

**Riverside Contracting, Inc.
Opencut Permit #3415**

**Marvin Rehbein Site
Lake County, MT**

**January 2023
Draft Environmental Assessment**

Contents

COMPLIANCE WITH THE MONTANA ENVIRONMENTAL POLICY ACT	3
PROPOSED ACTION	3
PURPOSE AND NEED FOR PROPOSED ACTION.....	3
Table 1: Summary of activities proposed in application.....	4
SUMMARY OF POTENTIAL IMPACTS:.....	7
1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE	7
2. WATER QUALITY, QUANTITY, AND DISTRIBUTION	8
3. AIR QUALITY:.....	10
4. VEGETATION COVER, QUANTITY AND QUALITY:	11
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:	11
6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:.....	12
7. HISTORICAL AND ARCHAEOLOGICAL SITES:	16
8. AESTHETICS:	17
9. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:	17
10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES:	18
11. Human Health and Safety:.....	18
12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION:	18
13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:	19
14. LOCAL AND STATE TAX BASE AND TAX REVENUES:.....	19
15. DEMAND FOR GOVERNMENT SERVICES:	19
16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:.....	20
17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:	20
18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:	20
19. SOCIAL STRUCTURES AND MORES:.....	21
20. CULTURAL UNIQUENESS AND DIVERSITY:	21
21. PRIVATE PROPERTY IMPACTS:.....	22
22. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	22
PROPOSED ACTION ALTERNATIVES:	22
CUMULATIVE IMPACTS:	22
Public Involvement:	23
OTHER GOVERNMENTAL AGENCIES WITH JURSDICTION:	23
NEED FOR FURTHER ANALYSIS AND SIGNIFICANCE OF POTENTIAL IMPACTS.....	24
References.....	26
Figure 1-Site Map	27
Figure 2-Area Map.....	28
Figure 3-Reclamation Map	29
Figure 4-Location Map	30

Montana Department of Environmental Quality
Air, Energy, & Mining Division
Mining Bureau
ENVIRONMENTAL ASSESSMENT

OPERATOR NAME: Riverside Contracting, Inc.
Draft EA DATE: January 2023
SITE NAME: Marvin Rehbein
OPENCUT NUMBER: 3415
AMENDMENT: 0
LOCATION: 47.185401 -114.070316 **COUNTY:** Lake
PROPERTY OWNERSHIP: FEDERAL STATE PRIVATE

COMPLIANCE WITH THE MONTANA ENVIRONMENTAL POLICY ACT

Under the Montana Environmental Policy Act (MEPA), Montana agencies are required to prepare an environmental review for state actions that may have an impact on the human environment. The proposed action is considered to be a state action that may have an impact on the human environment and, therefore, the Department of Environmental Quality (DEQ) must prepare an environmental review. This environmental assessment (EA) will examine the proposed action and alternatives to the proposed action and disclose potential impacts that may result from the proposed and alternative actions. DEQ will determine the need for additional environmental review based on consideration of the criteria set forth in Administrative Rules of Montana (ARM) 17.4.608.

PROPOSED ACTION

DEQ would issue Opencut Permit OC#3415 (permit) to Riverside Contracting, Inc. (Applicant) if DEQ has determined that the Riverside Contracting, Inc. has met the criteria set forth in 82-4-432, Montana Code Annotated (MCA). If approved, the permit to conduct mining activities would be granted until December of 2047. The application for OC#3415 was submitted on April 7, 2022. The applicant has revised and resolved outstanding deficiencies regarding their application, and addressed all of the deficiencies on December 6, 2022.

PURPOSE AND NEED FOR PROPOSED ACTION

DEQ's purpose and need in conducting this environmental review is to act upon the Riverside Contracting, Inc.'s application for a Standard permit to conduct in compliance with the Opencut Mining Act (OCA). Pursuant to 82-4-432, MCA, the application for a permit (the Applicant's Proposed Action) was determined to be acceptable on December 6, 2022.

Table 1: Summary of activities proposed in application.

Summary of Proposed Activities in Application	
General Overview	<p>The applicant proposes to mine, screen, crush, stockpile and transport 1,000,000 cubic yards of gravel and borrow material from a 157.1-acre site located approximately 1.45 miles northeast of Arlee, MT. The site would be on private property. The gravel would be mined to a maximum depth of 12 feet. A crusher, pug mill and asphalt plant would be used on site during the operation. All equipment could be moved on and off the site as needed. Final reclamation would be completed by December 2047.</p> <p>At the conclusion of mining, the site would be reclaimed to ‘cropland/farmland, rangeland and/or pasture.’ A landowner material stockpile would be left in the northwest corner of the site.</p> <p>The Applicant would be eligible for Phase I Release after ripping/deep-tilling and disking areas within the proposed permit area that are affected by compaction, restoring slopes to a 5:1 or flatter slope, replacing salvaged soil, and seeding the site. The site would be eligible for Phase II Release after two full growing seasons have passed and after the site is reclaimed to Phase I Release standards, and vegetation is well established. Phase I and Phase II reclamation requirements are required to be met prior to the December 2047 reclamation date stated in the application. The Applicant may file to extend the final reclamation date if the applicant wishes to continue to mine the site.</p> <p>This site was previously permitted under Opencut Permit #1569 in November of 2001. The site was never mined, however, before Opencut Permit #1569 expired in November 2010.</p>
Proposed Dimensions	
Total permitted acreage	157.1 acres with 1,000 feet of highwall that would be 12 feet tall.
Facilities and surface disturbances	Existing landowner disturbance associated with agricultural and ranch use is located in the northwest corner of the permit area.
Specific Proposed Activities	
Duration and timing	<p>Start Date: Start date is defined as the date on which DEQ issues the Opencut Permit. §§ 82-4-432(10)(c), (14)(d), MCA.</p> <p>Final Reclamation Date: December 2047</p> <p>Final reclamation date is defined as the date that the applicant identifies in the application for a permit.</p> <p>The Applicant has not proposed any specific hours of operation, so this environmental review is analyzing the effects of operations taking place for 24 hours per day and 7 days per week.</p> <p>Upon final reclamation, the site would be reclaimed to ‘cropland/farmland, rangeland and/or pasture.’ A landowner material stockpile would be left in the northwestern corner of the site following reclamation. The landowner stockpile must be accessible by road and have an adequate accompanying soil stockpile to reclaim the area. The soil stockpile must be located within 100 feet of the landowner material stockpile. Additionally, landowner material stockpiles must be consolidated into one area.</p> <p>Phase I and Phase II reclamation requirements are required to be met prior to the December 2047 reclamation date stated in the application. The Applicant may file to extend the final reclamation date if the Applicant wishes to continue to mine the site.</p>
Equipment	<p>Typical opencut excavating/hauling equipment includes a backhoe, bulldozer, dump/haul truck, excavator, loader, scraper, and skidsteer. Typical opencut processing equipment includes an asphalt plant, concrete plant, crusher, grizzly, pug mill, screen, and wash plant. Processing equipment may be stationary or mobile (moves with the highwall as mining progresses across the site). Equipment could also be moved on and off the site as needed by the Applicant.</p>

Location and Analysis Area	<p>Location: 47.185401 -114.070316</p> <p>Distance from nearest town/city: Approximately 1.45 miles northeast of Arlee, MT.</p> <p>Analysis Area: The area being analyzed as part of this environmental review includes the immediate project area as well as neighboring lands surrounding the analysis area, as appropriate for the impacts being considered. Refer to Location Map below.</p>
Structures	No new structures are proposed for this project. Existing structures on site include farming equipment, fences, irrigation pivot, and waterline feeding irrigation.
Project Water Source	The water source for the proposed project would be obtained from a source that would be greater than 300 feet from the permit area. Water would be stored on site in a water storage tank near the northwestern corner of the proposed permit boundary.
Supplemental Lighting	To comply with MSHA regulations, artificial light sources would be used on site during periods of operations when no sunlight is available.
Air Quality	Water would be used to control dust at the site. Applicable air quality permits for equipment would also be obtained prior to commencement of mining activities. The applicant is required to comply with the applicable local, county, state, and federal requirements pertaining to air quality.
Water Quality	A 50-foot buffer from the irrigation canal that is along the southern boundary of the proposed permit area would be maintained. No mining activities, including soil stockpiling, would take place within the buffer. The applicant is required to comply with the applicable local, county, state, and federal requirements pertaining to water quality.
Erosion Control and Sediment Transport	<p>Several Best Management Practices (BMPs) would be in place for the duration of mining. Soil would be bermed along the western edge of the proposed permit boundary for soil storage, creating a visual/noise buffer. All available soils on site would be salvaged for reclamation. At the first seasonal opportunity, the Applicant would be required to shape and seed any soil stockpiles that would remain in place for two years with an approved perennial seed mix.</p> <p>Additionally, the Applicant has proposed to use seeding/harrowing along the contour and slopes of 5:1 or flatter as two different types of erosion control BMPs. The applicant is required to comply with the applicable local, county, state, and federal requirements pertaining to erosion control and sediment transport.</p>
Solid Waste	Any solid waste generated would periodically be removed from the proposed site. The applicant is required to comply with the applicable local, county, state, and federal requirements pertaining to solid waste.
Cultural Resources	The applicant has not proposed any actions that would reduce any potential impacts to cultural resources. The applicant is required to comply with the applicable local, county, state, and federal requirements pertaining to cultural resources.
Aesthetics	There would be a temporary alteration of aesthetics while mining is under way.
Hazardous Substances	Fuel storage would be present in the northwest corner of the site according to the Site Map submitted by the Applicant. The Applicant proposed to store up to 250 cubic yards of salt. Salt would be located on an asphalt pad and covered with a tarp. Salt storage would also take place in the northwest corner of the site. Asphalt Plant production materials would also be stored on site. The applicant is required to comply with the applicable local, county, state, and federal requirements pertaining to hazardous substances.
Weed Control	Noxious weeds are required to be controlled on site at all times throughout the life of the permit.
Operation Requirements	The proposed opencut operation would need to comply with the Act and Rules governing permitted opencut operations. The activities proposed by the Applicant may be subject to additional regulatory oversight and operating conditions at federal, state, county, and/or local levels. The proposed activities examined in this EA do not necessarily meet operational or regulatory requirements beyond those set forth in the Act and Rules.

Reclamation Plans	<p>Upon commencement of mining, 12 inches of soil would be stockpiled along the western proposed permit boundary, within the bonded area, for reclamation purposes.</p> <p>Upon final reclamation, 12 inches of soil would be replaced in areas that have been affected by mining and mining related activities. The site would be reclaimed to ‘Cropland/Farmland, Rangeland and/or Pasture’ and a landowner material stockpile area as listed in the application. A crop type would be selected by the Landowner at the time of reclamation.</p> <p>The Applicant would be eligible for Phase I Release after ripping/deep-tilling and disking areas within the proposed permit area that are affected by compaction, restoring slopes to a 5:1 or flatter slope, replacing soil and seeding the site. The site would be eligible for Phase II Release after two full growing seasons have passed after the site is reclaimed to Phase I Release standards, and vegetation is well established. Phase I and Phase II reclamation requirements are required to be met prior to the December 2047 reclamation date stated in the application. The Applicant may also file to extend the final reclamation date if the Applicant wishes to continue to mine the site.</p>
-------------------	--

SUMMARY OF POTENTIAL IMPACTS:

The impact analysis will identify and estimate whether the impacts are direct or secondary impacts. Direct impacts occur at the same time and place as the action that causes the impact. Secondary impacts are a further impact to the human environment that may be stimulated, or induced by, or otherwise result from a direct impact of the action ((ARM) 17.4.603(18)). Where impacts would occur, the impacts analysis will also estimate the duration and intensity of the impact. The duration is defined as follows:

- Short-term: Short-term impacts are defined as those impacts that would not last longer than the life of the project, including final reclamation.
- Long-term: Long-term impacts are impacts that would remain or occur following project completion.

The intensity of the impact is measured using the following:

- No impact: There would be no change from current conditions.
- Negligible: An adverse or beneficial effect would occur but would be at the lowest levels of detection.
- Minor: The effect would be noticeable but would be relatively small and would not affect the function or integrity of the resource.
- Moderate: The effect would be easily identifiable and would change the function or integrity of the resource.
- Major: The effect would alter the resource.

1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE

Are soils present, which are fragile, erosive, susceptible to compaction, or unstable? Are there unusual or unstable geologic features? Are there special reclamation considerations?

The Applicant proposes to mine 1,000,000 cubic yards of material from a 157.1-acre site located on private land within the boundaries of the Flathead Reservation, northeast of Arlee, MT. The site is situated on a level agricultural field gently sloping up to the east in the direction of the foothills of the Mission Mountains that is primarily composed of glacial outwash ([MBMG](#), Nov. 2022). The onsite soils mapped by the Natural Resources Conservation Service (NRCS) consist of predominately Jocko gravelly loam with Walstead gravelly loam and McCollum fine sandy loams occurring in the northeast corner of the site ([NRCS](#), Nov.2022). This area receives 14 to 22 inches of precipitation per year and is located at approximately 3,050 feet above mean sea level ([WSS](#), Nov.2022). As part of reclamation, the Applicant would replace 12 inches of soil as stated in the permit application.

Direct Impacts: An irreversible and irretrievable removal of opencut materials from the site would occur, up to 1,000,000 cubic yards, as stated in the permit. A small impact to the quantity and quality of soils from salvaging, stockpiling, and resoiling activities also would occur, but this would not impair the capacity of the soils to support final reclamation of the site. There are no unusual or fragile topographic, geologic, soil, or special reclamation considerations that would prevent reclamation success, nor are there any such features of statewide or societal importance present.

The information provided above is based on the information that DEQ had available at the time of completing this EA. Available information was obtained from the permit application, site inspections analysis of aerial photography, topographic maps, geologic maps, soil maps, and other research tools listed in the reference section below. Based on this information, DEQ does not anticipate an impact to geology and soil quality, stability and moisture. No unusual or unstable geologic features are present, and no fragile or particularly erosive or unstable soils are present.

Impacts to topography would be minor and long-term.

Secondary Impacts: No secondary impacts to topography, geology, soil quality, stability, and moisture would be expected. Several Best Management Practices (BMPs) would be in place for the duration of mining. Soil would be bermed along the western edge of the proposed permit boundary for soil storage, creating a visual/noise buffer. During reclamation, seeding/harrowing along the contour and slopes of 5:1 or flatter as two different types of erosion control Best Management Practices (BMPs)

2. WATER QUALITY, QUANTITY, AND DISTRIBUTION

Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?

Public comments received by DEQ and historic maps of the area show Pellew Creek as running, entering near the center of the eastern proposed permit boundary and exiting along the proposed northern boundary on the east side of the landowner residence. There is no evidence, however, that Pellew Creek currently conveys surface water through the site. A site inspection revealed no signs of a defined channel or drainage feature.

Prior to submitting the application, the Applicant is required to provide one soil test hole per each three-acre area for proposed permit areas of nine acres or more, with a maximum of 20 representatively spaced soil test holes for permit areas that exceed 60 acres. The applicant did not encounter ground water or surface water in any of the 20 soil test holes. Several of these soil test holes were located in the vicinity of the mapped Pellew Creek, with no ground water or surface water intersected during excavation. Based on wells located in the surrounding area and information provided by the applicant in the *Depth to Determining Groundwater Worksheet*, the average static water level is 72 feet -78 feet.

Water would be obtained from a source greater than 300 feet from the permit boundary, most likely purchased from a local source near the project area. Water would be used on site for dust control, operation of a crusher, asphalt plant production and operation of a pug mill. Water on site would be stored in a water storage tank as indicated in the permit application. Overall, the site is situated in a dry location and disturbance would occur above groundwater and not impact surface water features at the static water levels in several wells located within the surrounding area is 72 feet -78 feet. The Applicant proposed to store up to 250 cubic yards of salt. Salt would be located on an asphalt pad and covered with a tarp. Salt storage would also take place in the northwest corner of the site. Asphalt plant production materials would also be stored on site. In

accordance with the proposed permit application, a maximum of 1,500 cubic yards of asphalt can be located onsite, near the asphalt plant, which would be in the northwest corner of the site according to the Site Map submitted by the applicant. Asphalt that could be imported would not be buried or disposed of on-site. During the final reclamation process, on-site asphalt stockpiles would be removed from the site and disposed of in a lawful manner or recycled into useful products which are removed from the site.

The site would contain and infiltrate precipitation until final reclamation when the land surface would be resoiled, revegetated and graded to slopes of 5:1 or flatter. A run-off collection area at the lowest topographical point of the reclaimed site would remain, but would be less than ½ acre in size. Soil would be bermed along the western edge of the proposed permit boundary for soil storage, creating a visual/noise buffer. All available soils on site would be salvaged for reclamation. At the first seasonal opportunity, the Applicant would be required to shape and seed any soil stockpiles that would remain in place for two years with an approved perennial seed mix.

Additionally, the Applicant proposed to use seeding/harrowing along the contour and slopes of 5:1 or flatter as two different types of erosion control Best Management Practices (BMPs).

A 50-foot buffer from the irrigation canal that is along the southern boundary of the proposed permit area would be maintained. No mining activities, including soil stockpiling, would take place within the buffer.

Direct Impacts: The information provided above is based on the information that DEQ had available to it at the time of completing this EA. Sources include the permit application, analysis of aerial photography, topographic maps, site inspections, documentation from the Class III Archeological survey, USGS StreamStats and a DEQ staff hydrologist. Based on this information, DEQ does not anticipate an impact to surface water or groundwater quality or quantity and distribution management.

During the beginning stages of mining, surface water that may leave the site during a heavy storm event could carry sediment. A run-off collection area at the lowest topographical point of the reclaimed site would remain, but would be less than ½ acre in size. The applicant proposes to mine the site, by creating a depression. This depression would cause runoff to drain internally into the site. Precipitation and surface water runoff leaving the site, however, would generally be expected to infiltrate into the subsurface. The nearest surface water is located approximately 15 feet south of the southern proposed permit boundary in the form of an irrigation ditch/canal. The Applicant stated in the proposed application that a 50-foot buffer would be maintained from all mining activities, including soil stockpiling, and the canal located along the southern proposed permit boundary. Because of the 50-foot buffer, runoff carrying sediment is not expected to reach the irrigation ditch/canal.

The Applicant would be required to obtain all other necessary permits to comply with any other applicable federal, state, county or local regulations, or ordinances and permits, licenses, and approval for the operation. Permits from within other DEQ sections such as the DEQ Water

Protection Bureau may be required. Any impacts to the surface water would be short-term and would be negligible as a result of the proposed action.

Secondary Impacts: No secondary impacts to water quality, quantity and distribution would be expected.

Opencut laws do not regulate water quality or quantity. However, Applicants are required to comply with all laws relating to water, such as the federal Clean Water Act and the Montana Clean Water Act, and to obtain all required permits, such as an MPDES permit. It is anticipated that the proposed opencut operation would have a negligible impact on water quality and water quantity.

3. AIR QUALITY:

Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?

Opencut laws do not regulate air quality, however, Applicants are separately required to comply with all laws relating to air, such as the federal Clean Air Act and the Montana Clean Air Act, and to obtain all required air quality permits, such as a permit from DEQ Air Resources Management Bureau. It is anticipated that the proposed opencut operation would have a negligible impact on air quality.

Public Comments provided to DEQ during a Tribal Council meeting with the Confederated Salish and Kootenai Tribes indicated that the area within the boundary of the Flathead Reservation is considered a Class I airshed ([USEPA](#), Dec. 2022).

Air quality permits would typically be required for processing equipment before installation. Machinery, such as generators, crushers, and asphalt plants are individually permitted for allowable emissions. Best Available Control Technology (BACT) is the usual standard applied. In accordance with air quality standards set forth in the Administrative Rules of Montana 17.8.1806, asphalt plants are not allowed to have an opacity greater than 10%, nor are they allowed to emit particulate matter in quantities greater than 0.04 grains per dry standard cubic foot.

Direct Impacts: Fugitive dust may emanate from the pit floor, soil stockpiles, and gravel roads used for access. Fugitive dust is considered to be a nuisance. Dust impacts would be mitigated by the revegetation of soil stockpiles, and the use of water to control dust emanating from mined areas. Water would be used to control dust on site. Minor impacts to air quality, including odor, could be expected with the proposed action due to an asphalt facility emitting a limited amounts of air pollutants per ARM 17.8.1815.

Any impacts to the air would be short-term and would be negligible as a result of the proposed permit application based on commitments and certifications made by the Applicant in the application.

Secondary Impacts: Negligible impacts from asphalt plants could be expected with the proposed

action in the event of an equipment malfunction.

4. VEGETATION COVER, QUANTITY AND QUALITY:

Will vegetative communities be significantly impacted? Are any rare plants or cover types present?

There are no known rare or sensitive plants or cover types present within the proposed permit boundary. No known fragile or unique resources or values, or resources of statewide or societal importance, are present within the proposed permit boundary. The proposed permit area has been a cultivated crop field for many years, therefore the likelihood of the presence of rare plants or cover types is low.

Onsite vegetation consists of hay crop type based on documentation provided in the class III archeological survey and observations made with aerial photography of the area. Cheatgrass and common mullein were also identified on site. Public comments indicated that spotted knapweed and hounds tongue occur in the area of the proposed operation, but none were identified within the proposed permit boundary during a site inspection. The estimated cover in undisturbed areas provides approximately 80% to 90% cover as estimated from aerial photography and by observations made during the site inspection.

Existing vegetation would be removed as 12 inches of soil is stripped and salvaged. The site would be replanted with a cropland seed mix designated by the Landowner at the time of reclamation. The post mining land use for this site would be ‘cropland/farmland, rangeland and/or pasture’ with slopes restored to 5:1 or flatter.

Additionally, the applicant is required to submit notification to the weed board in the county or counties in which the proposed opencut operation is located.

Direct Impacts: Based on information included in the permit application, class III archeological survey, site inspections and analysis of aerial photography in the DEQ Opencut Web Mapping Application, DEQ does not anticipate an impact to rare plant vegetation cover, quantity and quality.

The Applicant would be required to control weeds throughout the project area during the life of the permit.

Secondary Impacts: Land disturbance at the site may result in propagation of noxious weeds. Noxious weeds would be required to be controlled throughout the life of the permit. Final release of the site and permit termination would not happen if noxious weeds were not controlled at the site. Soil stockpiles that would remain in place for more than two years are required to be seeded at the first seasonal availability. Any surface disturbances would be reclaimed and seeded with an appropriate seed mix. If the Permit were approved, weed control during and after mining would be a requirement.

5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Is there substantial use of the area by important wildlife, birds or fish?

Although the proposed permit area is used primarily as cropland, based on available

information, it also likely could support individual members of populations of black bear, coyotes, deer, fox, raptors, rodents, and song birds. Additionally, public comments noted populations of sandhill cranes, elk, grizzly bear and wolves in the area as well. Population numbers for species listed in this section are not known.

Direct Impacts: The proposed mine could temporarily displace some individual members of species and it is likely that the site could be re-inhabited following reclamation to 'cropland/farmland, rangeland and/or pasture' with slopes restored to 5:1 or flatter as listed in the proposed permit application. Any displaced animals could find other suitable habitat nearby and return to the project area shortly after the project conclusion. Although some wildlife and wildlife habitat may be impacted until the project disturbance is reclaimed, ample non-developed land exists around the proposed site for the temporarily displaced animals. Impacts to biota and habitats, which are resources of significant statewide and societal importance, would be temporary and negligible.

Secondary Impacts: No secondary impacts to terrestrial, avian and aquatic life and habitats stimulated or induced by the direct impacts analyzed above would be expected.

6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern? Are there sage grouse core, general, or connectivity habitats present?

The proposed project would not be in core, general or connectivity sage grouse habitat, as designated by the Sage Grouse Habitat Conservation Program (Program) at: <http://sagegrouse.mt.gov>. Impacts to sage grouse, including cumulative impacts, would not be significant.

The Montana Natural Heritage Program (MNHP) lists the following 20 species of concern in the vicinity of the site:

Bull trout (*Salvelinus confluentus*) is a threatened species of fish that can be found in the Clark Fork and Flathead drainages of western Montana. Sub-adult and adult fluvial bull trout reside in larger streams and rivers and spawn in smaller tributary streams, whereas adfluvial bull trout reside in lakes and spawn in tributaries. Bull trout can grow to lengths of 37 inches and weights of 20+ pounds.

Westslope Cutthroat Trout (*Oncorhynchus clarkia lewisi*) One of two subspecies of native cutthroat found in the state of Montana. Westslope Cutthroat Trout are common in both headwaterslake and stream environments. They feed primarily on aquatic insect life and zooplankton. Cutthroat spawn in the spring in running water, burying their eggs in a nest called a redd. The eggs hatch in a few weeks to a couple of months. The newborn fry frequently migrate back to lakes to rear after 1 to 2 years in their native stream. Westslope Cutthroat Trout is a trout with small, non-rounded spots, with few spots on the anterior body below the lateral line. Coloration varies, but generally is silver with yellowish hints, though bright yellow, orange, and

especially red colors can be expressed to a great extent.

Lewis's woodpecker (*Melanerpes lewis*) is a medium sized woodpecker, approximately 10 to 11 inches in length. Lewis's woodpeckers are quieter than other woodpeckers as they usually only call during the breeding season. Important habitat features include an open tree canopy, a brushy understory with ground cover, dead trees for nest cavities, dead or downed woody debris, perch sites and abundant insects.

Long-legged Myotis (*Myotis Volans*) Similar in appearance to the Little Brown Myotis, but is slightly larger, fur extends from the ventral surface to the elbow on the wing undersurface, and the calcar is keeled. Wingspan is 10-12 inches (25-30 centimeters) and weight ranges from 0.2-0.3 ounces (6-9 grams) (Adams 2003). Occurs mostly in forested mountain regions and river bottoms, also at high elevations. Summer day roosts include trees, rock crevices, fissures in stream banks, abandoned buildings. Hibernacula include caves and mines.

Fringed Myotis (*Myotis thysanodes*) is a bat that is distinguished by well-developed fringe of hairs on the posterior margin of the uropatagium. The bats habitat consists of desert shrublands, sagebrush-grassland, and woodland habitats. The bats primary food source is moths, but it also eats other smaller insects.

Great Blue Heron (*Ardea herodias*) is the largest heron in North America, 60 cm tall and 97 to 135 cm long. Its upper parts are gray, and the fore-neck is streaked with white, black, and rust-brown. Great Blue Herons breed from southern Alaska southeast across central Canada to Nova Scotia and south to Guatemala, Belize, and the Galapagos Islands. Most Montana nesting colonies are in cottonwoods along major rivers and lakes; a smaller number occur in riparian ponderosa pines and on islands in prairie wetlands. Great Blue Herons eat mostly fish but also amphibians, invertebrates, reptiles, mammals, and birds. Disturbance by humans and loss of protected colony sites are major threats.

Clark's Nutcracker (*Nucifraga columbiana*) is a jay-sized corvid that is crowlike in build and flight, with moderate sexual size dimorphism. Total length of adults 27.0 to 30.1 cm. Mass 106 to 161 g. Males slightly larger than females. Sexes similar in appearance. Light to medium gray, with varying amounts of white around eyes, on forehead, and on chin; white around vent and at base of tail; wings and tail glossy black; secondaries broadly tipped with white forming a white patch; outer rectrices white. Folded wings nearly reach tip of tail. Long, pointed, black bill with short nasal bristles. Distinctive grating call audible at great distance (Tomback 1998).

Bald eagle (*Haliaeetus leucocephalus*) is a bird of prey found in North America that is most recognizable as the national bird and symbol of the United States of America. This sea eagle has two known sub-species and forms a species pair with the white-tailed eagle. Its range includes most of Canada and Alaska, all of the contiguous United States and northern Mexico. It is found near large bodies of open water with an abundant food supply and old-growth trees for nesting.

Cassin's Finch (*Carpodacus cassinii*) is the largest of the North American *Carpodacus* finches. Adult males have rose-red coloration on the head throat and upper breast, the crown is bright pinkish-red contrasting with the paler nape and back. Females have an overall brownish

plumage. Cassin's finches are short-distance elevational or latitudinal migrants in some parts of their range, the movements somewhat irregular and possibly dependent on food supply. Cassin's finches occur in every major forest type and timber-harvest regime in Montana, including riparian cottonwood, but are especially common in ponderosa pine and postfire forests; they occur less often in lodgepole pine, sagebrush, and grassland. Foods include seeds, especially of grasses, composites, conifers, alders, and birches, as well as buds, leaves, and invertebrates. In general a single-brooded species has 4 to 5 eggs per clutch, with an incubation period of 12 to 14 days.

Long-eared Myotis (*Myotis evotis*) Ears are black and the longest of any other North American bat in the genus *Myotis*; > 0.84 inches (>21 millimeters). When bent forward, ears extend > 5 millimeters beyond the tip of the nose. Wingspan of 10-12 inches (25-30 centimeters) and weighs 0.2-0.3 inches (5-8 grams). Coat color is dull brown to straw-colored with individual hairs black at the base (Adams 2003). Occupy a wide range of rocky and forested habitats over a broad elevation gradient (Jones et al. 1973). Summer day roosts include abandoned buildings, bridges, hollow trees, stumps, under loose bark, and rock fissures. Hibernacula include caves and abandoned mines. The species has been located hibernating in a mine in riverbreaks habitat in northeastern Montana (Swenson and Shanks 1979).

Pacific Wren (*Troglodytes pacificus*) The Pacific Wren is a small dark wren with a short stubby tail typically held in an upright and cocked position, and with a short slender bill. In Montana they are especially common in cedar-hemlock, cedar-grand fir, and spruce-fir forests and are strongly associated with riparian areas within these forest types. Nesting and foraging typically occur within 2 m (6.5 feet) of the ground.

Varied Thrush (*Ixoreus naevius*) is a large, brightly colored thrush. Adult male has a burnt-orange breast and throat, gray to gray-blue rump, back, neck, and crown, a black to slate-gray V-shaped breast band, orange-buffy eyebrow and wing bars, and black to slate-gray wing and tail feathers. Female coloring is similar but duller overall. The Varied Thrush breeds primarily in mature and old-growth mixed-coniferous forests of western Montana. This species is a short distance, partial migrant, but can travel widely. They forage primarily on the ground for arthropods, unless foraging for fruits and berries. Loss of suitable breeding habitat due to forestry practices, insect outbreaks, and wildfires reduce breeding populations.

Little Brown Myotis (*Myotis lucifugus*), also known as Little Brown Bat, has a cinnamon-buff to dark brown color above, and buffy to pale gray below. This species is resident year-round in Montana, but may be partially migratory because known winter aggregations are much smaller than the apparent size of summer populations. They are found in a variety of habitats across a large elevation gradient. They commonly forage over water and mostly feed on insects. They roost in attics, barns, bridges, snags, loose bark, and bat houses. These bats can live more than 30 years. Females have one young per year.

Great Gray Owl (*Strix nebulosa*) are the largest owl species in North America. They have a wingspan over 4 feet with a body length of up to 27 inches. They can weigh over 2 pounds. Great Gray Owls have a large, rounded, half-domed head with a flat face and no ear tufts. Their eyes are yellow, but look rather small due to the ringed facial disks. The bill is mostly yellow

with a black patch below separating white lores that give Great Gray Owls their classic bow-tied appearance, and the plumage is mostly gray with patches of whites and browns. They are a resident species in Montana, both during the breeding season and in winter. Great Gray Owls are known to use lodgepole pine/Douglas-fir for habitat in Montana. They usually forage in open areas where scattered trees or forest margins provide suitable sites for visual searching. Small mammals, especially rodents (i.e. voles) are the dominant prey.

Wolverine (*Gulo gulo*) is a bear-like mustelid with massive limbs and long, dense, dark brown pelage, paler on the head, with two broad yellowish stripes extending from the shoulders and joining on the rump. Wolverines are limited to alpine tundra, and boreal and mountain forests in the western mountains. They feed on a variety of roots, berries, small mammals, birds' eggs and young, fledglings, and fish. They may attack moose, caribou, and deer hampered by deep snow.

Grizzly Bears (*Ursus arctos*) have a massive head with a prominent nose, rounded inconspicuous ears, small eyes, short tail and a large, powerful body. The facial profile is concave and there is a noticeable hump above the shoulders. The claws on the front feet of adults are about 4 inches long and slightly curved. They vary in color, though the most prevalent coloration in Montana is medium to dark brown underfur, with light to medium grizzling on the head and back. Adult males can weigh around 200 kilograms, and adult females can weigh 130 kilograms. Grizzly bears often exhibit discrete elevational movements from spring to fall. They primarily use meadows, seeps, riparian zones, mixed shrub fields, closed timber, open timber, sidehill parks, snow chutes, and alpine slabrock habitats. Historically, the Grizzly Bear was primarily a plains species occurring in higher densities throughout most of eastern Montana.

Fisher (*Martes pennanti*) is a medium-sized mammal with a long, low stocky body and relatively long and heavily furred tail. The fisher occupies dense coniferous or mixed forests and tends to reside in tree hollows, under logs, in ground or rocky crevices or in the branches of conifers. The fisher's diet consists of small mammals, birds and fruit.

Western Pearlshell (*Margaritifera falcata*) is Montana's only cold water trout stream mussel, and the only native mussel found on the west-side of the state. The shell of *M. falcata* is elongate, compressed, dark colored, and slightly concave on the ventral edge, oftentimes erosion marks are prominent on the umbo region. The normal size is 50 to 85 mm with larger older specimens surpassing 10 cm. Sedentary as adults, they rarely move more than a few meters. As larvae (glochidia on the fish gills), they use their fish host for dispersal upstream or downstream to other suitable habitats. The species is found in cool and cold running streams that generally have a low to moderate gradient and are wider than 2 m; preferable habitat is stable sand or gravel substrates. Freshwater mussels are mostly filter-feeders, siphoning in floating particulate organic materials (small plant or animal) from the water column and straining out the particles and expel the strained water. Eutrophication due to agricultural runoff and siltation from improper agricultural practices are typical problems for many of the rivers in this species' range; impoundments and diversions are also continued threats.

The MNHP also identified that the following important Animal Habitat:

Bat Roost (Non-cave) – Confirmed area of occupancy based on the documented presence of

adults or juveniles of any bat species at non-cave natural roost sites (e.g. rock outcrops, trees), below ground human created roost sites (e.g. mines), and above ground human created roost sites (e.g. bridges, buildings).

Direct Impacts: The Sage Grouse Habitat Conservation Program has stated that the proposed project would not occur in core, general or connectivity sage grouse habitat. Therefore, impacts to sage grouse would be negligible.

The project area would be located in a rural, non-wilderness area. While potential habitat for some individuals of the threatened and endangered species listed above may exist, the surrounding area is comprised of large undeveloped spaces. Even if suitable habitat did exist on this site, the disturbance area would be small, and large areas of similar or identical habitat surround the site. The possible impact (including cumulative impacts) to these species would be short-term and negligible.

Secondary Impacts: No secondary impacts to sage grouse or sage grouse habitat would be expected. No secondary impacts to unique, endangered, fragile, or limited environmental resources that could be stimulated or induced by the direct impacts analyzed above would be expected.

7. HISTORICAL AND ARCHAEOLOGICAL SITES:

Are any historical, archaeological or paleontological resources present within the designated search locale?

The Montana State Historic Preservation Office (SHPO) and the Flathead Reservation Tribal Historic Preservation Office (THPO) was notified of the application. THPO was originally notified in the Spring of 2021 but no response was received by the applicant. The DEQ Tribal and Cultural resources Officer also contacted THPO and did not receive a response. In accordance with the National Historic Preservation Act (NHPA), ‘...no comment or response within 30 days of notification is considered concurrence.’ ([NHPA](#), 1966) A Class III archeological survey was completed in October 2021 by a 3rd party Archaeologist. No historical or cultural resources were found within the designated search locale. Additionally, SHPO reported, “There is no official record of isolated finds in this area.” (Murdo, Oct. 2021). Based on the recommendation from the Class III survey, “Archaeology clearance is recommended.” (Wood, Oct. 2021). Concurrence was obtained from SHPO and the DEQ Tribal and Cultural Resource Officer.

The Applicant is required to submit proof of consultation with the State Historic Preservation Office as part of the permitting process and to give archaeological and historical resources legally required protection.

Direct Impacts: The Confederated Salish and Kootenai Tribes have designated Arlee as a “Cultural Property”. A “Cultural Property” has been defined as “one that is eligible for inclusion in the National Register”. The Class III survey stated that the site has been a cultivated crop field for multiple decades therefore the likelihood of historical and archeological sites being impacted would be low. If resources are discovered during operations, it would be the applicant’s responsibility to determine next steps as required by law.

Secondary Impacts: No secondary impacts to historical and archaeological sites are anticipated.

8. AESTHETICS:

Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?

The site is located in an agricultural area. The proposed mining would occur on private land. The project area is expected to be visible from public spaces or roadways that border the private land. There are nearby residences located across Dumontier Road as inferred from aerial photography and witnessed during the site inspection.

The proposed operation would be visible to nearby neighbors but not visible from Highway 93 as it passes through Arlee.

The Montana Opencut Mining Act does not regulate hours of operation, but for the purposes of MEPA analysis, it is assumed that the proposed operation would occur at the maximum capacity of 24 hours per day, 7 days per week. If the Applicant would be operating during times of no sunlight, artificial light sources would be used on site to comply with MSHA regulations.

Direct Impacts: There would be a temporary alteration of aesthetics while mining is under way. Nearby residences would incur visual and noise impacts during operation of the gravel pit. The berm created by the salvage of soil material along the western boundary of the permit area would reduce visual and noise impacts for residences to the west of the operation. Once opencut operations commenced in the southern portion of the site, the applicant has also proposed to place berms along the southern boundary that would also reduce the visual and noise impacts for residence to the south of the operation.

This project is considered to be long-term, i.e., planned to take 25 years to complete. Impacts to aesthetics would continue through the life of the permit and would be moderate.

Secondary Impacts: No secondary impacts to aesthetics are anticipated.

9. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project?

The opencut operation would mine natural deposits from the site. No unusual demands on land, water, air, or energy are anticipated from the proposed opencut operation. Upon reclamation, the impacts would be negligible as the site would be reclaimed to 'cropland/farmland, rangeland and/or pasture' with slopes restored to 5:1 or flatter and a landowner stockpile area as stated in the permit.

The site is situated on a level agricultural field gently sloping up to the east to the foothills of the Mission Mountains. This site primarily consists of Jocko gravelly loams.

Direct Impacts: Based on the analysis of available data and certifications made by the Applicant, DEQ does not foresee any unusual demands on land, water, air or energy from this open-cut operation. Therefore, no direct impacts are anticipated.

Secondary Impacts: Increased acreage in the immediate area would be utilized for Open-cut operations.

10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES:

Are there other activities nearby that will affect the project?

The site is immediately surrounded by rangeland and cropland with several residences located across Dumontier Road. The unoccupied homestead of the landowner is located immediately adjacent and to the north of the proposed permit boundary near the northwest corner of the proposed site. The K canal is also located immediately adjacent and to the south of the proposed permit boundary. Even though the canal does not enter the site, the easement possibly could. Therefore, the Applicant would maintain a 50-foot buffer between all mining activities (including soil stockpiling) and the canal.

Direct Impacts: Based on the analysis of available data and on the certifications made by the Applicant, DEQ does not foresee any impacts on other environmental resources from this open-cut operation. Therefore, no direct impacts are anticipated.

Secondary Impacts: No secondary impacts to other environmental resources are anticipated as a result of the proposed project.

11. HUMAN HEALTH and SAFETY:

Will this project add to health and safety risks in the area?

As observed on an aerial photo of the surrounding area and based on the *Applicant Certification of Surface Landowners & Occupied Dwelling Units for A Standard Permit* form submitted by the Applicant, there are 29 residences within ½ mile of the proposed permit boundary.

Direct Impacts: Occasional increases in construction-related traffic may occur. Local roads may be improved. Traffic load would depend on site activity and is unknown at this time. The location of the proposed site was chosen by the applicant because of the location of the resource and to provide materials for local projects.

Secondary Impacts: No secondary impacts to health and safety are anticipated.

12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION:

Will the project add to or alter these activities within the permit boundary? Would grazing lands, irrigation water, or crop production be affected within the permit boundary?

The acreage listed in the proposal would be taken out of cropland use. Upon completion of mining, the land would be reclaimed to 'cropland/farmland, rangeland and/or pasture' with

slopes restored to 5:1 or flatter. A landowner material stockpile area would remain in the northwest corner of the site.

Direct Impacts: Cropland production would be reduced as soil stripping and operations progress across the site. When the entire site is permitted and established for mining and mine-related activities, all cropland activities would cease, but would be restored when the site is reclaimed. Impacts on the industrial, commercial, and agricultural activities and production in the area would be minor and long-term.

Secondary Impacts: No secondary impacts to industrial, commercial, water conveyance structures, and agricultural activities and production are anticipated as a result of the proposed project.

13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Will the project create, move or eliminate jobs? If so, estimated number.

Existing employees would mainly be utilized for this operation. There is low potential that this project would create a significant number of new jobs.

Direct Impacts: New employment opportunities would be limited. No lasting positive or negative impacts to employment would be expected from this project.

Secondary Impacts: No secondary impacts to quantity and distribution of employment are anticipated as a result of the proposed work.

14. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Will the project create or eliminate tax revenue?

The tax base for this land use type would change from agriculture to industrial. There would most likely be an increase in tax revenue for the proposed tax base change. Additionally the proposed project would have a limited increase in tax revenue related to the payroll taxes from new and/or existing employees.

Direct Impacts: Local, state and federal governments would be responsible for appraising the property, setting tax rates, collecting taxes, etc., from the companies, employees, or landowners benefitting from this operation. Following reclamation, it is assumed the tax base would revert to pre-mine levels.

Secondary Impacts: No secondary impacts to local and state tax base and tax revenues are anticipated as a result of the proposed project.

15. DEMAND FOR GOVERNMENT SERVICES:

Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?

The proposed operation would remove 1,000,000 cubic yards of material from the 157.1 acre site over 25 years. Based on the proposed bonded area, it is anticipated that haul trucks would utilize White Coyote Road or Dumontier Road via Martz Drive. The Montana Opencut Mining Act does not regulate local haul roads, it would be up to the local zoning ordinance to regulate

impacts that would occur to roads. Occasional increases in construction-related traffic may occur. Local roads may be improved. Impacts would be short-term and minor. Traffic load would depend on site activity and is unknown at this time.

Direct Impacts: Occasional increases in construction-related traffic may occur. Local roads may be improved. Impacts would be short-term and minor. Traffic load would depend on site activity and is unknown at this time.

Secondary Impacts: No secondary impacts to government services are anticipated as a result of the proposed open-cut operation.

16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?

The proposed operation would occur within Lake County and within the Flathead Indian Reservation boundary.

Direct Impacts: Lake County zoning clearance has been obtained. The site is not zoned.

Secondary Impacts: No secondary impacts to locally-adopted environmental plans and goals are anticipated as a result of the proposed work.

The open-cut operation is required to comply with zoning plans. It is unknown whether any management plans relate to the proposed open-cut site. The Applicant is required to comply with all laws and to obtain all required permits. The anticipated impacts to any zoning plan or management plan are negligible, if any.

17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:

Are wilderness or recreational areas nearby or accessed through the project? Is there recreational potential within the project area?

It appears that nearby federal and state lands can be accessed using Dumontier Road that runs adjacent to the southern proposed permit boundary. The proposed project would not limit access to wilderness or recreational areas nearby. No wilderness or recreational areas would be accessed through the project area.

Direct Impacts: Based on the information provided by the applicant and review of an aerial photo of the surrounding area, DEQ does not anticipate that any wilderness or recreational areas would be impacted by the proposed operation. Access to wilderness or recreation areas is not an issue at this site.

Secondary Impacts: No secondary impacts to wilderness or recreational areas are anticipated.

18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

Will the project add to the population and require additional housing?

As observed on an aerial photo of the surrounding area and based on the *Applicant Certification of Surface Landowners & Occupied Dwelling Units for A Standard Permit* form submitted by the Applicant, there are 29 residences within ½ mile of the proposed permit boundary.

Direct Impacts: This commercial pit is being sited in this area because of the location of the resource, and to provide materials for local projects. The project would not add to the population or require additional housing. Therefore, no impacts to density and distribution of population and housing are anticipated.

Secondary Impacts: No secondary impacts to density and distribution of population and housing are anticipated as a result of the proposed open-cut operation.

19. SOCIAL STRUCTURES AND MORES:

Is some disruption of native or traditional lifestyles or communities possible?

Based on the information provided by Applicant, DEQ is not aware of any native cultural concerns that would be affected by the proposed activity.

Numerous public comments have raised concerns about the proposed operation impacting *The Garden of One Thousand Buddhas* located 0.52 miles west from the northwest corner of the proposed permit boundary. *The Garden of One Thousand Buddhas* is considered a spiritual site and attracts visitors throughout the year.

Direct Impacts: The proposed open-cut activities would occur entirely on private land within the boundary of the Flathead Indian Reservation. The Confederated Salish and Kootenai Tribes have designated Arlee as a “Cultural Property”. A “Cultural Property” has been defined as “one that is eligible for inclusion in the National Register”. The proposed project would be located approximately 1.45 miles from Arlee. The proposed project is not expected to have significant noise or visual impacts to Arlee. Trucks hauling gravel from the site may use Highway 93 as it passes through Arlee, depending on the location where the gravel is needed.

The Class III Archeological Survey conducted in October 2021 determined that “[t]he project would have no adverse impact on any nearby site which may or may not be eligible for lists on National Register.”

The proposed operation could have a minor impact on the neighbors’ lifestyles surrounding the proposed permit area including *The Garden of One Thousand Buddhas*. Direct impacts could be from resulting changes in industrial noise and air quality, but the severity of those impacts will vary with their distance from the proposed open-cut operation.

Secondary Impacts: No secondary impacts to social structures and mores are anticipated as a result of the proposed open-cut operations.

20. CULTURAL UNIQUENESS AND DIVERSITY:

Will the action cause a shift in some unique quality of the area?

Based on the information provided by Applicant, DEQ is not aware of any unique qualities of the area that would be affected by the proposed activity.

Direct Impacts: No impacts to cultural uniqueness and diversity are anticipated from this project.

Secondary Impacts: No secondary impacts to cultural uniqueness and diversity are anticipated as a result of the proposed work.

21. PRIVATE PROPERTY IMPACTS:

Are we regulating the use of private property under a regulatory statute adopted pursuant to the police power of the state? (Property management, grants of financial assistance, and the exercise of the power of eminent domain are not within this category.) If not, no further analysis is required. Does the proposed regulatory action restrict the use of the regulated person's private property? If not, no further analysis is required. Does the agency have legal discretion to impose or not impose the proposed restriction or discretion as to how the restriction will be imposed? If not, no further analysis is required. If so, the agency must determine if there are alternatives that would reduce, minimize or eliminate the restriction on the use of private property, and analyze such alternatives.

If DEQ approves a permit, any conditions of the permit are either required to comply with applicable requirements of the Open-cut Mining Act (including administrative rules adopted under the Open-cut Mining Act) or would be included in the permit with the consent of the applicant. DEQ is not proposing to include in the permit any conditions that are not required under the Open-cut Mining Act or to which the applicant has not consented. Therefore, DEQ is not required to determine if there are alternatives that would reduce, minimize or eliminate the restriction on the use of private property, and to analyze those alternatives.

22. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Due to the nature of the proposed exploration activities, and the limited project duration, no further direct or secondary impacts would be anticipated from this project.

PROPOSED ACTION ALTERNATIVES:

In addition to the proposed action, DEQ also considered the "no action" alternative. The "no action" alternative would deny the approval of permit. The applicant would lack the authority to conduct open-cut mining activities on private land. Any potential impacts that would be authorized under the permit/amendment would not occur. However, DEQ does not consider the "no action" alternative to be appropriate because the applicant has demonstrated compliance with all applicable rules and regulations as required for approval. The no action alternative forms the baseline from which the impacts of the proposed action can be measured.

CUMULATIVE IMPACTS:

Cumulative impacts are the collective impacts on the human environment within the borders of Montana of the Proposed Action when considered in conjunction with other past and present actions related to the Proposed Action by location and generic type. Related future actions must also be considered when these actions are under concurrent consideration by any state

agency through preimpact statement studies, separate impact statement evaluation, or permit processing procedures.

This environmental review analyzes the proposed project submitted by the applicant. The proposed project would occur in an area that has been affected by historical and recent mining activity. Any impacts from the project would be temporary and would be fully reclaimed at the conclusion of the project pursuant. Thus, the proposed project would not contribute to the long-term cumulative impacts of mining in the area. DEQ identified other mining or exploration projects in the area.

DEQ-regulated projects located near the proposed project site include:

- Barney and Brand Ivanoff-Jocko-OC#1346
- Lake County Road Department-Oxford-OC#436

No other DNRC, BLM, USFS, or county regulated projects were identified in the project vicinity.

DEQ considered all impacts related to this project and secondary impacts that may result. Cumulative impacts related to this project would not be significant.

PUBLIC INVOLVEMENT:

DEQ engaged in internal and external efforts to identify substantive issues and/or concerns related to the proposed project. Internal review of the environmental assessment document by three DEQ staff including Whitney Bausch, P.G., Ed Hayes, and Craig Jones. External review efforts included queries to the following websites/ databases/ personnel:

- Montana State Historic Preservation Office (SHPO)
- Confederated Salish and Kootenai Tribal Council Meeting (September 29, 2022)
- Montana Department of Natural Resource and Conservation (DNRC)
- Montana Department of Environmental Quality (DEQ)
- Montana Department of Transportation (MDT)
- Lake County
- US Geological Society – Stream Stats
- Montana Natural Heritage Program (MNHP)
- Montana Cadastral Mapping Program
- Montana Groundwater Information Center (GWIC)
- Montana Bureau of Mines and Geology (MBMG)
- United States Department of Interior, Bureau of Land Management (BLM)
- United States Forest Service (USFS)
- United States Environmental Protection Agency (EPA)
- National Wetland Inventory
- FEMA Floodplain
- United States Department of Agriculture-Web Soil Survey

OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION:

The proposed project would be fully located on private land. All applicable state and federal rules must be adhered to, which, at some level, may also include other state, federal, or tribal agency jurisdiction, e.g. Montana Air Quality Permit and/or a Storm Water Discharge

Permit.

NEED FOR FURTHER ANALYSIS AND SIGNIFICANCE OF POTENTIAL IMPACTS

When determining whether the preparation of an environmental impact statement is needed, DEQ is required to consider the seven significance criteria set forth in the Administrative Rules of Montana (ARM) 17.4.608, which are as follows:

1. The severity, duration, geographic extent, and frequency of the occurrence of the impact;
2. The probability that the impact will occur if the proposed action occurs; or conversely, reasonable assurance in keeping with the potential severity of an impact that the impact will not occur;
3. Growth-inducing or growth-inhibiting aspects of the impact, including the relationship or contribution of the impact to cumulative impacts;
4. The quantity and quality of each environmental resource or value that would be affected, including the uniqueness and fragility of those resources and values;
5. The importance to the state and to society of each environmental resource or value that would be affected;
6. Any precedent that would be set as a result of an impact of the proposed action that would commit the department to future actions with significant impacts or a decision in principle about such future actions; and
7. Potential conflict with local, state, or federal laws, requirements, or formal plans.

Under ARM 17.4.607, DEQ is required to prepare an environmental impact statement (EIS) whenever an environmental assessment (EA) indicates that an EIS is necessary or whenever, based on the criteria in ARM 17.4.608, the proposed action is a major action of state government significantly affecting the human environment. ARM 17.4.608 sets forth the criteria DEQ is required to consider in determining the significance of individual and cumulative impacts on the quality of the human environment, and the need to prepare an EIS. The criteria set forth in ARM 17.4.608 are as follows:

1. the severity, duration, geographic extent, and frequency of occurrence of the impact;
2. the probability that the impact will occur if the proposed action occurs; or conversely, reasonable assurance in keeping with the potential severity of an impact that the impact will not occur;
3. growth-inducing or growth-inhibiting aspects of the impact, including the relationship or contribution of the impact to cumulative impacts;
4. the quantity and quality of each environmental resource or value that would be affected, including the uniqueness and fragility of those resources or values;
5. the importance to the state and to society of each environmental resource or value that would be affected;
6. any precedent that would be set as a result of an impact of the proposed action that would commit the department to future actions with significant impacts or a decision in principle about such future actions; and,
7. potential conflict with local, state, or federal laws, requirements, or formal plan.

The significance determination is made by giving weight to these criteria in their totality. Impacts identified as moderate or major in severity may not be significant if the duration is short-term.

Impacts of short-term duration may be significant if the quantity and quality of the resource is limited and/or the resource is unique or fragile. Moderate or major impacts to a resource may not be significant if the quantity of that resource is high or the quality of the resource is not unique or fragile.

DEQ has not identified any significant impacts associated with the proposed activities on the environmental resources discussed above in the resource sections of the EA. Under the Proposed Action, Riverside Contracting, Inc. would disturb up to 157.1 acres over an approximate 25-year period. Currently there is no open-cut disturbance on site.

Land cover in the project area varies, but generally includes cropland and a small amount of native grasses and forbs. This habitat is common throughout the larger ecosystem and any animals displaced would likely find other nearby suitable habitat and be able to return to the project area after reclamation is complete. The site would be regraded to a site with 5:1 or flatter slopes and revegetated with an approved seed mix. The site would be reclaimed to the post-mine land use of cropland/farmland, rangeland and/or pasture. A landowner material stockpile would be left in the northwest corner of the site following regrading and revegetation of the remainder of the site.

As discussed in the EA, the Proposed Action is not predicted to affect ground water or surface water, including intermittent or perennial streams, or water conveyance facilities. A fifty-foot buffer zone would be left between areas disturbed by the operation and the irrigation canal that runs along the southern boundary of the permit area, protecting this surface water feature from runoff that may carry sedimentation.

As disclosed in the EA, DEQ does not anticipate that direct, secondary and cumulative impacts to the other environmental resources considered in this environmental review would be significant. Additionally, DEQ does not believe that the proposed open-cut mining activities have any growth-inducing or growth-inhibiting aspects.

Approval of the Proposed Action in this EA does not set any precedent that commits DEQ to future actions with significant impacts or a decision in principle about such future actions. If the applicant submits another permit application or permit amendment application requiring environmental review, DEQ would separately determine the appropriate level of environmental review and conduct an environmental review, as required by the Open-cut Mining Act, MEPA, and their respective implementing rules, including ARM 17.4.608.

DEQ does not believe that the proposed activities conflict with any local, state, or federal laws, requirements, or formal plans. The local governing body, having zoning jurisdiction over the proposed site, has certified that the proposed open-cut operation complies with applicable local zoning regulations in effect, prior to the filing of the permit application, or at the time a written request was received for a preapplication meeting. After considering potential impacts on resources under ARM 17.4.608, DEQ has determined that the proposed activities would not significantly impact the quality of the human environment. Therefore, DEQ concludes that an EA is the appropriate level of environmental review under ARM 17.4.608.

Environmental Assessment and Significance Determination Prepared by:

Carly Russell

Carly Russell

Reclamation Specialist – Opencut Mining Section

References

- Confederated Salish and Kootenai Tribal Council Meeting. (September 29, 2022). Pablo.
- Federal Emergency Management Agency. (n.d.). *National Flood Hazard Layer*. Retrieved from FEMA:
<https://www.fema.gov/flood-maps/national-flood-hazard-layer>
- GIS Data*. (2022). Retrieved from Bureau of Land Management:
<https://www.blm.gov/services/geospatial/GISData>
- Lake County. (2022). Zoning Compliance Form. Montana.
- Maps*. (2022). Retrieved from Montana Department of Transportation:
<https://www.mdt.mt.gov/publications/maps.aspx>
- Montana Bureau of Mines and Geology. (2022). *Geologic Map of Montana*. Retrieved from Montana Bureau of Mines and Geology:
<https://mbmgmap.mtech.edu/server/rest/services/Geology/Geology500k/MapServer>
- Montana Bureau of Mines and Geology. (2022). *Ground Water Information Center Database*. Retrieved from Ground Water Information Center: <https://mbmggwic.mtech.edu/>
- Montana Department of Environmental Quality*. (2022). Retrieved from Discover DEQ's Data:
<https://discover-mtdeq.hub.arcgis.com/>
- Montana Department of Natural Resources and Conservation*. (2022). Retrieved from
<https://dnrc.mt.gov/>.
- Montana Natural Heritage Project. (2022). *Environmental Summary*. Helena.
- Montana State Library. (2022). *Montana Cadastral*. Retrieved from Montana State Library:
<https://svc.mt.gov/msl/mtcadastral>
- United State Geological Survey. (2022). *USGS Stream Stats*. Retrieved from United State Geological Survey: <https://streamstats.usgs.gov/ss/>
- United States Department of Agriculture. (n.d.). *Web Soil Survey*. Retrieved from Natural Resources Conservation Service: <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>
- United States Forest Service. (2022). *FSGeodata Clearinghouse*. Retrieved from Forest Service:
<https://data.fs.usda.gov/geodata/>
- US EPA. (2022). *Geospatial Resources at EPA*. Retrieved from US Environmental Protection Agency:
<https://www.epa.gov/geospatial>
- US Fish and Wildlife Service. (2022). *Wetlands Data*. Retrieved from US Fish and Wildlife Service:
<https://www.fws.gov/program/national-wetlands-inventory/data-download>

Figure 1-Site Map



Figure 2-Area Map

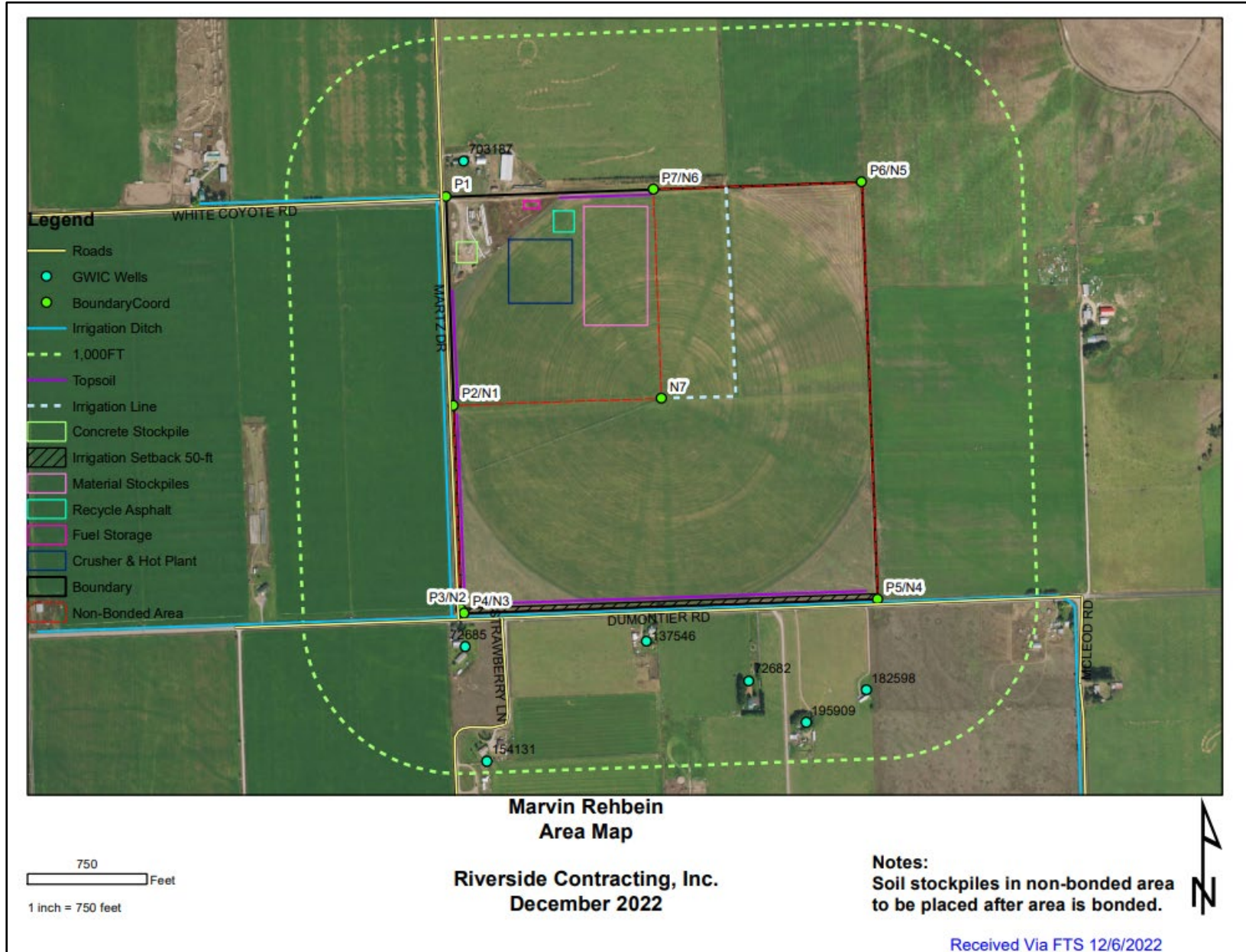


Figure 3-Reclamation Map

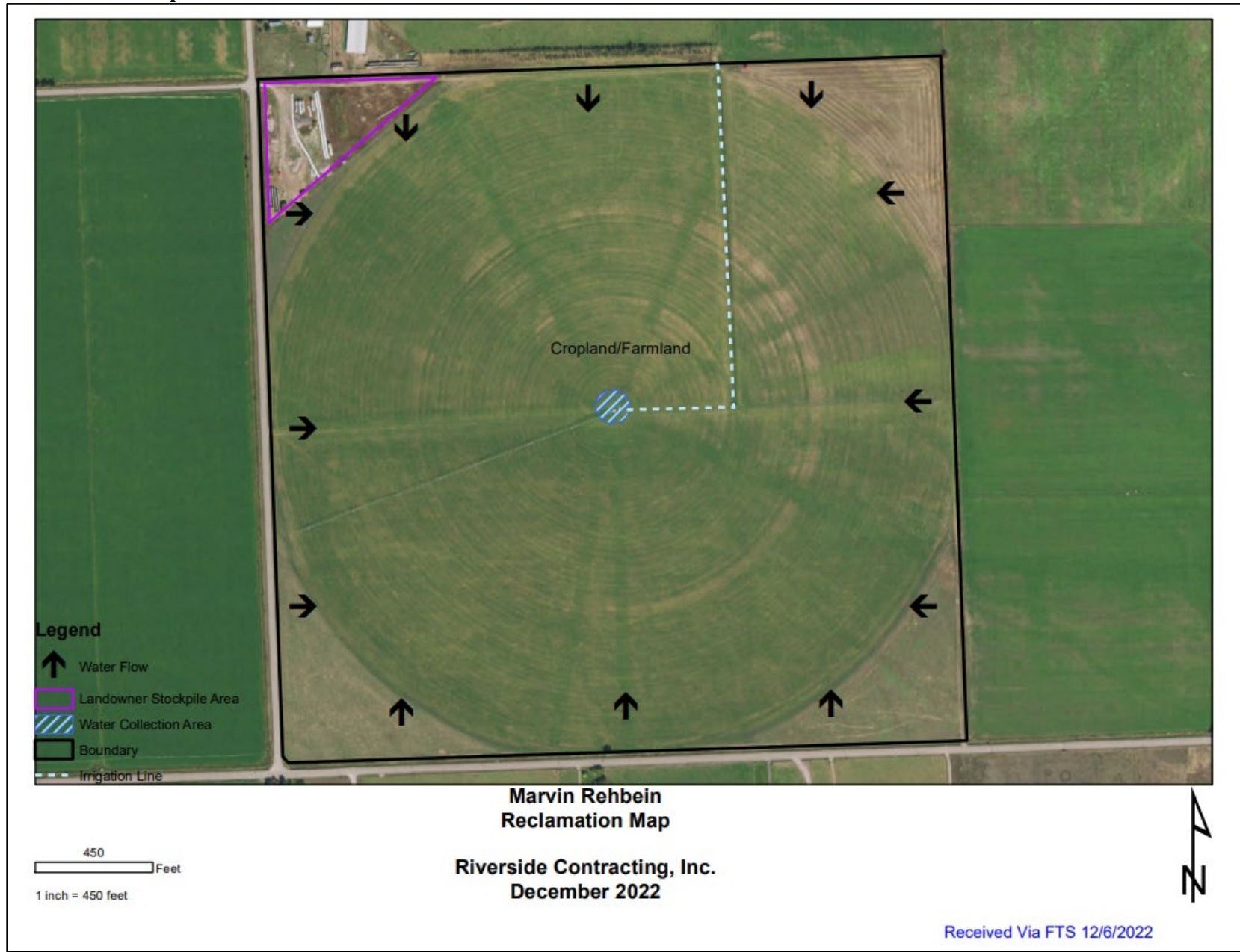


Figure 4-Location Map

