APPENDIX A

Preliminary Research Results

- Contaminated Sites, Spills and Underground Storage Tanks: A search of the Alaska Department of Environmental Conservation (ADEC) databases and a field review of the project corridor found several areas within the Parks Highway corridor (Lucus Road to Big Lake Road) where there is known current or previous soil or groundwater contamination. In addition, the potential for contamination occurs in some areas of the proposed project that have not been listed in ADEC databases, including sites with existing tanks or business types that may contribute to soil/groundwater contamination.

  A Phase 1 Environmental Site Assessment mapped the project corridor using designations of "low", "medium" and "high" to describe the potential to encounter contaminated materials during construction. The evaluation identified 401 listed sites of which 6 were rated as high risk and 21 as medium risk. The proposed footprint of the project has not yet been determined. When determined, the risk of encountering contamination can be refined.

- Wells and septic systems: No known public wells occur within the Parks Highway, Lucus Road to Big Lake Road, project corridor. There are a few private wells located within or close to the right-of-way. Discussions with local residents indicate there are also private septic systems near or within the project. Preliminary engineering activities will include listing the properties with wells or septic systems affected by various alternatives for highway improvements.

- Anadromous Fish Streams: We searched the Alaska Department of Fish and Game (ADF&G) *Catalog of Waters important to the Spawning, Rearing or Migration of Anadromous Fishes* and conducted a stream survey of the project corridor. The findings include two areas of interest: 1) Meadow Creek and tributaries, and 2) Blodgett Lake and connecting stream.

  - Meadow Creek 247-50-10330-2050-3050 (listed for coho salmon spawning and rearing, pink and chum salmon migration)

  - Blodgett Lake 247-50-10330-2050-3050-0010 (part of the Meadow Creek system – Blodgett Lake is used by sockeye salmon for spawning and coho salmon for rearing)

- State Refuges, Critical Habitat Areas and Sanctuaries: A review of the Alaska Department of Fish and Game (ADF&G) website page *Refuges, Sanctuaries, and Critical Habitat Areas* found that there are no State Refuges, Sanctuaries, or Critical Habitat Areas in the project corridor. State refuges occurring in the region include Susitna Flats, Palmer Hay Flats, and Goose Bay. We learned from discussions with ADF&G that three segments of the Parks Highway from Lucus to Big Lake are noted moose corridors: MP 47-48.5, MP 49-50, and MP 51-52.5. Moose cross the highway in these corridors when moving from the high ground of Bald Mountain

toward the Hay Flats, depending on snow conditions. The recent Big Lake fire resulted in good browse between Parks Highway and Knik Goose Bay Road. Although there have been no recent moose collar studies, reviewing accident reports involving moose collisions provides insight into the distribution of moose crossings within the project corridor. This part of the Parks Highway is noted for high accident rates involving moose.

- National Parks, Preserves, Monuments, and Wild and Scenic Rivers: A review of the National Park Service website indicates there are no National Parks, Preserves. Monuments, or Wild and Scenic Rivers near the project area.

- State Land Use Plans, State Parks: We reviewed the ADNR Division of Parks and Outdoor Recreation *Catalog of the Alaska State Park System*. There are no State Parks within the project study area, but nearby we found listings for Big Lake North and Big Lake South State Recreation Sites and Rocky Lake State Recreation Site. The main factor affecting our review of the Parks Highway from MP 44-52 is the traffic generated for recreational use of the surrounding area and the specific level of traffic at the Big Lake Road intersection.

  Other relevant factors are the induced use of the highway corridor by recreational vehicles and off-road vehicles frequenting the recreation sites and the adjacent lake and stream system. Coordination with the Mat-Su Borough and City of Wasilla is relevant considering the new sports complex and proposed trails from the complex along the lakes and streams of the area.

- Historical, Archeological, and Cultural Properties: An initial survey of the proposed project corridor, Parks Highway MP 44-52, was conducted in September 2004. The survey included background research and a field survey. Approximately 1200 acres of was considered and reviewed in this initial survey. A summary of the survey states the overall cultural resource potential within the project area is low, due largely to past construction activities, development, and a lack of high potential geomorphic features.

  The *Alaska Heritage Resources Survey* (AHRS) identified one site (# ANC-670, the Chitna Auto Railer Transportation Museum) within a one-mile radius of the project area. No other sites were found within the project area. The majority of listings in the AHRS for the general area, but more than a mile from the project area, designate sites of historic interest.

- Coastal Zone Management (CZM): The Parks Highway, Lucus Road to Big Lake Road project area falls within the coastal zone boundary, as depicted on the maps found in the Alaska Coastal Management Program website. We will coordinate with state and borough agencies to determine if plans for the project are consistent with state and local coastal management plans.

- Navigability, Flood Plain Management, and Wetlands: The U.S. Army Corps of Engineers, Alaska District website provides a list of navigable waters in Alaska. The list includes Big Lake but no waters crossing the Parks Highway within the project area of Lucus Road to Big Lake Road.

No specific information has been found regarding location of flood plains within the project corridor. We will coordinate with the Matanuska-Susitna Borough (MSB) Code Compliance Office to determine if the project affects flood plains

We conducted a field review of the project corridor and developed a preliminary delineation of wetlands in the area. The mapping area included nearly 1150 acres for the project, with about 96.6 acres consisting of wetland. Within the mapping area, approximately 8% is wetlands. Three percent of the overall area is mapped as open water in the form of small lakes or ponds and streams. Our discussions with resource agencies and local residents indicate the area provides habitat for waterfowl, eagles, fish, and moose. The project footprint has not been established so wetland impacts cannot yet be evaluated.

- Threatened and Endangered Species: No NMFS or U.S. Fish and Wildlife Service (USFWS) listed species are known to occur in the proposed project area. We will coordinate directly with USFWS Endangered Species Act (ESA) biologists for confirmation as part of our consultation under Section 7 of the Endangered Species Act.

- Bald Eagle Nest Information: Discussions with local residents indicate eagles frequent the area. Locations of nests provided by these residents have been labeled on a project aerial photo. According to correspondence with USFWS no known nests have been found within a half-mile of the highway. We will continue to talk with locals, view the roadside, and coordinate with USFWS to determine if new nesting sites are found within the project area.

- Essential Fish Habitat: Essential Fish Habitat (EFH) exists in the areas where anadromous fish occur. This includes Meadow Creek and its tributaries along with Blodgett Lake (see Anadromous Fish Streams section of the appendix). The project would affect Meadow Creek and EFH at its crossing with the Parks Highway. We will need to consult with National Marine Fisheries Service (NMFS) at a later stage of project development. We will also need to coordinate with the Alaska Department of Natural Resource – Office of Habitat Management and Permitting regarding any work below ordinary high water of Meadow Creek or any other anadromous stream.

- National Wildlife Refuges and Wetlands: The U.S. Fish and Wildlife Service web site has been visited to determine if National Wildlife Refuges exist in the proposed project area. The web site indicates there are none.

- Wildlife: Moose issues have been addressed under the State Refuges, Critical Habitat Areas and Sanctuaries section of this appendix. Other wildlife of concern in the Parks Highway, Lucus Road to Big Lake Road, corridor includes migratory birds and waterfowl. With a number of lakes, ponds and streams within the project area, vegetation and habitat mapping will be important to determine the impacts project alternatives will have on various species.

  During our agency scoping meeting, United State Fish and Wildlife Service (USFWS) asked if loons inhabit the area. A subsequent meeting with the public, including local residents,

provided an opportunity to pose this question. Cranes, swans, ducks, grebes, loons, and geese were listed as species seen in fields and ponds within the project area. Our evaluation of alternatives will include an assessment of impacts to the habitat favoring these species. In areas requiring clearing for construction, a nesting window will be defined during which time limitations on clearing will be enacted. Information defining the nesting window will be obtained from USFWS.

Other mammals have not been identified as a concern in the project area. Unless additional field work, research or communications with resource agencies indicates otherwise, we will focus our attention on the fish and wildlife species mentioned so far (birds and moose).

- Material Disposal Sites: There are no material sites or material disposal sites designated by Alaska Department of Transportation and Public Facilities (ADOT&PF) in the immediate project area. Several commercial material sites are located within the MSB. Typically ADOT&PF construction projects in the area will not designate either material sites or disposal sites because of the commercial availability. During the preliminary engineering phase of this project, we will evaluate the project vicinity for existing and potential material disposal sites, knowing that all sites must be permitted for use.