FINAL ENVIRONMENTAL ASSESSMENT

Project Name: Shields **Proposed Implementation Date:** March 1999
Proponent: Schellinger Construction Co., Inc.
Type and Purpose of Action: The proponent proposes to mine, crush, stockpile and transport 190,000 tons of sand and gravel from an 18.0 acre site for use in the reconstruction of Interstate 90. The site would be reclaimed by recontouring, respreading the topsoil and reseeding the site with grasses. The reclaimed use would be dryland hayfield. The proposed operation is 2 miles west of Belgrade.The proposed hours of operation would be 6:00 a.m. to 10:00 p.m. Monday through Friday, but there may be occasion when it would operate on a Saturday. Crushing operations would last approximately 2.5 months. There would be an asphalt plant involved with the operation and it would have the same hours of operation as the crusher and there may be occcasion when it would operate on a Saturday. The asphalt plant would start operating approximately the first of August and operate through approximately mid-October. The site would be reclaimed by December 31 of 2000.
Location: NW¼NE¼, Sec. 33, T1N, R4E **County:** Gallatin

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**
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?	**[N]** The proposed operation is located within the Gallatin River alluvial valley. The proposed operation would be located between to prelaw gravel pits which have had very limited reclamation done to them. The facility and stockpile area would adjoin the proposed operation to the north. The proponent would mine the site to the depth of the existing pits which is approximately 14 feet. The topsoil is a silt loam up to 12 inches deep. The proposed mine area has up to 12 inches of overburden, which is a sandy texture. The topsoil and the overburden would be stripped and stockpiled separately and after regrading the overburden and then the topsoil would be evenly replaced. The site would be reclaimed to have 4:1 or flatter slopes in all directions. Microorganisms should reinvade the soil. There are no fragile, compactible or unstable soils present, unusual geologic features, or special reclamation considerations.
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?	**[Y]** On the eastern boundary of the property is the Bell-Dunlop Irrigation Ditch which supplies irrigation water to landowners to the north of the interstate and to the landowner on whose property the proposed operation would be located. The landowner has a sump and a pump located on the ditch and in the past has irrigated his field from this sump and pump. This ditch would not be impacted by the proposed operation. There is an irrigation ditch on the proposed mine area which has been abandoned by the landowner and it would be taken out by the proposal. There are several water wells within the immediate area and 67 water wells within Section 33. The wells are used for domestic purposes and are generally 50 to 65 feet deep with the static water level at 20 feet plus or minus. The proponent would line and berm any fuel storage areas with impermeable materials to contain any spills. Any accidental spills of petroleum-based products would be immediately cleaned up and the contaminated material properly disposed. Best Management Practices (BMP)would be used to contain any stormwater. There would be no impact to any surface water. With the mining depth of 14 feet and the implementation of BMP there should not be any impact to ground or surface waters.

3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?	**[Y]** Air quality would be degraded and there would be an increase in particulate matter and odor. Dozers, loaders, crushers and trucking equipment typically cause dusty conditions in disturbed soil sites and asphalt plants typically emit odors that may be offensive to some people. However, crushers and asphalt plants are regulated for dust and other emissions, and the equipment used must be tested and approved by the Montana Dept. of Environmental Quality. Spray bars will be used on the crusher and transfer points, and water would be applied within the site and on the haul road as needed to reduce dust. If wind causes dust from the topsoil and overburden stockpiles, a tackifier would be applied.
4. VEGETATION COVERS, QUANTITY AND QUALITY: Will vegetative communities be permanently altered? Are any rare plants or cover types present?	**[N**] The vegetation on the site consists of smooth brome, timothy, orchardgrass, and native and non native grasses would be seeded on the site upon recontouring and retopsoiling. A literature search was done by the Montana National Heritage Program and no rare plants or cover types were identified as present at this site and none were identified during a ground search. The program did note the presence of small dropseed approximately 2 miles to the east of Belgrade.
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?	**[N]** Various mammals and birds may use the site occasionally, but the site is a dryland hayfield which would preclude extensive use.
6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or an endangered species or identified habitat present? Any wetlands? Species of special concern?	**[N]** The Montana Natural Heritage Program did not identify any federally listed, threatened or endangered species or habitat as present on or near the site. A ground search was conducted and no threatened or endangered a species or identified habitats were found on the site. No wetlands are present on the site. No species of special concern were found on the site during the ground search.
7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	**[N]** Due to the amount of previous disturbance the Montana Department of Transportation did not require a cultural survey on the site. If the operator of the proposed operation discovers any cultural resources the operation must be routed around the site of discovery for a reasonable amount of time until salvage can be made. The State Historical Preservation Office must be promptly notified.

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?	**[Y]** The site is visible from Interstate 90, but it is a short term operation and would be reclaimed by December 31, 2000. Topsoil and overburden would be stockpiled around the perimeter of the proposed operation to reduce impacts of sight, noise and light. There is at times noise created by the nearby railroad and traffic on the Interstate highway. Also, equipment working in the reconstruction of the Interstate will create additional noise. The site is visible by homes in the local area and to traffic along the Interstate and other roads. Hours of operation for the crusher would be Monday through Friday from approximately 6:00 a.m. to 10:00 p.m., and would last approximately 2.5 months. There may be occasion when the crusher would operate on a Saturday. The asphalt plant would operate the same hours and days of the week, and there may be times when it would operate on a Saturday. It would operate from the first of August through the middle of October. Hauling from stockpiles may occur at any time. Lights and generators running during the hours of operation could increase local impacts. On-site noise levels generated by operating equipment at the pit are generally within the range of 60 to 90 decibels, but decrease with distance. As a comparison, sound levels for ordinary activities such as close conversation and music from a radio are 60 decibels and 70 decibels and are considered to be moderate. Levels above 90 decibels are severe, and prolonged exposure can lead to hearing loss. Strategically locating the soil and overburden stockpiles would reduce noise and visual impacts to the surounding residents.
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?	**[N]**
10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other studies, plans or projects on this tract?	**[N]**

IMPACTS ON THE HUMAN POPULATION	
RESOURCE	**POTENTIAL IMPACTS AND MITIGATION MEASURES**
11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	**[Y]** There would be increased hazards because of equipment activity and hauling of the sand and gravel. The applicant must comply with OSHA and MSHA regulations however, proper precautions will be taken to avoid accidents.
12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	**[N]** 18 acres would be taken out of dryland hayfield until such time as the site is successfully reclaimed.
13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	**[N]**
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]** The site will require periodic site evaluations, but these will be done in conjunction with other operations in the area.

16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	**[N]** City of Belgrade 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:

A. Denial: The pit would not be permitted and impacts from mining would not occur at this location. The owner of the gravel resource would be denied full utilization of his property at this time.

B. Approval of the application: The Plan of Operation includes water protection, soil salvage, and placement of soil and overburden stockpiles to act as sight and sound barriers; those practices will provide a reduction of expected impacts.

23. Public Involvement, Agencies, Groups or Individuals contacted: Montana Natural Heritage Program, State Historic Preservation Office, City of Belgrade Planning Dept. & Gallatin County Weed Control District. Sixteen completed and signed Resident Notification Forms were submitted**. Twentyeight letters along with draft EAs and Plans of Operation were mailed on March 16, 1999 to all interested parties. The recipients had to 5:00 p.m. on Tuesday, March 23 to submit written comments to the department. No written comments were received. The draft EA is accepted as final without any changes.**

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

25. Magnitude and Significance of Potential Impacts: Impacts are unlikely to be significant on the general environment because of the short duration of the project, mining and reclamation practices employed and specfic impacts mitigation.

26. Regulatory Impact on Private Property: The analysis conducted in response to the Private Property Assessment Act indicates no impact.

Recommendation for Further Environmental Analysis:

[ ] EIS [ ] More Detailed EA [X] No Further Analysis

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Signature Date