1 Summary

The Alaska Department of Transportation and Public Facilities (DOT&PF), in cooperation with the Alaska Division of the Federal Highway Administration (FHWA), proposes to improve 8.3 miles of the Parks Highway. The proposed project corridor begins at Lucus Road (milepost 44) and ends approximately one-half mile past Big Lake Road (milepost 52) at Airolo Road (Figure 1: Project Corridor). The proposed project is part of the Statewide Transportation Improvement Program (STIP) and the Matanuska-Susitna Borough (MSB) Long-Range Transportation Plan (LRTP). Both planning documents specifically include expansion of the Parks Highway to a four-lane highway between Lucus Road and Big Lake Road.

Purpose and Need

The purpose of the proposed project is to improve mobility for people and freight and enhance access management along the Parks Highway between Lucas Road and Big Lake Road. As a result of local growth and development, traffic congestion and thru-traffic demand in the project area is sharply increasing. This slows thru-traffic and may be a contributing factor in crashes occurring throughout the project corridor. This segment of the Parks Highway experiences higher than average crash rates and has a significantly higher proportion of high severity crashes when compared to statewide average for similar facilities. Many of these crashes are access-related and over 60 percent are head-on collisions. The Parks Highway ranks in the top five fatal and major injury corridors in the state and was designated a Traffic Safety Corridor (TSC) in 2006. This proposed project addresses **safety**, **congestion** and **travel efficiency** issues due to projected traffic volumes, which are expected to nearly double over the next 20 years.

Existing Condition

The functional classification of the Parks Highway is Rural Interstate; however, the roadway serves varying traffic needs. Through the City of Wasilla (i.e., five-lane section), a 45 mph speed limit and high driveway density cause it to function more as an Urban Arterial. Through the Meadow Lakes community the roadway supports local traffic circulation as well as regional thru-traffic. Beginning inside the City of Houston, Bbeyond Big Lake Road, as the setting becomes more rural and the density of driveways decreases, the highway functions primarily as a rural interstate. The proposed project takes into account the varying needs of all roadway users while encouraging development that is consistent with state and local transportation and corridor management plans. It preserves the corridor by managing access at this stage of development to enable development of frontage roads as needs arise.

Alternatives Considered

In addition to a No Build Alternative, three Build Alternatives were considered during the preliminary design phase of the project. The Build Alternatives included a four-lane divided highway with depressed grass median and partial frontage roads (Preferred), a four-lane divided highway with fully controlled access, and a five-lane section with a center two-way left turn lane (CTWLTL).

The Preferred Alternative would extend the five-lane section from Lucus Road to Church Road and upgrade the existing highway to a four-lane divided highway with at-grade intersections spaced every half-mile from Church Road to Big Lake Road. Existing frontage roads would be improved, and the existing 10-foot wide pedestrian pathway would be reconstructed and/or relocated as necessary. Illumination would be installed along the full length of the project corridor. A bridge would be constructed parallel to the existing bridge at the Alaska Railroad crossing. The existing culverts at Little Meadow Creek would be removed and replaced with a short span bridge.

The four-lane divided highway with fully controlled access alternative would extend the five-lane section from Lucus Road to Church Road. The remainder of the project corridor from Church Road to Big Lake Road would be designed to be a freeway facility and upgraded to a four-lane divided highway with frontage roads on each side and grade separated interchanges at two major intersections. This alternative was eliminated from consideration due to its extreme right-of-way (ROW) impacts and construction cost impacts on the DOT&PF's program budget.

The five-lane section alternative would extend the existing five-lane section the entire length of the proposed project from Lucus Road to Big Lake Road. The Preferred Alternative was selected over the five-lane section alternative because it holds considerable **safety, capacity** and **efficiency** advantages over a five-lane facility. The Preferred Alternative more effectively balances the competing demands for thru-traffic mobility, local access, and public safety. The FHWA research conducted to determine the relative safety effects of various types of medians indicates "non-transversable" medians, such as depressed grass or raised medians, are safer than "transversable" medians, such as a CTWLTL. When CTWLTLs are installed where no prior median existed, 35 percent of total crashes are expected to be eliminated. A "non-transversable" median can be expected to reduce total crashes by an additional 37 percent when they replace CTWLTLs or an approximate overall reduction of 59 percent when no prior median existed (NCHRP Report 395, 1997)

Other Major Actions Proposed in the Area

Three connector projects, which include the Museum Drive Extension, the Machen Drive Extension, and the South Mack Drive Extension, are being developed by the MSB to enhance local road network connectivity. When they are completed, local traffic would be better distributed and local community access would be improved. The Museum Drive Extension would extend Museum Drive west to Marigold Drive. The Machen Drive Extension would extend Machen Drive west to Nicola Avenue. The South Mack Drive Extension would complete a north/south corridor connecting the Parks Highway to Knik Goose Bay Road. These projects are expected to be completed before 2013.

Overview of Affected Environment

The proposed project corridor is located entirely within the MSB. The MSB has historically been the fastest growing area in the state and currently has the third largest population. The project area is predominately rural and consists of mostly residential areas with smaller pockets of commercial development. The project area offers abundant recreational

opportunities, including fishing, boating, and camping, and contains several recreational facilities. The surrounding terrain is generally flat with large undeveloped forested and open areas. The project area contains several large and small lakes, ponds, streams, and wetlands, which provides valuable habitat for a variety of species including moose, bear, wolf, furbearers, birds, and fish.

Environmental Consequences

Under the No Build Alternative, the existing highway would remain unchanged. Safety conditions on the highway would continue to deteriorate and worsen over time. Congestion and delay would persist, ultimately reaching unacceptable levels. The existing corridor management plan would not be improved and more direct accesses to and across the highway would likely be constructed. Conditions for wildlife and fisheries would not be improved.

The Preferred Alternative would improve safety, reduce congestion, and improve travel efficiency along the highway. Access management strategies would be implemented to more effectively control direct access to and across the highway. Continuous illumination would be installed throughout the project corridor, which would improve driver visibility and is forecast to lead to a reduction in moose-vehicle collisions. Conditions for fish and other wildlife would be enhanced by removing the culverts and constructing a bridge over Little Meadow Creek, the largest and most significant anadromous fish stream in the project area.

Impacts associated with the Preferred Alternative include acquisition of additional right-of-way (ROW), a permanent loss of wetland, and visual changes. The Preferred Alternative would require acquisition of additional ROW at approximately 151 locations. Widening the highway would require loss of approximately 4.0 acres of wetland adjacent to the highway. The visual character of the area would change from a rural to a more urban setting. Construction of the Preferred Alternative would cause temporary effects, including increases in noise levels, minor degradation of air and water quality, traffic delays, and changes in accessibility to businesses. A comparison of the environmental consequences resulting from the No Build and Preferred Alternative is shown in Table 1.

Table 1: Comparison of Environmental Consequences

Environmental Consequence	Preferred Alternative	No Build
Farmland	No effect	No effect
Air Quality	No effect	No effect
Floodplains	No effect	No effect
Wild & Scenic Rivers	No effect	No effect
Coastal Barriers	No effect	No effect
Threatened & Endangered	No effect	No effect
Section 4(f) Properties	No effect	No effect
Social	Improve safety on highway	Highway safety would continue to deteriorate
Environmental Justice	No effect	No effect
Relocation	Acquisition of additional ROW at approx. 151 parcels, relocation of six residences and ten businesses	No effect
Pedestrians and Bicyclists	Reconstruct pedestrian pathway	No effect
Noise	No effect	No effect
Water Quality	No effect	No effect
Wetlands	Permanent impact to 4.0 acres of wetlands	No effect
Water Body Modification	Replace culverts with bridge at Little Meadow Creek to restore to natural condition	Culverts would remain and continue to impact Little Meadow Creek system
Wildlife	Bridge would provide improved wildlife crossing at bridge	Culverts at Little Meadow Creek would continue to impede wildlife crossing
Fisheries	Replacing culverts at Little Meadow Creek would improve conditions for fisheries and essential fish habitat	Culverts at Little Meadow Creek would continue to impact fish passage and spawning
Cultural Resources	No effect	No effect
Hazardous Waste	Recommend a Phase II Investigation	No effect
Visual	Highway would change from a rural to a more urban setting	No effect
Energy	No effect	No effect
Invasive Species	Existing invasive species would be inventoried, eradicated, and controlled.	Existing invasive species would not be inventoried, eradicated, or controlled.

Regulatory Permits

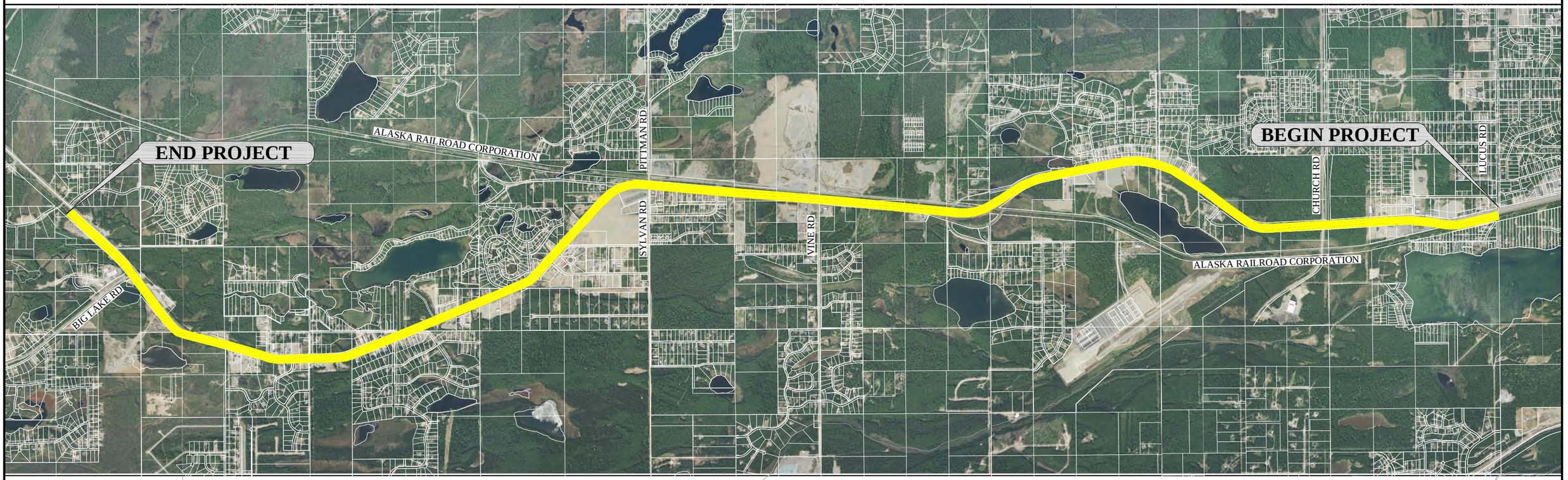
Construction of the Preferred Alternative would require the following environmental permits:

- U. S. Army Corps of Engineers (USACE) Section 404 permit for discharge of fill materials into Waters of the United States and wetlands;
- Alaska Department of Environmental Conservation (ADEC) 401 Water Quality Certification;
- Alaska Department of Fish and Game (ADF&G), Division of Habitat, Title 16 Fish Habitat Permit for work below Ordinary High Water (OHW);
- Alaska Department of Natural Resources (ADNR), Division of Mining, Land and Water, Land Use Permit for work below OHW;
- ADNR, Division of Coastal and Oceanic Management (DCOM), Coastal Consistency Review;
- ADEC, Alaska Pollutant Discharge Elimination System General Permit for Large and Small Construction Activities in Alaska (APDES CGP).

All construction activities and related work would be conducted in accordance with all federal, state, and local regulations and permit stipulations. All ROW acquisitions and relocations would comply with provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act. Impacts to wetlands would be avoided and minimized whenever possible, and unavoidable impacts would be compensated for by restoring, enhancing, preserving, or creating wetlands. The specific form of compensation will be determined in consultation with the USACE, Environmental Protection Agency (EPA), ADF&G, and other regulatory agencies. Culvert work would be conducted in accordance with the 2001 *Memorandum of Agreement between the ADF&G and DOT&PF for the Design, Permitting, and Construction of Culverts for Fish Passage*.

Scoping and Public Involvement

Federal, state, and local regulatory agencies, local governments, tribal organizations, and the public were consulted about the proposed project and asked to help identify potential concerns, mitigating measures, and alternatives. Outreach included public and agency scoping meetings, presentations to agencies and community groups, stakeholder interviews, and public information meetings. Agency and public involvement has been ongoing throughout the environmental process and would continue through construction of the proposed project. The Preferred Alternative is widely supported by most of the community. Local users consistently express frustration with safety problems along this corridor, and many voice anger and disappointment that the DOT&PF did not address safety problems in a 1996 resurfacing project in the same area. Opposition to the Preferred Alternative stems primarily from the median. Some business owners are concerned their businesses could suffer as a result of changed or redirected access.



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SCALE IN FEET

PARKS HIGHWAY MP 44-52
LUCUS RD TO BIG LAKE CUTOFF

FIGURE 1	PROJECT CORRIDOR