I. Proposed Action

Have there been any changes to the following since the approval of the original environmental document:

3. the project scope? ☒ ☐
4. the project design? ☒ ☐
5. the project funding sources? ☐ ☒

6. Describe changes:

The project location is shown on Figure 1. Below is a summary of changes made to the design from that presented in the original June 2009 categorical exclusion environmental document. The 2009 concept was re-evaluated by the Alaska Department of Transportation and Public Facilities (DOT&PF) with a traffic study and detailed investigation of intersection spacing along with merging distances and criteria for acceleration/deceleration lanes. DOT&PF also took a closer look at desired frontage road widths and profiles. The resulting changes follow.

- Auxiliary lanes extending from Wescott Garden Lane/Luanne Road west to the Badger Interchange ramps were identified as warranted and were added to the project due to the close proximity of the ramps to properly designed acceleration and deceleration lanes. Continuous auxiliary lanes are the preferred design option as opposed to an acceleration/deceleration lane taper that drops off within a few hundred feet of an on-ramp or off-ramp.
- The proposed Midland Street intersection location was relocated approximately 500’ east from where it was in 2009 due to desired spacing from the Wescott/Luanne Intersection. The added benefit of this shift was that it avoids impacting a fully developed parcel on the south that was largely undeveloped in 2009. It also limits impacts to a developed gravel pit on the north and vacant land to the south, thereby reducing overall right-of-way impacts at this intersection.
Frontage road improvements on the north and south were further explored revealing a need for minor partial-take ROW acquisitions in some areas of the corridor due to slight embankment raises and road widening, and/or utility relocations.

- Subdivision approaches to frontage roads are now realigned to approach the road at 90 degrees, requiring minor amounts of right-of-way.
- The Old Richardson Highway/Rozak Road intersection is mostly unchanged from 2009, except on the Old Richardson side. Appropriate access points to existing developed property and the Old Richardson Highway connector have been developed.
- There is no longer a cul-de-sac proposed at the Black Gold/Hamilton Express parcel. There is an established frontage road that continues east towards North Pole here, so terminating with a cul-de-sac isn’t practical, so the frontage road improvements will just end at this point and transition to the existing gravel road. Acceleration and deceleration lanes have also been added adjacent to the Richardson Highway at this shared property approach.

Considering the changes described above, the project’s environmental class of action and assignment status were re-coordinated with the Alaska Department of Transportation & Public Facilities (DOT&PF) Statewide Office and with the Federal Highway Administration (FHWA). No change in the class of action was considered warranted. The project remains an FHWA project not assigned to the State for processing under 6004. Documentation of this consultation is in Appendix A.

II. Purpose and Need

1. Have there been any changes in the project purpose and need from that described in the original approved environmental document? NO

2. Describe changes:

No changes from original document. The purpose of this project continues to be to improve safety and traffic flow on the Richardson Highway while maintaining reasonable access to parcels adjacent to the project corridor.

III. Environmental Consequences

Identify (yes or no) if there have been any changes in project impacts from those identified in the original environmental document. For each “yes”, describe the magnitude of the change. Include any supporting analysis or studies as Attachments to this document.

1. Have there been any changes in the affected environment within or adjacent to the project area that could affect any of the impact categories (e.g. new regulations, transportation infrastructure, protected resources, land use plans, etc.)? NO

2. Describe changes:

Design-related changes as described in item I.6. above have occurred resulting in little to no changes in project impacts from those identified in the original environmental document.

Right-of-Way - Revisions to the project design have resulted in a change in the estimated right-of-way (ROW) acquisition. The estimate has changed from 13.3 acres from 20 parcels (all partial acquisitions) to 13.2 acres from 32 parcels (all partial acquisitions). Of the proposed 32 parcels there are 22 industrial/commercial parcels (8.2 acres), 9 vacant parcels (4.2 acres), one residential parcel (0.005 acres) and one government parcel (0.68 acres). Figure 2 shows the current proposed r/w acquisition areas in green shading. Most of the acquisitions are attributable to the newly proposed intersections. A smaller amount results from proposed sliver acquisition for frontage road widening and utility work. There continues to be no proposed relocations or involvement with ANILCA lands requiring Title XI approval. See Section III.A.
Land Use - A new transportation plan, the *Interior Alaska Transportation Plan – November 2010*, and a new land use plan, *2011 FNSB Comprehensive Economic Development Strategy* were developed since the original environmental document. The project, as proposed, is consistent with these new plans. There are no changes in potential or anticipated land use impacts from those presented in the original environmental document. See Section III.D.

Historic Properties - The project activity changes described in Section I.6. were coordinated through FHWA with the SHPO and consulting parties. As a result there was no change in FHWA’s finding of “no-historic properties affected.” SHPO reconfirmed their concurrence with this finding on 3/19/2013. The 2/25/2013 Section 106 finding letter with SHPO's stamped 3/19/2013 concurrence is attached in Appendix B. There continues to be no proposed mitigation and/or environmental commitments related to cultural resources. See Section III.E.

Wetlands - The estimated wetland impacts have changed from those presented in the original environmental document due to a refined design. The impact estimate has increased from 0.5 acres to 0.8 acres. The estimated wetland impacts by type are 96% forested and 4% emergent. There are no changes in proposed mitigation or environmental commitments. See Section III.F.

Water Body Involvement - The estimate of water body impacts has changed from 3,500 cubic yards to 2,000 cubic yards over 0.1 acres. There are no changes in proposed mitigation or environmental commitments. Three existing 72-inch diameter, 395-foot long corrugated metal culverts in the FNSB Flood Control Channel B are still proposed to be extended by approximately 150 feet under the new frontage road. The channel in this area is typically dry during the summer, fall, and winter months but is treated as a water of the U.S. See section III.G.

Fish - The fish status and proposed impacts to fish-bearing waters has not changed, but environmental commitments related to fish have been made with the Department of Fish and Game. In a December 2012 email exchange DFG confirmed that the Flood Control Channel B does support grayling and in-water work would require a fish habitat permit. DFG agreed that the proposal to extend the flood control channel culverts would cause no substantial effects to fish and would not require a fish pass culvert design. DFG noted however that they would require fish passage be maintained over the life of the culverts. DOT&PF committed that the top of erosion protection (likely riprap) at the culvert ends would be placed so as to not impede fish passage though the culverts. See section III.H and Appendix C.

Air Quality Conformity - At the time of the project's June 9, 2009 Categorical Exclusion approval, the project area was not within a U.S. Environmental Protection Agency (EPA) designated air quality nonattainment or maintenance area. This status changed on December 14, 2009. The project now lies within an EPA-designated nonattainment area for fine particulate matter (PM 2.5). As a result the project has been analyzed for air quality on a regional and project level. The analyses concluded the project is not of air quality concern, no hot-spot analysis is needed, and the project conforms with the purpose of the current State Implementation Plan and the requirements of the Clean Air Act. See Section III.L and Appendix D for additional information.

Noise - Implementation of the 23 CFR 772 noise rule (7/13/2011) and the DOT Noise Policy (4/2011) occurred after the original environmental document was signed on 6/9/2009. Since the project proposes a new frontage road, realigned intersections, and new auxiliary lanes, a noise analysis was completed for the project in November 2013. Noise abatement measures including noise barriers were considered in the vicinity of impacted receivers but are determined not feasible or reasonable and are therefore not recommended. See the noise analysis report in Appendix F for additional information.

A. Right-of-Way Impacts

Have there been any changes to the following since the approval of the original environmental document:

<table>
<thead>
<tr>
<th>N/A</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

Richardson Highway MP 353-357 Access Improvements

Effective March 2013

0A24(019)/66148
A. **Right-of-Way Impacts**

<table>
<thead>
<tr>
<th></th>
<th>N/A</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>the right-of-way requirements for the project?</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>2.</td>
<td>the project’s effects on minority or low income populations as defined in E.O. 12898? (DOT Order 6640.23, December 1998)?</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>3.</td>
<td>the project’s use of ANILCA land?</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>4.</td>
<td>Describe changes for each ‘yes’ above:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Revisions to the project design have resulted in a change in the estimated right-of-way (ROW) acquisition. The estimate has changed from 13.3 acres from 20 parcels (all partial acquisitions) to 13.2 acres from 32 parcels (all partial acquisitions). Of the proposed 32 parcels there are 22 industrial/commercial parcels (8.2 acres), 9 vacant parcels (4.2 acres), one residential parcel (0.005 acres) and one government parcel (0.68 acres). Figure 2 shows the current proposed r/w acquisition areas in green shading. Most of the acquisitions are attributable to the newly proposed intersections. A smaller amount results from proposed sliver acquisition for frontage road widening and utility work. There continues to be no proposed relocations or involvement with ANILCA lands requiring Title XI approval. See Section III.A.

B. **Social and Cultural Impacts**

<table>
<thead>
<tr>
<th></th>
<th>N/A</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>the project’s effect on neighborhoods or community cohesion?</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>2.</td>
<td>the project’s effect on travel patterns and accessibility (e.g. vehicular, commuter, bicycle, or pedestrian)?</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>3.</td>
<td>the project’s effect on schools, recreation areas, churches, businesses, police and fire protection, etc.?</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>4.</td>
<td>the project’s effects on the elderly, handicapped, non-drivers, transit-dependent, minority and ethnic groups, or the economically disadvantaged?</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>5.</td>
<td>unresolved project issues or concerns of a federally recognized Indian Tribe [as defined in 36 CFR 800.16(m)]?</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>6.</td>
<td>Describe changes:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

No changes.

C. **Economic Impacts**

<table>
<thead>
<tr>
<th></th>
<th>N/A</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>the project’s potential to have adverse economic impacts on the regional and/or local economy, such as the effects of the project on development, tax revenues and public expenditures, employment opportunities, accessibility, and retail sales?</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>2.</td>
<td>the project’s potential to have adverse effect on established businesses or business districts?</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>3.</td>
<td>Describe changes:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

No changes

D. **Local Land Use and Transportation Plan**

<table>
<thead>
<tr>
<th></th>
<th>N/A</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Have there been any changes to the following since the approval of the original environmental document:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

No changes
D. Local Land Use and Transportation Plan

1. local land use or transportation plan(s)?

2. the potential for the project to have adverse indirect and cumulative effects on land use or transportation?

3. Is the project, as currently proposed, consistent with current land use and transportation plans?

4. Describe changes:

There are no changes in potential or anticipated land use impacts from those presented in the original environmental document.

Transportation Plan

The current Interior Alaska Transportation Plan – November 2010 has been developed since the original environmental document was signed in 2009. The project is consistent with the transportation plan’s goal to improve the overall Interior Regional Transportation System to promote the health, safety, and security of residents and visitors and for all motorized and non-motorized users (page 19 #2). The project is also consistent with the associated objective to evaluate highway vertical and horizontal alignments, accident statistics, and pavement design to ensure that deficiencies are addressed (page 19, #2f).

Land Use Plans

The current 2011 FNSB Comprehensive Economic Development Strategy has been developed since the original environmental document was signed in 2009. The project meets the physical infrastructure objective (page 56) regarding the sustainability of current infrastructure specifically to “support the design, construction, and maintenance of trail, road, and air transportation systems that improves access to the region.”

The project continues to be consistent with the 2005 FNSB Regional Comprehensive Plan Goal #1, Strategy #1, to “encourage location, design, and maintenance of roads based on their function and community needs.”

E. Impacts to Historic Properties

Have there been any changes to the following since the approval of the original environmental document:

1. the status of National Register-listed or eligible sites in the project area?

2. the involvement of any road that is included on the “List of Roads Treated as Eligible” in the Alaska Historic Roads PA?

3. the conclusions reached in the original environmental document regarding the project’s effect on cultural and historical resources?

4. the project activities described in consultation or findings letters previously submitted SHPO or other consulting parties?

5. Describe changes, including any changes to previously proposed mitigation and/or environmental commitments:

The project activity changes described in Section I.6. were coordinated through FHWA with the SHPO and consulting parties. As a result there was no change in FHWA’s finding of “no-historic properties affected.” SHPO reconfirmed their concurrence with this finding on 3/19/2013. The 2/25/2013 Section 106 finding letter with SHPO’s stamped 3/19/2013 concurrence is attached in Appendix B. There continues to be no proposed mitigation and/or environmental commitment related to cultural resources.

F. Wetlands Impacts

Have there been any changes to the following since the approval of the original
F. **Wetlands Impacts**

environmental document:

1. the project’s wetland impacts? *If yes, complete a through d and resource agency coordination is required.*
   a. List total acres of impact (original/changed): 0.5/ 0.8
   b. List total fill quantities in wetlands (original/changed): 350,000/560,000 cu.yds.
   c. List total dredge quantities (original/changed): NA
   d. Have mitigation measures changed? ✓ □ □

2. Describe changes, including any changes to previously proposed mitigation and/or environmental commitments:

   The estimated wetland impacts have changed from those presented in the original environmental document due to a refined design. The impact estimate has increased from 0.5 acres to 0.8 acres. The estimated wetland impacts by type are 96% forested and 4% emergent. There are no changes in proposed mitigation or environmental commitments.

   A notice of wetland involvement was placed in the Fairbanks Daily News Miner on 11/25/2012, 11/28/2012, and 11/29/2012 and was posted on the State of Alaska public notice website on 11/19/2012. A copy of the newspaper advertisement and website public notice are located in Appendix G.

G. **Water Body Involvement**

Have there been any changes to the following since the approval of the original environmental document:

1. the project’s effects on water bodies? ✓ □ □
2. the project’s effects on a navigable water body as defined by USCG (Section 9)? ✓ □ □
3. the project’s effects on Waters of the U.S. as defined by the USACE (Section 404)? □ ✗ □
4. the project’s effects on Navigable Waters of the U.S. as defined by the USACE (Section 10)? □ ✗ □
5. the project’s effect on a resident fish stream (Title 16.05.841)? □ ✗ □
6. the project’s effects on a Catalogued Anadromous Fish Stream (Title 16.05.871)? □ ✗ □
7. the project’s effects on a designated Wild and Scenic River or land adjacent to a Wild and Scenic River? □ ✗ □
8. Describe changes, including any changes to previously proposed mitigation and/or environmental commitments:

   The estimate of water body impacts has changed from 3,500 cubic yards to 2,000 cubic yards over 0.1 acres. There are no changes in proposed mitigation or environmental commitments. Three existing 72-inch diameter, 395-foot long corrugated metal culverts in the FNSB Flood Control Channel B are still proposed to be extended by approximately 150 feet under the new frontage road. The channel in this area is typically dry during the summer, fall, and winter months but is treated as a water of the U.S.

H. **Fish and Wildlife Impacts**

Have there been any changes to the following since the approval of the original environmental document:

1. the project’s effects on anadromous or resident fish habitat? □ ✗
H. **Fish and Wildlife Impacts**

2. the project’s effects on Essential Fish Habitat (EFH)?
   - N/A YES  NO

3. the project’s effects on wildlife resources?
   - NO YES  N/A

4. the project’s effect on bald eagles or golden eagles?
   - NO YES  N/A

5. the project’s compliance with the Bald and Golden Eagle Protection Act?
   - NO YES  N/A

6. the project’s effect on migratory birds?
   - NO YES  N/A

7. the project’s compliance with the Migratory Bird Treaty Act?
   - NO YES  N/A

8. Describe changes, including any changes to previously proposed mitigation and/or environmental commitments:

   The fish status and proposed impacts to fish-bearing waters has not changed, but environmental commitments related to fish have been made with the Department of Fish and Game. In a December 2012 email exchange DFG confirmed that the Flood Control Channel B does support grayling and in-water work would require a fish habitat permit. DFG agreed that the proposal to extend the flood control channel culverts would cause no substantial effects to fish and would not require a fish pass culvert design. DFG noted however that they would require fish passage be maintained over the life of the culverts. DOT&PF committed that the top of erosion protection (likely riprap) at the culvert ends would be placed so as to not impede fish passage through the culverts.

   See section III.H and Appendix C.

I. **Threatened and Endangered Species (T&E) Impacts**

   Have there been any changes to the following since the approval of the original environmental document:

1. the status of listed, proposed or candidate T&E species that will be directly or indirectly affected by the project?
   - NO YES  N/A

2. the status of critical habitat in the project area?
   - NO YES  N/A

3. the project’s effect on listed, proposed or candidate T&E species or designated critical habitat?
   - NO YES  N/A

4. Describe changes, including any changes to previously proposed mitigation and/or environmental commitments:

   No changes. An updated review of the USFWS listed species in Alaska reveals that no listed threatened, endangered or candidate species; or critical habitat are present in the project area.

J. **Invasive Species**

   Have there been any changes to the following since the approval of the original environmental document:

1. the measures that will be used to minimize the introduction or spread of invasive species?
   - NO YES  N/A

2. the project’s consistency with E.O. 13112 (Invasive Species)?
   - NO YES  N/A

3. Describe changes, including any changes to previously proposed mitigation and/or environmental commitments:

   No changes.
K. **Hazardous Waste**

Have there been any changes to the following since the approval of the original environmental document:

1. the status of known or potentially contaminated sites within or adjacent to the existing and/or proposed ROW? ☐ ☐ ☒
2. any proposed excavation plans adjacent to, or within, a known hazardous waste site? ☐ ☐ ☒
3. the potential for encountering hazardous waste during construction? ☐ ☐ ☒
4. Describe changes, including any changes to previously proposed mitigation and/or environmental commitments:

   No Changes. An updated review (11/8/2013) of the Alaska Department of Environmental Conservation and EPA databases of contaminated and potentially contaminated sites found no new sites within the project limits. Based on an updated review of the status of project area sites in the DEC contaminated site database, the conclusions from the original environmental document remain that the project is not expected to acquire a contamination source or to encounter contamination as a result of excavation near any of the sites. The TCE groundwater plume, with a source distant from the proposed right-of-way, has been reviewed by design staff. It is determined by that the plume is sufficiently deep that it is not expected to be encountered by construction excavation.

L. **Air Quality (Conformity)**

Have there been any changes to the following since the approval of the original environmental document:

1. the project’s effect on a nonattainment area or maintenance area, which will require a new or revised conformity determination? ☐ ☒ ☐
2. Describe changes, including any changes to previously proposed mitigation and/or environmental commitments:

   At the time of the project's June 9, 2009 Categorical Exclusion approval, the project area was not within a U.S. Environmental Protection Agency (EPA) designated air quality nonattainment or maintenance area. This status changed on December 14, 2009. The project now lies within an EPA-designated nonattainment area for fine particulate matter (PM 2.5). As a result the project has been analyzed for air quality on a regional and project level.

   **Regional-Level Air Quality Analysis**

   To evaluate air quality status on a regional level, the local unit of government was contacted to confirm that the project is part of the most recent transportation plan and has been determined to be in conformity with the State Implementation Plan (SIP) for air quality based on a regional emissions analysis. The Fairbanks Metropolitan Area Transportation System (FMATS) completed the most recent conformity analysis for their Long Range Transportation Plan (LRTP) for the Fairbanks Metropolitan Planning Area. This project was included. The most recent analysis found the transportation plans to be in conformity with the State Implementation Plan (SIP) for air quality based on a regional emissions analysis. Attached in Appendix D is DOT&PFs email correspondence with FMATS.

   **Project-Level Air Quality Analysis**

   To evaluate air quality status on a project level the project was first reviewed for exemption status but found not to be exempt under 40 CFR 93.126 or 93.128.

   The project was then reviewed to determine whether it fits the criteria under 40 CFR 93.123(b)(1) to be a project of air quality concern. The project does not meet the criteria under 40 CFR 93.123(b)(1) as a project of air quality concern as noted below. As a result no hot spot air quality analysis is required.

   • The project roadways do not carry a significant AADT. AADT (existing and projected) is substantially less than 125,000 vehicles.
The project primarily serves gasoline vehicles. The project highway and other roadways do not have a significant number (8% or 10,000 AADT) of diesel vehicles nor will the project result in an increase in diesel vehicles.

- The project does not involve terminals or other facilities that congregate diesel vehicles.
- The project does not involve a site that has been identified for violation or possible violation in a PM2.5 implementation plan.
- The project's operational improvements, including new acceleration/deceleration/auxiliary lanes, are of similar type to examples of projects that are not of air quality concern.

In November 2013 a Fairbanks, Alaska PM2.5 Hot-Spot Analysis Form for Interagency Consultation Form was sent out to the following air quality contacts to give opportunity for interagency comments: Cynthia Heil (Alaska Department of Environmental Conservation), Carl Pepple (Environmental Protection Agency), Ned Conroy (Federal Transit Administration), Chris Riesenberg (Federal Highway Administration), Glenn Miller (Fairbanks North Star Borough), Jim Conner (Fairbanks North Star Borough) and Donna Gardino (Fairbanks Metropolitan Area Transportation System). The analysis form concluded that the proposed project meets the Clean Air Act requirements and 40 CFR 93.116 without an explicit hot-spot analysis. Chris Riesenberg of FHWA replied on 11/22/2013 concurring with this conclusion. No other replies were received. The submittal indicated that no response by the comment period close date (December 4, 2013) would be assumed to be concurrence.

The project was on the agenda for the Interagency Consultations for FMATS MTP Update on December 5, 2013. The following representatives were present: Cynthia Heil (Alaska Department of Environmental Conservation), Carl Pepple (Environmental Protection Agency), Chris Riesenberg (Federal Highway Administration), and Donna Gardino (Fairbanks Metropolitan Area Transportation System). None of the representatives had comments on the November 2013 submittal concerning air quality conformity.

A summary of the coordination efforts and the FHWA comment received are attached in Appendix D.

Based on the information described above, the project, with its proposed changes, conforms with the purpose of the current State Implementation Plan and the requirements of the Clean Air Act.

M. Floodplains Impacts

| Have there been any changes to the following since the approval of the original environmental document: |
|----------------------|--------|---------|
| 1. the project’s encroachment into the 100-year floodplain (i.e. base floodplain in fresh or marine waters). If yes, attach documentation of public involvement conducted per E.O. 11988 and 23 CFR 650.109. Consultation with a regional or statewide Hydraulics/Hydrology expert and a location hydraulic study will be required per 23 CFR 650.111(c). | N/A | YES | NO |
| 2. the project’s potential to have significant encroachment as defined by 23 CFR 650.105(q)? | | | |
| 3. the project’s potential to encroach on a regulatory floodway? | | | |
| 4. the status of local flood hazard ordinances? | | | |
| 5. the project’s consistency with local flood protection standards and E.O. 11988? | | | |
| 6. Describe changes, including any changes to previously proposed mitigation and/or environmental commitments: No Changes. Application for a Fairbanks North Star Borough floodplain permit is still anticipated. Consultation with the regional hydraulics staff has been completed and the location hydraulics study per 23 CFR 650.111(c) is included in Appendix E. | | | |
N. Noise Impacts

1. Does the project as currently proposed involve any of the activities, listed below, that would trigger the need for a noise analysis? Activity list:
   - construction of a highway on a new location
   - substantial alteration in vertical or horizontal alignment as defined in 23 CFR 772.5
   - increase in the number of through lanes
   - addition of an auxiliary lane (except a turn lane)
   - addition or relocation of interchange lanes or ramps added to a quadrant to complete an existing partial interchange
   - restriping existing pavement for the purpose of adding a through-traffic lane or an auxiliary lane
   - addition of a new or substantial alteration of a weigh station, rest stop, ride share lot or toll plaza.

2. Was a noise analysis completed on the original project?
   a. Was the noise analysis completed prior to implementation of the final noise rule (23 CFR 772) and the current DOT&PF Noise Policy (April 2011)?

   **NOTE:** If yes, the project likely needs a revised noise analysis to comply with the current noise rule.

3. If the project needed a noise analysis are there any newly identified noise sensitive receivers in the project area?

4. Describe results of a new noise analysis, identification of new impacts, newly identified noise sensitive receivers or changes in noise abatement measures:

   Implementation of the 23 CFR 772 noise rule (7/13/2011) and the DOT Noise Policy (4/2011) occurred after the original environmental document was signed on 6/9/2009. Since the project proposes a new frontage road, realigned intersections, and new auxiliary lanes, a noise analysis was completed for the project in November 2013.

   Based on the analysis, traffic noise impacts were predicted at three residences in the project area in 2036. Noise abatement measures including noise barriers were considered in the vicinity of these three receivers. However, DOT&PF determined that noise abatement measures are not acoustically feasible or reasonable and are therefore not recommended. Adverse effects related to construction noise are anticipated to be localized, temporary, and transient in nature. See the noise analysis report in Appendix F for additional information.

O. Water Quality Impacts

   Have there been any changes to the following since the approval of the original environmental document:

   1. the project’s involvement with a public or private drinking water source?
   2. the project’s effect on discharges of storm water into Waters of the U.S.?
   3. the project’s effect on ADEC designated Impaired Waterbody?
   4. the project’s involvement with an area that is covered by a municipal separate storm sewer system (MS4) APDES permit?
   5. the potential for the project’s runoff to be mixed with discharges from a APDES permitted industrial facility?
   6. the potential for the project to discharge storm water to a water body within a national park or state park, a national or state wildlife refuge? *If yes and an Alaska Construction General Permit applies to the project, consultation with ADEC is required at least 30 days prior to planned start of construction activities.*
O. Water Quality Impacts
7. Describe changes, including any changes to previously proposed mitigation and/or environmental commitments:

No Changes.

P. Construction Impacts

Have there been any changes to the following since the approval of the original environmental document:

1. temporary degradation of water quality? ☑ ☑ ☒
2. temporary stream diversion? ☑ ☒ ☒
3. temporary degradation of air quality? ☑ ☒ ☒
4. temporary delays and detours of traffic? ☑ ☒ ☒
5. temporary impacts on businesses? ☑ ☒ ☒
6. temporary noise impacts? ☑ ☒ ☒
7. other construction impacts? ☑ ☒ ☒
8. Describe changes, including any changes to previously proposed mitigation and/or environmental commitments:

No Changes.

Q. Section 4(f)/6(f)

Have there been any changes to the following since the approval of the original environmental document:

1. the status of Section 4(f) properties affected by the proposed action or the project’s effects on such properties? ☑ ☒ ☒
2. the determination of whether the project would “use” land from a Section 4(f) property? ☑ ☒ ☒
3. the status of Section 6(f) properties affected by the proposed action? ☑ ☒ ☒
4. the determination of whether the use of a Section 6(f) property is a “conversion of use” per Section 6(f) of the LWCFA? ☑ ☒ ☒

If yes to any of the above, attach appropriate Section 4(f) and Section 6(f) documentation.

5. Describe changes, including any changes to previously proposed mitigation and/or environmental commitments:

No Changes. There continues to be no Section 4(f) or 6(f) lands in the project area. No use of Section 4(f) lands or conversions of Section 6(f) lands would occur as a result of the project.

IV. Permits and Authorizations

Have there been any changes to the status of the following permits and authorizations since the approval of the original environmental document:

1. USACE, Section 404/10 Includes Abbreviated Permit Process, Nationwide Permit, and General Permit ☑ ☒ ☒
2. Coast Guard, Section 9 ☑ ☒ ☒
IV. Permits and Authorizations

3. ADF&G Fish Habitat Permit (Title 16.05.871 and Title 16.05.841)  
   N/A    YES  NO

4. Flood Hazard  
   N/A    YES  NO

5. ADEC Non-domestic Wastewater Plan Approval  
   N/A    YES  NO

6. ADEC 401  
   N/A    YES  NO

7. ADEC APDES  
   N/A    YES  NO

8. Noise  
   YES  N/A  NO

9. Eagle Permit  
   N/A    YES  NO

10. Other. If yes, list below.  
    N/A    YES  NO

11. Describe changes:

The original environmental document indicated that ADEC Non-domestic Wastewater Plan Approval would not be required. This may be required at the discretion of ADEC.

V. Comments and Coordination Conducted for the Re-evaluation

1. Has public/agency coordination occurred since the original environmental document was approved?  
   YES  N/A  NO

2. Describe all outreach and coordination efforts taken for this project since approval of the original environmental document. Discuss pertinent issues raised by the public and other agencies. Attach applicable correspondence and responses.

Since the original environmental document was approved an open house public meeting was held in North Pole on November 29, 2012. An advertisement for the public meetings including a notice of potentially affected resources was placed in the Fairbanks Daily News Miner on 11/25/12, 11/28/12, and 11/29/12 and posted on the State of Alaska public notice website on 11/19/2012. Copies of the affidavit of newspaper publication and the website public notice are attached in Appendix G.

Comments received dealt with the following topics:
- Support for project plans for commercial vehicle access, business access, commuter safety, and lighting.
- Questions regarding the need for the project or elements of it
- Property impact concerns including right-of-way acquisition, loss of privacy, driveway impacts, and impact compensation
- Potential changes to emergency vehicle access and response time
- Traffic noise changes and request for noise walls
- Current reckless driving practices in the project area
- Impact of the project on proposed gas line projects or vice versa

Copies of the open house sign-in sheets, a summary of public comments received, and responses to those comments can be found in Appendix G.
VI. Changes in Environmental Commitments or Mitigation Measures

N/A  YES  NO

1. Have there been any changes in the environmental commitments or proposed mitigation?

2. Describe all changes:

The following updated wording for environmental commitments is made from the wording in the original environmental documents. The updated wording relates to eagle and migratory bird commitments and is consistent with the intent of previous commitment wording, compliance to the Migratory Bird Treaty Act, and current recommendations by the U.S. Fish and Wildlife Service.

- If an eagle nest is discovered at anytime during the project within one-eighth mile of the project, the USFWS should be contacted for A) a recommendation on whether the project related activities are likely to cause disturbance to eagles, B) a recommendation on disturbance-avoiding measures, and C) a recommendation on the need for a Bald and Golden Eagle Protection Act Permit.
- All construction activity shall comply with the Migratory Bird Treaty Act to prevent the killing or taking of migratory birds, or any part, nest, or egg of such birds.

The following environmental commitment has been made concerning fish since the original environmental document.

- To address Department of Fish and Game concerns, DOT&PF committed that the top of erosion protection (likely riprap) at the culvert ends would be placed so as to not impede fish passage though the culverts.

VII. Environmental Re-evaluation Determination

N/A  YES  NO

1. The conclusions of the original environmental document approval remain valid.

2. The project meets the criteria of the DOT&PF Programmatic Approval 2 authorized in the November 6, 2012 “CE Directive – Delegation of Approval Authority for Certain CEs under 6004 MOU”. If yes, the Re-evaluation may be approved by the Regional Environmental Manager. If no, the Re-evaluation may be approved by a Statewide NEPA Manager.

3. The project meets the criteria of the April 13, 2012 “Programmatic Categorical Exclusion for Use on Federal-Aid Highway Projects in Alaska” agreement between FHWA and DOT&PF. If yes, the Re-evaluation may be approved by the Regional Environmental Manager. If no, the Re-evaluation may be approved by FHWA Area Engineer.

4. The changes in the project scope, environmental consequences, environmental commitments or public controversy require a new or supplemental environmental document. If “Yes” consultation with the FHWA Area Engineer and FHWA NEPA Project Manager, or DOT&PF Statewide NEPA Manager is required.
VIII. Environmental Documentation Approval Signatures

Prepared by: [Signature] Environmental Impact Analyst
Robert A. Effinger  
[Print Name] Environmental Impact Analyst

Reviewed by: [Signature] Engineering Manager
Sarah E. Schupper  
[Print Name] Engineering Manager

Approved by: [Signature] Regional Environmental Manager
Brett O. Nelson  
[Print Name] Regional Environmental Manager

Date: 12/1/13

Assigned CE Re-evaluation

Date: ___

Approved by: [Signature] DOT&PF Statewide NEPA Manager

[Print Name] DOT&PF Statewide NEPA Manager

Non-Assigned CE Re-evaluation

Date: 12-13-2013

Approved by: [Signature] FHWA Area Engineer or FHWA NEPA Project Manager
John W. Huestis  
[Print Name] FHWA Area Engineer or FHWA NEPA Project Manager

EA or EIS Re-evaluation

Date: ___

Approved by: [Signature] FHWA Area Engineer or FHWA NEPA Project Manager

[Print Name] FHWA Area Engineer or FHWA NEPA Project Manager
Location and Vicinity Map
USGS Topography Map Fairbanks D1 & D2

STATE OF ALASKA
Department of Transportation and Public Facilities
Richardson Highway MP 353-357
Access Improvements
0A24(019)/66148
Fairbanks, Alaska

DATE: 12/10/13 | Figure 1
Proposed New road segments
Proposed New Auxiliary Lanes
Proposed New/Extended Acceleration/Deceleration Lanes

DATE: 12/10/13

North Pole, Alaska

STATE OF ALASKA
Department of Transportation and Public Facilities
Richardson Highway MP 353-357
Access Improvements
0A24(019)/66148

Figure 2
Appendix A

Class of Action
From: Effinger, Robert A (DOT)  
Sent: Monday, December 09, 2013 4:32 PM  
To: Effinger, Robert A (DOT)  
Subject: FW: Class of Action Request - Richardson Hwy MP 353-357 Access Improvements - 66148  
Attachments: image002.gif; image003.png

From: john.huestis@dot.gov [mailto:john.huestis@dot.gov]  
Sent: Thursday, January 03, 2013 2:04 PM  
To: Effinger, Robert A (DOT)  
Cc: Schacher, Sarah E (DOT); Nelson, Brett D (DOT); Tim.Haugh@dot.gov; Al.Fletcher@dot.gov  
Subject: RE: Class of Action Request - Richardson Hwy MP 353-357 Access Improvements - 66148

Bob,

FHWA has already approved a CE for this project. Based on the information you have provided to us in your e-mail it does not appear that the project would automatically require a different class of action that that already approved by FHWA. However, a written re-evaluation is required, which should answer the question as to whether the original CE determination is still valid. If, after the written re-evaluation, the original CE is still a valid determination then that is all that is required, if not, then a higher class of action is necessary. If you would like any further discussion on the matter please don’t hesitate to call me.

John W. Huestis, P.E.  
Northern Region Area Engineer  
FHWA - Alaska Division  
Office (907) 586-7464  
Fax (907) 586-7420

From: Effinger, Robert A (DOT) [mailto:bob.effinger@alaska.gov]  
Sent: Wednesday, January 02, 2013 3:27 PM  
To: Huestis, John (FHWA)  
Cc: Schacher, Sarah E (DOT); Nelson, Brett D (DOT); Haugh, Tim (FHWA)  
Subject: FW: Class of Action Request - Richardson Hwy MP 353-357 Access Improvements - 66148

John:
This is to follow up on our phone conversation a couple of weeks ago regarding the Class of Action for this project. As noted in emails below, we have coordinated the reference project with DOT&PF Statewide Environmental and they have concurred on 12/10/12 that this project is not assignable under 6004. As a result, this email is to request an FHWA class of action call for the referenced project.
PROJECT DESCRIPTION
A project description and figure can be found on the attached Statewide Class of Action form.

1. Close five existing at-grade highway intersections (Davidson Street, Midland Street, MP 354.8 intersection, Rozak Road, and Old Richardson Highway) and replace them with two new at-grade intersections (Midland Street & Rozak Road).
2. Close the median at the Westcott Garden Lane to make a separate right-in/right-out intersection for eastbound and westbound traffic.
3. Extend and improve the northern and southern frontage roads in order to enhance their use both for property access and as a secondary route to the Badger Road Interchange.
4. Add or extend acceleration and deceleration lanes at four intersections (Davidson Street, Midland Street, Rozak Road, and Black Gold Express/Hamilton Construction Access).
5. Add auxiliary lanes to the Badger Road Interchange ramps on the north end of the project.
6. Add or extend illumination at three intersections (Davidson Street, Midland Street, and Rozak Road).
7. Extend flood channel culverts beneath the new southern frontage road segment.
8. Relocate overhead and underground utilities (telephone, fiber optic lines, cable TV lines, electric power lines) as needed.

PREVIOUS ENVIRONMENTAL DOCUMENT
A categorical exclusion (CE) environmental document was previously approved by FHWA on 6/9/2009, prior to the State’s 6004 assignment. Because changes have been made to the project since then, we decided to request reconfirmation of the project class of action with FHWA and, if confirmed, to proceed with a re-evaluation the 6/9/2009 CE.

CHANGES - Below is a summary of changes made to the design from that presented in the original July 2009 Cat Ex Document:
The 2009 concept was re-evaluated with a traffic study and detailed investigation of intersection spacing along with merging distances and criteria for acceleration/deceleration lanes. We also took a closer look at desired frontage road widths and profiles. The resulting changes are as follows:

- Auxiliary lanes extending from Wescott Garden Lane/Luanne Road west to the Badger Interchange ramps were identified as warranted and were added to the project due to the close proximity of the ramps to properly designed acceleration and deceleration lanes. Continuous auxiliary lanes are the preferred design option as opposed to an accel/decel lane taper that drops off within a few hundred feet of an on-ramp or off-ramp.
- The proposed Midland Street intersection was relocated approximately 500' east from where it was in 2009 due to desired spacing from Wescott/Luanne intersection. The added benefit of this shift was that it avoids impacting a fully developed parcel on the south that was largely undeveloped in 2009, and also limits impacts to a developed gravel pit on the north and vacant land to the south, thereby reducing overall ROW impacts at this intersection.
- Frontage road improvements on the north and south were further explored and revealed a need for minor partial-take ROW acquisitions in some areas of the corridor due to slight embankment raises and road widening, and/or utility relocations.
- Subdivision approaches to frontage roads are now realigned to approach the road at 90 degrees, requiring minor amounts of ROW.
- Old Richardson Highway/Rozak Road intersection is mostly unchanged from 2009, except on the Old Richardson side, appropriate access points to existing developed property and the Old Richardson Highway Connector have been developed.
• There is no longer a cul-de-sac proposed at the Black Gold/Hamilton Express parcel. There is an established frontage road that continues east towards North Pole here, so terminating with a culdesac isn’t practical so the frontage road improvements will just end at this point and transition to the existing gravel road. Acceleration and deceleration lanes have also been added adjacent to the Richardson Highway at this shared property approach.

IMPACTS - Below is a list of Immediately Foreseeable Potential Impacts (IFPIs).

• **Right of Way** - Lands adjacent to the highway consist of approximately 75% industrial/commercial businesses, 20% undeveloped lands, and 5% rural residential. Nearly all parcels are Zoned as General Use with the exception of one rural residential and one light industrial. An estimated 15.6 acres of right-of-way is anticipated to be acquired. Most of the acquisition is attributable to the newly proposed intersections. A smaller amount results from proposed sliver acquisition for frontage road widening and utility work. Two full property acquisitions of vacant lots are likely on the south leg of the proposed Midland intersection. Acquisition would be from 39 industrial/commercial parcels (12.3 acres), 5 undeveloped parcels (3.1 acres), and 2 residential parcels (0.2 acres). The figure attached to the Class of Action form shows proposed r/w acquisition in green hatching.

• **Cultural Resources** - Properties in the project area generally have structures constructed between the mid 1980’s to present. Therefore the likelihood of eligible structures within the APE is low. Likewise, much of the APE where ground disturbance would occur has been developed and previously disturbed, therefore having low potential for archaeological resources. SHPO concurred in 4/7/2009 with a no historic properties affected finding. The project changes are not expected to change this finding.

• **Wetlands and Waters** - The project is expected to result in the loss of approximately 6.5 acres of moderate to low quality wetlands and waters. Moderate quality wetland impacts would be less than 1 acre. Approximately 3 acres of impacts are to an open water gravel pit pond.

• **Fisheries** - The project would extend two culverts located in the within flood control Channel B. This channel supports resident grayling and extensions would be designed to address any fisheries-related issues in coordination with the Alaska Department of Fish and Game during the Fish Habitat Permit application process. No anadromous fish are present within the project.

• **Floodplain** - The project would encroach minimally into a FEMA-designated 100 year floodplain on the south leg of the new Midland Street intersection. Floodplain impacts are not anticipated to raise the floodplain elevation by one foot or greater and are not anticipated to be significant as defined by 23 CFR 650. The project will comply with 23 CFR 650, E.O. 11988, and any local floodplain ordinance.

• **Air Quality** - The project is within a PM non-attainment area and is not exempt under 40 CFR 93.126/8 from the requirement to determine air quality conformity. Project level conformity would be coordinated with the interagency committee for an air quality conformity determination. The project is not expected to be a project of air quality concern nor require a hot spot analysis given that the project does not have a significant number of or result in a significant increase in diesel vehicles.

• **Noise** – A noise analysis would be completed for the project in accordance with 23 CFR 772 and the DOT&PF Noise Policy. A noise analysis is triggered due to the addition of auxiliary lanes to the Badger Road Interchange ramps on the north end of the project. Segments of new frontage roads and intersection connections are also part of the project. Noise impacts are not anticipated as a result of project improvements. The auxiliary lanes would not move traffic substantially closer to receptors. The frontage road would not generate a traffic volume that would raise traffic noise by any perceptible level. Existing noise impacts may be present from the Richardson Highway and would be addressed. An initial review indicates that if impacts occur, noise abatement measures would not be reasonable or feasible. In part, this is due to the spacing of receptors, the predominately commercial/industrial land use, and the lack of available space within the right-of-way.

• **Contaminated Sites** – A TCE groundwater contamination plume occurs under a portion of the highway on the north end of the project. Excavation for the project is not proposed at a depth that would encounter this contamination.
• **Species** – There are no T&E species or bald eagle records in the project vicinity.
• **Recreation** – No use of 4(f) or 6(f) lands is proposed. None are present in the project vicinity.
• **Water Quality** - No impaired water bodies are present in the project area. Best management practices would be implemented for the purpose of meeting state and federal water quality standards.
• **Social/Economic** - No net adverse social, cultural, economic impacts are anticipated. Some users may need to drive between 0.1 to 0.7 miles on frontage roads to access their properties from the highway instead of using direct access currently available. However, the project overall would provide improved highway access for business users and safer access for all users. Improvements to accessibility include upgraded and extended frontage roads, improved intersection spacing, closer intersection proximity for some users, reduced intersection congestion, full-access intersections to replace partial access intersections, and safer intersection designs. The project would not adversely affect community cohesion.
• **Traffic Patterns and Access** – The following is a link to a summary of traffic pattern changes that would occur with the project. It’s most useful to use the table of changes in conjunction with a project concept graphic included with the attached COA form.  [S:\Website\Rich 353-357\Intersection changes 11 7 2012.pdf](S:\Website\Rich 353-357\Intersection changes 11 7 2012.pdf)
• **No Project Controversy** - While various questions arose during public involvement there was a sense of overall public support for the project. Details on the public responses are given in the following section.
• **No Unusual Circumstances**

**LAND USE**
Undeveloped land does exist around the newly proposed intersections that could be served by the improvements. However, we have no information indicating reasonably foreseeable plans for development of these lands. The only related comments we received during public and agency involvement were offered by the Fairbanks North Star Borough (FNSB) at the public meeting. FNSB shared about a proposed plat (not in final status) near Exclusive Paving that may or may not ever come to be final. It proposed a driveway to the frontage road on the north side to the small house next to Exclusive on the east. We would not conclude that the proposal affects our project at all. Even if it came to pass our ROW plans could override it and relocate the new driveway if necessary.

**PUBLIC RESPONSE**
Written public comments and responses can be found at the link below:  [V\Hwy\66148 Rich Hwy Access Improvements\07 - Env\05 - Pub Inv-2012\Pub Comments](V\Hwy\66148 Rich Hwy Access Improvements\07 - Env\05 - Pub Inv-2012\Pub Comments)

**Here is a summary of public involvement conducted within the last year:**

• Individual in-person and phone meetings with multiple property owners in the corridor, particularly ones affected by proposed ROW acquisition that could be located in person or by phone have been on-going since April 2012.
• A project website with drawings and information has been online since early November 2012. This website has been published on all print ads associated with this project.
• Public open house was held November 29, 2012 in North Pole.
  o Over 400 mail-out invitations to the meeting were sent to property owners surrounding the project vicinity.
  o Three ads for the meeting were published in the Fairbanks Daily News Miner (Nov 25, 28, and 29, 2012), and the project and meeting received quite a bit of media attention including 3 televised news clip stories and interviews with DOT staff, two print stories and one radio broadcast with a news story and interview.
  o Approximately 40 people attended the meeting, and three local legislator’s offices were represented at the meeting.
A presentation to FMATS Technical Committee was given on December 5, 2012. This committee is comprised of local transportation agency officials within the FMATS area.

A presentation to the Fairbanks Chamber of Commerce Transportation Committee was given December 13, 2012. This committee is comprised of local transportation industry representatives.

Below summarizes the comments provided on the project (comment deadline is Dec 14, 2012):

Support for the project from multiple property owners and public

- Multiple trucking companies in corridor acknowledge need for acceleration/deceleration lanes and approve our project concept. They indicate that currently at some times of day, the delay experienced for larger, slower moving vehicles is substantial given the limited gaps in traffic. They also like that the addition of acceleration lanes inside the medians will allow all vehicles to make their maneuvers in stages, as opposed to waiting for four lanes of traffic to clear. This is significant for larger vehicles that take more time to get up to speed and merge.
- Multiple business in corridor have been contacted and support the need for improved access and a more fully developed frontage road system to support local trips.
- Other owners affected by ROW had general questions about the possibility of ROW vacation and specific questions about driveway access that were noted and will be explored during detailed final design.
- Comment from a daily commuter: this corridor is dangerous because of high speeds of traffic and that reducing the number of intersections will greatly improve safety.
- Several members of the public commented the project’s addition of highway lighting is a welcome improvement because the highway is very dark in the winter months. Area businesses also support highway lighting as an added measure of security surrounding their property to deter theft and vandalism.
- Comments from surrounding business owners general agreed that improved and safe access is good for business.

Concern from property owner of parcels affected by Midland St. realignment (south side). Overall questions about necessity for project, why traffic can’t be rerouted up frontage road to interchange? We explained the desire to not introduce adverse changes to travel patterns. Owner understands need for intersection improvement in area but isn’t excited to sell property to the state. ROW Negotiations Chief and Project Manager had a meeting with him, explained appraisal/acquisition process to him and gave him “Acquiring Real Property for Federal and Federal-Aid Programs and Projects” brochure.

Concern for effects on emergency vehicle response time due to changes in access/intersection closures. The fire department that serves the project area was contacted. The fire chief reviewed the design concept and said the department has no concerns with our proposed design and said that while it will require a few modifications to their routes, overall they support improved frontage roads and intersections. They specifically commented that the improved frontage roads may offset any lost travel time due to an intersection closure, and that the “shortest route is not necessarily the quickest route”. The chief indicated he’d be happy to speak to anyone in the public who had a concern about what our project was proposing and how it would affect their operations to ease any concerns.

Concerns about noise. Adjacent users acknowledge there is existing noise to abutting properties from the Rich Hwy traffic. Response to these comments indicated our environmental process would identify whether our project activities triggered a noise analysis and if so, whether noise abatement was warranted by the analysis.
• **Comment that trucks drive recklessly around these intersections and DOT should do something about it.**
  This is a law enforcement issue. DOT is seeking to make safety improvements that will benefit all users and not just trucks.

• **Comment that a gas line is proposed in this area and we should not spend money on a project that will be “wiped out” by the gas line.**
  Response was that there are no certain plans for a gas line and our goal is to build a project that will accommodate traffic needs for its design life regardless of speculation of gas line development. Follow up was made with Alaska DNR, Division of Oil & Gas and we learned there are no proposed plans for gas lines that are developed to a level of detail that allows for meaningful planning and/or logistical coordination for use in our project development. Not only that, any conceptual information being considered is confidential and is not being released to the public, so this public comment was purely speculative. There are a number of complex issues that need to be explored before meaningful gas line planning and environmental studies can begin. Consequently, DOT feels we need to proceed with the project as planned.

Please concur that the project qualifies as a Categorical Exclusion under 23 CFR 771.117d(1).

Let me know if you need any additional information.

Bob.

---

**From:** Heck, Linda K (DOT)  
**Sent:** Monday, December 10, 2012 4:30 PM  
**To:** Effinger, Robert A (DOT)  
**Cc:** Schacher, Sarah E (DOT); Heck, Linda K (DOT); White, Ben M (DOT); 'Tim.Haugh@dot.gov'; 'john.huestis@dot.gov'  
**Subject:** RE: Class of Action Request - Richardson Hwy MP 353-357 Access Improvements - 66148

Bob,

Based on the information provided in the attached Class of Action Consultation Form that the **Richardson Hwy MP 353-357 Access Improvements (66148) project** will involve construction of a new roadway, I concur with your determination that this project would not fall under the 6004 assignment.

Under the September 2012 MOU for 6004, DOT&PF can only assume those projects specifically included in 23 CFR 771.117(c), 23 CFR 771.117(d), or in “Attachment 3” of the FHWA clarification letter dated August 19, 2009. Since this project involves construction of a new roadway, which is an activity specifically clarified in Item #15 of “Attachment 3” as not being on either the “c” or “d” lists, this project would be excluded from assignment to the State under the September 2012 MOU for 6004.

I have copied FHWA with this email to inform them that this project will not be assigned to the State. If you have additional information that may change this determination, or any questions, please feel free to contact me.

Thank you,

Linda Heck

---

Linda Heck  
**NEPA Program Manager**  
**Alaska Department of Transportation and Public Facilities**  
2301 Peger Road  
Fairbanks, Alaska 99709  
Phone: (907) 451-5295
Linda,
Attached is a Class of Action form for your review and concurrence.

Bob.
Appendix B
Section 106 Consultation Documentation
Ms. Judith Bittner  
State Historic Preservation Officer  
Alaska Office of History and Archaeology  
550 W. 7th Avenue, Suite 1310  
Anchorage, AK 99501

Dear Ms. Bittner:

The Department of Transportation and Public Facilities (DOT&PF), in cooperation with the Alaska Division of the Federal Highway Administration (FHWA), is proposing a project designed to improve access, upgrade and extend frontage roads, and develop two new intersections along the Richardson Highway between Mileposts 353 and 357. The project is located in Sections 21, 27, 28, 34, 35, T1S, R1E and Section 2, T2S, R1E; United States Geological Survey Fairbanks D-1 and D-2. Figure 1 shows the project location and vicinity.

Pursuant to 36 CFR 800.4(d)(1), implementing regulations of Section 106 of the National Historic Preservation Act, the FHWA finds that no historic properties would be affected by the proposed project. This submission provides documentation in support of this finding, as required at 36 CFR 800.11(d).

**Background**

This project was previously coordinated with State Historic Preservation Officer (SHPO) and consulting parties in 2009. As a result SHPO concurred with a finding of no historic properties affected on April 7, 2009. Since then there have been design changes to the project. This letter is to reconfirm SHPO’s concurrence with the earlier finding of no historic properties affected, considering the design changes.

**Project Description**

The purpose of this project is to improve safety and capacity on the Richardson Highway while maintaining reasonable access to parcels adjacent to the project corridor. The project consists of upgrades to one mile of existing highway and 2.4 miles of existing frontage roads. Approximately 1.5 miles of new road would be constructed in the form of new intersections and frontage roads.
See Figure 2. The project would involve the following improvements.

1. Close five existing at-grade highway intersections (Davison Street, Midland Street, MP 354.8 intersection, Rozak Road, and Old Richardson Highway) and replace them with two new at-grade intersections (Midland Street & Rozak Road).

2. Close the median at the Wescott Garden Lane to make a separate right-in/right-out intersection for eastbound and westbound traffic.

3. Extend and improve the northern and southern frontage roads in order to enhance their use for property access.

4. Extend the southern frontage road as a secondary route to the Badger Road Interchange.

5. Add or extend acceleration and deceleration lanes serving five intersections (Wescott Garden Lane, Luanne Road, Midland Street, Rozak Road, and Black Gold Express/Hamilton Construction Access).

6. Add auxiliary lanes to the Badger Road Interchange ramps on the north end of the project.

7. Add or extend illumination at three intersections (Davison Street, Midland Street, and Rozak Road).

8. Extend flood channel culverts beneath the new southern frontage road segment.

9. Relocate overhead and underground utilities (telephone, fiber optic lines, cable TV lines, electric power lines) as needed.

Below is a summary of changes made to the design from that presented in the 2009 Section 106 consultation. The 2009 concept changed after further evaluating a traffic study, intersection spacing, merging distances, acceleration/deceleration lane criterion, and desirable frontage road widths and profiles. The resulting changes are as follows:

- Auxiliary lanes extending from the Badger Interchange ramps to Wescott Garden Lane/Luanne Road were added.

- The proposed Midland Street intersection was moved approximately 500’ to the east to improve spacing from the Wescott/Luanne intersection and to reduce overall right-of-way impacts.

- Frontage road improvement design was further developed revealing the need for strip right-of-way acquisitions in some areas due to slight embankment raises, minor road widening, and potential utility relocations.

- Realignments of approach roads to intersect the frontage road at 90 degrees were added, requiring acquisition of minor right-of-way triangles.

- The proposed Rozak Road intersection with the Richardson Highway was shifted 100 feet and the design of access points to adjacent properties and the Old Richardson Highway Connector were further developed.

- A new cul-de-sac at the Black Gold/Hamilton Express parcel is no longer proposed. The existing shared-property access will be improved by adding acceleration/deceleration lanes to the Richardson Highway for this intersection.

Material sites are anticipated to be contractor furnished in which case any necessary Section 106 coordination would be completed by the contractor.
Area of Potential Effect

The project’s area of potential effect (APE) as presented in FHWA’s original February 27, 2009, findings letter remains largely the same with some additions as shown on Figure 2 to accommodate recent project design changes. The APE description below has been updated to include the design changes.

The APE for this project includes:

1) **Existing Right-of-Way** – This includes the existing right-of-way of the Richardson Highway and side roads within the project limits. These areas are within the APE to address areas potentially disturbed by improvements to existing frontage roads and intersections, added lanes (auxiliary, acceleration, and deceleration), realigned approach roads, and by obliteration of existing roads. The existing Richardson Highway right-of-way width is 300 feet wide. The existing rights-of-way for other roads are 66-100 feet wide.

2) **Proposed Right-of-Way** - These areas are within the APE to cover areas potentially disturbed by new intersections, new frontage roads, new cul-de-sacs, frontage road widening, approach roads improvements, and culvert extensions. This includes a 10-foot wide strip outside the existing right-of-way for potential construction equipment operations. Also included are land parcels around the proposed Midland Street Intersection that may need to be purchased in right-of-way negotiations as potential uneconomic remnants. The proposed right-of-way varies in dimensions as shown on Figure 2.

The APE encompasses areas of potential direct effects (including temporary work areas) and takes into consideration potential indirect visual effects. Adjacent properties have been included in the APE in the vicinity of the two new intersections. Other improvements are near to or overlapping existing roadway facilities, are visually consistent with the current roadway elements, and are not visually prominent. The project’s elements visually blend into the surrounding heavily developed transportation corridor and commercial/industrial setting.

Identification Efforts

A search of the Alaska Heritage Resources Survey (AHRS) database on January 16, 2013, found one site, FAI-01752, within the project’s APE. FAI-01752 is the site of a Historic Telephone/Telegraph Line that follows the Old Richardson Highway alignment. The AHRS indicates the telegraph line segment from Badger Road to the intersection with the modern Richardson Highway was surveyed and no evidence of the historic line was found. A small segment of FAI-01752 that parallels the north side of the Richardson Highway east of the Old Richardson intersection is not covered by the AHRS reference. However, the proposed work in that section of the APE is limited to the road prism and is south of the reported location of FAI-01752.

A January 16, 2013, search of the Fairbanks North Star Borough tax assessment records found no structures to be 45 years or greater in age within the project’s APE.
The table below lists adjacent properties within the APE (from north to south) and their structure ages.

<table>
<thead>
<tr>
<th>Property</th>
<th>Building Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bright Services Inc.</td>
<td>1983</td>
</tr>
<tr>
<td>Exclusive Landscaping and Paving</td>
<td>1993</td>
</tr>
<tr>
<td>Parcel 1A Swift 1st Addition (Residence)</td>
<td>1991</td>
</tr>
<tr>
<td>Fairbanks Auto Auction</td>
<td>2012</td>
</tr>
<tr>
<td>Former Fantasy Land Video</td>
<td>1987</td>
</tr>
<tr>
<td>1815 Rozak Road (Residence)</td>
<td>1986</td>
</tr>
</tbody>
</table>

Concerning archaeology, the project area including newly proposed right-of-way has been reviewed by DOT&PF staff. Land conditions were found in 2009 to be substantially disturbed by previous construction and land clearing activities. DOT&PF cultural resources staff completed an updated review of the additional lands added to the APE since 2009. The updated review has confirmed the disturbed land conditions in this heavily developed transportation and industrial corridor. See Figures 3-7. Due to disturbed conditions, the project area is considered to have a low potential for archaeological resources. No project effects to archaeological resources are expected.

Under the Alaska Historic Roads Programmatic Agreement Interim Guidance, a core group of Alaska roads has been identified which would be treated as eligible for the National Register of Historic Places (NRHP). This project does not affect any of these roads. The Richardson Highway, as part the Interstate System, falls under the Federal Highway Interstate Exemption from Section 106 consideration as a historic property (Exception Regarding Historic Preservation Review Process for Effect to the Interstate Highway System, Federal Register, March 10, 2005).

**Finding of Effect**

The DOT&PF finds that no historic properties are present in the project’s APE, and consequently recommends no historic properties would be affected by the proposed project. The FHWA agrees with DOT&PF’s recommendation, and finds that no historic properties will be affected by the proposed project.

**Consultation Efforts**

Consultation letters were mailed on September 26, 2006, to the Doyon Limited, Fairbanks Native Association, and the Tanana Chiefs Conference. No places of traditional religious or cultural importance or other historic properties were identified in response.

Please direct your concurrence or comments to me at the address above, by telephone at (907) 586-7464, or by e-mail at john.huestis@dot.gov.
Sincerely,

[Signature]

John W. Huestis, P.E.
Northern Region Area Engineer

Enclosures:
Figure 1 – Location Map
Figure 2 – Section 106 Area of Potential Effect
Figure 3 – Photo Points
Figure 4 – Photos – New Cul-de-sac Area
Figure 5 – Photos – New Midland Street Intersection Area
Figure 6 – Photos – New Rozak Road Intersection Area
Figure 7 – Photos – New South Frontage Road Extension & Flood Channel Crossing Area

Electronic cc w/ enclosures:
Sarah Schacher, P.E., DOT&PF, Northern Region, Project Manager
Brett Nelson, DOT&PF, Northern Region, Environmental Manager
Jacob Woodcock, DOT&PF, Northern Region, Cultural Resource Specialist
Kathy Price, DOT&PF, Statewide Cultural Resources Specialist
New road segments on new alignment

Current APE Boundary

New road segments on new alignment

Added APE

Proposed Right-of-Way Acquisition

Added APE – Potential Parcel Acquisition

Figure 2

Section 106
Area of Potential Effect

STATE OF ALASKA
Department of Transportation and Public Facilities
Richardson Highway MP 353-357
Access Improvements
IM-HRO-0A24(19)/66148
North Pole, Alaska

DATE: 2/7/13  Figure 2
<table>
<thead>
<tr>
<th>Recipient</th>
<th>Sent this project</th>
<th>First Name</th>
<th>Last Name</th>
<th>Title</th>
<th>Agency</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHPO</td>
<td></td>
<td>Judith</td>
<td>Bittner</td>
<td>State Historical Preservation Officer</td>
<td>SHPO</td>
<td>Department of Natural Resources, Office of History and Archaeology, 550 West 7th Avenue, Suite 1310, Anchorage, AK 99501</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>Jerry</td>
<td>Issac</td>
<td>President/Chairman</td>
<td>Tanana Chiefs Conference</td>
<td>122 First Avenue, Suite 600, Fairbanks, AK 99701</td>
</tr>
<tr>
<td>Other - ANCSA</td>
<td></td>
<td>Audrey</td>
<td>Jones</td>
<td>President</td>
<td>Fairbanks Native Association</td>
<td>605 Hughes Avenue, Suite 100, Fairbanks, AK 99701</td>
</tr>
<tr>
<td>Other - CLG</td>
<td></td>
<td>Aaron M.</td>
<td>Schult</td>
<td>President/CEO</td>
<td>Doyon Limited</td>
<td>1 Doyon Place, Suite 300, Fairbanks, AK 99701-2941</td>
</tr>
<tr>
<td>Other - CLG</td>
<td></td>
<td>Clause</td>
<td>Naske</td>
<td>Chairman</td>
<td>FNSB Commission on Hist. Pres.</td>
<td>P.O. Box 80721, Fairbanks, AK 99708</td>
</tr>
</tbody>
</table>
Appendix C

Department of Fish and Game
Correspondence
From: Keith Hanneman  
To: Thatcher, Garrett A (DOT)  
Cc: Heather Estabrook; Effinger, Robert A (DOT); Schacher, Sarah E (DOT)  
Subject: RE: Rich 354.1 Crossing of Drainage Channel B

We can accommodate their needs going forward.

Keith

From: Thatcher, Garrett A (DOT) [mailto:garrett.thatcher@alaska.gov]  
Sent: Wednesday, December 19, 2012 2:52 PM  
To: Keith Hanneman  
Cc: Heather Estabrook; Effinger, Robert A (DOT); Schacher, Sarah E (DOT)  
Subject: FW: Rich 354.1 Crossing of Drainage Channel B

For your information we looked into fish pass at the flood channel B crossing. Fish and Game has agreed your pipe extension crossing the frontage road is appropriate for this application (from the perspective of fish pass).

The channel does contain grayling, but tentatively Fish and Game agrees the extension should not have significant negative effect on fish pass. Please note Bill is requesting we don’t make the situation worse with improperly installed riprap aprons.

Let me know if you have questions,

Garrett

From: Boles, Luke J (DOT)  
Sent: Wednesday, December 19, 2012 2:25 PM  
To: Thatcher, Garrett A (DOT)  
Cc: Bennett, John D (DOT); Stutzke, Jeff P (DOT)  
Subject: FW: Rich 354.1 Crossing of Drainage Channel B

Ok to extend the three 72” CMP’s per ADF&G.

From: Morris, William A (DFG)  
Sent: Wednesday, December 19, 2012 2:20 PM  
To: Boles, Luke J (DOT)  
Subject: RE: Rich 354.1 Crossing of Drainage Channel B

Agreed. We will require fish passage be maintained over the life of the structures—so, as you describe, don’t build a rip rap fish filter in the pipes.

******************************
Bill Morris  
Region III Regional Supervisor  
Division of Habitat  
Alaska Dept. of Fish and Game  
1300 College Road  
Fairbanks, AK 99701  
Phone: (907) 459-7282  
Fax: (907) 459-7303  
http://www.adfg.alaska.gov/  
******************************

From: Boles, Luke J (DOT)  
Sent: Wednesday, December 19, 2012 2:17 PM  
To: Morris, William A (DFG)  
Subject: RE: Rich 354.1 Crossing of Drainage Channel B

Bill,

I think we are on the same page on this one, so if you’re ok with DOT extending the existing three 72”-diameter culverts at this crossing, we don’t need to discuss further. We would specify that the top of any erosion protection (likely riprap) would be set at the channel bottom elevation so as not to impede fish passage into/out of the culvert. I assume we’d need a habitat permit for the in water work and that extending the culverts would be allowed under the permit.

Let me know if you agree.

Thanks,

Luke

From: Morris, William A (DFG)  
Sent: Wednesday, December 19, 2012 2:06 PM  
To: Boles, Luke J (DOT)  
Cc: Bennett, John D (DOT); Stutzke, Jeff P (DOT)  
Subject: RE: Rich 354.1 Crossing of Drainage Channel B

Luke,

I can discuss this this afternoon, briefly, or tomorrow just about any time for however long it may take. However, given what is upstream from mile 354, the nature of the habitat to begin with, and the unknown distribution of Arctic grayling in the channel, I do not see any need to require a fish passage design. From what I have seen of the crossing at 354.1 mile, I agree that it does appear to be backwastewater most often. A brief delay in fish movement during high flow events (if that really happens) would likely minimally impact fish, if they are there. We do know Arctic grayling use the channel but not really to what extent, I doubt there is much, if any spawning. We could go poke around next Spring as water temps increase and see what we find.

Hope this helps, let me know if you still would like to meet.
From: Boles, Luke J (DOT)
Sent: Tuesday, December 18, 2012 2:17 PM
To: Morris, William A (DFG)
Cc: Bennett, John D (DOT); Stutkie, Jeff P (DOT)
Subject: Rich 354.1 Crossing of Drainage Channel B

Bill,

One more thing of note for this crossing:

I've just reviewed the Hydrologic and Hydraulic Report for the Rich 6 Mile/Badger Road Interchange project (AKSASR #63886) from Jan 2001. This is next crossing of Drainage Channel B downstream from the 354.1 crossing. The report indicates that Mac did not require fish passage design of the culverts at the 6 Mile/Badger Road Interchange crossing. I haven't looked in our file to see how this was documented but can if need be.

The Fish mapper says that the 6 Mile/Badger Road Interchange crossing is rated green for fish passage. There is not info on the Rich 354.1 crossing in Fish Mapper.

Let me know when you're available to discuss.

Luke

From: Boles, Luke J (DOT)
Sent: Tuesday, December 18, 2012 12:00 PM
To: Morris, William A (DFG)
Cc: Bennett, John D (DOT); Stutkie, Jeff P (DOT)
Subject: Rich 354.1 Crossing of Drainage Channel B

Bill,

As we discussed today here is some background on the Rich 354.1 crossing at Drainage Channel B:

- Project Name: Richardson Hwy 353-357 Access Improvements (AKSASR: 66148)
- I've attached a kmz file with a marker at the crossing

The main issue I'd like to discuss is the habitat in Drainage Channel B. There are 3-72"-diameter, 395' long CMP culverts under the 4 lanes of the Richardson Hwy currently. The proposal is to extend the culverts by 150' on the west side (downstream) of the hwy, where a frontage road is proposed. FDC did the hydraulic modeling of the proposed extension but I have not been able to get a copy of a report. They indicated in the Design Study Report that the extension would not have a significant change in the ability to convey the 100-yr flood (0.01' rise in headwater).

My gut feel is that the extension would not affect fish passage since from what I've seen this crossing is typically backwatered. Let me know when you're free to have an informal discussion.

Thanks,

Luke

Luke Boles, P.E.
Hydraulic Engineer
ADOT&PF – Northern Region
451-2233
Appendix D

Air Quality Conformity
Correspondence
Bob,

The above referenced project was included in FMATS’ long range plan, *Fairbanks Metro 2035*. On August 27, 2010, FHWA and FTA found that the plan conformed to the State Implementation Plan and approved the conformity determination. This project is illustrated in the TIP for informational purposes but is funded through the Statewide Transportation Improvement Program.

Please let me know if you have any questions.

Donna Gardino  
MPO Coordinator  
907.459.6786  
*New email:* donna.gardino@fmats.us  
www.fmats.us

---

Donna Gardino  
MPO Coordinator  
907.459.6786  
*New email:* donna.gardino@fmats.us  
www.fmats.us

---

Donna,  
The DOT&PF is proposing a federally funded project designed to improve access, upgrade and extend frontage roads, and develop two new intersections along the Richardson Highway between Mileposts 353 and 357. A detailed project description is below.

This is to contact you to confirm that the project was included as part of the most recent transportation plans (TIP and LRTP) and that the plans have been determined to be in conformity with the State Implementation Plan (SIP) for air quality based on the most recent FMATS regional emissions analysis.

Could you please respond with by email so we can include your response in our environmental document for the project.

If regional-level conformity is confirmed, I will follow up by sending you a [Fairbanks, Alaska PM2.5 Hot-Spot Analysis Form for Interagency Consultation Form](mailto:fairbanks|alaska|pm25|hot-spot|analysis|form) for your distribution to the Interagency Consultation partners concerning project-level conformity.
If you need any additional information please contact me.

Bob Effinger  
Environmental Analyst  
Alaska Department of Transportation & PF  
2301 Peger Road Fairbanks, AK 99709  
bob.effinger@alaska.gov  
907-451-5294

Detailed Project Description.  
The project is located between Fairbanks and North Pole approximately 0.10 miles southeast of the City of Fairbanks limits and 3 miles northwest of the City of North Pole limits. See Figure 1. The project is located in Sections 27, 28, 34, 35, T1S, R1E, USGS Fairbanks D-2 SE and Section 35, T1S, R1E, USGS Fairbanks D-1 SW. The Richardson Highway, A National Highway System (NHS) route, is the main arterial between Fairbanks and North Pole. The project is located within a four-lane, divided, 55-mph section of the Richardson Highway. Traffic volumes have increased by approximately 25% over the past 20 years as the corridor and surrounding area have experienced commercial, industrial, and residential growth. Gradually more direct access points to the highway have been developed. Currently there are seven at-grade intersection connections to this segment of highway. Several are within 0.2 miles of each other, a close spacing for a high-speed facility.

The purpose of this project is to improve safety and capacity on the Richardson Highway while maintaining reasonable access to parcels adjacent to the project corridor. The project consists of upgrades to one mile of existing highway and 2.4 miles of existing frontage roads. Approximately 1.5 miles of new road would be constructed in the form of new intersections and frontage roads. See Figure 2. The project would involve the following improvements.

1. Close five existing at-grade highway intersections (Davison Street, Midland Street, MP 354.8 intersection, Rozak Road, and Old Richardson Highway) and replace them with two new at-grade intersections (Midland Street & Rozak Road).
2. Close the median at the Wescott Garden Lane to make a separate right-in/right-out intersection for eastbound and westbound traffic.
3. Extend and improve the northern and southern frontage roads in order to enhance their use for property access.
4. Extend the southern frontage road as a secondary route to the Badger Road Interchange.
5. Add or extend acceleration and deceleration lanes serving five intersections (Wescott Garden Lane, Luanne Road, Midland Street, Rozak Road, and Black Gold Express/Hamilton Construction Access).
6. Add auxiliary lanes to the Badger Road Interchange ramps on the north end of the project.
7. Add or extend highway illumination for the majority of the corridor, to include illumination of the new Midland Street and Rozak/Old Richardson Hwy intersections and along all auxiliary lanes.
8. Extend flood channel culverts beneath the new southern frontage road segment.
9. Relocate overhead and underground utilities (telephone, fiber optic lines, cable TV lines, electric power lines) as needed.
**Detailed Project Description.**

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8. Extend flood channel culverts beneath the new southern frontage road segment.
9. Relocate overhead and underground utilities (telephone, fiber optic lines, cable TV lines, electric power lines) as needed.
I. Roll Call
   FMATS, ADOT&PF, FNSB, ADEC, EPA, FHWA, FTA, Sierra Research, Kittelson

II. Public Comment

III. Richardson Highway MP 353 – 357 Access Improvements

IV. Background
   A. PM$_{2.5}$ SIP under development, expect submission to EPA in June 2014
   B. New MTP submittal expected in August 2014
   C. New travel demand model under development for MTP
   D. Existing MTP (FFY 2035) PM$_{2.5}$ conformity determination based on
      MOVES using no-greater than 2008-baseline test (2010)
   E. Existing TIP (2012 – 2015) CO/PM$_{2.5}$ conformity determination (2011)
   F. Limited CO Maintenance Plan approved by EPA (08/09/13)
   G. CO and PM$_{2.5}$ have different nonattainment boundaries

V. CO Requirements
   A. No budget test required
   B. Following requirements still apply:
      - timely implementation of SIP TCMs
      - plans and projects comply with the fiscal constraint element
      - MPO’s interagency consultation procedures meet applicable
        requirements
      - Conformity of transportation plans is determined no less frequently
        than every four years, and conformity of plan amendments and
        transportation projects is demonstrated in accordance with the
        timing requirement
      - The latest planning assumptions and emissions model are used
      - Projects do not cause or contribute to any new localized carbon
        monoxide or particulate matter violations
      - Project sponsors and/or operators provide written commitments as
        specified
VI. PM\textsubscript{2.5} Requirements
   A. No-greater than budgets established in upcoming SIP
   B. PM\textsubscript{2.5} (vehicle tailpipe, brake wear, tire wear)
   C. NOx required unless determined to be insignificant in the SIP
   D. Fugitive dust & other precursors presumed insignificant until SIP
   F. Emission factor model – MOVES

VII. Latest Planning Assumptions & Analysis
   A. Transportation Modeling
      - Travel survey data collected Sept/Oct 2013
      - Analysis of survey data underway
      - TAZs and network have been revised
      - Assembly of current planning assumptions
        i. 2010 Census data
        ii. Socioeconomic/employment projections
        iii. Interpolation for intermediate years
        iv. Different travel estimates for CO and PM\textsubscript{2.5} nonattainment areas
      - New model forecasts expected in April 2014
   B. Potential differences between VMT/speed estimates employed in SIP and produced by new travel demand model
      - New travel survey data and expansion in TAZ density may produce higher levels of VMT and speed differences
      - Initial indication will come with base year calibration
      - New forecasts of economic activity (e.g., pipeline construction, natural gas benefits on disposable income, etc.) may also cause growth to exceed levels employed in SIP
      - Increased VMT may make it impossible to demonstrate conformity and cause a lapse until a SIP revision with new travel model forecasts are completed
      - Important to track differences in travel model estimates as soon as they become available
      - It will also be important to track timing of when the SIP is submitted and when the MTP is submitted (i.e., will the new budgets be in place at the time of submission)
   C. Emission Factor Modeling
      - Consistency between MOVES inputs used in SIP and conformity analysis
        i. Local characterization
        ii. Adjustments to address plug-in benefits
VIII. Next Steps & Schedule
A. Assess differences in base year values, track SIP/MTP completion schedules, determine if alternate conformity analyses are needed, hold consultation to approve approach
B. Prepare analysis, circulate summary by email unless a request for a consultation is received
C. Interagency recommendation
D. Coordination with Technical and Policy Committee meetings

IX. Public Comment
Appendix E

Location Hydraulics Study
The Alaska DOT&PF proposes to improve access and safety of the Richardson Highway between Mileposts (MP), 353 and 357 (shown on figure 1). The project will:

- Consolidate five existing at-grade intersections into two larger at-grade intersections and add acceleration and deceleration lanes.
- Close the median at one intersection to make separate right-in/right-out intersections for eastbound and westbound traffic.
- Add acceleration and deceleration lanes to an existing right-in/right-out intersection for eastbound traffic.
- Illuminate the two new intersections and the new acceleration/deceleration lanes.
- Extend and improve the southern frontage road to facilitate access to the improved intersections.
Figure 1. Proposed Improvement Area
The proposed modifications to the existing intersections and frontage roads require the consideration of general criteria presented in Executive Order EO 11988, which mandates agencies to take floodplain encroachments into account when formulating or evaluating any water and land use plans. 23 CFR 650, “Location and Hydraulic Design of Encroachment on Flood Plains”, specifically addresses these issues and is used as the basis for evaluating whether this project has a significant encroachment consistent with EO 11988. This Location Hydraulic Study fulfills the requirements of 23 CFR 650.11(e). Once the project design is near final, the DOT&PF will prepare a Hydrology and Hydraulics Report with the design study documentation required per 23 CFR 650.117 along with the relevant hydraulic computations.

**National Flood Insurance Program (NFIP)**

The Fairbanks North Star Borough (FNSB) participates in the National Flood Insurance Program (NFIP). As a participating community, it has developed local flood plain ordinances per Federal Emergency Management Agency (FEMA) requirements. The FNSB Title 15 Flood Plain Management Regulations cover the requirements for development within flood plains.

The project is within the apparent flood influence of the Tanana River. The Flood Insurance Rate Maps indicate the majority of the proposed improvements fall within “Zone X”. “Zone X” locations are considered outside the 100-year flood plain or “adopted regulatory floodway”, and are not subject to the FNSB “no-rise” policy. However, several sections of the south frontage road extension between stations 376+50 to 384+50 and stations 409+50 to 432+00, are located in an unnumbered “A Zone” flood plain as shown on the Flood Insurance Rate Map (FIRM) in Figures 2-4. This is consistent with early correspondence with the FNSB indicating a “no-rise” certification would likely be required (Jennifer Schmetzer, personal communication). The locations in question are protected from the 100-year flood by the Tanana Flood Control levee.
Figure 2. FEMA’s Flood Insurance Rate Map (FIRM) between the Tanana River and the Richardson Highway. Mapped area within shows S. frontage Road Stationing BOP to 383+00. The dark gray area represents the flood limits of the “base flood”, also known as the 1% annual chance flood.

Figure 3. FEMA’s FIRM. Mapped area along Richardson Hwy, S. Frontage Road Stationing 380+00 to 450+00.
Figure 4. FEMA’s FIRM. Mapped area along Richardson Hwy, S. Frontage Road Stationing – 439+00 to End of Project (EOP).

**Risks associated with implementation of the action – Low**

The risks associated with this project are low. In this context, “risk” means the consequences associated with the probability of flooding attributable to an encroachment. An “encroachment” is an action within the limits of the base flood plain. The impacted areas are in shallow flow locations protected by the Tanana River Flood Control Levee, and therefore, outside the effective floodway. Culverts will be installed, maintained, or improved to maintain existing drainage patterns. Frontage road extensions will be constructed on or below existing road grade elevations in order to keep improvements within the ROW while maintaining existing ditch line profiles. Flood level increase due to displacement from embankment material will be negligible due to the small amount of fill being placed in the regulated flood zone (Zone A).

**FNSB Flood Control Channel B**

Within the project, the south frontage road near Sta. 483+20 will be extended and will cross the FNSB Flood Control Channel B. In order to maintain the drainage capacity of Channel B the three existing 72-inch diameter culverts will be extended approximately 150 feet to allow the culverts to pass water under both the highway and the frontage road. This extension will result in a total length of 545 feet for each of the three culverts. The initial sizing of these culverts was controlled by seepage flows coming from the Tanana River, flowing under the flood control dike and percolating up through the ground. In 1978, the U.S. Army Corps of Engineers
provided the original seepage flow values for the entire length of Channel B. At the intersection of Channel B and the highway, flows for the 25-year, 50-year and 100 year floods are 275 cfs, 318 cfs, and 426 cfs, respectively. The existing channel was analyzed to determine the normal depth at the 100-year flow. This depth was determined to be 2.74 feet which results in an average tailwater elevation of 464.7 feet at the downstream end of the culverts. The 100-year flow was also applied both to the existing culvert lengths and at the proposed length to analyze headwater elevations. The existing length yielded a computed headwater elevation of 470.16 feet, while the proposed extension yielded a computed headwater elevation of 470.17 feet. Comparing both cases, the maximum headwater elevation remains more than 3-feet below the highway shoulder elevation and the slight (0.01-foot) increase in headwater elevation is insignificant.

**Support of probably incompatible flood plain development** – Improbable

“Support of base flood-plain development” means to encourage, allow, serve, or otherwise facilitate additional base floodplain development. Direct support results from an encroachment in the regulated floodplain, while indirect support results from an action out of the base floodplain which would impact the base floodplain.

All projects within the FNSB jurisdictional boundary area are subject to the FNSB flood plain ordinance. It is therefore improbable that incompatible flood plain development would receive support from this project.

**Impacts on natural and beneficial flood plain values** – Minimal

“Minimize” means to reduce to the smallest practicable amount or degree, and “practicable” means capable of being done within reasonable natural, social, or economic constrains. DOT&PF routinely does the following for road projects:

- Maintains the existing flow distribution to the extent practicable;
- Minimizes the footprint of the project to the extent practicable;
- Incorporates ice and debris freeboard requirements for road and culvert layout;
- Considers geomorphic factors that could affect the bridge of its design life;
- Evaluates scour, velocities, erosion risk where applicable;
- Considers river ice processes that could contribute to flooding where applicable.

**Measures to restore and preserve the natural and beneficial flood plain values affected by the action** – See Below
“Restore” means to reestablish a setting or environment in which the functions of the natural and beneficial flood-plain values adversely impacted by the highway agency action can again operate. “Preserve” means to avoid modifications to the functions of the natural flood-plain environment or to maintain it as closely as practicable in its natural state.

Potential natural and beneficial values of floodplains in general may include fish, wildlife, plants, open space, natural beauty, scientific study, outdoor recreation, agriculture, aquaculture, forestry, natural moderation of floods, water quality maintenance, and ground water recharge. Most of these values are either absent or substantially diminished in the largely developed and disturbed floodplain units with potential for impact by the project. Natural vegetation has been disturbed over 90% of the adjacent floodplain area with approximately 40-50% bare ground. Most of this area is in commercial and industrial land use including gravel mining operations. In addition, the potentially impacted floodplain areas are isolated shallow depressions separated from surface water connection to the nearby Tanana River by a flood control dike.

In the project specific area natural and beneficial floodplain values that may remain to a minor degree include wildlife, plants, open space, natural moderation of floods, and water quality maintenance. The DOT&PF will minimize the footprint of the project to the extent possible thereby minimizing encroachment into the designated floodplain areas. Due to the minimal encroachment and an existing low degree of floodplain values in the project area, the overall values of the floodplain units impacted are expected to be preserved.

Construction impacted areas would be restored by measures such as re-vegetation, best management practices to minimize soil erosion and transport, and project specific permit conditions that may be required as a result of the permitting process. A Fairbanks North Star Borough Floodplain Permit is anticipated to be required prior to construction.

The proposed methods of complying with the regulations – Simple Hydraulic Analysis

DOT&PF has surveyed the topography within the project vicinity and affected floodplains. A complex hydraulic model is not economically feasible, nor is it justified to determine that the improvements will not worsen flood hazards due to minimal impacts of the impacts. A culvert performance analysis was done individually for the FNSB Flood Control Channel B. Headwater elevations calculated showed an insignificant increase and Channel B was determined to be located in a delineated mapped zone that is outside the 500-year floodplain and therefore inside an ineffective floodplain area.

Statement of certifications as required by local ordinance – To be issued with final design

When the design work nears final, DOT&PF will prepare and submit a “No-Rise” certification for the project to the FNSB Flood Plain Administrator.

Practicability of alternatives to any significant encroachments or any support of incompatible flood plain development – Not Applicable
The project will not involve significant encroachments, and as discussed above, should not support incompatible flood plain development. Alignment alternatives have been considered, but are limited by safety concerns, property impacts, and highway geometric constraints.

Consistency with existing watershed and flood-plain management programs, and proposed actions in the affected watersheds – YES

In conjunction with the Fairbanks North Star Borough’s (FNSB) Floodplain administration and as part of the National Flood Insurance Program, a No-Rise description of the proposed development was provided. It was determined that flood storage capacity for the proposed development in its final condition will not be affected and will adhere to the FNSB No-Rise policy.
REFERENCES

Appendix F

Noise Analysis Report
Traffic Noise Analysis Report

Richardson Highway MP 353-357 Access Improvements
IM-HRO-0A24(19)/66148

November 4, 2013

Prepared by
Alaska Department of Transportation and Public Facilities
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The format of this traffic noise analysis report, including headings, generally follows that provided on page 20 of the Alaska Department of Transportation & Public Facilities Alaska Environmental Procedures Manual Noise Policy, April 2011.

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Figure 1 – Project Location and Vicinity Map
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Appendix A – Feasibility and Reasonableness Worksheets
Executive Summary

The Alaska Department of Transportation and Public Facilities (DOT&PF), in cooperation with the Alaska Division of the Federal Highway Administration (FHWA), is proposing a project designed to improve access, upgrade and extend frontage roads, construct new auxiliary lanes, and develop two new intersections along the Richardson Highway between Mileposts 353 and 357. The project is located between Fairbanks and North Pole approximately 0.10 miles southeast of the Fairbanks city limits and 3 miles northwest of the North Pole city limits. The purpose of this project is to improve safety and capacity on the Richardson Highway while maintaining reasonable access to parcels adjacent to the project corridor.

In accordance with 23 CFR 772.5, CFR772.7(c), 23 CFR 772.11(a), and the DOT&PF Noise Policy (April 2011), a traffic noise analysis is required when a project meets one of eight definitions of a Type I project. This traffic analysis is being completed since the project proposes a new frontage road, realigned intersections, and new auxiliary lanes. The purpose of the traffic noise analysis is to identify expected traffic noise impacts in the project area, analyze and consider noise abatement where impacts are identified, and to recommend if noise abatement will be proposed.

In accordance with 23CFR 772.9(a) and the 2011 FHWA Highway Traffic Noise: Analysis and Abatement Guidance, any noise prediction analysis required under the regulation subpart must utilize the most recent version of the FHWA Traffic Noise Model (TNM Version 2.5) or other model found acceptable to FHWA. TNM 2.5 is a computer program that calculates traffic noise levels and models the effects of noise abatement barriers.

The TNM 2.5 computer program was run for all representative receivers in the project area to calculate traffic noise levels at receivers adjacent to the roadway and to determine if those calculated levels constitute a noise impact. Both construction year (2016) and design year (2036) build and no-build traffic noise levels were calculated. Based on the TNM 2.5 calculations, traffic noise impacts are predicted at no receivers in 2016 and at three receivers (numbers 4, 8, and 10) in 2036.

Noise abatement measures were considered in the vicinity of the three receivers where noise impacts were identified, in accordance with 23CFR 772.13(a). As a result DOT&PF has determined that no noise abatement measures are recommended for this project. Noise barriers, traffic management, and highway design measures were determined to not be acoustically feasible or reasonable. Adverse effects related to construction noise are anticipated to be localized, temporary, and transient in nature.
Traffic Noise Analysis

I. Project Background
The Alaska Department of Transportation and Public Facilities (DOT&PF), in cooperation with the Alaska Division of the Federal Highway Administration (FHWA), is proposing a project designed to improve access, upgrade and extend frontage roads, and develop two new intersections along the Richardson Highway between Mileposts 353 and 357.

The project is located between Fairbanks and North Pole approximately 0.10 miles southeast of the City of Fairbanks limits and 3 miles northwest of the City of North Pole limits. See Figure 1. The project is located in Sections 27, 28, 34, 35, T1S, R1E, USGS Fairbanks D-2 SE and Section 35, T1S, R1E, USGS Fairbanks D-1 SW.

The purpose of this project is to improve safety and capacity on the Richardson Highway while maintaining reasonable access to parcels adjacent to the project corridor. The project consists of upgrades to one mile of existing highway and 2.4 miles of existing frontage roads. Approximately 1.5 miles of new road would be constructed in the form of new intersections and frontage roads. See Figure 2. The project would involve the following improvements.

1. Close five existing at-grade highway intersections (Davison Street, Midland Street, MP 354.8 intersection, Rozak Road, and Old Richardson Highway) and replace them with two new at-grade intersections (Midland Street & Rozak Road).
2. Close the median at the Wescott Garden Lane to make a separate right-in/right-out intersection for eastbound and westbound traffic.
3. Extend and improve the northern and southern frontage roads in order to enhance their use for property access.
4. Extend the southern frontage road as a secondary route to the Badger Road Interchange.
5. Add or extend acceleration and deceleration lanes serving five intersections (Wescott Garden Lane, Luanne Road, Midland Street, Rozak Road, and Black Gold Express/Hamilton Construction Access).
6. Add auxiliary lanes to the Badger Road Interchange ramps on the north end of the project.
7. Add or extend highway illumination for the majority of the corridor, to include illumination of the new Midland Street and Rozak/Old Richardson Hwy intersections and along all auxiliary lanes.
8. Extend flood channel culverts beneath the new southern frontage road segment.
9. Relocate overhead and underground utilities (telephone, fiber optic lines, cable TV lines, electric power lines) as needed.

In accordance with 23 CFR 772.5, CFR772.7(c), 23 CFR 772.11(a), and the DOT&PF Noise Policy (April 2011), a traffic noise analysis is required when a project meets one of eight definitions of a Type I project, three of which include: construction of a highway on new location, the physical alteration of an existing highway that significantly changes the vertical or horizontal alignment, and the addition of an auxiliary lane, except when the auxiliary lane is a turn lane. This traffic analysis is being completed since the project proposes a new frontage road, realigned intersections, and new auxiliary lanes.
II. **Purpose of Study**  
The purpose of this traffic noise analysis is to identify expected traffic noise impacts in the project area, consider noise abatement where impacts are identified, and to recommend if noise abatement will be proposed.

III. **Methods**  
**Traffic Noise Model Version 2.5**  
In accordance with 23CFR 772.9(a) and the 2011 *FHWA Highway Traffic Noise: Analysis and Abatement Guidance*, any noise prediction analysis required under the regulation subpart must utilize the most recent version of the FHWA Traffic Noise Model, TNM Version 2.5 (TNM), or another model found acceptable to FHWA. TNM is a computer program that calculates traffic noise levels and models the effects of noise abatement barriers.

**TNM Validation Process**  
Prior to running TNM to calculate traffic noise levels in the project area, 23 CFR 772.11(d)(2) requires that TNM be validated by comparing field-measured sound readings with TNM-calculated traffic noise level predictions at select representative receivers. The purpose is to gain a level of certainty that TNM output results accurately model site-specific conditions. TNM results are considered valid, needing no adjustment factor, if they vary by no more than 3 decibels (dBA) from field readings.

*Validation Test #1*  
On September 16, 2013 DOT&PF collected on-site sound level readings utilizing a Larson Davis 820 integrating sound level meter. The readings were taken at representative receivers 2, 6, and 10. The receiver locations are shown on Figure 2. The readings were collected during midday, a timeframe with substantial traffic volumes. Skies were clear. Wind speed was 5-10 mph and variable in direction. A windscreen was utilized over the meter microphone to minimize the effects of wind. Meter temperature readings ranged from 50.8°F to 65.5°F. The field-collected sound level readings were 66.5, 63.2, and 67.2 dBA for receivers 2, 6, and 10, respectively. Traffic counts were collected during approximately 15-minute sound level reading intervals. Hourly traffic count estimates were calculated using the sample 15-minute traffic counts.

TNM was run inputting the 9/16/13 field site data collected. The TNM-calculated traffic noise levels were 64.0, 60.9, and 61.7 dBA at receivers 2, 6, and 10, respectively. At receivers 2 and 6 the TNM predicted sound levels were within a 3dBA tolerance difference from the 9/16/13 field readings. At receiver 10, TNM under predicted the field sound level by 5.5 dBA.

*Validation Test #2*  
DOT&PF collected a second round of field sound level readings at the same set of receivers on October 3, 2013 to verify the September 16, 2013 results. The readings were collected during midday, a timeframe with substantial traffic volumes. Skies were clear and winds were calm. A windscreen was utilized over the meter microphone to minimize the effects of wind. Meter
temperature readings ranged from 59.5°F to 63.4°F. The field-collected sound level readings were 67.5, 64.9, and 66.6 dBA for receivers 2, 6, and 10, respectively. Traffic counts were collected during approximately 15-minute sound level reading intervals. Hourly traffic count estimates were calculated using the sample 15-minute traffic counts.

TNM was run inputting the 10/3/13 field site data collected. The TNM-calculated traffic noise levels were 64.6, 62.8, and 62.3 dBA at receivers 2, 6, and 10, respectively. At receivers 2 and 6 TNM again predicted sound levels were within the 3 dBA tolerance difference from their 10/3/13 field readings. At receiver 10, TNM under predicted the field sound level by 4.3 dBA.

Adjustment Factor
Two sets of field readings collected on different days yielded similar results at each receiver. TNM inputs were reviewed for accuracy for all factors including location coordinates, traffic input, topography, and ground cover and no errors were identified. Since the field readings were consistent and the TNM data found accurate, the TNM validation results show that TNM is underestimating sound levels in the vicinity of receiver 10. As a result, it is appropriate to add an adjustment factor to TNM sound level results in the vicinity of receiver 10 to bring the TNM-calculated sound level to within a 3 dBA tolerance range from the field readings. A 1.9 dBA adjustment was added for this purpose. This is the average adjustment factor for the two validations runs.

IV. Results
Having validated TNM for the project setting, the model was run to predict traffic noise levels for both the construction year (2016) and the design year (2036). Traffic projections were input into the model for these years. Roadway coordinates were entered into TNM to model the roadway system for the Richardson Highway, its frontage roads, and its influencing side roads. Thirteen (13) representative receivers were selected for input into the model. These receivers represent worst-case conditions for potential noise impacts in terms of receiver sensitivity, receiver proximity to traffic, and receiver proximity to proposed roadway changes. The selected receivers are shown on Figure 2. Site specific ground terrain conditions were accounted for in the model. The resulting traffic noise levels are summarized in Table 2 (page 5).

V. Identification of Noise Impacts
Based on the TNM calculations, traffic noise impacts are predicted at no receivers in the construction year (2016, existing) and at three receivers (numbers 4, 8, and 10) in the design year (2036, predicted build and no-build).

The FHWA has established sound level criteria above which traffic noise impacts are defined to occur at a given receiver along a project. These sound level criteria are measured in A-weighted decibels (dBA), sound perceptible to the human year, and express the level of sound energy produced over a one hour period [Leq(h)]. Together the criteria are expressed as the hourly equivalent sound level in A-weighted decibels [dBA Leq(h)]. The decibel expression [dBA Leq(h)] is abbreviated as dBA throughout this report.
The FHWA sound level criteria are a function of land use. Land use categories are described in Table 1 below. Land use in the project area is approximately 50% commercial businesses, 20% rural residential, 30% undeveloped lands. The associated land use categories are B (residential), E (offices), F (retail facilities, industry, gravel mining), and G (undeveloped lands). For Category B lands, the hourly equivalent sound level used to define noise impacts is 67 dBA. For Category E lands it is 72 dBA. Category F and G lands have no sound level criteria for a noise impact. These sound levels are referred to as the FHWA the noise abatement criteria (NAC) as shown in Table 1 below.

<table>
<thead>
<tr>
<th>Activity Category</th>
<th>Hourly A-Weighted Sound Level dB, Leq(h)</th>
<th>Evaluation Location</th>
<th>Description of Activity Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>57</td>
<td>Exterior</td>
<td>Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.</td>
</tr>
<tr>
<td>B</td>
<td>67</td>
<td>Exterior</td>
<td>Residential.</td>
</tr>
<tr>
<td>C</td>
<td>67</td>
<td>Exterior</td>
<td>Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.</td>
</tr>
<tr>
<td>D</td>
<td>52</td>
<td>Interior</td>
<td>Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.</td>
</tr>
<tr>
<td>E</td>
<td>72</td>
<td>Exterior</td>
<td>Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A–D or F.</td>
</tr>
<tr>
<td>F</td>
<td>None</td>
<td>None</td>
<td>Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.</td>
</tr>
<tr>
<td>G</td>
<td>None</td>
<td>None</td>
<td>Undeveloped lands that are not permitted.</td>
</tr>
</tbody>
</table>

According to the Code of Federal Regulations 23CFR 772.5 a traffic noise impact occurs when the predicted design year build condition traffic noise levels approach or exceed the noise abatement criteria (NAC) established for a receiver’s land use category. The DOT&PF Noise Policy (April 2011) further defines a predicted noise level within 1 decibel of the NAC as sufficient to satisfy the condition of approaching the NAC. Therefore, sound levels that equal or exceed 66 dBA (Category B receivers) or 71 dBA (Category E receivers) are defined as a noise impact. Three Category B residential receivers (numbers 4, 8, and 10) have TNM-calculated traffic noise levels equal to or greater than 66 dBA. See the TNM-calculated traffic noise levels and receiver impact status in Table 2, page 5.
TABLE 2
TNM-CALCULATED TRAFFIC NOISE LEVELS AND
NOISE IMPACT STATUS AT REPRESENTATIVE RECEIVERS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>B</td>
<td>66</td>
<td>60.5</td>
<td>No Impact</td>
<td>62.3</td>
<td>No Impact</td>
<td>62.1</td>
<td>No Impact</td>
</tr>
<tr>
<td>2</td>
<td>E</td>
<td>71</td>
<td>65.4</td>
<td>No Impact</td>
<td>67.1</td>
<td>No Impact</td>
<td>66.3</td>
<td>No Impact</td>
</tr>
<tr>
<td>3</td>
<td>B</td>
<td>71</td>
<td>61.7</td>
<td>No Impact</td>
<td>63.4</td>
<td>No Impact</td>
<td>63.4</td>
<td>No Impact</td>
</tr>
<tr>
<td>4</td>
<td>B</td>
<td>66</td>
<td>65.0</td>
<td>No Impact</td>
<td>66.7</td>
<td>Impact</td>
<td>66.7</td>
<td>Impact</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>71</td>
<td>60.4</td>
<td>No Impact</td>
<td>62.1</td>
<td>No Impact</td>
<td>62.2</td>
<td>No Impact</td>
</tr>
<tr>
<td>6</td>
<td>B</td>
<td>66</td>
<td>62.9</td>
<td>No Impact</td>
<td>63.0</td>
<td>No Impact</td>
<td>64.6</td>
<td>No Impact</td>
</tr>
<tr>
<td>7</td>
<td>E</td>
<td>71</td>
<td>63.0</td>
<td>No Impact</td>
<td>64.3</td>
<td>No Impact</td>
<td>64.7</td>
<td>No Impact</td>
</tr>
<tr>
<td>8</td>
<td>B</td>
<td>66</td>
<td>65.7</td>
<td>No Impact</td>
<td>67.5</td>
<td>Impact</td>
<td>67.5</td>
<td>Impact</td>
</tr>
<tr>
<td>9</td>
<td>E</td>
<td>71</td>
<td>62.2</td>
<td>No Impact</td>
<td>63.4</td>
<td>No Impact</td>
<td>63.9</td>
<td>No Impact</td>
</tr>
<tr>
<td>10</td>
<td>B</td>
<td>66</td>
<td>65.9</td>
<td>No Impact</td>
<td>66.7</td>
<td>Impact</td>
<td>67.5</td>
<td>Impact</td>
</tr>
<tr>
<td>11</td>
<td>E</td>
<td>71</td>
<td>59.6</td>
<td>No Impact</td>
<td>61.2</td>
<td>No Impact</td>
<td>61.2</td>
<td>No Impact</td>
</tr>
<tr>
<td>12</td>
<td>E</td>
<td>71</td>
<td>65.5</td>
<td>No Impact</td>
<td>67.2</td>
<td>No Impact</td>
<td>67.2</td>
<td>No Impact</td>
</tr>
<tr>
<td>13</td>
<td>B</td>
<td>66</td>
<td>59.6</td>
<td>No Impact</td>
<td>61.3</td>
<td>No Impact</td>
<td>61.3</td>
<td>No Impact</td>
</tr>
</tbody>
</table>

* A-Weighted Sound Level dBA,Leq(h)

The Code of Federal Regulations 23CFR 772.5 also defines a traffic noise impact to occur when predicted design year build condition traffic noise levels substantially exceed existing construction year noise levels. The DOT&PF Noise Policy (April 2011) defines a 15 dBA increase (existing to predicted) as substantial. No TNM-predicted noise increases for this project equal or exceed 15 dBA. The difference between TNM existing and predicted traffic noise levels for this project do not exceed 1.8 dBA, therefore no noise impacts are identified based on this criterion.

VI. Noise Abatement Analysis

In accordance with 23CFR 772.13(a), noise abatement measures must be considered in the vicinity of the receivers where noise impacts occur. At a minimum a highway agency must consider noise abatement in the form of a noise barrier [23CFR 772.13 (c)(1)]. Two required criteria must be considered when evaluating the incorporation of noise abatement measures into a specific project: acoustic feasibility and reasonableness.

Noise Barrier Consideration

Construction of noise barriers was evaluated and considered at the three neighborhoods where impacted receivers were identified. These are Neighborhoods 4, 8, and 10 as shown on Figure 2. The modeled noise barriers at each neighborhood were placed between the frontage road and the Richardson Highway. The barriers were centered on the neighborhood and extended to a length and position that intercepts 95% of traffic noise. Beyond the 95% length there is minimal benefit.
for the cost. Exceptions to the full 95% length were made where intersections gaps were necessary at Westcott Garden Lane and the new Midland and Rozak intersections. Noise barrier locations analyzed are shown on Figure 2.

A minimal height barrier was established such that DOT&PF’s 7dBA noise reduction design goal would be met or nearly met. Table 3 below shows the resulting barrier dimensions for each neighborhood. Table 4 shows the TNM-calculated noise reduction at each neighborhood receiver.

### TABLE 3
TNM MODELL ED NOISE BARRIER SUMMARY

<table>
<thead>
<tr>
<th>Barrier #</th>
<th>Receiver Neighborhood</th>
<th>Length (feet)</th>
<th>Height (feet)</th>
<th>Receivers in Neighborhood</th>
<th>Benefiting Receivers *</th>
<th>Cost</th>
<th>Cost per benefiting receiver</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>#4</td>
<td>6677</td>
<td>11</td>
<td>11</td>
<td>1</td>
<td>$5 million</td>
<td>$5 million</td>
</tr>
<tr>
<td>2</td>
<td>#8</td>
<td>1105</td>
<td>11</td>
<td>1</td>
<td>1</td>
<td>$840,000</td>
<td>$840,000</td>
</tr>
<tr>
<td>3</td>
<td>#10</td>
<td>5832</td>
<td>11</td>
<td>10</td>
<td>2</td>
<td>$4.4 million</td>
<td>$2.2 million</td>
</tr>
</tbody>
</table>

* A benefitted receiver is defined as one that receives a noise reduction at or above the minimum threshold of 5 decibels (dBA) as a result of a noise abatement measure.

### TABLE 4
TNM CALCULATED TRAFFIC NOISE REDUCTIONS FROM MODELL ED BARRIERS UNDER CONSIDERATION*

<table>
<thead>
<tr>
<th>Receiver #</th>
<th>TNM Calculated Noise Reduction</th>
<th>Receiver #</th>
<th>TNM Calculated Noise Reduction</th>
<th>Receiver #</th>
<th>TNM Calculated Noise Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>-6.6</td>
<td>8</td>
<td>-6.7</td>
<td>10</td>
<td>-7.0</td>
</tr>
<tr>
<td>4A to 4I</td>
<td>-1.5 to -2.3</td>
<td>8A</td>
<td>-4.6</td>
<td>10A</td>
<td>-5.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10B</td>
<td>-4.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10C-10H</td>
<td>-0.9 to -1.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Shaded numbers are noise reductions of 5 dBA or greater at impacted receivers. These are single impacted receivers therefore not meeting the noise reduction feasibility criterion. The remaining receivers are non-impacted receivers therefore not meeting the noise reduction feasibility criterion.

### A. Acoustic Feasibility

Concerning the acoustic feasibility criterion, the noise barrier evaluation concluded the following.

1. **Safety** – A noise barrier is considered feasible concerning this factor if the barrier is found not to create a safety hazard to the driving public, protected receivers, or to maintenance personnel. DOT&PF design staff reviewed the modeled barriers and determined that the barriers could be constructed without posing safety hazards. Barrier designs can be accomplished between the frontage road and highway that provide for adequate vehicle recovery zones, recommended safety and site distances, and safe maintenance operations.
2. **Noise Reduction** - A noise barrier is considered feasible concerning this factor if the barrier achieves a minimum 5 dBA traffic noise reduction at least 50% of first row impacted dwellings. For a barrier to be effective and to meet this feasibility factor it would need to be placed between the Richardson Highway, the primary traffic noise source, and a row of impacted dwellings fronting the Richardson Highway, typically within 200 feet of the highway. However each neighborhood does not have a layout that allows for this. Each neighborhood has only a single adjacent impacted residence within 200 feet of the highway. See Table 2. Neighborhood 8 is an isolated residence. Neighborhoods 4 and 10 have residences that increasingly extend away from the highway along intersecting side roads (Davidson Street and Rozak Road, respectively). See Figure 2. As a result, a 5dBA reduction can be achieved only at a single impacted residence closest to the highway, not at a row of impacted residences. Noise abatement measures that do not achieve the 5 dBA noise reduction feasibility factor are not considered prudent expenditures of public funds. As a result, barrier construction for the current project is not considered feasible in terms of the minimum noise reduction factor.

B. **Reasonableness**

Concerning the reasonableness criterion, the noise barrier evaluation concluded the following.

1. **Cost Effectiveness** – A noise barrier is considered reasonable concerning this factor if it costs is no more than $32,000 per benefitted receiver (PBR). Table 5 shows the dimensions and cost of an 11-foot high barrier modeled at each neighborhood with an impacted residence. Since the barrier dimensions needed to benefit receivers is large compared to the number of benefited receivers, each barrier substantially exceeds the $32,000 PBR threshold for cost effectiveness. The barrier cost estimates in Table 5 were conservatively estimated based on the cost per square foot for a noise barrier constructed for a nearby DOT&PF project in 2008. If the cost PBR utilized were adjusted for inflation to the construction year (2016) it would yield an even greater barrier cost not meeting the $32,000 threshold. Therefore, barrier construction for the current project is not considered reasonable in terms of cost effectiveness.

2. **Noise Reduction Design Goal** - A noise barrier is considered reasonable concerning this factor if the barrier can achieve the DOT&PF noise reduction design goal of 7 dBA or greater at 50% or more of benefited first row impacted receivers. The same rationale discussed in the previous acoustic feasibility section applies to this reasonableness factor. Each of the three neighborhoods (Figure 2) analyzed for a noise abatement barrier do not have a layout that allows this criterion to be met. To meet this factor each neighborhood would need a row of impacted dwellings fronting the Richardson Highway, typically within 200 feet. Each neighborhood has only a single impacted residence within 200 feet of the highway. As a result, a 7dBA reduction can be achieved only at a single impacted residence closest to the highway, not at a row of impacted residences. Therefore, barrier construction would not meet this factor and is not considered reasonable in terms of the noise reduction design goal.
3. Views of Benefitted Property Owners and Residents – The reasonableness factors listed in CFR 772.13(d)(2)(i),(ii), and (iii) are cost effectiveness, noise reduction design goal, and views of property owners and residents. CFR 772.13(d)(2)(iv) notes that these three reasonableness factors must collectively be achieved in order for a noise abatement measure to be deemed reasonable. Failure to achieve any one factor will result in the noise abatement measure under consideration being deemed not reasonable. Since neither of the cost effectiveness nor the design goal factors were met, DOT&PF did not make formal contacts to obtain property owner and resident views and desires on noise barriers. Such contacts would not alter the conclusion on reasonableness.

Other Noise Abatement Measures Considered
Traffic management measures such as speed reducing measures and vehicle use restrictions have been considered, as well as highway design measures, but none are considered feasible or reasonable options as described below.

1. Speed reducing measures were evaluated but would neither be feasible nor reasonable. Reducing speed would not achieve the necessary traffic noise reduction without resulting in operational and safety issues. TNM modeling results show that a speed limit reduction of 15 to 20 miles per hour would be needed in order to achieve a minimally perceptible traffic noise reduction (3 dBA) at neighboring lands uses and a 25-30 mile per hour speed limit reduction would be needed to achieve a minimum 5 dBA reduction. An even greater speed reduction would be needed to meet the DOT&PF noise reduction design goal of 7dBa. Reducing speed to such an extent is expected to result in unsafe traffic congestion and inefficient traffic flow. Such a speed limit reduction would be incompatible with the current purpose of the highway to provide for safe and efficient movement of goods, services, and commuter traffic on the primary route in the area serving this purpose.

2. Use restrictions on louder vehicles such as trucks was evaluated and found not to be feasible or reasonable. Restricting truck traffic on the Richardson Highway would require it to be diverted to another route; however, other suitable routes are not available. Badger Road would be the next most capable alternative route to handle truck traffic; however this route is substantially less desirable in terms of its ability to accommodate a high volume of heavy truck traffic. The Richardson Highway is classified as interstate highway and is therefore the preferred route for interstate commerce. By contrast, Badger Road is an urban minor arterial and characterized by numerous adjoining collector roads and adjacent residential subdivisions. The Richardson Highway has full access control except at the designated intersection breaks in this project, whereas access control on Badger Road is by a driveway permit application process. The level of service for truck traffic would diminish substantially if truck drivers were diverted to Badger Road, a route that introduces a multitude of access points not otherwise found on the interstate system. Safety and service would also be substantially diminished for all users on the Badger Road corridor if additional truck traffic was introduced into an area with multiple access points (at-grade driveways and intersections).

In addition, diverting truck traffic to Badger Road would not result in the minimum noise reduction of 5 dBA or the DOT&PF noise reduction design goal of 7 dBA at Richardson
Highway receivers. TNM modeling results show that diverting all truck traffic to Badger Road would result in a 5 dBA noise reduction at only one Richardson Highway receiver and a 7 dBA reduction would be achieved at no receivers. Any noise reduction at Richardson Highway receivers would only be offset by higher traffic noise at a larger number of more sensitive residential receivers along Badger Road.

3. Alterations of alignment to reduce noise impacts are not compatible with the project’s largely developed surroundings. Sufficient undeveloped space is not available for meaningful alignment changes without resulting in other substantial environmental impacts. Alignment changes would need to double the distance of the highway from impacted receivers in order to achieve a minimally perceptible (3dBA) reduction in traffic noise. However, shifting the highway away from impacted receivers on one side of the highway to protect them would only relocate noise impacts to receivers on the opposite side and/or require removal of receivers. Alignment changes that eliminate noise impacts from one side of the highway would result in substantial environmental impacts on the other side and would be beyond the project scope and available funding.

VII. Abatement Recommendations
Based on the noise abatement analysis prepared above noise abatement measures are not recommended for this project. Noise barriers are determined to not be acoustically feasible in terms of noise reduction and are determined not to be reasonable in terms of both cost effectiveness and the DOT&PF noise reduction design goal. In addition, traffic management measures and highway design measures are determined not to be feasible or reasonable noise abatement measures.

VIII. Statement of Likelihood
As a result of the feasibility and reasonableness analysis conducted as part of the environmental document, the DOT&PF proposes to incorporate no noise abatement measures into the proposed project. This noise abatement recommendation is preliminary and based upon the feasibility and reasonableness analysis completed at the time the environmental document. Final recommendations for noise abatement will be based upon the feasibility and reasonable analysis conducted during the detailed design of the project. Any changes in the final abatement recommendations will result in the reevaluation of the approved NEPA document and the solicitation of additional public comment.

IX. Construction Noise
The noise generated by construction equipment will vary greatly depending upon the equipment type and model, mode and duration of operation, and specific type of work effort; however, typical noise levels may occur in the 75 dBA to 95 dBA range at 50 feet. Other distance-typical noise level ranges are shown in Table 5 (page 10). Typical Construction Equipment Noise Generation Levels are shown in Table 6 (Page 10). Variations in building setbacks and land use activity zones, local intensity of specific construction activities, and special and temporal distribution of activities will result in varying degrees of exposure to construction noise and hence varying levels of resulting impacts. Adverse effects related to construction noise are anticipated to be localized, temporary, and transient in nature.
TABLE 5
CONSTRUCTION NOISE/DISTANCE RELATIONSHIPS

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<th>Distance from Construction Site (feet)</th>
<th>Range of Typical Noise Levels (dBA)*</th>
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<td>75-95</td>
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<td>500</td>
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<tr>
<td>1000</td>
<td>49-69</td>
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* Point Sources = 6 dBA reduction per doubling distance.
Source: EPA and Wisconsin Department of Transportation Facilities Development Manual

TABLE 6
TYPICAL CONSTRUCTION EQUIPMENT NOISE GENERATION

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<tr>
<th>CONSTRUCTION EQUIPMENT</th>
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<tr>
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<tr>
<td>Earth Moving</td>
<td>Compactors (Rollers)</td>
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<td></td>
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<td>Backhoes</td>
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<tr>
<td></td>
<td>Tractors</td>
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<td></td>
<td>Scrapers, Graders</td>
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<td>Concrete Pumps</td>
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<td>Cranes (Moveable)</td>
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<td>Cranes (Derrick)</td>
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<td>Stationary</td>
<td>Pumps</td>
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<td></td>
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<td>Impact Equipment</td>
<td>Pneumatic Wrenches</td>
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<td></td>
<td>Jack Hammers/Rock Drills</td>
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<td>Other</td>
<td>Vibrator</td>
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<td></td>
<td>Saws</td>
</tr>
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Source: EPA PB 206717, Environmental Protection Agency, 12/31/1971, "Noise from Construction Equipment & Operations"
X. Conclusion
Based on the TNM calculations, traffic noise impacts are predicted at three receivers (numbers 4, 8, and 10) in the 2036 design year. Noise abatement measures were considered in the vicinity of these three receivers, in accordance with 23CFR 772.13(a). As a result DOT&PF determined that no noise abatement measures are recommended for this project. Noise barriers, traffic management, and highway design measures were determined to not be acoustically feasible or reasonable. Adverse effects related to construction noise are anticipated to be localized, temporary, and transient in nature.

XI. Contact Information
This noise analysis was completed by Bob Effinger of the Alaska Department of Transportation and Public Facilities. If you have any questions concerning the analysis please contact Bob Effinger, Environmental Analyst, Alaska Department of Transportation & PF, Northern Region – Fairbanks, bob.effinger@alaska.gov, (907) 451-5294

XII. References


Location and Vicinity Map
USGS Topography Map Fairbanks D1 & D2

STATE OF ALASKA
Department of Transportation and Public Facilities

Richardson Highway 353-357
Access Improvements
IM-HRO-0A24(19)/66148

Fairbanks, Alaska

DATE: 11/4/13
Figure 1
Proposed New road segments

Proposed New Auxiliary Lanes

Proposed New/Extended Acceleration/Deceleration Lanes

Proposed Right-of-Way Acquisition

Representative Receivers

Noise Barrier Locations Analyzed

Proposed New/Extended Acceleration/Deceleration Lanes

Richardson Highway MP 353-357
Access Improvements
IM-HRO-0A24(19)/66148
North Pole, Alaska

DATE: 11/4/13

Figure 2
Appendix A
Noise Abatement
Feasibility and Reasonableness Worksheets
APPENDIX A

Feasibility and Reasonableness Worksheet
HIGHWAY TRAFFIC NOISE ABATEMENT FOR PROJECT
IMPACTED RECEIVERS

Richardson Highway MP 353-357 Access Improvements
IM-HRO-0A24(19)/66148

Receiver Location Information* Coordinates (NAD 83)

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<td>64°47’9.12”N</td>
<td>-147°30’35.28”W</td>
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* Receiver locations are shown on Figure 2 of the Noise Analysis Report

Noise Analysis Receiver Summary

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<td>67.5</td>
<td>Impact</td>
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* A-Weighted Sound Level dBA,Leq(h)

Impacts
Has a noise impact been identified?  YES, at each receiver listed.
(If yes continue filling out worksheet.  If no, no noise abatement is required. Sign worksheet and recommend no abatement)

Highway Traffic Noise Abatement Feasibility and Reasonableness Analysis
For in depth analysis discussion on noise abatement analysis please refer to the Noise Analysis Report, Section VI.

Feasibility
Do the noise abatement measures analyzed meet the acoustic feasibility criterion?  No
(To be considered feasible both factors below must be answered “yes.”)

1. Safe Hazard Avoidance – Does the analyzed noise abatement barrier avoid creating a safety hazard to the driving public, protected receivers, or maintenance personnel?  Yes
2. Minimum Noise Reduction - Do the noise abatement measures considered provide a minimum 5 dBA reduction to 50% or more of impacted first row dwelling units?  No
Feasibility and Reasonableness Worksheet
HIGHWAY TRAFFIC NOISE ABATEMENT FOR PROJECT
Richardson Highway MP 353-357 Access Improvements
IM-HRO-0A24(19)/66148

Reasonableness
Does the proposed noise abatement measure meet the reasonableness criterion? No
(To be considered reasonable all three factors below must be answered “yes.”)

Federal Mandatory Factors
1. Cost Effectiveness - Is the analyzed noise abatement barrier cost effective? No
2. Noise Reduction Design Goal - Do the noise measures considered provide a minimum 7dBA reduction to 50% or more of the benefited impacted first row structures? No
3. Views of Benefited Residents and Property Owners - Do at least 60% of benefited households and property owners want the analyzed noise abatement barrier?

The reasonableness factors listed in CFR 772.13(d)(2)(i),(ii), and (iii) are cost effectiveness, noise reduction design goal, and views of property owners and residents. CFR 772.13(d)(2)(iv) notes that these three reasonableness factors must collectively be achieved in order for a analyzed noise abatement barrier to be deemed reasonable. Failure to achieve any one will result in the noise abatement measure under consideration being deemed not reasonable. Since neither the cost effectiveness nor the design goal noise reduction factors were met, DOT&PF did not make formal contacts to obtain property owner and resident views and desires on noise barriers. Such contacts would not alter the conclusion on reasonableness.

Recommendation
Impacted Receivers are 4, 8, and 10.

Is Noise Abatement recommended for these receiver(s)? No

Brett Overson
Regional Environmental Manager
11-6-13

DOT Project Manager
11/5/2013

Page 2 of 2
### Feasibility and Reasonableness Worksheet

**HIGHWAY TRAFFIC NOISE ABATEMENT FOR PROJECT**

**NON-IMPACTED RECEIVERS**

Richardson Highway MP 353-357 Access Improvements
IM-HRO-0A24(19)/66148

---

#### Receiver Location Information* Coordinates (NAD 83)

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*Receiver locations are shown on Figure 2 of the Noise Analysis Report*

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#### Noise Analysis Receiver Summary

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* A-Weighted Sound Level dBA,Leq(h)

**Impacts**

Has a noise impact been identified? **No**

(If yes continue filling out worksheet. If no, no noise abatement analysis is required. Sign worksheet and recommend no abatement)
Feasibility and Reasonableness Worksheet
HIGHWAY TRAFFIC NOISE ABATEMENT FOR PROJECT
NON-IMPACTED RECEIVERS
Richardson Highway MP 353-357 Access Improvements
IM-HRO-0A24(19)/66148

Recommendation
Non-Impacted Receivers are 1, 2, 3, 5, 6, 7, 9, 11, 12, and 13.

Is Noise Abatement recommended for these receiver(s)? **No**

[Signature]
Regional Environmental Manager

[Signature]
DOT Project Manager

11-5-13
Date

11-6-13
Date
Appendix G

Public Involvement
OPEN HOUSE
Richardson Highway MP 353-357 Access Improvements
Project No.: HRO-0A2-4(19)/66148

The Alaska Department of Transportation & Public Facilities, in cooperation with the Federal Highway Administration invites you to attend an open house to discuss proposed safety and access improvements in the Richardson Highway corridor between the 6-Mile Badger Road interchange and Eielson Avenue near North Pole. The project proposes to consolidate and improve existing at-grade intersections and expand the existing frontage road system to better serve mobility and access needs in the area.

Saturday, November 29, 2012
5:00 p.m. – 7:00 p.m.
McPeak’s Badger Store (former Subway portion)
Home Badger Road, North Pole
brief presentation will begin at 5:30 p.m.

More information and preliminary drawings are available at: dot.alaska.gov/hrp/richaccess

Notwithstanding executive orders apply to this notice: Executive Order 1195, of Wetland Involvement; Executive Order 12898, Environmental Justice; Executive Order 11593, Protection and Enhancement of the Cultural Resources; Executive Order 13112, Invasive Species.

Please provide contact information or if you would like to submit comments or attend a meeting, please contact:
Sarah Schacher, P.E., Engineering Manager
2301 Peger Road, Fairbanks, AK 99709-5316
Telephone: (907) 451-5361; Fax: (907) 451-5126
Text Telephone (TDD): (907) 451-2363
Email: sarah.schacher@alaska.gov

Submit your comments by December 14, 2012. If you require special accommodations to participate in the meeting, please call ahead so arrangements may be made to assist you.

OF PUBLICATION

Before me, the undersigned, a notary public, this day personally appeared Marlena Burnett, who, being first duly sworn, according to law, says that he/she is an Advertising Clerk of the Fairbanks Daily News-Miner, a newspaper (i) published in newspaper format, (ii) distributed daily more than 50 weeks per year, (iii) with a total circulation of more than 500 and more than 10% of the population of the Fourth Judicial District, (iv) holding a second class mailing permit from the United States Postal Service, (v) not published primarily to distribute advertising, and (vi) not intended for a particular professional or occupational group. The advertisement which is attached is a true copy of the advertisement published in said paper on the following day(s):


and that the rate charged thereon is not excess of the rate charged private individuals, with the usual discounts.

Subscribed and sworn to before me on this 20 day
November, 2012

Notary Public in and for the State Alaska.

My commission expires September 1, 2016
Open House Richardson Highway MP 353-357 Access Improvements Project No.: HRO-0A2-4(19)/66148

Category: Public Notices
Publish Date: 11/19/2012
Archive Date: 12/15/2012
Event/Deadline Date: 11/29/2012 05:00 PM

Department: Transportation & Public Facilities
Location: Fairbanks, Northern Region
Coastal District: N/A

Body of Notice:

The Alaska Department of Transportation & Public Facilities, in cooperation with the Federal Highway Administration invites you to attend an open house to discuss proposed safety and access improvements in the Richardson Highway corridor between the 6-Mile Badger Road interchange and Levee Way near North Pole. The project proposes to consolidate and improve several at-grade intersections and expand the existing frontage road system to better serve mobility and access needs in the area.

Tuesday, November 29, 2012
5:00pm – 7:00pm
McPeak’s Badger Store (former Subway restaurant portion)
½ Mile Badger Road, North Pole
A brief presentation will begin at 5:30pm.

More information and preliminary drawings are available at: dot.alaska.gov/nreg/richaccess

The following executive orders apply to this notice: Executive Order 11990, Notice of Wetland Involvement; Executive Order 12898, Environmental Justice; Executive Order 11593, Protection and Enhancement of the Cultural Environment; Executive Order 13112, Invasive Species.

For additional information or if you would like to submit comments outside the public meeting, please contact:

Sarah Schacher, P.E., Engineering Manager
2301 Peger Road
Fairbanks, AK 99709-5316
Telephone: (907) 451-5361; Fax: (907) 451-5126
Text Telephone (TDD): (907) 451-2363
Email: sarah.schacher@alaska.gov

Please submit your comments by December 14, 2012. If you require special accommodations to participate in the meeting, please call ahead so arrangements can be made to assist you.

http://notes5.state.ak.us/pn/pubnotic.nsf/pn/0/b8940724dea781089257abb00680903?Op... 11/19/2012
ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PUBLIC MEETING
SIGN IN SHEET

Richardson Highway MP 353-357 Access Improvements -DOT&PF Project No: IM-HRO-0A24(19)/66148
DATE: 11/29/2012

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<td>PO Box 21509</td>
<td>452-7631</td>
<td>M</td>
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<td>Dale Oines</td>
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<td>Heather Estabrook</td>
<td>PEO, Inc.</td>
<td>907-743-3200</td>
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<tr>
<td>Steven/Cindy Colburn</td>
<td>Box 58162</td>
<td>488-3420</td>
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<td>Robert Franklin</td>
<td>P.O. Box 83593, 9963</td>
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RACE CATEGORIES: WHITE (W), ALASKA NATIVE (AN), NATIVE AMERICAN (N), BLACK (B), HISPANIC (H), ASIAN (A), PACIFIC ISLANDER (P), and OTHER (O)
effective: December 2004
*This information is voluntary. Its purpose is to ensure fair and equal representation by the public in all projects and programs administered by the Alaska Department of Transportation and Public Facilities.

Richardson Highway MP 353-357 Access Improvements -DOT&PF Project No: IM-HRO-0A24(19)/66148  
DATE: 11/29/2012

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<tr>
<td>Bill Allen</td>
<td>10.6 x 5 x 498, N.E.</td>
<td>488-7372</td>
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<tr>
<td>Jeff Elliott</td>
<td>1413 476th St. C. De</td>
<td>486-3444</td>
<td>M</td>
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<tr>
<td>Mike Lebert</td>
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<tr>
<td>Kim Lebert</td>
<td>1015 2nd Ave. C. De.</td>
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<tr>
<td>Pamela Sharp</td>
<td>1901 Airport Wy.</td>
<td>456-6008</td>
<td>F</td>
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<tr>
<td>Bruce Wright</td>
<td>P.O. Box 5811/9972</td>
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<tr>
<td>Martin A. Stahlman</td>
<td>1815 Rodeo Rd. N. P.</td>
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<tr>
<td>Barry Hooper</td>
<td>DOT &amp; P.</td>
<td>451-2218</td>
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<tr>
<td>Brandon Befczynski</td>
<td>P.O. Box 188, Ester, AK 99725</td>
<td>347-9559</td>
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Richardson Highway MP 353-357 Access Improvements -DOT&PF Project No: IM-HRO-0A24(19)/66148
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<tr>
<td>Paul McCarthy</td>
<td>1570 Richardson Hwy</td>
<td>488-8833</td>
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<td>Debra A. Bullock</td>
<td>1191 Lakeview Dr</td>
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<td>Rep. Steve Thompson</td>
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<td>M</td>
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<tr>
<td>Bill Hoople</td>
<td>P.O. Box 80686, Fairbanks</td>
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<td>W</td>
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<tr>
<td>Richard Scholl</td>
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<td>456-9911</td>
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<tr>
<td>Dan Schacher</td>
<td>2301 Pogo</td>
<td>451-2276</td>
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<tbody>
<tr>
<td>Hunter Kyle Julkins</td>
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<td>Rynnieva Moss</td>
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<tr>
<td>Kevin &amp; Mike Coultharp</td>
<td>P.O. Box 58551 Fairbanks, AK 99711</td>
<td>907-460-2406</td>
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<tr>
<td>Cindy Stageman</td>
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<tr>
<td>Rosanna Graham</td>
<td>1445 Old Rich - 99705 2120 Badger Rd MP AK 988-4106</td>
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<tr>
<td>Maureen Misowicz</td>
<td>P.O. Box 32154 Fish AK 99711</td>
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<tr>
<td>Cindy Plum</td>
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<tr>
<td>Betty Rollins</td>
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<tr>
<td>Charles Rolling</td>
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effective: December 2004
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<td>Keller Spillman</td>
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Comments in support of project

- **Commercial vehicle access** - Trucking companies within the project area have acknowledged the need for improved access. They confirmed that during busy periods, drivers typically experience substantial delays while waiting for gaps in traffic.

- **Business access** - Several local business owners expressed support for improved access to their facilities with more fully developed frontage roads. Business owners agreed safe access is good for business.

- **Safety** - A daily commuter indicated that this corridor is dangerous because of high speeds, and that reducing the number of intersections will greatly improve safety.

- **Lighting** - Several positive comments were provided in support of adding highway lighting. This portion of the highway is very dark in the winter months. Area businesses also support highway lighting as an added measure of security surrounding their property to deter theft and vandalism.

Comments regarding project impacts

- **Project need** – Questions were raised regarding the need for improved intersections and frontage roads or the need for project as a whole.

  *Response: Improvements are needed in the area to maintain safe, efficient access as the number of motorists on the Richardson Highway continues to grow. We looked into a number of options including an overpass, various at-grade intersection styles and locations, and removing all of the existing intersections and re-routing traffic to the Badger overpass.*

  *We determined the current alternative is the most efficient means to provide the needed safety and capacity improvement while balancing impacts to the travelling public and surrounding residents.*

- **Property impacts** - Several property owners expressed concerns over right of way acquisition. Specific concerns included questions about loss of property, loss of privacy due to frontage road extension, various acquisition options, compensation, driveway impacts and the right of way process in general.

  *Response: We are working hard to develop a solution that meets the project needs and minimizes impacts to individual property owners; however, right-of-way acquisition cannot be completely avoided. We will continue to update property owners of potential impacts as the design concept is advanced. Several issues raised are ROW negotiation issues, and we acknowledge concerns about exposure to new frontage road. Concerns related to introducing*
thief and vandals due to a new road may be negated by highway lighting, and the fact being more exposed also helps in the sense that potential thieves and vandals would not have as much seclusion from roadway as they currently do. Overall, the Department feels the setting for adjacent businesses will be unchanged with our project in consideration of the fact they are adjacent to a four-lane high-volume, high speed roadway.

- **Emergency vehicle access** – Concerns were raised about possible increased vehicle response time due to changes in access and intersection closures.

  *Response:* We followed up with the local fire chief (North Star) regarding these concerns and presented our design concept for review. The fire chief believes the proposed improvements will likely require a few modifications to their route, but overall the improved frontage roads and intersections will offset any travel time lost due to potential intersection closures. They stressed that the shortest route is not necessarily the quickest route and that as first responders, they support our efforts for intersection safety improvements.

- **Noise** – Multiple users expressed concern regarding additional road noise to abutting properties, and requested noise walls.

  *Response:* We will evaluate whether a noise study is required as a part of our environmental document re-evaluation process. If required, a noise study will help us evaluate noise impacts to adjacent property owners. If the results indicate the project will have significant noise impacts, we will explore noise abatement options such as noise walls.

- **Unsafe driving** – Commenters expressed concerns regarding reckless driving practiced by some truckers while entering and exiting their facilities. Commenters asked DOT to do something about it.

  *Response:* This is a law enforcement issue that our design team does not have influence over. However, we believe that providing properly designed facilities will reduce motorist’s likelihood to take greater risks when crossing the highway.

- **Gas line** – Commenters expressed concern with the impacts the project may have on proposed gas line projects or vice versa.

  *Response:* We followed up with the Alaska DNR Division of Oil and Gas, and they said the pipeline routes are not complete at this point. It is unknown which project(s) will ultimately be chosen, when they will be constructed, and/or what alignment will be chosen. We expect this project will be a benefit to the current plan to truck natural gas.