

Reclamation Costs

Exhibit L

Reclamation of the Bennett Gravel Pit will be completed in two phases, which will require a phased bond. Phase 1 will involve reclaiming the site to the conditions shown on Map F-1; Phase 2 will reclaim to the conditions shown on Map F-2. Each phase's bond is calculated and described below. Prior to opening Phase 2 for mining a new gravel well permit and any needed additional bond will be posted with the Division as part of a technical revision.

1. Phase 1 Bond Scenario

The worst-case reclamation scenario for Phase 1 includes reclaiming the pit as a groundwater lake, reclaiming the processing area in the north for industrial use, and reclaiming the remaining disturbed areas near the river as wildlife habitat. The active pit and the existing pond will both require dewatering to full depth.

A maximum of 2,000 ft of highwall will have to be backfilled, graded, topsoiled, and vegetated above the anticipated water line. This highwall distance includes the entirety of the current mining pit slope on the east side of the site and the remaining north shore of the existing south pond.

All structures will have to be removed from the processing area prior to regrading and flattening berms. All disturbed areas upslope of backfilled areas will require topsoiling along with the backfilled slopes. The backfilled slopes would need to be topsoiled and vegetated to 10 feet below the water level.

Reclamation will be completed with monitoring of vegetation growth and weed control following seeding and mulching activities.

Table L-1 – Reclamation Cost Estimate Phase 1

Activity Description	Time (Months)	Quantity		Unit Cost (\$)Cost (\$)	
Backfill and grade 2,000' of highwall (30 ft. tall)	0.5	25,036	cy	\$1.50	\$37,557
Pit dewatering of a 9.5-acre lake (25 ft deep)	1	237.5	acre-ft	\$105.00	\$24,938
Remove scale and office trailer	0.1	1		\$1,000.00	\$1,000
Gravel industrial area (5 inches over 9.9 acres)	0.2	6,660	CY	\$0.75	\$4,995
Topsoil all disturbed areas to be revegetated	0.5	12,895	CY	\$1.50	\$19,343
Drill seed all topsoiled areas (rangeland mix)	0.5	15.3	acres	\$476.00	\$7,283
Mulch all seeded areas	0.5	15.3	acres	\$858.00	\$13,127
Weed control management	24	1		\$750.00	\$750
Totals	25.5				\$108,993
DRMS Costs (28% x direct costs)					\$30,518
Phase 1 Bond Amount					\$139,511

2. Phase 2 Bond Scenario

Many reclamation activities of Phase 2 are already accounted for in the Phase 1 bond shown in Table L-2. This section covers the additional costs created by Phase 2 mining and reclamation.

Phase 2 dewatering will be for the volume of the final pond shown on Map F-2. Backfilling and grading of pit slopes will still be controlled by the 2,000 foot highwall length limit and topsoil. Vegetation, weed control, and gravel placement in the Phase 1 bond is sufficient to cover the Phase 2 versions of those activities as well.

Table L-2 - Additional Reclamation Cost Estimate Phase 2

Activity Description	Time (Months)	Quantity	Unit Cost (\$)	Cost (\$)
Pit dewatering of 15.3 acre lake (25 ft deep)	1	382.5 acre-ft	\$105.00	\$40,163
Totals	1.5			\$40,163
DRMS Costs (28% x direct costs)				\$11,246
Phase 2 Bond Amount				\$51,409

3. Backfill Haul Distances

In both phases topsoil and overburden will be directly placed via trucks and loaders. Haul distances from the stockpile area to the centroid of each Phase's mining area are listed below in Table L-3.

Table L-3 – Approximate Haul Distances

Material	Phase 1	Phase 2
Topsoil	600 ft.	600 ft
Overburden	600 ft.	600 ft