CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Eureka Gravel Testing
Proposed Implementation Date:	Spring 2024
Proponent: Location:	LHC, Inc Approximately 160 acres in the W ¹ / ₂ of W ¹ / ₂ T37N-R27W-Sec 36 (Common Schools Trust)
County:	Lincoln

I. TYPE AND PURPOSE OF ACTION

LHC, Inc. henceforth referred to as the proponent, has applied for a gravel test permit on Trust Lands on the above-referenced tract in Lincoln County. The project area can be seen on page number 20, attachment A. This project would utilize a backhoe to dig 10 test holes to a depth of approximately 20 feet. Testing and documenting would be performed by employees of LHC, Inc.

If approved, the proponent would be issued an aggregate testing permit to determine the gravel resource contained within the above-referenced tract. Gravel and dirt would be excavated from the ground and subsurface. Topsoil would be saved in a separate pile, and the disturbance created would be reclaimed immediately upon completion of documenting the test pit by backfilling the hole, replacing topsoil, and spreading native grass seed. The test pit areas would be seeded with a certified weed-free seed, native grazing and pasture mix. The mix will be provided in the stipulations at the end of this document. The seed would be supplied by the proponent.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

The proponent submitted a permit to test for aggregate on January 26, 2024, to the DNRC to explore gravel resources in the project area. The Stillwater Unit has been notified of the application.

A two-week scoping period was opened on February 13, 2024, and closed on February 27, 2024. Eight landowners adjacent to the proposed project area, including the surface lessee, and the local MT FWP office were notified of the proposal and scoped for comments. Three comments were received from individuals asking questions about the project and expressing concern about weed propagation and aesthetic impacts. Each individual was responded to separately by the Department.

The surface lessee was contacted via phone by the Department and was given the opportunity to provide comment on the proposed action.

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

The Montana DNRC, Forestry and Trust Lands Division has sole jurisdiction over the proposed action on State Trust Lands.

• Montana DNRC – FTLD – MMB – Permit to Test for Aggregate

3. ALTERNATIVES CONSIDERED:

No Action Alternative: The permit to test for aggregate would be denied and the proponent would not test for aggregate from the Montana State Trust Lands tracts referenced above.

Action Alternative: The permit to test for aggregate would be approved with stipulations and mitigations identified within this analysis. The proponent would be allowed to dig test holes in the proposed project area.

SUMMARY OF POTENTIAL IMPACTS TO THE PHYSICAL AND HUMAN ENVIRONMENT

The impacts analysis identifies and evaluates direct, secondary, and cumulative impacts.

• Direct impacts: impacts that occur at the same time and place as the action that causes the impact

• **Secondary impacts**: further impacts to the human environment that may be stimulated, or induced by, or otherwise result from a direct impact of the action.

• **Cumulative impacts**: collective impacts on the human environment of the proposed action when considered in conjunction with other past and present actions related to the proposed action by location or generic type. Related future actions must also be considered when these actions are under concurrent consideration by any state agency through pre-impact statement studies, separate impact study evaluation, or permit processing procedures.

Where impacts are expected to occur, the impacts analysis estimates the duration and severity of the impact.

The duration of an impact is quantified as follows:

• **Short-term**: impacts that would not last longer than the proposed operation of the site, including reclamation of the site.

• Long-term: impacts that would remain or occur following reclamation of the proposed site.

The severity of an impact is measured using the following:

- No impact: There would be no change from current conditions.
- Negligible: An adverse or beneficial effect would occur but would be at the lowest levels of detection.

• **Minor**: The effect would be noticeable but would be relatively small and would not affect the function or integrity of the resource.

• Moderate: The effect would be easily identifiable and would change the function or integrity of the resource.

• Major: The effect would alter the resource.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.
- Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.
- Enter "NONE" If no impacts are identified or the resource is not present.

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

Current Conditions:

Geology: Site geology consists of glacial deposits of gravel and boulders.

Soils: According to the USDA's Web Soil Survey, the project area is comprised of 4 soil types.

- McCollum-Buist family, stony-Downey, bouldery complex
- Jocko, stony-Rondowa family, stony complex
- Iphil-Turscreek-Downey comples
- Niarada-Niarada, greater slopes-Roosville complex

These soils exhibit the following properties:

Shallow excavations – This rating is the property that influences the ease of digging and resistance to sloughing. The project area soils exhibit a "*somewhat limited*" rating to shallow excavations.

Soil compactibility risk – Soils found in the project area exhibit a medium risk to soil compactibility.

Wind erodibility group - Soils found in the project area exhibit a moderate risk from wind erosion.

Soil restoration potential – Soils found in the project area exhibit a high potential for soil restoration.

Soil rutting hazard - Soils found in the project area exhibit moderate to severe soil rutting hazard.

Topsoil thickness – The 15 water wells adjacent to the project area show a topsoil thickness described by the well driller(s) as an average of 1-foot of topsoil being present.

Alternatives

No Action Alternative:

The selection of the no action alternative would not be expected to have any direct, secondary or cumulative impacts to the geology and soil quality, stability, and moisture.

Action Alternative:

<u>Direct Impacts</u>: The proponent would use existing roads to access the testing area. The proponent would then track a backhoe and light-duty trucks off-road to test hole sites. The proponent would begin by stripping and stockpiling topsoil prior to continuing to dig to an approximate depth of 20 feet below ground surface, upon reaching the desired depth, the proponent would evaluate the aggregate resource present by taking pictures, measurements, and samples. The excavation of topsoil and aggregate resource would be conducted in areas substrate back into the hole and spreading topsoil over the stripped area. Testing would be conducted in areas with mild topography and under dry or frozen conditions. This should mitigate the risks of displacing, compacting, or otherwise impacting the soils beyond the direct areas of testing. The test pits will be backfilled immediately upon digging and measuring. The impacted areas would return to their current uses shortly after project completion. Negligible, short-term impacts to geology and soil quality and moisture would be expected from the selection of the action alternative.

<u>Secondary Impacts</u>: There are no secondary impacts expected to geology and soil quality, stability and moisture from the selection of the action alternative.

<u>Cumulative Impacts</u>: Cumulative impacts to geology and soil quality, stability and moisture are not expected to change from the selection of the action alternative.

Duration: Impacts from the selection of the action alternative are expected to be short-term.

Mitigations

The potential selection of action alternative would include the following stipulations in the permit to test for aggregate:

- Testing activities shall only be conducted when the ground is dry or frozen to reduce the potential for rutting.
- Topsoil will be saved in a separate pile and disturbance would be reclaimed immediately upon completion of logging the test hole.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

Current Conditions

Surface Water: The project area is at an average approximate surface elevation of 2687' above sea level. The east half of section 36 contains Indian Creek, which is separated from the project area by US HWY 93. Indian Creek originates in a mountain basin east of the project area approximately 5 miles away. It then flows mostly southwest until it enters the Tobacco River. The southwest quarter of section 36 contains an irrigation ditch.

Ground Water: A search of the Montana Ground Water Information Center's website yields 64 water wells within 1 mile of the project area. Each well is summarized below in Table 1. Inaccurate reporting, less refined legal descriptions and poor mapping accuracy by the well drillers may lead to inconsistencies between the reported and physical location of groundwater wells. Surface elevations were obtained by taking the surface elevation of the reported well location according to Montana State Library lidar.

GWIC ID	Latitude	Longitude	Surface Elevation	Static Water Level	Calculated Water Level
142465	48.912671	-115.073492	2643	110	2533
308241	48.91267069	-115.0734916	2643	180	2463
273950	48.912708	-115.051453	2653	40	2613
304972	48.91270814	-115.0514531	2653	43	2610
301499	48.91375	-115.051944	2656	80	2576
207858	48.91663136	-115.0508056	2657.99	49.19	2608.8
312334	48.915556	-115.050278	2660	53	2607
162985	48.91892099	-115.072653	2660.45	124.6	2535.85
90169	48.91142534	-115.06068	2660.48	117.5	2542.98
302298	48.91839754	-115.0590755	2662.33	119.67	2542.66
221319	48.918289	-115.059572	2663	30	2633
312441	48.915833	-115.049833	2663	100	2563
278304	48.91743494	-115.0528634	2663.22	58.75	2604.47
162226	48.919168	-115.072083	2666	120	2546
194876	48.918289	-115.054159	2666	72	2594
195326	48.910848	-115.054159	2666	42	2624
289070	48.91084789	-115.0541593	2666	45	2621
231313	48.9215692	-115.0560053	2667.62	Unknown	Unknown
164650	48.91892413	-115.0748899	2668.3	183	2485.3
142464	48.919168	-115.0749	2669	80	2589
263425	48.9175	-115.053056	2669	59	2610
277735	48.918971	-115.071796	2669	109	2560
232330	48.92169892	-115.0516446	2669.59	Unknown	Unknown
90166	48.91603976	-115.0604427	2670.86	129	2541.86
271629	48.91510314	-115.0485367	2671.268	109.67	2561.598
298355	48.91889648	-115.0707013	2672	128	2544
231312	48.9217	-115.0514	2673	44	2629
231315	48.9372	-115.0569	2673	Unknown	Unknown
162497	48.91914	-115.06563	2673.03	100	2573.03
90167	48.915964	-115.058895	2675	90	2585
138211	48.919168	-115.069265	2676	100	2576
152576	48.939508	-115.059091	2676	70	2606
215949	48.919168	-115.069265	2676	183	2493
325852	48.923525	-115.050829	2676.1	Unknown	Unknown

299013	48.92953195	-115.0578525	2676.85	Unknown	Unknown
255042	48.919543	-115.065661	2677	129	2548
231337	48.91911	-115.064	2680.9	145	2535.9
231314	48.92678134	-115.0516898	2682.42	167	2515.42
90520	48.940893	-115.0582812	2685.05	75	2610.05
232329	48.9261	-115.0517	2687	Unknown	Unknown
210182	48.94347	-115.055546	2689	82	2607
287278	48.914044	-115.047934	2689	130	2559
231311	48.9264	-115.0497	2690	Unknown	Unknown
231309	48.9267	-115.0508	2691	Unknown	Unknown
319602	48.914	-115.048528	2692	130	2562
175565	48.943378	-115.058154	2699	80	2619
90172	48.91100247	-115.0680246	2701.77	160	2541.77
232332	48.9299	-115.0469	2705	49	2656
232331	48.92955187	-115.0483727	2710.67	49	2661.67
264845	48.930072	-115.048447	2712	48.39	2663.61
232334	48.93	-115.0486	2713	49	2664
239612	48.934916	-115.062926	2713	182	2531
264846	48.929728	-115.048436	2713	47.76	2665.24
235328	48.92975	-115.0485333	2715	Unknown	Unknown
325875	48.92329	-115.049847	2723.26	Unknown	Unknown
141762	48.93934	-115.066551	2789	150	2639
147382	47.006531	-114.693843	2890	14.2	2875.8
147385	47.000203	-114.703331	2891	14.9	2876.1
71368	47.00466	-114.739009	2920	132	2788
315621	48.91270814	-115.0514531	2656	56	2600
318442	48.91270814	-115.0514531	2656	61	2595
322513	48.912671	-115.073492	2643	72	2571
329315	48.912708	-115.051453	2656	89	2567
329316	48.912708	-115.051453	2656	35	2621

Table 1

Alternatives

No Action Alternative:

The selection of the no action alternative would not be expected to have any direct, secondary or cumulative impacts to water quality, quantity, and distribution.

Action Alternative:

<u>Direct Impacts</u>: The average calculated groundwater elevation from nearby water wells is approximately 2597 feet above sea level. The project area elevation is approximately 2687 feet above sea level, which is more than 90 feet greater than the calculated groundwater elevation. The action alternative would only dig test holes approximately 20 feet deep. Groundwater would not be expected to be encountered during testing activities, if it is encountered the digging will stop, and the test hole will be backfilled after the completion of documenting the gravel resource. If groundwater is encountered, some temporary turbidity would be expected to occur locally. However, no appreciable changes to groundwater quantity or quality are expected if it is intersected during testing operations. The action alternative is expected to have no, or negligible, short-term impacts to groundwater quality and quantity in the project area. Surface water quality and quantity are not expected to be impacted by the selection of the action alternative.

<u>Secondary Impacts</u>: There are no secondary impacts expected to surface or ground water quality or quantity resulting from the selection of the action alternative.

<u>Cumulative Impacts</u>: The cumulative impacts to surface or groundwater quality or quantity from the selection of the action alternative are not expected to change.

Duration: Impacts from the selection of the action alternative are expected to be short-term.

Mitigations

The potential selection of action alternative would include the following stipulation in the permit to test for aggregate:

- All equipment utilized in testing activities must be regularly maintained and inspected to ensure it is not leaking fluids, spreading noxious weeds or creating an undue fire hazard.
- If groundwater is intersected during testing activities, the permittee shall quit digging and begin backfilling after the completion of documenting the gravel resource.

6. AIR QUALITY:

What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

Current Conditions

Currently, significant emission sources in the project area are from vehicles travelling on Montana Highway 93, and other adjacent roads. As well as emissions from heating homes and other buildings in the greater area. Fugitive dust from vehicle travel on adjacent gravel roads contributes small amounts of airborne particulate matter in the area.

Alternatives

No Action Alternative:

<u>Direct Impacts</u>: The selection of the no action alternative would not be expected to have any direct, secondary or cumulative impact to air quality.

Action Alternative:

<u>Direct Impacts</u>: Fugitive dust would be generated from testing activities such as travelling to testing sites, digging test holes, and reclaiming test holes. The dust created from these activities is expected to be minimal and stay within direct vicinity of the source before settling. Wind velocities would introduce variability in dust dispersion in the area. Air quality could be temporarily impacted during testing activities; however, those impacts are expected to be short-term and negligible. The project is anticipated to create 0.1524 metric tons of carbon dioxide from the use of the anticipated 15 gallons of diesel fuel. There are no anticipated long-term impacts on air quality. Any impact to air quality resulting from the selection of the action alternative would be expected to correlate directly with testing operations which are expected to last one to two days.

<u>Secondary Impacts</u>: There are no secondary impacts expected to air quality resulting from the selection of the action alternative.

<u>Cumulative Impacts</u>: Air quality in the area can vary depending on the time of year due to seasonal weather patterns, wildfire smoke, heating of homes, and traffic within the area. The small amounts of additional dust and emissions beyond what is currently created by existing activities, is not expected to have appreciable impacts on the environment. Anticipated emissions could create 0.1524 metric tons of carbon dioxide from the use of the anticipated 15 gallons of diesel fuel. The additional impacts from testing activities would be expected to be negligible.

Duration: Impacts to air quality are expected to be short-term.

7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

Issues and Concerns

• The surface lessee has worked diligently to manage and mitigate noxious weeds on the tract. The action alternative would have the potential to introduce new weeds or further exacerbate the existing conditions.

Current Conditions

The proposed testing area is covered by Rocky Mountain Lower Montane, Foothill, and Valley Grassland. This grassland system is found throughout lower elevations of Montana comprising of perennial bunch grasses and forb, shrub cover, rough fescue, Idaho fescue, bluebunch wheatgrass, and western wheatgrass.

An inventory of the Montana Natural Heritage Program's Species of Concern database was conducted for the project area. The search yielded one vegetative species of concern, Spalding's Catchfly, *"Silene spaldingii."* The Spalding's Catchfly is a perennial native to northwest Montana with flowering occurring July through August. Invasive weeds being the most widespread threat along with other factors such as cattle grazing, and housing development.

During the most recent department field evaluation in 2015 the following noxious weeds were identified within the project area: Spotted Knapweed and Cheatgrass.

Per the Montana Weed Control Association Spotted Knapweed is a priority 2B weed, being abundant and widespread throughout Montana and is a biennial or short-lived perennial that inhibits growth of plants surrounding them. While being short lived Spotted Knapweed seeds could survive in the soil for eight years. Management of Spotted Knapweed starts with prevention as the seeds are spread through wind and movement of animals or people.

Cheatgrass is a priority 3 weed being regulated throughout Montana, and has potential negative impacts, such as outcompeting neighboring plants. This annual bunchgrass can be managed through a variety of methods such as; proper grazing, hand-pulling and revegetating any disturbances.

The current surface lessee has been managing the noxious and invasive weeds.

Alternatives

No Action Alternative:

The selection of the no action alternative would not be expected to have any direct, secondary or cumulative impacts to vegetation cover quantity and quality.

Action Alternative:

<u>Direct Impacts</u>: The use of excavation equipment would temporarily damage some areas of the plant community. The disturbance would occur from the vegetation being compacted and excavated by equipment. Damage to the plant community should be lesser at this time of year since most species should be dormant. Per the proposed stipulations of the permit, the proponent would be responsible for the management and mitigation of invasive weeds at the testing sites and on equipment travel routes. The proponent would also be responsible for reseeding the impacted areas with a native seed mixture, that would be included in the permit. Overall, the impacts to vegetation cover, quantity and quality, including the species of concern would be expected to be minor. No appreciable changes to vegetation are expected to occur resulting from the selection of the action alternative.

<u>Secondary Impacts</u>: Secondary impacts may occur in the form of noxious weed propagation from testing sites. Weed impacts can be mitigated to negligible with proper efforts, such as monitoring and chemical treatment if necessary.

<u>Cumulative Impacts</u>: Noxious weed introduction and propagation is a serious concern throughout Montana. Mitigations must be considered for actions that could further exacerbate the problem. Mitigations are offered below and would be implemented within the testing permit if the action alternative is selected.

Duration: Impacts to vegetation cover, quantity and quality are expected to be short-term.

Mitigations

The potential selection of action alternative would include the following stipulation in the permit to test for aggregate:

- The Proponent will be responsible for the management, mitigation and elimination of invasive weeds introduced or propagated from testing activities. Such activities include digging and the transportation of equipment to and from each testing site.
- Trucks and testing equipment should be washed and inspected, prior to activities, to limit the possible spread of noxious weeds.
- The testing sites will be monitored by the proponent for a period of three growing seasons to ensure revegetation, and to accommodate any weed infestations within the test sites.
- The Proponent will be responsible for reseeding the affected areas with certified weed free seed mixture, listed below.

0	<u>Species</u>	Lbs PLS/Acre
	Slender wheatgrass	2
	Western wheatgrass	3
	Thickspike wheatgrass	2.5
	Bluebunch wheatgrass	2.5
	Green needlegrass	2
	Western Yarrow	0.5

• If Spalding's Catchfly is encountered during project activities efforts will be made to avoid the areas inhabited by the plant.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

Issues and Concerns

• Montana FWP comment specify the proposed project area provides important open space for wintering elk herds and facilitates unhindered animal movement within the valley.

Current Conditions

The project area maybe used by a variety of terrestrial and avian wildlife, including white-tailed deer, mule deer, elk, black bears, coyotes, foxes, raptors, rodents, and songbirds. Generally, many of these species are common in the region. Proximity to Highway 93, numerous residences, past gravel mining and other forms of human disturbances have likely altered the usefulness of the project area by wildlife. During past field evaluations by the department, it was noted that elk were occupying the east half of section 35, as elk and others use the area for winter range.

<u>Alternatives</u>

No Action Alternative:

The selection of the no action alternative would not be expected to have any direct, secondary or cumulative impacts to terrestrial, avian, and aquatic life and habitats.

Action Alternative:

<u>Direct Impacts:</u> The action alternative would create minor audible and visual disturbances for a short time frame to any animals that may occupy the project area or its surroundings. Wildlife may pass through the project area as part of their movements between habitats. As indicated earlier, disturbance in the vicinity, including the effects of Highway 93, numerous residences, various recreational activities, and other forms of human disturbance have impacted the ability of the area to be used for wildlife habitat. Given the current disturbances and limited hiding cover in the project area, many wildlife species have likely altered how they use the project area to times when human presence and disturbance is lessened, such as at night. Similar habitat and forage can be found throughout the surrounding area and could sustain any impacted wildlife species temporarily. Grazing by domestic animals would continue. Only the impacts from gravel testing operations are evaluated within this analysis. Impacts to terrestrial, avian and aquatic life and habitat are expected to be minor.

Secondary Impacts: There are no secondary impacts expected to terrestrial, avian and aquatic life and habitats.

<u>Cumulative Impacts:</u> Cumulative impacts to terrestrial, avian and aquatic life and habitats would not be expected to appreciably change from the selection of the action alternative.

<u>Duration:</u> Impacts from the selection of the action alternative are expected to be short-term resulting in one to two days of increased activity on the tract. Project activities would be completed by May 31st

Mitigations

The potential selection of action alternative would include the following stipulation in the permit to test for aggregate:

• Testing may only occur during daylight hours.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

Current Conditions

The Montana Natural Heritage Program's species of concern was conducted for the project area. The search yielded the following species of concern that have potential to be within the project area;

- Grizzly Bear Grizzly Bears can be found throughout the much of western Montana in a variety of habitats that depend on the season, following food availability.
- Hoary Bat A bat species that may be found in the project area during the summer months, predominantly living in forested areas.
- Little Brown Myotis A native permanent resident of Montana, during winter months this species may be found in caves and abandoned mines.
- Long-eared Myotis A native permanent resident of Montana with some migrating during winter months. Occupying a range of rocky and forested areas.
- Yuma Myotis A native permanent resident of Western Montana found in dry coniferous forests and arid shrublands.
- Bobolink A summer resident of Montana, with primarily nests in tall grass and mixed grass prairies. Their spring migration has been found to occur from May 20 to June 5, in southwest Montana.
- Evening Grosbeak A year-round resident of Western Montana breeding in coniferous forests, moving throughout the state throughout the state.
- Long-billed Curlew A summer resident of Montana migrating to breed in prairie habitats and moist meadows. Nests can be found in open short grasslands and avoids areas with trees, dense shrubs or grasses.
- Pileated Woodpecker A permanent resident which prefers late stage coniferous or deciduous forests.

Alternatives

No Action Alternative:

The selection of the no action alternative would not be expected to have any direct, secondary or cumulative impacts to unique, endangered, fragile or limited environmental resources.

Action Alternative:

<u>Direct Impacts:</u> The action alternative would create small, temporary, visual and audible disturbances for 1-2 days in the project area. Negligible changes to existing vegetation would occur, thus no appreciable changes in available habitats would be expected to occur. Some minor, short-duration disturbance to individuals of any of these species may occur if they are in the vicinity of the project area during testing activities. The action alternative would not be expected to impact species of concern beyond completion of the project.

<u>Secondary Impacts</u>: There are no secondary impacts expected to unique, endangered, fragile or limited environmental resources.

<u>Cumulative Impacts</u>: There are existing disturbances near the project area which include HWY 93, residences, ranches, and a golf course. All these disturbances have been present for long periods of time. The proposed activity would add to the disturbance, in a negligible and short-term manner. The additional impacts introduced from the selection of the action alternative are not expected to appreciably change cumulative impacts.

Duration: Impacts from the selection of the action alternative are expected to be short-term.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine effects to historical, archaeological or paleontological resources.

Current Conditions

A Class I (literature review) level review was conducted by the DNRC staff archaeologist for the area of potential effect (APE). This entailed inspection of project maps, DNRC's sites/site leads database, land use records, General Land Office Survey Plats, and control cards. The Class I search results revealed that no cultural or paleontological resources have been identified in the APE, but it should be noted that Class III level inventory work has not been conducted there to date.

Alternatives

No Action Alternative:

No impacts to historical and archeological sites would be expected from the selection of the no action alternative.

Action Alternative:

<u>Direct Impacts</u>: The selection of the action alternative would have no impact to antiquities as defined under the Montana State Antiquities Act.

However, if previously unknown cultural or paleontological materials are identified during project related activities, all work would cease until a professional assessment of such resources can be made.

<u>Secondary Impacts</u>: There are no secondary impacts expected, resulting from the selection of the action alternative.

<u>Cumulative Impacts</u>: There are no cumulative impacts expected to historical and archeological sites from the selection of the action alternative.

Duration: No impacts are anticipated; therefore the duration of impacts is not applicable.

Mitigations

The potential selection of action alternative would include the following stipulation in the permit to test for aggregate:

• If any cultural or paleontological resources are encountered during testing activities, all operations must stop, and the proponent shall contact DNRC.

11. AESTHETICS:

Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

Issues and Concerns

• Gravel pits leave unsightly scars upon the land.

Current Conditions

The project area is currently comprised of vegetation as described in section 7 of this document. The project area has been managed for grazing in the past by the Department since 2001. In the northern part of the tract are remnants of a gravel pit, which the MT DEQ opencut permit is held by the Montana Department of Transportation with a pending reclamation date of being in 2043.

The project area is directly adjacent to Highway 93. The project area is approximately 3.5 miles north of Eureka and separated by HWY 93 from Indian Springs Golf, RV Resort & Suites. Traffic travelling along Highway 93 can be seen and heard at varying degrees throughout the project area.

Alternatives

No Action Alternative:

There would be no direct, secondary, or cumulative impacts to aesthetics expected from the selection of the no action alternative.

Action Alternative:

<u>Direct Impacts</u>: An increase in noise from trucks and a single backhoe may be heard adjacent to the project area. From adjacent roads and public spaces, the testing may be visible. Test hole disturbance will be visible temporarily from areas adjacent to the activity. The holes would be backfilled with the same substrate excavated during testing. Topsoil would then be spread upon the top of the disturbance and native grass seed would be spread by the proponent. The disturbance would be expected to remain visible while the disturbance is being revegetated. Noise impacts would be expected only during testing operations that will occur over a one- or two-day period. Upon reclamation, the site will be returned to a landscape consistent with the surroundings. Impacts to aesthetics are expected to be short-term and minor. The action alternative does not evaluate the impacts of a gravel pit, and those impacts are outside the scope of this analysis. Only the impacts from gravel testing operations are evaluated within this analysis.

<u>Secondary Impacts</u>: Noise and visual impacts will occur outside of the project area. However, these impacts are expected to be minor and short-term.

<u>Cumulative Impacts</u>: Some minor additional noise may occur in areas adjacent to the project area. The selection of the action alternative is not expected to appreciably change the aesthetics in the area.

Duration: Impacts to aesthetics from the selection of the action alternative are expected to be short-term.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY: Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

Current Conditions

The impacts to land, water and air is described within other sections of this document. Energy sources that would be required by the project are abundant in the area.

Alternatives

No Action Alternative:

The no action alternative would not be expected to have any direct, secondary, or cumulative impacts on the demands on environmental resources of land, water, air or energy.

Action Alternative:

<u>Direct Impacts</u>: The proposed project would create individual 10 test holes within a larger area of approximately 160 acres. The overall disturbances created within the project would be expected to have minor and short-term impacts on the environmental resources of the land. The expected impacts to water and air were identified earlier in this document. Energy resources used for this project, such as fuel for the proposed activity, in the area are abundant and any impact to energy resources would be expected to be negligible.

<u>Secondary Impacts</u>: There are no secondary impacts expected resulting from the selection of the action alternative.

<u>Cumulative Impacts</u>: Cumulative impacts for land, water and air are evaluated in their respective sections. There are no appreciable cumulative impacts expected to energy resources resulting from the selection of the action alternative.

Duration: Impacts of the selection of the action alternative are expected to be short-term.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

Current Conditions

There are no other known environmental documents within the area.

Alternatives

No Action Alternative:

The no action alternative would not be expected to have direct, secondary, or cumulative impacts to other environmental documents pertinent to the area.

Action Alternative:

<u>Direct Impacts</u>: The grazing lessee would realize a short-term negligible loss in vegetation within their lease. Upon reclamation the impacted areas would return to grazing rangeland. The proposed project would have a temporary, negligible impact to the surface lease agreement. The proposed project would not be expected to have any impact on the past gravel pit workings or gravel stockpile. Any future development in the area would likely be restricted to utility or mineral development. <u>Secondary Impacts</u>: There are no secondary impacts expected resulting from the selection of the action alternative.

<u>Cumulative Impacts</u>: There are no cumulative impacts expected resulting from the selection of the action alternative.

Duration: Impacts of the selection of the action alternative are expected to be short-term.

IV. IMPACTS ON THE HUMAN POPULATION

- RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.
- Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.
- Enter "NONE" If no impacts are identified or the resource is not present.

14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

Current Conditions

The current conditions of the tract pose no risk to human health or safety.

Alternatives

No Action Alternative:

The no action alternative would not be expected to have any direct, secondary, or cumulative impacts to human health or safety.

Action Alternative:

<u>Direct Impacts</u>: The proposed project is expected to have a negligible impact to human health or safety, other than the occupational risks typically associated with aggregate testing machinery. The site is in a rural area away from residences. Impacts to air quality and water quality are evaluated in their respective resource sections of this document. During project activities there would be a minor increase in truck traffic and a single backhoe will be working within the project areas, the impact to human health and safety resulting from the selection of the action alternative is expected to be short-term and negligible as the activities would occur for one to two days with minimal increases in traffic.

<u>Secondary Impacts</u>: There are no secondary impacts expected resulting from the selection of the action alternative.

<u>Cumulative Impacts</u>: There are no cumulative impacts expected resulting from the selection of the action alternative.

Duration: Impacts of the selection of the action alternative are expected to be short-term.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION: *Identify how the project would add to or alter these activities.*

Current Conditions

The project areas are in a moderately rural environment and industrial activities are mostly non-present. Commercial activities in the area are mostly driven by tourism. Outdoor recreation is a large component of the activity in the area and consists of hiking, fishing, and hunting. The project area is adjacent to a golf course and RV park. Any agricultural activities in the area are mostly limited to the grazing of cattle. The entirety of the testing area has an overlying grazing lease held by Yorlum Properties LP. In the NWNW¹/₄ of the project area are remnants of an MDT gravel pit with a left-over stockpile of gravel. There is currently no aggregate permit held for the stockpile in the disturbed area.

Alternatives

No Action Alternative:

The no action alternative would be expected to have no direct, secondary, or cumulative impacts to industrial, commercial, and agricultural activities.

Action Alternative:

<u>Direct Impacts</u>: The action alternative would not be expected to have negligible impacts upon the industrial, commercial, or agriculture activities currently present.

<u>Secondary Impacts</u>: There are no secondary impacts expected resulting from the selection of the action alternative.

<u>Cumulative Impacts</u>: There are no cumulative impacts expected resulting from the selection of the action alternative.

Duration: No impacts identified.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

Current Conditions

The closest town and employment center is Eureka, Montana 3.5 miles to the south of the project area.

Alternatives

No Action Alternative: The no action alternative is not expected to have any direct, secondary or cumulative impacts to the quantity and distribution of employment.

Action Alternative:

<u>Direct Impacts</u>: No direct impacts are expected to quantity and distribution of employment from the selection of the action alternative.

<u>Secondary Impacts</u>: There are no secondary impacts expected resulting from the selection of the action alternative.

<u>Cumulative Impacts</u>: There are no changes to cumulative impacts could be expected from the selection of the action alternative.

Duration: No impacts identified.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES: Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

Current Conditions

Trust land is exempt from local property tax. Operators and lessees conducting business on Trust Lands must pay business taxes.

Alternatives

No Action Alternative:

The no action alternative is not expected to have any direct, secondary, or cumulative impact on local and state tax bases or tax revenues.

Action Alternative:

<u>Direct Impacts</u>: No direct impacts to local and state tax base and tax revenue are expected from the selection of the action alternative.

Secondary Impacts: There are no secondary impacts expected from the selection of the action alternative.

Cumulative Impacts: There are no cumulative impacts expected from the selection of the action alternative.

Duration: No impacts identified.

18. DEMAND FOR GOVERNMENT SERVICES:

Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services

Current Conditions

The traffic sources in the area are on Highway 93 and adjacent roads. Emergency services would likely come from Eureka, MT.

Alternatives

No Action Alternative:

The no action alternative is not expected to have any direct, secondary, or cumulative impacts on the demand for government services.

Action Alternative:

<u>Direct Impacts</u>: No direct impacts to the demand of government services are expected from the selection of the action alternative.

<u>Secondary Impacts</u>: There are no secondary impacts expected resulting from the selection of the action alternative.

<u>Cumulative Impacts</u>: There are no changes to cumulative impacts resulting from the selection of the action alternative.

Duration: No impacts identified.

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

Current Conditions

There are no known environmental plans or goals for this tract in the project vicinity.

Alternatives

No Action Alternative:

The no action alternative is not expected to have any direct, secondary, or cumulative impacts on locally adopted environmental plans or goals.

Action Alternative:

<u>Direct Impacts</u>: No impacts are expected to locally adopted environmental plans and goals from the selection of the action alternative.

<u>Secondary Impacts</u>: There are no secondary impacts expected resulting from the selection of the action alternative.

<u>Cumulative Impacts</u>: There are no changes to cumulative impacts expected resulting from the selection of the action alternative.

Duration: No impacts identified.

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:

Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

Current Conditions

This site is not designated as wilderness, nor does it provide access to wilderness. Montana State Trust Lands are accessible for public use by purchasing the necessary conservation license through Montana Fish Wildlife and Parks.

<u>Alternatives</u>

No Action Alternative:

The no action alternative is not expected to have any direct, secondary, or cumulative impacts on the access to and quality of recreational and wilderness activities.

Action Alternative:

<u>Direct Impacts</u>: The proposed project area does have public access. Recreation accessibility is not expected to be limited during testing activities. However, the quality of recreation sought by individuals visiting the tract may be impacted by the proposed activity. Impacts to recreation are expected to be minor and short-term and will only occur during testing activities.

<u>Secondary Impacts</u>: There are no secondary impacts expected resulting from the selection of the action alternative.

<u>Cumulative Impacts</u>: There are no changes to cumulative impacts expected resulting from the selection of the action alternative.

Duration: Impacts to recreation will occur during testing operations which would be expected to last 1-2 days.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.

Current Conditions

The closest population center to the project areas is Eureka, MT.

Alternatives

No Action Alternative:

The no action alternative is not expected to any direct, secondary, or cumulative impacts to the density and distribution of population and housing.

Action Alternative:

<u>Direct Impacts</u>: No direct impacts to the density and distribution of population and housing are expected from the selection of the action alternative.

<u>Secondary Impacts</u>: There are no secondary impacts expected resulting from the selection of the action alternative.

<u>Cumulative Impacts:</u> There are no cumulative impacts expected resulting from the selection of the action alternative.

Duration: No impacts identified.

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

Current Conditions

The Flathead Reservation is approximately 80 miles to the south of the project area.

Alternatives

No Action Alternative:

The no action alternative is not expected to have any direct, secondary, or cumulative impacts on social structures, native or traditional lifestyles or communities.

Action Alternative:

Direct Impacts: No direct impacts are expected to native or traditional lifestyles.

<u>Secondary Impacts</u>: There are no secondary impacts expected resulting from the selection of the action alternative.

Cumulative Impacts: There are no cumulative impacts expected from the selection of the action alternative.

Duration: No impacts identified.

23. CULTURAL UNIQUENESS AND DIVERSITY:

How would the action affect any unique quality of the area?

Current Conditions

There are no known unique qualities of the area.

Alternatives:

No Action Alternative:

The no action alternative is not expected to have any direct, secondary, or cumulative impacts to cultural uniqueness or diversity.

Action Alternative:

Direct Impacts: No direct impacts are expected to the unique qualities of the area.

Secondary Impacts: There are no secondary impacts expected to cultural uniqueness and diversity.

Cumulative Impacts: There are no cumulative impacts expected to cultural uniqueness and diversity.

Duration: No impacts identified.

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

<u>Alternatives</u>

No Action Alternative:

The \$25 application fee would be retained by the Department. The denial of a testing permit would not be expected to generate potential future income from gravel. Grazing lease would continue to generate around \$1600.00 annually.

Action Alternative:

<u>Direct Impacts</u>: If the action alternative is selected the project would provide the trust with a \$25.00 application fee. The results of testing would determine whether there is a viable resource for commercial gravel operations and help the Department and proponent understand potential assets present. Future revenue generating activity for the project area could include a gravel pit, current grazing lease, and other forms of recreational activity. Gravel testing is not expected to hinder or impede any of the future potential in the project area. Social and economic circumstances are expected to be minor and short-term from the selection of the action alternative.

Secondary Impacts: No secondary impacts expected.

<u>Cumulative Impacts</u>: All funds generated from application fees go directly towards supporting Montana Trust Lands. While the \$25 fee is minimal, it does contribute to an overall significant value attributed to the schools of Montana.

Duration: No impacts identified.

EA Checklist Prepared By:	Name: Thomas Palin	Date: March 19, 2024
	Title: Mineral Resource Specialist	

V. FINDING

25. ALTERNATIVE SELECTED:

The Action Alternative has been chosen.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

The granting of the requested aggregate test permit pits on this tract of State Trust Lands is not expected to result in, nor cause significant negative environmental impacts. The proposed action satisfies the Trust's fiduciary mandate and ensures the long-term productivity of the land. An environmental assessment is the appropriate level of analysis for the proposed action.

I conclude that all identified potential impacts will be mitigated by utilizing permit requirements, including the stipulations listed below.

- 1. The proponent must notify DNRC at least 48 hours prior to proposed activities.
- 2. The permit holder shall be in compliance with all applicable state and federal laws, rules, and regulations, including but not limited to those concerning safety, environmental protection, reclamation, drone flight requirements for photography and topographic mapping over the site.
- 3. Topsoil/sod will be stockpiled separately from subsoil for reclamation. The licensee shall fill holes with subsoil before covering them with topsoil and sod. All holes must be filled and reclaimed immediately prior to moving on to the next hole.
- 4. Geologic, geochemical/geophysical information (including but not limited to detailed sample site locations, areas disturbed by gravel pit testing, and sample results for each corresponding sample site) if collected for the tract will be provided to Minerals Management Bureau, TLMD MT-DNRC with a report on exploration activities. The permittee shall also concurrently provide GPS, GIS, or other data, detailed maps, and/or aerial photos associated with the associated permit to MMB. The licensee should advise the department if they consider this information confidential.
- 5. Testing will be limited to areas within the northern ½ of the west ½ of section 36, Township 37N, Range 27W, see attached map.
- 6. Test holes will be limited to 10.
- 7. The permit holder agrees to avoid and not disturb historic buildings, foundations, or other cultural features on this tract. If any cultural or paleontological resources are encountered during testing activities, all operations must stop and contact DNRC.
- 8. To prevent unnecessary impacts on soils and reduce the potential for rutting no significant precipitation has occurred within the last 48 hours.
- 9. The proponent will seed disturbances with the below described certified weed free seed mix, before leaving project areas or at a time that will achieve successful germination. Before spreading the weed free seed the certified weed free tag will be given to the Department.

0	<u> </u>	
SPECIES		Lbs PLS/Acre
Slender wheatgrass		2
Western wheatgrass		3
Thickspike wheatgrass		2.5
Bluebunch wheatgrass		2.5
Green needlegrass		2
Western Yarrow		0.5

- 10. Seed will be loosely covered with a weed free mulch or straw.
- 11. The proponent will be responsible for the management, mitigation and elimination of invasive weeds potentially introduced from testing which includes monitoring the testing sites for a period of two growing

seasons. A licensed applicator will spray the sites for two growing seasons to ensure revegetation, and to accommodate any weed infestations within the individual test sites.

- 12. All equipment must be washed, free of weeds, and inspected by DNRC prior to entering the project area.
- 13. All equipment utilized in testing activities must be regularly maintained and inspected to ensure it is not leaking fluids or creating an undue fire hazard.
- 14. If groundwater is intersected during testing activities, the permittee shall quit digging and begin backfilling after the completion of documenting the gravel resource.
- 15. Testing may only occur during daylight hours.
- 16. If any damage to fences are incurred the proponent will fix damages.
- 17. Food, garbage, and other attractants will be stored in a bear-resistant manner.
- 18. Topsoil will be saved in a separate pile and disturbance would be reclaimed immediately upon completion of logging the test hole.
- 19. If Spalding's Catchfly is encountered during project activities efforts will be made to avoid the areas inhabited by the plant.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

EIS		More Detailed EA	X No Fu	urther Analysis
EA Checklist	Name:	Dave Ring		
Approved By:	Title:	Stillwater Unit Manager		
Signature:	/S/ Davi	d A. Ring	Date:	3/19/2024

Attachment A

