5.0 RULE 6.3.5: EXHIBIT E–RECLAMATION PLAN

5.1 OVERVIEW

This section is intended to provide context to support the proposed reclamation plan.

The Leadville Mill is a historic operation with legacy RoM stockpiles and tailings. Existing ore stockpiles and tailings have been stored on site since 1991. There are 3 historic stockpiles totalling approximately 1,500 tons which lie on unlined areas. The existing mill permit (M1990-057) requires these piles be maintained using best management practices (BMPs) via plastic cover and down-gradient perimeter. There is also 1 tailings pile containing approximately 900 tons of tailings. This pile was moved to the northwest end of the Mill property under TR-5. It sits on a liner and is also covered with plastic, as approved by the Division.

Per the existing permit, the ore and tailings piles must be removed within 60 days of project start-up. CJK assumes this requirement will also apply to this permit application. Pile removal will be the first reclamation activity.

The stockpiles, including the tailings will be reprocessed in the Mill and treated as production tailings. Until such time they are reprocessed, the following actions are in place to mitigate potential surface or groundwater contamination impacts.

- The stockpiles are covered with reinforced **polyethylene plastic sheeting (PPS)** (often referred to as Visqueen©, a PPS brand) sheeting, approximately 40ft x 100ft in size, with edges folded and pinned, and held in place by tires, blocks, rocks and/or other suitable ballast.
- The water runoff from the reinforced PPS is passed through erosion and sediment control measure consisting of wattles and vegetative filters.
- Reinforced PPS is replaced as needed.
- Stockpiled ore will be sampled, and a Synthetic Precipitation Leaching Process (SPLP) analysis will be performed, as outlined in the Division's August 27, 2009, letter prior to removal and prior to milling or disposal.
- Upon commencement of operations, a stockpile removal schedule will be provided to CDRMS, and

- Weather permitting, historical stockpiled ore will be removed and disposed within 60 days production start.

The stockpile ores will be reprocessed or disposed in the FTD or other approved facility.

5.2 GENERAL REQUIREMENTS

(1) In preparing the Reclamation Plan, the Operator/Applicant should be specific in terms of addressing such items as final grading (including drainage), seeding, fertilizing, revegetation (trees, shrubs, etc.), and topsoiling. Operators/Applicants are encouraged to allow flexibility in their plans by committing themselves to ranges of numbers (e.g., 6"-12" of topsoil) rather than specific figures.

(2) The Reclamation Plan shall include provisions for, or satisfactory explanation of, all general requirements for the type of reclamation proposed to be implemented by the Operator/Applicant. Reclamation shall be required on all the affected land. The Reclamation Plans shall include:

The Mill site is zoned by Lake County as Industrial/Mining (IM). Affected Land reclamation will be consistent with supporting IM uses. **Table 5-1** summarizes planned reclamation.

TABLE 5-1: RECLAMATION AREAS

Task	Reclamation Area
10	Historic ore stockpile & tailings areas
20	Entrance, driveway, and roads
30	Wire Fence
40	Structures & Equipment
50	Emergency Containment Sump (ECS)
60	Filtered Tailings Deposit (FTD)
70	Monitoring Wells
80	Chemicals

(a) A description of the type(s) of reclamation the Operator/Applicant proposes to achieve in the reclamation of the affected land, why each was chosen, the amount of acreage accorded to each, and a general discussion of methods of reclamation as related to the mechanics of earthmoving;

Reclamation activities are described in **Table 5-2**.

TABLE 5-2: RECLAMATION ACTIVITIES

Task	Reclamation Area	Units	Action
10	Historic ore stockpiles	0.6 ac	Reclaim land, remove liner & BMPs, grade and seed
20	Entrance, driveway, & roads	0.85 ac	These assets will remain for future use
30	Wire fence	5500 ft	Remove posts & wire strands
40	Structures & Equipment		
41	Structure-Mill building	NA	Retain Building. Remove Equipment
42	Structure-crusher building	NA	Retain Building. Remove Equipment
43	Ore storage bunker	NA	Retain Building. Remove Equipment
44	Structure-filter plant	NA	Retain Building. Remove Equipment
45	Structure-leach tanks & pad	3,000 ft^2	Leach tank pads. Remove tanks, piping, & foundation
46	Structure-scale	150 ft^2	Scales. Remove scales and foundation
50	Emergency Containment Sump	3 ac	Grade to original contour and seed
60	Filtered Tailings Deposit		
61	Filtered tailings deposit	9 ac	Grade, cap and seed
62	Filtered tailings equip building	1600 ft^2	Retain for future use.
63	Filtered tailings access road	NA	Retain for future use
70	Monitoring wells	0.1 ac	Cap
80	Chemicals	NA	Remove or Neutralize

5.3 POST MINING LAND USE

(b) A comparison of the proposed post mining land use to other land uses in the vicinity and to adopted state and local land use plans and programs. In those instances where the post mining land use is for industrial, residential, or commercial purposes and such use is not reasonably assured, a plan for revegetation shall be submitted. Appropriate evidence supporting such reasonable assurance shall be submitted

The Mill is located on land zoned Industrial Mining (IM) by Lake County. The property borders a historic mill site (Leadville Gold and Silver Mill) and now owned by Salem Minerals to the North, the historic Leadville Corporation (currently in bankruptcy) process facility to the northeast, Leadville Sanitation municipal sewage treatment plant to the East, and a parcel with a proposed concrete batch plant to the South.

The land directly West of the Mill is zoned Agriculture Forestry (AF) by Lake County. There are 4 residential properties located proximate to the Mill.

Lake County's long-term plan indicates that the IM zoning for the Mill and all properties East of the AF zone will remain IM. This is supported by Lake County's zoning map shown in **Figure 5-1**.

5.4 RECLAMATION PERFORMANCE STANDARDS

(c) A description of how the Reclamation Plan will be implemented to meet each applicable requirement of Rule 3.1;

5.4.1 POST MINING USE (RULE 3.1.1)

The property owner, CJK shall reclaim the land consistent with IM use.

5.4.2 RECLAIMING SUBSTITUTED LAND (RULE 3.1.21)

Not applicable.

5.4.3 TIME LIMIT & PHASED RECLAMATION (RULE 3.1.3)

Reclamation Task 10 will be completed within 90 days after the historic stockpile materials have been removed, weather permitting. If stockpile removal is completed in late fall or during the winter, reclamation activities will necessarily be delayed until the spring.

Reclamation Tasks 20 to 80 will be completed within 18 months after termination of processing activities.

5.4.4 PUBLIC USE (RULE 3.1.4)

Not applicable.

5.4.5 RECLAMATION MEASURES (RULE 3.1.5)

Reclamation measures, described in Rule 3.1.5, will be addressed as follows:

(1) Grading shall be carried on so as to create a final topography appropriate to the final land use selected in the Reclamation Plan.

Reclamation grading will be to approximate original contours (AOC), as appropriate, with the following exceptions.

- Task 20. Historic tailings are currently placed on the upper Mill driveway. The reclamation plan will retain the driveway; hence the reclaimed area will be graded accordingly.
- Tasks 50 and 60. The ECS and FTD will be graded to their final design contours.

(2) When backfilling is a part of the plan, the Operator shall replace overburden and waste materials in the mined area and shall ensure adequate compaction for stability and to prevent leaching of toxic or acid-forming materials.

The ECS will be backfilled using the existing excavated material used in its construction. No other backfilling activity is contemplated.

(3) All grading shall be done in a manner to control erosion and siltation of the affected lands, to protect areas outside the affected land from slides and other damage. If not eliminated, all highwalls shall be stabilized.

Grading will be performed to control erosion and siltation in accordance with the storm water management plan (SWMP).

(4) All backfilling and grading shall be completed as soon as feasible after the mining process. The Operator shall establish reasonable timetables consistent with good mining and reclamation procedures.

Backfilling the ECS will be completed reasonably after the end of operations.

(5) All refuse and acid forming or toxic producing materials that have been mined shall be handled and disposed of in a manner that will control unsightliness and protect the drainage system from pollution.

This task will be completed as per the tailings management plan.

(6) Any drill or auger holes that are part of the mining operation shall be plugged with non- combustible material, which shall prevent harmful or polluting drainage. Adits and shafts should be closed, and where practicable, backfilled and graded in a manner consistent with the post mine land use and shall comply with the provisions of the Act, Mineral Rules and Regulation.

Not applicable.

(7) Maximum slopes and slope combinations shall be compatible with the configuration of surrounding conditions and selected land use. In all cases where a lake or pond is produced as a portion of the Reclamation Plan, all slopes, unless otherwise approved by the Board or Office, shall be no steeper than a ratio of 2:1 (horizontal to vertical ratio), except from 5 feet above to 10 feet below the expected water line where slopes shall be not steeper than 3:1. If a swimming area is proposed as a portion of the Reclamation Plan, the slope, unless otherwise approved by the Board or Office, shall be no steeper than 5:1 throughout the area proposed for swimming, and a slope no steeper than 2:1 elsewhere in the pond.

The ECS will be graded to AOCs. The FTD will be graded per the design specifications. No lakes or ponds are contemplated in the reclamation plan.

(8) If the Operator's choice of reclamation is for agricultural or horticultural crops which normally require the use of farm equipment, the Operator shall grade so that the area can be traversed with farm machinery.

Not applicable.

(9) An Operator may backfill structural fill material generated within the MLRB permitted area into an excavated pit within the permit area as provided for in the MLRB Permit. If an Operator intends to backfill inert structural fill generated outside of the approved permit area, it is the Operator's responsibility to provide the Office notice of any proposed backfill activity not identified in the approved Reclamation Plan. If the Office does not respond to the Operator's notice within thirty (30) days after receipt of such Notice by the Office, the Operator may proceed in accordance with the provisions of this Rule. The Operator shall maintain a Financial Warranty at all times adequate to cover the cost to stabilize and cover any exposed backfilled material. The Notice to the Office shall include but is not limited to:

a. a narrative that describes the approximate location of the proposed activity;

The reclamation plan contemplates placing the leach pad concrete foundation inside the ECS. The leach pad is located directly adjacent to the ECS. Once the concrete is "jackhammered" it will be pushed into the ECS with a dozer. The volume of concrete represents a very small fraction of overall ECS capacity and will not affect AOC grading.

b. the approximate volume of inert material to be backfilled;

The leach pad concrete volume is approximately 285yd^3.

c. a signed affidavit certifying that the material is clean and inert, as defined in Rule 1.1(31);

Inert Material, as defined in Rule 1.1(31) means non-water soluble and non-putrescible solids together with such minor amounts and types of other materials, unless such materials are acid or toxic producing, as will not significantly affect the inert nature of such solids. The term includes, but is not limited to, earth, sand, gravel, rock, concrete which has been in a hardened state for at least sixty (60) days, masonry, asphalt paving fragments, and other inert solids.

The material to be placed in the ECS as backfill honors this definition. A signed affidavit certifying the material is "Inert Material" shall be provided to the Division during post mining reclamation activity.

d. the approximate dates the proposed activity will commence and end, however, such dates shall not be an enforceable condition;

Operational start date is a function of CDRMS, CDPHE and Lake County permit approval. As such, dates are based upon a tentative start date of May 1, 2023, and assuming a 10-year project life.

- Tasks 10 and 20 will commence July 1, 2023, and will be completed by August 1, 2023, but no later than October 1, 2023.
- Tasks 30 to 90 will commence May 1, 2033, and will be completed by November 1, 2034, or 18-months including a 3-month weather delay.

e. an explanation of how the backfilled site will result in a post-mining configuration that is compatible with the approved post-mining land use; and

The backfilled site will be to AOC. The fill will consist of the same alluvial material as the surrounding area (except for a small amount of concrete) and will therefore not change the existing suitability of planned IM use.

f. a general engineering plan stating how the material will be placed and stabilized in a manner to avoid unacceptable settling and voids.

The ECS is the only area to be backfilled. The ECS is a basic cut-and-fill facility, where a "ring-dyke" dam was constructed using only existing material. Reclamation will essentially be the reverse of the construction including:

- Break and push leach tanks concrete pad into void.
- Fill void with embankment material using bulldozer.
- This activity will include burying the ECS liner along with the fill material.
- The reclaimed surface will be created by contouring the earth fill cover to minimize ingress of surface water and to pass runoff into an engineered channel towards the South of the ECS to an ephemeral tributary to California Gulch. Impoundment closure design will prevent water ponding on the reclaimed ECS surface to promote a stable cap (**Figure-6-2** and **Figure-6-3**).
- Stockpiled till and topsoil/SPGM will be spread over the impoundment surface using a LGP dozer, excavator, or other suitable equipment to establish a trafficable surface.
- An engineered channel(s) will convey surface water flow into the Mill site unnamed ephemeral drainage.
- Stockpiled topsoil and/or suitable plant growth material will be graded at a thickness of ranging between 4-6 inches over the disturbed impoundment area.
- Topsoil/Alternative growth media estimates indicate there is sufficient material stored or available on site to address reclamation requirements.

(10) All mined material to be disposed of in the affected area must be handled is such a manner so as to prevent any unauthorized release of pollutants to the surface drainage system.

Upon cessation of the milling operation, the following site restoration and reclamation activities will be undertaken:

- All processed material will be placed in the FTD and reclaimed as per the approved tailings design as discussed in **Exhibit D**.
- Chemicals and petroleum hydrocarbons will be removed from the site and disposed or recycled in accordance with federal and State regulations.
- Mill equipment will be dismantled, sold, recycled, or disposed off-site in an approved facility.
- Debris, refuse, and other solid waste will be disposed in an approved mono fill or landfill;
- Utility infrastructure will remain or be disposed, sold, or recycled off site. Utility equipment will be recycled, or debris materials includes poles, pumps, junction boxes, fences, and power lines.
- Drainage areas to be restored will be reclaimed and revegetated, where necessary,
- Select monitoring wells will be plugged in accordance with Colorado Division of Water Resources (DWR) criteria and well abandonment reports will be filed.
- Disturbed or compacted areas will be ripped, scarified, topsoil placed, and seeded. Weed free straw mulch will be applied and crimped at a rate of 2.0st/ac;
- Storm Water control BMPs will be implemented to minimize on and off-site erosion and sedimentation impacts. A discussion of the storm water management plan is in **Exhibit U**.
- Seed drilling planting methods will be used, with an application rate of 9.45 pls lbs/acre. If broadcasting seeding methods are to be used, the seed application rate application will be 18.9 pls lbs/acre.
- Following reclamation activities, the Mill site will be placed under a post mill monitoring and maintenance program. Monitoring activities will identify areas requiring site repair. Reclaimed areas that may be repaired includes 6in rills, noxious weed growth, and areas where seeded reclaimed areas have failed.

(11) No unauthorized release of pollutants to groundwater shall occur from any materials mined, handled or disposed of within the permit area.

See part (10) above. Process material will be stored in the filtered tailings facility as per the approved design. All other pollutants will be removed from site and disposed or recycled in accordance with federal and State regulations.

5.5 TOPSOIL & REVEGETATION

(d) Where applicable, plans for topsoil segregation, preservation, and replacement; for stabilization, compaction, and grading of spoil; and for revegetation. The revegetation plan shall contain a list of the preferred species of grass, legumes, forbs, shrubs or trees to be planted, the method and rates of seeding and planting, the estimated availability of viable seeds in sufficient quantities of the species proposed to be used, and the proposed time of seeding and planting;

- Approximately 1,775yd^3 of topsoil/SPGM is stockpiled for placement and vegetation for Task 60-Emergency Containment Sump.
- 4,750yd^3 to 7,200yd^3 of topsoil/SPGM representing 4in to 6in of cover material will be required and stockpiled for Task 60- Filtered Tailings Deposit.
- Prior to initiating reclamation activities alternative growth media will be analyzed for growth suitability.
- If soil or alternative growth media sample results deem it necessary, soil amendments will be applied.
- CDRMS approved by seed mix is summarized **Table 5-3**.

TABLE 5-3: RECLAMATION SEED MIX

Species	Scientific Name	Variety	Pls lbs./Acre
Yarrow	Achillea Lanulosa	-	0.1
Groundsel	Senecio Atratus	-	0.1
Lupine	Lupinus Perennial Lupine	-	1.0
Slender Wheatgrass	Elymus Trachycaulus	San Luis	1.4
Nodding Brome	Bromus Anomalus	-	2.5
Sheep Fescue	Festuca Ovina	Covar	0.5
Hard Festuca	Festuca Ovina Duriuscula	Durar	0.5
Red Fescue	Festuca Rubra	Penniawn	0.5
Tufted Hairgrass	Deschampsia Caespitosa	-	0.5
Redtop	Agrostis Alba	-	0.1
Blue Wildrye	Elymus Glaucus	-	1.75
Muttongrass	Poa Fendleriana	-	0.5
		Total pls lbs./acre (drilled)	**9.45**

5.6 IMPLEMENTATION PLAN

5.6.1 CLOSURE SCHEDULE

(e) A plan or schedule indicating how and when reclamation will be implemented. Such plan or schedule shall not be tied to any specific date but shall be tied to implementation or completion of different stages of the mining operation as described in Rule 6.4.4 (e). The plan or schedule shall include:

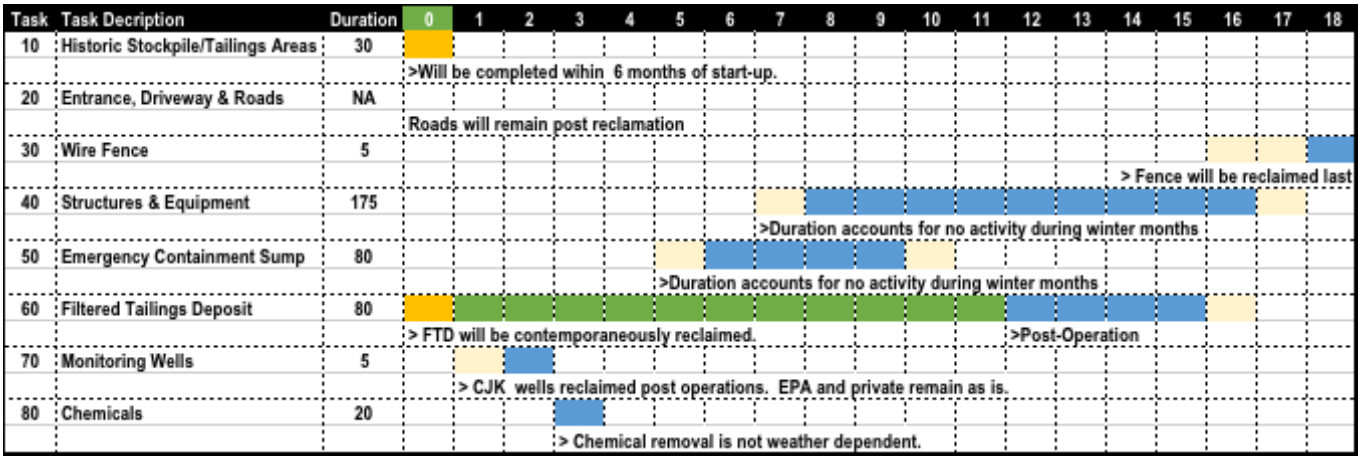
(i) An estimate of the periods of time which will be required for the various stages or phases of reclamation;

Post-operation closure activities including timing and duration are shown in **Table 5-4**.

- Given the harsh winters experienced in the area, and since the exact month operations will end is not known, the schedule accounts for delays/no operations during extreme winter months.

- Historic stockpiles and tailings areas will be removed within 6-months of project start-up
- Chemical removal is not winter-weather dependent. Chemicals will be immediately removed, but dependent on licensed 3rd-party contractor schedule(s).
- The schedule provides 30 to 60 days of float for critical path items.

TABLE 5-4: RECLAMATION CLOSURE SCHEDULE



(ii) A description of the size and location of each area to be reclaimed during each phase; and

Reclamation areas are shown in **Figure 6-1**. Post grading maps of the ECS and FTD areas are shown in **Figures 6-2 to 6-5**. Estimated unit sizes and volumes of reclamation activities are summarized in **Table 5-5**, and details are provided in **Exhibit L**.

Task 10 – Stockpiles/Tailings. There are 3 historic ore stockpiles labeled Stockpile 1, 2 and 3, respectively. There is also one legacy tailings pile consisting of tailings deposit on the land, which was removed by Union Milling, the previous owners, in order to construct a TSF. This pile was moved to the northwest corner of the property under TR5 in preparation for processing. These legacy piles represent the initial material to be processed in the Mill. Once processed the areas will be reclaimed. If the ore is not milled it will be placed on the bottom of the ECS and buried. Silt fence, waddles and PPS sheeting will be removed and disposed of. Areas will be graded to natural contours and seeded. The existing permit mandates this material be removed during the first 60-days of operation. Reclamation duration is 30 days, weather permitting. If material is removed during winter months, then reclamation will be performed the following spring.

Task 20 – Entrance, Driveway & Roads. There are 2 access roads to the Mill. The main entrance is a driveway from US Highway 24 about 1/4 mile from Leadville Sanitation Water Treatment facility. A new road accessing the property from the North via CJK Milling Company's Arkansas Valley Slag Project will be constructed. These roads will remain for post-reclamation IM use, as currently zoned in Lake County.

Task 30 – Wire Fence. A 4-wire fence exists on the South, West, North, and a small portion of the East original (20.7ac Zuni Placer) property. The East side is fenced by Leadville Sanitation 9-wire fence, Colorado Department of Wildlife (CDW) mandated an animal-friendly design. Nevertheless, wildlife walks through this fence thus requiring constant maintenance. These strands will be removed post-operations to alleviate the maintenance requirement. There is no land disturbance.

Task 40 – Structures & Equipment. The property is in an area zoned for IM by Lake County and post operation use will remain IM. Therefore, all buildings will remain. However, (1) equipment will be removed and either sold for use or scrap, (2) the leach pad area will be removed, and the concrete from the pad will be pushed into the ECS, (3) scales will be removed, (4) slurry and water lines will be removed, and (5) in the event of a hard stop, all remaining RoM will be processed and properly disposed.

Task 50 – Emergency Containment Sump. Reclaiming the ECS includes: (1) pumping out fresh water into sewer, (2) folding HDPE, leak detection, and GCL liners into the containment area, (3) grading the embankment into the containment area, (4) placing topsoil, and (5) mulch and seeding. The fresh water will be tested to confirm it is suitable for pumping into the sewer. The ECS was constructed as a cut and fill volume balance, confirming adequate material exists to fill the hole. Any excess material due to liner and leach pad concrete that will be placed in the ECS will be graded to approximate original contours.

Task 60 – Filtered Tailings Deposit. The FTD will be contemporaneously reclaimed. Activity involves compacting tailings, placing 4-6 inches of topsoil/SPGM followed by 2-4 inches of mulching and 18.9 pls lb/ac seeding. At the end of FTD life, the containment pond will be reclaimed by filling the facility with soil along with burying the liner. Note that slurry and water pipe removal is accounted for in Task 40.

Task 70 – Monitoring Wells. Only CJK Milling-owned wells, MW-2 and MW-3 will be capped. EPA and Asarco/Newmont owned wells will remain as is.

Task 80 – Chemicals. All chemicals will be removed from the site. The estimate assumes the maximum number of reagents will be on site at the time of closure. The vendor will buy-back all sealed containers, so sealed containers are only subject to transportation costs.

TABLE 5-5: RECLAMATION VOLUMES

Task	Task Description	Quantities
10	Historic Stockpiles/Tailings	0.65 acres disturbed land-grade/seed 860 lineal feet BMPs-remove
20	Entrance, Driveway &Roads	4,000 lineal feet. Roads will remain.
30	Wire Fence	13,500 lineal feet-remove.
40	Structures and Equipment	22 structures identified for demolition. See **Exhibit L** for detail.
50	Emergency Containment Sump	Max. 300,000-gal water. Treat & pump 6,000yd^3 cut excess volume 18,700yd^3 fill volume 1,775yd^3 topsoil/SPGM 3.3 acres mulch/seed.
60	Filtered Tailings Facility	4,750yd^3 to 7,200yd^3 topsoil/SPGM 500yd^3 grading 12-acres mulch & seed
70	Monitoring Wells	3yd^3 aggregate 7 sacks concrete mix
80	Chemicals	Multiple reagent volumes. See **Exhibit L**.

(iii) An outline of the sequence in which each stage or phase of reclamation will be carried out.

See part (i) above.

(iv) Demonstrate a reasonably foreseeable end date respecting water quality treatment as required in Rule 3.1.6 (1) (g)—(h).

Long-term water quality management is not anticipated.

(The schedule need not be separate and distinct from the Reclamation Plan, but may be incorporated therein.)

5.6.2 GRADING, SEEDING, FERTILIZING, REVEGETATION, TOP-SOILING

(f) A description of each of the following:

(i) Final grading - specify maximum anticipated slope gradient or expected ranges thereof;

All grading will be to original contours, except the ECS which will be to approximate original contours and the FTD which will be graded to an overall slope of 3.5H:1.0V.

Lifts will be 10-12ft with 2.5H:10.0 inter ramp slopes. Drainages will approximate origin conditions except for the FTD, where drainage will flow around the facility generally from northeast corner of property to the southwest. Current drainage around roads and remaining structures will remain.

(iii) Seeding - specify types, mixtures, quantities, and expected time(s) of seeding and planting;

See **Section 5.5** for seeding, revegetation, and topsoil discussion.

(iv) Fertilization-if applicable, specify types, mixtures, quantities and time of application;

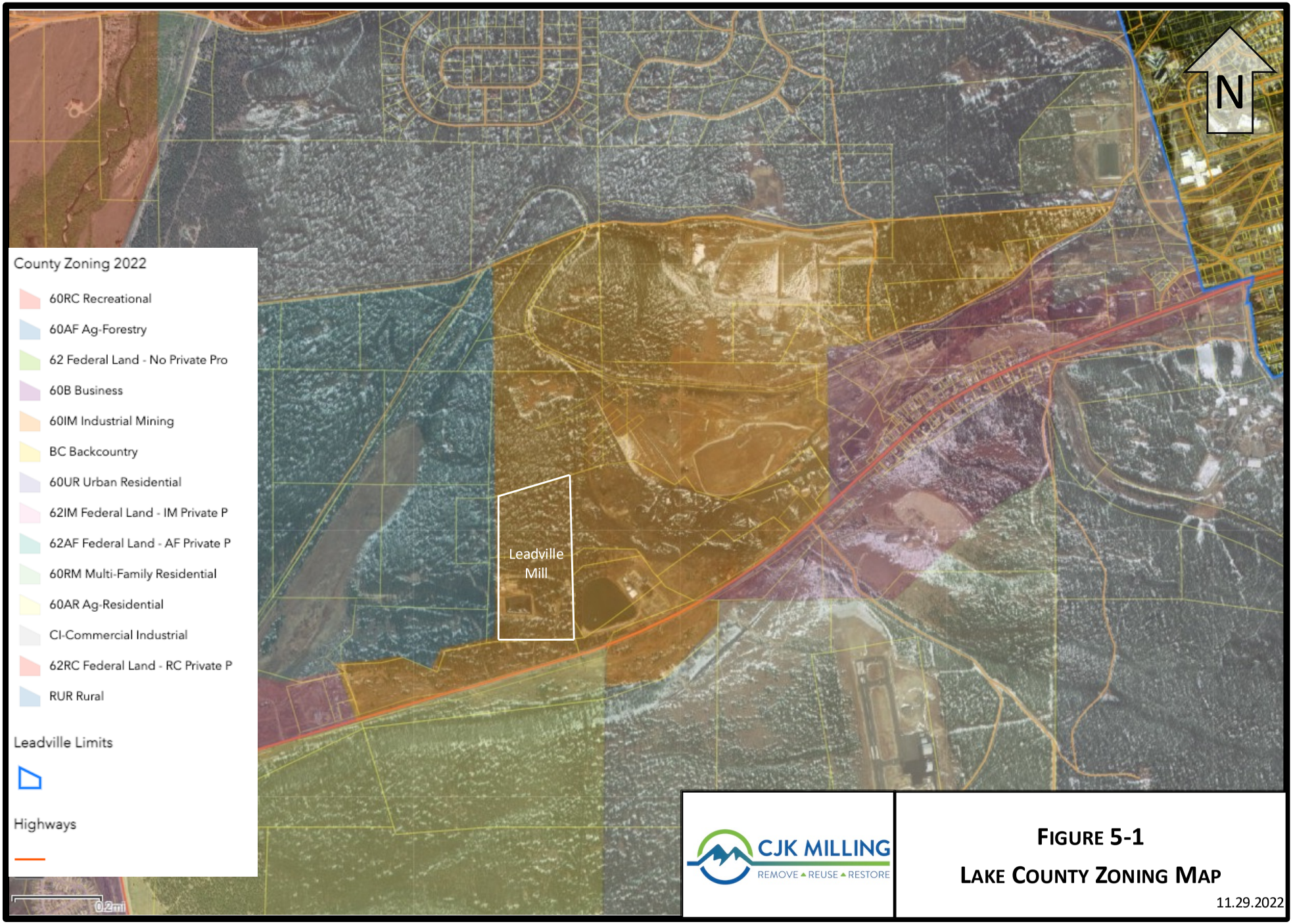
CJK does not anticipate fertilization, excepting any fertilizer that may be included in seed mix per contractor recommendation.

(v) Revegetation - specify types of trees, shrubs, etc., quantities, size and location; and

See **Section 5.5** for seeding, revegetation, and topsoil discussion.

(v) Topsoiling - specify anticipated minimum depth or range of depths for those areas where topsoil will be replaced.

See **Section 5.5** for seeding, revegetation, and topsoil discussion.



CJK MILLING
REMOVE ▲ REUSE ▲ RESTORE

FIGURE 5-1

LAKE COUNTY ZONING MAP

11.29.2022