

ENVIRONMENTAL ASSESSMENT

Project Name: Conley site Proposed Implementation Date: 5/15/97
 Proponent: Schellinger Construction

Type and Purpose of Action: The applicant proposes to permit and expand an existing pit and to mine, crush, stockpile and transport 15,000 cubic yards of sand and gravel. It is a 2 acre pit located 2.5 miles north of the town of Bigfork. The estimated start-up date is May 15, 1997 and will remove a ridge resulting in a lot which is level with surrounding land to the south. The pit will be reclaimed to a building site after grading the slopes to at least a 3:1.

Location: NW¼ NW¼ Sec. 19, T27N, R19W County: Flathead

N = Not present or No Impact will occur.
 Y = Impacts may occur (explain under Potential Impacts).

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
<p>1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are fragile, compactible or unstable soils present? Are there unusual geologic features? Are there special reclamation considerations?</p>	<p>[Y] The proposed mine is located in rolling glacial outwash debris 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. Belt series shale outcrops protrude above the surface adjacent to the pit.</p> <p>The billion year old Precambrian rock of the Belt Series sandstone, mudstone and limestone rocks surround the deposit in towering walls sculpted by alpine 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 overlies the glacial sands and gravels nearby the site, and local terrace slopes demonstrate reasonably good stability. Most soil has been lost by previous mining, but all available soil material will be salvaged and stockpiled away from the affected land. Following mining, grading and ripping, the soils will be replaced, disced and seeded to stabilize the soil and prevent erosion. Microbes will re-colonize the soil.</p>
<p>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?</p>	<p>[N] There is no surface water in the permit area. Water quality in the area is very high with good porosity and permeability in the sands and gravels that provide excellent transmissivity. There are many commercial and domestic water wells in the area but none in the vicinity of the site. There are 22 wells in section 19 that were drilled an average of 150 feet in depth. The average yield is 20 gallons per minute. The site will be mined to a depth level with existing ground which is above the anticipated depth of the water table.</p> <p>All fuel, lubricants and chemicals will be kept out of the permit area, and any accidental spills or major leaks from equipment operating in the pit will immediately be excavated and removed from the site. Therefore, the quality and quantity of the groundwater should not be impacted.</p>
<p>3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?</p>	<p>[N] This amendment will increase the size of the pit area but will not increase other impacts such as noise, dust, etc. above the levels currently in place under the existing permit.</p>

<p>4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be permanently altered? Are any rare plants or cover types present?</p>	<p>[Y] Ground vegetation consists of native grasses and pine trees where not previously mined. Vegetation covers 10% of the ground 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, they will be replaced following mining.</p>
<p>5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?</p>	<p>[Y] The area is used primarily for mining and garbage dumping, but it also supports populations of deer, game and non-game birds, coyotes, foxes, rodents, raptors, insects and various other animal species. The mine site is frequented by those animals and they will be displaced as the mine expands. Human use of the area has intensified in the past two decades with the increase in residential and commercial activity. The proposed mine is not expected to significantly degrade wildlife populations.</p>
<p>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?</p>	<p>[N] There are not expected to be any impacts on rare and endangered species from the proposed mining operation. Site evaluations have not revealed any other endangered or threatened plant or animal species.</p>
<p>7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?</p>	<p>[N] There are important cultural values in the general area. Most of this site has been previously disturbed by modern man, thereby destroying much of the integrity of resources that may have existed. If significant resources are found, the operation will be routed around the site of discovery for a reasonable time until salvage can be conducted. The State Historical Preservation Office will be promptly notified.</p>
<p>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?</p>	<p>[Y] There will be a temporary deterioration of aesthetics while the operation is under way. The site is visible by homes in the local area and to traffic along Highway 82, but visibility will be increased more than the existing gravel operation for a short time. Reclamation will return the area to a visually acceptable landscape.</p> <p>This permit will increase the size of the pit area and will increase other impacts such as noise, dust, etc. above the levels currently in place for a relatively short time.</p> <p>Mining will leave a ridge between the highway and the residence on the south to reduce line of site visual negative impacts to the highway. Sound deflection and absorption will subdue those impacts.</p>
<p>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?</p>	<p>[N]</p>
<p>10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other studies, plans or projects on this tract?</p>	<p>[N]</p>

IMPACTS ON THE HUMAN POPULATION

RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
<p>11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?</p>	<p>[Y] The operation will be near the highway, but flagging and traffic controls will mitigate those safety.</p>
<p>12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?</p>	<p>[N]</p>
<p>13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.</p>	<p>[N]</p>

14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	[N]
15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc) be needed?	[N]
16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[Y] City/County zoning clearance has been obtained.
17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?	[N]
18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	[N]
19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	[N]
20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	[N]
21. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	[N]

22. Alternatives Considered:

1. Denial: The permit would not be approved at this time but impacts would still have occurred at this location. The department would not have the pit under permit and would have no bond to ensure reclamation. Aggregate would be hauled from a greater distance increasing fuel use, gaseous emissions and project costs. The owner of the gravel resource would be denied full utilization of his property at this time.

2. Approval of the permit with mitigating conditions: The Plan of Operation has been written with mitigating conditions. Mitigation measures include water protection, fuel containment, visual barriers.

23. Public Involvement, Agencies, Groups or Individuals contacted: State Historic Preservation Office, Montana Heritage Program, County Weed Control District, County Commissioners for zoning.

24. Other Governmental Agencies with Jurisdiction, List of Permits Needed: Montana Department of Environmental Quality for Air Quality Permit; Mine Safety and Health Administration for safety permit; Montana Department of Labor & Industry, Bureau of Safety for safety permit.

25. Magnitude and Significance of Potential Impacts: Impacts are unlikely to be significant because of the short timeframes involved, the location away from residential development and the potential for beautifying an existing eyesore.

26. Regulatory impact on private property: The analysis conducted in response to the Private Property Assessment Act indicates no impact since this Plan of Operations would not require "Special Stipulations" in order to comply with the Openpit Mining Act.

Recommendation for Further Environmental Analysis:

EIS More Detailed EA No Further Analysis

EA Checklist Prepared By: Rod Samdahl
Name

Reclamation Specialist
Title

Approved By: _____
Name Title

Signature Date

Opencut

Revised, 9/96