,880.00	cuyd	86.40	cuyd/hr	392.10	$ 114.36	$ 44,840.56	$ 57.84	$ 22,679.06	$ -	$ -	$ 67,519.62	
	GRADING	Reestablish Williams Fork drainage	12M3 Grader AWD		1,294	1,294.00	acres	0.50	acres/hr	2,588.00	$ 51.96	$ 134,472.48	$ 50.30	$ 130,176.40	$ -	$ -	$ 264,648.88	
Revegetation	MATERIALS	Seeding-Drill Seed	Seeding-Drill Seed		5	5.25	acre								$ 1,363.00	$ 7,155.75	$ 7,155.75	
	MATERIALS	Reveg-Drill Seed	Reveg-Drill Seed		21	21.00	acre								$ 1,595.00	$ 33,495.00	$ 33,495.00	
	MATERIALS	Tree & Shrub-Seeding	Seeding-Tree&Shrub		5	5.25	acre								$ 1,359.13	$ 7,135.43	$ 7,135.43	
	MATERIALS	Tree & Shrub-Revegetation	Reveg-Tree&Shrub		21	21.00	acre								$ 1,359.13	$ 28,541.73	$ 28,541.73	
	MATERIALS	Maintenance Fertilization	Maintenance Fertilization		25	25.00	acre								$ 231.90	$ 5,797.50	$ 5,797.50	
TOTAL COSTS												**$ 313,846**		**$ 220,898**		**$ 82,125**	**Total Cost $ 616,870**	

Financial Reporting Unit Rates

Conveyor Access Road

Assumptions

Tasks

Reclamation of the conveyor access road following demolition

Timing

LOM

Total Costs

$406,446

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
Regrading	SPREAD	Surface Railroad	D8T Dozer		116,160	116,160.00	cuyd	86.40	cuyd/hr	1,344.40	$ 114.36	$ 153,745.58	$ 57.84	$ 77,760.10	$ -	$ -	$ 231,505.68	
	GRADING	Reestablish Williams Fork Drainage	12M3 Grader AWD		92	92.00	acres	0.50	acres/hr	184.00	$ 51.96	$ 9,560.64	$ 50.30	$ 9,255.20	$ -	$ -	$ 18,815.84	
Revegetation	MATERIALS	Seeding-Drill Seed	Seeding-Drill Seed		9	9.00	acre								$ 1,363.00	$ 12,267.00	$ 12,267.00	
	MATERIALS	Reveg-Drill Seed	Reveg-Drill Seed		36	36.00	acre								$ 1,595.00	$ 57,420.00	$ 57,420.00	
	MATERIALS	Seeding-Tree & Shrub	Seeding-Tree&Shrub		9	9.00	acre								$ 1,359.13	$ 12,232.17	$ 12,232.17	
	MATERIALS	Reveg-Tree & Shrub	Reveg-Tree&Shrub		36	36.00	acre								$ 1,359.13	$ 48,928.68	$ 48,928.68	
	MATERIALS	Maintenance Fertilization	Maintenance Fertilization		109	109.00	acre								$ 231.90	$ 25,277.10	$ 25,277.10	
TOTAL COSTS												**$ 163,306**		**$ 87,015**		**$ 156,125**	**Total Cost $ 406,446**	

Financial Reporting Unit Rates

Mill Yard And Access Road

Assumptions

Tasks

Reclamation of the mill area and access road following demolition

Timing

LOM

Total Costs

$958,109

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
Regrading	SPREAD	Backfill & Grade Mill Site	D8T Dozer		182,021	182,021.00	cuyd	86.40	cuyd/hr	2,106.70	$ 114.36	$ 240,922.21	$ 57.84	$ 121,851.53	$ -	$ -	$ 362,773.74	
	SPREAD	Reclaim Mill Access Road	D8T Dozer		60,080	60,080.00	cuyd	86.40	cuyd/hr	695.40	$ 114.36	$ 79,525.94	$ 57.84	$ 40,221.94	$ -	$ -	$ 119,747.88	
Revegetation	MATERIALS	Seeding-Drill Seed	Seeding-Drill Seed		31	30.75	acre								$ 1,363.00	$ 41,912.25	$ 41,912.25	
	MATERIALS	Reveg-Drill Seed	Reveg-Drill Seed		123	123.00	acre								$ 1,595.00	$ 196,185.00	$ 196,185.00	
	MATERIALS	Seeding-Tree & Shrub	Seeding-Tree&Shrub		31	30.75	acre								$ 1,359.13	$ 41,793.25	$ 41,793.25	
	MATERIALS	Reveg-Tree & Shrub	Reveg-Tree&Shrub		123	123.00	acre								$ 1,359.13	$ 167,172.99	$ 167,172.99	
	MATERIALS	Maintenance Fertilization	Maintenance Fertilization		123	123.00	acre								$ 231.90	$ 28,523.70	$ 28,523.70	
TOTAL COSTS												**$ 320,448**		**$ 162,073**		**$ 475,587**	**Total Cost $ 958,109**	

Financial Reporting Unit Rates

EB HS UC Reservoirs

Assumptions

Tasks

Reclamation at the E. Branch Reservoir for fresh water storage consisting of sediment excavation and footprint revegetation
Reclamation of the access roads into the East Branch, Horseshoe and Ute Creek Reservoirs

Timing
LOM
Total Costs
$44,839

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
Excavation	HAUL_LOAD	Excavate Sediment	740B EJ Artic. Haul Truck	4	18,796	18,796.00	cuyd	97.52	cuyd/hr	192.70	$ 104.50	$ 20,137.15	$ 36.83	$ 7,097.14	$ -	$ -	$ 27,234.29	
	HAUL_LOAD	Excavate Sediment	938M Loader			-	cuyd		cuyd/hr	48.20	$ 35.77	$ 1,724.11	$ 54.13	$ 2,609.07	$ -	$ -	$ 4,333.18	
Revegetation	MATERIALS	Reveg-Drill Seed	Reveg-Drill Seed		4.1	4.10	acre								$ 1,595.00	$ 6,539.50	$ 6,539.50	
	MATERIALS	Reveg-Tree & Shrub	Reveg-Tree&Shrub		4.1	4.10	acre								$ 1,359.13	$ 5,572.43	$ 5,572.43	
	MATERIALS	Maintenance Fertilization	Maintenance Fertilization		5	5.00	acre								$ 231.90	$ 1,159.50	$ 1,159.50	
TOTAL COSTS												**$ 21,861**		**$ 9,706**		**$ 13,271**	**Total Cost $ 44,839**	

Financial Reporting Unit Rates

Tailings Deposition Area

Assumptions
See notes below

Tasks
Closure of the TDA

Timing
LOM

Total Costs
$69,230,349

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
Cover soil haul and placement	HAUL_LOAD	From Stockpile/Borrow Area to Dams, Dry beach	740B EJ Artic. Haul Truck	3	2,833,013	3,442,111.20	cuyd	84.84	cuyd/hr	40,571.80	$ 104.50	$ 4,239,753.10	$ 36.83	$ 1,494,259.39	$ -	$ -	$ 5,734,012.49	
	HAUL_LOAD	From Stockpile/Borrow Area to Dams, Dry beach	938M Loader			-	cuyd		cuyd/hr	13,523.90	$ 35.77	$ 483,749.90	$ 54.13	$ 732,048.71	$ -	$ -	$ 1,215,798.61	
	SPREAD	Spread cover on Dams, Dry Beach	D8T Dozer		2,833,013	2,833,013.33	cuyd	86.40	cuyd/hr	32,789.50	$ 114.36	$ 3,749,807.22	$ 57.84	$ 1,896,544.68	$ -	$ -	$ 5,646,351.90	
Cover soil haul and placement	HAUL_LOAD	From Stockpile/Borrow Area to Pond, Wet Beach	740B EJ Artic. Haul Truck	3	1,748,853	2,124,856.80	cuyd	83.73	cuyd/hr	25,377.50	$ 104.50	$ 2,651,948.75	$ 36.83	$ 934,653.33	$ -	$ -	$ 3,586,602.08	
	HAUL_LOAD	From Stockpile/Borrow Area to Pond, Wet Beach	938M Loader			-	cuyd		cuyd/hr	8,459.20	$ 35.77	$ 302,585.58	$ 54.13	$ 457,896.50	$ -	$ -	$ 760,482.08	
	SPREAD	Spread cover on Pond, Wet Beach	D8T Dozer		1,748,853	1,748,853.33	cuyd	86.40	cuyd/hr	20,241.40	$ 114.36	$ 2,314,806.50	$ 57.84	$ 1,170,762.58	$ -	$ -	$ 3,485,569.08	
Rock armor haul and placement	HAUL_LOAD	From West Portal	740B EJ Artic. Haul Truck	1	335,573	335,573.33	cuyd	24.16	cuyd/hr	13,889.60	$ 104.50	$ 1,451,463.20	$ 36.83	$ 511,553.97	$ -	$ -	$ 1,963,017.17	
	HAUL_LOAD	From West Portal	938M Loader			-	cuyd		cuyd/hr	13,889.60	$ 35.77	$ 496,830.99	$ 54.13	$ 751,844.05	$ -	$ -	$ 1,248,675.04	
	SPREAD	Spread on Embankment, from Spillway exc.	D8T Dozer		335,573	335,573.33	cuyd	86.40	cuyd/hr	3,884.00	$ 114.36	$ 444,174.24	$ 57.84	$ 224,650.56	$ -	$ -	$ 668,824.80	
Regrade borrows, roads, buttresses	GRADING	Finish grade soil borrow areas	12M3 Grader AWD		200	200.00	acres	0.50	acres/hr	400.00	$ 51.96	$ 20,784.00	$ 50.30	$ 20,120.00	$ -	$ -	$ 40,904.00	
	SPREAD	Grade Ultimate Canal	D8T Dozer		55,000	55,000.00	cuyd	86.40	cuyd/hr	636.60	$ 114.36	$ 72,801.58	$ 57.84	$ 36,820.94	$ -	$ -	$ 109,622.52	
	SPREAD	Rip Haul Roads	D8T Dozer		55,000	55,000.00	cuyd	86.40	cuyd/hr	636.60	$ 114.36	$ 72,801.58	$ 57.84	$ 36,820.94	$ -	$ -	$ 109,622.52	
Revegetation	MATERIALS	Reveg-Hydroseeding TDA	Reveg-Hydroseeding		1,420	1,420.00	acre								$ 3,234.00	$ 4,592,280.00	$ 4,592,280.00	
	MATERIALS	Reveg-Hydroseeding Spillway	Reveg-Hydroseeding		34	33.80	acre								$ 3,234.00	$ 109,309.20	$ 109,309.20	
	MATERIALS	Reveg-Tree & Shrub Planting	Reveg-Tree&Shrub		2	1.69	acre								$ 1,359.13	$ 2,296.93	$ 2,296.93	
	MATERIALS	Reseeding	Maintenance Fertilization		34	33.80	acre								$ 231.90	$ 7,838.22	$ 7,838.22	
Buttresses 1 and 3	SPREAD	Reshape and fill	D9T Dozer		338,889	338,889.00	cuyd	135.00	cuyd/hr	2,510.30	$ 173.13	$ 434,608.24	$ 57.84	$ 145,195.75	$ -	$ -	$ 579,803.99	
Wet Beach Cover Support	MATERIALS	Geogrid	Geogrid		2,623,280	2,623,280.00	sqyd								$ 4.85	$ 12,722,908.00	$ 12,722,908.00	
Diversion Channels - excavation	GENERAL	Channels	Channel exc.		384,480		cuyd				$ 4.30	$ 1,653,264.00					$ 1,653,264.00	
Diversion Channels - geotextile lining	MATERIALS	Geotextile	Geotextile		42,720	42,720.00	sqyd								$ 2.50	$ 106,800.00	$ 106,800.00	
Diversion Channels - riprap armoring	MATERIALS	Riprap Armoring	Rip Rap Armoring (12-24" D50)		28,480	28,480.00	cuyd								$ 98.00	$ 2,791,040.00	$ 2,791,040.00	
Spillway - riprap armoring	MATERIALS	Riprap Armoring	Rip Rap Armoring (12-24" D50)		20,915	20,915.00	cuyd								$ 98.00	$ 2,049,670.00	$ 2,049,670.00	
Spillway to discharge into Ranger Gulch	SPREAD	Spillway Excavation	D9T Dozer		2,664,480	3,237,343.20	cuyd	135.00	cuyd/hr	23,980.30	$ 173.13	$ 4,151,709.34	$ 57.84	$ 1,387,020.55	$ -	$ -	$ 5,538,729.89	
Pond settlement	HAUL_LOAD	Sacrificial Fill in Former Pond	740B EJ Artic. Haul Truck	1	800,000	800,000.00	cuyd	24.16	cuyd/hr	33,112.60	$ 104.50	$ 3,460,266.70	$ 36.83	$ 1,219,537.06	$ -	$ -	$ 4,679,803.76	
	HAUL_LOAD	Sacrificial Fill in Former Pond	938M Loader			-	cuyd		cuyd/hr	33,112.60	$ 35.77	$ 1,184,437.70	$ 54.13	$ 1,792,385.04	$ -	$ -	$ 2,976,822.74	
Spillway - inlet structure	MATERIALS	Spillway - inlet structure	Spillway - inlet structure			-	ea									$ 100,000.00	$ 122,000.00	(a)
Barge relocation	MATERIALS	Barge relocation	Barge relocation			-	ea									$ 1,000,000.00	$ 1,220,000.00	(a)
Embankment rock cover	MATERIALS	Embankment rock cover	Crush and screen			-	ea									$ 3,520,000.00	$ 4,294,400.00	(a)
Bench channels	MATERIALS	Bench channels	Channel exc., lining			-	ea									$ 995,000.00	$ 1,213,900.00	(a)

TOTAL COSTS	$ 27,185,793	$ 12,812,114	$ 27,997,142	Total Cost $ 69,230,349

(a) Previous estimate, escalated by ~4%/yr (see CPI Inflation rates on Material List tab)

Notes:
Embankment: no benches; runoff will be conveyed off the embankment at the break in slope above the buttress.; 1' rock cover over 2' soil cover; 208 ac.
Dry Beach: 2 ft. of vegetated soil; 670 ac.
Wet Beach: 2 ft. vegetated soil over geogrid; 542 ac.
Pond: drain pond; use spillway invert to keep pond area drained; incl. in wet beach calcs
Spillway: discharge in Ranger Gulch

Financial Reporting Unit Rates

Main Gravel Pit Below 1-Dam

Assumptions

Tasks

Reclamation at the main gravel pit below 1-Dam

Timing

LOM

Total Costs

$287,231

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
Pit regrading	SPREAD	Backfill and grade	D8T Dozer		63,524	63,524.00	cuyd	86.40	cuyd/hr	735.20	$ 114.36	$ 84,077.47	$ 57.84	$ 42,523.97	$ -	$ -	$ 126,601.44	
Cover material haul and placement	HAUL_LOAD	Replace topsoil	740B EJ Artic. Haul Truck	5	15,740	15,740.00	cuyd	114.61	cuyd/hr	137.30	$ 104.50	$ 14,347.85	$ 36.83	$ 5,056.76	$ -	$ -	$ 19,404.61	
	HAUL_LOAD	Replace topsoil	D8T Dozer			-	cuyd		cuyd/hr	27.50	$ 114.36	$ 3,144.90	$ 57.84	$ 1,590.60	$ -	$ -	$ 4,735.50	
Revegetation	MATERIALS	Seeding-Drill Seed	Seeding-Drill Seed		9	8.75	acre								$ 1,363.00	$ 11,926.25	$ 11,926.25	
	MATERIALS	Reveg-Drill Seed	Reveg-Drill Seed		35	35.00	acre								$ 1,595.00	$ 55,825.00	$ 55,825.00	
	MATERIALS	Seeding-Tree & Shrub	Seeding-Tree&Shrub		9	8.75	acre								$ 1,359.13	$ 11,892.39	$ 11,892.39	
	MATERIALS	Reveg-Tree & Shrub	Reveg-Tree&Shrub		35	35.00	acre								$ 1,359.13	$ 47,569.55	$ 47,569.55	
	MATERIALS	Maintenance Fertilization	Maintenance Fertilization		40	40.00	acre								$ 231.90	$ 9,276.00	$ 9,276.00	
TOTAL COSTS												**$ 101,570**		**$ 49,171**		**$ 136,489**	**Total Cost $ 287,231**	

Financial Reporting Unit Rates

Laydown Yard at Rectifier 6

Assumptions

Tasks

Reclamation at the Laydown Yard at Rectifier 6

Timing

LOM

Total Costs

$73,593

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
Regrading	SPREAD	Backfill and grade	D8T Dozer		27,225	27,225.00	cuyd	86.40	cuyd/hr	315.10	$ 114.36	$ 36,034.84	$ 57.84	$ 18,225.38	$ -	$ -	$ 54,260.22	
Revegetation	MATERIALS	Seeding-Drill Seed	Seeding-Drill Seed		1.25	1.25	acre								$ 1,363.00	$ 1,703.75	$ 1,703.75	
	MATERIALS	Reveg-Drill Seed	Reveg-Drill Seed		5.00	5.00	acre								$ 1,595.00	$ 7,975.00	$ 7,975.00	
	MATERIALS	Seeding-Tree & Shrub	Seeding-Tree&Shrub		1.25	1.25	acre								$ 1,359.13	$ 1,698.91	$ 1,698.91	
	MATERIALS	Reveg-Tree & Shrub	Reveg-Tree&Shrub		5.00	5.00	acre								$ 1,359.13	$ 6,795.65	$ 6,795.65	
	MATERIALS	Maintenance Fertilization	Maintenance Fertilization		5.00	5.00	acre								$ 231.90	$ 1,159.50	$ 1,159.50	
TOTAL COSTS												**$ 36,035**		**$ 18,225**		**$ 19,333**	**Total Cost $ 73,593**	

Financial Reporting Unit Rates

Mill Site Demo

Assumptions

Structures remaining post closure include Williams Fork Pump House

Tasks

Demolition of structures not being used for ongoing water management

Timing

LOM

Total Costs

$7,078,299

Calculations

Specific Tasks	BLDG	Area	Material	Length	Width	Height	Volume	Units	Cost/Unit Materials	Total Cost	Comment
Demolish SUPERSTRUCTURE	PC2/PC3 TRANSFER BUILDING	Conveyor	steel	1.00	14,280.00	63.00	899,640.00	cuft	$ 0.43	$ 270,791.64	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	PC2/PC3 TRANSFER BUILDING	Conveyor	concrete floor	1.00	14,280.00	3.00	42,840.00	sqft	$ 0.79	$ 11,281.20	
Demolish SUPERSTRUCTURE	PC3/SC1 TRANSFER BUILDING	Conveyor	steel	1.00	5,651.00	82.00	463,382.00	cuft	$ 0.43	$ 139,477.98	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	PC3/SC1 TRANSFER BUILDING	Conveyor	concrete floor	1.00	5,651.00	3.00	16,953.00	sqft	$ 0.79	$ 4,464.29	
Demolish SUPERSTRUCTURE	CONVEYOR MAINT. SHOP (LOCI) - SUPERSTRUCTURE	Mill	steel	1.00	43,632.00	34.00	1,483,488.00	cuft	$ 0.43	$ 446,529.89	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	CONVEYOR MAINT. SHOP (LOCI) - SUPERSTRUCTURE	Mill	concrete floor	1.00	43,632.00	1.00	43,632.00	sqft	$ 0.79	$ 34,469.28	
Demolish SUPERSTRUCTURE	TAILING & TRANSPORTATION BUILDING - SUPERSTRUCTURE	Mill	steel	1.00	6,100.00	19.00	115,900.00	cuft	$ 0.43	$ 34,885.90	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	TAILING & TRANSPORTATION BUILDING - SUPERSTRUCTURE	Mill	concrete floor	1.00	6,100.00	1.00	6,100.00	sqft	$ 0.79	$ 4,819.00	
Demolish SUPERSTRUCTURE	MILL BUILDING - SUPERSTRUCTURE	Mill	steel	1.00	242,640.00	39.29	9,532,900.00	cuft	$ 0.43	$ 2,869,402.90	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	MILL BUILDING - SUPERSTRUCTURE	Mill	concrete floor	1.00	242,640.00	1.00	242,640.00	sqft	$ 0.79	$ 191,685.60	
Demolish SUPERSTRUCTURE	ORE STORAGE & CONV. TERMINUS - SUPERSTRUCTURE	Mill	steel	1.00	30,910.00	17.52	541,600.00	cuft	$ 0.43	$ 163,021.60	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	ORE STORAGE & CONV. TERMINUS - SUPERSTRUCTURE	Mill	concrete floor	1.00	30,910.00	1.00	30,910.00	sqft	$ 0.79	$ 24,418.90	
Footing	ORE STORAGE & CONV. TERMINUS - SUPERSTRUCTURE	Mill	concrete footing	640.00	1.00	1.00	640.00	LF	$ 13.20	$ 8,448.00	
Demolish SUPERSTRUCTURE	CONCENTRATE THICKENER - SUPERSTRUCTURE	Mill	steel	1.00	31,416.00	11.00	345,576.00	cuft	$ 0.43	$ 104,018.38	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	CONCENTRATE THICKENER - SUPERSTRUCTURE	Mill	concrete floor	1.00	31,416.00	1.00	31,416.00	sqft	$ 0.79	$ 24,818.64	
Demolish SUPERSTRUCTURE	MOBILE EQUIP. SHOP - SUPERSTRUCTURE	Mill	steel	1.00	6,879.00	32.00	220,128.00	cuft	$ 0.43	$ 66,258.53	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	MOBILE EQUIP. SHOP - SUPERSTRUCTURE	Mill	concrete floor	1.00	6,879.00	1.00	6,879.00	sqft	$ 0.79	$ 5,434.41	
Demolish SUPERSTRUCTURE	ACID HOUSE/STORAGE - SUPERSTRUCTURE	Mill	steel	1.00	6,705.00	31.00	207,855.00	cuft	$ 0.43	$ 62,564.36	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	ACID HOUSE/STORAGE - SUPERSTRUCTURE	Mill	concrete floor	1.00	15,625.00	1.00	15,625.00	sqft	$ 0.79	$ 12,343.75	
Demolish SUPERSTRUCTURE	NOKES STORAGE BLDG. - SUPERSTRUCTURE	Mill	steel	1.00	5,274.00	31.00	163,494.00	cuft	$ 0.43	$ 49,211.69	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	NOKES STORAGE BLDG. - SUPERSTRUCTURE	Mill	concrete floor	1.00	5,274.00	1.00	5,274.00	sqft	$ 0.79	$ 4,166.46	
Demolish SUPERSTRUCTURE	HAZ. WASTE/FLAMMABLE BLDG - SUPERSTRUCTURE	Mill	steel	1.00	1,466.00	17.00	24,922.00	cuft	$ 0.43	$ 7,501.52	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	HAZ. WASTE/FLAMMABLE BLDG - SUPERSTRUCTURE	Mill	concrete floor	1.00	1,466.00	1.00	1,466.00	sqft	$ 0.79	$ 1,158.14	
Demolish SUPERSTRUCTURE	BULK STORAGE WHSE - SUPERSTRUCTURE	Mill	steel	1.00	5,600.00	17.00	95,200.00	cuft	$ 0.43	$ 28,655.20	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	BULK STORAGE WHSE - SUPERSTRUCTURE	Mill	concrete floor	1.00	5,600.00	1.00	5,600.00	sqft	$ 0.79	$ 4,424.00	
Demolish SUPERSTRUCTURE	TRUCK SCALE BLDG - SUPERSTRUCTURE	Mill	steel	1.00	1,482.00	19.00	28,158.00	cuft	$ 0.43	$ 8,475.56	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	TRUCK SCALE BLDG - SUPERSTRUCTURE	Mill	concrete floor	1.00	1,482.00	1.00	1,482.00	sqft	$ 0.79	$ 1,170.78	
Demolish SUPERSTRUCTURE	ELECTRIC SWITCHGEAR BLDG - SUPERSTRUCTURE	Mill	steel	1.00	1,530.00	16.00	24,480.00	cuft	$ 0.43	$ 7,368.48	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	ELECTRIC SWITCHGEAR BLDG - SUPERSTRUCTURE	Mill	concrete floor	1.00	1,530.00	1.00	1,530.00	sqft	$ 0.79	$ 1,208.70	
Demolish SUPERSTRUCTURE	SEWAGE TREATMENT BLDG - SUPERSTRUCTURE	Mill	steel	1.00	500.00	1.00	500.00	cuft	$ 0.43	$ 150.50	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	SEWAGE TREATMENT BLDG - SUPERSTRUCTURE	Mill	concrete floor	1.00	500.00	1.00	500.00	sqft	$ 0.79	$ 395.00	
Demolish SUPERSTRUCTURE	PROCESS/POTABLE WATER TANKS - SUPERSTRUCTURE	Mill	steel	1.00	6,705.00	32.00	214,560.00	cuft	$ 0.43	$ 64,582.56	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	PROCESS/POTABLE WATER TANKS - SUPERSTRUCTURE	Mill	concrete floor	1.00	6,705.00	1.00	6,705.00	sqft	$ 0.79	$ 5,296.95	
Asphalt Demolition		Mill	asphalt	1.00	159,976.00	1.00	159,976.00	sqyd	$ 5.20	$ 831,875.20	
1% of Structures to landfill		Mill	Landfill Fee	1.00	159832.00	1.00	159,832.00	EA	$ 0.68	$ 108,685.76	
Demolish SUPERSTRUCTURE	Topsoil Shop	Tailing	steel	130.00	60.00	24.00	187,200.00	cuft	$ 0.43	$ 56,347.20	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	Topsoil Shop	Tailing	concrete floor	1.00	10,680.00	1.00	10,680.00	sqft	$ 0.79	$ 8,437.20	
Demolish SUPERSTRUCTURE	Tailing Operations/Maintenance Shop	Tailing	steel	1.00	3,320.00	20.00	66,400.00	cuft	$ 0.43	$ 19,986.40	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	Tailing Operations/Maintenance Shop	Tailing	concrete floor	1.00	3,320.00	1.00	3,320.00	sqft	$ 0.79	$ 2,622.80	
Demolish SUPERSTRUCTURE	Ute Park Pump Station	Tailing	steel	108.00	47.00	16.00	81,216.00	cuft	$ 0.43	$ 24,446.02	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	Ute Park Pump Station	Tailing	concrete floor	1.00	5,076.00	1.00	5,076.00	sqft	$ 0.79	$ 4,010.04	
Demolish SUPERSTRUCTURE	East Branch Pump Station	Tailing	steel	1.00	4,653.00	18.00	83,754.00	cuft	$ 0.43	$ 25,209.95	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	East Branch Pump Station	Tailing	concrete floor	1.00	4,653.00	1.00	4,653.00	sqft	$ 0.79	$ 3,675.87	
Demolish SUPERSTRUCTURE	West Portal Building	W. Portal	steel	1.00	25,752.00	1.00	25,752.00	cuft	$ 0.43	$ 7,751.35	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	West Portal Building	W. Portal	concrete floor	1.00	1,133.00	1.00	1,133.00	sqft	$ 0.79	$ 895.07	
Demolish SUPERSTRUCTURE	Rectifier Station 5	W. Portal	steel	1.00	75,411.00	1.00	75,411.00	cuft	$ 0.43	$ 22,698.71	Deduct 30% for no interior walls per RS Means
Demolish FLOOR	Rectifier Station 5	W. Portal	concrete floor	1.00	3,969.00	1.00	3,969.00	sqft	$ 0.79	$ 3,135.51	
Demolish POWER LINE	Gravel Pit Spur (200-ft spacing)	Power	power poles, x-arms	1.00	3.00	1.00	3.00	EA	$ 386.50	$ 1,159.50	
Demolish POWER LINE	Pond Shop Spur (200-ft spacing)	Power	power poles, x-arms	1.00	11.20	1.00	11.20	EA	$ 386.50	$ 4,328.80	
Demolish POWER LINE	1-Dam Lighting (200-ft spacing)	Power	power poles, x-arms	1.00	66.70	1.00	66.70	EA	$ 386.50	$ 25,779.55	
Bridge Removal	Williams Fork	Mill	bridge	1.00	1,600	1.00	1,600.00	sqft	$ 12.40	$ 19,840.00	
Bridge Removal	S. Branch Williams Fork	Mill	bridge	1.00	1,600	1.00	1,600.00	sqft	$ 12.40	$ 19,840.00	
Demolish Tailing Line	Tailing Distribution System (incl. drop towers)	Tailing	TDL concrete pipe	1.00	18,300.00	1.00	18,300.00	LF	$ 57.50	$ 1,052,250.00	
Demolish Overland Conveyor	OVERLAND CONVEYOR - SUPERSTRUCTURE (incl. supports)	Conveyor	Overland conveyor	1.00	431,060.00	1.00	431,060.00	sqft	$ 0.40	$ 172,424.00	

	Total Cost
TOTAL COSTS	**$ 7,078,298.72**

Financial Reporting Unit Rates

Williams Fork Pump System

Assumptions

Tasks

Reclamation at the Williams Fork Pump System

Timing

LOM

Total Costs

$15,053

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
Regrading	SPREAD	Backfill and grade Williams Fork pumphouse	D8T Dozer		5,650	5,650.00	cuyd	86.40	cuyd/hr	65.40	$ 114.36	$ 7,479.14	$ 57.84	$ 3,782.74	$ -	$ -	$ 11,261.88	
Revegetation	MATERIALS	Seeding-Drill Seed	Seeding-Drill Seed		0.25	0.25	acre								$ 1,363.00	$ 340.75	$ 340.75	
	MATERIALS	Reveg-Drill Seed	Reveg-Drill Seed		1.00	1.00	acre								$ 1,595.00	$ 1,595.00	$ 1,595.00	
	MATERIALS	Maintenance Fertilization	Maintenance Fertilization		8.00	8.00	acre								$ 231.90	$ 1,855.20	$ 1,855.20	
TOTAL COSTS												**$ 7,479**		**$ 3,783**		**$ 3,791**	**Total Cost $ 15,053**	

Financial Reporting Unit Rates

Tailings Line And Power Line

Assumptions

Tasks

Reclamation along the Tailings and Power Line Alignments

Timing

LOM

Total Costs

$160,087

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
Regrading	SPREAD	Backfill and grade tailing line/power line	D8T Dozer		56,386	56,386.00	cuyd	86.40	cuyd/hr	652.60	$ 114.36	$ 74,631.34	$ 57.84	$ 37,746.38	$ -	$ -	$ 112,377.72	
Revegetation	MATERIALS	Seeding-Drill Seed	Seeding-Drill Seed		2.5	2.50	acre								$ 1,363.00	$ 3,407.50	$ 3,407.50	
	MATERIALS	Reveg-Drill Seed	Reveg-Drill Seed		10.0	10.00	acre								$ 1,595.00	$ 15,950.00	$ 15,950.00	
	MATERIALS	Seeding-Tree & Shrub	Seeding-Tree&Shrub		2.5	2.50	acre								$ 1,359.13	$ 3,397.83	$ 3,397.83	
	MATERIALS	Reveg-Tree & Shrub	Reveg-Tree&Shrub		10.0	10.00	acre								$ 1,359.13	$ 13,591.30	$ 13,591.30	
	MATERIALS	Maintenance Fertilization	Maintenance Fertilization		49	49.00	acre								$ 231.90	$ 11,363.10	$ 11,363.10	
TOTAL COSTS												**$ 74,631**		**$ 37,746**		**$ 47,710**	**Total Cost $ 160,087**	

Financial Reporting Unit Rates

Tailing Facility Structures

Assumptions

Tasks

Reclamation at the Tailing Operations/Maintenance Shop, Topsoil Shop, Pump Stations, etc.

Timing

LOM

Total Costs

$181,604

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
Regrading	SPREAD	Backfill and grade pond shop/road area	D8T Dozer		52,627	52,627.00	cuyd	86.40	cuyd/hr	609.10	$ 114.36	$ 69,656.68	$ 57.84	$ 35,230.34	$ -	$ -	$ 104,887.02	
Revegetation	MATERIALS	Seeding-Drill Seed	Seeding-Drill Seed		3.5	3.50	acre								$ 1,363.00	$ 4,770.50	$ 4,770.50	
	MATERIALS	Reveg-Drill Seed	Reveg-Drill Seed		14	14.00	acre								$ 1,595.00	$ 22,330.00	$ 22,330.00	
	MATERIALS	Seeding-Tree & Shrub	Seeding-Tree&Shrub		3.5	3.50	acre								$ 1,359.13	$ 4,756.96	$ 4,756.96	
	MATERIALS	Reveg-Tree & Shrub	Reveg-Tree&Shrub		14	14.00	acre								$ 1,359.13	$ 19,027.82	$ 19,027.82	
	MATERIALS	Maintenance Fertilization	Maintenance Fertilization		14	14.00	acre								$ 231.90	$ 3,246.60	$ 3,246.60	
	MATERIALS	Mill 35 MLGW Monitoring Wells	Well plug and abandon			2,670.00	LF								$ 5.60	$ 14,952.00	$ 14,952.00	
	MATERIALS	Mill 15 THP Monitoring Wells	Well plug and abandon			381.00	LF								$ 5.60	$ 2,133.60	$ 2,133.60	
	MATERIALS	Mill 7 MLEX Interceptor Wells	Well plug and abandon			657.00	LF								$ 5.60	$ 3,679.20	$ 3,679.20	
	MATERIALS	Mill 9 HMEX Extraction Wells	Well plug and abandon			325.00	LF								$ 5.60	$ 1,820.00	$ 1,820.00	
TOTAL COSTS												**$ 69,657**		**$ 35,230**		**$ 76,717**	**Total Cost $ 181,604**	

Financial Reporting Unit Rates

Mill Water Return Pipe Line

Assumptions

Tasks

Reclamation along the Mill Water Return Pipe Line Alignment

Timing

LOM

Total Costs

$170,731

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
Regrading	SPREAD		D8T Dozer		18,783	18,783.00	cuyd	86.40	cuyd/hr	217.40	$ 114.36	$ 24,861.86	$ 57.84	$ 12,574.42	$ -	$ -	$ 37,436.28	
	SPREAD	Rip access road	D8T Dozer		32,267	32,267.00	cuyd	86.40	cuyd/hr	373.50	$ 114.36	$ 42,713.46	$ 57.84	$ 21,603.24	$ -	$ -	$ 64,316.70	
Revegetation	MATERIALS	Seeding-Drill Seed	Seeding-Drill Seed		4.25	4.25	acre								$ 1,363.00	$ 5,792.75	$ 5,792.75	
	MATERIALS	Reveg-Drill Seed	Reveg-Drill Seed		17	17.00	acre								$ 1,595.00	$ 27,115.00	$ 27,115.00	
	MATERIALS	Seeding-Tree & Shrub	Seeding-Tree&Shrub		4.25	4.25	acre								$ 1,359.13	$ 5,776.30	$ 5,776.30	
	MATERIALS	Reveg-Tree & Shrub	Reveg-Tree&Shrub		17	17.00	acre								$ 1,359.13	$ 23,105.21	$ 23,105.21	
	MATERIALS	Maintenance Fertilization	Maintenance Fertilization		31	31.00	acre								$ 231.90	$ 7,188.90	$ 7,188.90	
TOTAL COSTS												**$ 67,575**		**$ 34,178**		**$ 68,978**	**Total Cost $ 170,731**	

Financial Reporting Unit Rates

Topsoil Stockpiles & Roads

Assumptions

Tasks

Reclamation at the Topsoil Stockpiles and Haul Roads

Timing

LOM

Total Costs

$514,877

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
Regrading	SPREAD	Rip topsoil stockpile area/road	D8T Dozer		161,333	161,333.00	cuyd	86.40	cuyd/hr	1,867.30	$ 114.36	$ 213,544.43	$ 57.84	$ 108,004.63	$ -	$ -	$ 321,549.06	
Revegetation	MATERIALS	Seeding-Drill Seed	Seeding-Drill Seed		13	12.50	acre								$ 1,363.00	$ 17,037.50	$ 17,037.50	
	MATERIALS	Reveg-Drill Seed	Reveg-Drill Seed		50	50.00	acre								$ 1,595.00	$ 79,750.00	$ 79,750.00	
	MATERIALS	Seeding-Tree & Shrub	Seeding-Tree&Shrub		13	12.50	acre								$ 1,359.13	$ 16,989.13	$ 16,989.13	
	MATERIALS	Reveg-Tree & Shrub	Reveg-Tree&Shrub		50	50.00	acre								$ 1,359.13	$ 67,956.50	$ 67,956.50	
	MATERIALS	Maintenance Fertilization	Maintenance Fertilization		50	50.00	acre								$ 231.90	$ 11,595.00	$ 11,595.00	
																	Total Cost	
TOTAL COSTS												**$ 213,544**		**$ 108,005**		**$ 193,328**	**$ 514,877**	

Financial Reporting Unit Rates

PC3 Overland Surface Conveyor

Assumptions

Tasks

Reclamation along the PC3 Overland Conveyor Alignment

Timing

LOM

Total Costs

$322,001

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
Haul impacted material spillage	HAUL_LOAD	Haul ore spilled from conveyor to TDA	740B EJ Artic. Haul Truck	1	110	110.00	cuyd	14.19	cuyd/hr	7.80	$ 104.50	$ 815.10	$ 36.83	$ 287.27	$ -	$ -	$ 1,102.37	
	HAUL_LOAD	Haul ore spilled from conveyor to TDA	938M Loader			-	cuyd		cuyd/hr	7.80	$ 35.77	$ 279.01	$ 54.13	$ 422.21	$ -	$ -	$ 701.22	
Revegetation	MATERIALS	Seeding-Hydroseeding	Reveg-Hydroseeding		13.3	13.34	acre								$ 3,234.00	$ 43,141.56	$ 43,141.56	
	MATERIALS	Reveg-Hydroseeding	Reveg-Hydroseeding		53.4	53.36	acre								$ 3,234.00	$ 172,566.24	$ 172,566.24	
	MATERIALS	Seeding-Tree & Shrub	Seeding-Tree&Shrub		15.4	15.38	acre								$ 1,359.13	$ 20,903.42	$ 20,903.42	
	MATERIALS	Reveg-Tree & Shrub	Reveg-Tree&Shrub		61.5	61.50	acre								$ 1,359.13	$ 83,586.50	$ 83,586.50	
TOTAL COSTS												**$ 1,094**		**$ 709**		**$ 320,198**	**Total Cost $ 322,001**	

Financial Reporting Unit Rates

Wtr Trtmnt Capex O&M (10y)

Tasks

Mine: flood underground workings, construct 2 concrete bulkheads, pump to existing Urad WTP; assumes max. water level is 10,830-ft amsl.
CCI: Construction Cost Index (for ref. only); BCI: Building Cost Index (utilized for 5 of the 6 tasks listed); URAD actual O&M costs used for 2023

Timing

Mill WTP constructed prior to mine closure; O&M at LOM for 10 years
Bulkheads, pumping systems constructed prior to mine closure; O&M at LOM for 10 years

Total Costs

$99,582,630

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	Total Cost	Comment
WTP construction	CAPEX	Mill		$ 27,067,498.00	
WTP operation	O&M	Mill		$ 27,141,536.00	
WTP operation	O&M	Urad		$ 16,558,131.00	
Underground pumping system construction	CAPEX	Mine		$ 4,062,450.00	
Pumping from flooded underground workings	O&M	Mine		$ 6,447,031.00	
Bulkhead construction	CAPEX	Underground		$ 18,305,984.00	

	Total Cost
TOTAL COSTS	**$ 99,582,630**

Notes:
Construct Bulkhead #1 at the conveyor portal (West Portal):
- Located 100-ft inside the portal, 75-ft thick, Elev. 8,945.5 ft.
Construct Bulkhead #2 at the bottom of No. 4 Shaft (Ventilation Shaft):
- Located 55-ft on the cross drift, 105-ft thick, Elev. 8,228.5 ft.
Construct UG pumping systems Phase 1 & 2
- Pump from Level 7025-7500 (Ph 1) and from 7500-8100 (Ph 2)

ENR Escalation factors by year

	CCI	BCI	
2016	0.018768	0.018522	
2017	0.032476	0.032296	
2018	0.028787	0.031286	
2019	0.017433	0.015164	
2020	0.021527	0.038169	
2021	0.073542	0.115791	
2022	0.055605	0.085675	
2023	0.025806	0.036267	
2024	0.001258	0.002051	1st qtr

DRMS Cost basis escalation

	CCI	BCI	
2018	0.014393	0.015643	Based upon 50 % for year to account for qtrs 3 and 4 of 2018
2019	0.017433	0.015164	
2020	0.021527	0.038169	
2021	0.073542	0.115791	
2022	0.055605	0.085675	
2023	0.025806	0.036267	
2024	0.001258	0.002051	Based upon end first Quarter costs at end March
2024	0.002516	0.004102	Based upon costs for 2nd quarter projected to be equal to escalation for first quarter

Final Escalation factors used to project DRMS Cost Estimate to second qtr 2024 Dollars

	CCI	BCI
2018	0.014393	0.015643
2019	0.017433	0.015164
2020	0.021527	0.038169
2021	0.073542	0.115791
2022	0.055605	0.085675
2023	0.025806	0.036267
2024	0.002516	0.004102

CCI	Mill Capx	Mill O&M	Urad O&M	Mine Capx	Mine O&M	Underground Capx	
DRMS Cost Basis	$20,061,845	$20,116,720	$14,679,800	$3,011,000	$4,778,400	$13,568,000	from 2019 DRMS submittal
2018	$20,350,604	$20,406,269	$14,891,093	$3,054,339	$4,847,178	$13,763,290	
2019	$20,705,366	$20,762,001	$15,150,682	$3,107,583	$4,931,676	$14,003,219	
2020	$21,151,093	$21,208,947	$15,476,832	$3,174,481	$5,037,841	$14,304,668	
2021	$22,706,588	$22,768,697	$16,615,031	$3,407,939	$5,408,334	$15,356,663	
2022	$23,969,177	$24,034,739	$17,538,901	$3,597,435	$5,709,062	$16,210,562	
2023	$24,587,736	$24,654,991	$17,991,518	$3,690,272	$5,856,392	$16,628,899	
2024	**$24,649,592**	**$24,717,016**	**$18,036,780**	**$3,699,556**	**$5,871,126**	**$16,670,733**	
					Total Cost	**$93,644,802**	

BCI	Mill Capx	Mill O&M	Urad O&M	Mine Capx	Mine O&M	Underground Capx
DRMS Cost Basis	$20,061,845	$20,116,720		$3,011,000	$4,778,400	$13,568,000
2018	$20,375,671	$20,431,404		$3,058,101	$4,853,148	$13,780,243
2019	$20,684,642	$20,741,221		$3,104,473	$4,926,740	$13,989,203
2020	$21,474,157	$21,532,895		$3,222,968	$5,114,789	$14,523,159
2021	$23,960,669	$24,026,208		$3,596,158	$5,707,035	$16,204,809
2022	$26,013,496	$26,084,651		$3,904,259	$6,195,985	$17,593,153
2023	$26,956,926	$27,030,661	$16,490,490	$4,045,854	$6,420,694	$18,231,203
2024	**$27,067,498**	**$27,141,536**	**$16,558,131**	**$4,062,450**	**$6,447,031**	**$18,305,984**
					Total Cost	**$99,582,629**

Financial Reporting Unit Rates

Maint & Enviro Control

Assumptions

Tasks

General maintenance and environmental control tasks

Timing

30 years post-closure

Total Costs

$7,218,946

Calculations

Specific Tasks		Total Cost	Comment
	$	-	
Tailings Stewardship	$	3,000,000.00	
Operations and Maintenance first 10-year period	$	2,068,395.12	
Operations and Maintenance second 10-year period	$	1,034,197.56	
Operations and Maintenance third 10-year period	$	689,465.04	
Reseeding (132 acres)	$	426,888.00	
		Total Cost	
TOTAL COSTS	**$**	**7,218,946**	

Notes:
Tailings Stewardship annual cost $100K based on similar Freeport mine sites.
Assume 30 days per year, years 1-10; 15 days/year, years 11-20; 10 days/year, years 21-30.
Assume 10% of seeded area of TDA and PC3 corridor will require reseeding during first 5 years post-closure (other disturbed areas include an equivalent "Maintenance Fertilization" activity which was approved by DRMS for the 2015 and 2020 closure cost estimates - see individual facility worksheets).

Maintenance and Repair Crew

Man Hours	Members					
Member Crew		9	90		90	hrs/day
Equipment	Quantity		Rate			
CAT D6N		1	$ 502.82	$	502.82	per day
CAT 938M LOADER		1	$ 357.69	$	357.69	per day
CAT 740B HAUL TRUCK		2	$ 1,045.04	$	2,090.08	per day
12M GRADER		1	$ 519.63	$	519.63	per day
				$	3,470.23	
Labor	Quantity		Rate			
CAT D6		1	$ 578.36	$	578.36	per day
CAT 938 LOADER		1	$ 541.29	$	541.29	per day
CAT 470B HAUL TRUCK		2	$ 368.31	$	736.62	per day
12M GRADER		1	$ 502.98	$	502.98	per day
Laborer		4	$ 266.29	$	1,065.17	per day
TOTAL LABOR COST				$	3,424.42	
Total Daily Maintenance Cost				**$**	**6,894.65**	per day

Financial Reporting Unit Rates

Mobilize-Demobilize

Assumptions
Construction duration is 3 years

Tasks
Costs to mobilize and demobilize **EACH YEAR** (used DRMS value in 2019 plus CPI inflation)

Timing
LOM
Total Costs
$824,774

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
	Year 1											$ 274,924.56		$ -		$ -	$ 274,924.56	
	Year 2											$ 274,924.56		$ -		$ -	$ 274,924.56	
	Year 3											$ 274,924.56		$ -		$ -	$ 274,924.56	
																	$ -	
																	Total Cost	
TOTAL COSTS												**$ 824,774**		**$ -**		**$ -**	**$ 824,774**	

Financial Reporting Unit Rates

Project

Assumptions

Tasks

THIS AREA SHOULD BE USED TO DESCRIBE, IN GENERAL TERMS, THE WORK TO BE PERFORMED.

Timing

When

Total Costs

$0

Calculations

Specific Tasks	BLDG	Area	Material	Length	Width	Height	Volume	Units	Cost/Unit Materials	Total Cost	Comment
									$	-	

	Total Cost
TOTAL COSTS	**$ -**

Notes:

Financial Reporting Unit Rates

Project

Assumptions

Tasks

THIS AREA SHOULD BE USED TO DESCRIBE, IN GENERAL TERMS, THE WORK TO BE PERFORMED.

Timing

When

Total Costs

$0

Calculations

Specific Tasks	Work Type	Area	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost	Comment
																	Total Cost	
TOTAL COSTS												$ -		$ -		$ -	$ -	

Notes:

Spillway Excavation D9T Dozer SPREAD SPECIFICS		
Spillway Excavation D9T Dozer	METRIC	INPUT
Swell Factor		1.00
EQUIPMENT		
Average Push(LF)	(ft)	250
Effective Load Capacity(cu yds)	(cuyd/hr)	500
CORRECTION FACTORS		
Operator	Average	0.75
Material Consistency	Cat Table	0.90
Dozing Method	General	1.00
Spoil Pile Factor	Fnd-Rt	0.70
Push Gradient	Cat Table	1.00
Altitude Duration	Cat Table	0.86
Weight Correction	Cat Table	0.79
Blade Type	S or U	1.00
Job Efficiency		0.83
TOTAL CORRECTION FACTOR		0.27
FACTORED PRODUCTION SPREAD RATE	(cuyd/hr)	**135.00**

SOURCE: Colorado Division of Geology and Minerals, 1998.

Sacrificial Fill in Former Pond 740B EJ Artic. Haul Truck HAUL_LOAD SPECIFICS		
Sacrificial Fill in Former Pond 740B EJ Artic. Haul Truck 938M Loader	METRIC	INPUT
Swell Factor		1.00
EQUIPMENT		
HAUL TRUCK-Effective Load Capacity (cu yds)	(cy)	25.80
LOADER-Effective Load Capacity (cu yds)	(cy)	3.25
CYCLE TIME		
Loader Cycle Time per loader used	(min)	0.25
Loader Cycles per Truck		8
Empty Haul Time	(min)	4.53
Loaded Haul / Dump Time per truck used	(min)	6.66
Total Load / Haul Time	(min)	13.17
Maximum Production Rate per Haul Truck	(cy/hr)	117.50
CORRECTION FACTORS		
Materials Adj		1.00
Operator	Average	1.00
Job Efficiency	50 min/hr	0.83
TOTAL CORRECTION FACTOR		0.83
FACTORED HAUL PRODUCTION RATE	(cy/hr)	**97.52**
MAX TRUCKS:LOADER RATIO CALCULATED	(truck/loader)	4

SOURCE: Colorado Division of Geology and Minerals, 1998.

#REF!		
#REF! #REF!	METRIC	INPUT
Swell Factor		1.00
EQUIPMENT		
Average Push(LF)	(ft)	#REF!
Maximum Production	(acres/hr)	0.50
CORRECTION FACTORS		
Operator	Average	1.00
Material Consistency	Cat Table	1.00
Dozing Method	General	1.00
Spoil Pile Factor	Fnd-Rt	1.00
Push Gradient	Cat Table	1.00
Altitude Duration	Cat Table	1.00
Weight Correction	Cat Table	1.00
Blade Type	S or U	1.00
Job Efficiency		1.00
TOTAL CORRECTION FACTOR		1.00
FACTORED PRODUCTION GRADING RATE	(acres/hr)	**0.50**

SOURCE: Colorado Division of Geology and Minerals, 1998.

Formula Master Lists

	Equipment/Material	# of Equip	Initial Volume	Final Volume	Units of Measure	Production	Units	Hrs Req'd	Cost/Unit Equip	Total Equip Cost	Cost/Unit Labor	Total Labor Cost	Cost/Unit Materials	Total Material Cost	Total Cost
HAUL/SPREAD Formulas	Use dropdown to insert Dozer Here			#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	$ -	#N/A	#N/A
HAUL TRUCK Formulas	Use dropdown to insert HAU	#N/A		#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	$ -	#N/A	#N/A
Loader Formulas	Use dropdown to insert LOADER Here			#N/A		#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	$ -	#N/A	#N/A
Materials Formulas	Use dropdown to insert Material Here		-	#N/A									$ -	$ -	$ -
Grading Formulas	12M Grader AWD	#N/A		#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	$ -	#N/A	#N/A
Water Only Formulas	Use dropdown to insert WATER TRUCK Here							INSERT HOURS HERE	#N/A	#VALUE!	#N/A	#N/A	$ -	$ -	#VALUE!
Grading Plus Formulas	12M Grader AWD		-	#N/A		#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	$ -	$ -	#N/A
Water Plus Formulas	Use dropdown to insert WATER TRUCK Here						#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	$ -	$ -	#N/A
General Task Formulas										$ -		$ -			$ -
Demolition Task Formulas	RBE DEMOLITION TASK HERE AND USE BUTTON TO ADD NEW TASKS							-	#N/A	#N/A	#N/A				

Validation Master Lists

HAUL_LOAD	cuyd
SPREAD	cuyd
GRADING	acres
MATERIALS	
WATER	
DEMO_MATERIALS	