

# ENVIRONMENTAL ASSESSMENT

**Project Name:** Broksle

**Proposed Implementation Date:** Fall 98

**Proponent:** A.M. Welles, Inc.

**Type and Purpose of Action:** The proponent proposes to mine, crush, stockpile and transport 150,000 cubic yards of sand and gravel from a 13.5-acre site for the reconstruction of Highway 287. There would be an asphalt plant set up at the site. The proponent would salvage soils, mine sand and gravel, recontour, reseed and reseed the site with grasses. The reclaimed use would be dryland pasture. Final reclamation on the site would be completed in November 2000.

**Location:** NE¼ & NW¼, Sec.17, T4S, R5W **County:** Madison

**N = Not present or No Impact will occur.**

**Y = Impacts may occur (explain under Potential Impacts).**

| IMPACTS ON THE PHYSICAL ENVIRONMENT   |   |
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| RESOURCE  | [Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES   |
| <p><b>1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:</b> Are fragile, compactible or unstable soils present? Are there unusual geologic features? Are there special reclamation considerations?</p>   | <p><b>[Y]</b> The proposed site lays 3 miles north of Sheridan and is just west of Highway 287. The proposed operation is on the Wisconsin Creek alluvial fan.</p> <p>The soil is a sandy loam, with rock in places, approximately 6 inches deep. The soils are not fragile, compactible or unstable. There is no overburden to be salvaged. The soil would be salvaged and stockpiled prior to mining and after regrading the slopes to 3:1 or flatter the topsoil would be replaced. The site would be mined to a maximum depth of 20 feet. Microorganisms should reinvade the site.</p> <p>There are no unusual geologic features and no special reclamation considerations.</p>   |
| <p><b>2. WATER QUALITY, QUANTITY AND DISTRIBUTION:</b> 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><b>[Y]</b> There are three water wells within 1,000 feet of the proposed operation. The static water level in the wells is between 38 and 42 feet below a ground surface. The site would be mined to a depth of 20 feet which is well above the static water table.</p> <p>The applicant would berm and line any fuel and fuel storage areas to contain any petroleum-based products spills. Any spills of petroleum-based products would be immediately picked up and properly disposed of. Any storm water would be contained within the existing reclaimed pit area. There is an old unreclaimed gravel pit with water in approximately 700 feet west of the proposed site and Wisconsin Creek is 325 feet to the northwest. With the mining depth of 20 feet and Best Management Practices there should be no impact to ground or surface water resources.</p> |
| <p><b>3. AIR QUALITY:</b> Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?</p>  | <p><b>[N]</b> There would be an increase in airborne particulates while the soil is being salvaged, the gravel being crushed and hauled and soil replaced. The applicant would need to secure an Air Quality Permit from the Montana Dept. of Environmental Quality prior to crushing activities and operating the asphalt plant and the proponent must comply with all applicable air quality guidelines. Spray bars will be placed on the crusher to suppress dust. The hard stand areas, soil stockpiles and haul roads would be watered as necessary.</p>   |

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| <p><b>4. VEGETATION COVER, QUANTITY AND QUALITY:</b> Will vegetative communities be permanently altered? Are any rare plants or cover types present?</p>  | <p>[N] Existing vegetation would be removed with the soil. Some roots may remain viable in the soil stockpile and regenerate upon replacement. The applicant would seed all affected land to species compatible with the post mine land use. The site currently contains native species. A literature search by the Montana Natural Heritage Program and a ground search found no threatened or endangered plants present.</p> |
| <p><b>5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:</b> Is there substantial use of the area by important wildlife, birds or fish?</p>   | <p>[N] The location of the proposed operation precludes the significant use of wildlife, although it would be expected to receive transient use by various avian species, deer and rodents.</p>  |
| <p><b>6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:</b> Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern?</p> | <p>[N] The Montana Natural Heritage Program and a ground search did not identify any threatened or endangered plant or animal species present on this site. There are no wetlands present on the site.</p>   |
| <p><b>7. HISTORICAL AND ARCHAEOLOGICAL SITES:</b> Are any historical, archaeological or paleontological resources present?</p>  | <p>[N] A cultural resource survey was done by Mr. Gar wood and no cultural resources were found and clearance has been given. Should a significant archaeological or historical value be found, the operation would be routed around the site of discovery for a reasonable time until salvage can be made. The State Historic Preservation Office would be promptly notified.</p>   |
| <p><b>8. AESTHETICS:</b> 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>[N] The site would be visible from people traveling Highway 287, but the proposed operation is of a temporary nature.</p>   |
| <p><b>9. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:</b> 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><b>10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES:</b> Are there other studies, plans or projects on this tract?</p>   | <p>[N] Zoning clearance has been obtained.</p>   |

| <p align="center"><b>IMPACTS ON THE HUMAN POPULATION</b></p>  |   |
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| <p align="center"><b>RESOURCE</b></p>   | <p align="center"><b>POTENTIAL IMPACTS AND MITIGATION MEASURES</b></p>  |
| <p><b>11. HUMAN HEALTH AND SAFETY:</b> Will this project add to health and safety risks in the area?</p>  | <p>[Y] The use of heavy mining and hauling equipment will increase the risk of accidents. However, the applicant must comply with OSHA and MSHA regulations and it is expected that safety considerations will be given the utmost attention.</p> |
| <p><b>12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION:</b> Will the project add to or alter these activities?</p>                                       | <p>[N] 13.5 acres would be temporarily removed from agricultural production (dryland pasture) until such time as the site is fully reclaimed.</p>   |
| <p><b>13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:</b> Will the project create, move or eliminate jobs? If so, estimated number.</p>  | <p>[N]</p>  |
| <p><b>14. LOCAL AND STATE TAX BASE AND TAX REVENUES:</b> Will the project create or eliminate tax revenue?</p>  | <p>[N]</p>  |
| <p><b>15. DEMAND FOR GOVERNMENT SERVICES:</b> Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc) be needed?</p> | <p>[N] The site would require periodic site evaluations by DEQ staff, however they would generally be conducted in conjunction with other regional sites.</p>   |
| <p><b>16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:</b> Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?</p>                 | <p>[N] Zoning clearance has been secured from Madison County.</p>   |

