

**ENVIRONMENTAL ASSESSMENT  
M.A. DEATLEY CONSTRUCTION, INC.  
COUGAR RANCH BORROW SITE  
MISSOULA COUNTY, MONTANA**

This Environmental Assessment (EA) is required under the Montana Environmental Policy Act (MEPA). An EA functions to identify, disclose, and analyze the impacts of a proposed action. This document may disclose impacts that have no legislatively required mitigation measures, or over which there is no regulatory authority.

The state law that regulates gravel mining operations in Montana is the Opencut Mining Act. This law and the rules adopted thereunder place operational guidance and limitations on a project during its lifetime, and provides for the reclamation of land affected by opencut mining operations.

Approval or denial of the application will be based on a determination of whether or not the proposed operation complies with the Opencut Mining Act, the Rules adopted thereunder, and local laws and regulations.

**PROPONENT:**  M.A. DeAtley Construction, Inc.

**PROJECT NAME:**  Opencut Borrow Site – Cougar Ranch

**LOCATION:**  Section 13, T15N, R20W  **COUNTY:**  Missoula

**PERSON PREPARING EA:**  Rod Samdahl

**E.A. COMPLETED:**  09/29/08   
(Date)

**TYPE AND PURPOSE OF ACTION:**

The applicant proposes to mine and haul 300,000 to 350,000 cubic yards of sand and gravel from a pit located 3 miles northeast of Evaro. The material will all be used to improve US Highway 93 from Evaro to McClure Road. The site is located on a terrace deposit of glacial sand and gravel washed down out of the foothills to the east, adjacent to the east Fork of Finley Creek at approximately 3920 feet, mean sea level. The new 500-foot access road would cross the creek over a newly-installed culvert. The site would be mined as a gentle depression, in an area where the topsoil averages 10” with 8” of overburden. The slopes of the reclaimed area would be reduced to 3:1 or flatter and the floor would be graded fairly flat, and planted into grasses. The hours of operation would be from 7:00 a.m. to 7:00 p.m., Monday through Friday. The site would be mined starting in the fall of 2008, but would shut down during the winter from mid-November through mid-March. Hauling would be completed near the end of August 2009. Reclamation would begin in the fall and be completed by April 2010. The site is unzoned by Missoula County and is on privately-owned land within the Salish/Kootenai Indian Reservation.

A: Significant Unavoidable Impacts. B: Insignificant as a result of conditioned mitigation. C: Insignificant as proposed.

				POTENTIAL IMPACTS		
	A	B	C	LONG TERM	SHORT TERM	AMPLIFICATION
<b>PHYSICAL ENVIRONMENT</b>						
1. <u>TOPOGRAPHY</u>			X	X		Mining would permanently alter the topography, but reclamation would level and smooth the site and plant grasses to stabilize the soils.
2. <u>GEOLOGY</u> ; Stability						No effect on Geology.
3. <u>SOILS</u> ; Quality, Distribution			X		X	Soils would be stripped, saved and replaced after mining is finished.
4. <u>WATER</u> ; Quality, Quantity; Distribution			X		X	The operation would not affect ground or surface waters including the East Fork of Finley Creek, which is located south of the proposed site.
5. <u>AIR</u> ; Quality			X		X	Some deterioration of air quality would occur during the extraction phase of the Highway 93 project. Dust would be controlled around the site with a water truck.
6. <u>UNIQUE, ENDANGERED, FRAGILE, or LIMITED</u> environmental resources						No unique, endangered, fragile or limited species or habitats are known at this site. Species of concern identified by the Natural Heritage Program include the Grey Wolf and the Wolverine. No denning activities or sightings are known for these species at this site.
<b>BIOLOGICAL ENVIRONMENT</b>						
1. <u>TERRESTRIAL, AVIAN, and AQUATIC</u> ; species and habitats			X		X	Wildlife utilizing this site is minimal since it is actively used as pasture. Any wildlife that could be displaced during active mining could return following reclamation.
2. <u>VEGETATION</u> ; Quantity, quality, species			X		X	Existing pasture would be replanted into grasses of a compatible type.
3. <u>AGRICULTURE</u> ; grazing, crops, production			X		X	The site is currently being pastured and land would be temporarily taken out of use during mining and reclamation. Following successful reclamation, it would be put back to pasture.
				POTENTIAL IMPACTS		
	A	B	C	LONG TERM	SHORT TERM	AMPLIFICATION
<b>HUMAN ENVIRONMENT</b>						
1. <u>SOCIAL</u> , structures and mores						Individuals living in this area have expressed concerns about the impacts of this project on their lives and property. There would be some impact and disruption of current lifestyles as the project is underway, but reclamation would return the site to pre-mining conditions.
2. <u>CULTURAL</u> ; Uniqueness, diversity						No unique or diversified cultural values exist.
3. <u>POPULATION</u> ; quantity and diversity						No effect on the population is anticipated. Employees of the operator would not take up permanent residence as a result of this project.

4. <u>HOUSING</u> ; quantity and distribution					No effects are anticipated on the quantity or distribution of housing due to this gravel pit. This project would not develop more residential land, nor consume any existing or proposed housing.
5. <u>HUMAN HEALTH &amp; SAFETY</u>			X	X	Some dust and additional traffic would be generated at the site but the operator must comply with existing traffic and air quality laws.
6. <u>COMMUNITY &amp; PERSONAL INCOME</u>			X	X	The landowner may benefit from additional revenue or value added by this operation.
7. <u>EMPLOYMENT</u> ; quantity and distribution			X	X	No additional employees would be hired to assist in daily operations.
8. <u>TAX BASE</u> ; local and state tax revenue			X	X	Additional taxes may be generated for the state and county as aggregates are hauled and used to improve US Highway 93.
9. <u>GOVERNMENT SERVICES</u> ; demand			X	X	The site would be monitored through its permit life along with other sites in the area.
10. <u>INDUSTRIAL, COMMERCIAL and AGRICULTURAL</u> activities			X	X	The site would be removed from pasture, and used commercially until reclamation when it would be reclaimed to grassland.
11. <u>HISTORICAL AND ARCHAEOLOGICAL</u>					No historical, cultural or archaeological values are known to be present.
12. <u>AESTHETICS</u>			X	X	The site sits back several hundred feet from Highway 93 and is not highly visible to the motoring public. It would be very visible to those residents who use the private road connecting this site to Highway 93.
13. <u>ENVIRONMENTAL PLANS and GOALS</u> ; local and regional					There are no known environmental plans or goals in this area.
14. <u>DEMANDS on ENVIRONMENTAL RESOURCES</u> of land, water, air and energy					There are no unusual demands on environmental resources.
15. <u>TRANSPORTATION</u> ; networks and traffic flows			X	X	There would be heavy truck traffic added to the short private road as this borrow pit is accessed for the highway project.

ALTERNATIVES CONSIDERED: The Department would deny an incomplete application or one that does not comply with the Act or Rules. The proponent could then submit a modified application or submit an application for another site. The Agency Preferred Alternative provided for thicker replacement of soils, clarification of planted pasture grasses, disposition of the access road, burial of oil spills would not be allowed, and a full ban on livestock grazing until vegetation is fully established. Those alternatives were accepted by the applicant and specified in the revised Plan of Operations dated 9/23/08.

PUBLIC INVOLVEMENT: Agencies and individuals involved in the process included the Montana Natural Heritage Program, State Historic Preservation Office, local zoning authorities, county weed control board, the Confederated Salish and Kootenai Tribe, and the landowner. Comments were solicited via email from state, county and tribal officials in addition to the residents in the area. Comments were accepted through Monday, September 29 and eight individuals provided comments back. See Attachment B below for a summary of comments.

OTHER GROUPS OR AGENCIES CONTACTED OR WHICH MAY HAVE OVERLAPPING JURISDICTION: EPA regarding air quality, MSHA and OSHA regarding mine safety, and the Consolidated Salish and Kootenai Tribes.

REGULATORY IMPACT ON THE APPLICANT'S 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.

INDIVIDUALS OR GROUPS CONTRIBUTING TO THIS EA: None

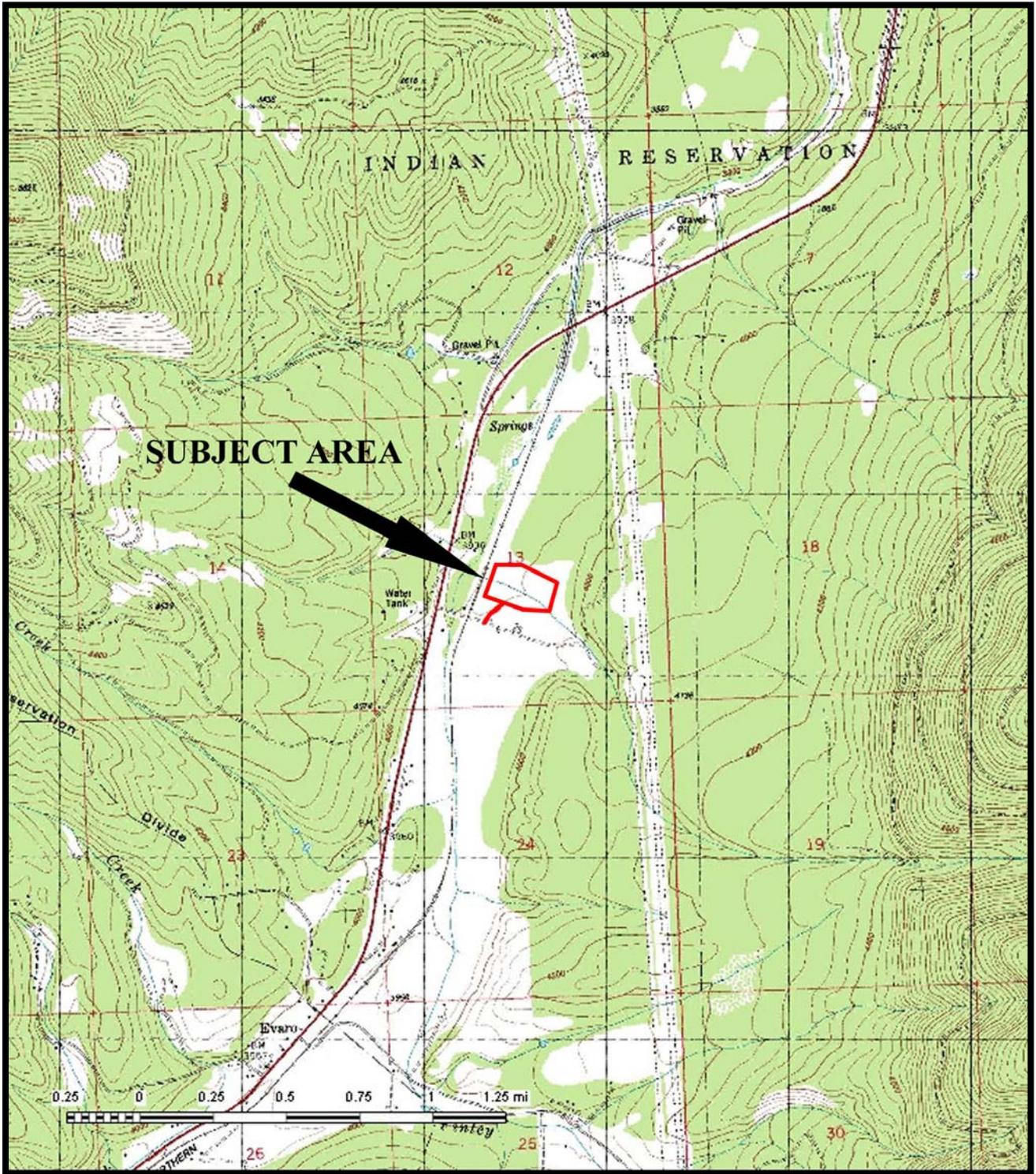
RECOMMENDATION FOR FURTHER ENVIRONMENTAL ANALYSIS: No further analysis is required.

Prepared by: Rod Samdahl

Approved By \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Date)

**FIGURE 1 - AREA MAP**





**ATTACHMENT A - PRIVATE PROPERTY ASSESSMENT ACT (PPAA) CHECKLIST**

**PROPERTY DESCRIPTION:** Section 13, T15N, R20W, Missoula County

**COMPANY NAME:** MA DeAtley Cougar Ranch Site

**DOES THE PROPOSED AGENCY ACTION HAVE TAKINGS IMPLICATIONS UNDER THE PPAA?**

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deprive the owner of all economically viable uses of the property?
	X	4. Does the action deny a fundamental attribute of ownership?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? (If answer is NO, skip questions 5a and 5b and continue with question 6.)
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property?
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally? (If the answer is NO, skip questions 7a-7c)
		7a. Is the impact of government action direct, peculiar, and significant?
		7b. Has the government action resulted in the property becoming practically inaccessible, waterlogged, or flooded?
		7c. Has the government action diminished property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?

Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b.

If taking or damaging implications exist, the agency must comply with § 5 of the Private Property Assessment Act, to include the preparation of a taking or damaging impact assessment. Normally, the preparation of an impact assessment will require consultation with agency legal staff.

## ATTACHMENT B – PUBLIC COMMENTS/QUESTIONS AND DEQ RESPONSES

Comments are combined and paraphrased below as necessary for efficiency and convenience.

**Public Comment/Question.** This site is within the perimeter of the Salish Kootenai Indian Reservation. The Tribe must grant clearance of this permit application.

**DEQ Response.** The State (DEQ) currently asserts the regulatory authority and responsibility for gravel pit operations on fee in-holdings within the reservation, and does not require clearance from the Tribe. According to the 1995 legislative document entitled “*The Tribal Nations of Montana; A Handbook for Legislators*”, the state has jurisdiction within a reservation in situations where neither federal nor tribal law *preempt* state law. Specifically, a state may regulate non-Indians and land held by non-Indians on reservations unless the regulation is prohibited by federal law including tribal regulations, or interferes with the right of the tribe to govern itself. This is the overall basis for Opencut's regulation of gravel actions on fee in-holdings. DEQ does not have the authority to accede to the tribal assertion that tribal “clearance” is required for Opencut permitting actions on said lands. DEQ does respect the interests of the Tribes in this kind of regulated activity within their reservation boundaries, and we do engage them early in the process by informing them of permit applications and supplying them with any data or information gathered as a result of the review process.

**Public Comment/Question.** Has the DEQ researched the possibility of cultural resources at this site?

**DEQ Response.** In addition to an onsite inspection, the DEQ actively seeks information on all permit applications from available sources for cultural resources including the State Historical Preservation Office (SHPO) and the Tribes. We have received a letter from SHPO saying that this site has a very low probability for cultural resources. We notified the Salish/Kootenai Tribe immediately of this application and asked for any information they had on known resources at this location. We have not received any indication that there are any Indian cultural resources here.

**Public Comment/Question.** Do not introduce grasses that are not already used in area pasture/hayland into the Evaro area. We prefer only native grasses to be used.

**DEQ Response.** The site has already been planted with introduced pasture grasses which are not native. Much (or all) of this existing pasture was forested land at one time that was cleared and planted with introduced pasture grasses. We would not require native grasses to be planted here.

**Public Comment/Question.** Is public notification of residents near this gravel pit required? I understand this is an unzoned area but believe notification both in the newspaper, letters to the impacted residents, and signs notifying is required.

**DEQ Response.** None of those things are required by the Opencut Mining Act or the associated Rules.

**Public Comment/Question.** Will the groundwater be affected?

**DEQ Response.** All the domestic water wells located within 1,000 feet of the site were drilled and cased with steel casing beneath the depth of surface waters and near-surface groundwater in order to protect the drinking water extracted by those wells from deeper aquifers. The borrow pit would only be dug 15 feet into the surface gravels, and the potable aquifer in this area is a water-bearing zone located 46 to 52 feet below the surface based on a well log from USGS observation well #133834. Mining will stay even above the near-surface water table as they go, and if it is encountered, they will backfill to stay above the wet material. They intend to "work dry". We do know that the water table rises and falls, and that there may be a period of time in the spring when

the depression contains water. That is not a problem as long as the water recedes and the grasses are left dry during summer.

**Public Comment/Question.** Will they mine into the groundwater?

**DEQ Response.** No, mining would stay above the groundwater. If the water table is encountered, they would backfill and reduce the depth of excavation.

**Public Comment/Question.** Will rising groundwater in the spring cause flooding in the pit? I'm concerned as to the water level in the proposed gravel pit next spring. From talking to residents of Musket Road and other long-time residents of Evaro, this area floods each spring. The landowner mentions using flood irrigation for the pasture area, but did not mention that it occurs naturally each spring.

**DEQ Response.** We expect that spring runoff may flood parts of the depression left from mining in any given year, but that is something that happens to some extent in that area historically. We expect that when high groundwater and water from spring melt and runoff recedes, the pit area will be left dry and productive with pasture grass. Our concern here is that during spring overland flow, there could be some erosion into the depression. DEQ has asked that the landowner avoid intentionally diverting any spring runoff into the fresh reclamation, potentially causing erosion. If erosion does occur, it will be the operator who must do any needed repairs, until they are released from further responsibility by the DEQ.

**Public Comment/Question.** How will they control the knapweed that is currently pervasive at this site?

**DEQ Response.** The operator must comply with Missoula County weed district requirements for noxious weeds. The DEQ only requires that weeds be reasonably controlled, which means that knapweed must be kept at a level at or below that of the surrounding area so as not to become a weed seed source for offsite land, and we do not specify how that should be accomplished. In this case, there is a heavy, pre-existing infestation of knapweed. The operator has agreed to plant grass seed into the soils piles as soon as they are stripped in order to retard the aggressive invasion of knapweed.

**Public Comment/Question.** Will Finley Creek be affected?

**DEQ Response.** No, Finley Creek flows south of the site and is separated by undisturbed vegetation from all activities except for the new access road crossing. There is little danger of sedimentation or contamination of the creek from pit activities. There is some exposure for the pit to be overrun during heavy springtime flooding, but flood waters are already typically sediment-laden before they would reach the pit.

**Public Comment/Question.** What changes did the DEQ require to the original Plan of Operations?

**DEQ Response.** The following changes were required to be made to the Plan of Operation under the Agency preferred Alternative mentioned above:

1. At least 18 inches of soils must be replaced, which could be 10 inches of soil with 8 inches of subsoil (overburden).
2. Change the answer to the pre-mine vegetation question to show that the existing vegetation is a mixture of planted pasture grasses, not "native" grass.
3. Clarify that the access road will be left for use by the landowner.
4. Oil or fuel spills may not be buried on site. All spills must be hauled off site and disposed of in a legal manner.

5. Following final reclamation, no grazing will be allowed until the site is released by the DEQ.

**Public Comment/Question.** We need gravel pits, especially for Highway 93 construction, but I don't feel that this is the appropriate place for one.

**DEQ Response.** DEQ does not choose the pit sites. We can only react to those chosen and applied for. Further, we neither promote nor discourage mining on any land containing gravel resources.

**Public Comment/Question.** What about grass production being dependant upon flood irrigation at this site, and how will future irrigation practices be affected? Without irrigation, knapweed and other noxious weeds already at this site could worsen.

**DEQ Response.** The seed mix to be planted is a dry-land pasture mix similar to the one already there, and does not need irrigation to survive. The addition of irrigation water may increase the volume of biomass that can be produced from the grass species planted, but is not required. A high groundwater level in the spring may even have the effect of sub-irrigation, and there may be beneficial effects of having water available to early spring grasses. The proof will be in the longer-term success of the grasses in the depression, and that will be the basis of DEQ of this permit. Following release of the site, the landowner could practice proper range management to avoid overgrazing, which leads to infestation by noxious weeds such as knapweed. However, after DEQ releases the site, we have no control over the landowner, nor could we enforce any BMP's (best management practices) for range management.

**Public Comment/Question.** Will the railroad crossing be upgraded, and will it be safe for local traffic?

**DEQ Response.** The DEQ has no jurisdiction over off-site impacts such as railroad crossings. We only regulate the site itself and certain off-site impacts that might be caused directly by mining such as water quality and quantity flowing through or under the site.