

# ENVIRONMENTAL ASSESSMENT

**PROPONENT:** Ames Construction, Inc.

**SITE NAME:** Lee Borrow Site

**LOCATION:** Section 27, T4N, R23E

**COUNTY:** Yellowstone

**TYPE AND PURPOSE OF ACTION:** Proponent has applied for a 25-acre opencut mine permit area where they propose to remove 600,000 cy of borrow. Processing equipment would include a screen and crusher. The tentative final reclamation date is 11/2009. The application contains all items required by the Act and Rules. Proponent commits to properly conducting opencut operations and would be legally bound by their permit to reclaim the site to a postmining land use of rangeland.

A = significant unavoidable impacts. B = insignificant as a result of conditioned mitigation. C = insignificant as proposed.

	POTENTIAL IMPACTS AND MITIGATIVE MEASURES					
	A	B	C	LONG TERM	SHORT TERM	EXPLANATION
<b>PHYSICAL ENVIRONMENT</b>						
1. <u>TOPOGRAPHY</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The proposed site is located in a gently rolling area on the east side of Highway 3. Borrow removal to a maximum depth of less than 40 feet would alter the topography by lowering the surface and creating new slopes. All surfaces would be graded to 3:1 or flatter and blended into the surrounding topography and drainageways.
2. <u>GEOLOGY</u> : stability	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The Department reviewed potential impacts due to the removal of mine material and determined that the site can be reclaimed to a stable condition.
3. <u>SOILS</u> : quality, distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The range of soil thickness is 6 to 12 inches and the range of overburden thickness is 0 to 12 inches (8/12/08 conversation between Mark Carlstrom of DEQ and Leonard Boteilho of Ames Construction). Soil and overburden would be stripped from mine-level areas and evenly placed on areas prepared for resoiling or stockpiled for later reclamation use. Soil stripped from facility-level areas would be evenly replaced on those areas.
4. <u>WATER</u> : quality, quantity; distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Surface water does not appear to be a factor at this site. Based on groundwater level data for wells in the site vicinity, the depth to water in this area is variable, ranging from 13 to 50 feet below grade. The operator proposes to mine to less than 40 feet below grade. If groundwater is encountered, the operator will stop mining any deeper. The finished reclaimed surface will be several feet higher than the level of water, if encountered.
5. <u>AIR</u> : quality	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	There would be some degradation of air quality while operations are in progress. Proponent must comply with state air quality regulations.
6. <u>UNIQUE, ENDANGERED, FRAGILE, OR LIMITED ENVIRONMENTAL RESOURCES</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	None identified.
<b>BIOLOGICAL ENVIRONMENT</b>						
1. <u>TERRESTRIAL, AVIAN, AND AQUATIC SPECIES AND HABITATS</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The Montana Natural Heritage Program reports the Chestnut-collared longspur and the McCown's longspur as species of special concern in the vicinity of the proposed operation.

						<p>The Chestnut-collared longspur is a small, sparrow-like songbird. The eastern two-thirds of Montana, east of the Rocky Mountain Front, make up a portion of its summer range. The species winters from Colorado and Kansas south to Texas and northern Mexico. Dry elevated prairies and short-grass plains are preferred habitats. The opencut operation would disturb a relatively small area. Abundant similar habitat exists in the area.</p> <p>The McCown's longspur is a medium-sized sparrow. The eastern three-quarters of Montana make up a portion of its summer range. Species spends winters from Nebraska and Colorado southward. It is found in shortgrass prairies, native grasslands, pastures, and agricultural areas. The opencut operation would disturb a relatively small area. Abundant similar habitat exists in the area.</p>
2. <u>VEGETATION</u> : quantity, quality, species	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The proposed disturbance area consists of native rangeland. The Montana Natural Heritage Program reports no species of special concern. No noxious weeds were observed on or next to the proposed permit area. Proponent contacted the local weed district about the proposed operation and is in compliance with their requirements.
3. <u>AGRICULTURE</u> : grazing, crops, production	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	A small area of native rangeland would be temporarily out of production. This would not substantially impact local agriculture. The site would be reclaimed to rangeland.
<b>HUMAN ENVIRONMENT</b>						
1. <u>SOCIAL</u> : structures, mores	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. <u>CULTURAL</u> : uniqueness, diversity	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. <u>POPULATION</u> : quantity, diversity	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. <u>HOUSING</u> : quantity, distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. <u>HUMAN HEALTH &amp; SAFETY</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No problems are anticipated. Restricted hours of operation are not needed at this remote site.
6. <u>COMMUNITY &amp; PERSONAL INCOME</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. <u>EMPLOYMENT</u> : quantity, distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
8. <u>TAX BASE</u> : local, state tax revenue	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
9. <u>GOVERNMENT SERVICES</u> : demand	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. <u>INDUSTRIAL, COMMERCIAL, &amp; AGRICULTURAL ACTIVITIES</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11. <u>HISTORICAL AND ARCHAEOLOGICAL</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No resources were identified during the premine inspection.
12. <u>AESTHETICS</u> : noise, visual	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The site is in a remote location. There are no nearby residences.
13. <u>ENVIRONMENTAL PLANS AND GOALS</u> : local, regional	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Proponent contacted the local zoning authority about the proposed operation and is in compliance with local zoning regulations.

14. <u>DEMANDS ON ENVIRONMENTAL RESOURCES:</u> land, water, air, energy	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
15. <u>TRANSPORTATION:</u> networks, traffic flows	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Proponent would use the railroad right of way to transport mine material to project sites. This activity would not affect local traffic.

**ALTERNATIVES CONSIDERED:** The Department would deny an incomplete application or one that does not comply with the Act and Rules. The proponent could then submit a modified application or submit an application for another site.

**PUBLIC INVOLVEMENT:** Agencies and individuals involved in the process included the Montana Natural Heritage Program, State Historic Preservation Office, local zoning authority, county weed control board, and landowner.

**OTHER GROUPS OR AGENCIES CONTACTED OR WHICH MAY HAVE OVERLAPPING JURISDICTION:** DEQ's Air Resources Management Bureau regarding air quality, DEQ's Water Protection Bureau regarding water discharge, DNRC's Water Rights Bureau regarding water rights, and MSHA regarding mine safety.

**REGULATORY IMPACT ON PRIVATE PROPERTY:** The analysis done in response to the Private Property Assessment Act indicates no impact. The Department does not plan to deny the application or impose conditions that would restrict the use of private property so as to constitute a taking.

**RECOMMENDATION FOR FURTHER ENVIRONMENTAL ANALYSIS:** No further analysis

**INDIVIDUALS OR GROUPS CONTRIBUTING TO THIS EA:** None

Approved By: \_\_\_\_\_ Date: \_\_\_\_\_  
 (Signature)

Prepared by: Mark Carlstrom