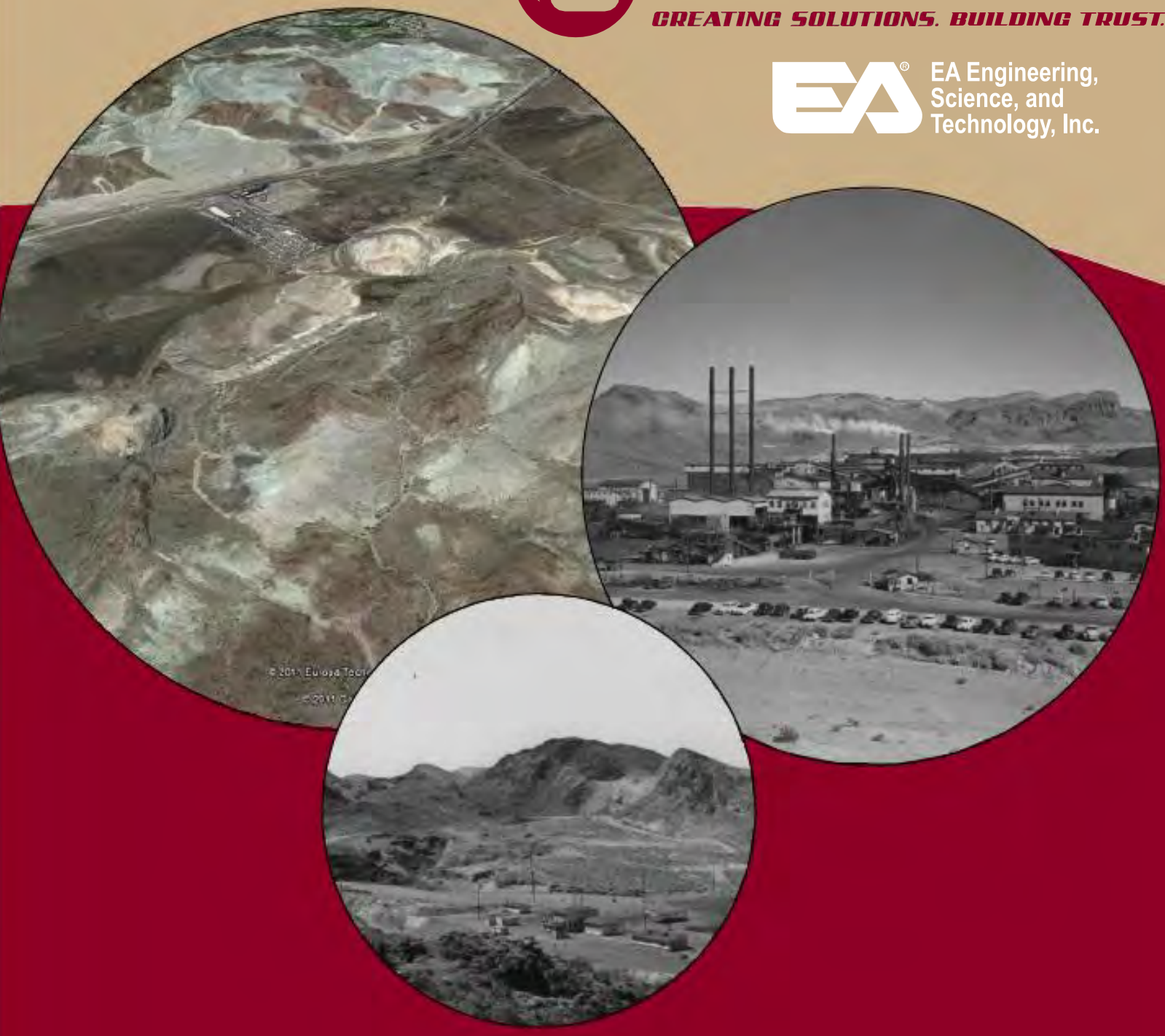
BROADBENT
CREATING SOLUTIONS. BUILDING TRUST.

EA Engineering, Science, and Technology, Inc.



Remedial Design Report, Revision 1
Three Kids Mine
Lakemoor Ventures LLC

March 4, 2024

BROADBENT
8 West Pacific Ave., Henderson, NV 89015
[T] 702-563-0600 [F] 702-563-0610
broadbentinc.com

March 4, 2024 Project No. 14-01-156

Alan Pineda, PE
Professional Engineer
Bureau of Industrial Site Cleanup
Nevada Division of Environmental Protection
375 E. Warm Springs Rd., Ste. 200
Las Vegas, NV 89119

Re: Remedial Design Report, Revision 1
Three Kids Mine

Dear Mr. Pineda:

Broadbent & Associates, Inc. (Broadbent) is pleased to submit this *Remedial Design Report, Revision 1* for the Three Kids Mine located in Henderson, Nevada.

Please do not hesitate to contact us if you should have any questions or require additional information.

Sincerely,
BROADBENT & ASSOCIATES, INC.

Kirk Stowers, CEM
Principal Geologist

cc: JD Dotchin, NDEP
Joe McGinley, McGinley & Associates, Inc.
Caitlin Jelle, McGinley & Associates, Inc.
Ann Verwiel, ToxStrategies
Robert Unger, Lakemoor Ventures LLC
Mindy Unger-Wadkins, Lakemoor Ventures LLC
Leo Drozdoff, Drozdoff Group, LLC
Karen Gastineau, Broadbent & Associates, Inc.
Christene Klimek, City of Henderson
Sean Robertson, City of Henderson
Stephanie Garcia-Vause, City of Henderson
Anthony Molloy, City of Henderson
Quincy Edwards, Pulte Group
Doug Adair, Pulte Group
Paul Kenner, on behalf of Pulte Group
Michael Ford, Snell & Wilmer
Brad Cahoon, Dentons
Bryan Douglass, Douglass, Inc.
Charles M. Damus, Laker Development, LLC
Darryn Padfield, River Mountain Bike Shop
David Grossheim, Laker Plaza, Inc.
Frank Sator, Laker Development, LLC
Laird Sanders, Lake Mead Boat Storage
Rhonda Sanders, Lake Mead Boat Storage
Tyler Cahoon, Dentons

Remedial Design Report, Revision 1
Three Kids Mine
Henderson, Nevada

JURAT: I, Karen Gastineau, hereby certify that I am responsible for the services in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and to the best of my knowledge comply with all applicable federal, state and local statutes, regulation and ordinances.

Karen Gastineau

March 4, 2024

Karen Gastineau
Senior Hydrogeologist
CEM #2468 (4/1/2025)

Date

The following individuals contributed significantly to the preparation of this document:

Lonnie Roy, PE, Broadbent & Associates, Inc.
Chris Carrier, PE, Broadbent & Associates, Inc.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF ENGINEERING FIGURES

LIST OF APPENDICES

1.0 STATEMENT OF WORK

On behalf of Lakemoor Ventures LLC (Lakemoor), Broadbent & Associates, Inc. (Broadbent) prepared this Remedial Design Report for Three Kids Mine site (the Site) in Henderson, Nevada. PN II, Inc. dba Pulte Homes of Nevada (Pulte), under the oversight of the Nevada Division of Environmental Protection (NDEP), has agreed to undertake the steps necessary to achieve closure of legacy contamination associated with former mining activities.

This Remedial Design details the selected alternative as described in the Record of Decision (ROD) and presents engineering drawings for remediation and reclamation of the Site. The ROD and this Remedial Design support a Mine Remediation and Reclamation Agreement (MRRA), referred to as the Administrative Order on Consent (AOC), pursuant to the Three Kids Mine Remediation and Reclamation Act, United States Public Law 113-135, Section 3.b.2.B (the Act).

1.1 INTRODUCTION

The Site is located approximately five miles northeast of central Henderson, Nevada, along East Lake Mead Parkway (State Road 564). The Site occupies most of Section 35 and parts of Sections 26, 34, and 36 of Township 21S, Range 63E of the Mount Diablo Meridian. Figure 1 is a map depicting the location of the Site.

The Project area consists of approximately 1,165 acres, of which 411 acres are considered the disturbed former mine site, 97 acres were evaluated for impacts by windblown sediment receiving a no further action determination from NDEP, 597 acres are considered undisturbed, or background, and the remaining 60 acres are located in the Lake Mead Parkway corridor. Land ownership is shown in Figure 2. Approximately 851 acres were under federal administration but were transferred to Pulte on February 28, 2024. The remaining 314 acres are controlled by three different entities: Lakemoor (295 acres), Laker Plaza (5 acres), and Lake Mead Boat Storage (14 acres). The latter two are not part of this Remedial Design and are being addressed separately by NDEP.

The Site is the former Three Kids Mine and Mill. It was used for the mining of manganese from 1917 to 1961. Site operations were permanently discontinued in 1961 when the open pits were economically exhausted. Key features of the Site include three major open pits, waste rock, ore yard, mill, and three tailings ponds (Figure 3). The three major open pits are the combined A and B Pits (A-B Pit), Hydro Pit, and Hulin Pit as shown on Figure 3. A smaller open pit, the original Three Kids Mine Pit, is located east of the A-B Pit. The three major pits represent approximately nine million cubic yards of vacant volume (Zenitech, 2007). Overburden and waste rock generated from excavation during mining are left in piles near the pits. In the northeast of the Site are mill building foundations remaining in part or in whole, and remnants of eight circular flotation cells that were used in the manganese beneficiation process. Three tailings ponds are located in the west central portion of the Site and were used in the past for disposal of tailing slurry produced from the beneficiation process.

Most areas of the Site are erosive and the mill site, mine pits, and waste piles are poorly vegetated, causing visible dust during moderate and high wind conditions. Despite numerous measures implemented, the Site is largely unprotected and allows for easy access, trespassing, and widespread illegal dumping. Abandoned boats and automobiles, tires, construction debris, and trash are present at the Site.

1.2 SUMMARY OF SELECTED ALTERNATIVE

The selected alternative authorized by the ROD includes internment of mine waste (tailings and waste rock) within existing mining pits and capping these contaminated materials to prevent direct exposure to the environment and minimize potential migration of contaminants to the other Site soil and surface water. Historical surface disposal of asbestos containing material (ACM) and municipal wastes will be consolidated and transported offsite for disposal at a licensed facility, while ACM and municipal waste within the pits will remain in place and covered by mine waste. Concrete will be demolished and used in the pits as fill. The Site will be converted to full residential use, under the stipulation that wastes will be covered with 10 feet of native soil and an environmental covenant will be enacted on soil below 10 feet.

1.3 REMEDIAL ACTION OBJECTIVES

The Remedial Action Objectives (RAOs) were developed for mine waste and contaminated soil to address unacceptable risks and protect human health and the environment. The future land use and contaminant exposure pathways were included in the RAO development. The following describes the RAOs for the Site soil.

- Prevent human exposure to mining wastes and soil that pose an unacceptable risk to human health and the environment.
- Minimize leaching and transport of soil and waste into groundwater, surface water, and other Site soil.
- Prevent direct human exposure to asbestos.
- Restore the Site to beneficial use as appropriate.

1.4 ROLES AND RESPONSIBILITIES

NDEP is the lead environmental agency overseeing assessment and remediation of the Site. The agency is responsible for reviewing reports provided on Site investigation and remediation, determining when the remedial action goals have been achieved, and deciding when the remediation can be terminated and the Site closed to allow for intended use. The Bureau of Land Management (BLM) and City of Henderson also have a role in review of environmental documents in support of federal land conveyance as stipulated in the Act, in which the federal land is initially transferred to the City of Henderson Redevelopment Agency.

As specified in the AOC, Pulte is accepting responsibility for the Site remediation under the oversight of NDEP. The Site remediation and reclamation team includes:

- A contractor to implement the Remedial Design,
- Environmental oversight consisting of a certified environmental manager (CEM),
- An asbestos abatement contactor to perform asbestos abatement activities,
- An asbestos abatement consultant (AAC) to oversee asbestos abatement, and

- Construction Quality assurance testing by third parties (e.g, a geotechnical contractor, liner testing).

In accordance with the agreements with all parties, the CEM and AAC will have the authority to stop work if the Remedial Design is not followed or if unforeseen circumstances are encountered, and all parties have the authority to stop work if unsafe work practices are observed.

1.5 DOCUMENT PURPOSE AND ORGANIZATION

The purpose of this document is to provide a summary of the overall approach and strategy for implementing the selected alternative for the Site.

The report is organized into six sections which include:

Section 1. Introduction describes the Site, provides a summary of the selected alternative, lists the RAOs, presents roles and responsibilities of parties involved in the Site remediation, and lays out organization of this report.

Section 2. Basis of Design summarizes the results of the remedial investigation (RI) and lays out the remedial action, including Site preparation, excavation and containment, engineering controls, and institutional controls.

Section 3. Performance Standards provides requirements for closure by Closure Unit.

Section 4. **Schedule, General Construction Sequencing, and Reporting** provides a general schedule of remedial activities and construction and outlines reports required by the AOC which are needed to provide updates on construction and document completion of construction activities.

Section 5. Operation and Maintenance describes checks on the remedial action after completion.

Section 6. References provides references cited in the report.

Responses to NDEP comments are provided in Appendix A.

2.0 BASIS OF DESIGN

The basis of design includes the following elements:

- Summary of RI Results that led to selected alternative
- Site preparation required before implementing the selected alternative
- The selected alternative (primarily, excavate and contain mine wastes)
- Engineering controls
- Institutional controls

RAOs will be addressed by capping the contaminated materials to prevent direct exposure to the environment and to minimize potential migration of contaminants to the other Site soil and surface water. The Hydro Pit liner will reduce the infiltration, therefore reducing the potential for leaching of contaminants into the groundwater. ACM and municipal wastes will be consolidated and disposed offsite, while ACM and municipal waste within the pits will remain in place and covered by mine waste. The Site will be converted to full residential use, under the stipulation that wastes will be covered with 10 feet of native soil and an environmental covenant will be enacted on soil below 10 feet.

2.1 RI RESULTS

Field activities were conducted in January, May, and September 2021, which were performed in general accordance with the Phase II SAP (Broadbent, 2021), with the purpose of investigating the nature and extent of contamination at the site and supporting the focused feasibility study (EA Engineering, 2022a). After initial review of the data collected in September, data gaps in the subsurface investigation were identified, and a fourth mobilization was initiated in December 2021 and completed in January 2022. In total, 907 soil samples were collected as part of the RI from background soil/rock, tailings, overburden/waste rock, and soil.

The Three Kids Mine site presently and principally consists of open pits from which ore was mined, overburden and waste rock dumps, tailings ponds, and remnant structures in and around the former mill site where ore was crushed and processed. Mine site wastes exceed background threshold values (BTVs) and U.S. Environmental Protection Agency (EPA) Regional Screening Levels (RSLs) for certain metals (primarily arsenic, lead, and manganese), and in the case of tailings and some mill site soil, total petroleum hydrocarbons (TPH) and polycyclic aromatic hydrocarbons (PAHs; Broadbent, 2022b and EPA, 2021). Minor occurrences of other contaminants of concern (COCs) are present, and additional details are provided in the Remedial Investigation Report, Revision 2 dated October 14, 2022 (RI Report; Broadbent, 2022d).

Subsurface native soils and rock have highly variable distribution of metals – arsenic, lead, and manganese – that suggest elevation concentrations in rock proximal to ore emplacement. Removal or scraping of shallow soil to unimpacted native soil with COC concentrations less than BTVs or RSLs is not technically feasible. Therefore, the Remedial Design specifies consolidation of mine wastes in the former pits and low areas onsite (i.e., the central valley area), followed by placement of 10 feet of native soil to eliminate shallow soil and construction worker pathways.

2.1.1 Summary of Asbestos Work Performed

Details regarding the ACM survey performed at the Site are presented in a Broadbent report dated April 6, 2022 entitled Asbestos Survey Report – Revision 2, Former Three Kids Mine Facility, Henderson, Nevada (Asbestos Survey Report). The findings of the survey identified ACM in varying quantities in twelve of the sixteen sample areas established for the Site (Broadbent, 2022c). The ACM was identified in sporadic volumes on the surface of the ground, in debris piles of various sizes, and in place on structures. Based on the condition of the material, it was classified as a Regulated Asbestos Containing Material (RACM) in accordance with the National Emission Standard for Hazardous Air Pollutants (NESHAP). NESHAP regulations as they pertain to asbestos are located in 40 Code of Federal Regulations (CFR) Subpart M. Figure 4 depicts the approximate location of the RACM identified at the Site.

2.2 SITE PREPARATION

Site preparation activities include preparation of a Health and Safety Plan, well abandonment, permitting, utility clearance, land survey, work area preparation, haul road construction, and developing access roads to open pits, and these activities are described below.

2.2.1 Preparation of a Health and Safety Plan

A Health and Safety Plan will be prepared and submitted to NDEP to establish requirements for construction activities. Job Safety Analyses will be also prepared for different scopes of work (e.g., asbestos abatement, environmental oversight, construction). During field activities, onsite personnel will follow Occupational Safety and Health and Administration (OSHA) requirements for general industrial and hazardous waste Site operations and construction. Onsite workers may potentially be exposed to hazardous materials, therefore personnel who may potentially be in direct contact with the contaminated materials (e.g., ACM, contaminated soil, and tailings) must be 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) trained in accordance with the requirements of 40 CFR 1910.120 (including current eight-hour refresher).

It is anticipated that construction activities will require modified Level D PPE, which may consist of steel-toe boots, nitrile gloves, safety glasses, ear plugs, hard hats, and construction reflective safety vests. The level of personal protection can be upgraded as necessary in accordance with a Health and Safety Plan to be prepared prior to the construction.

An onsite health and safety manager who is 40-hour HAZWOPER trained will be responsible for hosting daily safety meetings, health and safety inspection and audits, monitoring of air quality and other safety activities, and implementing PPE upgrade if necessary.

Details on personal air monitoring during asbestos abatement activities are provided in Appendix B.

2.2.2 Well Abandonment

Prior to the construction, the Three Kids Partnership monitoring well located in the northeast corner of the property will be properly plugged and abandoned by a driller licensed in the State of Nevada unless this well is instead refurbished for use as a source of water for construction. If repurposed, the well will

be rehabilitated and water rights obtained. The method and procedure of well plugging and abandonment will meet the requirements in Nevada Administrative Code (NAC) 534.360 – 438. The driller will submit a report to the State after the well abandonment.

2.2.3 Permitting

This section presents the federal, state, and local agency permits that are required to implement the selected alternative at the Site. The permits will include, but not be limited to:

- **Clark County Department of Air Quality (CCDAQ) NESHAP Permit:** as required for the abatement of the RACM.

- **Nevada OSHA Asbestos Abatement Project Permit**: as required for the abatement of the RACM.

- **Southern Nevada Health District (SNHD) Transportation Permit:** as required for the transportation of the RACM.

- **Construction Stormwater Permit**: A Construction Stormwater General Permit NVR100000 will be applied for prior to mobilizing to the Site. The objective of the permit is to control and reduce pollution to waters of the state. The NDEP requires owner/operators to obtain a Construction Stormwater Permit if the project will discharge to surface water and project will disturb one or more acres. For the coverage under the Construction Stormwater General Permit NVR100000, a Notice of Intent must be completed by filling in the required information with a signature of an authorized representative and a filing fee of $200 to NDEP. A Stormwater Pollution Prevention Plan (SWPPP) will be developed to address stormwater protection and erosion controls for the Site remediation. Best management practices (BMPs) for erosion control will be incorporated into the overall Site design, and BMPs will be installed prior to any land disturbing activities. Considering low precipitation in the area, typical BMPs include silt fences, inlet protection, rock berms, steep slope protection, and a stabilized Site entrance, which may be installed as needed. These BMPs will be implemented throughout the project to control erosion and stormwater run-on and run-off during excavation.

- **Spill Prevention, Control, and Countermeasure (SPCC) Plan**: 40 CFR Part 112 includes spill prevention and countermeasure plans for spills from aboveground and certain underground storage tanks. A construction project must meet SPCC regulatory requirements if it meets the following three criteria:

  - It stores, uses, transfers, or otherwise handles oil;
  - It has a maximum aboveground storage capacity greater than 1,320 gallons of oil (which includes both bulk and operational storage volumes) OR total underground storage capacity greater than 42,000 gallons of oil; and
  - There is a reasonable expectation (based on the location of your Site) that an oil spill would reach navigable waters or adjoining shorelines of the U.S.

  Preparation of the SPCC Plan is the responsibility of the facility owner or operator (the party who is in charge of the Site cleanup in this case), or it can be prepared by an engineer or consultant, but it must be certified by a registered Professional Engineer. A temporary fueling station will be

set up at the Site prior to the construction, therefore a SPCC Plan will be prepared and certified by a Professional Engineer licensed in the State of Nevada.

- **Construction Air Quality Monitoring and Dust Control**: The construction team will conduct air quality monitoring and control dust generated during the construction in accordance with the requirements of Clean Air Act and National Ambient Air Quality Standards, State of Nevada air quality standards, and standards established by OSHA. This includes obtaining a CCDAQ Dust Control Operating Permit as required for the disturbance of soil exceeding 0.25 acres in overall area. Prior to construction, an Air Monitoring Plan will be established to protect the environment and human health during construction. Site supervisors and water truck drivers and operators will attend and pass the online Air Quality Dust Class required by the Clark County before mobilizing to the Site.

2.2.4 Utility Clearance

A utility clearance survey will be conducted by a utility locate company to identify and flag underground utilities at the Site where excavation and demolition activities may take place. If there are overhead utilities, they may be re-routed or discontinued as appropriate.

2.2.5 Land Survey

A land survey has been conducted, and the survey data will be used to develop a base topographic map needed for the design and engineering calculations for excavation, soil cover, stormwater detention basins, and final Site grading. Topography of the Site and Site features, for example, ditches, drains, roads, utility lines, property lines, and former mine features and footprint have also been surveyed.

2.2.6 Work Area Preparation

Work areas to be prepared may include exclusion zones, decontamination zones, staging areas, temporary storage zones, and temporary fueling stations. Vegetation in the excavation areas will be cleared and grubbed as needed to make the Site accessible to heavy equipment.

Exclusion and decontamination zones will be used for asbestos abatement. These areas will change frequently based on work locations, and additional details are provided in Appendix B. Specific exclusion and decontamination zones are not anticipated for other remediation work, but vehicles that are used to transport contaminated materials (i.e., during tailings removal and placement of excavated materials in the open pits) must be decontaminated before transporting clean borrow source materials. Daily inspection will be conducted for the equipment and vehicles that are assigned to transport clean materials to ensure they are clean and free of contaminants and debris. Heavy equipment will be decontaminated before it leaves the Site.

The Site will not be enclosed by a fence due to its large size, but access will be controlled through daily constant inspection to identify trespassing and unauthorized access. In general, typical Site access control will include: 1) berms will be maintained along Lake Mead Parkway, 2) Signage will be posted along the construction perimeter to warn public away from the remediation areas and restrict unauthorized access, and 3) dedicated personnel will be assigned to patrol the Site at all times to identify unauthorized access and inspect the equipment/material storage areas. Storage containers, if any, will be locked.

A staging area to include temporary offices and meeting locations will be created. Temporary storage zones may be used to stockpile clean soil for the soil cover construction and clean equipment. A temporary fueling station will also be established, and the location of the temporary storage tank and its secondary containment will meet the requirements specified in the Site SPCC Plan. No Smoking signage and guard posts around the fuel station(s) will be set up to prevent accidental fire and damage to the storage tank(s). An area for decontamination of heavy equipment between handling tailings and clean borrow materials will be established, if needed. Heavy equipment will also be decontaminated before it leaves the Site.

2.2.7 Haul Road Construction

Haul roads will be constructed, and existing roads will be modified to be used during construction. The roads may be widened to accommodate two-way construction traffic if needed. Waste rock to the south and west of the Hydro Pit will be removed to improve hauling sight lines. Weight of the heavy equipment and vehicles will be considered during the design and construction of the roads so that roads will support and remain supportive of construction traffic throughout the entire remedial action. Vehicle speeds will not exceed 30 miles per hour (mph), and traffic flow direction signage will be added as needed. Planned haul routes for tailings remediation are depicted in Figure 5; additional haul routes for waste rock will be established in the future.

2.2.8 Access Roads to Open Pits

Access to open pits will be established to support the equipment needing to gain ingress and egress of the pits easily and safely. Existing access to the bottom of A-B Pit will be used after minor modifications to widen the route. Access to the Hydro Pit and the Hulin Pit presents challenges because new ramps will need to be constructed. A steep, one-way access road to the Hydro Pit (sufficient for bulldozers, compactors, and six-wheel-drive water trucks) is planned to allow equipment to the bottom of the pit to mix and compact tailings and waste rock after it is dumped. A steep access road will also be constructed into the Hulin Pit to transport equipment for compacting.

2.3 REMEDIATION AND RECLAMATION

Remediation and reclamation of the Site will include multiple steps described in this section that include:

1. Asbestos abatement and removal
2. Municipal waste consolidation and disposal
3. Demolition
4. Excavation
5. Placement of excavated material in open pits and central valley area

2.3.1 Asbestos Abatement and Removal

Abatement of RACM at the Site will be performed by an asbestos abatement contractor licensed in the State of Nevada. The abatement activities will be performed in accordance with applicable OSHA regulations by properly trained workers that have been licensed in Nevada through the Asbestos Control Program. Applicable OSHA regulations can be found in 29 CFR 1926.1101 and NAC 618.850 through

618.986. In general, OSHA requires the asbestos abatement work to include the establishment of regulated areas, use of wet methods (no visible emissions), prompt clean-up, use of leak tight containers, and employee exposure monitoring. The asbestos abatement plan is presented in detail in Appendix B.

2.3.2 Municipal Waste Consolidation and Disposal

Abandoned boats, automobiles, appliances, tires, and other municipal waste are present at the Site. In areas of substantial waste build-up, large loaders and haul trucks will collect the debris for offsite disposal. Waste will not be removed by hand, and some small amounts of scattered debris may remain on Site to be handled with mine waste for disposal in deep pits during the next steps of remediation. A combination of commercial haul trucks (with payload tarps), and solid waste roll-off bins will be transported to the Apex Landfill, or another nearby permitted landfill for the disposal of the majority of surface waste. Effort will be taken to minimize the amount of incidental dirt loaded into these transports in order to reduce the overall volume transported to the landfill. Municipal waste in the pits will remain in place. Concrete from the former mine site will be broken into large chunks and used as fill deep in the A-B Pit, described below in Section 2.3.3 and 2.3.5.

If encountered, special waste, such as hazardous or liquid waste, remaining at the Site will be inventoried to characterize the quantity and conditions of the waste in preparation of offsite disposal. Aerosol cans and other containerized waste may require overpack and other handling methods if the waste containers are in a poor condition before initiating offsite transportation and disposal. Liquid wastes, such as may be found in discarded drums, will be vacuumed out and containerized. Special wastes will be properly profiled and transported offsite for disposal.

As stated in an email dated August 29, 2022 responding to Broadbent's letter dated August 23, 2022 regarding the approach for solid waste management, the approach described in this section is acceptable with the solid waste management authority (SWMA) for the Site, the SNHD, as demonstrated by the geotechnical report submitted to SNHD that demonstrates suitability of concrete as deep fill (Broadbent, 2022e and Centurion, 2022).

2.3.3 Demolition

After the ACM are abated and disposed offsite, the demolition areas will be inspected to confirm the ACM is completely removed prior to initiation of demolition work. The former mine facility structures (i.e., mill building foundations and remnants of eight circular flotation cells as shown in the Demolition Plan, Figure G-3) will be demolished by excavators, hydraulic hammers, and other equipment. The majority of structures consist of concrete with some wood, metal, and other building materials.

The three mill site dumps (West Dump, East Dump, and Engineering Dump, depicted in Figure G-3) contain building debris and concrete below grade that will be included in with demolition. The West Dump is primarily comprised of waste rock and can be handled with other waste rock after separation of building materials. Only a small amount of building materials was observed during the RI in the East Dump, and that area primarily consists of soil. The Engineering Dump contains large concrete blocks over six feet in length, often containing rebar. These areas will be excavated and demolished along with other building structures on Site.

The former fuel farm area (depicted in Figure G-3) contains two wooden sumps with bunker fuel that will be demolished. The bunker fuel will be mixed with soil until solid, characterized, and disposed offsite at Apex Landfill or other permitted facility.

Clean concrete will be staged in a nearby area, broken into pieces, and transported to the A-B Pit or Hulin Pit and placed as deep fill. Other materials (such as wood, metal, and building debris) will be separated and disposed offsite in a manner similar to municipal waste described above in Section 2.3.2. Air quality will be monitored, and dust control will be performed by spraying clean water over the area. Details of the dust control will be presented in the Dust Control Operating Permit.

The structures to be demolished are not anticipated to contain any liquid, however, if found, the liquid must be vacuumed out and containerized. The waste will be characterized for offsite disposal.

2.3.4 Excavation

Areas to be excavated primarily consist of tailings ponds and waste rock piles. Other areas where excavation is needed include the fuel farm, the northeast drainage, and mill site soil excavated to facilitate the 10-foot native soil cover below final grade. Figures G-7 through G-9 depict the areas that are targeted for remediation down to the 1917 topography, before mining activities commenced at the site, including tailings, the ore yard, surface scrapings from the mill site area, and some waste rock outside the central valley area. Figures G-10 through G-12 depict additional excavation necessary to allow for 10 feet of cover. These figures were created by comparing the surface from Figures G-7 through G-9 to the final grading plan.

During the excavation, proper protective systems will be used to protect Site workers, i.e., sloping, benching, shoring, or shielding if the depth of excavation is greater than five feet. Trenching and shoring activities will be conducted by following protective system requirements in OSHA Technical Manual Section V, Chapter 2. During excavation, dust will be controlled via water truck. Additional details will be provided in the Dust Control Operating Permit.

2.3.4.1 Tailings

Tailings, the byproduct created from the beneficiation of manganese ore, are present primarily in three ponds on Site. The three tailings ponds, as well as the portion of tailings to the east of Tailings Pond 3 and the tailings stockpile area, will be excavated to the maximum extent of tailings. Lateral extent of tailings in Tailings Pond 1 is defined by the tailings dam, in Tailings Pond 2 by topography, and Tailings Pond 3 by waste rock piles on each side. The total estimated volume of tailings is 1.6 million cubic yards. Depth of excavation is tentatively planned to the surface of the pre-mining 1917 topographic map but will continue based on visual observations by a CEM. As observed during the RI, tailings are dark gray to black consisting of sandy silt, while native material consists of primarily reddish sand and gravel, so the contact between tailings and native will be visually apparent. The remediation surface, or surface below the maximum depth excavated, will be documented with photographs. The remediation surface will also be documented via survey. Impacts to native soil and rock below tailings is minimal (Broadbent, 2022d), and due to the placement of a 10-foot native soil cover, potentially impacted native material will not be excavated.

2.3.4.2 Waste Rock

Waste rock piles, material removed to access manganese ore and depicted in Figures G-4 through G-6, will be excavated to the pre-mining surface as interpreted by the 1917 topographic map. The total

estimated volume of waste rock is 7.0 million cubic yards. A CEM will be present to make visual observations on the vertical extent of waste rock. However, due to the overburden's similarity to native alluvium and rock, it is not anticipated that the maximum excavated surface of waste rock will deviate significantly from the 1917 surface. The lateral extent of waste rock piles is visually apparent and will match the polygons as depicted in Figures G-4 through G-6. As with the tailings excavation, the remediation surface will be documented with photographs and via survey. In the central valley area, waste rock may be left in place if geotechnical tests suggest sufficient stability.

2.3.4.3 PAH-Impacted Soil

After demolishing the wooden sumps and removing remaining bunker fuel for offsite disposal, PAH-impacted soil below each sump containing bunker fuel will be excavated to 13 feet below land surface (bls) based on data collected during the RI (Broadbent, 2022d). The remaining areas of the former fuel farm area will have a two-foot excavation to remove surface soil impacted with PAHs. Results from sampling surface soil in the chemical processing area and thermal processing areas also indicated soil impacted with PAHs above RSLs (Broadbent, 2022d). These two areas will also receive a two-foot excavation to remove impacted soil.

Required excavation from the fuel farm, chemical processing, and thermal processing areas are included in the excavation surface shown in Figure G-9. As described in Section 2.3.5.1, soil with PAH impacts will be interred in the Hydro Pit along with the tailings, which also has impacts from petroleum hydrocarbons. Results from the Leaching Analysis Report suggest that PAHs will not be mobilized (Broadbent, 2022a).

2.3.4.4 Northeast Drainage

A release of processing solution in the northeast drainage containing elevated metals, TPH, and PAHs was documented in the RI Report (Broadbent, 2022d). Based on observations of the lateral extent, the material is anticipated to be present in an area approximately 200 feet by 100 feet adjacent to Lake Mead Parkway at the surface to a maximum observed depth of nine feet bls. The affected area is depicted in Figure G-3. Because stormwater drainage is intended to be routed through this low point on the Site (described in more detail in Section 2.4.2 below), the process material will be excavated and handled in a manner similar to the tailings. The impacted material is visually apparent (dark gray to black and fine-grained) with a hydrocarbon odor and will be excavated to the maximum depth of soil impacted with the processing solution based on visual observations by a CEM.

2.3.4.5 Ore Yard and Mill Site Soil Excavated to Facilitate 10-Foot Cover to Final Grade

Based on the plan described herein which includes placing a 10-foot native soil cover over the Site to prevent exposure, excavation of mill site soil exceeding screening levels as documented in the RI is not needed. However, a significant portion of the mill site area will be excavated to allow for the placement of 10 feet of cover below the planned development final grade. These areas are accounted for in Figures G-18 through G-20 and include the majority of the ore yard area and the southern and western portions of the mill site. Additionally, in locations where utilities are deeper than 10 feet below final grade, existing soil will be excavated to accommodate the placement of native soil cover to two feet below the depth of utility, where necessary to be protective. Approximate locations of deep utilities are provided in the figure in Appendix C. Soil excavated from the ore yard area and mill site area below the two-foot excavation described in Section 2.3.4.3 will be handled in a manner similar to waste rock and can be placed in any of the pits or central valley area. Maximum depth of excavation will be ten feet below final grade to allow for native soil cover placement.

2.3.5 Placement of Excavated Materials

Excavated material will be contained in the three major open pits and a central valley area north of the Hulin Pit. This will separate the mine site wastes from the potential for human exposure, as well as resolve the physical hazard presented by the open pits. Tailings and petroleum-contaminated soil will be placed in the Hydro Pit. Tailings and petroleum-contaminated soil may also be placed deep in the A-B Pit if the tailings-waste rock mixture is a greater volume than the Hydro Pit. Suitable engineering protection, such as a liner, will be constructed in the event that tailings are placed in the A-B Pit. Other excavated material, including overburden, waste rock, concrete, and soil excavated to achieve final grade will be placed in any of the three pits or the central valley area. The types of waste and their designated disposal area are listed in the table below.

Type of Waste	Hydro Pit	Hulin Pit	A-B Pit	Central Valley
Tailings	X		X*	
Waste rock and overburden	X	X	X	X
Concrete		X	X	
PAH-impacted soil	X		X*	
Process solution release from northeast drainage	X		X*	
Soil excavated to facilitate 10-foot cover	X	X	X	X
Solid waste presently in deep pits	X	X	X	

*Only as contingency if tailings and petroleum-contaminated soil do not fit in Hydro Pit as anticipated

The method of placing materials to open pits is pit specific depending on pit condition, especially ramp slope. Existing debris and trash in the pits, such as tires and boat frames, will be left in place. Placement of excavated materials in the pits will occur via a phased approach based on each planned phase of home construction, with the anticipated completion date of earthwork in the winter of 2027. Additional details on the preliminary timeline are provided in Appendix D, and as in all development, are subject to change based on fluctuations in the economy. Updated schedules will be provided in quarterly and annual reports, as described below in Section 4.0.

2.3.5.1 Hydro Pit

A mixture of approximately 90 percent tailings and 10 percent waste rock will be placed in the Hydro Pit, although the ratio of tailings to waste rock may be adjusted to achieve compaction standards. Petroleum-contaminated soil from the mill site will also be placed in the Hydro Pit. The steep slope of the Hydro Pit makes frequent equipment traffic to the bottom infeasible. Therefore, materials will be dumped over the side of the pits over either a tailings dump slope or a waste rock dump slope during one shift. The next shift, another crew will rehandle, mix, and place the material in the bottom of the pits using earthmoving equipment, accessing the bottom of the pit via the steep one-way access road. Lift thickness and compaction requirements are described in the Geotechnical Exploration Report (Centurion, 2022). A water truck will spray clean water over material to help achieve compaction and control the dust in the area. The area will be monitored for dust as specified in the Dust Control Operating Permit obtained through Clark County.

2.3.5.2 Hulin Pit

Waste rock will be placed into the Hulin Pit over a dump slope, similar to the one described above for the Hydro Pit. Lift thickness and compaction requirements are described in the Geotechnical Exploration Report (Centurion, 2022). A water truck will spray clean water over material to help achieve compaction and control the dust in the area. The area will be monitored for dust as specified in the Dust Control Operating Permit obtained through Clark County.

2.3.5.3 A-B Pit

Waste rock and concrete pieces will be driven into the A-B Pit on the improved access road. Lift thickness and compaction requirements are described in the Geotechnical Exploration Report (Centurion, 2022). Tailings and petroleum-contaminated soil may also be placed deep in the A-B Pit, as a contingency, if the volume of tailings and petroleum-contaminated soil does not fit in the Hydro Pit. Placement and compaction of material abutting the sheer wall will follow a different process based on safety requirements so that workers and equipment are not within 50 feet of the sheer wall. An open space rather than residences is planned for this area, so compaction requirements may differ. A water truck will spray clean water over material to help achieve compaction and control the dust in the area. The area will be monitored for dust as specified in the Dust Control Operating Permit obtained through Clark County.

2.3.5.4 Central Valley Area

An area of the Site north of the Hulin Pit extending to Lake Mead Parkway (shown in Figure 6) will require a significant amount of fill to be brought to the final grade. Waste rock will be placed in this central valley area up to ten feet below final grade, allowing space for placement of the native soil cover. Waste rock in this area will be placed via heavy equipment based on lift thicknesses and compaction requirements specified in the Geotechnical Exploration Report (Centurion, 2022). A water truck will spray clean water over material to help achieve compaction and control the dust in the area. The area will be monitored for dust as specified in the Dust Control Operating Permit obtained through Clark County.

2.4 ENGINEERING CONTROLS

After excavation and consolidation of mine waste in the open pits and low areas of the Site (i.e., central valley area), engineering controls will be used to prevent exposure to contaminants. Engineering controls include construction of a 10-foot cover, construction of stormwater infrastructure to control drainage, and final grading of the Site; these engineering controls are described in more detail below.

2.4.1 Cover Construction

Mine site wastes will be capped with 10-foot cover, except where a liner will be placed over the Hydro Pit. A minimum of two feet of native soil cover will be placed over the Hydro Pit liner. A community park is planned for the Hydro Pit, and cover thickness over the liner will be coordinated with City of Henderson Parks and Recreation Department based on park design (up to approximately 25 feet of cover). In locations of the Site where utilities are deeper than 10 feet below final grade, native soil cover will be placed a minimum of two feet below the depth of utility inverts, where necessary to be protective. Approximate locations of deep utilities are provided in the figure in Appendix C.

The cover soil and rock will be imported from borrow sources located to the east, south, and west of the Site (Figure 7). Borrow areas were evaluated during the background study (Broadbent, 2022b) and consist of background areas and the downwind volcanic area, which received a No Further Action Determination

from NDEP on August 22, 2022 based on a screening level human health risk assessment (EA Engineering, 2022b).

Settlement monitoring of deep fills within the three pits (Hydro, Hulin, and A-B) will be performed until the rate has slowed enough for construction to continue with placement of the cover. The central valley area will be over-excavated and brought up to the interim grade (below 10-foot cover) in lifts as engineered fill and will have little settlement. The cover material will be placed based on lift thicknesses and compaction requirements specified in the Geotechnical Exploration Report (Centurion, 2022). The area will be graded to meet the designed elevations. Additional consolidation, if it occurs, will be addressed during finish grading with the addition of cover material, maintaining a minimum of 10 feet of cover.
Geotechnical performance specifications for the cover material are included in the Geotechnical Exploration Report (Centurion, 2022). Flyover surveys will be conducted via drone at a minimum on a monthly basis to track cover construction progress.

The location of the 10-foot cover is shown in Figure 8. Figures G-18 through G-20 depict the surface prior to placement of the 10-foot cover, and Figures G-21 through G-23 depict the final grade after placement of the 10-foot cover. Over-excavation will occur in areas below deep utilities; locations of deep utilities are provided in Appendix C. Ten feet of native soil will be placed over Closure Units 1, 2, 3a, 3b, 5a, 5b, and 6, as shown in Figure 9. The Closure Units receiving the 10-foot cover include all areas to be developed as residential except for Closure Unit 11. Closure Unit 11, a small sliver directly adjacent to Laker Plaza and Lake Mead Boat Storage, will receive the maximum amount of fill possible based on following OSHA safe work practices for slope stability. Cross section details are provided as Figures G-13 and G-14. The environmental covenant will be adjusted accordingly to be protective of human health and the environment. Specifics by Closure Unit are described in more detail in Section 3.0.

2.4.2 Stormwater Basin Construction

Stormwater basins will be constructed to 1) control stormwater runoff and direct stormwater away from closed areas of the Site (i.e., soil below native cover), 2) reduce infiltration of precipitation into the covered and protected mine site wastes, and 3) facilitate Site development. One stormwater detention basin is currently planned as part of the overall Site grading plan east of the A-B Pit next to the original Three Kids Mine Pit, and one peaking basin is planned covering a portion of the Hydro Pit (Figure G-22).

The stormwater detention basin east of the A-B Pit is designed for a 100-year storm in accordance with Clark County policies outlined in the Clark County Regional Flood Control District's Hydrologic Criteria and Drainage Design Manual, Section 300. It will be cut into native rock with a concrete spillway and concrete inlet structures directing stormwater from the River Mountains to the south and east. The original Three Kids Mine Pit will be filled and regraded as part of the stormwater infrastructure construction. From the stormwater basin east of the A-B Pit, stormwater will be directed into concrete channels and underground pipes north toward Lake Mead Parkway where it is released into the existing northeast drainage. Stormwater channels and drainage areas will be sloped to maintain drainage such that surface water is not ponded or retained. An outfall structure will be constructed to dissipate stormwater prior to reaching Lake Mead Parkway.

The Hydro Pit peaking basin is designed to capture rainfall directly within the Hydro Pit area and for flows in excess of a 10-year event that are beyond what other site diversion structures can handle. The peaking

basin will have positive slope to a major outlet (10-year capacity) and will only store water during the peak of a storm event. As a result, the basin will not pond water after the peak of the event has passed. The Hydro Pit liner system, described in more detail in the following paragraph, will have a minimum slope of 1% and will drain toward a subdrain outlet at the northwest corner of the former Hydro Pit.

Design of the Hydro Pit liner and stormwater basin is provided in Figures G-15 through G-17 and includes a liner and drainage system over the backfilled tailings and waste rock. The liner system is comprised of several layers that work together to prevent stormwater from reaching the tailings and waste rock, as well as draining the stormwater from the Hydro Pit. The liner consists of a silt bedding layer that will naturally prevent the percolation of water to the tailings and waste rock, and a 60-mil HDPE liner that overlays the silt bedding and serves as the primary mechanism to prevent stormwater from reaching the tailings and waste rock. The liner is topped with a 0.2-inch drain net and 6-oz geo-textile fabric to convey any stormwater off the liner. The liner is graded a minimum slope of 1% towards a drainage system located on the northwest perimeter of the Hydro Pit. The drainage system consists of six-inch diameter, HDPE perforated collection pipe with a minimum 0.5% slope. Stormwater will be directed to a six-inch diameter outlet pipe that daylights to natural drainage. Finally, the entire liner and drainage system is covered with two feet of cover.

Compaction requirements are specified in the Geotechnical Exploration Report (Centurion, 2022). Elevations of the basins will be confirmed and surveyed by a land surveyor.

2.4.3 Site Final Grading

The remediation surface (i.e., the maximum depth of excavation) will be tracked so that a minimum of 10 feet cover can be placed between the remediation surface and final grade for residential development. The final grade for residential development is determined by the homebuilder. As-builts will be provided that show both the remediation surface and the final grade.

The majority of the Site final grading will be in preparation for building residential homes. Current plans for development over the backfilled Hydro Pit include a community park constructed on top of the peaking basin that may contain irrigated fields. Figure G-15 depicts the topography of the liner with a minimum slope of 1% and a subdrain system designed to drain water from the top of the liner. The water collection system on top of the liner will daylight to a drainage channel or outlet for the peaking basin. An interim subdrain outlet, also with a minimum slope of 0.5% is included in the design for the period before the liner system ties into sitewide stormwater drainage. A park or open space element is planned for the top of the backfilled Hulin Pit and may contain pools and splashpads. Current plans over the backfilled A-B Pit include open space adjacent to the sheer wall of the A-B Pit with homes covering the remaining portion.

2.5 INSTITUTIONAL CONTROLS

In addition to engineering controls, institutional controls will be used to prevent exposure to contaminants. Primarily, these will include environmental covenants on soil beneath 10 feet, but will also include restrictions on drilling drinking water wells and restrictions residential homes in certain areas.

2.5.1 Environmental Covenant on Soil Beneath 10 feet

An environmental covenant will be placed on soil below 10 feet bls to protect construction workers who may encounter soil at depths greater than 10 feet bls. The covenant will work through the homeowner's association of the development and City of Henderson permitting. If a resident requests a permit for construction deeper than 10 feet bls, this will require NDEP approval, and an approved Soil Management Plan will need to be in place before work is completed. In locations where native soil cover is greater than 10 feet to accommodate deep (greater than 10 feet bls) utility inverts, the environmental covenant will be placed on soil below the total depth of the native soil cover. As a result, a Soil Management Plan would not be needed for utility work unless soil would be disturbed below the native soil cover. Approximate locations of deep utilities are provided in the figure in Appendix C.

2.5.2 Restrictions on Drinking Water Wells

An environmental covenant will prohibit the installation of domestic or water supply wells for potable water use. This restriction will apply to each Closure Unit.

2.5.3 Restrictions on Residential Development

Although the Site will be zoned as residential, construction of residential homes will be restricted in certain areas, including:

- Closure Unit 2, the former Hulin Pit
- Closure Unit 4, the former Hydro Pit
- Closure Unit 5a, a portion of the former A-B Pit abutting a sheer wall
- Closure Unit 10, the utility corridor
- Closure Unit 11, the transition area between private property and the development

Construction of residential homes is restricted for various reasons including the inability to achieve the proper compaction for a given location, presence of a shear wall, allowing for protection of the liner, and the inability to place a 10-foot cover.

3.0 PERFORMANCE STANDARDS

Closure Units were developed to allow for a phased approach to closure at the Site and to account for differences in the selected alternative by geographic area. Closure unit boundaries depicted in Figure 9 may change as a result of the development timeline but will follow the approach described below. Closure unit boundaries will be clearly defined in their respective Closure Unit Work Completion Reports. The following list specifies performance standards for the selected alternative required for a No Further Action Determination by each Closure Unit.

3.1 CLOSURE UNITS 1, 3A, AND 3B

Closure Units 1, 3a, and 3b represent roughly the western half of the Site, excluding the Hulin Pit. These Closure Units will be cleared for residential development by eliminating exposure pathways via placing ten feet of native soil cover. The following actions must be demonstrated to close these areas.

- Excavation of tailings and containment in the Hydro Pit (and A-B Pit, if additional space is needed), depicted in Figures G-7 through G-9
- Excavation of waste rock outside of the central valley area to 1917 topography and containment in the Hydro, Hulin, or A-B pits, depicted in Figures G-7 through G-9
- Placement of 10-foot cover, depicted in Figures G-18 through G-23
- Demonstration that fill placement and compaction standards have been met
- Within 90 days of receiving a No Further Action Determination, enact an environmental covenant that requires NDEP approval prior to disturbance of soil below 10 feet bls and prohibits installation of water supply wells for potable use.

3.2 CLOSURE UNIT 2

Closure Unit 2 represents the former Hulin Pit and will be closed by eliminating exposure pathways via placing ten feet of native soil cover. Future anticipated use of the area is a recreation center. The following actions must be demonstrated to close this area.

- Containment of waste rock and concrete in Hulin Pit, depicted in Figure G-8
- Demonstration that fill placement and compaction standards have been met
- Placement of 10-foot cover, depicted in Figures G-19 and G-22
- Within 90 days of receiving a No Further Action Determination, enact an environmental covenant that requires NDEP approval prior to disturbance of soil below 10 feet bls, prohibits construction of residential homes, and prohibits installation of water supply wells for potable use.

3.3 CLOSURE UNIT 4

Closure Unit 4 represents the former Hydro Pit and will be closed by installing a liner over the excavated materials followed by a minimum of two feet of native soil on top of the liner. Additional native soil will be used to accommodate future park features, such as trees and light posts (up to approximately 25 feet), as needed. The following actions must be demonstrated to close this area.

- Containment of tailings, waste rock, and contaminated soil in Hydro Pit, depicted in Figure G-8

- Demonstration that fill placement and compaction standards have been met
- Installation and quality control testing of liner (including inspection of liner seam welds) covering tailings footprint and allowing for drainage away from Hydro Pit, depicted in Figure G-15 with additional details in Figure G-17
- Placement of a minimum of two feet of native soil cover to protect liner, depicted in Figure G-16
- Within 90 days of receiving a No Further Action Determination, enact an environmental covenant that prohibits disturbance of liner, prohibits construction of residential homes, and prohibits installation of water supply wells for potable use.

3.4 CLOSURE UNIT 5A

Closure Unit 5a represents a portion of the former A-B Pit adjacent to the sheer wall and will be closed by eliminating exposure pathways via placing ten feet of native soil cover. Future anticipated use of the area is a park or open space feature. The following actions must be demonstrated to close this area.

- Containment of waste rock and concrete in A-B Pit, depicted in Figure G-8
- Demonstration that fill placement and compaction standards have been met
- Placement of 10-foot cover, depicted in Figures G-19 and G-22
- Within 90 days of receiving a No Further Action Determination, enact an environmental covenant that requires NDEP approval prior to disturbance of soil below 10 feet bls, prohibits construction of residential homes, and prohibits installation of water supply wells for potable use.

3.5 CLOSURE UNIT 5B

Closure Unit 5b represents a portion of the former A-B Pit not adjacent to the sheer wall. This Closure Unit will be cleared for residential development by eliminating exposure pathways via placing ten feet of native soil cover. The following actions must be demonstrated to close this area.

- Containment of waste rock and concrete in A-B Pit, depicted in Figure G-8
- Demonstration that fill placement and compaction standards have been met
- Placement of 10-foot cover, depicted in Figures G-19 and G-22
- Within 90 days of receiving a No Further Action Determination, enact an environmental covenant that requires NDEP approval prior to disturbance of soil below 10 feet bls and prohibits installation of water supply wells for potable use.

3.6 CLOSURE UNIT 6

Closure Unit 6 represents the eastern portion of the mine site. This Closure Unit will be cleared for residential development by eliminating exposure pathways via placing ten feet of native soil cover. The following actions must be demonstrated to close this area.

- Excavation of PAH-impacted soil and processing solution release in the Northeast Drainage followed by containment in the Hydro Pit (and A-B Pit, if needed), depicted in Figure G-9
- Excavation of waste rock to 1917 topography and containment in the Hydro, Hulin, or A-B pits, depicted in Figure G-8 and G-9
- Placement of 10-foot cover, depicted in Figures G-19, G-20, G-22, and G-23

- Demonstration that fill placement and compaction standards have been met
- Within 90 days of receiving a No Further Action Determination, enact an environmental covenant that requires NDEP approval prior to disturbance of soil below 10 feet bls and prohibits installation of water supply wells for potable use.

3.7 CLOSURE UNIT 7

Closure Unit 7 represents the volcanic ridge northeast and downwind of the former mine site. This Closure Unit was closed via risk assessment.

- NDEP granted a No Further Action Determination on August 22, 2022 based on the *Screening Level Human Health Risk Assessment* for the downwind portion of the River Mountain volcanics dated July 11, 2022 (EA Engineering, 2022b).

3.8 CLOSURE UNITS 8 AND 9

Closure Units 8 and 9 represent two portions of the Project area north of Lake Mead Parkway and are not covered under this Remedial Design as they are not part of the planned development.

3.9 CLOSURE UNIT 10

Closure Unit 10 represents the area east of the A-B Pit. This Closure Unit will be closed as a non-residential utility corridor with infrastructure to manage stormwater. The following actions must be demonstrated to close this area.

- Construction of stormwater infrastructure that will restrict infiltration through contaminated soil
- Access to remaining contaminated soil will be reduced via placement of a 2-foot cover, depicted in Figures G-19 and G-22
- Access to the stormwater basin may also be restricted via fencing
- Within 90 days of receiving a No Further Action Determination, enact an environmental covenant that requires NDEP approval prior to disturbance of soil, prohibits construction of residential homes, and prohibits installation of water supply wells for potable use.

3.10 CLOSURE UNIT 11

Closure Unit 11 represents a 10-foot buffer around the property boundary with Lake Mead Boat Storage and Laker Plaza. Future anticipated use of the area is residential, however, rather than building homes, this area will consist of roads and landscaping. The following actions must be demonstrated to close this area.

- Excavation of tailings and containment in the Hydro Pit (and A-B Pit, if needed), depicted in Figures G-8 and G-9
- Excavation of waste rock outside of the central valley area to 1917 topography and containment in the Hydro, Hulin, or A-B pits, depicted in Figures G-8 and G-9
- Placement of 10-foot cover or the maximum amount of fill possible as shown in Figures G-13 and G-14 and based on following OSHA safe work practices for slope stability

- Demonstration that fill placement and compaction standards have been met
- Within 90 days of receiving a No Further Action Determination, enact an environmental covenant that requires NDEP approval prior to disturbance of soil below six feet bls, prohibits construction of residential homes, and prohibits installation of water supply wells for potable use.

4.0 SCHEDULE, CONSTRUCTION SEQUENCING, AND REPORTING

4.1 SCHEDULE AND CONSTRUCTION SEQUENCING

Appendix D provides a project schedule that shows milestones of major tasks under the corrective action. After mobilizing to the Site, it will be prepared for construction. ACM abatement and removal and municipal waste removal will take place first followed by demolition. Existing debris and trash in the pits, such as tires and boat frames, will be left in place. Excavation and placement of tailings will occur next, then waste rock and placement of the 10-foot cover will then be handled moving west to east across the Site. Last, stormwater basin construction and final Site grading will occur. It is estimated that entire construction will take approximately five to ten years.

Excavation and Site grading will be completed in a phased approach based on planned development. Closure Units are depicted in Figure 9 based on this phased approach. The preliminary timeline for closure of each Closure Unit presented in Appendix D is approximate and may change based on economic fluctuations. An updated schedule will be provided in each Quarterly Progress Report.

4.2 REPORTING

This section provides general documentation and reporting related to the Site remediation as required by the AOC.

4.2.1 Daily Reports

Daily Reports will be prepared to document each day's field activities and relevant observations of remediation progress. The reports will include, but not be limited to, the following:

- Date and time of Site construction
- Personnel onsite
- Health and safety briefing (tailgate meeting)
- Activities conducted that day
- Materials used, and quantities of materials that are used that day
- Imported materials' datasheets or specifications, if any
- Volume of excavation and placement of materials
- Field geotechnical testing conducted (i.e., in-place density test)
- Survey
- Air monitoring results (dust and metal concentrations)
- Health and safety inspection
- SWPPP inspection
- SPCC inspection
- Issues encountered and rework items if any
- Field notes and photographs

4.2.2 Quarterly Progress Reports

Quarterly Progress Reports will be prepared for submittal to NDEP documenting remediation progress at the Site. The reports will be submitted on the 10th day of January, April, and July and provide the following information:

- Actions taken at the Site to implement the Remedial Design in the previous quarter, including but not limited to ACM abatement and removal, excavation, placement of excavated materials in open pits, cover construction, construction of stormwater basins, and grading
- Work planned for the subsequent quarter and updated schedule
- Interim measures taken or needed
- Issues encountered with implementing the Remedial Design, including delays or anticipated delays, and proposed or implemented solutions to address issues identified.

4.2.3 Annual Summary of Remedial Design/Remedial Action Activities

Each year an Annual Summary of Remedial Design/Remedial Action Activities will be prepared for submittal to NDEP. The reports will be submitted on October 10th and provide the following information:

- The information listed above in Section 4.2.2 for quarterly reports for the previous and subsequent quarters
- Actions taken at the Site to implement the Remedial Design in the previous year, including but not limited to ACM abatement and removal, excavation, placement of excavated materials in open pits, cover construction, construction of stormwater basins, and grading
- A summary of data collected in the previous year unless results have already been reported, such as volume of materials excavated and placed in open pits, surveyed locations and elevations of remediation surface and 10-foot cover, geotechnical testing results, as-builts for stormwater basins, and results of air quality monitoring
- A list of deliverables completed in the previous year
- A description of actions to implement the Remedial Design scheduled for the upcoming year, including anticipated delays
- An estimate of remaining costs to complete Remediation Work as defined in the AOC
- Modifications to the Remedial Design, either proposed or approved by NDEP
- Community involvement activities undertaken during the previous year and planned for the upcoming year.

Components of the report covering the data collected over the previous year may cover August 1 through July 31 to allow time to receive and QC analytical data.

4.2.4 Closure Unit Work Completion Reports

Within 30 days of completing the remedial action for a given Closure Unit (as defined in Section 3.0 above), a Site inspection attended by Pulte and NDEP will be held. Within 30 days of the inspection, a Closure Unit Work Completion Report for a given Closure Unit will be prepared and submitted to NDEP. The report will demonstrate that performance standards have been met and include but not be limited to following:

- As-built drawings, such as remediation surface and final grading surface
- Description of modifications from the Remedial Design
- Monitoring data, if any
- Process in place to enact environmental covenant
- Other documentation to demonstrate that performance standards have been met
- Risk assessment on native soil cover based on the May 2021 background study
- A request for a No Further Action Determination from NDEP

NDEP approval of the Closure Unit Work Completion Reports will result in a No Further Action Determination for that particular Closure Unit. Within 90 days of receiving a No Further Action Determination for a Closure Unit, institutional controls will be recorded in the appropriate county land records and with the City of Henderson. NDEP will be provided with the associated records.

4.2.5 Work Completion Report

Within 30 days of completing the remedial action for the Site, an inspection attended by Pulte and NDEP will be held. Within 30 days of the inspection, a Work Completion Report will be prepared and submitted to NDEP documenting the work performed and requesting a No Further Action Determination for the Site as a whole. The report will demonstrate that performance standards have been met and include but not be limited to following:

- As-built drawings, depicting changes since the various Closure Unit Work Completion Reports were submitted and approved
- Other documentation to demonstrate that work is complete

NDEP approval of the Work Completion Report will result in a No Further Action Determination for the Site and termination of the AOC agreement. Operations and maintenance activities described in Section 5.0 will begin after the final No Further Action Determination.

5.0 OPERATIONS AND MAINTENANCE

Operations and maintenance requirements for the selected alternative are described below and satisfy the requirement under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) for a statutory review to be conducted every five years after the completion of the remedial action when contaminants are contained onsite.

5.1 ENGINEERING CONTROLS

A third party will conduct an annual inspection for erosion of native fill across the Site, including areas with a 10-foot cover, Closure Unit 10, Closure Unit 11, and Closure Unit 4 over the Hydro Pit liner. Maintenance records for the park constructed over the Hydro Pit, including pressure testing of water lines for irrigation and restrooms, will be reviewed to check for leaks in water infrastructure.

5.2 INSTITUTIONAL CONTROLS

Every five years, a third party will also conduct an administrative check that environmental covenants are in place and functioning as intended. This includes confirmation that NDEP is being notified when soil below 10 feet is disturbed, potable water supply or domestic wells have not been installed, and other deed restrictions are being followed.

6.0 LIMITATIONS

The findings presented in this Remedial Design Report are based upon observations of field personnel; points investigated; results of laboratory tests as presented in the RI; and our understanding of Nevada Administrative Code. Our services were performed in accordance with the generally accepted standard of practice at the time this report was written. No other warranty, expressed or implied, is made, and Broadbent assumes no liability for any loss resulting from errors or omissions arising from the use of inaccurate/incomplete information or misrepresentations made by others. Third parties who rely on this report shall do so at their own risk.

ACRONYMS

AAC	Asbestos Abatement Consultant
ACM	Asbestos Containing Material
ACP	Asbestos Competent Person
Act	Three Kids Mine Remediation and Reclamation Act
AOC	Administrative Order on Consent
BLM	Bureau of Land Management
bls	Below land surface
BMP	Best management practice
Broadbent	Broadbent & Associates, Inc.
BTV	Background Threshold Value
CCDAQ	Clark County Department of Air Quality
CEM	Certified Environmental Manager
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
COC	Contaminant of Concern
EA Engineering	EA Engineering, Science, and Technology, Inc., PBC
EL	Excursion Limit
EPA	U.S. Environmental Protection Agency
f/cc	Fibers per cubic centimeter
HAZWOPER	Hazardous Waste Operations and Emergency Response
HEPA	High-efficiency particulate absorbing
Lakemoor	Lakemoor Ventures, LLC
LPM	Liters per minute
MCEF	Mixed cellulose ester filter
mm	Millimeter
MRRA	Mine Remediation and Reclamation Agreement
mph	miles per hour
NAC	Nevada Administrative Code
NDEP	Nevada Division of Environmental Protection
NESHAP	National Emission Standard for Hazardous Air Pollutants
NIOSH	National Institute for Occupational Safety and Health
OSHA	Occupational Safety and Health Administration
PAHs	Polycyclic Aromatic Hydrocarbons
PCM	Phase Contract Microscopy
PPE	Personal protective equipment
Pulte	PN II, Inc. dba Pulte Homes of Nevada
QA	Quality assurance
RACM	Regulated asbestos containing material
RAO	Remedial action objective
RI	Remedial Investigation
ROD	Record of Design
RSL	EPA Regional Screening Level
Site	Three Kids Mine site
SNHD	Southern Nevada Health District
SPCC	Spill Prevention, Control, and Countermeasure

SWMA	Solid Waste Management Authority
SWPPP	Stormwater Pollution Prevention Plan
TEM	Transmission Electron Microscopy
TPH	Total Petroleum Hydrocarbons
TSI	Thermal system insulation
TWA	Time weighted average

REFERENCES

EA Engineering, Science, and Technology, Inc., PBC (EA Engineering). 2022a. *Focused Feasibility Study Report – Soil and Mine Wastes, Revision 2, Three Kids Mine, Henderson, Nevada.* June 30.

EA Engineering. 2022b. *Screening Level Human Health Risk Assessment, Revision 1, Three Kids Mine, Henderson, Nevada*. July 11.

Broadbent. 2021. *Phase II Sampling and Analysis Plan, Revision 2, Three Kids Mine.* November 3.

Broadbent. 2022a. *Leaching Analysis Report, Revision 1, Three Kids Mine, Henderson, Nevada*. August 17.

Broadbent. 2022b. *Background Soil Report, Revision 2, Three Kids Mine, Henderson, Nevada.* April 5.

Broadbent. 2022c. *Asbestos Survey Report – Revision 2, Former Three Kids Mine Facility, NDEP.* April 6.

Broadbent. 2022d. *Remedial Investigation Report, Revision 1, Three Kids Mine, Henderson, Nevada*. August 26.

Broadbent. 2022e. Letter to Southern Nevada Health District. Approach for Solid Waste Management, Three Kids Mine, Henderson, Nevada. August 23.

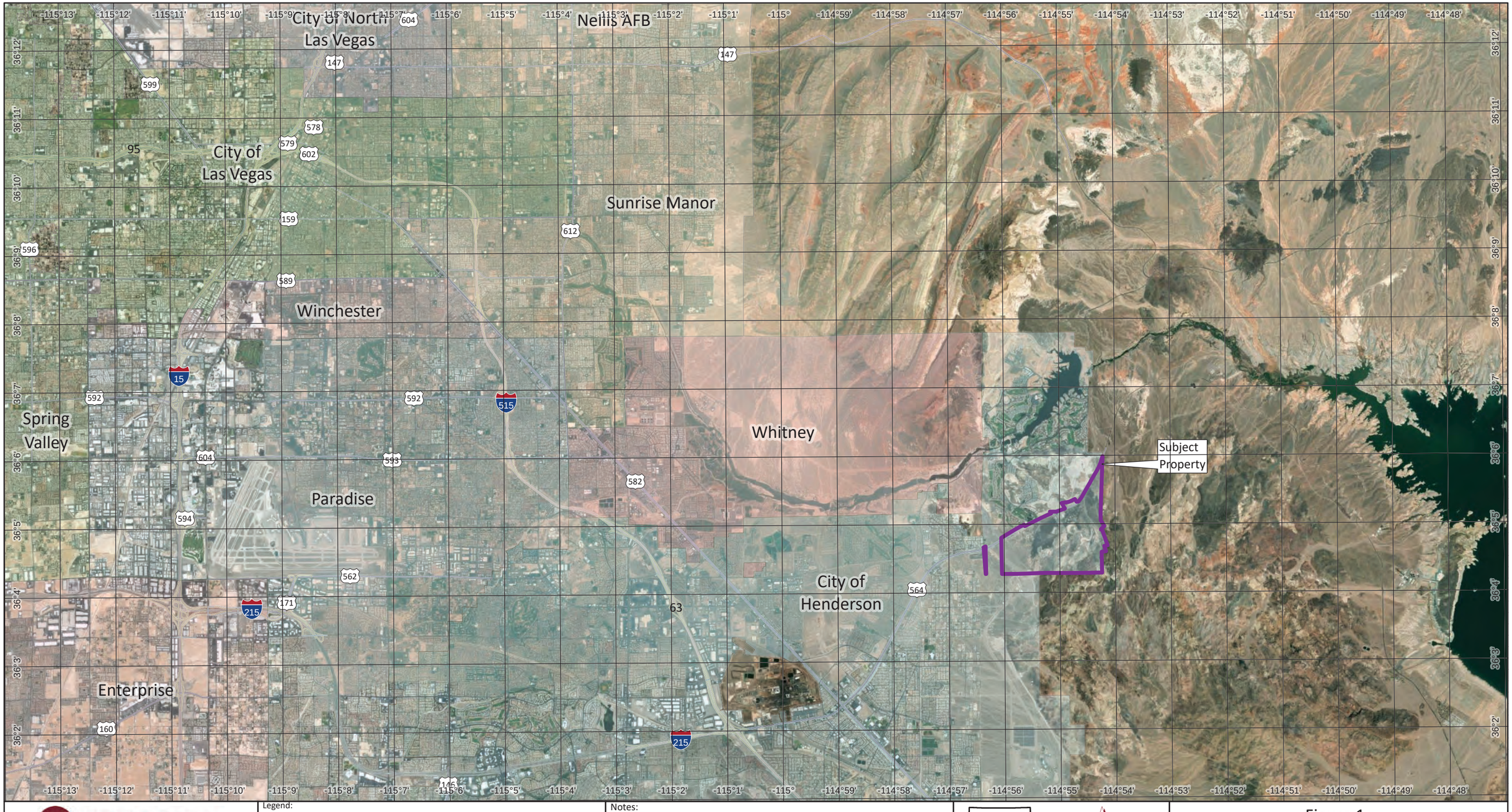
Burns, Dan (Southern Nevada Health District). 2022. Email to Karen Gastineau (Broadbent). August 29.

Centurion Consultants (Centurion). 2022. Geotechnical Exploration Report, Three Kids Mine Site Mixed-Use Development, SEC Lake Mead Parkway and Lake Las Vegas Parkway, Henderson, Nevada. Prepared for Pulte Homes. August 19.

U.S. Environmental Protection Agency (EPA). 2021. Regional Screening Levels for Chemical Contaminants at Superfund Sites. https://www.epa.gov/risk/regional-screening-levels-rsls. November.

Zenitech. 2007. *Phase I Environmental Site Assessment, Three Kids Mine and Mill Site, Clark County, Nevada.* Boulder City (NV).

FIGURES



BROADBENT
8 West Pacific Avenue
Henderson, NV, 89015
(702) 563-0600 (P) • (702) 563-0610 (F)

Job # 14-01-156 Date: 9/19/2022

Legend:

- Subject Property
- City of Henderson
- City of Las Vegas
- City of North Las Vegas
- Clark County
- Enterprise
- Nellis AFB
- Paradise
- Spring Valley
- Sunrise Manor
- Whitney
- Winchester

Notes:
1. Imagery Source: Esri World Imagery (Earthstar Geographics)
2. Datum: NAD 1983 StatePlane Nevada East FIPS 2701 Feet
3. Political Boundary Source: Clark County GIS Management Office.
4. Parcel Boundary Source: Clark County Assessor.
5. Roads Source: Nevada DOT GeoHub.

N

Scale: 1:100,000

1 0.5 0 1

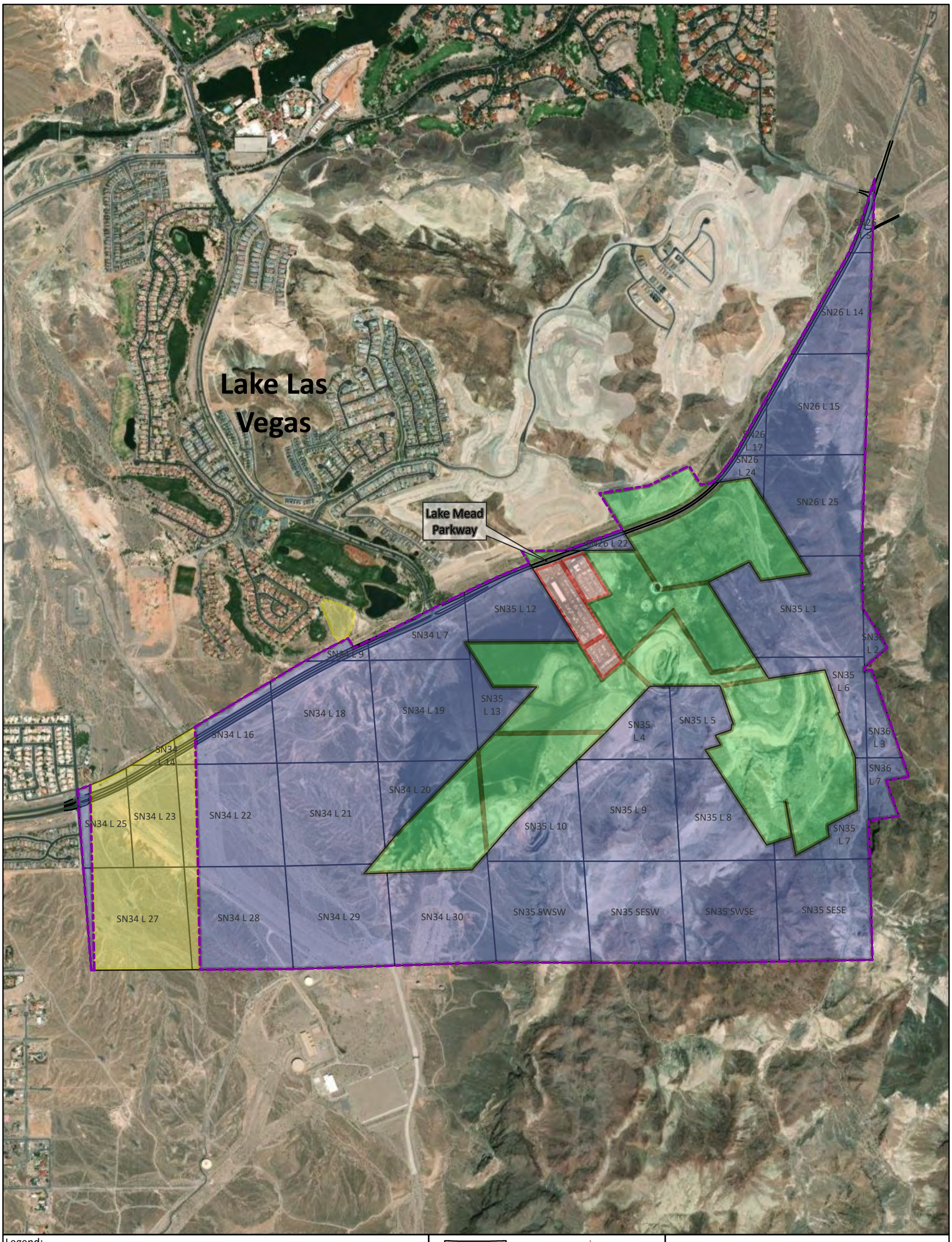
Miles

Figure 1

Site Location

Three Kids Mine

Designed	
Drawn	JCM
Approved	



Legend:

- Project Area
- BOR Withdrawn
- Three Kids Inc. et al. and Kings Beach Ltd.
- M&R LP and Laker Plaza Inc.
- PN II, Inc. (Pulte Homes of Nevada)
- Public Lands Survey System (BLM, 10/29/2020)

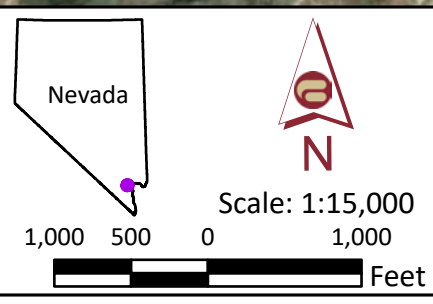


Figure 2

Land Ownership Map

Three Kids Mine

BROADBENT
8 West Pacific Avenue
Henderson, NV, 89015
(702) 563-0600 (P) • (702) 563-0610 (F)

Job # 14-01-156 Date: 2/28/2024

Notes:
1. Imagery Source: Esri World Imagery (Maxar)
2. Datum: NAD 1983 StatePlane Nevada East FIPS 2701 Feet
3. Not a survey.
4. Parcel Source: Clark County Assessor and BLM Administrative Units.

Designed	
Drawn	JCM
Approved	

Legend:

- Site Feature
- Three Kids Partnership well
- Unimproved Road
- Tailings Dam
- Project Area
- Mine Site
- Sedimentary Units (alluvium and Muddy Creek Formation)
- River Mountain Volcanics
- Disturbed former mine site
- Area evaluated for impacts by windblown sediment, receiving a no further action determination from NDEP
- Undisturbed/background

N

Scale: 1:14,000

1,000 500 0 1,000 Feet

Figure 3

Mine Site Layout

Three Kids Mine

BROADBENT

8 West Pacific Avenue
Henderson, NV, 89015
(702) 563-0600 (P) • (702) 563-0610 (F)

Job # 14-01-156 Date: 9/19/2022

Notes:
1. Imagery Source: Esri World Imagery
2. Datum: NAD 1983 StatePlane Nevada East FIPS 2701 Feet
3. Not a survey. Derived from aerial imagery.

Designed	
Drawn	JCM
Approved	

LEGEND

ACM = Asbestos Containing Material

RACM = Regulated Asbestos Containing Material

Abate sporadic RACM debris under OSHA Class IV Work Practices and further evaluate area for additional suspect ACM

Abate isolated RACM debris pile under OSHA Class IV Work Practices

Abate RACM under OSHA Class I/Class II Work Practices

N

Former Three Kids Mine
Henderson, Nevada

Project No. 14-01-156

BROADBENT

Figure No. 4

RACM Location Figure

Legend:

- Project Area
- Tailings remediation haul routes

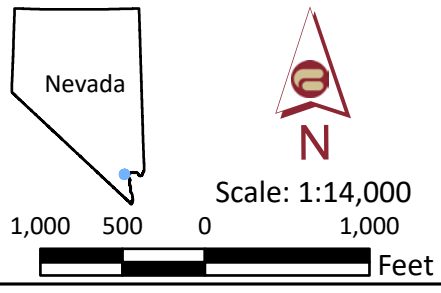


Figure 5

Haul Routes

Three Kids Mine

BROADBENT

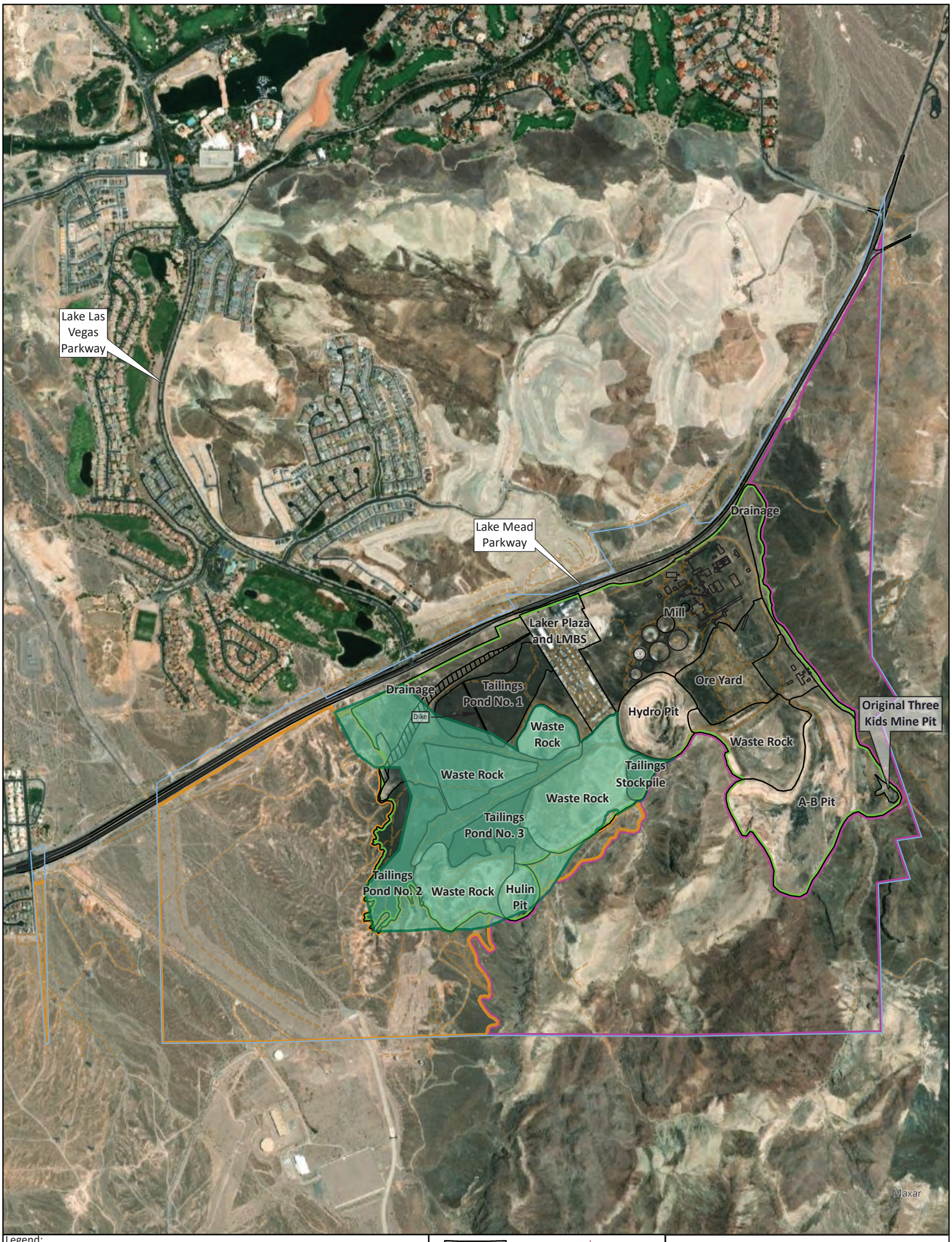
8 West Pacific Avenue
Henderson, NV, 89015
(702) 563-0600 (P) * (702) 563-0610 (F)

Job # 14-01-156 Date: 2/28/2024

Notes:

1. Imagery Source: Esri World Imagery (Maxar)
2. Datum: NAD 1983 StatePlane Nevada East FIPS 2701 Feet
3. Not a survey. Derived from aerial imagery.
4. Haul roads depicted will be used for hauling tailings to the Hydro Pit. Additional haul roads for waste rock and other material will be established in the future.

Designed	
Drawn	JCM
Approved	



Legend:

- Central Valley Area
- Site Feature
- Unimproved Road
- Tailings Dam
- Project Area
- Mine Site
- Sedimentary Units (alluvium and Muddy Creek Formation)
- River Mountain Volcanics

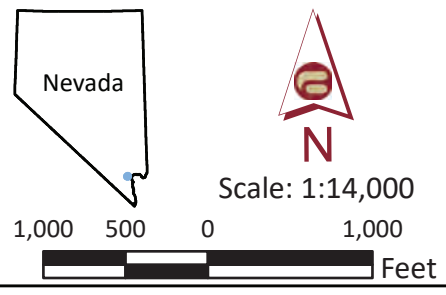


Figure 6

Central Valley Area

Three Kids Mine

BROADBENT
8 West Pacific Avenue
Henderson, NV, 89015
(702) 563-0600 (P) • (702) 563-0610 (F)

Job # 14-01-156 Date: 9/20/2022

Notes:
1. Imagery Source: Esri World Imagery
2. Datum: NAD 1983 StatePlane Nevada East FIPS 2701 Feet
3. Not a survey. Derived from aerial imagery.

Designed	
Drawn	JCM
Approved	

Legend:

- Project Area

Stratum

- Sedimentary units (Muddy Creek Formation and alluvium)
- River Mountain volcanics
- Downwind River Mountain volcanics

Nevada

N

Scale: 1:12,000

1,000 500 0 1,000 Feet

Figure 7

Borrow Source Locations

Three Kids Mine

BROADBENT

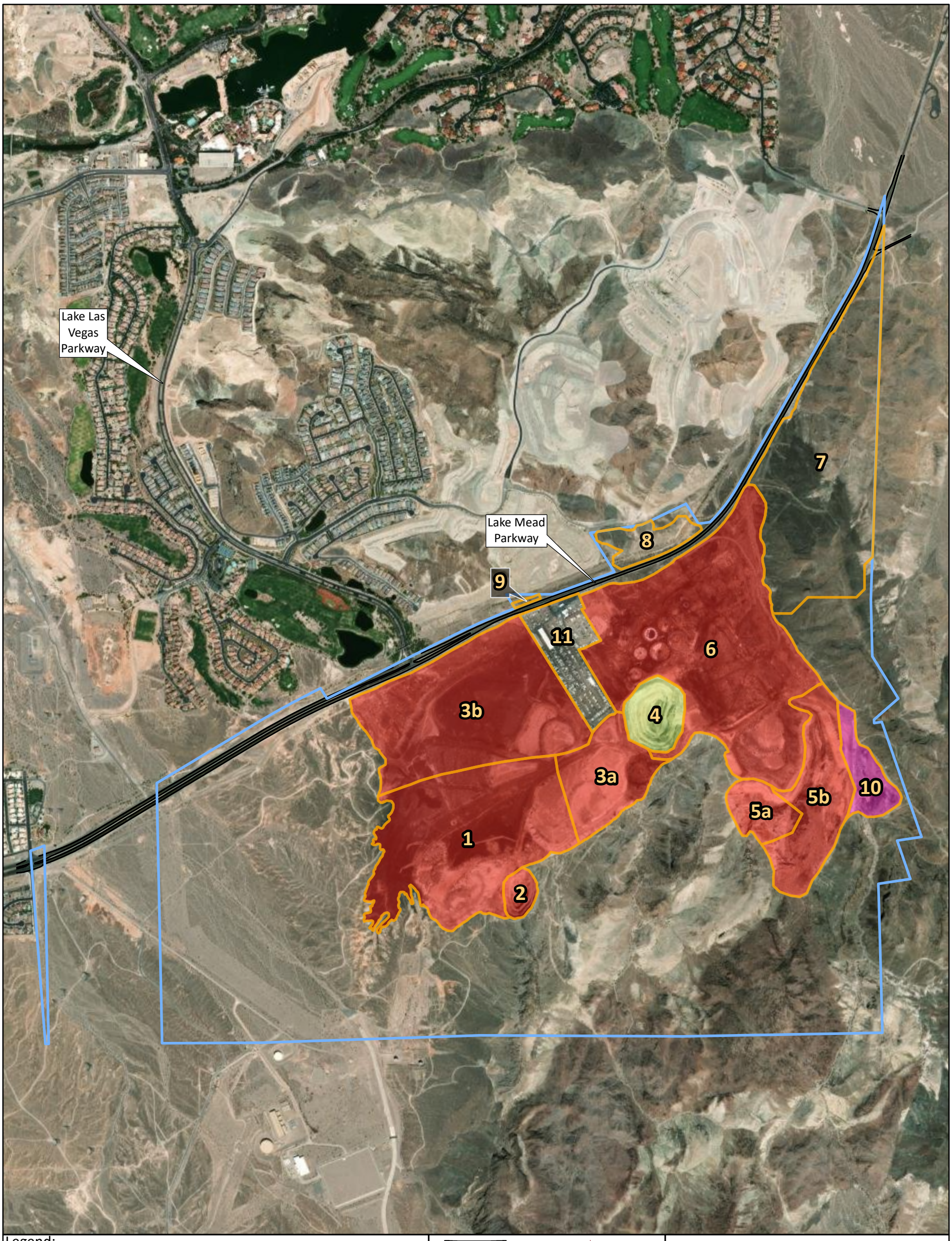
8 West Pacific Avenue
Henderson, NV, 89015
(702) 563-0600 (P) • (702) 563-0610 (F)

Job # 14-01-156 Date: 9/19/2022

Notes:

1. Imagery Source: Esri World Imagery
2. Datum: NAD 1983 StatePlane Nevada East FIPS 2701 Feet
3. Not a survey.

Designed	
Drawn	JCM
Approved	



Legend:

- Ten-foot native soil cover
- Two-foot native soil cover
- Liner plus two-foot native soil cover
- Closure Unit
- Project Area

Nevada

N

Scale: 1:14,000

1,000 500 0 1,000 Feet

Figure 8

Location of Ten-Foot Cover

Three Kids Mine

BROADBENT

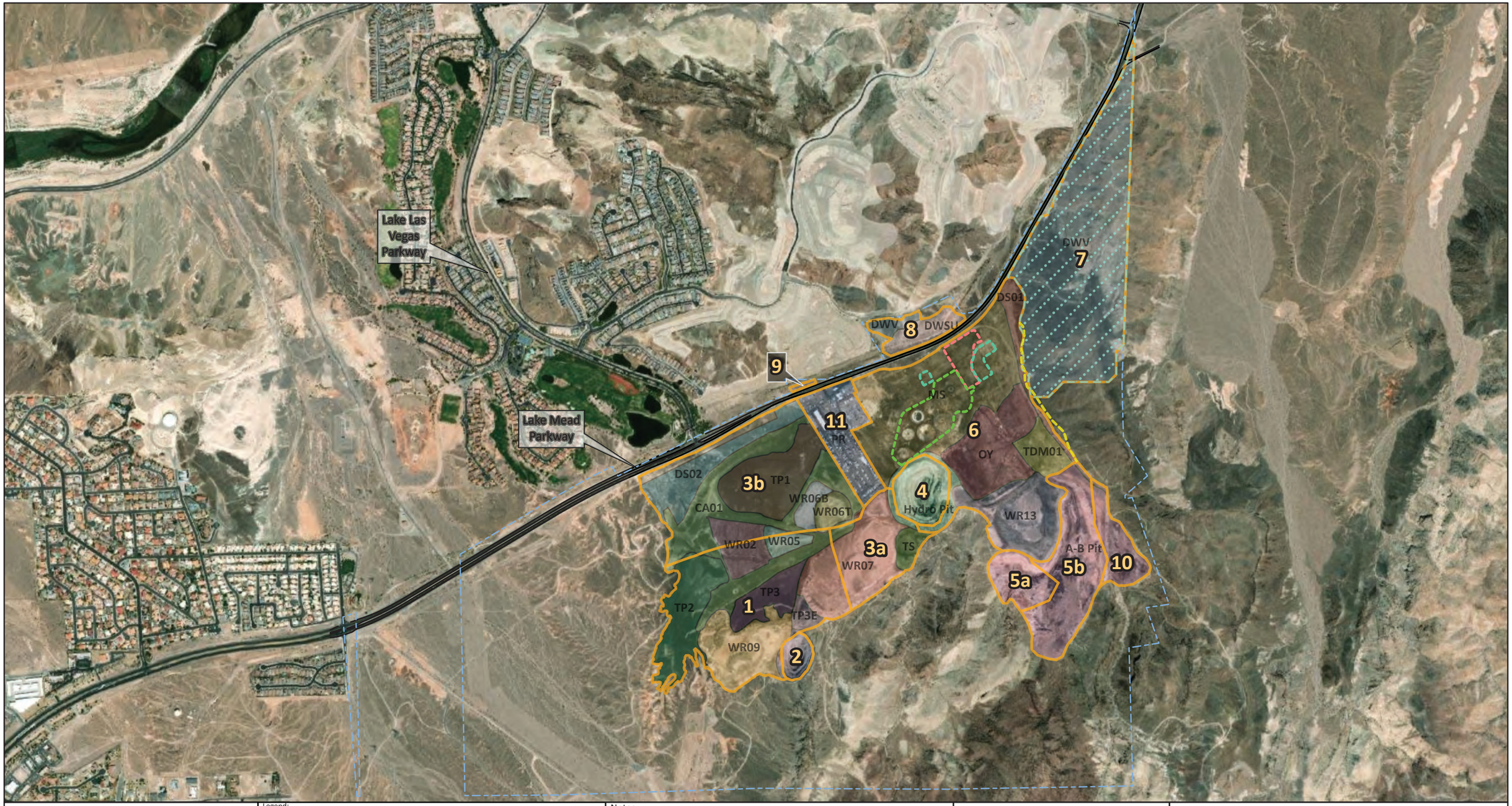
8 West Pacific Avenue
Henderson, NV, 89015
(702) 563-0600 (P) * (702) 563-0610 (F)

Job # 14-01-156 Date: 9/1/2023

Notes:

1. Imagery Source: Esri World Imagery (Maxar)
2. Datum: NAD 1983 StatePlane Nevada East FIPS 2701 Feet
3. Not a survey. Derived from aerial imagery.
4. A four-foot border around Laker Plaza and Lake Mead Boat Storage (LMBS) will not receive the full ten-foot native soil cover due to slope safety requirements. Additional details are provided in the Remedial Design engineering figures.

Designed	
Drawn	JCM
Approved	



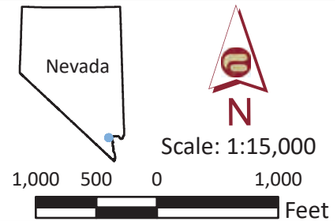
BROADBENT
8 West Pacific Avenue
Henderson, NV, 89015
(702) 563-0600 (P) * (702) 563-0610 (F)

Job # 14-01-156 Date: 5/10/2023

Legend:

- Closure Unit
- NFA, See Note 5
- Approx. location of stormwater infrastructure connecting parts of unit 10
- Floatation circuit
- Thermal processing area
- Fuel farm
- Project Area
- 2021 IU
- A-B Pit
- CA01
- DS01
- DS02
- DWSU
- DWV
- Hulin Pit
- Hydro Pit
- MS
- OY
- PR
- TDM01
- TP1
- TP2
- TP3
- TP3E
- TS
- WR02
- WR05
- WR06B
- WR06T
- WR07
- WR09
- WR13

Notes:
1. Imagery Source: Esri World Imagery (Maxar)
2. Datum: NAD 1983 StatePlane Nevada East FIPS 2701 Feet
3. Not a survey.
4. Closure Unit 11 includes a ten-foot buffer around the Laker Plaza/Lake Mead Boat Storage properties.
5. Closure Unit 7 received a No Further Action Determination (NFA) from NDEP on August 22, 2022.
6. Investigative Units are abbreviated as: A-B Pit = A-B Pit, CA01 = Compacted Area 01, DS## = Disturbed Soils ##, DWSU = Downwind sedimentary units, DWV = Downwind volcanics, Hulin Pit = Hulin Pit, Hydro Pit = Hydro Pit, MS = Mill Site, OY = Ore Yard, PR = Laker Plaza and Lake Mead Boat Storage, TDM01 = Scale house, TP # = Tailings Pond #, TS = Tailings Stockpile, WR## = Overburden ##.



N

Scale: 1:15,000

1,000 500 0 1,000 Feet

Figure 9

Closure Units

Three Kids Mine

Designed	
Drawn	JCM
Approved	

APPENDICES

APPENDIX A

Responses to Comments

APPENDIX A
Responses to NDEP Comments made on February 27, 2024
to the Remedial Design Report, dated November 30, 2023

1. **General Comment #1** – Sections 1.5 and 2.2.3 refer to the preferred alternative. Please replace "preferred alternative" with "selected alternative."

   "Preferred alternative" was changed to "selected alternative" in both Sections 1.5 and 2.2.3.

2. **General Comment #2** – For consistency with Section 2.3.5 (Placement of Excavated Materials), it is recommended that the discussion regarding the removal of ACM and municipal waste in Sections 1.2 (Summary of Selected Alternative) and 4.1 (Schedule and Construction Sequencing) be revised to clarify that the municipal waste and ACM already existing in the pits will remain in place.

   Sections 1.2 and 4.1 were edited to clarify that municipal waste and ACM already in the pits will remain in place.

3. **General Comment #3** – Sections 2.3.4.5, 2.4.1, and 2.5.1 of the Remedial Design Report (RD) indicate that:
   a. In locations where utilities are deeper than 10 feet below final grade, existing soil will be over-excavated to accommodate the placement of native soil cover to a minimum of two feet below the depth of utility inverts.
   b. "These utilities are located primarily on an east-west road cutting through the center of the eastern half of the Site"
   c. "The environmental covenant will be placed on soil below the total depth of the native soil cover. As a result, a Soil Management Plan would not be needed for utility work unless soil would be disturbed below the native soil cover."

   If a different depth of native soil cover (ultimately associated with over excavation) is proposed in different areas of the site due to utilities, it would be helpful for the RD to include a map identifying those areas. If those designs are currently incomplete, perhaps the RD could include a reference to a future addendum or update when those locations and overall depths are known.

   Exact utility design details are subject to change and will be provided as as-builts in the closure reports. Approximate locations and depths of over-excavated areas with greater than 10 feet of native soil cover are identified in the figure provided in Appendix C.

4. **General Comment #4** –
   a. Section 2.4.1 (Cover Construction) states that "a minimum of two feet of native soil cover will be placed over the Hydro Pit liner. A community park is planned for the Hydro Pit, and cover thickness over the liner will be coordinated with City of Henderson Parks and Recreation Department based on park design." Section 3.3 (Closure Unit 4) states that "Additional native soil will be used to accommodate future park features, such as trees and light posts, as needed," and that an environmental covenant will prohibit

disturbance of the liner. Are there any concerns that future improvements (e.g., light posts and trees) could compromise the liner?

b. Section 5.1 (Engineering Controls) states that "a third party will conduct an annual inspection for erosion of native fill across the area with a 10-foot cover and over the Hydro Pit liner." Periodic inspections should also include inspections of liner integrity (not just erosion of the overlying soil cover) and results should be reported to NDEP in applicable progress reports. This should be specified in the RD.

4a. Park features such as light posts and trees will be placed in areas that will receive greater than two feet of cover over the liner. Certain areas of the park will receive up to approximately 25 feet of cover over the liner.

4b. The Hydro Pit liner will be inspected after installation, as stated in Section 3.3 ("quality control testing of liner"), which will include inspection of the seam welds. However, periodic inspections of the Hydro Pit liner will not be possible once the cover is placed on top of the liner. Cover depth will be a minimum of two feet but could be greater than 25 feet in some locations, limiting access for inspection.

5. **General Comment #5** – The fill material, lift thicknesses, and compaction requirements are discussed in the Geotechnical Exploration Report; however, the RD makes four references to "…approximately 12-inch lifts…" in Sections 2.3.5.1 through 2.3.5.4 where the geotechnical report allows thicker lifts at depth. This results in inconsistencies between the lift thickness outlined in the RD (12") and the lift thickness vs the maximum diameter/dimension of rock that is usable during backfill in the Geotechnical Exploration Report. Typically, the lift thickness and material dimensions are dependent on placement within the fill (i.e., near the structure vs in deep 15+ foot fills) and overall compactibility. Since this is specific to the geotech for the site, it is recommended that the Geotechnical Exploration Report be referenced for minimum and maximum lift thickness rather than specifying lift thickness in the RD. This comment also applies to Section 2.4.1 (Cover Construction), which states that "the cover material will be placed in loose lifts consisting of a maximum thickness of 12 inches."

Specific details regarding fill material, lift thicknesses, and compaction requirements are described in the Geotechnical Exploration Report prepared by Centurion Consultants. This information was removed from the Remedial Design Report and replaced with references to the Geotechnical Exploration Report.

6. **Section 1.4 Roles and Responsibilities** – The second paragraph states that "as specified in the AOC, Lakemoor is accepting responsibility for the Site remediation under the oversight of NDEP." However, the Mine Remediation and Reclamation Agreement and Administrative Order on Consent (AOC) designates the homebuilder as the responsible party required to perform the remediation and reclamation work. Consider editing Section 1.4 to clarify.

The second paragraph in Section 1.4 was edited to state that the homebuilder Pulte will be accepting responsibility for Site remediation. This change was made elsewhere in the document, including Section 1.0, Section 4.2.4, and Section 4.2.5.

7. **Section 2.1.1 Summary of Asbestos Work Performed –** This section states that "Figure 10 in the Asbestos Survey Report depicts the approximate location of the RACM identified at the Site." Please include the referenced figure in the RD.

   Figure 10 from the Asbestos Survey Report was added as Figure 4 to the Remedial Design Report.

8. **Section 2.3.3 Demolition** – The second to last paragraph in this section states that "details of the dust control are included in Section 2.2.3 of this document." Similarly, Sections 2.3.5.1 through 2.3.5.4 state that "the area will be monitored for dust as specified in Section 2.2.3." However, Section 2.2.3 identifies permitting stipulations, not details about actual dust control. Therefore, it is recommended that these statements be revised.

   The statements referencing Section 2.2.3 were revised to reference the Dust Control Operating Permit.

9. **Section 2.3.4.3 PAH-Impacted Soil** – This section indicates that a two-foot "scrape" will be performed to remove PAH-impacted soil from the former fuel farm area, chemical processing area, and thermal processing areas. Scraping in earthwork implies scraping with teeth. Please edit to clarify that impacted soil from these areas will be excavated two feet. Section 2.3.4.5 and Figures G-9 and G-12 also mention the two-foot "scrape." An alternative to both excavation and scrape would be to blade the soil off in lifts to achieve a clean surface at two feet below the original ground surface.

   Section 2.3.4.3 and Figures G-9 and G-12 were edited to refer to a two-foot excavation.

10. **Section 2.3.4.4 Northeast Drainage** – This section states that "The impacted material is visually apparent (dark gray to black and fine-grained) with a hydrocarbon odor and will be excavated to a maximum depth based on visual observations by a CEM." A maximum depth of how many feet ? Or will it be excavated until all the dark gray to black fine-grained soils are removed?

    The approach to excavation of the processing solution release in the northeast drainage will be similar to the approach for excavation of tailings. A maximum depth of nine feet bls is anticipated based on results of the remedial investigation (RI), but a CEM will be present to observe the excavation and visually confirm that the dark gray to black fine-grained soil is removed. Text in Section 2.3.4.4 was edited to clarify.

11. **Section 2.3.5 Placement of Excavated Materials** – This section indicates that tailings, PAH-impacted soil, and process solution release from the northeast drainage may be placed in the A-B Pit as a contingency if these materials do not fit in the Hydro Pit. The NDEP-approved Corrective Action Plan states that "suitable engineering protection, such as a liner, will be constructed in the event that tailings are placed in the A-B Pit." This statement should also be included in the RD.

    The referenced text from the CAP was added to Section 2.3.5

12. **Section 2.3.5 Placement of Excavated Materials Act** – The second paragraph in this section states that "additional details on the preliminary timeline are provided below and in Appendix C…." However, additional details are not "provided below" as

indicated. Please revise sentence to "Additional details on the preliminary timeline are provided in Appendix C…."

The text in the second paragraph of Section 2.3.5 was modified to indicate that the schedule is included only in an appendix.

13. **Section 2.3.5.1 Hydro Pit** through **Section 2.3.5.4 Central Valley Area** – Each of these four sections states that "in-place density will be tested onsite to ensure the compaction meets the design requirement." What is the design requirement? The RD should specify the design requirement and/or identify where the design requirement can be found. Please edit accordingly.

The referenced text above in Sections 2.3.5.1 through 2.3.5.4 was removed and replaced with a reference to the Geotechnical Exploration Report prepared by Centurion Consultants. Specifically, lift thickness and compaction requirements can be found in Section 6.6.6 of the Geotechnical Exploration Report.

14. **Section 2.3.5.1 Hydro Pit** through **Section 2.3.5.4 Central Valley Area** – Each of these four sections states that "a water truck will spray clean water over material to control the dust in the area." Please revise this sentence to state that "a water truck will spray clean water over material to help achieve appropriate compaction and to control the dust in the area."

The text in Sections 2.3.5.1 through 2.3.5.4 was edited as suggested.

15. **Section 2.4.1 Cover Construction** – This section states that "the fill material will be placed and compacted to design requirements…[and] in-place soil density and moisture content will be tested …to ensure that the two parameters meet the performance specifications." What are the design requirements and performance specifications? The RD should specify the design requirements and performance specifications and/or identify where they can be found. Please edit accordingly.

Section 2.4.1 was edited to reference the Geotechnical Exploration Report prepared by Centurion Consultants.

16. **Section 2.4.2 Stormwater Basin Construction** –
    a. The second paragraph states that "design of the Hydro Pit stormwater basin is ongoing at the time of this report and will include a low permeability liner. Prior to initiating installation of the stormwater basins, materials to be used in the basin construction (i.e., low permeability liner datasheets and specifications) will be reviewed and approved by a Professional Engineer to ensure the materials meet the design specifications." What are the design specifications? The RD should specify the design specifications and/or identify where they can be found. Some of the design specifications appear to be included in Figures G-15 through G-17, so it would be appropriate for Section 2.4.2 to include a reference to those figures and to provide a description of the design specifications. Please revise Section 2.4.2 accordingly.
    b. NDEP received an email from Broadbent on June 13, 2023 with information about the Hydro Pit stormwater detention basin, and another email on August 11, 2023 with information about the stormwater detention basin to the east of

the A-B Pit. Please revise Section 2.4.2 to include this information (i.e., design standards, including type of storm event that each basin will be designed to withstand, etc.).

c. The last paragraph states that "in-place density will be tested periodically during the construction of the basins to ensure the compaction of the soil meets the requirements. " What requirements? The RD should specify the requirements and/or identify where the requirements can be found. Please edit accordingly.

a. The second paragraph in Section 2.4.2 was edited to describe the design of the Hydro Pit liner as depicted in Figures G-15 through G-17.
b. Additional details provided to NDEP in emails dated June 13, 2023 and August 11, 2023 were added to Section 2.4.2 of the revised Remedial Design Report.
c. The final paragraph in Section 2.4.2 was edited to reference the Geotechnical Exploration Report prepared by Centurion Consultants.

17. **Section 3.0 Performance Standards** – Please consider adding appropriate references to figures or drawing sets in the subsection for each Closure Unit.

Figure references were added to each subsection in Section 3.0.

18. **Section 3.9 Closure Unit 10** – This section states that "Closure Unit 10 represents the area south and west of the A-B Pit." However, Figures 7 and 8 show that Closure Unit 10 is located east of the A-B Pit. Please correct this discrepancy.

Section 3.9 was edited to state that Closure Unit 10 is east of the A-B Pit.

19. **Section 3.9 Closure Unit 10** – This section indicates that "access to remaining contaminated soil will be reduced via placement of a 2-foot cover." Will additional engineering controls (e.g., fencing) be used to restrict public access to Closure Unit 10?

The primary means to restrict access to potentially contaminated soil will be via placement of a two-foot cover. However, fencing will also be used to restrict access specifically to the stormwater basin.

20. **Section 4.2.3 Annual Summary of Remedial Design/Remedial Action Activities** – This section states that "each year an Annual Summary of Remedial Design/Remedial Action Activities [Annual Report] will be prepared for submittal to NDEP. The reports will be submitted on October 10th of the following year…." This suggests that the Annual Report for 2024 would be submitted on October 10th of 2025. This appears to be a slight misinterpretation of the intended reporting schedule outlined in Section VII, paragraph 33 of the AOC. Please contact NDEP to discuss.

After discussion with NDEP, Section 4.2.3 was edited specify that the annual report will be submitted the same year, not the following year. However, data included in the annual report may be cut off on July 31 (approximately two months prior) to allow time to receive and QC analytical data.

21. **Section 4.2.4 Closure Unit Work Completion Reports and Section 4.2.5 Work Completion Report** – The timeframes specified in these sections for site inspections (within 90 days of

completing remedial action) and submittal of work completion reports (within 60 days of the inspection) do not match the timeframes specified in Section XXVIII, paragraphs 111(a) and 112(a) of the AOC (within 30 days). Please edit the timeframes in Sections 4.2.4 and 4.2.5 accordingly.

The timeframes in Section 4.2.4 and 4.2.5 were edited for consistency with the AOC.

22. **Section 5.1 Engineering Controls** – This section states that "a third party will conduct an annual inspection for erosion of native fill across the area with a 10-foot cover and over the Hydro Pit liner." Will other Closure Units with less than 10 feet of cover (i.e., Closure Unit 10 and Closure Unit 11) also be inspected annually for erosion? This should be specified in the RD.

Yes, the annual inspection for erosion of native cover will include Closure Units 10 and 11. Section 5.1 was edited to clarify this.

23. **Section 5.2 Institutional Controls** – This section should specify the frequency of the administrative check to be conducted.

Section 5.2 was revised to specify a frequency of every five years for administrative checks on institutional controls. This frequency is consistent with the five-year review period required for CERLCA projects.

24. **References** – The last paragraph of Section 2.3.2 (Municipal Waste Consolidation and Disposal) refers to a "geotechnical report submitted to SNHD." Please list the geotechnical report in the list of references.

The Geotechnical Exploration Report prepared by Centurion Consultants was added to the list of references.

25. **Figure 4 Haul Routes** – It seems that several other hauls roads will be needed to move borrow material, place material in the A-B and Hulin pits, place fill material and cover in the central valley area, etc. Please revise Figure 4 to also identify the general location of these additional major planned haul roads. Minor planned haul roads (i.e., haul roads inside the pits) do not need to be identified in the figure.

Haul road locations will be based on contractor means and methods, and the general contractor has not yet been selected. Additionally, haul roads are likely to change throughout the remediation and reclamation at the site. As a result, additional details on haul road locations cannot be provided in the revised Remedial Design Report. A note was added to Figure 4 stating that additional haul routes will be established in the future.

26. **Figure 7 Location of Ten-Foot Cover** – It is recommended that the word "clean" in the legend be replaced with "native soil" for consistency with the rest of the RD, including Figure G-2.

Figure 7 (Figure 8 in the revised Remedial Design Report) was updated to refer to "native soil cover" rather than "clean cover" for consistency with the Record of Decision and the rest of the Remedial Design. Figure G-2 did not require edits as it already referred to the native soil cover.

27. **Figure G-3 Demolition Plan** – The table in this figure suggests that zero cubic yards of soil will be removed from the area identified as Excavation Area 3 (East Dump, Engineering, West Dump, and Mill Site). Please update the table to reflect the volume of soil that will be excavated from Excavation Area 3 (including fuel farm, chemical processing, and thermal processing areas within the mill site).

    The areas in Excavation Area 3 were identified as areas where surface cleanup of debris and asbestos containing material is expected to take place, but not necessarily include additional soil excavation. Soil excavation in these areas is included under Excavation Area 1 (PAH-Impacted Soil). Therefore, Area 3 has been removed from the table in Figure G-3.

28. **Figure G-3 Demolition Plan** Section 2.3.3 describes the Engineering Dump as a mill site dump depicted in Figure G-3. However, Figure G-3 does not appear to identify the Engineering Dump. Figure G-3 shows an area labeled as the Engineering Hillslope Dump Area east of the Ore Yard Area, but this dump area appears to be distinct from the Engineering Dump north of the Ore Yard identified in Figure 5-1 of the Corrective Action Plan. Please clarify and revise Figure G-3, if necessary.

    Figure G-3 has been revised to include the Engineering Dump north of the Ore Yard.

29. **Figure G-5 Existing Topography Within Property Boundary** – This figure is missing labels for various site features such as waste rock, tailings ponds, and pits. Please add the missing labels to the figure.

    Figure G-5 has been revised to include the missing labels.

30. **Figure G-15 Hydro Pit Liner and Figure G-16 Hydro Pit Final Grading Plan** – The elevation contours on Figure G-15 appear to be identical to the elevation contours on Figure G-16. However, the titles of the figures suggest that the elevations should be different. Please explain the difference between the two figures and revise the figures if necessary.

    Figure G-15 shows the surface elevation of the Hydro Pit liner. G-16 shows the final surface elevation after two feet of cover has been placed on top of the liner. Note that Figure G-16 was revised to increase the cover depth from 18 inches to two feet. A callout to Detail 1 on Figure G-17 was added to Figure G-16 to clarify.

31. **Figure G-17 Hydro Pit Liner Details** – Details 2 and 3 show a 6 oz geotextile fabric directly overlying the 0.2-inch drainage net. Should Detail 1 also include geotextile fabric over the drainage net? Does the Zone 1 Material in Details 1 through 3 represent the native soil cover, or will the native soil cover be placed on top of the Zone 1 Material?

    Detail 1 was revised to include the geotextile fabric over the drainage net. The 12 inches of Zone 1 material is part of the two-foot cover. Details 1 through 3 have been revised to show twelve inches of Zone 1 material, then an additional 12 inches of native fill on top.

32. **Figures G-18 through G-20 Interim Grading Plan and Figures G-21 through G-23 Final Grading Plan** – The note on the bottom left-hand corner of the Interim Grading Plan figures indicates that the figures show the “final grading plan of the development lowered by 10 feet.” The note on the bottom left-hand corner of the Final Grading

Plan figures indicates that the figures show the "final grading plan of the development, including 10 feet of native soil cover." However, the elevation contours between the two sets of figures do not appear to show the 10-foot difference in elevation. Please explain and revise the figures if necessary.

In the previous set of figures with five-foot contour intervals, the 10 feet of cover did not shift the minor contour lines, while the major contour lines shifted by two lines. Figures G-18 through G-23 were edited to display 10-foot rather than 5-foot contour lines. Additionally, elevation labels were added the minor contours so that when going between the drawings, the elevation increase of 10 feet at a particular contour is more apparent.

33. **Figure G-23 Final Grading Plan** – A file named "G-23 Final Grading Plan 11-30-23 Sealed.pdf" was included in the electronically-submitted drawing package for the remedial design. This file is a duplicate of Figure G-22. Please submit an electronic copy of Figure G-23.

Figure G-23 is provided with the revised Remedial Design.

Responses to NDEP Comments made on February 27, 2024
to the Geotechnical Exploration Report prepared by Centurion Consultants dated August 19, 2022

1. **General Comment #1** – A geotechnical report for this site indicates cuts and fills "in excess of 200 to 300 feet." Once the cuts and fill are completed, a new geotechnical investigation should proceed with samples collected in the actual bearing soils for the proposed development.

   The nature of the remediation program would suggest that the expansive and gypsiferous soils be located below the 10-feet clean cap soils, thus negating two of the recommendations. Also, per the remediation program, all fill will be removed and recompacted, thus making the fill removal recommendation unnecessary

   Comment noted. Recommendations are retained in the Geotechnical Exploration Report to provide clarity to the contractor.

2. **Section 6.2 Foundations** – The foundation section of the report alludes to the necessity of new geotechnical reports. The report should have titled the section 6.2 as Preliminary Foundations. The settlement discussion makes no mention of the deep fills and the expected long-term settlement of these deep fills. A settlement discussion of the deep fills does occur in Section 6.7 indicating several feet of settlement with post-construction settlement of 6-inches to 1-foot.

   A discussion of when to place the final 10-feet cap material should be addressed in both the remediation and geotechnical reports. For instance, if the cap is placed immediately, then it settles several feet, who would be responsible for adding additional cap material to achieve the final grades?

   While settlement of several feet may occur in the deep fill areas, consolidation of greater than a few inches is not anticipated within the 10-foot cover. Settlement monitoring of deep fills within the three pits (Hydro, Hulin, and A-B) will be performed until the rate has slowed enough for construction to continue with placement of the cover. The central valley area will be over-excavated and brought up to the interim grade (below 10-foot cover) in lifts as engineered fill and will have little settlement. Once the 10-ft minimum cover material has been placed and compacted, any further consolidation will be addressed during finish grading with the addition of acceptable cover material, maintaining a minimum of 10 feet.

3. **Section 6.3 Site Class** – The seismic site class should be determined after the cuts and fills are completed. In the areas of shallow bedrock, a site class B may be achievable; while in the deeper fills, a site class D may be the result from on-site testing.

   The Geotechnical Exploration Report was not intended for structural design where site class is most relevant. Future geotechnical reports will be developed for the phased structural areas and the seismic site class of each area will be determined at the appropriate times in accordance with relevant code.

4. **Section 6.6.5 Fill Materials** – This section indicates the fill will be "(1) soil fill or (2) soil-rock fill." The geotechnical report assumes that all municipal soil waste will be

removed. As discussed above, the remediation report in section 2.3.5 allows waste to remain. If debris are allowed to remain, the geotechnical report needs to address the municipal solid waste in the fills.

A maximum dimension of 12-inches is allowed in the fills, with the exception of within 5-feet below the bottom of footings. I would recommend that "the bottom of footings" be replaced by the "bottom of cap material." Over size material near the liner could damage the liner during installation and impact the liner performance.

Proposed building areas, adjacent walks, slabs, and areas to be paved will be cleared and grubbed of vegetation, debris, etc., including municipal waste. Subsequent fill material will meet the requirements of the Geotechnical Exploration Report. Pit/mine areas, with no proposed structures as described above, may allow municipal waste to be left if greater than 100-ft below the liner elevation. Waste material above this elevation must be reviewed and approved by the Geotechnical Engineer on a case-by-case basis.

Oversize material will not be placed under or over the Hydro Pit liner. Figure G-17 of the Remedial Design Report specifies 12 inches of silt material (maximum permeability of $1x10^{-5}$ centimeters per second) below the liner and 12 inches of Zone 1 material on top of the liner, which is defined as "material with 100% passing a ¾" sieve."

5. **Section 6.6.6 Fill Placement and Compaction** – The layer thickness of soil-rock fill shall not exceed one and one-third times the vertical dimension of the maximum size material."

   "Particles up to 5 feet in vertical dimension may be used…"

   As discussed above, these larger debris over a foot in size should be limited to at a minimum 5-feet below the bottom of the cap material.

   "Compaction should be done in a longitudinal direction along the fill layer." To help reduce the amount of settlement predicted, "compaction should be done with a minimum of three complete passes in both longitudinal and transverse directions along the fill layer."

Comment noted. This will be taken into account when geotechnical reports are prepared in the future for structural buildings. Note that as discussed above in the response to comment #4, oversize material will not be placed over the Hydro Pit liner (see Figure G-17).

Compaction methodology specifics will be accomplished by the means and methods of the selected contractor and approved by the geotechnical engineer. The geotechnical requirements are for the compaction results, validated by proof rolling and approved by the geotechnical engineer.

APPENDIX B

Asbestos Abatement

ASBESTOS ABATEMENT
Three Kids Mine
Henderson, Nevada

Details are provided below related to the asbestos abatement portions of the remedial action.

Project Personnel and OSHA Classes of Work

Abatement of RACM at the Site will be performed by an asbestos abatement contractor licensed in the State of Nevada. The abatement activities will be performed in accordance with applicable OSHA regulations by properly trained workers that have been licensed in Nevada through the Asbestos Control Program. Applicable OSHA regulations can be found in 29 CFR 1926.1101 and NAC 618.850 through 618.986. In general, OSHA requires the asbestos abatement work to include the establishment of regulated areas, use of wet methods (no visible emissions), prompt clean-up, use of leak tight containers, and employee exposure monitoring. Additional details on worker safety will be provided in the forthcoming Health and Safety Plan, including worker personal protective equipment (PPE). The following OSHA Classes of Work apply to the abatement of RACM at the Site.

1) Class I Asbestos Work – Defined as activities involving the removal of thermal system insulation (TSI) and surfacing ACM. This definition applies to the surfacing ACM remaining in place on structures located within the boundaries of the Flotation Cell Area.

2) Class II Asbestos Work – Defined as activities involving the removal of ACM which is not thermal insulation or surfacing material. This includes, but is not limited to, the removal of asbestos-containing wallboard, floor tile and sheeting, roofing, siding shingles, and construction mastics. This definition applies to the abatement of penetration mastic, expansion joint, and gaskets located within the boundaries of the Flotation Cell Area.

3) Class IV Asbestos Work – Defined as maintenance and custodial activities during which employees contact but do not disturb ACM and activities to clean up dust, waste, and debris resulting from Class I and II activities. This definition applies to the abatement of sporadic debris on the surface of the ground as well as in the various debris piles located throughout the Site.

During the abatement of RACM, the asbestos abatement contractor will provide a licensed Asbestos Competent Person (ACP). An ACP is defined as a person who is capable of identifying existing asbestos hazards, selecting the appropriate control strategy for asbestos exposure, and who has the authority to take prompt corrective measures to eliminate the hazards. In addition to the ACP provided by the licensed asbestos abatement contractor, an Asbestos Abatement Consultant (AAC) licensed through the Asbestos Control Program will provide oversight during the performance of the abatement activities. At a minimum, the AAC will be accredited as an Inspector and a Project Monitor. The AAC will assist in evaluating and mitigating hazards resulting from the work at the Site, guide abatement activities at the Site, perform air sampling, perform post abatement inspections, and collect additional material samples in the event additional suspect ACM is identified.

Site Control for Asbestos Abatement

Within the boundaries of the secured Site as described above, support areas, contaminant reduction areas, and asbestos regulated areas will be constructed. These Site control areas will be established first and not dismantled until the location passes a visual inspection for remnant RACM as performed by an

AAC in accordance with NAC 618.956(2)(a). As the RACM is present in multiple locations at the Site, multiple support areas, contamination reductions areas, and asbestos regulated areas will be constructed. These Site control areas will be constructed at the discretion of the ACP and in coordination with the AAC. Provided to follow is a description of the activities that will be performed in each area.

The support area will serve as the areas of the Site that are free from asbestos contamination. These locations will be used for administrative, planning, and staging that will support the operations in the contaminant reduction area and the asbestos regulated area. A key feature of the support area will include a designated location where roll-off bins, haul trucks, or other various containers can be prepared to be loaded (i.e., lined with plastic sheeting) with RACM.

The contaminant reduction area(s) will serve as the transition zone between the support area and the regulated area. This is the area where asbestos trained workers will enter and exit the regulated area and where decontamination activities will take place. Key features of the contaminant reduction area will include a worker decontamination area and equipment decontamination areas. Due to the numerous locations that contain RACM at the Site, the decontamination equipment used will be mobile but will have the ability to containerize wash water.

Regulated areas will be established for Class I and Class II work. In addition, with the exception of small-scale work (i.e., picking up sporadic RACM debris), Class IV work will be performed within regulated areas. Class IV work that will be performed within a regulated area includes abatement and segregation of isolated waste piles throughout the Site. Loading and securement of RACM into containers for disposal will be performed within a regulated area.

Asbestos Fiber Mitigation

During the performance of the abatement activities, wet methods will be used to remove RACM in accordance with OSHA and NESHAP regulations. In addition, as the RACM is located outside, on the surface of unpaved surfaces, and will be removed by mechanical means in certain instances (i.e., skid steer, backhoe, etc.), mitigation of dust using engineering controls, work practice controls, and administrative controls will also be implemented. Broadbent anticipates that the use of wet methods will be successful in minimizing the generation of asbestos fibers so that 1) personal air monitoring results for workers on the project do not exceed the Nevada OSHA established Permissible Exposure Limit for the 8-hour Time Weighted Average (TWA) or the 30-minute Excursion Limit (EL) for asbestos and 2) potential asbestos fibers do not migrate beyond the regulated area. As the overall Site restoration activities associated with the project will disturb an area in excess of 0.25 acres in overall area, a Dust Control Permit will be obtained from CCDAQ. Dust control measures specified in the Dust Control Permit as well as the measures outlined in this document will be adhered to during the asbestos abatement portion of the project. These additional measures include the following items.

1) All RACM will be removed using wet methods and promptly placed into leak tight containers.

2) All visibly dry disturbed soil surfaces associated with an established asbestos work area, including within the regulated area, will be wetted using water to minimize dust emissions. Water will be applied by means of water truck(s) prior to and concurrent with ground disturbance to minimize dust emissions to the fullest extent possible. Water will be applied to disturbed areas as daily ground disturbance activities and environmental conditions warrant. The dust control measures will continue to be implemented during weekends in the event abatement activities are not complete in an established asbestos work area.

3) Disturbed work areas will be sprayed down at the end of the work shift to form a thin crust.

4) Working hours will be adjusted based on expected wind speeds and other exposure factors. Criteria used to suspend work will be based on constant wind speeds in excess of 25 mph or instantaneous wind speeds measured to be at least 40 mph. Wind speed will be determined using an Ambient Weather WM-4 Handheld Weather Station (or similar).

5) Vehicle speeds with an established asbestos work area will not exceed 15 mph.

Area-Specific Abatement Work

The following sections provide the general scope of asbestos work to be performed in the areas of the Site that RACM was identified to be present. Figure 10 of the Asbestos Survey Report shows the locations of ACM abatement and removal areas. However, if additional suspect ACM or RACM are identified that were not presented in the Asbestos Survey Report, work will stop and the ACP/AAC immediately notified so appropriate measures can be implemented to address the change in conditions.

1. East Dump Area

Sporadic and limited RACM was identified on the surface of the ground within the boundaries of the East Dump Area. As part of the RI, a trench and four test pits were excavated through the East Dump located within a portion of the East Dump Area. Results of the excavation activities did not identify RACM below grade within the boundaries of the trench or test pits. The following general scope of asbestos abatement work is to be executed within the boundaries of the East Dump Area.

1) The area is to be transected by the asbestos abatement contractor and all visible RACM will be removed prior to ground disturbance. Due to the limited volume of RACM, it is anticipated the RACM can be successfully mitigated by hand collection.

2) During the initial disturbance of shallow soil in the East Dump, a licensed asbestos abatement inspector will be present to continue to screen for RACM. In the event ACM/RACM is identified, work must stop, and the material removed by a licensed abatement contractor in accordance with applicable regulations.

2. Ore Yard Area

Sporadic and limited RACM was identified on the surface of the ground in the northern portion of the Ore Yard Area. Three isolated debris piles containing RACM were also present in the northern portion of the Ore Yard Area. Furthermore, as part of the RI, a trench and five test pits were excavated within the Ore Yard Area to evaluate an Engineering Dump. Although significant concrete building debris was present, results of the investigation did not identify RACM below grade within the Engineering Dump. The following general scope of asbestos abatement work is to be executed within the boundaries of the Ore Yard Area.

1) The northern portion of the Ore Yard Area is to be transected by the asbestos abatement contractor and all visible RACM will be removed prior to ground disturbance. Due to the limited volume of RACM, it is anticipated the RACM will be successfully mitigated by hand throughout a majority of the Ore Yard Area. However, due to the volume of RACM present in the three isolated debris piles, mechanical means will likely be required to be implemented to successfully abate the RACM in these locations.

2) During the excavation of the Engineering Dump located within the Ore Yard Area, a licensed asbestos abatement inspector will be present to continue to screen for RACM. In the event RACM is identified, work must stop, and the material removed by a licensed abatement contractor in accordance with applicable regulations.

3. Engineering Area

Sporadic and limited RACM was identified on the surface of the ground within the boundaries of the Engineering Area. The area is to be transected by the asbestos abatement contractor and all visible RACM will be removed prior to ground disturbance. Due to the limited volume of RACM, it is anticipated the RACM can be successfully mitigated by hand collection.

4. Engineering Hillslope Dump Area

A significant debris pile consisting of both non-ACM as well as sporadic RACM was observed along a hillslope within the boundaries of the Engineering Hillslope Dump Area. As the RACM appears to be sporadic as well as mixed into the debris pile along the hillslope, segregation of the waste stream will be performed in the event the entire debris pile is not to be classified as RACM. If segregation is performed, the work will be performed in a manner that allows a thorough inspection of the debris pile to be performed. Due to the volume and size of various waste materials present in the debris pile, mechanical means are anticipated to be required to segregate as well as remove the debris pile from the Engineering Hillslope Dump Area.

5. A-B Pit Area

An isolated debris pile of RACM was observed within the boundaries of the A-B Pit Area. Sporadic RACM throughout the area was not observed. In addition, RACM was not specifically identified at the bottom of the A-B Pit. Based on the volume of RACM identified in the debris pile, mechanical means may be required to be implemented to successfully abate the RACM. ACM within the A-B Pit will remain in place.

6. Hydro Pit Area

Two isolated debris piles containing RACM were identified in the Hydro Pit Area. The debris piles were located on a haul road leading to the bottom of the Hydro Pit and along the southern edge of the Hydro Pit. Sporadic RACM throughout the area was not observed. In addition, RACM was not specifically identified at the bottom of the Hydro Pit. ACM within the Hydro Pit will remain in place.

7. Illegal Dump #5

A significant debris pile consisting of non-ACM as well as sporadic RACM was observed along a hillslope within the boundaries of Illegal Dump #5. As the RACM appears to be sporadic as well as mixed into the debris pile along the hillslope, segregation of the waste stream will be performed in the event the entire debris pile is not to be classified as RACM. If segregation is performed, the work will be performed in a manner that allows a thorough inspection of the debris pile to be performed. Due to the volume and size of various waste materials present in the debris pile, mechanical means are anticipated to be required to segregate as well as remove the debris pile from Illegal Dump #5.

8. Mill Site Area

Sporadic and limited RACM was identified on the surface of the ground within the boundaries of the Mill Site Area. The area is to be transected by the asbestos abatement contractor and visible RACM will be

removed prior to ground disturbance. Due to the limited volume of RACM, it is anticipated the RACM can be successfully mitigated by hand collection.

9. Flotation Cell Area

Eight flotation cells are present that have RACM remaining in place as well as laying in and around the structures within the Flotation Cell Area. In certain instances, the RACM present within the flotation cells appears to be present below remnant process material. Piping associated with the flotation cells was also observed that contains RACM and in isolated instances observations suggested this piping extends below grade. Sporadic and significant quantities of RACM are also present on the surface of the ground throughout the area. The following general scope of asbestos abatement work is to be executed within the boundaries of the Flotation Cell Area.

1) The area is to be transected by the asbestos abatement contractor and all visible RACM on the surface of the ground will be removed prior to ground disturbance or initiating abatement activities associated with RACM remaining in place on flotation cells. Based on the volume of RACM identified in the Flotation Cell Area, mechanical means may be required to be implemented to successfully abate the RACM.

2) Abate the RACM remaining in place on and laying around within the flotation cells prior to demolition of the structures. In select instances where process material remains within a flotation cell, segregation of the process waste from the RACM will be required. In the event segregation is not performed, the entire waste stream will be designated as RACM. If segregation is performed, the work will be performed in a manner that allows a thorough inspection of the waste stream to be performed.

3) As a potential exists for RACM to be present below grade associated with the subsurface flotation cell piping, a licensed asbestos abatement inspector will be present during the demolition of the flotation cells to continue to screen for RACM below grade. In the event RACM is identified, work must stop and the material removed by a licensed abatement contractor in accordance with applicable regulations.

10. West Dump Area

Within the West Dump Area, a location was identified as the West Dump. RACM on the ground in the West Dump appeared to be present in minor volumes with only trace to sporadic RACM debris located towards the northern boundary of this area. As part of the RI, a trench and four test pits were excavated through the West Dump. Results of the excavation activities did not identify RACM below grade within the boundaries of the trench or test pits to any significant depth. However, in select instances, RACM was identified to a depth of 6-inches bls.

Two isolated debris piles containing RACM were also present in the West Dump Area. Sporadic RACM throughout the remaining area was not observed. The following general scope of asbestos abatement work is to be executed within the boundaries of the West Dump Area.

1) As the RACM appears to be sporadic as well as mixed into the West Dump, segregation of the waste stream will be performed in the event the entire waste stream is not to be classified as RACM. If segregation is performed, the work needs to be performed in a manner that allows a thorough inspection of the debris pile to be performed. Due to the volume and size of various waste materials present in West Dump, mechanical means are anticipated to be required to

segregate as well as remove the debris from the West Dump. In addition, excavation to a depth of six inches bls may be required to successfully abatement the RACM from the West Dump.

2) Abate the RACM identified in the two isolated debris piles. Based on the volume of RACM identified in the two isolated debris piles, mechanical means may be required to be implemented to successfully abate the RACM.

11. Hulin Pit Area

Limited and isolated debris piles consisting of both non-ACM as well as RACM were observed on the surface of the ground outside the boundaries of the Hulin Pit. ACM within the Hulin Pit will remain in place. Sporadic and isolated debris consisting of both non-ACM as well as RACM were observed on the surface of the ground along the haul road, northeast wall, and bottom of the Hulin Pit. Observations suggested that a portion of the debris located along the northeast wall of the Hulin Pit was partially buried into the hillslope. The following general scope of asbestos abatement work is to be executed within the boundaries of the Hulin Pit.

1) Abate the RACM identified in the debris piles located outside the boundaries of the Hulin Pit. Based on the volume of RACM identified in the isolated debris piles, mechanical means may be required to be implemented to successfully abate the RACM. In addition, further measures may be required to address safety concerns due to the location of the RACM in relationship to the edge of the Hulin Pit.

2) RACM will be left in place within the boundaries of the Hulin Pit. RACM may be moved to allow for construction of an access road into the Hulin Pit. If RACM is moved to allow for construction of an access road, it will be done under supervision of the AAC with proper handling.

12. DS02 Area

Sporadic debris consisting of both non-ACM as well as RACM were observed on the surface of the ground in minor volumes in the western portion of the DS02 Area. Numerous isolated debris piles consisting of both non-suspect materials as well as RACM were observed in the western portion of the DS02 Area. In addition, an unpaved roadway is present along a hillslope that contains significant volumes of asphalt and concrete that appears to be intermixed with RACM. The following general scope of asbestos abatement work is to be executed within the boundaries of the DS02 Area.

1) The western portion of the DS02 area is to be transected by the asbestos abatement contractor and visible RACM will be removed prior to ground disturbance. Based on the volume of RACM identified, in select instances, mechanical means may be required to be implemented to successfully abate the RACM.

2) As the RACM appears to be sporadic as well as mixed into the debris pile along the hillslope of the roadway, segregation of the waste stream will be performed in the event the entire debris pile is not to be classified as RACM. If segregation is performed, the work will be performed in a manner that allows a thorough inspection of the debris pile to be performed. Due to the volume and size of the concrete and asphalt present in the debris pile, mechanical means are anticipated to be required to segregate as well as remove the debris pile from the DS02 Area.

<u>Post-Abatement Visual Inspections</u>

In accordance with NAC 618.956(2)(a), subsequent to completing the abatement activities at a given location, the area will be visually inspected for remnant ACM by the AAC. In the event remnant ACM is

observed, the AAC in coordination with the ACP will direct the abatement contractor to remove the identified ACM. Visual inspections will continue to be performed until remnant ACM is no longer observed by the AAC. If a regulated area has been constructed, the regulated area will not be deconstructed until the location passes the visual inspection.

As Broadbent understands negative pressure enclosed containment areas will not be constructed, post abatement final air clearance monitoring activities in accordance with NAC 618.956(3) will not be performed as part of the remedial action. Results of the post abatements visual inspections will be documented.

Potential for Asbestos Fibers in Soil

As documented in the Asbestos Survey Report (Broadbent, 2022c), the RACM at the Site is largely present sporadically as well as in isolated and limited debris piles at the Site. Visual observations performed to date suggest the bulk RACM is located on or near the surface of the ground. Based on the nature of the RACM present at the Site, visual inspections performed in accordance with NAC 618.956(2)(a) appear to be a sufficient methodology to evaluate the successful removal of the RACM. However, to further ensure impacts to the Site from RACM are adequately addressed, soil below areas with more than just sporadic RACM debris will be scraped down to two inches bls, placed in a bin, and disposed offsite to address the potential for asbestos fibers to be present in soil. Areas where soil removal is anticipated include various debris piles, the West Dump, and portions of the flotation circuit area.

Personal Air Monitoring

Personal air sampling will be performed daily during the project to evaluate employee exposure to airborne asbestos during asbestos abatement field activities. The sampling will be performed in a manner that allows an evaluation of the employee's exposure to asbestos concentrations in excess of the OSHA 8-hour TWA of 0.1 fibers per cubic centimeter (f/cc) and the 30-minute EL of 1.0 f/cc. The personal air monitoring will be performed by both the ACP and the AAC. The ACP will be responsible for evaluating the licensed abatement contractor's employees while the AAC will be responsible for monitoring the licensed asbestos consultant's employees.

The personal air sampling will be performed in accordance with OSHA Standard 1926.1101, Appendix A. Sampling procedures will include the following items.

1) Low flow air pumps (Gilian BDX II or similar) will be utilized to collect air samples from the employee's breathing zone daily during the performance of the field activities.

2) Each low flow air pump will be calibrated prior to use with a primary gas flow calibrator (Drycal) or with a rotameter. In the event rotameter is used, it will be calibrated with a primary standard in the last six months. Each low flow air pump will be calibrated at the Site to minimize environmental influences on flow rates. A filter cassette from the same cassette lot used for calibration will be used for sampling. In the event that the flow rate changed by more than 5 percent during the sampling period, the average of the pre and post calibration rates will be used to calculate the total sample volume.

3) Air samples will be collected at a flow rate of 2.0 liters per minute (LPM) to minimize overloading of the filter cassettes.

4) The air will be drawn through a factory preassembled 0.8-micron mixed cellulose ester filter (MCEF) 25-millimeter (mm) open face cassette equipped with a 50 mm long electrically conductive extension cowl. Filter cassettes will not be reused.

5) Prior to connecting each personal air sample to a low flow air pump, the sample will be assigned a unique identification name.

6) The sample cassette will be connected to the low flow air pump using flexible tubing. Each cassette will be secured and positioned open face side down within 10 centimeters from the breathing zone of the employee under evaluation.

7) Upon completion of the personal air sampling, the cassette will be closed and sealed with the factory provided base and plastic plugs.

8) The flow rate of the low flow air pump will be verified at the completion of the daily sampling activities.

9) It is unlikely that factory-provided sample cassettes would be contaminated prior to receipt. However, as part of the quality assurance (QA) procedures, upon receiving and initially opening a shipment of cassettes, one sample cassette will be collected for each lot identification number and submitted without opening for laboratory analysis. In accordance with National Institute for Occupational Safety and Health (NIOSH) Test Method 7400, if a lot blank sample has a fiber count in excess of five fibers observed in 100 graticule fields, the remaining cassettes associated with the lot will be returned to the manufacturer for replacement. Personal lot blank sample submittal will be performed in conjunction with perimeter lot blank samples.

10) To evaluate if contamination occurred during sample handling, two field blank samples will be collected daily prior to the start of operations. The field blank samples will be collected by opening an unused filter cassette for approximately 30 seconds at the sampling location with no air being drawn through it. Upon closing the cassette, the field blank sample will be handled and transported with the personal air sample cassettes collected during the workday. In accordance with Appendix A Item 11 of OSHA 1910.1101, sample sets represented by a field blank having a fiber count in excess of seven fibers observed in 100 graticule fields are to be rejected. Personal field blank sample submittal will be performed in conjunction with perimeter field blank samples.

11) The samples collected for the evaluation of employee exposure to airborne asbestos will be delivered under chain-of-custody procedures to an accredited laboratory in the National Voluntary Laboratory Accreditation Program for the sample analysis outlined to follow. The samples will be analyzed by Phase Contract Microscopy (PCM) per NIOSH Test Method 7400. If PCM data (analyzes for fibers of any type) suggests OSHA PELs have been exceeded, the asbestos content of the sample(s) will be confirmed using Transmission Electron Microscopy (TEM) in accordance with NIOSH Test Method 7402. This confirmation will be done since other fibrous substances, if present, may interfere with PCM analysis and result in an inaccurate evaluation of an employee's exposure to actual asbestos fibers. Samples will be submitted with a turnaround-time request of no more than 24 hours (weekends excluded).

The personal air sample data collected during the project will be evaluated by the ACP and AAC against the OSHA 8-hour TWA and the EL. As multiple samples will be collected daily to evaluate employee's

exposure to airborne asbestos, the following calculation will be used to determine the OSHA 8-hour TWA. In instances where fibers are not detected above the laboratory level of detection, the laboratory level of detection will be used as a conservative method to evaluate the employee's exposure to airborne asbestos.

$$TWA_{total} = \frac{(C1 \times T1) + (Cn \times Tn)}{480 \text{ minutes}}$$

Where:

TWA_{total} = TWA concentration across multiple samples presented in f/cc
C1 = Concentration of first sample presented in f/cc
Cn = Concentration of subsequent sample(s) presented in f/cc
T1 = Sample duration of first sample presented in minutes
Tn = Sample duration of subsequent sample(s) in minutes

Perimeter Air Monitoring

Although wet methods and dust control measures will be implemented during the abatement of the RACM during the project, asbestos has the potential to become airborne and migrate beyond the boundaries of a regulated area. As a result, a perimeter threshold for airborne asbestos will be established for the project and perimeter air sampling will be performed to evaluate asbestos concentrations to the established threshold. For the purposes of the project, a perimeter threshold of 0.01 f/cc will be utilized. The threshold is based on the final clearance concentration standard for re-occupancy of a building subsequent to the completion of asbestos abatement activities as set for in NAC 618.956. The perimeter air monitoring will be performed by the AAC.

Pre-construction air monitoring will be performed prior to the start of remediation activities at the Site. The pre-construction air monitoring will be performed to establish background airborne asbestos concentrations at the Site as well as confirm the perimeter threshold of 0.01 f/cc can be met. The pre-construction air monitoring will consist of setting up five air monitoring stations at the Site. The monitors will be placed throughout the Site and will focus on areas in which RACM has been identified. During pre-construction air monitoring, wind direction will be documented using an Ambient Weather WM-4 Handheld Weather Station (or similar). However, monitors will not be moved to reflect changes in wind directions that may occur during the air sampling. The pre-construction air monitoring will include the collection of a total of 15 samples over three days (i.e., five samples per day). The samples will be collected at a target flow rate of 2.5 LPM over an 8-hour period resulting in a total sample volume of 1,200 liters. Figure B-1 depicts the location of the pre-construction asbestos air monitoring locations.

Upon initiating asbestos abatement activities Site, construction perimeter air monitoring will be initiated. Operation of the air monitoring stations will commence daily and will coincide with the start and stop of the asbestos abatement activities. The construction perimeter air monitoring performed will include operating four monitoring stations around each regulated area (one on each side of the regulated area). The use of four air monitoring stations in this manner will allow representative data to be collected in the event wind directions shift during the workday. Monitors will not be moved to reflect changes in wind directions that may occur during daily operations. However, significant changes in wind direction or speed will be recorded during the collection of the construction air monitoring samples. Wind direction will be determined at the Site using an Ambient Weather WM-4 Handheld Weather Station (or similar). The monitors will be placed within five feet of the regulated area and at locations that attempt to accurately

evaluate airborne asbestos concentrations potentially generated by abatement activities at the Site. Figure B-2 depicts the locations of the perimeter air monitoring stations set up in response to a regulated area established around Illegal Dump #5. Perimeter air monitoring stations will be set up as work moves to other areas of the Site, and new regulated areas are established.

In addition to the air monitoring stations setup in the immediate vicinity of the regulated area, five additional air monitoring stations will be set up to the north and east of the Site. These additional air monitoring stations will be operated to further evaluate potential airborne asbestos concentrations at sensitive receptors (i.e., commercial businesses and housing) at the Site boundaries. The location of these five additional monitoring stations is not anticipated to change during the progression of the project. Figure B-2 also depicts the location of these monitoring stations.

The following procedures will be implemented during the collection of the perimeter air samples.

1) Low flow air pumps (Gilian BDX II or similar) will be utilized to collect perimeter air samples. The perimeter air samples will be collected at an anticipated flow rate of 2 to 3 LPM. The flow utilized will vary daily to accommodate changing work hours but allow a minimum total sample volume of 1,200 liters to be collected.

2) Each low flow air pump will be calibrated prior to use with a primary gas flow calibrator (Drycal) or rotameter in the same manner as outlined above.

3) Prior to connecting each sample cassette to the air pump, the air sample will be assigned a unique identification name.

4) One cassette will be used to collect the daily perimeter air sample at each monitoring location.

5) The sample cassette will be connected to the air pump using 0.25-inch flexible tubing. Each cassette will be secured and positioned open face downward, perpendicular to the wind, and approximately 5 feet above ground surface.

6) Upon completion of the air sampling, the cassettes will be closed and sealed with the factory provided base and plastic plugs.

7) The flow rate of the low flow air pump will be verified at the completion of the daily sampling activities. In the event that the flow rate changed by more than 5 percent during the sampling period, the average of the pre and post calibration rates will be used to calculate the total sample volume.

8) The lot blank and field blank samples collected as part of the personal monitoring activities will also be used for perimeter air monitoring activities.

9) The perimeter air samples will be delivered under chain-of-custody procedures to an accredited laboratory in the National Voluntary Laboratory Accreditation Program for the sample analysis outlined to follow. The samples will be analyzed by PCM per NIOSH Test Method 7400. If PCM data suggests the perimeter air threshold has been exceeded, the asbestos content of the sample(s) will be confirmed using TEM in accordance with NIOSH Test Method 7402. Samples will be submitted with a turn-around time that will not exceed 24 hours (weekends excluded).

Construction activities will be planned, managed, scheduled, and executed in a manner that attempts to ensure the perimeter monitoring threshold is not exceeded. Although not anticipated, in the event the perimeter monitoring threshold is exceeded, engineering, work practice, and administrative controls will be adjusted to further minimize the offsite migration of asbestos. These adjustments will be made by the ACP and AAC. Adjustments to these controls will be documented.

Bulk Material Sample Collection

A potential exists that additional suspect-ACM may be identified during the performance of the restoration activities at the Site. Suspect-ACM will be considered to be ACM/RACM unless it is evaluated and sampled by the AAC. Bulk material samples will be sealed in the appropriate sample container and assigned a discrete sample identification number. The bulk samples will be submitted under chain-of-custody procedures to an accredited laboratory in the National Voluntary Laboratory Accreditation Program for bulk asbestos fiber analysis.

Decontamination

The specific equipment decontamination procedures that will be conducted during the abatement of RACM at the Site are the following:

1) Personnel will dress in proper PPE to reduce personal exposure. Vacuums with high-efficiency particulate absorbing (HEPA) filters will be used to clean disposable PPE prior to removing. Any non-reusable PPE will be managed and disposed onsite with other RACM.

2) Personal equipment (shovels, trowels, rakes, etc.) will be cleaned using wet methods in the contaminant reduction zone. Wash water and waste generated during the cleaning will be containerized for disposal.

3) Heavy construction equipment decontamination will be conducted at the equipment decontamination pad prior to the equipment leaving the contaminant reduction area. The decontamination area will consist of a Washdown Quickberm® system (or equivalent). Decontamination wash water will be pumped from the collection area into a storage tank, which will be sampled and analyzed to determine appropriate offsite licensed disposal facility.

4) In the event a haul truck enters into a regulated area, the truck tires will be decontaminated in a constructed contaminated reduction zone. Impacted wash water will be collected and properly managed. Drivers entering the regulated area will have the appropriate level of asbestos training.

RACM Disposal

The section to follow presents the methods for disposing RACM generated during the abatement activities at the Site.

Onsite Disposal

ACM located within the three deep pits (Hydro, Hulin, and A-B) will be left in place. This approach is documented in a letter from Broadbent to SNHD dated August 23, 2022 and approved by SNHD in an e-mail dated August 29, 2022 (Broadbent, 2022e).

Offsite Disposal

The following general requirements apply for offsite disposal of RACM.

1) RACM will be transported offsite in accordance with a SNHD Permit and NDOT regulations to an appropriate disposal facility. At the time this Remedial Design Report was drafted, Republic Services and Western Elite are the closest landfills to the Site that are properly permitted to accept RACM. Republic Services landfill is located at 13550 North Highway 94 in Las Vegas, Nevada. Western Elite is located at US Highway 93, Mile Marker 8, in Lincoln County, Nevada.

2) RACM will be containerized in properly labeled leak tight containers (double bagged). In the event bins or haul trucks are utilized for direct loading of RACM, two layers of poly sheeting will be utilized to form a leak tight container. The load will be sealed using glue and rope to ensure the contents do not open during dumping at the disposal facility.

3) Loads will be properly labeled, manifested, and transported in accordance with applicable regulations.

APPENDIX C

Location of Deep Utilities

ENVIRONMENTALLY IMPACTED AREA BOUNDARY

PHASE 1
(PTM PARCELS 1-4)

PHASE 2
(PTM PARCELS 5-7)

ENVIRONMENTALLY IMPACTED AREA BOUNDARY

0 400 800
SCALE - 1"=400' FEET

PHASE 1
(PTM PARCELS 1-4)

PHASE 2
(PTM PARCELS 5-7)

LEGEND

- A — EAST WEST PARKWAY IN ENVIRONMENTALLY IMPACTED AREA, SEE DETAIL A, D-1 FOR EXCAVATION DETAIL (22')
- B — EAST STREET, SEE DETAIL B, D-1 FOR EXCAVATION DETAIL (18')
- C — CENTER STREET, SEE DETAIL C, D-1 FOR EXCAVATION DETAIL (12')
- D — IN TRACT STREET D, SEE DETAIL D, D-1 FOR EXCAVATION DETAIL (12')
- E — IN TRACT STREET EXTRA DEPTH 60"+ SD, SEE DETAIL E, D-1 FOR EXCAVATION DETAIL (15')
- F — UTILITY CORRIDOR IN ENVIRONMENTALLY IMPACTED AREA, SEE DETAIL F, D-1 FOR EXCAVATION DETAIL (VARIES)
- ENVIRONMENTALLY IMPACTED AREA

REMEDIAL GRADING NOTE

THIS PLAN SET DEPICTS PROPOSED FINISH GRADE DESIGN OVER EXISTING GROUND INCLUSIVE OF TAILING REMOVAL AND MILL SITE AREA SCRAPINGS (REMEDIAL GRADING).

EXISTING GROUND INFORMATION IS FROM AERIAL TOPOGRAPHY BY WALLACE MORRIS KLINE SURVEYING AND AEROTECH MAPPING INC, DATED NOVEMBER 21, 2021.

FOR REMEDIAL GRADING PLEASE REFER TO "REMEDIAL DESIGN TO IMPLEMENT CORRECTIVE ACTION PLAN-SOIL AND MINE WASTES THREE KIDS MINE" DATED NOVEMBER 22, 2023, PREPARED BY BROADBENT & ASSOCIATES FOR LAKEMOOR VENTURES, LLC. THE REMEDIAL GRADING IN THE AFOREMENTIONED REPORT TAKES PRECEDENCE OVER THE REMEDIAL CONTOURS DISPLAYED IN THIS PLAN.

GEOTECHNICAL ENGINEER INFORMATION PER "REMEDIAL DESIGN TO IMPLEMENT CORRECTIVE ACTION PLAN-SOIL AND MINE WASTES THREE KIDS MINE" DATED NOVEMBER 22, 2023, PREPARED BY BROADBENT & ASSOCIATES FOR LAKEMOOR VENTURES, LLC.

ENGINEER: CENTURION CONSULTANTS
DATE: AUGUST 19, 2022 (SEALED MARCH 8, 2023)
JOB NUMBER: 22004

COH PLAN APPROVAL STAMP

Westwood
Phone (702) 284-5300
5725 W. Badura Ave.
Suite 100
Las Vegas, NV 89118
westwoodps.com
Westwood Professional Services, Inc.

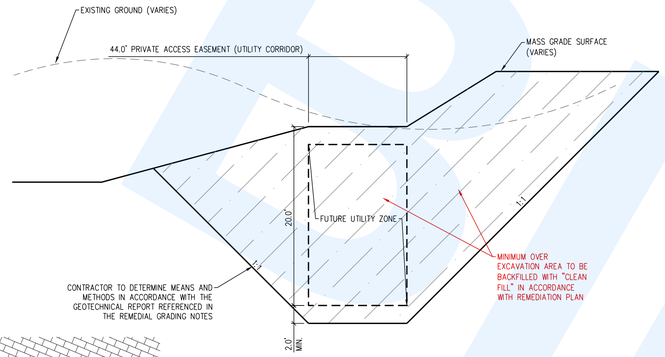
NO.	DESCRIPTION	DATE	BY	APP. DATE	APP.
1					

PN II, INC.

MASS GRADING PLANS FOR LAKEMOOR
EXCAVATION SHEET (FOR REFERENCE ONLY)

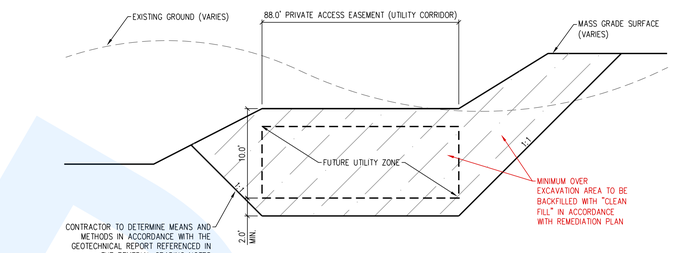
DATE: 1/9/24
DRAFTER: CB
DESIGNER: EE
CHECKED: MJ/DY
PROJECT NO.
PUL2401-000

X-1
SHEET 27 OF 32



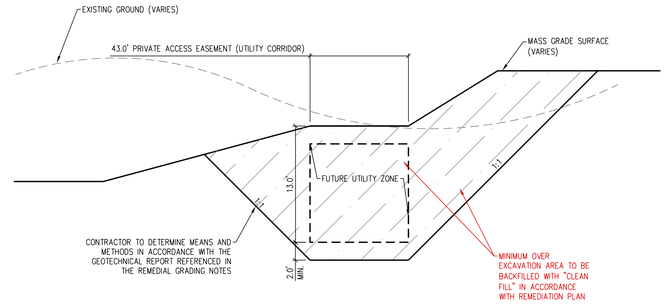
A. FUTURE EAST WEST PKWY (OVER EXCAVATION IN ENVIRONMENTALLY IMPACTED AREA)

NOT TO SCALE



C. FUTURE CENTER STREET (OVER EXCAVATION IN ENVIRONMENTALLY IMPACTED AREA)

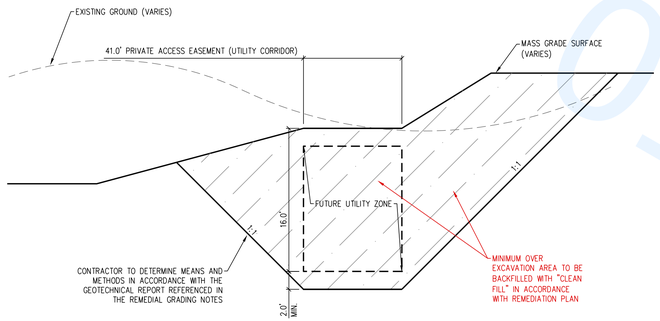
NOT TO SCALE



D. FUTURE IN TRACT STREET, EXTRA DEPTH (OVER EX. IN ENVIRONMENTALLY IMPACTED AREA)

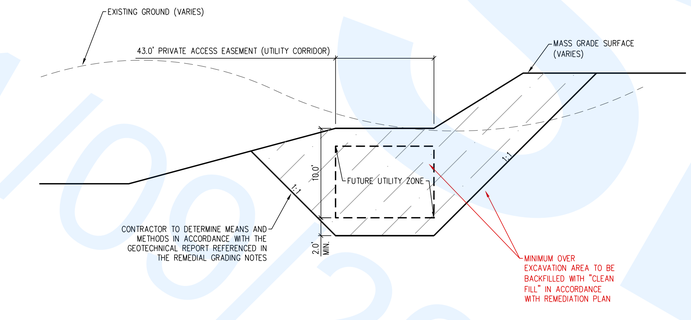
NOT TO SCALE

EXTRA DEPTH FOR 60'+ SD



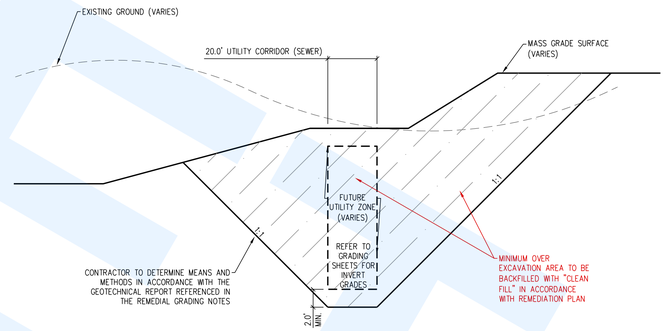
B. FUTURE EAST STREET (OVER EXCAVATION IN ENVIRONMENTALLY IMPACTED AREA)

NOT TO SCALE



D. FUTURE IN TRACT STREET (OVER EXCAVATION IN ENVIRONMENTALLY IMPACTED AREA)

NOT TO SCALE



E. SEWER CORRIDOR (OVER EXCAVATION IN ENVIRONMENTALLY IMPACTED AREA)

NOT TO SCALE

EXTRA DEPTH FOR 60'+ SD

REMEDIAL GRADING NOTE

THIS PLAN SET DEPICTS PROPOSED FINISH GRADE DESIGN OVER EXISTING GROUND INCLUSIVE OF TAILING REMOVAL AND MILL SITE AREA SCRAPINGS (REMEDIAL GRADING).

EXISTING GROUND INFORMATION IS FROM AERIAL TOPOGRAPHY BY WALLACE MORRIS KLINE SURVEYING AND AEROTECH MAPPING INC, DATED NOVEMBER 21, 2021.

FOR REMEDIAL GRADING PLEASE REFER TO "REMEDIAL DESIGN TO IMPLEMENT CORRECTIVE ACTION PLAN SOIL AND MINE WASTES THREE KIDS MINE" DATED NOVEMBER 22, 2023, PREPARED BY BROADBENT & ASSOCIATES FOR LAKEMOOR VENTURES, LLC. THE REMEDIAL GRADING IN THE AFOREMENTIONED REPORT TAKES PRECEDENCE OVER THE REMEDIAL CONTOURS DISPLAYED IN THIS PLAN.

GEOTECHNICAL ENGINEER INFORMATION PER "REMEDIAL DESIGN TO IMPLEMENT CORRECTIVE ACTION PLAN SOIL AND MINE WASTES THREE KIDS MINE" DATED NOVEMBER 22, 2023, PREPARED BY BROADBENT & ASSOCIATES FOR LAKEMOOR VENTURES, LLC.

ENGINEER: CENTURION CONSULTANTS
DATE: AUGUST 19, 2022 (SEALED MARCH 8, 2023)
JOB NUMBER: 22004

COH PLAN APPROVAL STAMP

Westwood
Phone (702) 284-5300
5725 W. Badura Ave.
Suite 100
Las Vegas, NV 89118
westwoodps.com
Westwood Professional Services, Inc.

NO.	DESCRIPTION	DATE	BY	APP. DATE	APP.
1					

PN II, INC.

MASS GRADING PLANS FOR LAKEMOOR

DETAIL SHEET 1

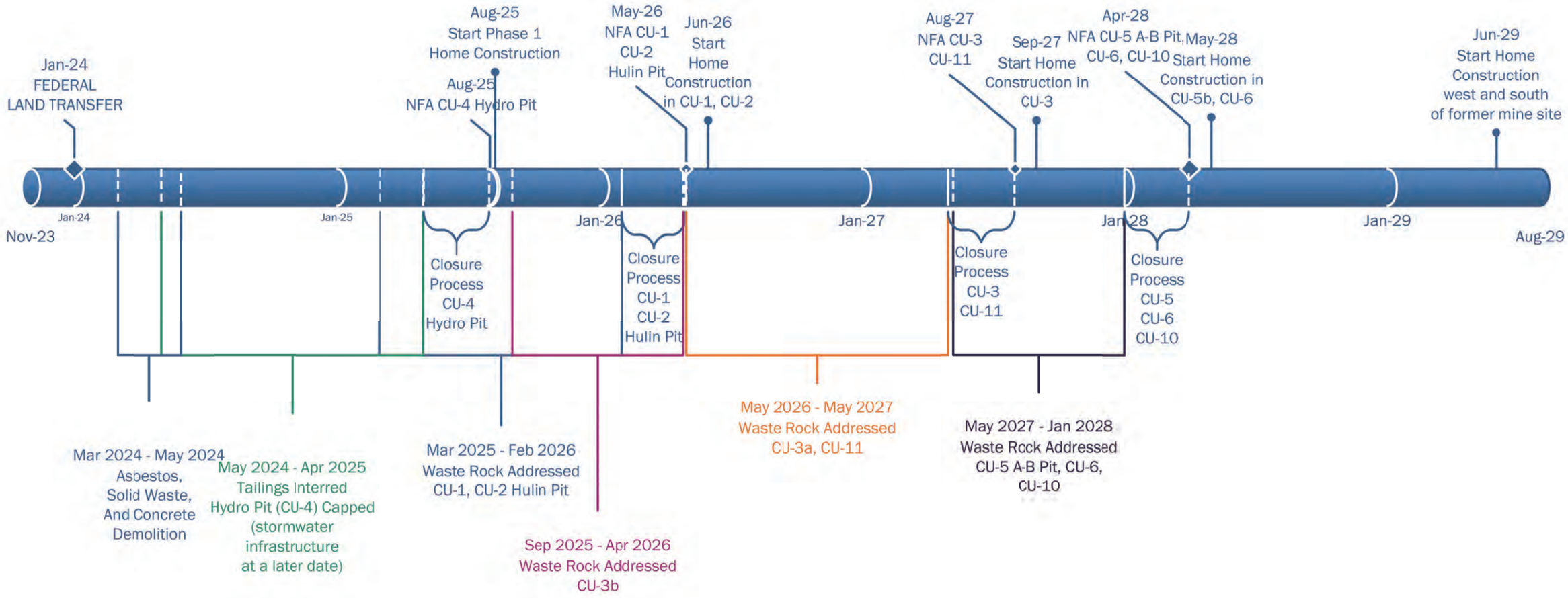
DATE: 1/9/24
DRAFTER: CB
DESIGNER: EE
CHECKED: MJ/DY
PROJECT NO.
PUL2401-000

D-1
SHEET 28 OF 32

J:\pul2401-000 lakemoor mass grading\dwg\civil\sheet set\mpros\pul2401-000 dtl.dwg 1/9/2024 3:19 PM Ed Esparza

APPENDIX D

Remedial Action Schedule



BROADBENT
8 West Pacific Avenue
Henderson, NV, 89015
(702) 563-0600 (P) * (702) 563-0610 (F)

Job # 14-01-156 Date: 11/30/2023

Notes:
1. Closure Units depicted in Figure 7.
2. CU-8 and CU-9 are not addressed in the Remedial Design or timeline and will be addressed at a later date.

Figure D-1

Closure Timeline

Three Kids Mine

Designed	
Drawn	JCM
Approved	