

## ENVIRONMENTAL ASSESSMENT

On an Application for an

### OPENCUT MINING PERMIT AMENDMENT #2

The Montana Department of Environmental Quality (DEQ) prepared this Environmental Assessment (EA) in accordance with requirements of the Montana Environmental Policy Act (MEPA). An EA functions to identify, disclose, and analyze the impacts of a proposed action. This document may disclose impacts that have no legislatively required mitigation measures, or over which there is no regulatory authority.

The state law that regulates gravel mining operations in Montana is the Opencut Mining Act. This law and the rules adopted thereunder place operational guidance and limitations on a project during its lifetime, and provide for the reclamation of land affected by opencut mining operations.

Local governments and other state agencies may have authority over different resources and activities under their regulations. Approval or denial of this Opencut Application will be based on a determination of whether or not the proposed operation complies with the Opencut Mining Act and the rules adopted thereunder. The DEQ approval of this application would not relieve the operator from the obligation to comply with any other applicable federal, state, or county statutes, regulations, or ordinances. The operator is responsible for obtaining any other permits, licenses, approvals, etc. that are required for any part of the proposed operation.

**Applicant:** Riverside Contracting Inc.

**SITE NAME:** McHenry

**LOCATION:** Section 34, T29N, R20W

**COUNTY:** Flathead

**DATE:** January 2011

**OPENCUT PERMIT:** 1559

**PROPOSAL:** The proponent has submitted an application to amend its existing gravel mining permit to increase acreage from 8.0 to 20.9, to revise the Plan of Operation, to extend the date of final reclamation to November 2037, to increase bonding, and to submit a new map. Normal working hours would remain 7 am – 7 pm, Monday through Friday. The amended area could undergo the mining and processing of an additional 500,000 cubic yards of sand and gravel. Soils and overburden would be stripped and stockpiled in berms on the north and east sides of the property to reduce the visual and aural impact to those residents living closest to the operation. Upon final reclamation the berms would be removed and the soil would be used to cover the disturbed site. Other operational aspects would remain the same as provided for in the previous permit (See [FIGURE 1 – AREA MAP](#)).

As part of the amendment application, the proponent has submitted a revised Plan of Operation that provides better baseline information, operation plans, and plans for reclamation that would replace soils, plant grasses and return the affected lands to a post-mine land use of grassland. This application contains all items required by the Opencut Mining Act and its implementing rules. Proponent commits to properly conducting opencut operations and would be legally bound by the permit.

### IMPACTS ON THE PHYSICAL ENVIRONMENT

RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
<b>1. TOPOGRAPHY, GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:</b>	The proposed mine is located on a rolling glacial outwash terrace left by the last retreating glacier around 10,000 years ago. The deposit consists of stratified layers of alluvium and glacial outwash sand, gravel and cobbles that cover the deeper Tertiary valley fill. The Precambrian rock of the Belt Series sandstone, mudstone and limestone rocks surround the Flathead Valley in towering walls sculpted by alpine

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<b>RESOURCE</b>	<b>POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
	<p>glaciers that form an intermountain, fault block basin known as the Rocky Mountain Trench. The Whitefish Range to the north, the Flathead and Swan Ranges to the southeast and the less dramatic Salish Range to the west surround this flat-lying valley that is generally pock-marked with sink holes created when large blocks of glacial ice were buried in the outwash and later melted.</p> <p>Up to twelve inches of fairly well drained, sandy clay loam topsoil and up to six inches of sandy overburden overlies the glacial sands and gravels, and local terrace slopes demonstrate reasonably good stability. All soil material will be salvaged and stockpiled away from the affected land. Following mining, grading and ripping, the soils will be replaced, disked and seeded to stabilize the soil and prevent erosion. Microbes will re-colonize the soil. (See <a href="#">FIGURE 2 – SITE MAP</a>).</p> <p><i>Impacts:</i> Irreversible and irretrievable removal of gravel from the site will leave a permanent alteration to the topography. Small impact to the quantity and quality of soils from salvaging, stockpiling, and re-soiling activities, but this would not impair the capacity of the soils to support full reclamation. There are no unusual topographic, geologic, soil, or special reclamation considerations that would prevent reclamation success.</p>
<b>2. WATER QUALITY, QUANTITY AND DISTRIBUTION</b>	<p>The nearest surface water is Blaine Creek is located 300 feet to the west. Groundwater quality in the area is very high with good porosity and permeability in the sands and gravels. The site will lower a bench 75 feet below the existing level, which is above the anticipated depth of the water table, estimated to be at least 70 feet below the finished surface.</p> <p>Fuel will be stored in a 10,000 gallon double-walled tank on skids, and any accidental spills or major leaks from equipment operating in the pit will immediately be excavated and removed from the site. Silt fences will be installed and to preventing sediment laden runoff from entering into Blaine creek.</p> <p><i>Impacts:</i> The proposed activities would have a minimal effect on the quantity and quality of the surface and groundwater resources.</p>
<b>3. AIR QUALITY</b>	<p>Air quality in this area is generally very good with little industrial activity. Except for the gravel pit and facilities operated in it, wood smoke and dust from farming and vehicular traffic on local gravel roads are usually the only pollutants observed. This site has been active on an intermittent basis since it was first permitted as a gravel pit in 1994.</p> <p>Air quality standards are based upon the Clean Air Act of Montana and pursuant rules and are administered by the DEQ Air Resources Management Bureau (ARMB). Its program is approved by the Environmental Protection Agency (EPA). These rules and standards are designed to be protective of human health and the environment.</p> <p>Air quality permits would be required on the processing equipment</p>

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	<p>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. Fugitive dust is that which blows off the pit floor, stockpiles, gravel roads, farm fields, etc. It is considered to be a nuisance but not harmful to health.</p> <p><i>Impacts:</i> Air quality standards as set by the federal government and enforced by the Air Resources Management Bureau of the DEQ would allow minimal detrimental air impacts.</p>
<b>4. VEGETATION COVER, QUANTITY AND QUALITY</b>	<p>Vegetation in the area consists of non-native planted pasture grasses with orchard grass and smooth brome the dominant species in pasture areas, and Ponderosa pine and Douglas fir in the forested areas. Vegetation covers 100% of the ground outside the 8-acre gravel pit and will be removed and planted again following mining. There is no record of threatened or endangered plants or animals, although the area is used by deer, elk, birds and small mammals. While all plant species will be destroyed during mining, the areas will be re-vegetated following mining. A county weed control plan is in place to control noxious weeds.</p>
<b>5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:</b>	<p>Although the site is primarily pasture, it includes small patches of forest that support populations of deer, rodents, song birds, coyotes, foxes, raptors, insects and various other animal species. Population numbers for these species are not known.</p> <p><i>Impacts:</i> The proposed mine is expected to temporarily displace some individual species and it is likely that the site would be re-inhabited following reclamation to grassland.</p>
<b>6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:</b>	<p>There are no known sensitive environmental resources at this site. Even if such general resources did exist at this specific location, the mining disturbance area would be small and large areas of similar or identical habitat surround the site. The possible impact to these resources would be minimal.</p>
<b>7. HISTORICAL AND ARCHAEOLOGICAL SITES</b>	<p>There are no known historical or archaeological resources at this site. A walkover of the area by DEQ personnel did not reveal any artifacts or signs of occupation. No signs were evident at depth in the previously disturbed area.</p> <p><i>Impacts:</i> If during operations, resources were to be discovered, activities would be temporarily moved to another area or halted until SHPO was contacted and the importance of the resources was determined.</p>
<b>8. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY</b>	<p>Energy in the form of diesel fuel for dozers, loaders and trucks would be consumed while this site is operated and material is hauled to various projects. Water in minimal amounts will be utilized as necessary for dust control.</p>

<b>IMPACTS ON THE HUMAN POPULATION</b>	
<b>RESOURCE</b>	<b>POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
<b>9. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS</b>	This area is not zoned and the site complies with Flathead County's zoning regulations. A Zoning Form was signed by the County Planner on May 3, 2007.
<b>10. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING</b>	None of these resources will be affected.
<b>11. AESTHETICS</b>	<p>There is and has been an alteration of the viewshed as a result of this existing sand and gravel mine. The site is visible by homes in the local area and briefly to traffic along Lake Blaine Road. However, reclamation will return the area to a visually acceptable landscape.</p> <p>Because the crusher and other noise generating equipment is located in the bottom of the excavation which is 60 feet below habitations to the east, effects from noise and light are reduced for those living to the north, east and south. Impacts from these facilities are intermittent and of relatively short duration but are in addition to the noise created by the increased truck traffic hauling to various projects.</p> <p><i>Impacts:</i> There would be mining and hauling activity at this site during normal work hours, especially during projects in the summer. These impacts would be minimal.</p>
<b>12. QUANTITY/ DISTRIBUTION OF EMPLOYMENT</b>	<i>Impacts:</i> No impact on employment; the same crews will be utilized for all operations.
<b>13. INDUSTRIAL, COMMERCIAL, AGRICULTURAL ACTIVITIES AND PRODUCTION</b>	<p>This is an industrial site with periods of stripping, mining, processing and hauling during the summers until the resource is depleted.</p> <p><i>Impacts:</i> This site would be taken out of pasture land during the life of the mine and would be returned to productive grassland within several years of resource depletion.</p>
<b>14. LOCAL, STATE TAX BASE AND TAX REVENUES, PERSONAL AND COMMUNITY INCOME</b>	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.
<b>15. DEMAND FOR GOVERNMENT SERVICES</b>	Minimal oversight from DEQ, MSHA, and OSHA.
<b>16. HUMAN HEALTH AND SAFETY</b>	Industrial activities are inherently more dangerous than non-use of an area. The OSHA and MSHA regulations provide specific regulation and oversight to ensure safety is paramount.
<b>17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES</b>	This site is not used to access any recreational or wilderness resources.

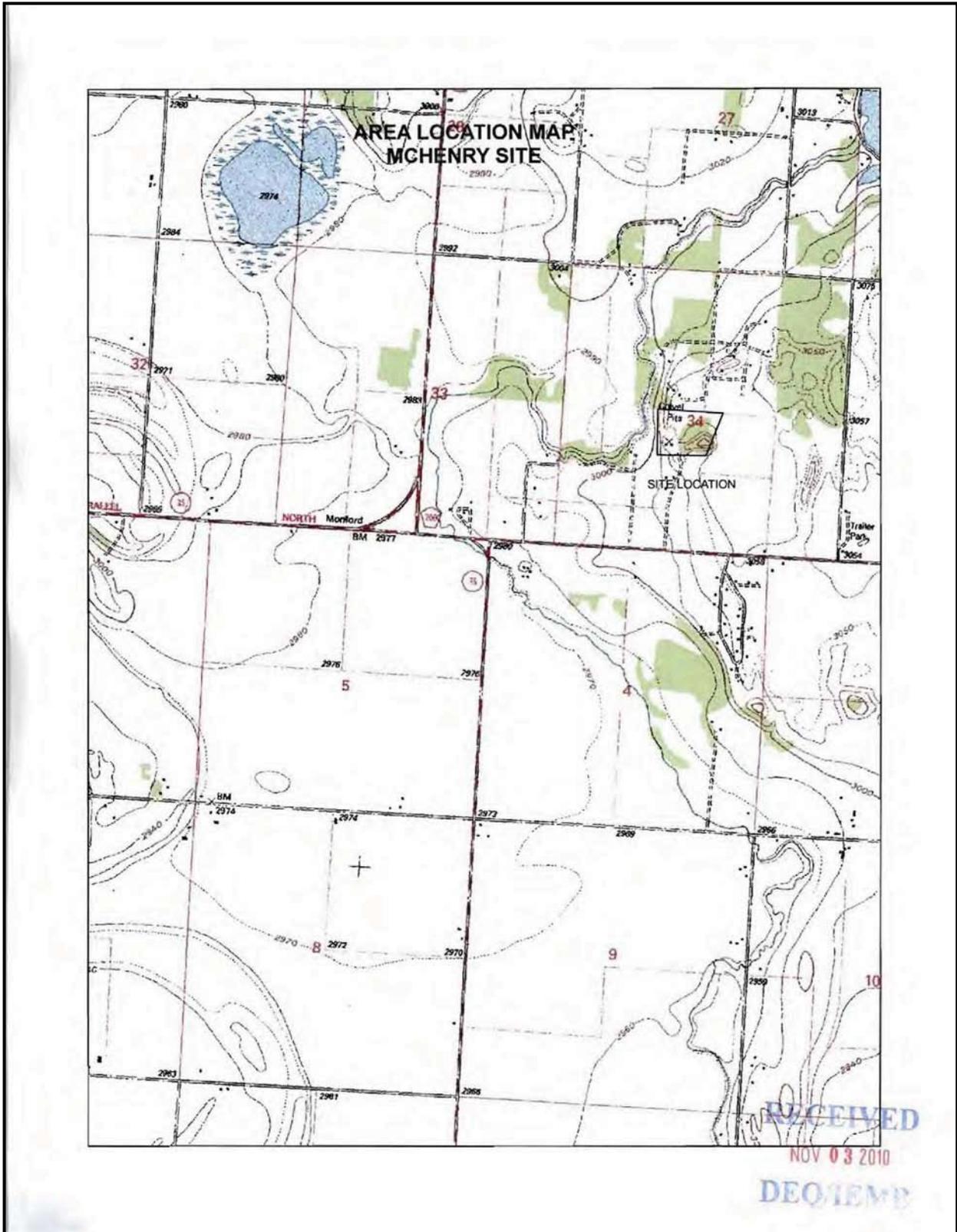
**18. Alternatives Considered:**

- A.** Denial Alternative: The Department would deny an application that does not comply with the Act and Rules. No impacts to the natural or human environment would occur.
- B.** Approval Alternative: The Department would approve an application that complies with the Act and Rules. Impacts of this application are addressed in the body of the EA.



**FIGURE 1 – AREA MAP**

[\(go back\)](#)



# FIGURE 2 – SITE MAP

[\(go back\)](#)



PRIVATE PROPERTY ASSESSMENT ACT (PPAA) CHECKLIST

**PROPERTY DESCRIPTION: Section 34, T29N, R20W, Flathead County**

**COMPANY NAME: Riverside Contracting, Inc., McHenry Site**

DOES THE PROPOSED AGENCY ACTION HAVE TAKINGS IMPLICATIONS UNDER THE PPAA?

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deprive the owner of all economically viable uses of the property?
	X	4. Does the action deny a fundamental attribute of ownership?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? (If answer is NO, skip questions 5a and 5b and continue with question 6.)
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property?
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally? (If the answer is NO, skip questions 7a-7c)
		7a. Is the impact of government action direct, peculiar, and significant?
		7b. Has the government action resulted in the property becoming practically inaccessible, waterlogged, or flooded?
		7c. Has the government action diminished property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?

Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b.

If taking or damaging implications exist, the agency must comply with § 5 of the Private Property Assessment Act, to include the preparation of a taking or damaging impact assessment. Normally, the preparation of an impact assessment will require consultation with agency legal staff.