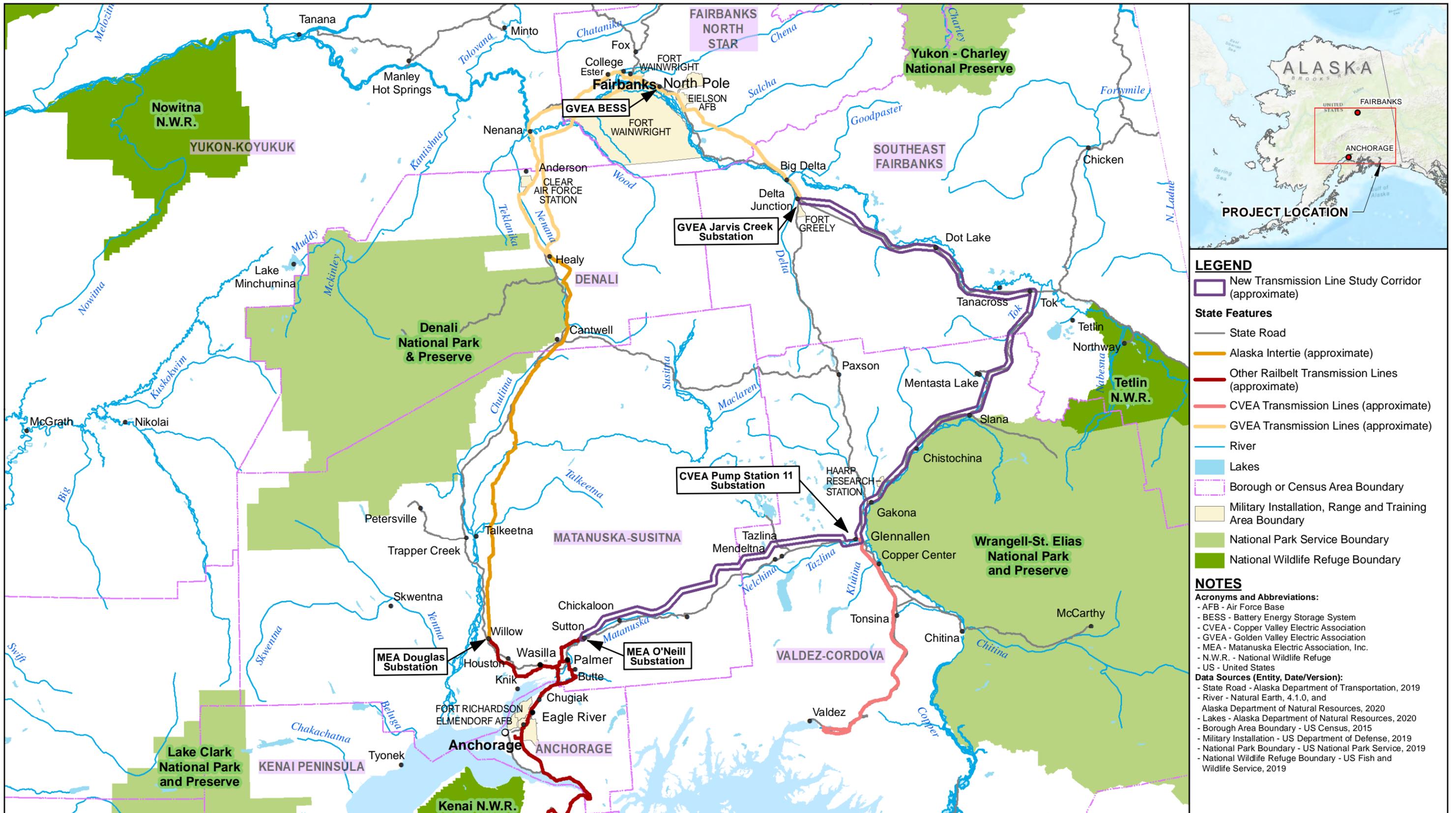


FIGURES

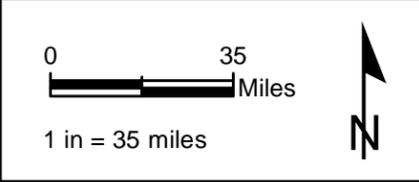
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- LEGEND**
- New Transmission Line Study Corridor (approximate)
 - State Features**
 - State Road
 - Alaska Intertie (approximate)
 - Other Railbelt Transmission Lines (approximate)
 - CVEA Transmission Lines (approximate)
 - GVEA Transmission Lines (approximate)
 - River
 - Lakes
 - Borough or Census Area Boundary
 - Military Installation, Range and Training Area Boundary
 - National Park Service Boundary
 - National Wildlife Refuge Boundary

- NOTES**
- Acronyms and Abbreviations:**
- AFB - Air Force Base
 - BESS - Battery Energy Storage System
 - CVEA - Copper Valley Electric Association
 - GVEA - Golden Valley Electric Association
 - MEA - Matanuska Electric Association, Inc.
 - N.W.R. - National Wildlife Refuge
 - US - United States
- Data Sources (Entity, Date/Version):**
- State Road - Alaska Department of Transportation, 2019
 - River - Natural Earth, 4.1.0, and Alaska Department of Natural Resources, 2020
 - Lakes - Alaska Department of Natural Resources, 2020
 - Borough Area Boundary - US Census, 2015
 - Military Installation - US Department of Defense, 2019
 - National Park Boundary - US National Park Service, 2019
 - National Wildlife Refuge Boundary - US Fish and Wildlife Service, 2019

MAP PROJECTION
 Coordinate System: NAD 1983 Alaska Albers
 Projection: Albers
 Datum: North American 1983
 Units: Meter



Project Configuration

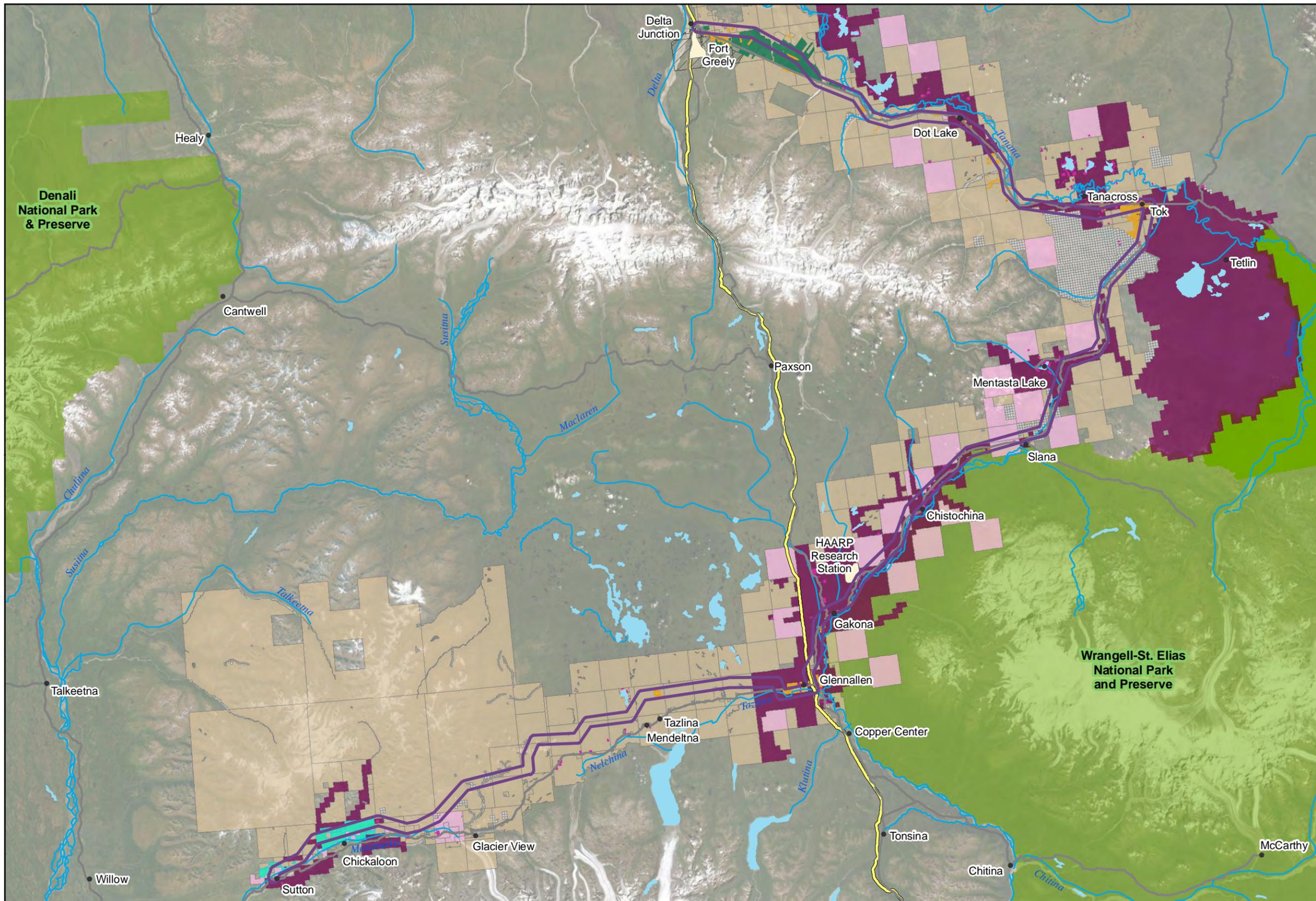
**ROADBELT INTERTIE
 RECONNAISSANCE ENGINEERING REPORT**

Drawn by: AEI
 Date: 10/20/2020

FIGURE 1

FILE: C:\Users\kholmes\Desktop\DC_Roadbelt\AutoCAD-GIS\NativeFiles\MXD\Figure1.mxd

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LEGEND

- New Transmission Line Study Corridor (approximate)
- Land Ownership Type**
 - Agriculture (digitized)
 - Mental Health Trust (ADNR)
 - Military (digitized)
 - Native Allotment
 - Private (digitized)
 - Region (BLM)
 - State Mining Claim (ADNR)
 - State of Alaska
 - Village (BLM)
- State Features**
 - State Road
 - TAPS
 - River
 - Lake
 - Military Installation, Range and Training Area Boundary
 - National Park Service Boundary
 - National Wildlife Refuge Boundary

NOTES

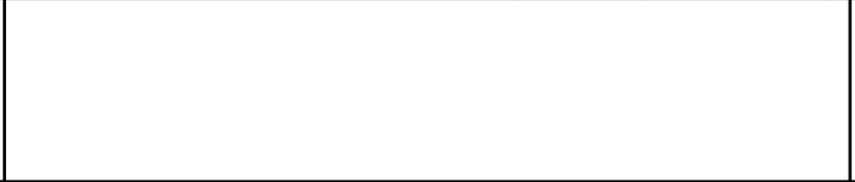
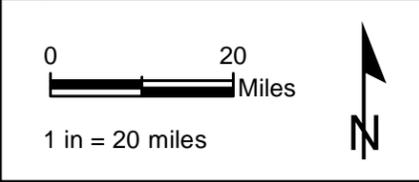
Acronyms and Abbreviations:

- ADNR - Alaska Department of Natural Resources
- BLM - US Bureau of Land Management
- TAPS - Trans-Alaska Pipeline System
- US - United States

Data Sources (Entity, Date/Version):

- Land Ownership - various
- State Road - Alaska Department of Transportation, 2019
- River - Natural Earth, 4.1.0, and Alaska Department of Natural Resources, 2020
- Lakes - Alaska Department of Natural Resources, 2020
- Military Installation - US Department of Defense, 2019
- National Park Boundary - US National Park Service, 2019
- National Wildlife Refuge Boundary - US Fish and Wildlife Service, 2019
- Aerial Imagery - ESRI basemaps, 2020

MAP PROJECTION
 Coordinate System: NAD 1983 Alaska Albers
 Projection: Albers
 Datum: North American 1983
 Units: Meter



General Land Use
Land Status

**ROADBELT INTERTIE
RECONNAISSANCE ENGINEERING REPORT**

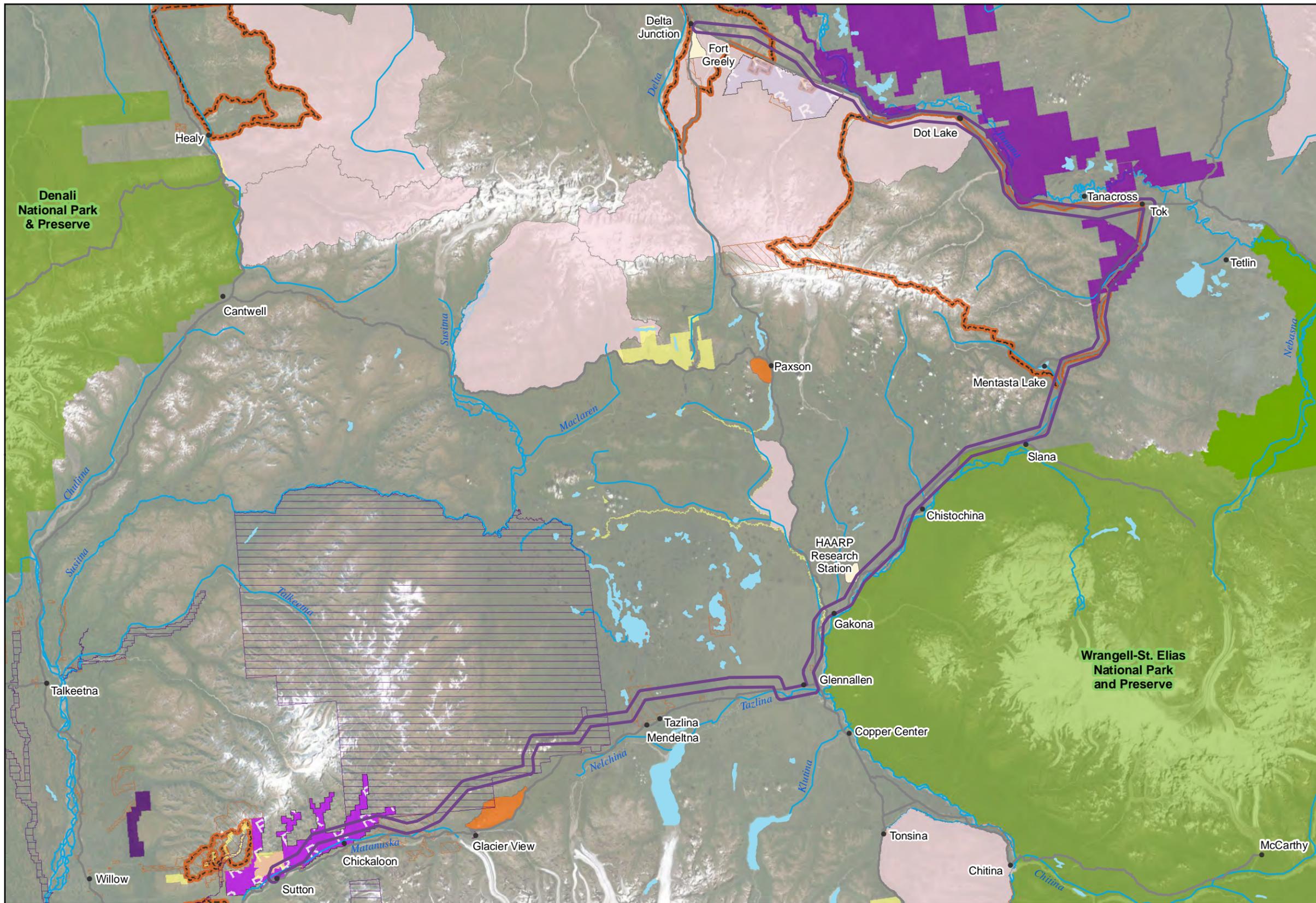
Drawn by: AEI

Date: 10/20/2020

FIGURE 2A

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LEGEND

- New Transmission Line Study Corridor (approximate)
- ADFG Conservation Areas**
 - Delta Junction Bison Range
 - Matanuska Valley Moose Range
 - Willow Mountain CHA
- ADFG Restrictive Hunting Areas**
 - Management Area
 - Controlled Use Area
 - Closed Area
- ADNR Legislatively Designated Areas**
 - Forest
 - Multiple Use
- Additional Categorized Lands**
 - ADNR Recreational Use
 - ADNR Special Use
- State Features**
 - State Road
 - River
 - Lake
 - Military Installation, Range and Training Area Boundary
 - National Park Service Boundary
 - National Wildlife Refuge Boundary

NOTES

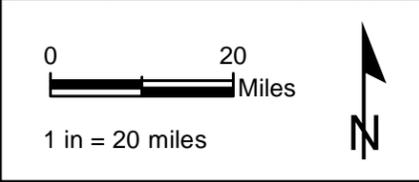
Acronyms and Abbreviations:

- ADFG - Alaska Department of Fish and Game
- ADNR - Alaska Department of Natural Resources
- CHA - Critical Habitat Area
- US - United States

Data Sources (Entity, Date/Version):

- ADFG Conservation Areas - ADFG, 2020
- ADFG Restrictive Hunting Areas - ADFG, 2017
- ADNR Legislatively Designated Areas - ADNR, 2020
- ADNR Recreational Use - ADNR, 2020
- ADNR Special Use - ADNR, 2020
- State Road - Alaska Department of Transportation, 2019
- River - Natural Earth, 4.1.0, and Alaska Department of Natural Resources, 2020
- Lakes - Alaska Department of Natural Resources, 2020
- Military Installation - US Department of Defense, 2019
- National Park Boundary - US National Park Service, 2019
- National Wildlife Refuge Boundary - US Fish and Wildlife Service, 2019
- Aerial Imagery - ESRI basemaps, 2020

MAP PROJECTION
 Coordinate System: NAD 1983 Alaska Albers
 Projection: Albers
 Datum: North American 1983
 Units: Meter



General Land Use
 Special Use Areas

**ROADBELT INTERTIE
 RECONNAISSANCE ENGINEERING REPORT**

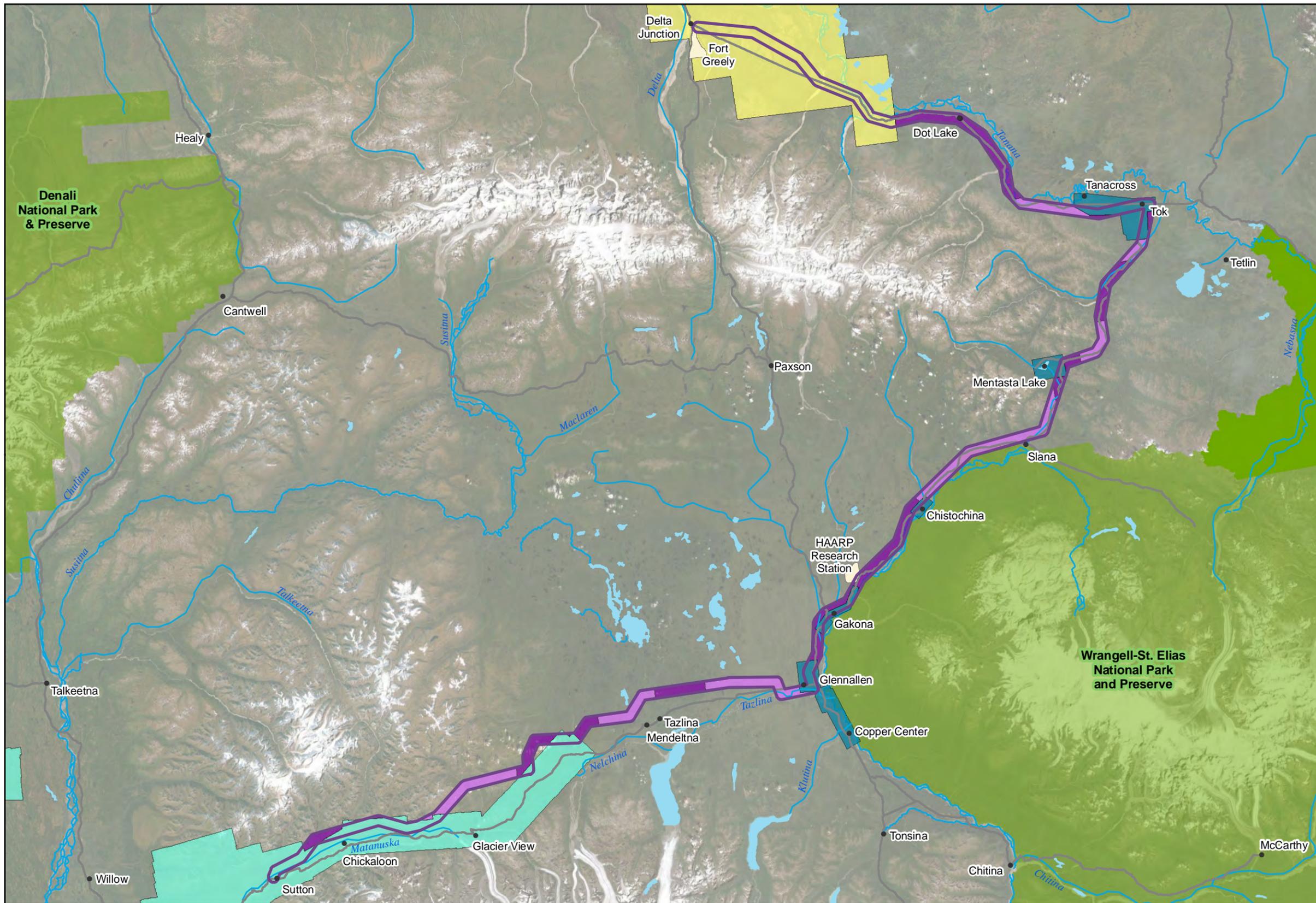
Drawn by: AEI

Date: 10/20/2020

FIGURE 2B

FILE: C:\Users\kholmes\Desktop\DC_Roadbelt\AutoCAD-GIS\NativeFiles\MXD\LO_MXD\Figure2B_SpecialUse.mxd

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LEGEND

- New Transmission Line Study Corridor (approximate)
- Existing Public Domain Imagery
 - DCRA
 - MSB
 - NRCS
- Future Satellite Imagery Purchase
 - DigitalGlobe - Archived
 - DigitalGlobe - New Tasking
- State Features
 - State Road
 - River
 - Lake
 - Military Installation, Range and Training Area Boundary
 - National Park Service Boundary
 - National Wildlife Refuge Boundary

NOTES

1. Alaska statewide orthomosaic imagery (SPOT 2.5 meter) and IFSAR data available for the entire study corridor.

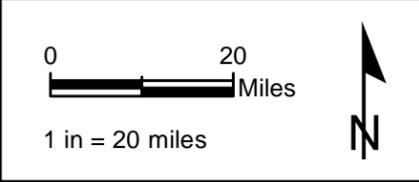
Acronyms and Abbreviations:

- DCRA - Alaska Division of Community and Regional Affairs
- IFSAR - Interferometric Synthetic Aperture Radar
- MSB - Matanuska-Susitna Borough
- NRCS - US Department of Agriculture, Natural Resources Conservation Service
- SPOT - Satellite Pour l'Observation de la Terre
- US - United States

Data Sources (Entity, Date/Version):

- State Road - Alaska Department of Transportation, 2019
- River - Natural Earth, 4.1.0, and Alaska Department of Natural Resources, 2020
- Lakes - Alaska Department of Natural Resources, 2020
- Military Installation - US Department of Defense, 2019
- National Park Boundary - US National Park Service, 2019
- National Wildlife Refuge Boundary - US Fish and Wildlife Service, 2019
- Aerial Imagery - ESRI basemaps, 2020

MAP PROJECTION
 Coordinate System: NAD 1983 Alaska Albers
 Projection: Albers
 Datum: North American 1983
 Units: Meter



Imagery Availability

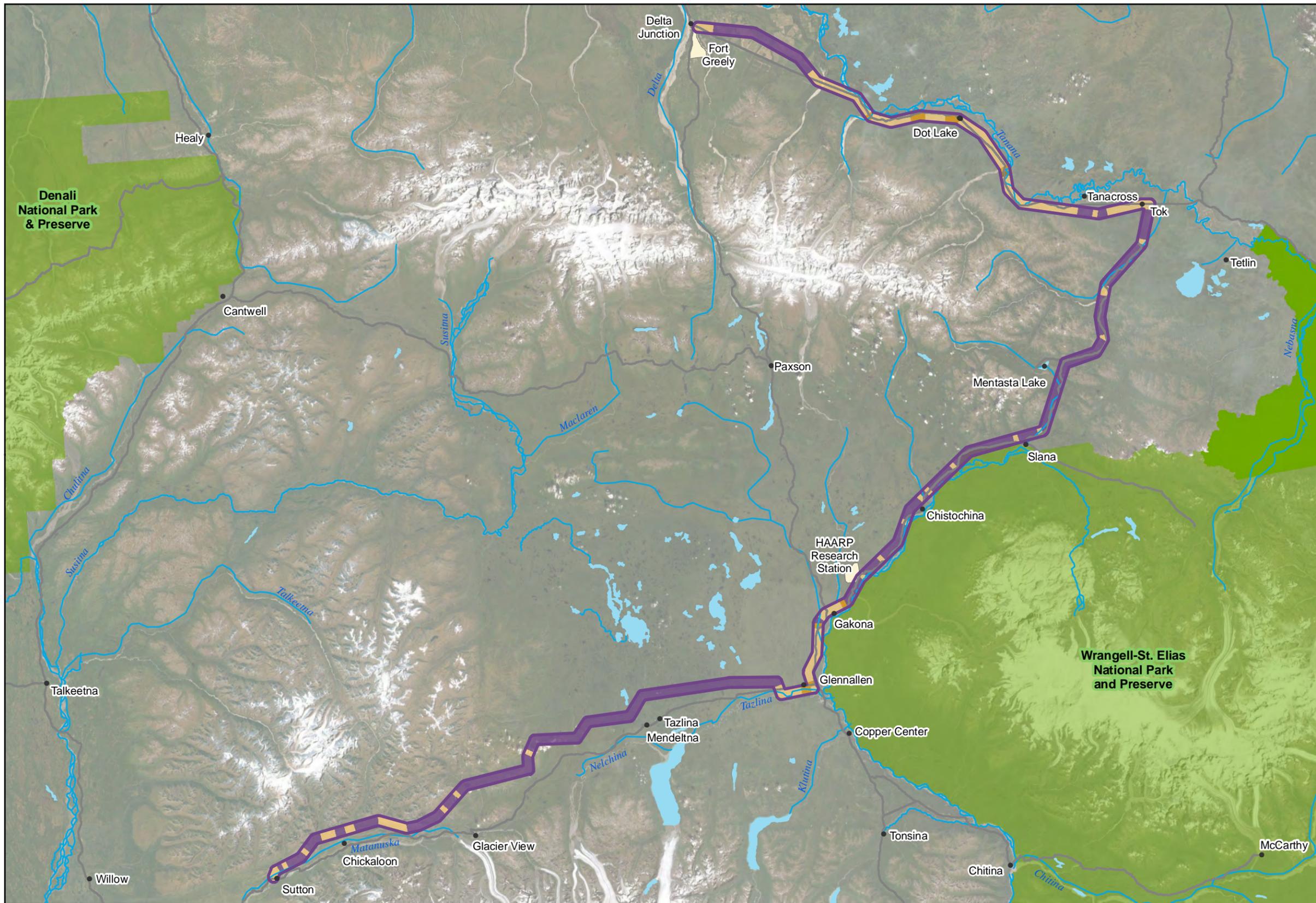
**ROADBELT INTERTIE
 RECONNAISSANCE ENGINEERING REPORT**

Drawn by: AEI

Date: 10/20/2020

FIGURE 3

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LEGEND

- New Transmission Line Study Corridor (approximate)

AHRS Summary

- 0 AHRS Sites per Mile
- 1-5 AHRS Sites per Mile
- 6-10 AHRS Sites per Mile
- 11+ AHRS Sites per Mile

State Features

- State Road
- River
- Lake
- Military Installation, Range and Training Area Boundary
- National Park Service Boundary
- National Wildlife Refuge Boundary

NOTES

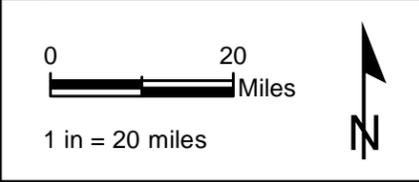
Acronyms and Abbreviations:

- AHRS - Alaska Heritage Resources Survey
- US - United States

Data Sources (Entity, Date/Version):

- AHRS Summary - Ahtna, 2020
- State Road - Alaska Department of Transportation, 2019
- River - Natural Earth, 4.1.0, and Alaska Department of Natural Resources, 2020
- Lakes - Alaska Department of Natural Resources, 2020
- Military Installation - US Department of Defense, 2019
- National Park Boundary - US National Park Service, 2019
- National Wildlife Refuge Boundary - US Fish and Wildlife Service, 2019
- Aerial Imagery - ESRI basemaps, 2020

MAP PROJECTION
 Coordinate System: NAD 1983 Alaska Albers
 Projection: Albers
 Datum: North American 1983
 Units: Meter



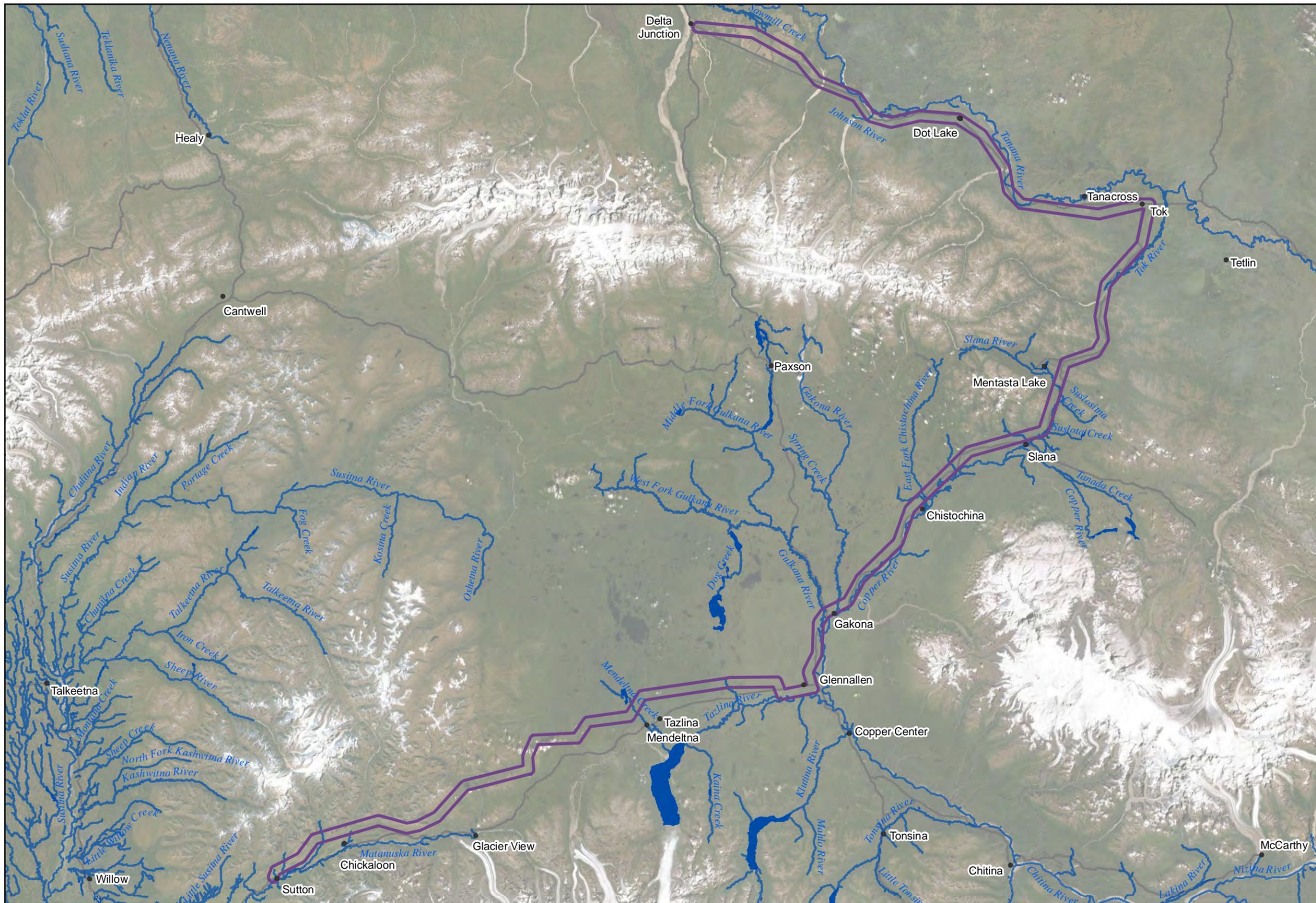
Documented Cultural Sensitivity Zones

**ROADBELT INTERTIE
 RECONNAISSANCE ENGINEERING REPORT**

Drawn by: AEI
 Date: 10/20/2020
FIGURE 4

FILE: C:\Users\kholmes\Desktop\DC_Roadbelt\AutoCAD-GIS\NativeFiles\MXD\Figure4.mxd

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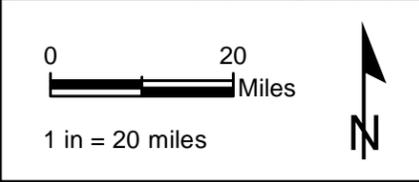
LEGEND
 [Purple Line] New Transmission Line Study Corridor (approximate)

AWC Feature Type
 [Blue Line] AWC Stream
 [Blue Area] AWC Waterbody

State Features
 [Grey Line] State Road

NOTES
Acronyms and Abbreviations:
 - AWC - Anadromous Waters Catalog
 - US - United States
Data Sources (Entity, Date/Version):
 - AWC datasets - Alaska Department of Fish and Game, 2019
 - State Road - Alaska Department of Transportation, 2019
 - Aerial Imagery - ESRI basemaps, 2020

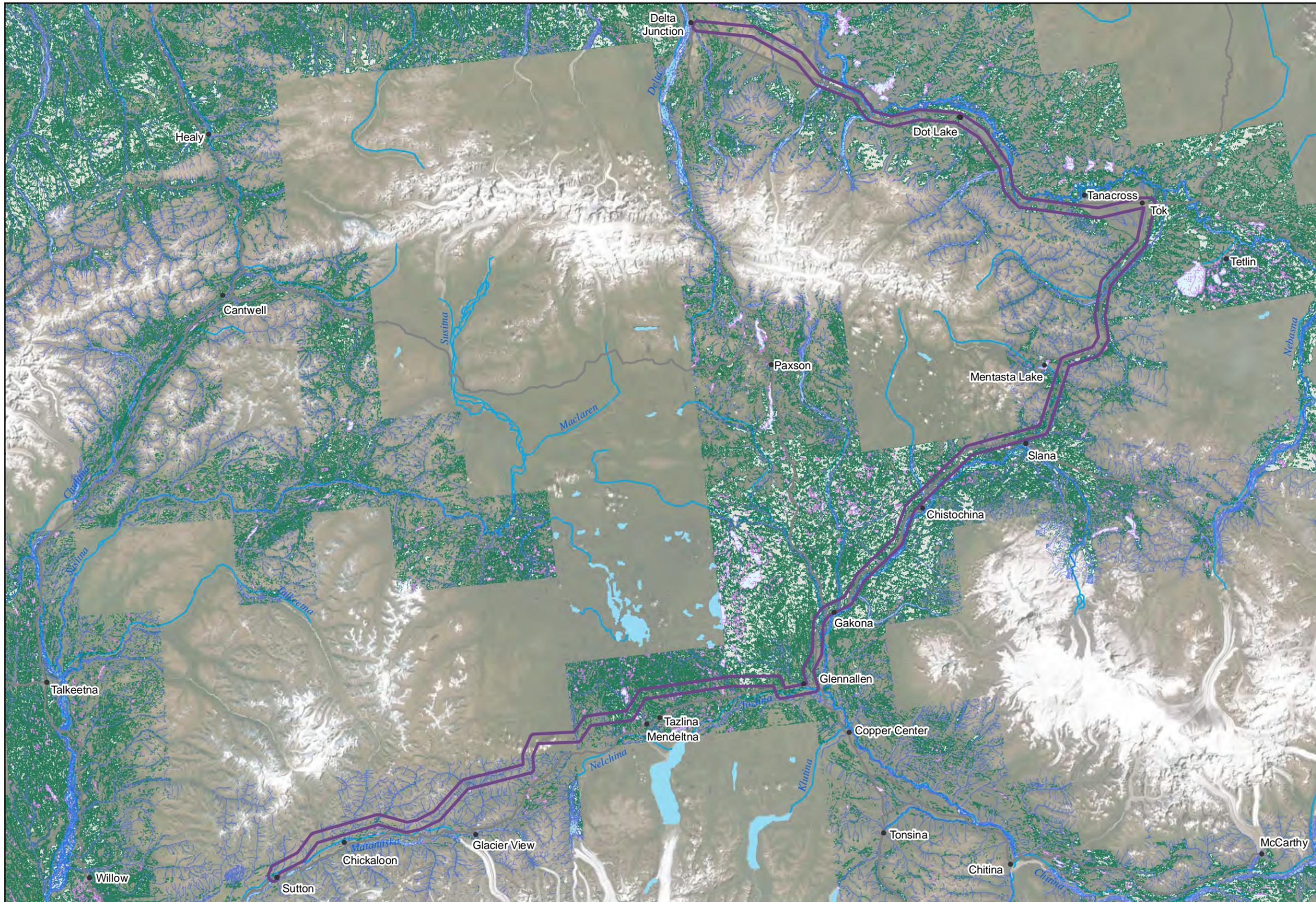
MAP PROJECTION
 Coordinate System: NAD 1983 Alaska Albers
 Projection: Albers
 Datum: North American 1983
 Units: Meter



Environmental Features
 Anadromous Waters
**ROADBELT INTERTIE
 RECONNAISSANCE ENGINEERING REPORT**

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 Date: 10/20/2020
FIGURE 5A

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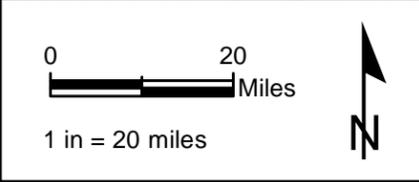
LEGEND
 [Purple Line] New Transmission Line Study Corridor (approximate)

Wetland Type (Area within Study Corridor)
 [Green Pattern] Palustrine (108,055 acres)
 [Pink Pattern] Lacustrine (2,197 acres)
 [Blue Pattern] Riverine (11,922 acres)

State Features
 [Grey Line] State Road
 [Blue Line] River
 [Light Blue Area] Lake

NOTES
Acronyms and Abbreviations:
 - US - United States
Data Sources (Entity, Date/Version):
 - Wetlands - US Fish and Wildlife Service, 2017
 - State Road - Alaska Department of Transportation, 2019
 - River - Natural Earth, 4.1.0, and Alaska Department of Natural Resources, 2020
 - Lakes - Alaska Department of Natural Resources, 2020
 - Aerial Imagery - ESRI basemaps, 2020

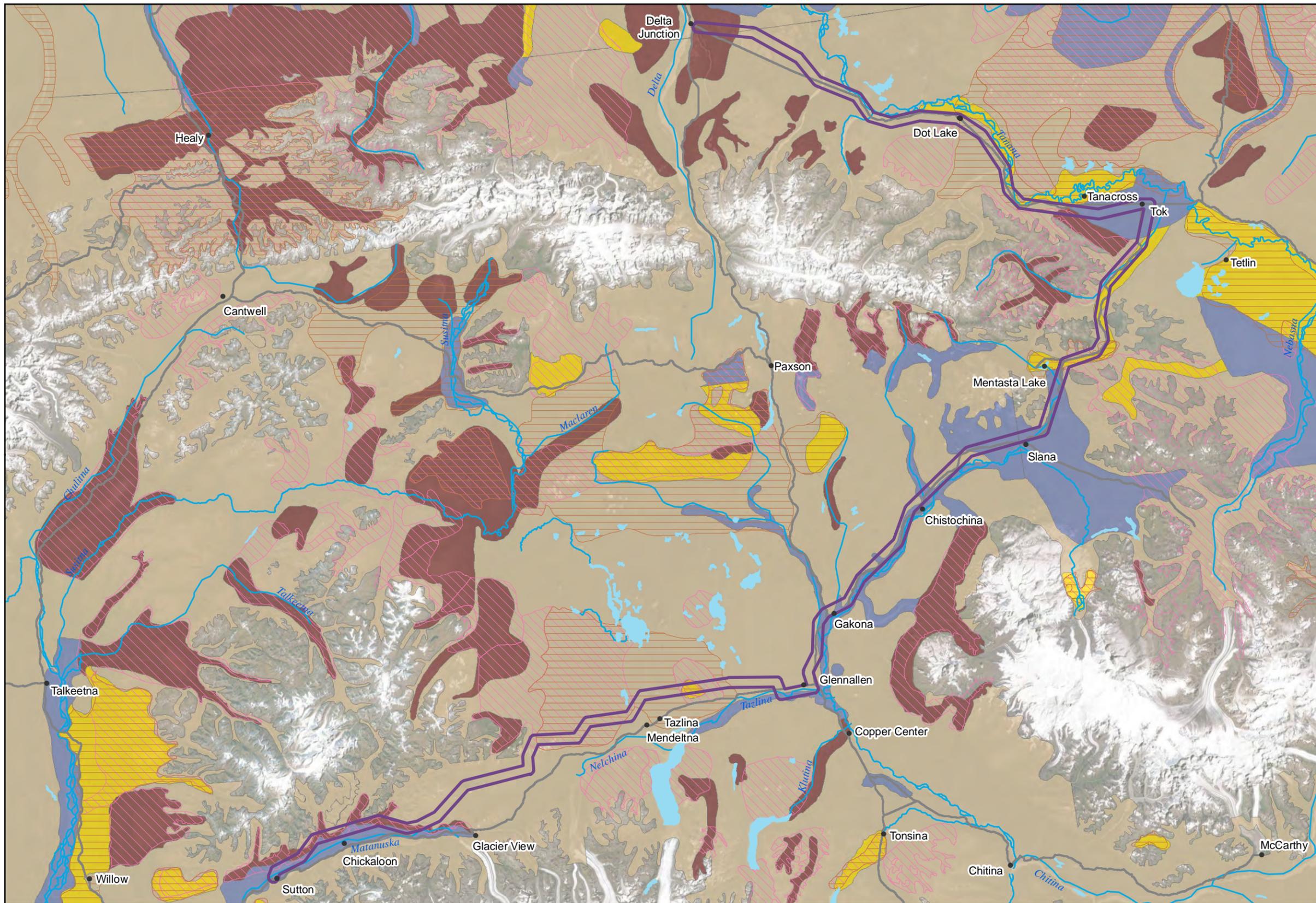
MAP PROJECTION
 Coordinate System: NAD 1983 Alaska Albers
 Projection: Albers
 Datum: North American 1983
 Units: Meter



Environmental Features
 Wetlands
**ROADBELT INTERTIE
 RECONNAISSANCE ENGINEERING REPORT**

Drawn by: AEI
 Date: 10/20/2020
FIGURE 5B

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LEGEND

- New Transmission Line Study Corridor (approximate)

AWH - Moose

- Spring-Summer Concentration
- Fall Concentration
- Winter Concentration
- Distribution

AHMG - Moose

- Known Calving Concentration
- Known Rutting Concentration
- Known Calving and Rutting Concentration

State Features

- State Road
- River
- Lake

NOTES

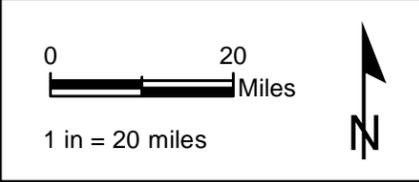
Acronyms and Abbreviations:

- ADFG - Alaska Department of Fish and Game
- AHMG - Alaska Habitat Management Guide
- AWH - Alaska's Wildlife and Habitat
- US - United States

Data Sources (Entity, Date/Version):

- AWH - ADFG, 2016
- AHMG - ADFG, 2020
- State Road - Alaska Department of Transportation, 2019
- River - Natural Earth, 4.1.0, and Alaska Department of Natural Resources, 2020
- Lakes - Alaska Department of Natural Resources, 2020
- Aerial Imagery - ESRI basemaps, 2020

MAP PROJECTION
 Coordinate System: NAD 1983 Alaska Albers
 Projection: Albers
 Datum: North American 1983
 Units: Meter



Environmental Features
Moose Habitat

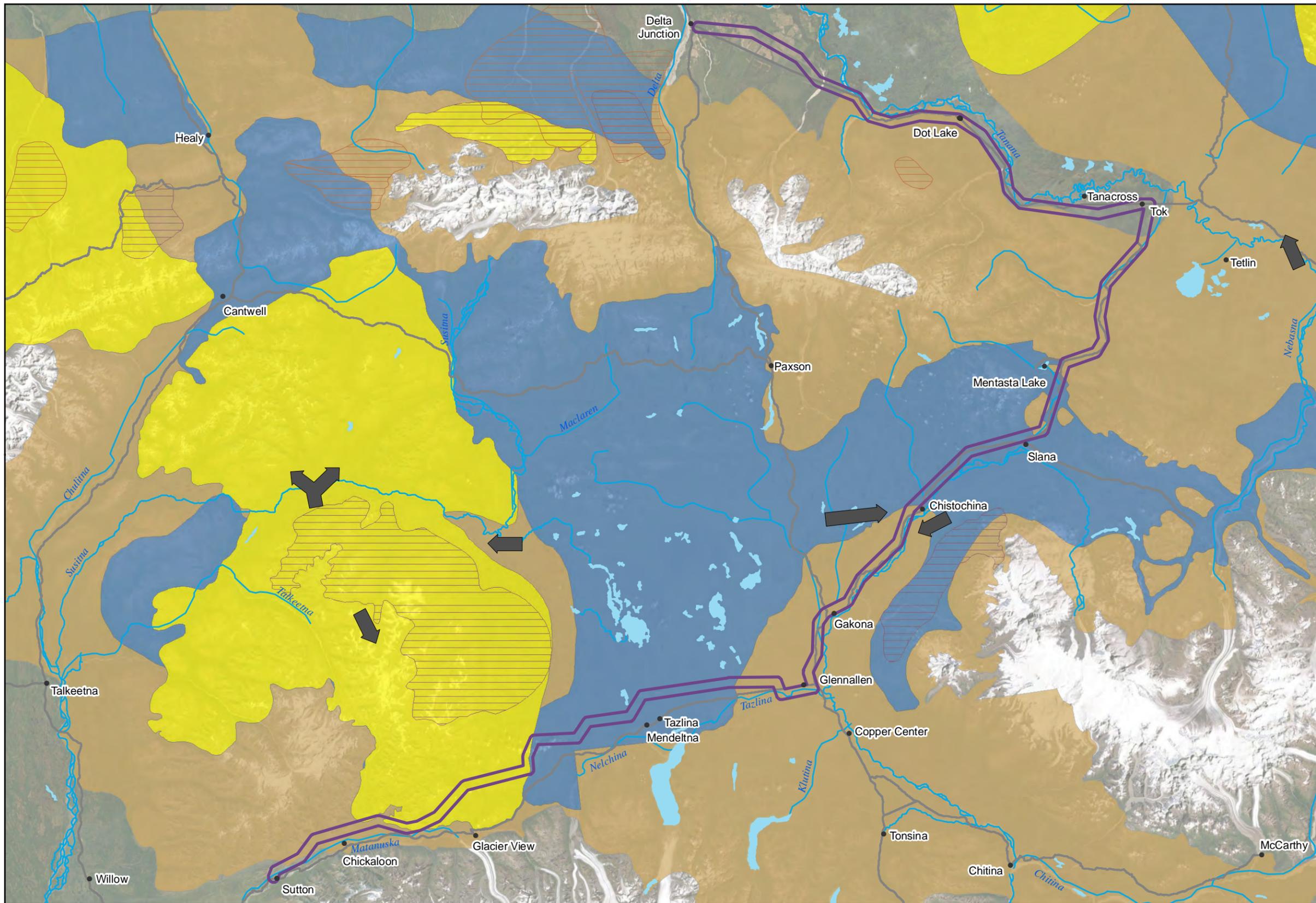
**ROADBELT INTERTIE
RECONNAISSANCE ENGINEERING REPORT**

Drawn by: AEI

Date: 10/20/2020

FIGURE 5C

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LEGEND

- New Transmission Line Study Corridor (approximate)
- AWH - Caribou**
 - Calving
 - Summer Range
 - Winter Range
 - Present
 - Migration Routes
- AHMG - Caribou**
 - Calving
- State Features**
 - State Road
 - River
 - Lake

NOTES

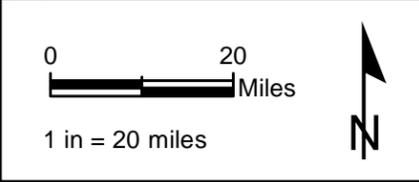
Acronyms and Abbreviations:

- ADFG - Alaska Department of Fish and Game
- AHMG - Alaska Habitat Management Guide
- AWH - Alaska's Wildlife and Habitat
- US - United States

Data Sources (Entity, Date/Version):

- AWH - ADFG, 2016
- AHMG - ADFG, 2020
- State Road - Alaska Department of Transportation, 2019
- River - Natural Earth, 4.1.0, and Alaska Department of Natural Resources, 2020
- Lakes - Alaska Department of Natural Resources, 2020
- Aerial Imagery - ESRI basemaps, 2020

MAP PROJECTION
 Coordinate System: NAD 1983 Alaska Albers
 Projection: Albers
 Datum: North American 1983
 Units: Meter



Environmental Features
 Caribou Habitat

**ROADBELT INTERTIE
 RECONNAISSANCE ENGINEERING REPORT**

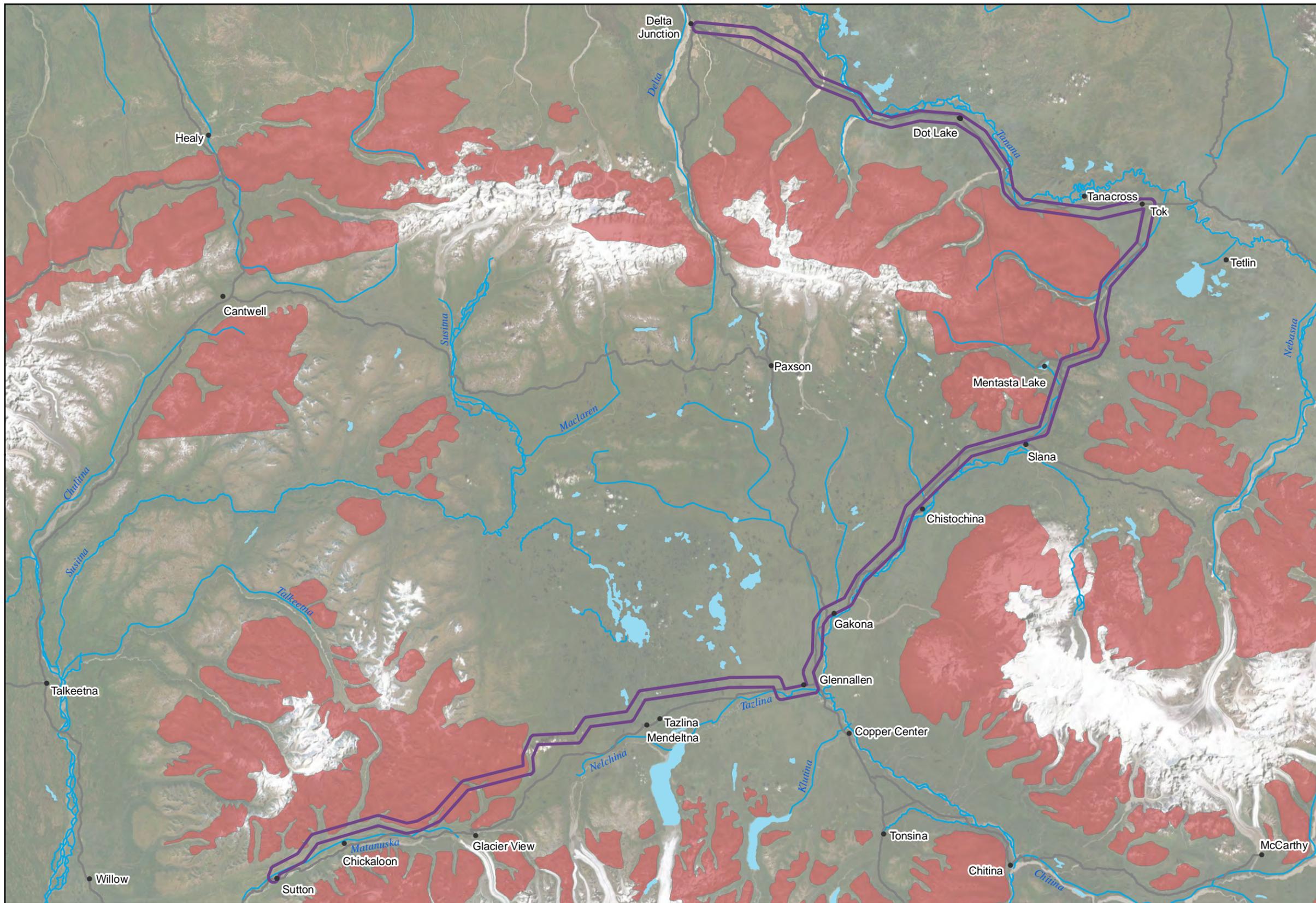
Drawn by: AEI

Date: 10/20/2020

FIGURE 5D

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LEGEND

-  New Transmission Line Study Corridor (approximate)
- AWH - Dall Sheep**
-  Range
- State Features**
-  State Road
-  River
-  Lake

NOTES

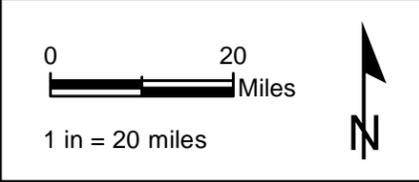
Acronyms and Abbreviations:

- ADFG - Alaska Department of Fish and Game
- AWH - Alaska's Wildlife and Habitat
- US - United States

Data Sources (Entity, Date/Version):

- AWH - ADFG, 2016
- State Road - Alaska Department of Transportation, 2019
- River - Natural Earth, 4.1.0, and Alaska Department of Natural Resources, 2020
- Lakes - Alaska Department of Natural Resources, 2020
- Aerial Imagery - ESRI basemaps, 2020

MAP PROJECTION
 Coordinate System: NAD 1983 Alaska Albers
 Projection: Albers
 Datum: North American 1983
 Units: Meter

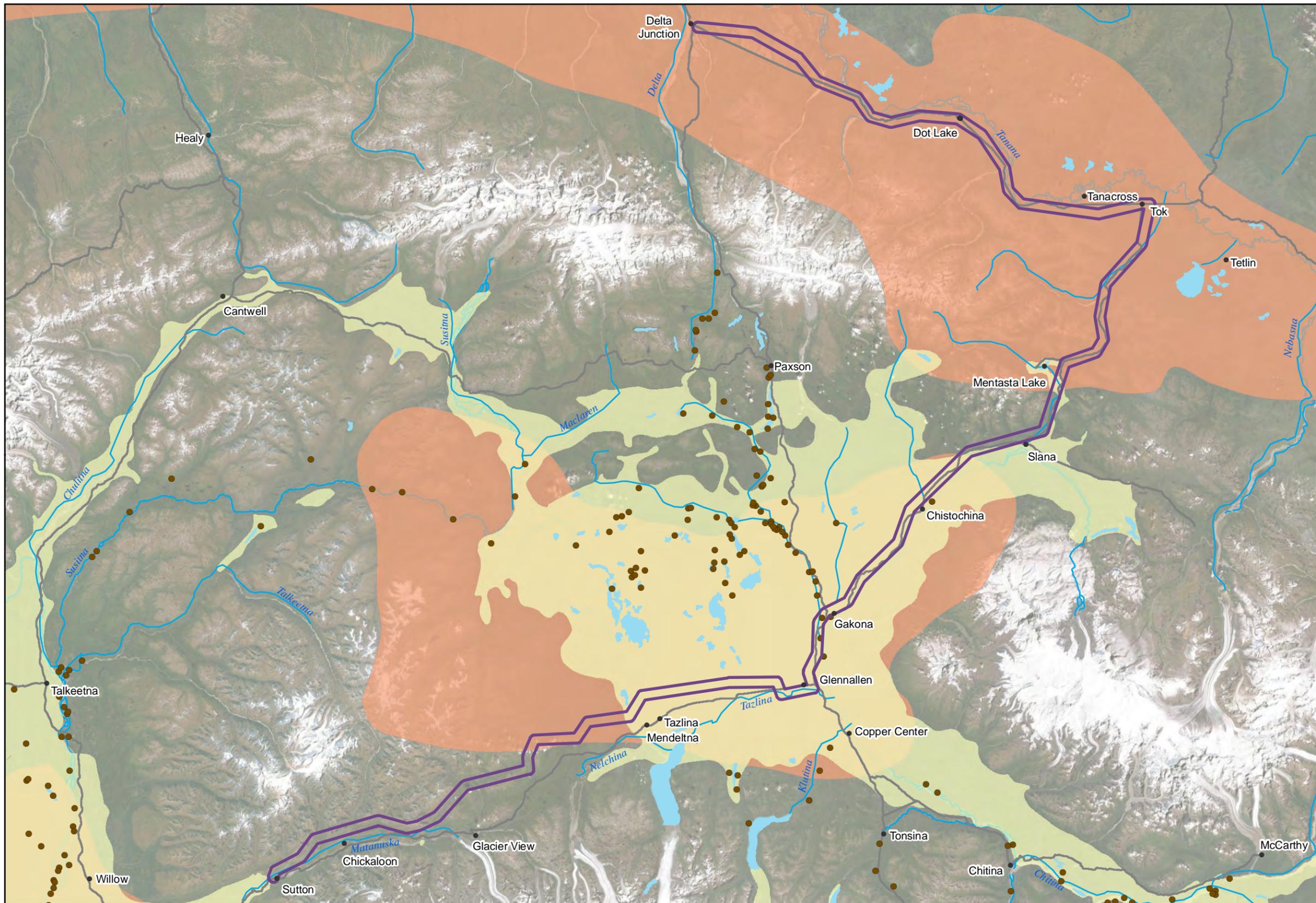


Environmental Features
 Dall Sheep Habitat

**ROADBELT INTERTIE
 RECONNAISSANCE ENGINEERING REPORT**

Drawn by: AEI
 Date: 10/20/2020
FIGURE 5E

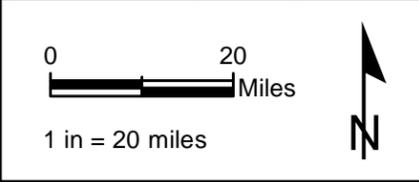
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- LEGEND**
- New Transmission Line Study Corridor (approximate)
 - AWH - Waterfowl**
 - Primary Waterfowl Habitat
 - AHMG - Trumpeter Swans**
 - Trumpeter Swan Habitat
 - AHMG - Bald Eagles**
 - Bald Eagle Nest
 - State Features**
 - State Road
 - River
 - Lake

- NOTES**
- Acronyms and Abbreviations:**
- ADFG - Alaska Department of Fish and Game
 - AHMG - Alaska Habitat Management Guide
 - AWH - Alaska's Wildlife and Habitat
 - US - United States
- Data Sources (Entity, Date/Version):**
- AWH - ADFG, 2016
 - AHMG - ADFG, 2020
 - State Road - Alaska Department of Transportation, 2019
 - River - Natural Earth, 4.1.0, and Alaska Department of Natural Resources, 2020
 - Lakes - Alaska Department of Natural Resources, 2020
 - Aerial Imagery - ESRI basemaps, 2020

MAP PROJECTION
 Coordinate System: NAD 1983 Alaska Albers
 Projection: Albers
 Datum: North American 1983
 Units: Meter



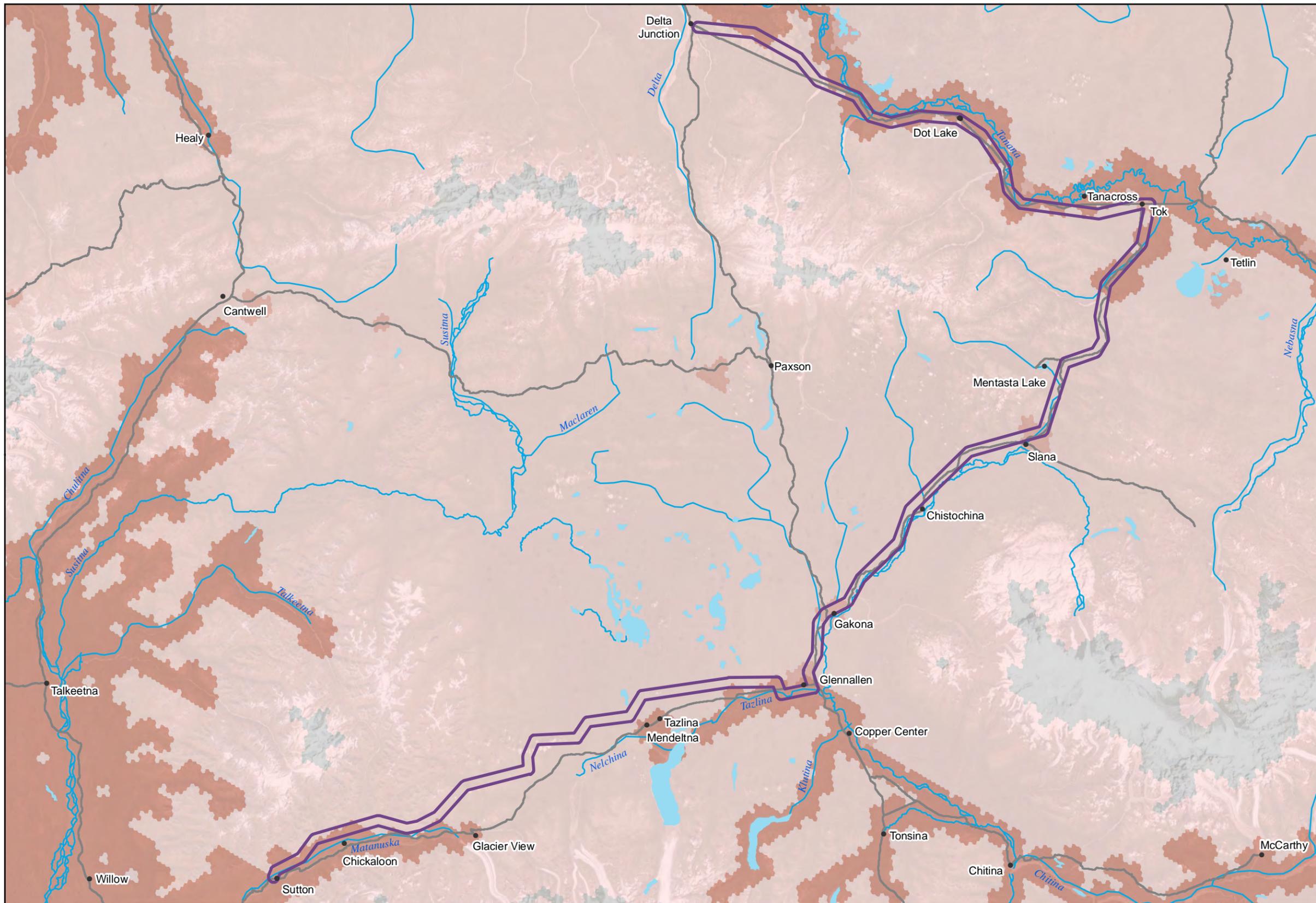
Environmental Features
 Bald Eagle Nests and Waterfowl Habitat

**ROADBELT INTERTIE
 RECONNAISSANCE ENGINEERING REPORT**

Drawn by: AEI
 Date: 10/20/2020
FIGURE 5F

FILE: C:\Users\kholmes\Desktop\DC_Roadbelt\AutoCAD-GIS\NativeFiles\MXD\EnvC_MXD\Figure5F_Waterfowl.mxd

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LEGEND

New Transmission Line Study Corridor (approximate)

Alaska CHAT - Species of Concern Rank (Area within Study Corridor)

- 0 - No Rank
- 1 - Most Crucial (0 acres)
- 2 - (0 acres)
- 3 - (9,181 acres)
- 4 - (115,582 acres)
- 5 - (324,704 acres)
- 6 - Least Crucial (17,470 acres)

State Features

- State Road
- River
- Lake

NOTES

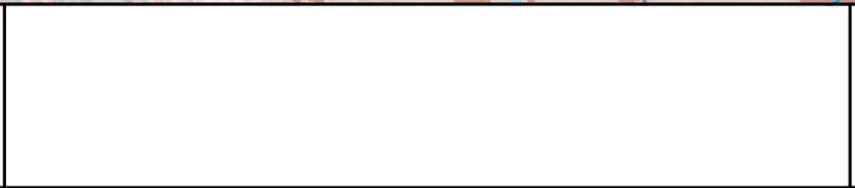
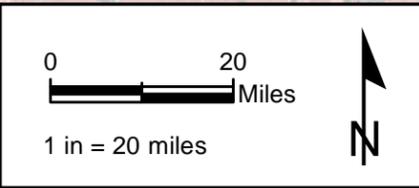
Acronyms and Abbreviations:

- CHAT - Crucial Habitat Assessment Tool
- US - United States
- WAFWA - Western Association of Fish and Wildlife Agencies

Data Sources (Entity, Date/Version):

- Alaska CHAT - WAFWA, 2020
- State Road - Alaska Department of Transportation, 2019
- River - Natural Earth, 4.1.0, and Alaska Department of Natural Resources, 2020
- Lakes - Alaska Department of Natural Resources, 2020
- Aerial Imagery - ESRI basemaps, 2020

MAP PROJECTION
 Coordinate System: NAD 1983 Alaska Albers
 Projection: Albers
 Datum: North American 1983
 Units: Meter



Environmental Features
 Species of Concern

**ROADBELT INTERTIE
 RECONNAISSANCE ENGINEERING REPORT**

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 Date: 10/20/2020
FIGURE 5G

FILE: C:\Users\kholmes\Desktop\DC_Roadbelt\AutoCAD-GIS\NativeFiles\MXD\EnvC_MXD\Figure5G_CHAT_SpecCon.mxd

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