

ENVIRONMENTAL ASSESSMENT
December 19, 2000

Project Name: Marsall Site

Proposed Implementation Date: January 1, 2001

Proponent: Schellinger Construction

Type and Purpose of Action: The applicant proposes to mine, stockpile and transport 168,450 cubic yards of sand and gravel and to batch hot asphalt from a 13.7 acre pit located 4 miles south of Kalispell. There will be a temporary crusher set up to manufacture aggregate for the reconstruction of Highway 503, and a temporary hot plant to mix asphalt during the finish phase of road construction. The mine will result in a leveled horse pasture that will be approximately the same grade as the adjacent existing pasture to the southwest. The floor of the mine area will daylight out to the south and west, with a slope on the back side of at least 5:1 that will be topsoiled and re-seeded back to grass. All reclamation work should be completed by June, 2002.

Location: S½ SW¼ Section 25, T28N, R22W

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>[N] The proposed mine is located in the steep, rolling foothills of the Salish Mountains near Foy's Lake. The area was last inundated by Lake Missoula around 10,000 years ago and was formed by glacial scouring. The deposit consists of stratified layers of glacial outwash sand and gravel that covers the deeper bedrock. The site is a pasture area in a high, narrow valley surrounded by rock outcrops, which drains north toward Foy's Lake and south down the Birch Creek drainage.</p> <p>Topsoil, a silty loam which averages 6 to 12 inches thick, will be salvaged and stockpiled away from the pit, road and facility area. Following mining, grading and ripping, the soils will be replaced, disked and seeded back to grass. There are no special soils or reclamation considerations in this area.</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>[Y] The nearest pre-mining surface waters are two small headwaters to Birch Creek located 1000 feet southwest and southeast of the proposed location. Foy's Lake is located 2000 feet to the northwest. The stream drainages and lake will not be affected by mining.</p> <p>There are 6 water wells drilled and recorded in Section 25. They are typically very deep averaging a depth of 896 feet, have static water levels of 359 feet and have an average yield of 37 gpm. The Marsall well is much shallower, drilled 40 feet deep, pumping 25 gallons per minute. The mine will not affect these wells. The site will be dug to a depth of 12 feet into the side of a gravel knob, which will not intercept groundwater.</p> <p>Special precautions will be taken to minimize possible contamination of the groundwater and surface water. Any bulk fuel, solvents and lubricants stored on site will be kept within an earthen berm. Portable equipment with fuel tanks such as dozers, loaders, crusher, hot plant and trucks will be in various places within the facility. Any accidental spills or leaks from equipment will be immediately excavated and disposed of. No trash other than clean fill will be disposed of at the site. Runoff from snowmelt and stormwater will be contained on site. With these precautions, the quality and quantity of the groundwater should not be adversely 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>[Y] Air quality will be degraded and there will be an increase in particulate matter and odor. Dozers, loaders, crusher and trucking equipment typically cause dusty conditions in disturbed soil sites. Dust will be controlled around the site by water truck and spray bars on the crusher. The hot asphalt plant emits odors that may be offensive to some, but emission levels will be maintained within allowable standards to protect human health. The site is not within a Class I airshed</p>
<p>4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be permanently altered? Are any rare plants or cover types present?</p>	<p>[N] There are no known rare or sensitive plants in the site area. Vegetation in the general area is planted pasture with such species as orchardgrass, timothy, bluegrass, wheatgrasses and quackgrass, which covers 80% of the ground. The vegetation will be removed and replanted with species compatible with the proposed reclaimed use.</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>[N] Although the area is used primarily for horses and rural residential homes, it also supports populations of whitetail deer, rodents, song birds, coyotes, foxes, raptors, insects and various other animal species. The area is also thought to be suitable habitat for the Lynx. Population numbers for these species is not known. There are nesting sites of ospreys and bald eagles in the region, but none were identified at or near the site. 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] The Natural Heritage Program and site evaluations have not revealed any endangered or threatened plant or animal species that would be directly affected.</p>
<p>7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?</p>	<p>[N] Although there are cultural values in the general area, this site has been previously disturbed by modern man, thus destroying the integrity of resources that may have existed. A surface reconnaissance did not discover any cultural, historical or archeological resources. A cultural resource inventory was done by Ginger Hamilton of Stevensville, MT to comply with federal regulation 36CFR 800 Section 106. The operator will give appropriate protection to any values or artifacts discovered in the affected area. 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] The site is located in a scenic, but not unique area. There will be a temporary deterioration of aesthetics while the operation is under way. However, reclamation will return the area to a visually acceptable landscape.</p> <p>The site is visible by homes and roads in the local area and to traffic along Highway 203. Normal hours of operation for the crusher are 6 am to 10 pm, Monday to Friday. Trucks will haul from 7 am to 5:30 pm a maximum of 6 days per week, and the asphalt plant will work during daylight hours.</p> <p>Noise levels generated by operating equipment at the pit are generally within the range of 60 to 90 decibels measured on-site, decreasing with distance. As a comparison, sound levels for ordinary activities such as close conversation at 60 decibels and music from a radio at 70 decibels are considered to be moderate. Levels above 90 decibels are severe, and prolonged exposure can lead to hearing loss. This noise is from loaders and truck traffic hauling to various projects and from the crusher and hot plant. These impacts are intermittent and of relatively short duration.</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>	[N]
<p>10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other studies, plans or projects on this tract?</p>	[N]
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] Heavy equipment and facilities including trucks and loaders will create hazards, but the operator must comply with all MSHA and OSHA regulations. The operator must employ proper precautions to avoid accidents. Flaggers along the roadway will reduce the risk of traffic-related accidents during the highway project.</p> <p>Excessive and prolonged noise and light could increase stress for nearby residents and induce difficulty sleeping, but ongoing operations are not planned for nighttimes. Both of these effects may be considered harmful to human health if the activities are continuous. The proposed will not be a long-termed, continuous operation, and should not significantly affect human health.</p>
<p>12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?</p>	[Y] The acreage listed in the Type and purpose of Action will be taken out of pasture and put into industrial/commercial use. Upon completion of mining, the land will be returned to a pasture.
<p>13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.</p>	[N]
<p>14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?</p>	[N]
<p>15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc) be needed?</p>	[Y] The operation will require periodic site evaluations by DEQ staff until such time as the site is successfully reclaimed to the required post-mining use. However, these evaluations are usually performed in conjunction with other area operations.
<p>16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?</p>	[Y] City/County zoning clearance has been obtained.
<p>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?</p>	[N]

