



# United States Department of the Interior

BUREAU OF LAND MANAGEMENT  
Fairbanks District Office  
1150 University Avenue  
Fairbanks, AK 99709



## ENVIRONMENTAL ASSESSMENT DOI-BLM-AK-03000-2012-0008-EA

FF096022 (360213)

Mile Post 208.5-240  
Along the Dalton Highway

Proposed action located in:  
The Fairbanks Meridian within:  
Sections 1, 11-13, 14, 23, 24, Township 33N, Range 10W,  
Section 23-26, Township 34N, Range 10W  
Sections 4 and 9, Township 35N, Range 10W  
Sections 2, 3, 10, 21, 28, Township 36N, Range 10W  
Sections 25, 35, 36, Township 37N, Range 10W

The Umiat Meridian within:  
Section 3, Township 16S, Range 11E

Mineral Material Exploration Permit  
State of Alaska  
Department of Transportation and Public Facilities  
2301 Peger Road  
Fairbanks, AK 99701

## **A. INTRODUCTION**

### **1. Background**

Alaska Department of Transportation and Public Facilities (ADOT&PF) maintains the Dalton Highway with repair and upgrade projects for the road and various facilities along the highway. This requires the use of mineral material sites located along the highway for the materials needed to complete these projects.

### **2. Purpose and Need for the Proposed Action**

#### a. ADOT&PF's Purpose and Need:

ADOT&PF has requested to conduct an exploration program along the Dalton Highway milepost 208.5 - 240 to locate additional suitable material source(s) to meet the complete range of mineral material requirements for one or more new sources along this stretch of the Dalton highway, and the expansion of three established mineral material sites. Attachment 1 includes the map and the permit request for this geotechnical exploration.

#### b. BLM's Purpose and Need:

The BLM administers mineral material resources along the Dalton Highway corridor to provide material for infrastructure projects by responding to applications for the use of the material. ADOT&PF filed an application locate a new gravel source in 2012, and the BLM needs to respond to the application under the authority of 43 CFR 3601 and 30 USC 601 (Materials Act of 1947).

#### c. Decision to be Made:

The BLM will decide whether or not to issue ADOT&PF a Free Use Exploration Permit to conduct exploration along this stretch of the Dalton Highway. The BLM will also determine the mitigation necessary to prevent undue and unnecessary degradation of the resources.

### **3. Potential Issues**

Specialists in the Central Yukon Field Office identified potential issues that involve air quality, Areas of Critical Environmental Concern, invasive non-native plants, hazardous and solid wastes, water quality, wetlands, access, visual resources, and wildlife. Of these, the most substantial concerns were:

1. Invasive plant seeds could be transported into previously uninfested areas.
2. Sediment from the existing pit could spread over the vegetative mat and increase water turbidity.

### **4. Conformance with Land Use Plan and Land Status**

The proposed action falls within the Utility Corridor Resource Management Plan (RMP) prepared by BLM. Mineral material extraction is dealt with specifically on Pg. 2-108 of the Utility Corridor RMP, "Mineral material (gravel) sales would be allowed throughout the planning area with certain safeguards for specific areas (e.g., within the Jim River and Prospect Creek floodplains and the Ivishak River ACEC)."

## **5. Relationship to Statutes, Regulations, or Other Plans**

The management of these lands, subject to valid existing rights, is in accordance with the 1947 Mineral Materials Act, applicable provisions of the Alaska National Interest Lands Conservation Act (ANILCA), the Federal Land Policy and Management Act of 1976 (FLPMA), and the Utility Corridor Resource Management Plan and the Record of Decision which covers the area within which the proposed action would take place.

The following list summarizes the principal laws and regulations that pertain to this analysis. This is not a comprehensive listing of all laws and regulations that may pertain to BLM's management responsibility.

- Materials Act of 1947 (61 Stat. 681).
- 43 Code of Federal Regulations (CFR) 3620.01
- Federal Land Policy and Management Act of 1976.
- Alaska National Interest Lands Conservation Act of 1980, as amended.
- Executive Order 11988 of 1977, as amended - Floodplains
- Executive Order 11990 of 1977 - Protection of Wetlands.
- Endangered Species Act of 1973, as amended.
- Antiquities Act of 1906.
- National Historic Preservation Act of 1966, as amended.
- Archaeological Resources Protection Act (ARPA) of 1979.
- Clean Air Act, as amended.
- Clean Water Act of 1977.
- Resource Conservation and Recovery Act (RCRA) of 1976 (Solid Waste Disposal Act), as amended.
- Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1970, as amended.
- 40 CFR Subparts 110 and 112.
- Migratory Bird Treaty Act of 1918, as amended
- Executive Order 13186 for migratory birds
- Bald Eagle Protection Act of 1940

## **B. PROPOSED ACTION AND ALTERNATIVE**

### **1. Proposed Action**

The Alaska Department of Transportation and Public Facilities (ADOT&PF) has submitted a request to conduct a geotechnical exploration operation from milepost 208.5 – 240 along the Dalton Highway to locate additional suitable material source(s) to meet the complete range of mineral material requirements for one or more new sources along this stretch of the Dalton Highway, and the expansion of three established mineral material sites. Attachment 1 includes the map and the permit request for this geotechnical exploration. Once a mineral material source is located, a complete mine

plan is received from ADOT&PF, and the site is approved for mining, it will be used for road maintenance and construction projects over the next 10 or more years.

Access to the exploration sites would be conducted by using a Bombadier Muskeg carrier with a mounted CME 45-B Drill, which will be walked over the surface to the proposed drilling locations. The Bombadier contains enough fuel to allow it to not be refueled for two days. Refueling will occur on the Dalton Highway. This equipment was chosen for its ability to conduct operations across soft ground with a minimum impact to the ground surface. The exploration program is planned for a start date of May 2012 with a completion date in October 2012.

### General Information

ADOT is looking for a material source that will meet their needs for type of material and quantity for a reconstruction project that will be done along the Dalton Highway from milepost 209-235. The material sources will need to provide an estimated 300,000 cubic yards of borrow, 250,000 cubic yards of select type A, 250,000 cubic yards of crushed aggregate and 20,000 cubic yards of rip-rap.

Exploration targets will be prioritized by location and suitability. Successful outcomes at some locations could obviate the need for additional drilling at other locations.

The initial drilling will utilize widely spaced (500-ft to 1000-ft) reconnaissance test holes to identify the subsurface material in an area. Estimates for the number of reconnaissance test holes needed are noted below by location. Altogether, up to 30 reconnaissance test holes will be drilled.

At selected locations where reconnaissance drilling indicates the potential for a favorable quantity and quality of material, ADOT&PF will conduct definition drilling using closely spaced (250-ft to 500-ft) test holes to delineate the required volume of extractable material. Definition drilling could involve drilling of up to a total of 36 test holes.

Including the 30 reconnaissance test holes and 36 test holes from definition drilling, a total of up to 66 test holes may be drilled in this project. All test holes will be backfilled with auger cuttings, flagged with lath and located with a hand held Global Positioning System (GPS).

At selected locations where definition drilling indicates the presence of a useful volume of extractable material, three to four test trenches may be excavated to produce a thorough representative sampling of the material at that site. The trenches will be excavated from 10 to 20 feet in depth and 10 to 20 feet in length. Trenches will be backfilled with excavated material and organic material replaced at the surface after backfilling. Trenching will only be conducted at locations for which ADOT&PF expects to apply for a permit as material sources.

All drilling will be conducted using a track-mounted CME-S50X or CME-45 drill, equipped with 6-in diameter solid stem augers, with the capability of drilling core samples. Trenches will be excavated with a Komatsu PC2700 tracked excavator,

equipped with a 2 to 3 foot wide frost bucket or a Case 1150-C dozer/ back hoe equipped with an IS-in wide bucket.

Below is a summary of the geotechnical survey planned for each of the proposed exploration targets.

- **Dalton Highway MP 208.5 - MP 211**

The focus of exploration here will be upland alluvial terrace gravel deposits and abandoned gravel structures of the Dietrich Camp between the road and the active channel of the Dietrich River. This area has potential as a source of crushed aggregate material and Select type A. Nine reconnaissance test holes may be drilled to characterize the subsurface material. The area is within the Chandalar Quadrangle, Fairbanks Meridian, T33N, R10W, W 1/2 of Sec. 24 west of the Dalton Highway, E 1/2 Sec. 23 east of the Dietrich River, E 1/2 Sec. 14 east of the Dietrich River and west of the Dalton Highway, SW 1/4 of Sec. 13 west of the Dalton Highway and SE 1/4 of Sec. 11 east of the Dietrich River and west of the Dalton Highway. See Figure 1.

- **Dalton Highway MP 211.5**

The focus of exploration here will be conglomerate bedrock in the undeveloped hills east of the road. This site has the potential to produce high quality crushable material or riprap. ADOT will conduct initial surface sampling and mapping. The need for additional drilling will be determined based on those results. Any test holes in this material will be core drilled. The area is within the Chandalar Quadrangle, Fairbanks Meridian, T33N, R10W, the N 1/2 of N 1/2, of Sec. 12 and S 1/2 of S 1/2 of Sec. 1. See Figure 1.

- **Dalton Highway MP 214 (a)**

The focus of exploration here will be conglomerate bedrock in the undeveloped hills east of the road. This site has the potential to produce high quality crushable material or riprap. ADOT will conduct initial surface sampling and mapping. The need for additional drilling will be determined based on those results. Any test holes in this material will be core drilled. The area is within the Chandalar Quadrangle, Fairbanks Meridian, T34N, R10W, the SW 1/4 of Sec. 25. See Figure 1.

- **Dalton Highway MP 214 (b)**

The focus of exploration here will be Dacite/gabboid bedrock in the undeveloped hills east of the road. This site has the potential to produce high quality crushable material or riprap. ADOT will conduct initial surface sampling and mapping. The need for additional drilling will be determined based on those results. Any test holes in this material will be core drilled. The area is within the Chandalar Quadrangle, Fairbanks Meridian, T34N, R10W, the NW 1/4 of NW 1/4 of Sec. 25, NE 1/4 of NE 1/4 of Sec. 26, SE 1/4 of SE 1/4 of Sec. 23 and SW 1/4 of SW 1/4 of Sec. 24. See Figure 1.

- **Dalton Highway MP 223**

This area is intended as a potential expansion to the north and west, of the expired material site 65-9-055-2. The original material site is currently under application for renewal. The focus of exploration here will be upland alluvial terrace gravel deposits west of the road and pipeline and east of the active channel of the Dietrich River. Four reconnaissance test holes may be drilled in this area to characterize the subsurface material. The area is within the Chandalar Quadrangle, Fairbanks Meridian, T35N, R10W, SW 1/4 of Sec. 9, west of the pipeline and east of the Dietrich River. See Figure 2.

- **Dalton Highway MP 224**

This area is intended as a potential expansion to the south and west, of the expired material site 65-9-079-2. The original material site is currently under application for renewal. The focus of exploration here will be upland alluvial terrace gravel deposits east of the active channel of the Dietrich River. Four reconnaissance test holes may be drilled in this area to characterize the subsurface material. The area is within the Chandalar Quadrangle, Fairbanks Meridian, T35N, R10W, W1/2, of SE 1/4 of Sec. 4, SW 1/2 of Sec. 4 east of the Dietrich River, S 1/2, of the NW 1/4 of Sec. 4 east of the Dietrich River. See Figure 2.

- **Dalton Highway MP 226**

The focus of exploration here will be upland alluvial terrace gravel deposits east of the active channel of the Dietrich River. Four reconnaissance test holes may be drilled in this area to characterize the subsurface material. The area is within the Chandalar Quadrangle, Fairbanks Meridian, T36N, R10W, W 1/2 of E 1/2 of Sec. 28, W 1/2 of Sec. 28 east of the Dietrich River, SW 1/4 of the SE 1/4 of Sec. 21, S 1/2, of the SW 1/2 of Sec. 21 east of the Dietrich River. See Figure 2.

- **Dalton Highway MP 230**

The focus of exploration here will be upland alluvial terrace and fan deposits east of the road. Three reconnaissance test holes may be drilled in this area to characterize the subsurface material. The area is within the Chandalar Quadrangle, Fairbanks Meridian, T36N, R10W, NE 1/4 of NE 1/4 of NE 1/4 of Sec.10 east of the Dalton Highway, E 1/2 of E 1/2 of SE 1/4 of Sec. 3 east of the Dalton Highway and south of the Dietrich River tributary, W 1/2 of SW 1/4 of SW 1/2 of Sec. 2 south of the Dietrich River tributary. See Figure 2.

- **Dalton Highway MP 231.5**

The focus of exploration here will be upland alluvial terrace and fan deposits east of the road. Three reconnaissance test holes may be drilled in this area to characterize the subsurface material. The area is within the Chandalar quadrangle, Fairbanks Meridian, T37N, R10W, NW 1/4 of NW 1/4 of Sec. 36 east of the Dalton Highway, NE 1/4 of NE 1/2 of Sec. 35 east of the Dalton Highway, S 1/2 of the SW 1/4 of SW 1/4 of Sec. 25 east of the Dalton Highway. See Figure 2.

- **Dalton Highway MP 240**

This area is south of the expired material site, 65-9-004-2, which is going through the application process for renewal. The focus of exploration here will be upland alluvial fan deposit south of the material site. Three reconnaissance test holes may be drilled in this area to characterize the subsurface material. The area is within the Philip Smith Mountains Quadrangle, Umat Meridian, T6S, R11E, SW 1/4 of Sec. 3 west of the Dalton Highway. See Figure 3.

## **2. Alternatives**

No Action Alternative:

The No Action Alternative would deny the applicant's request to conduct a geotechnical exploration program. This alternative would not allow ADOT locate new or expand existing mineral material sites along this section of the Dalton Highway for the continued highway maintenance and rehabilitation projects.

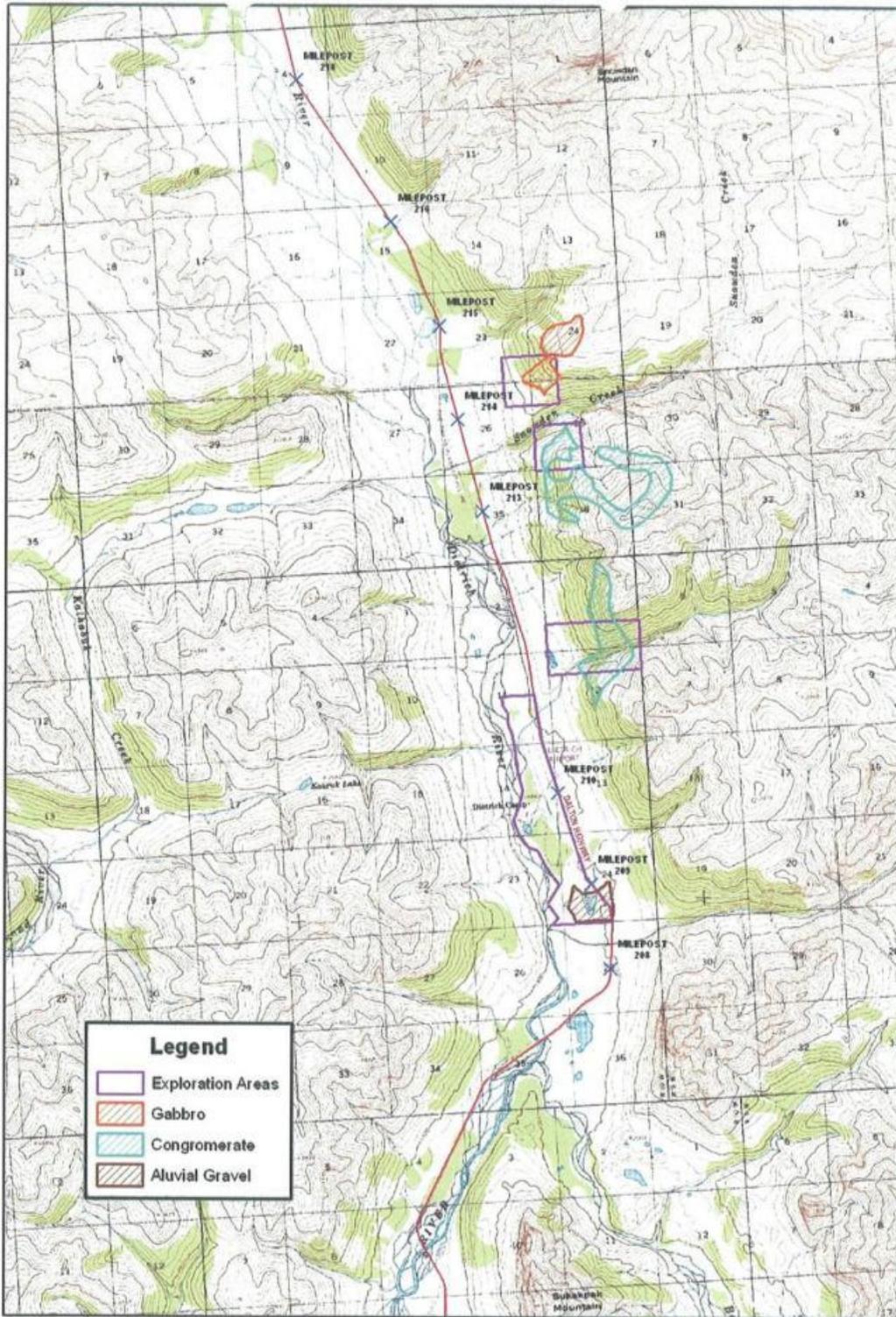


Figure 1. **Proposed Exploration Areas  
Dalton Highway Reconstruction MP 209 to MP 235**

Figure 1: Geotechnical exploration location map

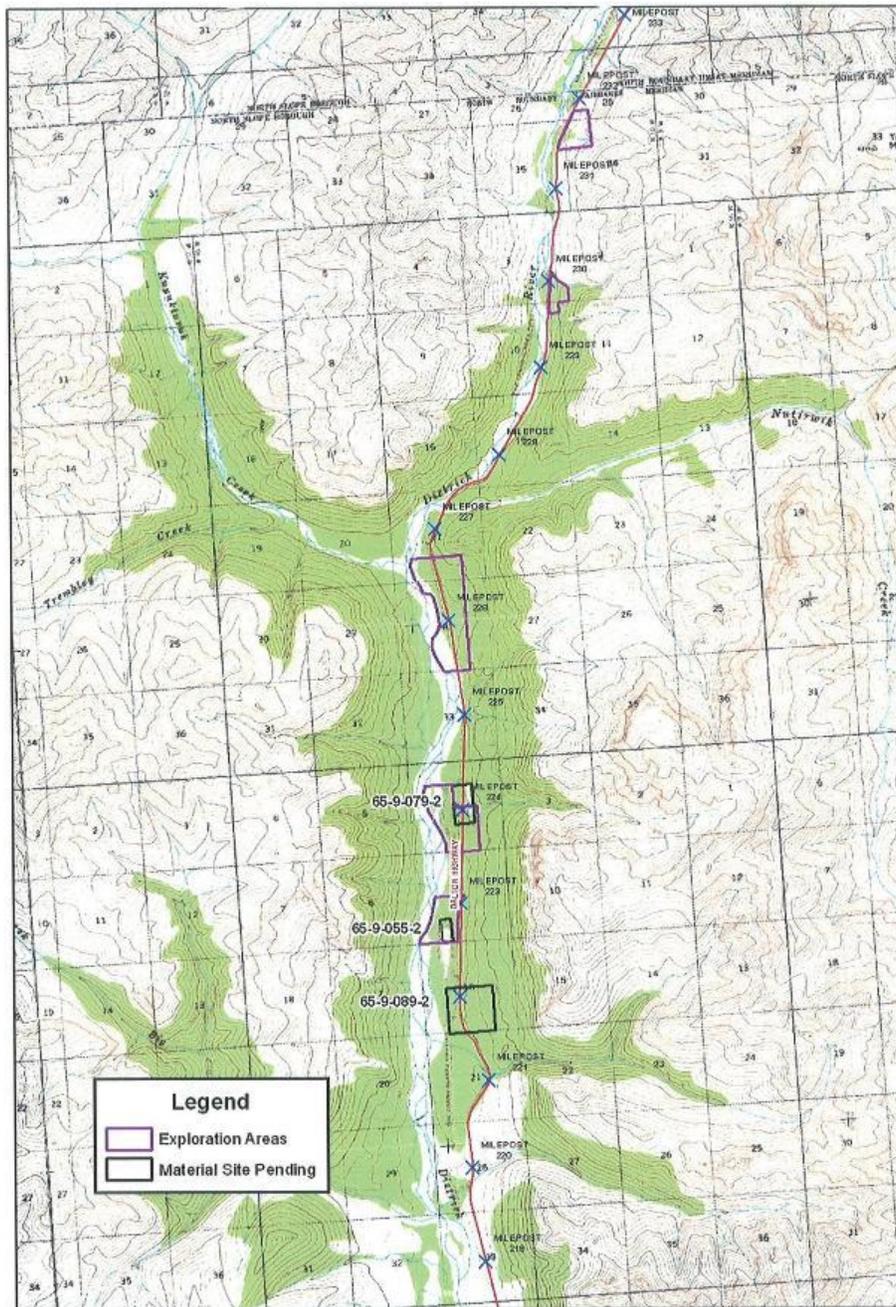


Figure 2.  
**Proposed Exlporation Areas**  
**Dalton Highway Reconstruction MP 209 to MP 235**

Figure 2: Geotechnical exploration location map

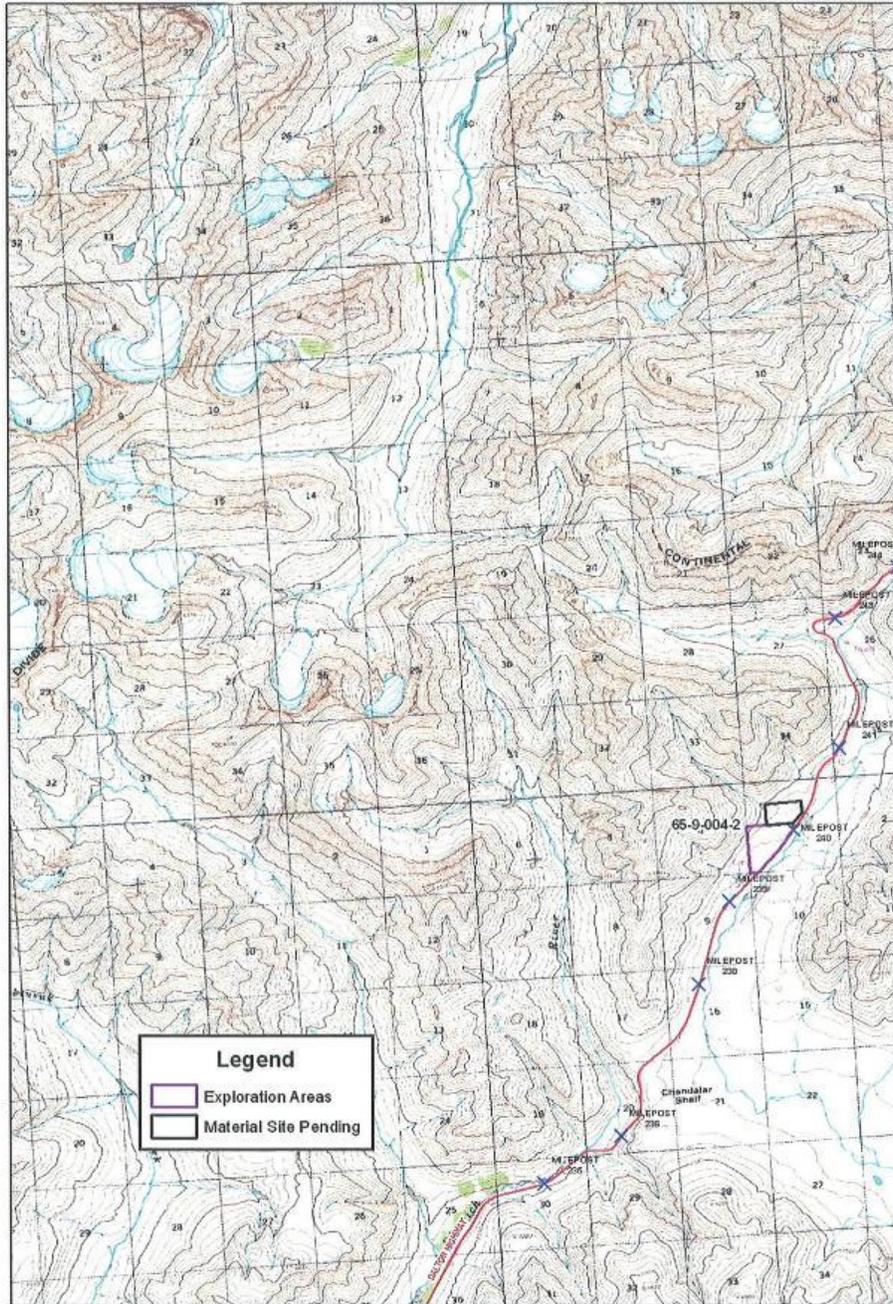


Figure 3.

**Proposed Exlporation Areas  
Dalton Highway Reconstruction MP 209 to MP 235**

Figure 3: Geotechnical exploration location map

## **C. AFFECTED ENVIRONMENT**

### **1. General Setting**

The project is located along the Dalton Highway, between mileposts 208 and 240; access is from the Dalton Highway. The sites are within the view-shed of the Dalton Highway and border the Sukapak Mountain Area of Critical Environmental Concern. The exploration area access is generally through spruce forest/shrub habitat and occurs in relatively flat terrain. Average elevation is about 1,300 to 1,400 ft.

### **2. Affected Resources**

Table 1. Elements of the human environment that have been considered for this environmental assessment (EA) are listed below. Elements that may be affected are further described in this EA. Those elements marked as not being affected will not be considered further in this Environmental Assessment.

<b>Elements of the Human Environment</b>					
<b>Elements</b>	<b>Affected</b>		<b>Elements</b>	<b>Affected</b>	
	<b>Yes</b>	<b>No</b>		<b>Yes</b>	<b>No</b>
Access		X	Native American Religious Concerns		X
Air Quality		X	Recreation		X
Areas of Critical Environmental Concern		X	Soils	X	
Boundary resources		X	Subsistence		X
Cultural Resources		X	Threatened or Endangered Species		X
Environmental Justice		X	Vegetative Resources		X
Essential Fish Habitat		X	Visual Resources		X
Farm Lands, Prime and Unique		X	Water Quality- Surface and Ground		
Fire Management		X	Wetlands/Riparian Zones	X	
Floodplains		X	Wild and Scenic Rivers		X
Hazardous and Solid Wastes		X	Wilderness		X
Invasive, Non-native Species	X		Wildlife/Aquatic		X
Mineral Resources		X	Wildlife/Terrestrial	X	

### Invasive, Non-native species:

Surveys along the Dalton Highway for non-native invasive plant species (NIP) have occurred annually since 2004; 28 species have been documented and 15 species have been found between Coldfoot and ~milepost 270. Invasive plants in Alaska are ranked on a scale of 0-100, with 100 being the most invasive. *Hordeum jubatum* (foxtail barley; ranking: 63) a moderately aggressive invasive species, has been recorded at many mining and material extraction sites near these proposed geotechnical exploration drill sites. However, the species of utmost concern in this area are: *Melilotus alba* and *Vicia cracca*. *Melilotus alba* (white sweetclover; ranking: 80), has been rapidly expanding its range northward along the Dalton Highway in recent years and has been found as far north as Coldfoot (~MP 175). *Vicia cracca* (Bird Vetch; ranking: 73), has been found in more than three places, and as far north as Rosie Creek (~MP 170) along the Dalton Highway in 2010. *Linaria vulgaris* P. (Yellow Toadflax; ranking: 69), *Leucanthemum vulgare* (Ox-eye daisy; ranking: 61), and *Crepis tectorum* (Annual hawkbeard; ranking: 54) are also species to watch for in the area.

### Soils:

In general, soils found in northern Alaska are poorly developed due to the cold temperature regime. They are shallow, with a thin organic layer, underlain by combinations of sand, silt, and gravel. Most lowland areas are poorly drained. Well drained sites often display fine textured upper horizons over gravelly subhorizons (USDI 1989).

Soil and permafrost characteristics vary along the Dalton Highway. Soil formation on hillsides likely occurred through weathering processes on bedrock in combination with deposition from wind driven silt. Permafrost is regionally prevalent. Stability of the permafrost and its' active layer have been disrupted where mining, road and pipeline building and other disturbances have occurred. Natural disturbances to vegetative ground cover from forest fires also have the potential to impact permafrost conditions.

### Wetland/Riparian/Floodplains:

Wetland communities are known to exist in the Brooks Range physiographic province in areas where sediments build up along waterways. Permafrost is generally present, with surface waters and soils that are frozen much of the year resulting in poorly drained soils that remain saturated throughout the vegetative growing season. These growing conditions limit species variability and annual growth.

The riparian-wetlands within the area of the proposed action can generally be described as a low shrub community along the streams intermixed with an upland community dominated by black spruce needleleaf woodland (Vioreck and others 1992). The area above tree line near Chandalar Shelf is low shrub tundra vegetated with willow, dwarf birch, and forb/grass/moss/lichen communities (McKendrick 2002).

## **D. ENVIRONMENTAL IMPACTS**

### **1. Impacts of the Proposed Action (Direct, Indirect and Cumulative)**

#### Invasive, Non-native species:

*Direct effects:* Highways are corridors for the spread of invasive plant species because plant seeds and reproductive parts can ‘hitchhike’ on vehicles and equipment. Disturbed areas such as material extraction pits are common places for non-native invasive plant species to occur because they adapt to and propagate on disturbed areas much easier than on undisturbed areas. Creating geotechnical exploration drill sites, with the associated disturbance from equipment and vehicle traffic (Bombadier Muskeg carrier), in previously undisturbed areas not far from the highway corridor (Dalton) along with human activity greatly increases the likelihood of invasive plant species establishing at the sites.

*Indirect effects:* Invasive plant seeds may be transported into previously un-infested areas and become established as a result of the disturbance associated with walking a Bombadier Muskeg carrier through undisturbed land, drilling deep holes, and removing vegetation in this process. Thereafter, in addition to transport by machines, vehicles and even the clothing of people, natural vectors, such as animals, and wind may transport seeds that could provide a seedbank for future infestations over a much larger area.

*Cumulative effects:* This proposed geotechnical exploration for material extraction sites along MP 202-207 of the Dalton Highway occurs on land that is undisturbed and free of non-native invasive plant (NIP). This project could result in the introduction and spread of NIP at these sites which currently do not have NIP species. Issuing this permit will increase the opportunity for establishment of invasive, non-native plant species at the geotechnical exploration drilling sites, which could provide a seedbank for their spread into the surrounding area. Over time this has the potential to impact the native plant community structure and composition and the natural ecosystem processes. This can ultimately contribute to the result of biodiversity loss.

#### Soils:

*Direct and Indirect effects:* Impacts to soil resources include the selected removal and disturbance of the soil profile at the test holes and trenches. The test holes and trenches will be backfilled with excavated material and organic material replaced at the surface after backfilling. Excess material at the disturbed sites will flow to low lying areas. Effects may include mixing of the soil and a short-term reduction in the ability of vegetation to obtain nutrients from the soil at the test holes and trenches. No significant long-term direct or indirect effects to soils are expected from the proposed action.

*Cumulative effects:* In addition to the proposed action, there are other active gravel quarrying sites, gold mining sites, the Trans-Alaska Pipeline, the Dalton Highway, and an AK DOT highway maintenance facility in the Dietrich River watershed, all of which have altered habitat and condition. Given that all holes and trenches will be re-filled and access impacts are anticipated to be mitigated, soils should generally function in the same

condition as currently observed. As a result, additional impact to soils in the local area will be negligible.

Wetland/Riparian/Floodplains:

*Direct and Indirect effects:* The exploration will occur on upland alluvial terrace gravel deposits, abandoned gravel structures, and undeveloped hills near the Dalton Highway in the Dietrich River watershed. Based on the maps provided by the applicant, there is the potential for some sampling to occur in the 100 year floodplain of the Dietrich River and in wetlands.

Excavation in a riparian zone or wetlands would result in a direct loss of vegetation. Travel to and from the excavation sites could result in direct impact to vegetation due to trampling, rutting and crushing. Proper access (short and direct) and overburden/gravel replacement at drill sites will minimize vegetation loss and reduce the potential for soil erosion. Any impacts are anticipated to be short term and confined to the drill sites. Mitigation related to access and travel would minimize impacts to wetlands and riparian vegetation and should include: avoiding multiple passes over the same ground, avoiding minimum radius turns, use of existing access trails, avoid trampling willows and trees.

Overall, the proposed soil sampling is not anticipated to result in any noticeable impact to the function of the floodplain or riparian-wetland within the project area.

*Cumulative Effects:* In addition to the proposed action, there are other active gravel quarrying sites, gold mining sites, the Trans-Alaska Pipeline, the Dalton Highway, and an AK DOT highway maintenance facility in the Dietrich River watershed, all of which have altered habitat and condition. Even with the additional disturbance from this permitted activity, there will be little change in the current functionality of wetlands, floodplains and riparian vegetation on a landscape scale because most of the Dietrich watershed remains in a natural condition.

Wildlife/Terrestrial:

BLM-Alaska Sensitive Species

*Direct Effects:* This proposed activity will disturb and/or displace resident mammals and birds that occur at the project site. Of the five BLM Sensitive bird species that occur in the area, four that could potentially nest there may be affected by drilling activities during the nesting season (May 1 – August 1). Nonetheless, the total disturbance will be small and this project will not have an appreciable effect on terrestrial wildlife at the landscape scale. It may affect any migratory birds nesting at the sites and golden eagles, which have known historic territories in the area. However, if exploration is conducted in late fall and winter, migratory birds will most likely have migrated south and out of the area of the proposed drilling.

*Indirect Effects:* The proposed work at this mine may result in a small loss (less than one acre) of terrestrial wildlife habitat, if trees are removed to allow passage of the drill.

*Cumulative Effects:* The project site is in close proximity to the Dalton Highway and the Trans Alaska Pipeline. Wildlife habitat has been removed for by this infrastructure. This project may result in an additional small reduction in habitat for species that are found in Needleleaf and Woodland communities if trees are removed to allow passage of the drill.

### **3. Mitigation Measures**

Mitigation measures are most often derived from the standard operating procedures and site specific stipulations developed from the accumulated staff knowledge gained in the management of lands and resources in the Central Yukon Field Office.

All activities within the scope of this permit shall confirm the site specific stipulations found attached to the Free Use Permit that have been developed by the BLM. In addition, all activities shall confirm to the regulations contained within 43 CFR 3620, and all written orders of the Authorized Officer.

The following guidelines should be observed to minimize disturbance to woody vegetation and wetlands in these areas:

- a) Minimum radius turns (i.e. turns made by locking the track or wheel on one side and turning the other) shall be avoided where possible.
- b) Multiple passes over the same ground shall be avoided.
- c) Tracked vehicles will be used only to access specific locations where test holes or trenches will be dug.
- d) Routes to test holes and trenches will be plotted using existing roads/trails wherever possible.

In areas of discontinuous forest, routes to test holes and trenches will be plotted to avoid willow stands and trees wherever possible. In areas covered by continuous forest, routes to test holes and trenches will be plotted to avoid damage to trees that are 6 inches DBH (diameter at breast height) or larger whenever possible.

If exploration occurs during the nesting season, to ensure that destruction of migratory bird nests does not occur, it is recommended that vegetation modification be avoided from May 1 through July 15(see: *ADVISORY: Recommended Time Periods for Avoiding Vegetation Clearing in Alaska to Protect Migratory Birds*. US Fish and Wildlife Service. Anchorage Office (907) 786-3672). To avoid disturbance of raptors, including golden eagles, during the nesting season, drilling activities near nesting territories should be conducted in late fall and winter (August 2 - April 15).

Bare, erosion prone areas may require grass seeding, fertilizing or planting of willow cuttings (per Authorized Officers discretion) to enhance growth of vegetation.

The permittee will keep garbage or other wildlife attractants secured while awaiting their use or incineration. Specifically, we recommend they use bear-proof containers for all garbage and other wildlife attractants.

The permittee and their contractor will avoid harassing wildlife.

Reclamation of disturbed areas shall take place as quickly as possible after exploration is complete.

If BLM identifies locations where federally listed sensitive plants occur, the permittee will avoid ground-disturbing activities in those areas.

Utilization of drip pans/pads under equipment with leaks, or during refilling operations will minimize the potential for release of petroleum products to the environment. The contractor shall have absorbent material readily available on site to contain any spills. Secondary containment of fuel storage containers shall be utilized in a safe location to avoid damage by equipment. Minor equipment repair on site may be conducted to eliminate the release of POLs to the environment and shall be conducted over an impermeable liner. All wastes associated with spill cleanup will be disposed of in accordance with all applicable regulations. Adherence to proper safety procedures and spill prevention plans shall establish mitigating measures.

A central location for the collection of solid waste shall be identified. Waste shall be disposed of within an Alaska Department of Environmental Conservation (ADEC) approved landfill on a regular basis.

Waste, Human: The contractor shall provide temporary portable facilities.

Because invasive plant seeds are spread by multiple vectors and readily colonize disturbed ground it is unrealistic to expect that some invasive plant species will not invade the material site as a result of the proposed activity. However, one of the best defenses against the spread of invasive plant species is early detection and treatment of infestations that occur. The applicant, his/her employees and contractors shall learn to identify the invasive plant species of concern in this area and promptly report to the BLM any infestations found, regardless of size. They should be provided the most recent NIP pocket book to help them monitor their disturbances. These measures will help reduce the chances of a large infestation occurring, or the further spread of invasive plants into the surrounding area.

## **4. Residual Impacts**

### Wildlife/Terrestrial.

*Direct Effects:* This proposed human activity will disturb terrestrial wildlife, including migratory birds, if they occur at the project site. However, the total disturbance resulting from this proposal will small (less than one acre) and if the drilling occurs in fall or winter, most migratory birds will have left the area.

### Invasive, non-native species:

*Direct effects:* No known invasive species currently occur at the drilling sites so there are no direct residual effects.

*Indirect effects:* The disturbed ground on the geotechnical exploration drilling sites and the overland access created to the site will provide a place where invasive plant species, which favor disturbed areas, could become established. The activity of equipment and people at the site will increase the likelihood of invasive plants becoming introduced at the site.

*Cumulative effects:* Non-native and invasive plants that have been introduced or spread at the sites of the proposed action will continue to be present and spread unless actively controlled by manual, mechanical, chemical or other treatment measures. Chemical control would require additional environmental analysis.

Soils: Residual impacts include mixing of the soil layers and a short-term reduction in the ability of vegetation to obtain nutrients from the soil at the test holes and trenches.

## **E. CONSULTATION AND COORDINATION**

### **List of Preparers**

Table 2. Preparers (BLM Specialists)

<b>Area of Expertise</b>	<b>Name</b>
Air Quality	Bob Karlen
ACECs	Darrel VandeWeg
Cultural Resources (Paleontology)	Bill Hedman
Environmental Justice	Darrel VandeWeg
Engineering	Rodd Moretz
Essential Fish Habitat/Fisheries	Bob Karlen
Floodplains	Bob Karlen
Invasive, Nonnative Species	Merben Cebrian
Native American Religious Concerns	Bill Hedman
Threatened and Endangered Species	Merben Cebrian
Wastes, Hazardous and Solid	Rebecca Hile
Water Quality/Drinking and Ground	Bob Karlen
Wetlands/Riparian	Bob Karlen
Wild and Scenic Rivers	Kelly Egger
Wilderness	Lisa Jodwalis
Minerals	Darrel VandeWeg
NEPA	Jeanie Cole
Subsistence	Bob Karlen
Wildlife	Merben Cebrian
Visual Resource Management	Cal Westcott
Reality/Lands	Peggy Thigpen
Recreation	Kelly Egger
Vegetation	Merben Cebrian

## **F. ATTACHMENTS**

1. Standard and Site-Specific Stipulations
2. ANILCA Section 810 Evaluation and Findings
3. Wilderness Assessment
4. Essential Fish Habitat Assessment
5. Assessment of Archaeological and Historical Resources
6. Alaska DOT Dalton Highway Geotechnical Exploration Request

## **FINDING OF NO SIGNIFICANT IMPACT**

### Background:

Alaska Department of Transportation and Public Facilities (ADOT&PF) maintains the Dalton Highway with repair and upgrade projects for the road and various facilities along the highway. This requires the use of mineral material sites located along the highway for the materials needed to complete these projects.

### Finding of No Significant Impact:

Based on the analysis of the potential impacts contained in DOI-BLM-AK-03000-2012-0008-EA and considering the significance criteria in 40 CFR 1508.27, I have determined that the proposed action will not have significant impacts on the human environment and preparation of an environmental impact statement is not required.

/s/ Nichelle W. Jacobson  
Nichelle W. Jacobson  
Manager, Central Yukon Field Office

8/23/2012  
Date

## DECISION RECORD

### Decision:

It is my decision to issue a permit to Alaska Department of Transportation for a geotechnical exploration program along the Dalton Highway MP 208-240. Mitigation measures from NEPA document DOI-BLM-AK-03000-2012-0008-EA are being carried forward as stipulations attached to the permit (Attachment 1).

ADOT&PF has amended the number of the original exploration for future mineral material sites to about seven. Several of the sites were removed by ADOT&PF after they conducted an initial field site visit. Please see the updated maps below. The two expired mineral material sites that were in the original request were removed.

- **Dalton Highway MP 208.5 - MP 211**

This site was modified from the proposed action to only include the camp and airfield gravel pads. See ROD Figure 2.

- **Dalton Highway MP 211.5**

This site was eliminated from the proposed action.

- **Dalton Highway MP 214 (a)**

This site was eliminated from the proposed action.

- **Dalton Highway MP 214 (b)**

This site was eliminated from the proposed action.

- **Dalton Highway MP 223**

The exploration of this site will continue as described in the proposed action; however the material stockpile that is currently sitting in the Dietrich River will be evaluated for renewal under a separate NEPA assessment. See ROD Figure 2. Any expansion of this site will be requested by ADOT&PF and a separate NEPA assessment will be conducted prior to the authorization.

- **Dalton Highway MP 224**

The exploration of this site will continue as described in the proposed action. The expired material site will be evaluated for renewal under a separate NEPA assessment. See ROD Figure 1. Any expansion of this site will be requested by ADOT&PF and a separate NEPA assessment will be conducted prior to the authorization.

- **Dalton Highway MP 226**

This site was eliminated from the proposed action.

- **Dalton Highway MP 230**

This site was eliminated from the proposed action.

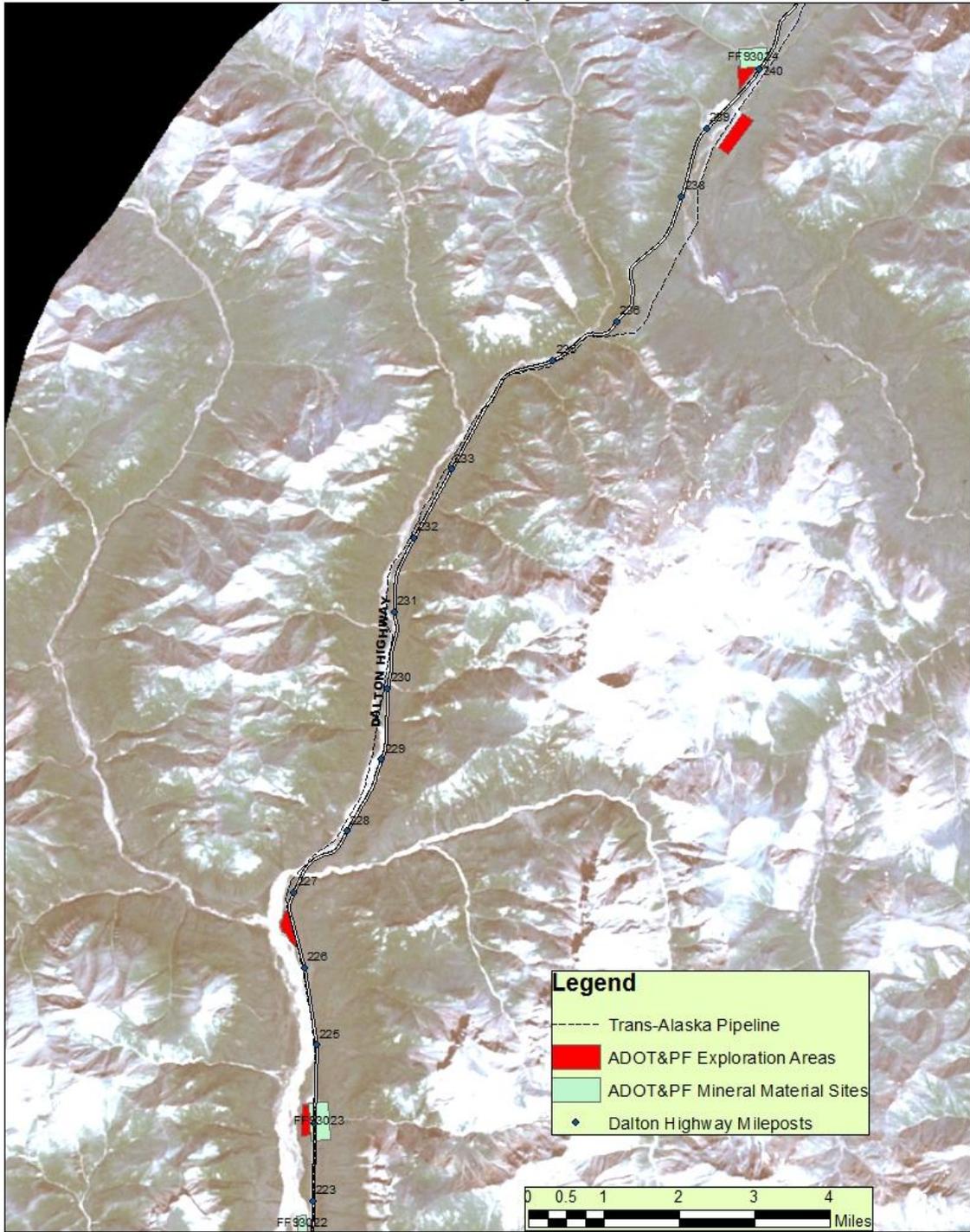
- **Dalton Highway MP 231.5**

This site was eliminated from the proposed action.

- **Dalton Highway MP 240**

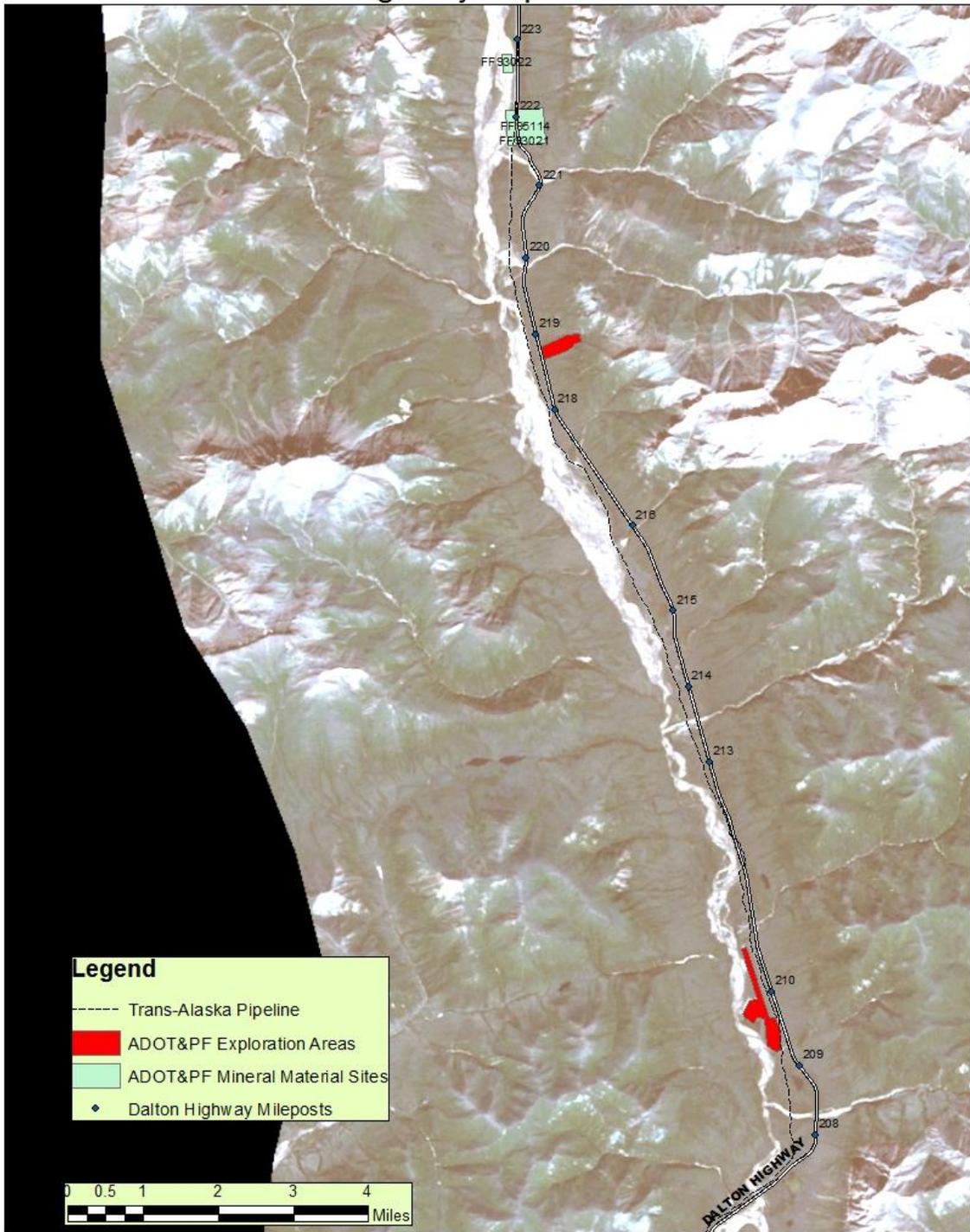
The exploration of this site will continue as described in the proposed action. The expired material site will be evaluated for renewal under a separate NEPA assessment. See ROD Figure 1. Any expansion of this site will be requested by ADOT&PF and a separate NEPA assessment will be conducted prior to the authorization.

# Dalton Highway Exploration Sites



ROD Figure # 1: Amended site map for the northern half of the exploration area.

# Dalton Highway Exploration Sites



ROD Figure # 2: Amended site map for the northern half of the exploration area.

Rationale for Decision:

- The exploration for new mineral material pits are needed in this area as the other material pits in this vicinity provide different material, or are nearing the end of their usable life.
- The exploration will be used to locate a new mineral material source that will be used for continued maintenance of the Dalton Highway.
- There are no anticipated impacts to cultural resources. See attachment # 4.
- The Proposed Action will not significantly restrict subsistence uses. See attachment # 2.
- The proposed action is in compliance with the Utility Corridor RMP and consistent with the use of public lands under the authority of the Utility Corridor RMP Record of Decision.
- The environmental effects of this action were considered in NEPA document DOI-BLM-AK-03000-2012-008-EA and were found to have no significant impacts, thus an environmental impact statement is not required.

/s/ Nichelle W. Jacobson  
Manager, Central Yukon Field Office

8/23/2012  
Date

Appeal Procedures:

This decision shall take effect immediately upon the date it is signed by the authorized officer and shall remain in effect while any appeal is pending unless the Interior Board of Land Appeals issues a stay (43 CFR 2801.10(b)).

Any appeal of this decision must follow the procedures set forth in 43 CFR Part 4. Within 30 days of the decision, a notice of appeal must be filed in the office of the authorized officer at Central Yukon Field Office, 1150 University Avenue, Fairbanks Alaska 99709. If a statement of reasons for the appeal is not included with the notice, it must be filed with the Interior Board of Land Appeals, Office of Hearings and Appeals, U.S. Department of the Interior, 801 North Quincy St., Suite 300, Arlington, VA 22203 within 30 days after the notice of appeal is filed with the authorized officer. If you wish to file a petition for stay of the effectiveness of this decision pursuant to 43 CFR Part 4.21(b), the petition for stay should accompany your notice of appeal and must show sufficient justification based on the following standards: (1) The relative harm to the parties if the stay is granted or denied, (2) The likelihood of the appellant's success on the merits, (3) The likelihood of irreparable harm to the appellant or resources if the stay is not granted, and (4) Whether the public interest favors granting the stay. If a petition for stay is submitted with the notice of appeal, a copy of the notice of appeal and petition for stay must be served on each party named in the decision from which the appeal is taken, and with the IBLA at the same time it is filed with the authorized officer. A copy of the notice of appeal, any statement of reasons and all pertinent documents must be served on each adverse party named in the decision from which the appeal is taken and on the Office of the Solicitor, U.S. Department of the Interior, 4230 University Drive Suite 300, Anchorage, AK 99508, not later than 15 days after filing the document with the authorized officer and/or IBLA.

**Attachment # 1**  
**Site-Specific Stipulations for Exploration permit # FF-96022**

1. Once sampling is completed, the results must be submitted to the Bureau of Land Management (BLM), per 43 CFR 3601.30(b) for review.
2. The permittee/contractor shall not expand or work outside of your permitted area without additional archeological clearances being done by a qualified archeologist.
3. The permittee/contractor shall immediately report to the BLM all paleontologic and cultural materials encountered during your geotechnical exploration operation.
4. The permittee/contractor must stop all operations in the area of these discovered paleontologic and cultural materials until the resources are evaluated and mitigation measures to prevent the loss of significant cultural or scientific resources are developed by a BLM archeologist.
5. The permittee/contractor shall pay all the costs, as determined by the BLM archeologist, associated with the evaluation and mitigation of the paleontologic and cultural resources.
6. Activities shall be conducted in such a manner as to not cause damage or disturbance to any historical or archaeological sites and artifacts. The Antiquities Act (1906), Archaeological Resources Protection Act (1979), Federal Land Policy and Management Act (1976), and general United States property laws and regulations, all prohibit the appropriation, excavation, damage, or destruction of any historic or prehistoric ruin or monument, or any other object of antiquity situated on lands owned or controlled by the United States (16 USA 470; 16 USC 432; 43 U.S. 1733 (a); 18 USC 1361; 18 USC 641; 43 CFR 8365.1). Such items include both prehistoric stone tools and sites, as well as historic log cabins, remnants of such structures, refuse dumps, and other such features. Should any such site be discovered during the permitted activity, the permittee should avoid impacting such materials, and immediately notify the Authorized Officer.
7. The BLM and the permittee/contractor will develop the amount of fertilizer and seeding mixtures to be used when reclaiming the disturbed areas of this site as determined necessary.
8. The permittee/contractor shall not “take” migratory birds, their nests, or their eggs. To be sure nesting migratory birds are not disturbed, the permittee should avoid modifying vegetation between May 1 and July 15. Exploration activities near nesting raptor territories should be done during the non-nesting season (August 2 – April 14) (see: *ADVISORY: Recommended Time Periods for Avoiding Vegetation Clearing in Alaska to Protect Migratory Birds*. US Fish and Wildlife Service. Anchorage Fish and Wildlife Field Office (907) 786-3672). .

9. A site Spill Prevention Control and Countermeasure Plan (SPCC) shall be written for the site if the amount of petroleum products stored or potential to store exceeds 1,320 gallons. The plan will be submitted to the Authorized Officer Representative (Darrel VandeWeg) for review and approval prior to storage of petroleum products greater than 1,320 gallons.
10. Transportation and storage of petroleum, oil and lubricants (POLs) shall be handled in a manner to ensure the products minimize the effects to the environment and human health. Gasoline, diesel, oils, greases and hydraulic fluids are a few of the most common POLs. All containers that are transferred to remote locations for everyday operations are to be stored within a containment area which has been constructed to contain 110% of the volume of the largest container. The containment area should be lined with an impermeable liner which is free of cracks or gaps and sufficiently impervious to contain leaks or spills. The containers shall be covered to eliminate the collection of rainwater within the containment area throughout the storage period.
11. Transfer of POLs to equipment shall be completed in a secure manner to minimize the possibility of contamination to the surrounding environment. At a minimum POL type absorbent pads shall be placed under the location to catch overflow or assist the operator in containing a spill, if one occurs. Fuel storage within 100 feet of a waterbody should be avoided where possible. If a refueling site is within 100 feet of a waterbody the holder shall exercise caution to ensure no release of POLs. Equipment that has been identified as having a fluid leak should have a drip basin under the leak area to ensure no release to the surrounding environment.
12. All hazardous materials storage containers must be labeled with the following information: permittee's/contractor's name, contents of the container (name of the product that you put in the container, if not in the original container from the manufacturer), date the product was purchased/put in the container. (e.g. Northern Guides, Diesel Fuel, 2009)
13. Equipment repair by the permittee/contractor is allowed on the basis of the necessity to operate equipment on the site located within this permit. Equipment repair that has the potential to release fluids should be completed over an impermeable liner to ensure fluid migration to the environment does not occur.
14. All spills shall be contained and cleaned up as soon as the release has been identified. The release of POLs to any water body is to be reported to the Alaska Department of Environmental Conservation (ADEC) as soon as the person has knowledge of the release (in Fairbanks 457-2121 or 1-800-478-9300 outside normal business hours). Within 48 hours of a spill on public lands the permittee/contractor shall contact the Authorized Officer Representative, Darrel VandeWeg (907-474-2325) or Rebecca Hile (907-474-2371)

15. Attracting wildlife to food and garbage is prohibited. The permittee/contractor shall keep garbage or other wildlife attractants secured while awaiting their use or incineration. Specifically, it is recommend that they use bear-proof containers, elevated caches or, where possible, suspend attractants from a tree or structure 10 feet up in the air and 12 feet away from the tree if attractants are stored on site.
16. Wildlife will not be harassed by the permittee/contractor, any of their employees or contractors.
17. Burial of garbage on public lands is not authorized. All solid waste (garbage), including incinerated ash shall be removed by the permittee/contractor from public lands and disposed of in an Alaska Department of Environmental Conservation (ADEC) approved waste disposal facility, unless otherwise specified. Solid waste combustibles may be incinerated in a contained and controlled manner.
18. Areas of operation shall be kept in a neat and sanitary condition at all times. Specific written instructions will be provided by the authorized officer's representative should it be required.
19. The permittee/contractor is responsible for familiarizing him/herself and affiliates with the identification of invasive plant species that may occur in the area, particularly the ones listed in this document. The permittee/contractor will promptly report to the BLM, the location and extent any invasive plant infestations observed at, or near, the permitted exploration site.
20. The federal government shall not be held responsible for protection of the permittee/contractors structures or their personal property from wildfire. The permittee/contractors will be held financially responsible for any actions or activity that results in a wildfire. Costs associated with wildfire include but are not limited to; Damage to natural resources and costs associated with suppression action taken on the fire.
21. Minimum radius turns (i.e. turns made by locking the track or wheel on one side and turning the other) shall be avoided where possible.
22. Multiple passes over the same ground shall be avoided.
23. Tracked vehicles will be used only to access specific locations where test holes or trenches will be dug.
24. Routes to test holes and trenches will be plotted using existing roads/trails wherever possible.

25. In areas of discontinuous forest, routes to test holes and trenches will be plotted to avoid willow stands and trees wherever possible. In areas covered by continuous forest, routes to test holes and trenches will be plotted to avoid damage to trees that are 6 inches DBH or larger whenever possible.

## **Attachment # 2**

### **ANILCA §810 Evaluations and Findings for All Alternatives**

**E.A. No.:** DOI-BLM-AK-03000-2012-0008-EA

**Applicant:** State of Alaska, Department of Transportation and Public Facilities

**Evaluation by:** Merben R. Cebrian and

#### **1. Evaluation and Finding of Alternative 1: The No Action Alternative**

##### **1.A. Effect of Alternative 1 on subsistence uses and needs:**

###### Fisheries:

Wildlife: This alternative proposes to continue current management practices on the Dalton Highway corridor under the 1991 Utility Corridor Resource Management Plan. Current practices are considered adequate to meet subsistence needs. Therefore, this alternative will have no significant effect on subsistence uses and needs.

Other resources: The No Action Alternative will not significantly affect other harvestable resources such as berries, willows, firewood, and spruce roots. Current practices are considered adequate to meet subsistence needs. Therefore, this alternative will have no significant effect on subsistence uses and needs.

##### **1.B. Availability of other lands, if any, for the purposes sought to be achieved:**

None. Lands available for the purposes of the applicant are on BLM lands that are within the Dalton Highway corridor. There are no other lands considered by the applicant for the intended purposes.

##### **1.C. Other alternatives, if any, which would reduce or eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes:**

The only alternative that would reduce or eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes is to not allow or permit any activities that conflict with subsistence uses. However, such an alternative is not viable because the BLM manages public lands for multiple uses.

##### **1.D. Finding:**

Under Alternative 1, management of the Dalton Highway corridor would continue under the 1991 Utility Corridor Management Plan. Management actions will not result in a

significant reduction in subsistence uses. Access to subsistence resources will not be hampered. There is no reasonably foreseeable significant decrease in the abundance of harvestable resources and in the distribution of harvestable resources due to this alternative.

## **2. Evaluation and Finding of Alternative 2 (the Proposed Action)**

### **2.A. Effect of Alternative 2 on subsistence uses and needs:**

#### Fisheries:

Wildlife: The proposed action intends to conduct mineral material exploration along a 32-mile stretch of the Dalton Highway from MP 208.5 to MP 240 for future mineral material sources between May 2012 and October 2012.

ANILCA §811 stipulates that “rural residents engaged in subsistence uses shall have reasonable access to subsistence resources on the public lands”, subject to reasonable regulation.

Under Alternative 2, up to 66 test holes may be drilled within this 32-mile stretch of the Dalton Highway, all of which will be backfilled. At selected locations where drillings indicate the presence of a useful volume of extractable material, three to four trenches may be excavated for additional sampling of the material. These trenches will also be backfilled. Where these trenches are dug, the applicant may apply for a permit for future material sources.

The proposed action is within Game Management Unit (GMU) 24A. Moose population estimates in GMU 24A has generally seen a declining trend (Stout 2008). Federal subsistence hunters are allowed one antlered bull moose in GMU 24A. Between 2005 and 2010, 14 moose have been harvested by federal subsistence hunters with a 47% average success rate per year (OSM 2012). Caribou herds within GMU 24 are rarely hunted due to relative inaccessibility (Hollis 2009). Grizzly bears are found in moderate numbers in GMU 24 (Stout 2007).

The Alaska Department of Transportation and Public Facilities have four existing/pending material sites within the proposed project area. Some of the testing appear to be adjacent to these sites. For previously disturbed areas, the disturbance created by the testing will have minimal effect on wildlife and the habitat. For undisturbed areas, the testing will still have minimal effect on wildlife and the habitat because the proposed testing sites are adjacent to the highway. Disturbance from highway traffic likely habituate resident wildlife to vehicular human disturbance. Recent

increase in walk-in hunting for Dall sheep have increased human disturbance to wildlife from this mode of recreation.

Subsistence users from nearby rural areas use the area for hunting and travel purposes. And as long as access is not impeded through traditional access corridors, subsistence users will continue to use the area.

Hunting of small game and upland birds will not be significantly restricted by the proposed action. Trapping of furbearers will not be significantly restricted by the proposed action since this activity is usually conducted via snowmachine that requires adequate snow cover.

Other resources:

The proposed action will not significantly affect other harvestable resources such as berries, willows, firewood, and spruce roots. Proposed actions that mitigate litter and human waste disposal, fire rings, and campsite impacts will likely be beneficial to the habitat by minimizing habitat fragmentation.

**2.B. Availability of other lands, if any, for the purposes sought to be achieved:**

None. Lands available for the purposes of the applicant are on BLM lands that are within the Dalton Highway corridor. Therefore, no other lands were considered by the applicant for the intended purposes.

**2.C. Other alternatives, if any, which would reduce or eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes:**

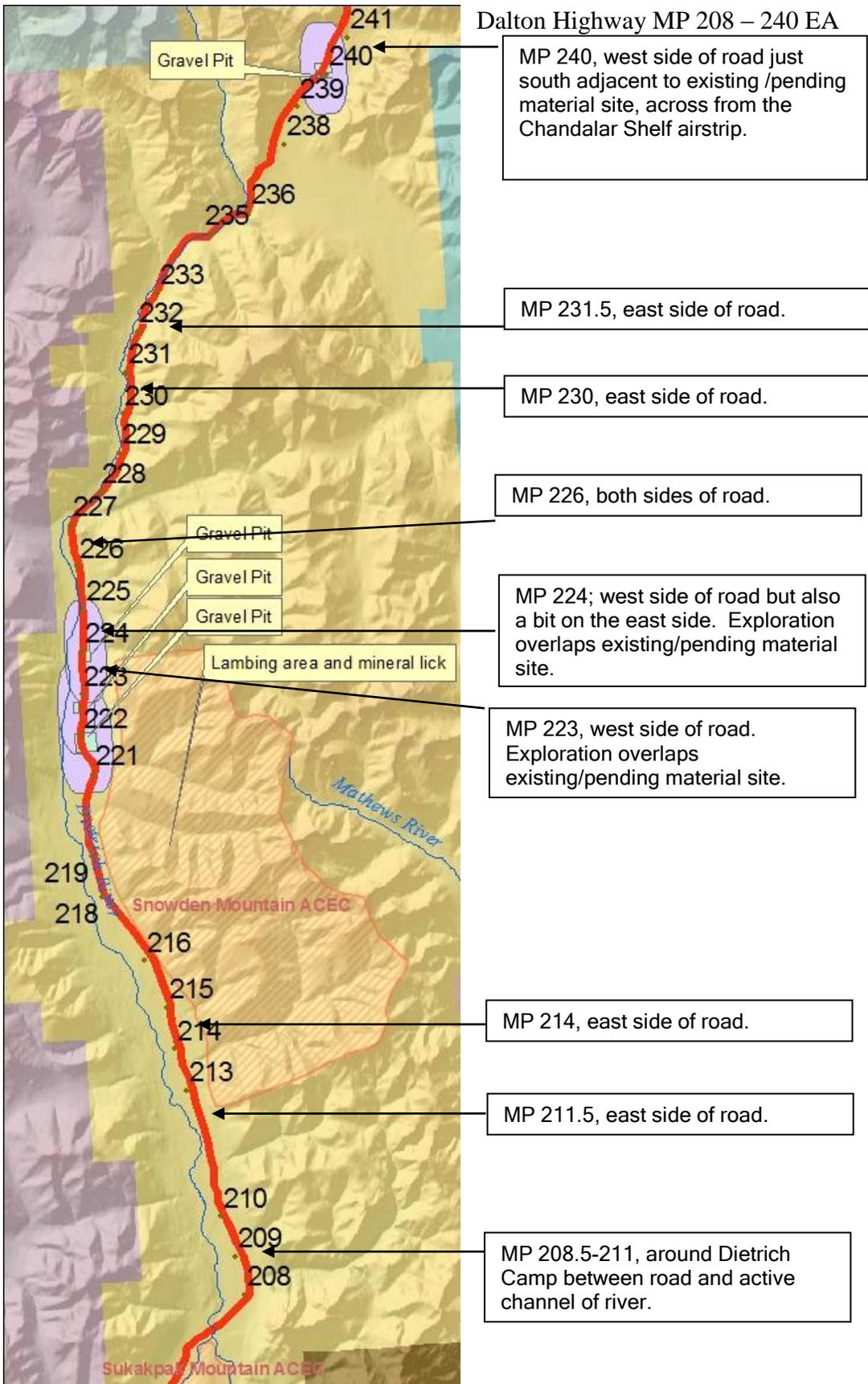
The only other alternative that would reduce or eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes is to not allow or permit any activities that conflict with subsistence uses. However, such an alternative is not viable because the BLM manages public lands for multiple uses.

**2.D. Finding:**

Alternative 2 (Proposed Action) will not significantly restrict subsistence uses. Access to subsistence resources will not be hampered by the proposed activity. There is no reasonably foreseeable significant decrease in the abundance of harvestable resources and in the distribution of harvestable resources due to the proposed action.

## References

- Alaska Department of Fish and Game. 2012. Fish Distribution Database. Internet website at: <http://www.sf.adfg.state.ak.us/>
- Hollis, A.L. 2009. Units 20F, 21B, 21C, 21D, 24A, 24B, and 25D caribou. Pages 159-175 *in* P. Harper, editor. Caribou management report of survey and inventory activities 1 July 2006-30 June 2008. Alaska Department of Fish and Game. Project 3.0 Juneau, Alaska, USA.
- McKendrick, J.D. 2002. Soils and Vegetation of the Trans-Alaska Pipeline Route: A 1999 survey. Bulletin 109. University of Alaska Agricultural and Forestry Experiment Station, Fairbanks, Alaska.
- Stout, G.W. 2007. Units 21B, 21C, 21C, 21D, and 24 brown bear. Pages 253-264 *in* P. Harper, editor. Brown bear management report of survey and inventory activities 1 July 2004-30 June 2006. Project 4.0. Alaska Department of Fish and Game. Juneau, Alaska, USA.
- Stout, G.W. 2008. Unit 24 moose. Pages 579-616 *in* P. Harper, editor. Moose management report of survey and inventory activities 1 July 2005-30 June 2007. Alaska Department of Fish and Game. Project 1.0 Alaska, USA.
- USDI/Bureau of Land Management. 1989. Utility Corridor Proposed Resource Management Plan and Final Environmental Impact Statement. USDI/Northern Field Office. Fairbanks, Alaska.
- Viereck, L.A., C.T. Dyrness, A.R. Batten, and K.J. Wenzlick. 1992. The Alaska vegetation classification. Gen. Tech. Rep. PNW-GTR-286. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 278 pp.



## Attachment # 3

# WILDERNESS CHARACTERISTICS ASSESSMENT

### **DOI-BLM-AK-03000-2012-0008-EA**

Mineral Material Exploration Permit, Milepost 208.5-240 along the Dalton Highway

### **FF096022 (360213)**

#### **Applicant**

State of Alaska Department of Transportation and Public Facilities

#### **Proposed Action**

ADOT&PF has requested to conduct an exploration program along the Dalton Highway from milepost 208.5 to 240 to locate additional suitable material source(s) to meet the complete range of mineral material requirements for one or more new sources along this stretch of the Dalton highway, and the expansion of three established mineral material sites.

#### **Purpose and Need**

The BLM will decide whether or not to issue ADOT&PF a Free Use Exploration Permit to conduct exploration along this stretch of the Dalton Highway. The BLM will also determine the mitigation necessary to prevent undue and unnecessary degradation of the resources.

#### **Evaluation**

The basis for this evaluation is BLM Manual 6310-Conducting Wilderness Characteristics Inventory on BLM Lands, and BLM Manual 6320 - Considering Lands with Wilderness Characteristics in the BLM Land Use Planning Process, which direct offices to conduct and maintain inventories regarding the presence or absence of wilderness characteristics, and to consider identified lands with wilderness characteristics in land use plans and when analyzing projects under the National Environmental Policy Act (NEPA).

The 1980 Nonwilderness Assessment was a special project approved by the Director, BLM and conducted by BLM along portions of the trans-Alaska oil pipeline system (TAPS) corridor (U.S. Department of Interior, BLM, 1980). The assessment identified lands under BLM administration that lacked wilderness characteristics as defined in the Wilderness Act of 1964 and was conducted in a manner that met the requirements of Section 603 of the Federal Land Policy and Management Act of 1976 (FLPMA).

The action being considered is located within the Atigun Segment of the Nonwilderness Assessment, which covers approximately 223,000 acres. BLM management authority in

this segment occurs along the Dalton Highway and extends to the east/west limits of BLM-managed land.

Portions of this segment meet the 5,000 acre minimum size. The Atigun Segment was deemed as not meeting naturalness standards due to roads, camps, airfields, pipelines, material sites and associated facilities. These disturbances bisect the entire length of the segments.

#### **Type of Assessment/Sources**

- U.S. Department of Interior, BLM, 1980. Nonwilderness Assessment: The Alaska Natural Gas Transportation System. Final Decision. Anchorage, Alaska
- Maps: USGS quadrangles Chandalar B-6 and C-6
- Google Earth
- Personal knowledge of the area

#### **FINDING**

The proposed action will occur in an area that has been determined not to have wilderness characteristics. More recent observations have confirmed that the 1980 assessment is still valid. In addition, the lands that were determined to be nonwilderness are reserved as a Utility and Transportation Corridor under PLO 5150, so would not be suitable for management for wilderness characteristics.

**Prepared by:** Lisa Shon Jodwalis

**Date:** 7 June 2012

## Attachment # 4

### ESSENTIAL FISH HABITAT ASSESSMENT

**Applicant:** Alaska Department of Transportation and Public Facilities (ADOT&PF)

**Serial No.:** FF096022 (360213)

**EA No.:** DOI-BLM-AK-03000-2012-0008-EA

**Proposed Action:** Mineral material exploration

**Location:** Dalton Highway Mile Post 208.5-240

**Description of Proposed Action:** The Alaska Department of Transportation and Public Facilities (ADOT&PF) has submitted a request to explore for new pit sites on upland alluvial terrace gravel deposits, abandoned gravel structures, and undeveloped hills near the Dalton Highway in the Dietrich River watershed.

Date: 26 June 2012

On October 11, 1996, the Sustainable Fisheries Act (Public Law 104-297) became law which, among other things, amended the habitat provisions of the Magnuson Act. The re-named Magnuson-Stevens Act calls for direct action to stop or reverse the continued loss of fish habitats. Toward this end, Congress mandated the identification of habitats essential to managed species and measures to conserve and enhance this habitat. The Act requires federal agencies to consult with the Secretary of Commerce regarding any activity, or proposed activity, authorized, funded, or undertaken by the agency that may adversely affect essential fish habitat (EFH).

For this assessment, essential fish habitat means those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity (Magnuson-Stevens Act, 16 U.S.C. 1801 et seq). For the purpose of interpreting the definition of essential fish habitat: Waters include aquatic areas and their associated physical, chemical, and biological properties that are used by fish and may include aquatic areas historically used by fish where appropriate; substrate includes sediment, hard bottom, structures underlying the waters, and associated biological communities; necessary means the habitat required to support a sustainable fishery and the managed species' contribution to a healthy ecosystem; and spawning, breeding, feeding, or growth to maturity covers a species' full life cycle (50 CFR § 600.10).

The National Marine Fisheries Service (NMFS) recognizes fresh waters cataloged as being used by salmon under the State of Alaska's *Catalog of Waters Important for the Spawning, Rearing or Migration of Anadromous Fishes* as essential fish habitat. There are no streams in the vicinity of the proposed exploration area that meet the criteria (ADF&G 2012). Exploration activities are not expected to result in any impacts to aquatic habitat or resources. As a result, it is anticipated that there will be no impacts to fisheries resources beyond the mined area.

EFH Finding: Based on the finding that there are no salmon species catalogued by the State of Alaska present in the area to be used or impacted by the permit holder, it is anticipated that the proposed action will not have any deleterious effects on salmon or their habitat. Therefore, the proposed action is assigned the EFH determination: *No affect*. EFH consultation with NMFS is not required.

Literature Cited:

Alaska Department of Fish and Game. 2012. Fish distribution database. Internet website at: <http://www.sf.adfg.state.ak.us>.

Robert Karlen  
Fisheries Biologist  
Central Yukon Field Office

