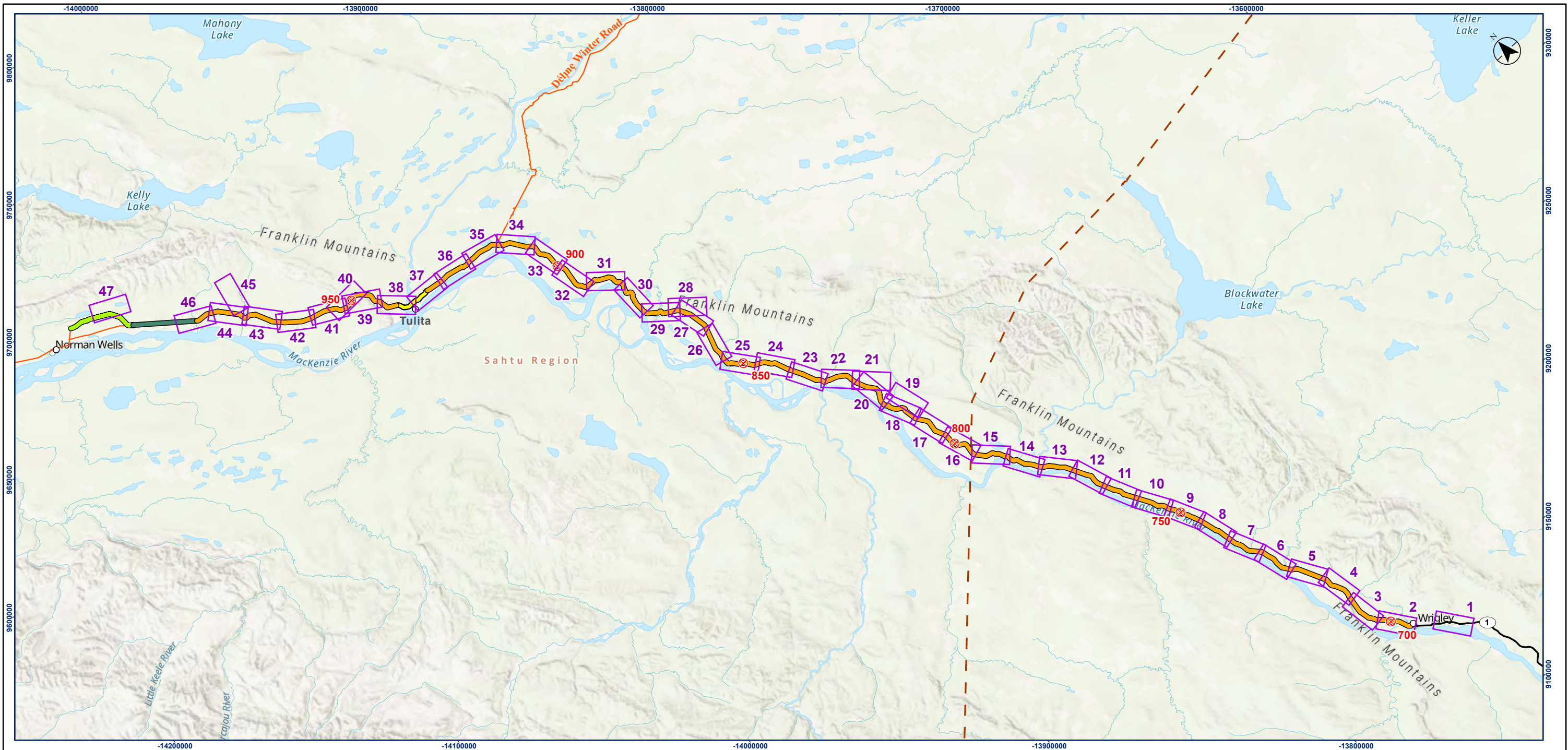


APPENDIX 5A

Project Mapbook



- Mapsheet
- ⊕ Proposed Mackenzie Valley Highway Kilometre Post
- Proposed Mackenzie Valley Highway Project Route
- Northwest Territories Highway
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)
- Winter Road
- Region Boundary



Project Location: Wrigley to Norman Wells
 Client/Project: 14493025-0079 REV A
 Prepared by CES on 2023-08-04
 TR by DS on 2023-08-04
 IR by EB on 2023-08-04

Government of the Northwest Territories
 Mackenzie Valley Highway Project

Figure No. **5A**
 Title

**Mackenzie Valley Highway Project
 Alignment Route Mapbook**

Notes
 1. Coordinate System: NAD 1983 UTM Zone 10N
 2. Data Sources: Government of Canada, Government of Northwest Territories, Stantec
 3. Background: World Topographic Map: Esri, FAO, NOAA, USGS, NRCAN
 World Topographic Map: Northwest Territories, Esri Canada, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NRCAN, Parks Canada
 World Hillshade: Esri, USGS

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
- Municipal Boundary
- Region Boundary
- Sahtu Land
- Surface Land Withdrawal Dehcho Region (R-048-2014)



Notes

- Coordinate System: NAD 1983 UTM Zone 10N
- Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
- Sahtu Land Use Planning Board, July 28, 2021
- Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada
- World Imagery: Earthstar Geographics
- World Hillshade: Esri, USGS. Imagery date: 2021.

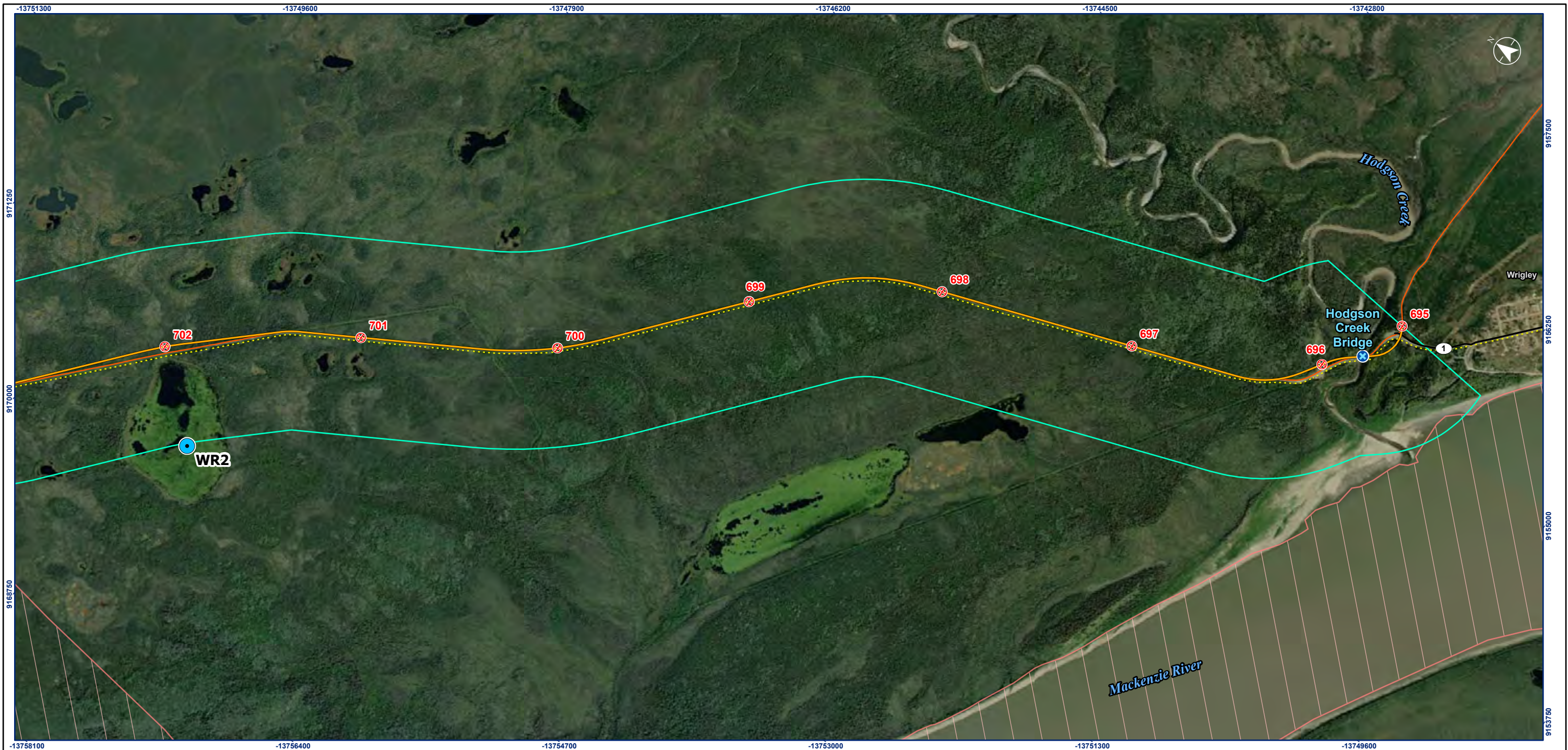


Project Location: Wrigley to Norman Wells, Northwest Territories
 Prepared by CES on 2023-08-04
 TR by DS on 2023-08-04
 IR by EB on 2023-08-04
 Client/Project: 144903025-0078 REV8

Government of the Northwest Territories
 Mackenzie Valley Highway

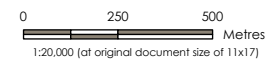
Figure No. **5A.1**
 Title: **Mackenzie Valley Highway Project Alignment Route Mapbook**

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



Notes
 1. Coordinate System: NAD 1983 UTM Zone 10N
 2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
 3. Sahtu Land Use Planning Board, July 28, 2021
 4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada
 World Imagery: Maxar
 World Hillshade: Esri, USGS. Imagery date: 2021.

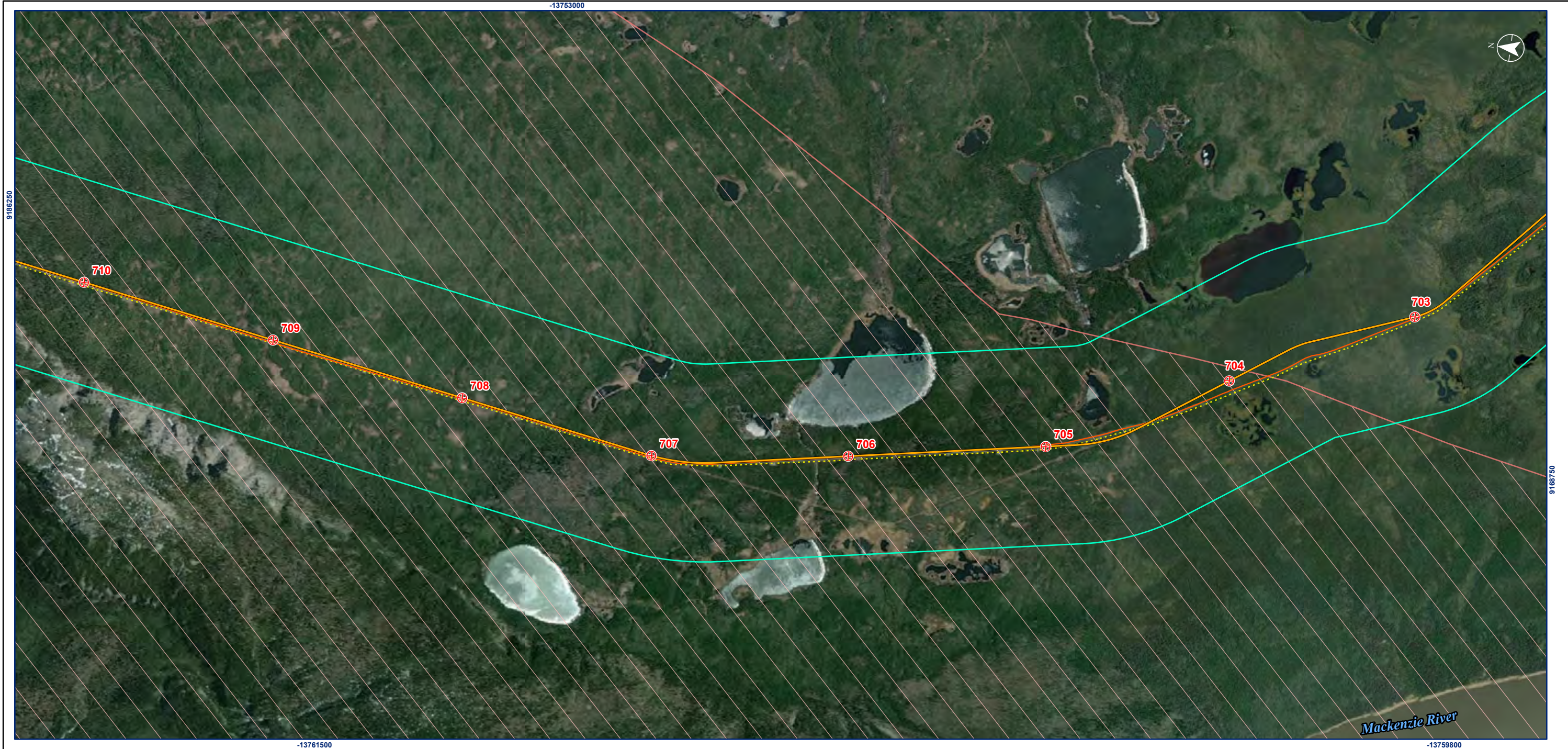
- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option
- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source
- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)
- Winter Road
- Municipal Boundary
- Region Boundary
- Sahtu Land
- Surface Land Withdrawal Dehcho Region (R-048-2014)



Project Location
 Wrigley to Norman Wells,
 Northwest Territories
 Client/Project
 Government of the Northwest Territories
 Mackenzie Valley Highway
 Prepared by CES on 2023-08-04
 TR by DS on 2023-08-04
 IR by EB on 2023-08-04
 144903025-0078 REV8

Figure No.
5A.2
 Title
**Mackenzie Valley Highway Project
 Alignment Route Mapbook**

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



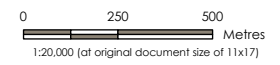
Notes
 1. Coordinate System: NAD 1983 UTM Zone 10N
 2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
 3. Sahtu Land Use Planning Board, July 28, 2021
 4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCan, Parks Canada
 World Imagery: Earthstar Geographics
 World Hillshade: Esri, USGS. Imagery date: 2021.

- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
- Municipal Boundary
- Region Boundary
- Sahtu Land
- Surface Land Withdrawal Dehcho Region (R-048-2014)



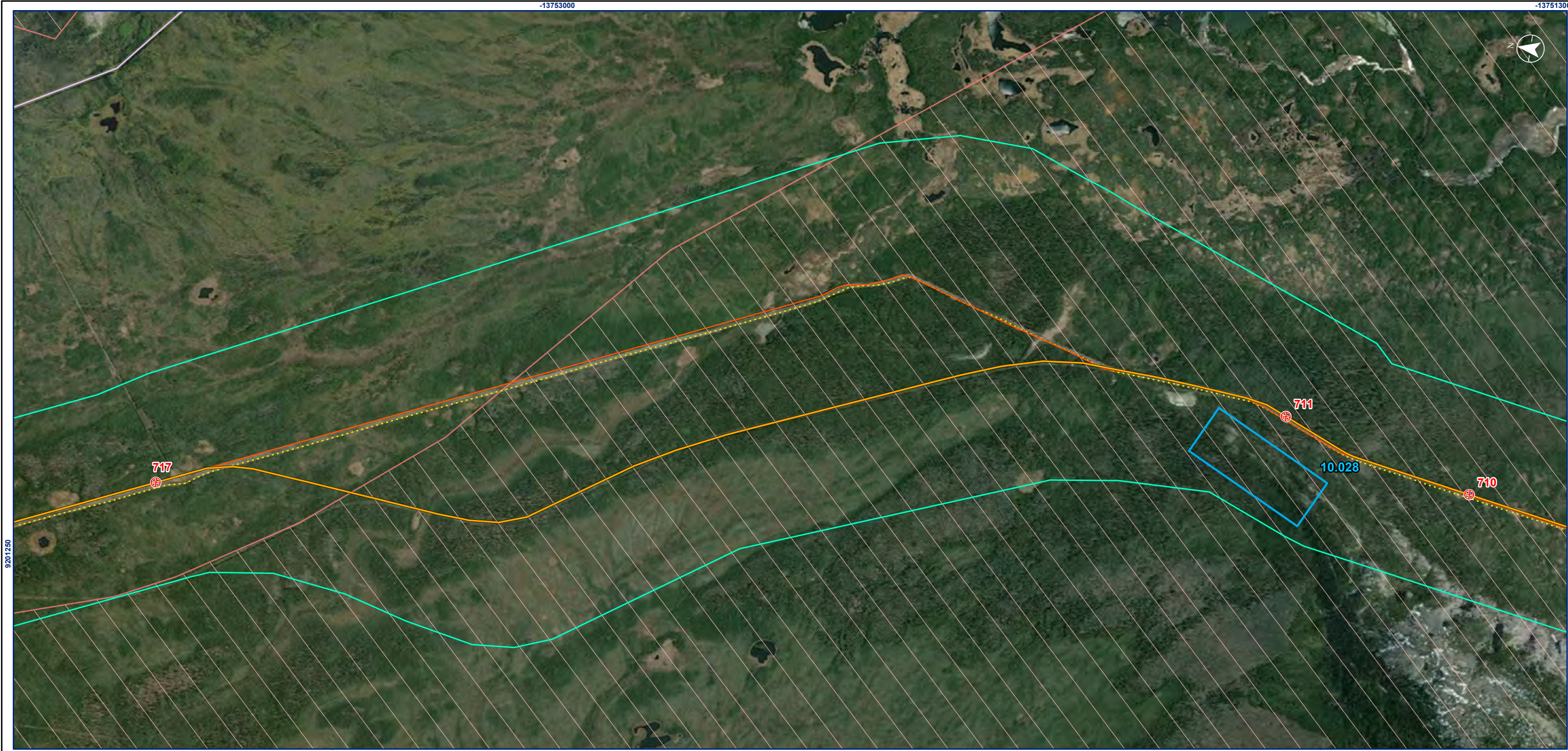
Project Location: Wrigley to Norman Wells, Northwest Territories
 Client/Project: 144903025-0078 REV8

Government of the Northwest Territories
 Mackenzie Valley Highway

Figure No. **5A.3**
 Title

Mackenzie Valley Highway Project Alignment Route Mapbook

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.

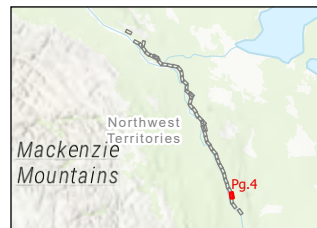


9201250

9185000

-13761500

-13759800



- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
- Municipal Boundary
- Region Boundary
- Sahtu Land
- Surface Land Withdrawal Dehcho Region (R-048-2014)



Project Location: Wrigley to Norman Wells, Northwest Territories
 Prepared by CES on 2023-08-04
 TR by DS on 2023-08-04
 IR by EB on 2023-08-04
 Client/Project: 144903025-0078 REV8

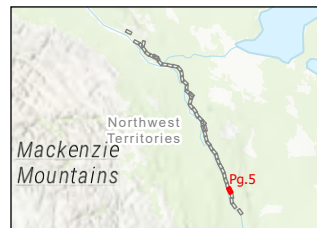
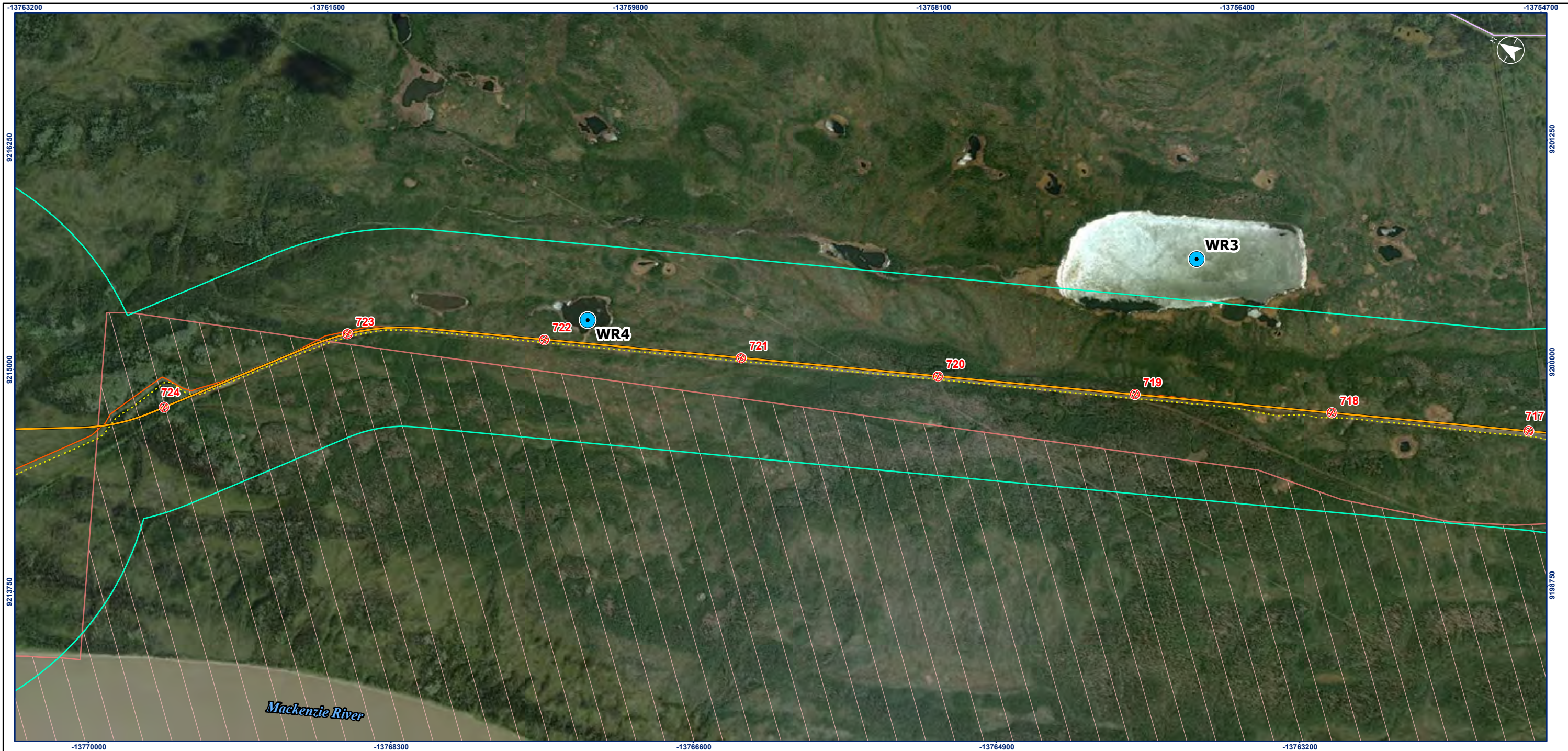
Government of the Northwest Territories
 Mackenzie Valley Highway

Figure No. **5A.4**
 Title

Mackenzie Valley Highway Project
Alignment Route Mapbook

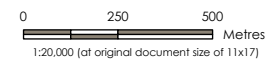
Notes
 1. Coordinate System: NAD 1983 UTM Zone 10N
 2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
 3. Sahtu Land Use Planning Board, July 28, 2021
 4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada
 World Imagery: Earthstar Geographics
 World Hillshade: Esri, USGS. Imagery date: 2021.

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



Notes
 1. Coordinate System: NAD 1983 UTM Zone 10N
 2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
 3. Sahtu Land Use Planning Board, July 28, 2021
 4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada
 World Imagery: Maxar
 World Hillshade: Esri, USGS. Imagery date: 2021.

- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option
- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source
- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)
- Winter Road
- Municipal Boundary
- Region Boundary
- Sahtu Land
- Surface Land Withdrawal Dehcho Region (R-048-2014)

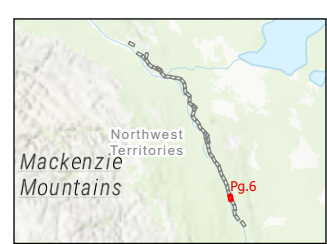


Project Location: Wrigley to Norman Wells, Northwest Territories
 Prepared by CES on 2023-08-04
 TR by DS on 2023-08-04
 IR by EB on 2023-08-04
 Client/Project: 144903025-0078 REV8

Government of the Northwest Territories
 Mackenzie Valley Highway

Figure No. **5A.5**
 Title: **Mackenzie Valley Highway Project Alignment Route Mapbook**

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
- Municipal Boundary
- Region Boundary
- Sahtu Land
- Surface Land Withdrawal Dehcho Region (R-048-2014)



Notes

1. Coordinate System: NAD 1983 UTM Zone 10N
2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
3. Sahtu Land Use Planning Board, July 28, 2021
4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada World Imagery: Maxar World Hillshade: Esri, USGS. Imagery date: 2021.



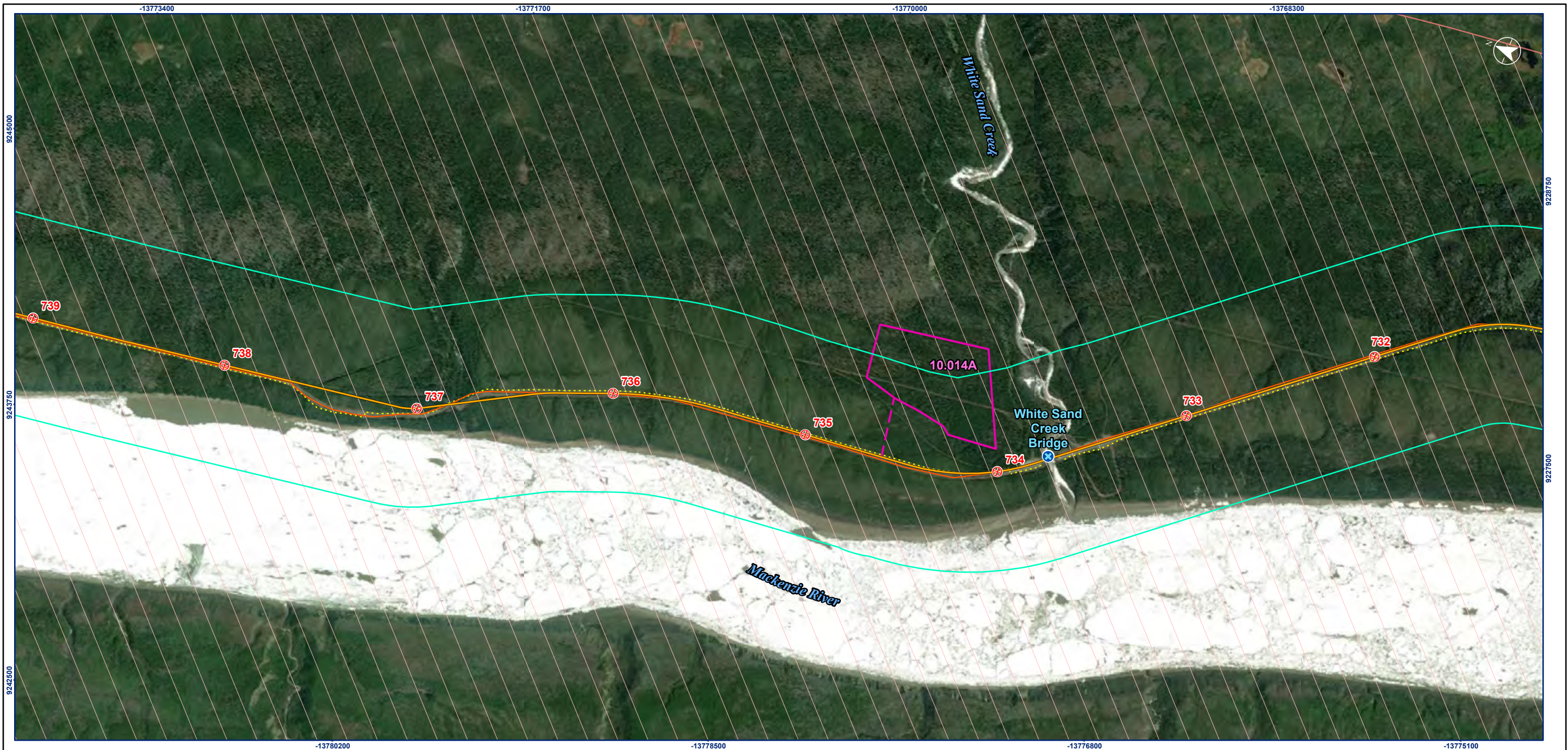
Project Location: Wrigley to Norman Wells, Northwest Territories
 Client/Project: 144903025-0078 REV8

Government of the Northwest Territories
 Mackenzie Valley Highway

Figure No. **5A.6**
 Title

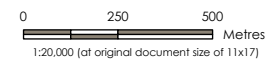
**Mackenzie Valley Highway Project
 Alignment Route Mapbook**

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



Notes
 1. Coordinate System: NAD 1983 UTM Zone 10N
 2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
 3. Sahtu Land Use Planning Board, July 28, 2021
 4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada
 World Imagery: Maxar
 World Hillshade: Esri, USGS. Imagery date: 2021.

- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option
- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source
- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)
- Winter Road
- Municipal Boundary
- Region Boundary
- Sahtu Land
- Surface Land Withdrawal Dehcho Region (R-048-2014)



Project Location: Wrigley to Norman Wells, Northwest Territories
 Client/Project: 144903025-0078 REV8
 Prepared by CES on 2023-08-04
 TR by DS on 2023-08-04
 IR by EB on 2023-08-04

Government of the Northwest Territories
 Mackenzie Valley Highway

Figure No. **5A.7**
 Title

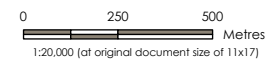
Mackenzie Valley Highway Project
 Alignment Route Mapbook

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



Notes
 1. Coordinate System: NAD 1983 UTM Zone 10N
 2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
 3. Sahtu Land Use Planning Board, July 28, 2021
 4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada
 World Imagery: Earthstar Geographics
 World Hillshade: Esri, USGS. Imagery date: 2021.

- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option
- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source
- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)
- Winter Road
- Municipal Boundary
- Region Boundary
- Sahtu Land
- Surface Land Withdrawal Dehcho Region (R-048-2014)



Project Location: Wrigley to Norman Wells, Northwest Territories
 Client/Project: 144903025-0078 REV8
 Prepared by CES on 2023-08-04
 TR by DS on 2023-08-04
 IR by EB on 2023-08-04

Government of the Northwest Territories
 Mackenzie Valley Highway

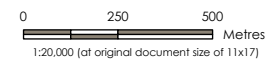
Figure No. **5A.8**
 Title: **Mackenzie Valley Highway Project Alignment Route Mapbook**

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



Notes
 1. Coordinate System: NAD 1983 UTM Zone 10N
 2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics, n.d. Inventory of Landscape Change Map Viewer, GNWT, Centre for Geomatics, n.d. Open Data, MVLWB, n.d. Public Registry, Sahtu Land and Water Board, n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
 3. Sahtu Land Use Planning Board, July 28, 2021
 4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada
 World Imagery: Earthstar Geographics
 World Hillshade: Esri, USGS. Imagery date: 2021.

- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option
- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source
- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)
- Winter Road
- Municipal Boundary
- Region Boundary
- Sahtu Land
- Surface Land Withdrawal Dehcho Region (R-048-2014)

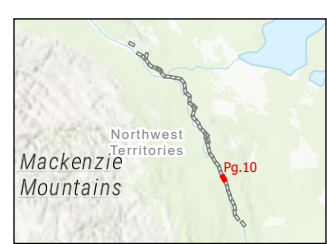
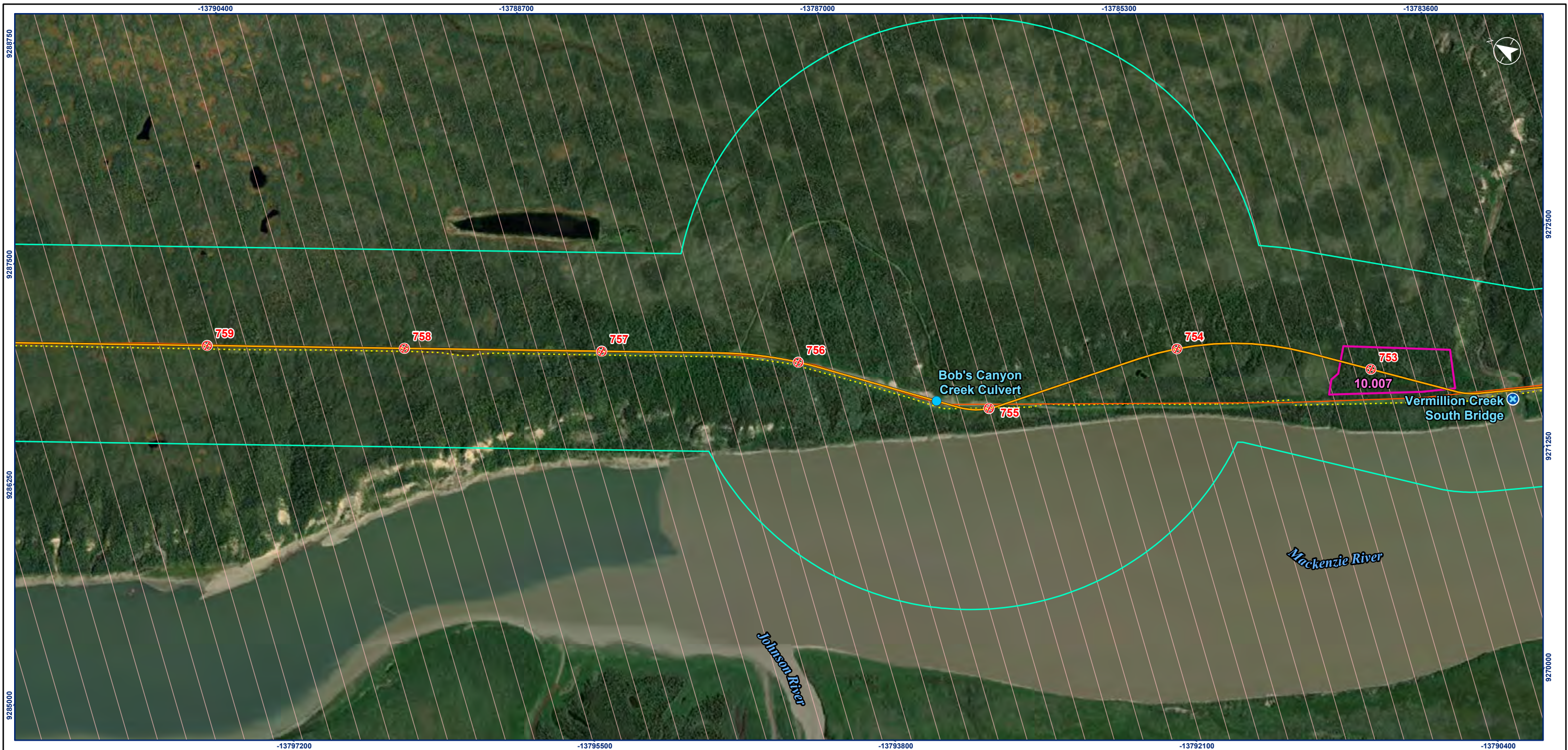


Project Location: Wrigley to Norman Wells, Northwest Territories
 Client/Project: 144903025-0078 REV8
 Prepared by CES on 2023-08-04
 TR by DS on 2023-08-04
 IR by EB on 2023-08-04

Government of the Northwest Territories
 Mackenzie Valley Highway

Figure No. **5A.9**
 Title: **Mackenzie Valley Highway Project Alignment Route Mapbook**

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
- Municipal Boundary
- Region Boundary
- Sahtu Land
- Surface Land Withdrawal Dehcho Region (R-048-2014)



Notes

1. Coordinate System: NAD 1983 UTM Zone 10N
2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
3. Sahtu Land Use Planning Board, July 28, 2021
4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada

World Imagery: Earthstar Geographics
World Hillshade: Esri, USGS. Imagery date: 2021.



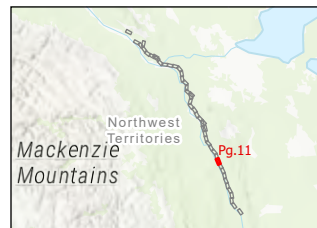
Project Location: Wrigley to Norman Wells, Northwest Territories
Client/Project: 144903025-0078 REV8

Government of the Northwest Territories
Mackenzie Valley Highway

Figure No. **5A.10**
Title

**Mackenzie Valley Highway Project
Alignment Route Mapbook**

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



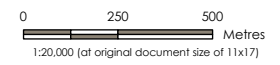
Notes
 1. Coordinate System: NAD 1983 UTM Zone 10N
 2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
 3. Sahtu Land Use Planning Board, July 28, 2021
 4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada
 World Imagery: Earthstar Geographics
 World Hillshade: Esri, USGS. Imagery date: 2021.

- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

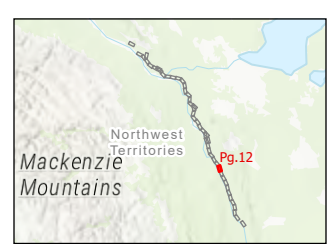
- Winter Road
- Municipal Boundary
- Region Boundary
- Sahtu Land
- Surface Land Withdrawal Dehcho Region (R-048-2014)



Project Location: Wrigley to Norman Wells, Northwest Territories
 Prepared by CES on 2023-08-04
 TR by DS on 2023-08-04
 IR by EB on 2023-08-04
 Client/Project: 144903025-0078 REV8

Government of the Northwest Territories
 Mackenzie Valley Highway

Figure No. **5A.11**
 Title: **Mackenzie Valley Highway Project Alignment Route Mapbook**



- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
- Municipal Boundary
- Region Boundary
- Sahtu Land
- Surface Land Withdrawal Dehcho Region (R-048-2014)



Notes

1. Coordinate System: NAD 1983 UTM Zone 10N
2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
3. Sahtu Land Use Planning Board, July 28, 2021
4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCan, Parks Canada

World Imagery: Earthstar Geographics
World Hillshade: Esri, USGS. Imagery date: 2021.



Project Location: Wrigley to Norman Wells, Northwest Territories
Client/Project: 144903025-0078 REV8

Government of the Northwest Territories
Mackenzie Valley Highway

Figure No. **5A.12**
Title

**Mackenzie Valley Highway Project
Alignment Route Mapbook**

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.

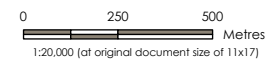


Notes

1. Coordinate System: NAD 1983 UTM Zone 10N
2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
3. Sahtu Land Use Planning Board, July 28, 2021
4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada

World Imagery: Earthstar Geographics
World Hillshade: Esri, USGS. Imagery date: 2021.

- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option
- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source
- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)
- Winter Road
- Municipal Boundary
- Region Boundary
- Sahtu Land
- Surface Land Withdrawal Dehcho Region (R-048-2014)



Project Location
Wrigley to Norman Wells,
Northwest Territories

Client/Project
144903025-0078 REV8

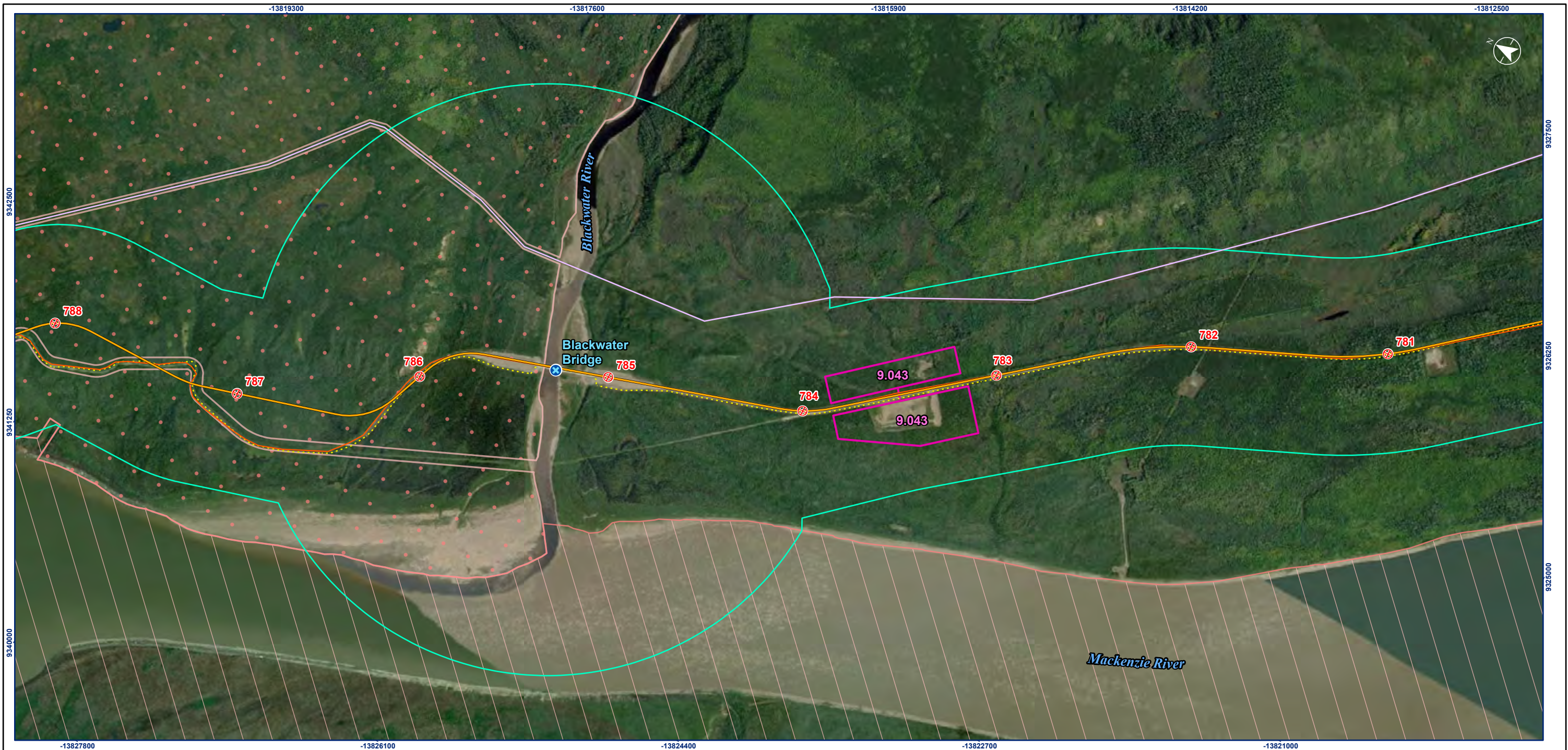
Prepared by CES on 2023-08-04
TR by DS on 2023-08-04
IR by EB on 2023-08-04

Government of the Northwest Territories
Mackenzie Valley Highway

Figure No.
5A.13

Title
**Mackenzie Valley Highway Project
Alignment Route Mapbook**

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
- Municipal Boundary
- Region Boundary
- Sahtu Land
- Surface Land Withdrawal Dehcho Region (R-048-2014)



Notes

1. Coordinate System: NAD 1983 UTM Zone 10N
2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
3. Sahtu Land Use Planning Board, July 28, 2021
4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada
- World Imagery: Earthstar Geographics
- World Hillshade: Esri, USGS. Imagery date: 2021.



Project Location
Wrigley to Norman Wells,
Northwest Territories

Client/Project
144903025-0078 REV8

Government of the Northwest Territories
Mackenzie Valley Highway

Figure No.
5A.14

**Mackenzie Valley Highway Project
Alignment Route Mapbook**

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
- Municipal Boundary
- Region Boundary
- Sahtu Land
- Surface Land Withdrawal Dehcho Region (R-048-2014)



Notes

1. Coordinate System: NAD 1983 UTM Zone 10N
2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
3. Sahtu Land Use Planning Board, July 28, 2021
4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada

World Imagery: Earthstar Geographics
World Hillshade: Esri, USGS. Imagery date: 2021.

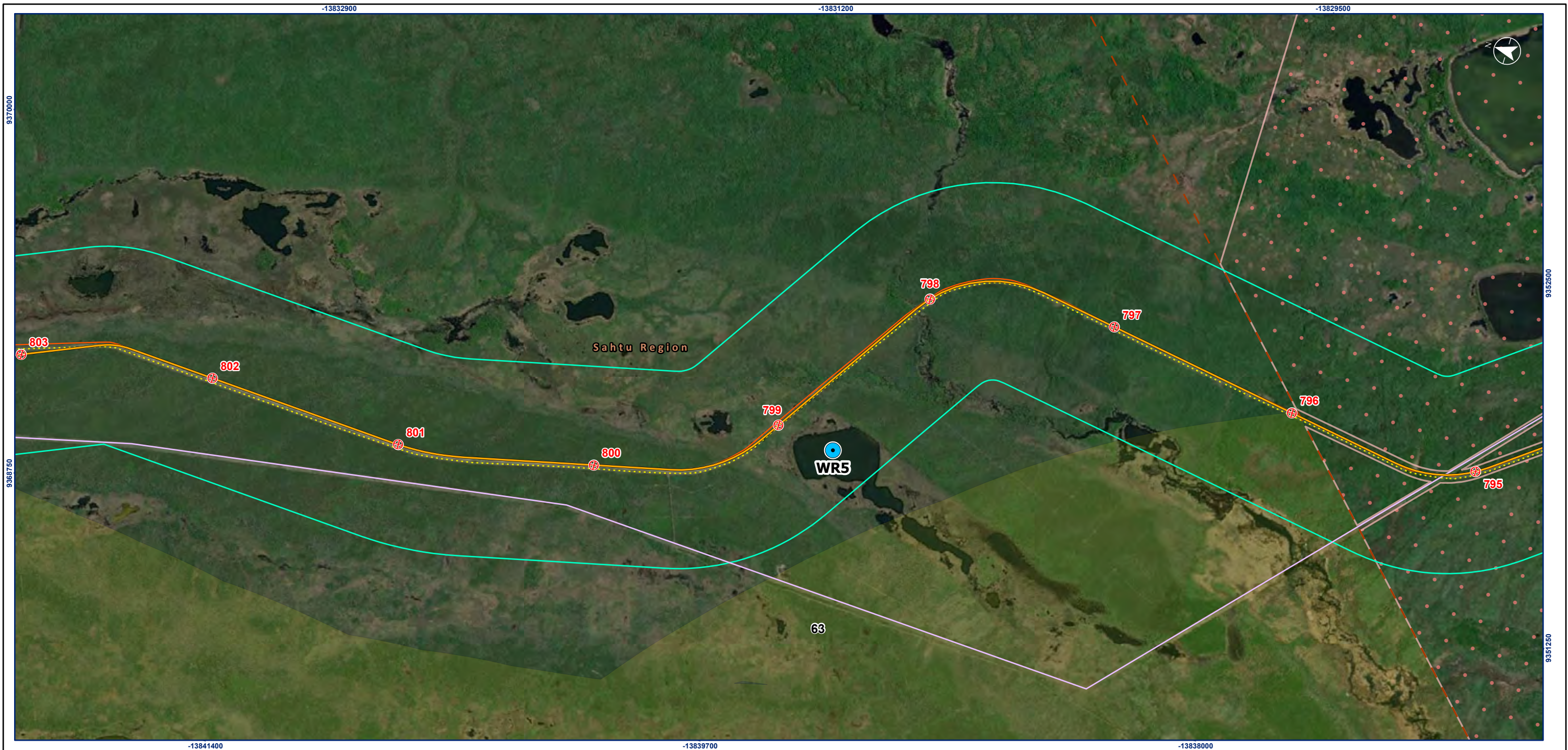


Project Location: Wrigley to Norman Wells, Northwest Territories
Client/Project: 144903025-0078 REV8

Government of the Northwest Territories
Mackenzie Valley Highway

Figure No. **5A.15**
Title: **Mackenzie Valley Highway Project Alignment Route Mapbook**

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
 - Municipal Boundary
 - Region Boundary
 - Sahtu Land
 - Surface Land Withdrawal Dehcho Region (R-048-2014)
- Sahtu Land Use Plan Zoning³**
- Special Management Zone



Notes

1. Coordinate System: NAD 1983 UTM Zone 10N
2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
3. Sahtu Land Use Planning Board, July 28, 2021
4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada

World Imagery: Earthstar Geographics
World Hillshade: Esri, USGS. Imagery date: 2021.



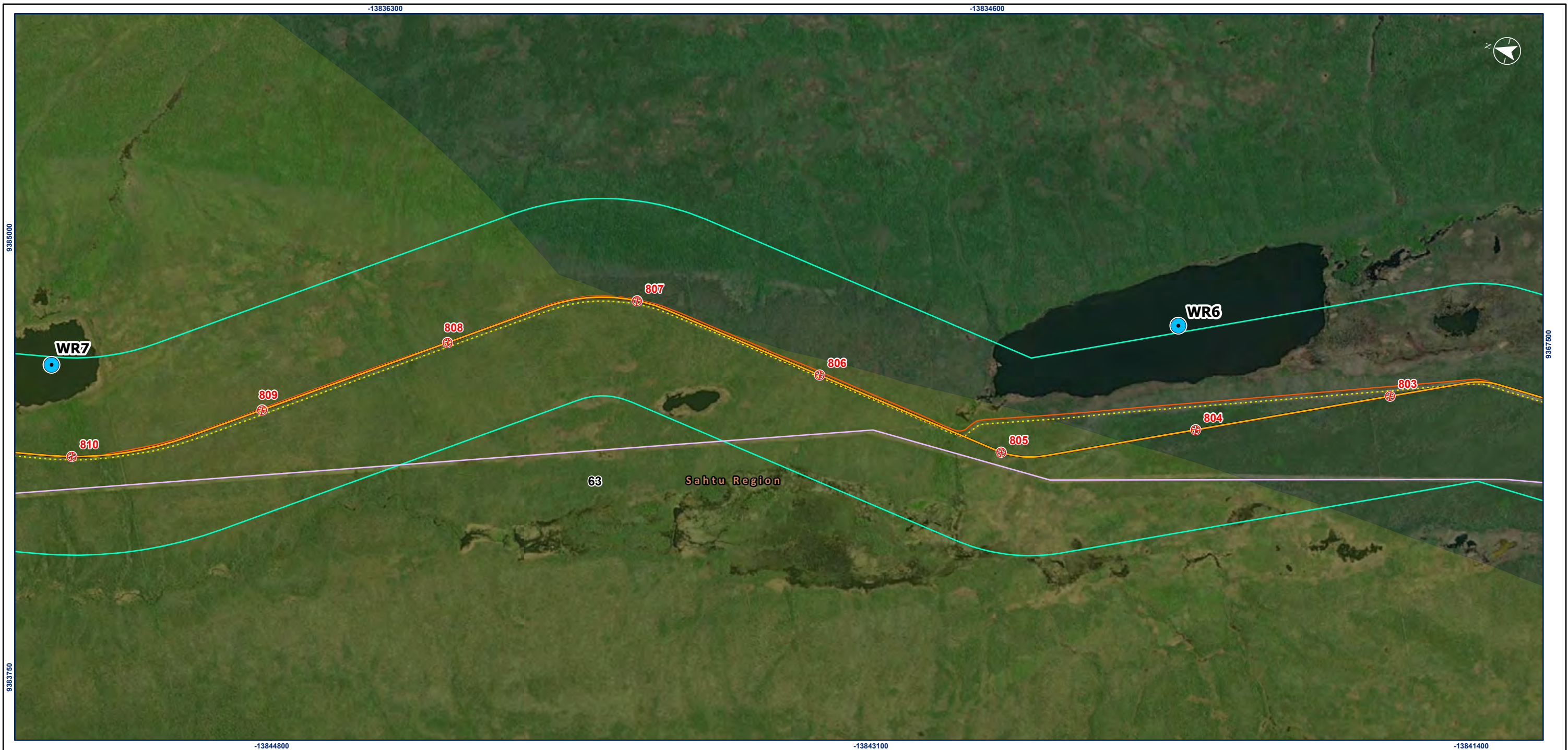
Project Location: Wrigley to Norman Wells, Northwest Territories
Client/Project: 144903025-0078 REV8

Government of the Northwest Territories
Mackenzie Valley Highway

Figure No. **5A.16**
Title

**Mackenzie Valley Highway Project
Alignment Route Mapbook**

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
 - Municipal Boundary
 - Region Boundary
 - Sahtu Land
 - Surface Land Withdrawal Dehcho Region (R-048-2014)
- Sahtu Land Use Plan Zoning³**
- Special Management Zone



Project Location: Wrigley to Norman Wells, Northwest Territories
 Prepared by CES on 2023-08-04
 TR by DS on 2023-08-04
 IR by EB on 2023-08-04
 Client/Project: 144903025-0078 REV8

Government of the Northwest Territories
 Mackenzie Valley Highway

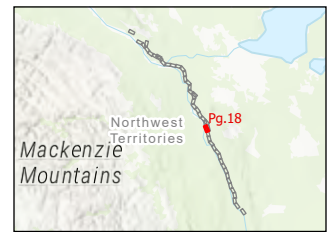
Figure No. **5A.17**
 Title: **Mackenzie Valley Highway Project Alignment Route Mapbook**

Notes
 1. Coordinate System: NAD 1983 UTM Zone 10N
 2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
 3. Sahtu Land Use Planning Board, July 28, 2021
 4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada
 World Imagery: Earthstar Geographics
 World Hillshade: Esri, USGS. Imagery date: 2021.

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



13851600 -13849900 -13848200 -13846500 -13844800

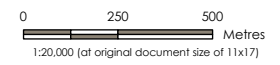


- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
 - Municipal Boundary
 - Region Boundary
 - Sahtu Land
 - Surface Land Withdrawal Dehcho Region (R-048-2014)
- Sahtu Land Use Plan Zoning³**
- Special Management Zone



Notes

1. Coordinate System: NAD 1983 UTM Zone 10N
2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
3. Sahtu Land Use Planning Board, July 28, 2021
4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada

World Imagery: Earthstar Geographics
World Hillshade: Esri, USGS. Imagery date: 2021.



Project Location
Wrigley to Norman Wells,
Northwest Territories

Client/Project
144903025-0078 REV8

Government of the Northwest Territories
Mackenzie Valley Highway

Figure No.
5A.18

Title
**Mackenzie Valley Highway Project
Alignment Route Mapbook**

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
- Municipal Boundary
- Region Boundary
- Sahtu Land
- Surface Land Withdrawal Dehcho Region (R-048-2014)
- Sahtu Land Use Plan Zoning³**
- Special Management Zone



Notes

1. Coordinate System: NAD 1983 UTM Zone 10N
2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
3. Sahtu Land Use Planning Board, July 28, 2021
4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada
- World Imagery: Earthstar Geographics
- World Hillshade: Esri, USGS. Imagery date: 2021.



Project Location: Wrigley to Norman Wells, Northwest Territories
 Prepared by CES on 2023-08-04
 TR by DS on 2023-08-04
 IR by EB on 2023-08-04
 Client/Project: 144903025-0078 REV8

Government of the Northwest Territories
 Mackenzie Valley Highway

Figure No. **5A.19**
 Title: **Mackenzie Valley Highway Project Alignment Route Mapbook**

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
- Municipal Boundary
- Region Boundary
- Sahtu Land
- Surface Land Withdrawal Dehcho Region (R-048-2014)
- Sahtu Land Use Plan Zoning³**
- Special Management Zone



Notes

1. Coordinate System: NAD 1983 UTM Zone 10N
2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
3. Sahtu Land Use Planning Board, July 28, 2021
4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada

World Imagery: Earthstar Geographics
World Hillshade: Esri, USGS. Imagery date: 2021.

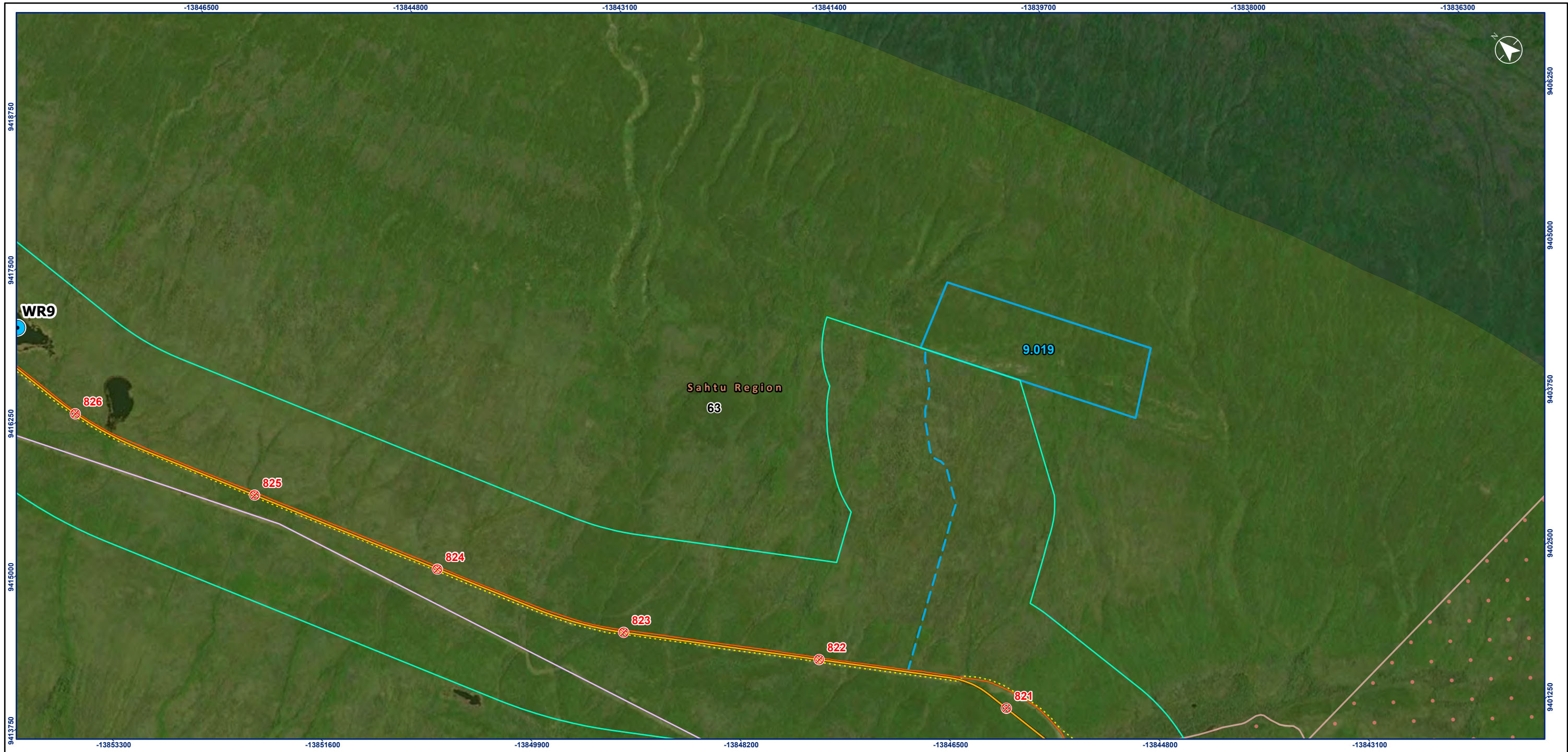


Project Location: Wrigley to Norman Wells, Northwest Territories
Client/Project: 144903025-0078 REV8

Government of the Northwest Territories
Mackenzie Valley Highway

Figure No. **5A.20**
Title: **Mackenzie Valley Highway Project Alignment Route Mapbook**

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



Notes

1. Coordinate System: NAD 1983 UTM Zone 10N
2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
3. Sahtu Land Use Planning Board, July 28, 2021
4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada

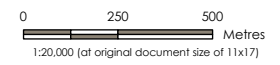
World Imagery: Earthstar Geographics
World Hillshade: Esri, USGS. Imagery date: 2021.

- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

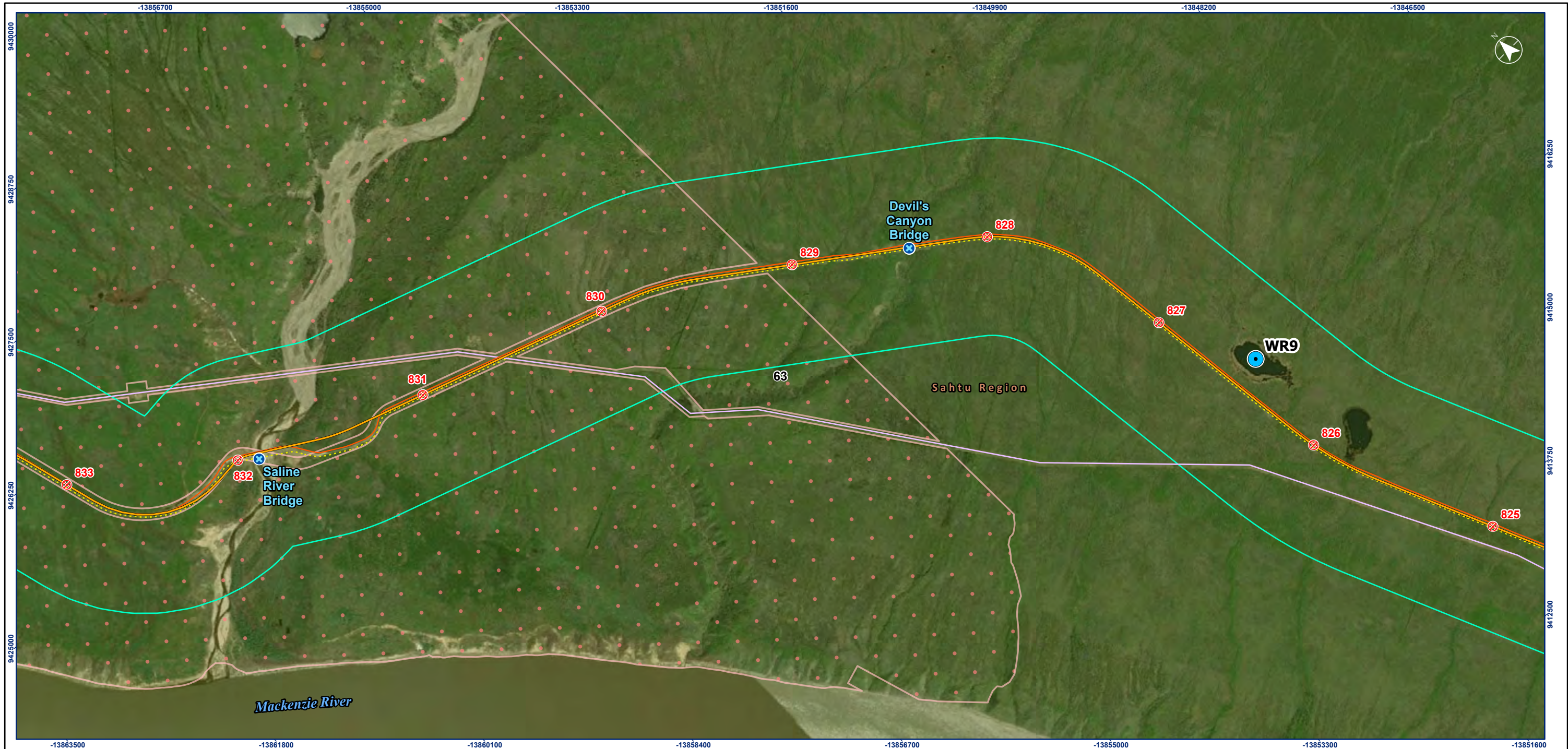
- Winter Road
 - Municipal Boundary
 - Region Boundary
 - Sahtu Land
 - Surface Land Withdrawal Dehcho Region (R-048-2014)
- Sahtu Land Use Plan Zoning³**
- Special Management Zone



Project Location: Wrigley to Norman Wells, Northwest Territories
 Prepared by CES on 2023-08-04
 TR by DS on 2023-08-04
 IR by EB on 2023-08-04
 Client/Project: 144903025-0078 REV8

Government of the Northwest Territories
 Mackenzie Valley Highway

Figure No. **5A.21**
 Title: **Mackenzie Valley Highway Project Alignment Route Mapbook**



-13863500 -13861800 -13860100 -13858400 -13856700 -13855000 -13853300 -13851600

9425000 9426250 9427500 9428750 9430000

9416250

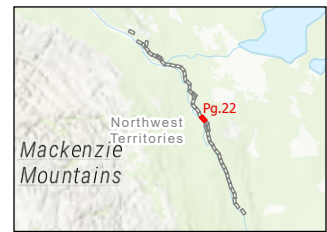
9415000

9413750

9412500

-13851600

-13863500 -13861800 -13860100 -13858400 -13856700 -13855000 -13853300 -13851600

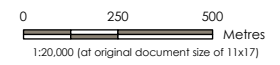


- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
- Municipal Boundary
- Region Boundary
- Sahtu Land
- Surface Land Withdrawal Dehcho Region (R-048-2014)
- Sahtu Land Use Plan Zoning³**
- Special Management Zone



Project Location: Wrigley to Norman Wells, Northwest Territories
 Prepared by CES on 2023-08-04
 TR by DS on 2023-08-04
 IR by EB on 2023-08-04
 Client/Project: 144903025-0078 REV8

Government of the Northwest Territories
 Mackenzie Valley Highway

Figure No. **5A.22**
 Title

Mackenzie Valley Highway Project
Alignment Route Mapbook

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
- Municipal Boundary
- Region Boundary
- Sahtu Land
- Surface Land Withdrawal Dehcho Region (R-048-2014)
- Sahtu Land Use Plan Zoning³**
- Special Management Zone



Notes

1. Coordinate System: NAD 1983 UTM Zone 10N
2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
3. Sahtu Land Use Planning Board, July 28, 2021
4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada

World Imagery: Earthstar Geographics
World Hillshade: Esri, USGS. Imagery date: 2021.



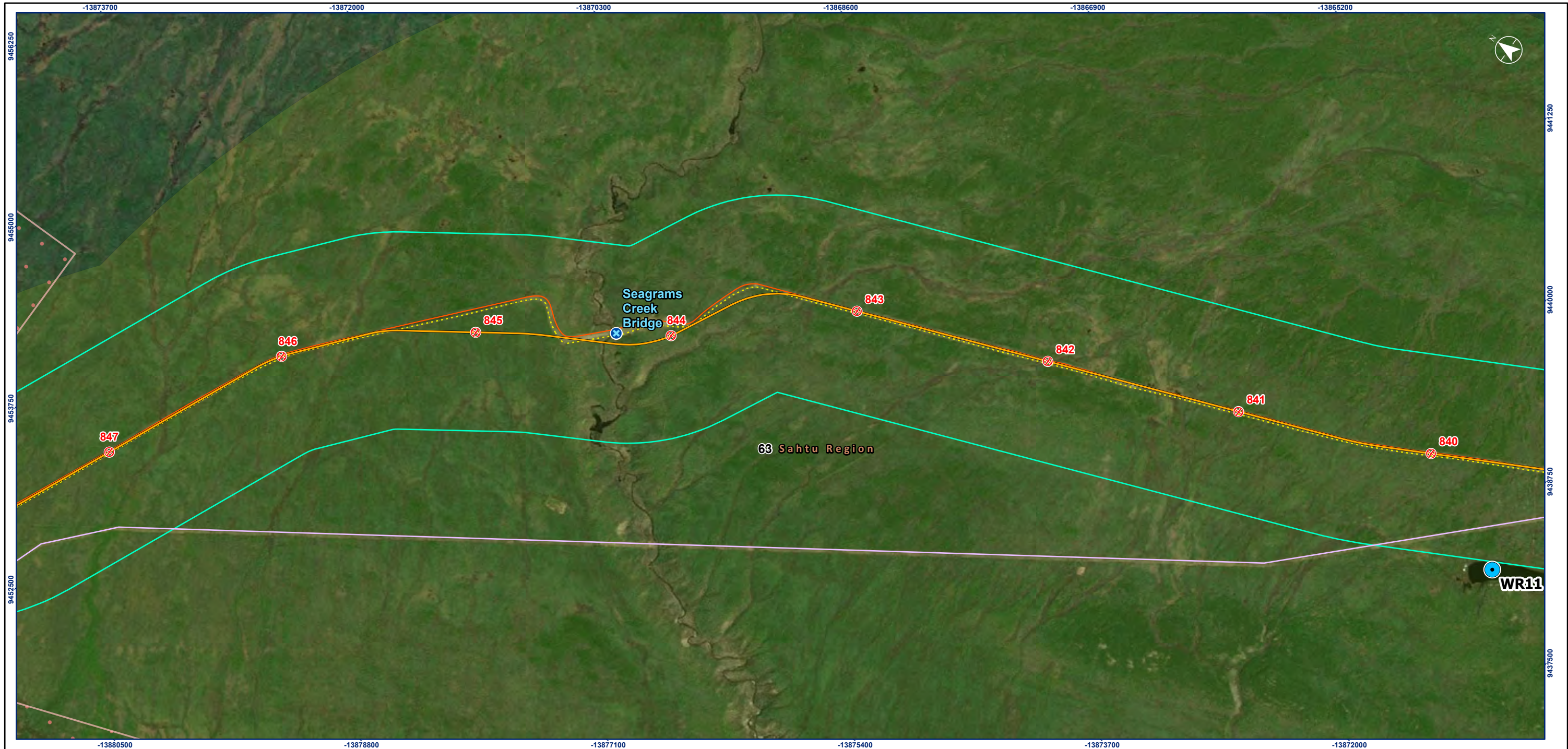
Project Location
Wrigley to Norman Wells,
Northwest Territories

Client/Project
144903025-0078 REV B

Government of the Northwest Territories
Mackenzie Valley Highway

Figure No.
5A.23

Title
**Mackenzie Valley Highway Project
Alignment Route Mapbook**



- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
- Municipal Boundary
- Region Boundary
- Sahtu Land
- Surface Land Withdrawal Dehcho Region (R-048-2014)
- Sahtu Land Use Plan Zoning³**
- Special Management Zone



Notes

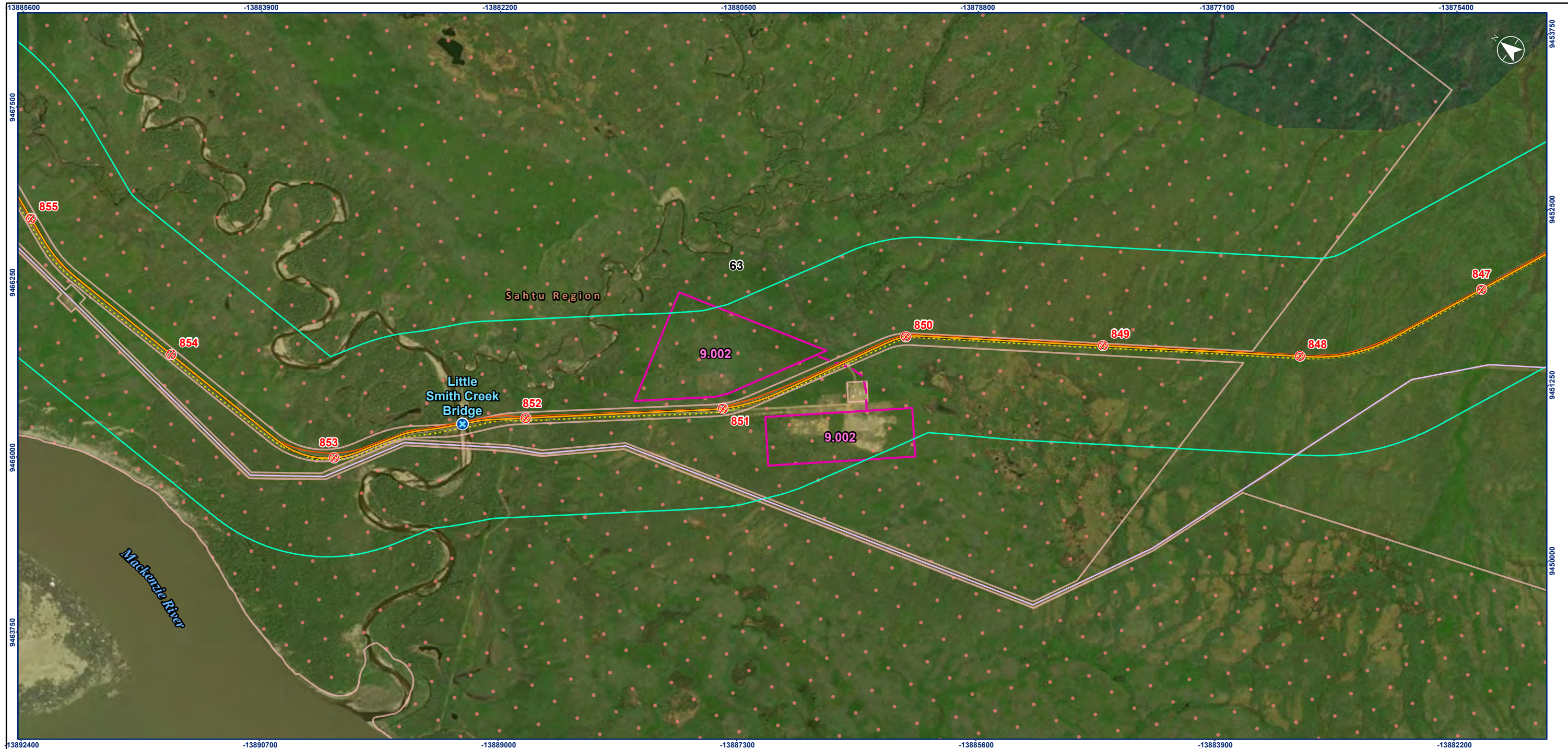
1. Coordinate System: NAD 1983 UTM Zone 10N
2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
3. Sahtu Land Use Planning Board, July 28, 2021
4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada
- World Imagery: Earthstar Geographics
- World Hillshade: Esri, USGS. Imagery date: 2021.



Project Location: Wrigley to Norman Wells, Northwest Territories
 Prepared by CES on 2023-08-04
 TR by DS on 2023-08-04
 IR by EB on 2023-08-04
 Client/Project: 144903025-0078 REV8

Government of the Northwest Territories
 Mackenzie Valley Highway

Figure No. **5A.24**
 Title: **Mackenzie Valley Highway Project Alignment Route Mapbook**



13885600 -13883900 -13882200 -13880500 -13878800 -13877100 -13875400
 9467500 9466250 9465000 9453750 9452500 9451250 9450000
 13892400 -13890700 -13889000 -13887300 -13885600 -13883900 -13882200

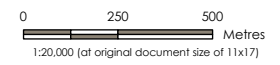


- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
- Municipal Boundary
- Region Boundary
- Sahtu Land
- Surface Land Withdrawal Dehcho Region (R-048-2014)
- Sahtu Land Use Plan Zoning³**
- Special Management Zone



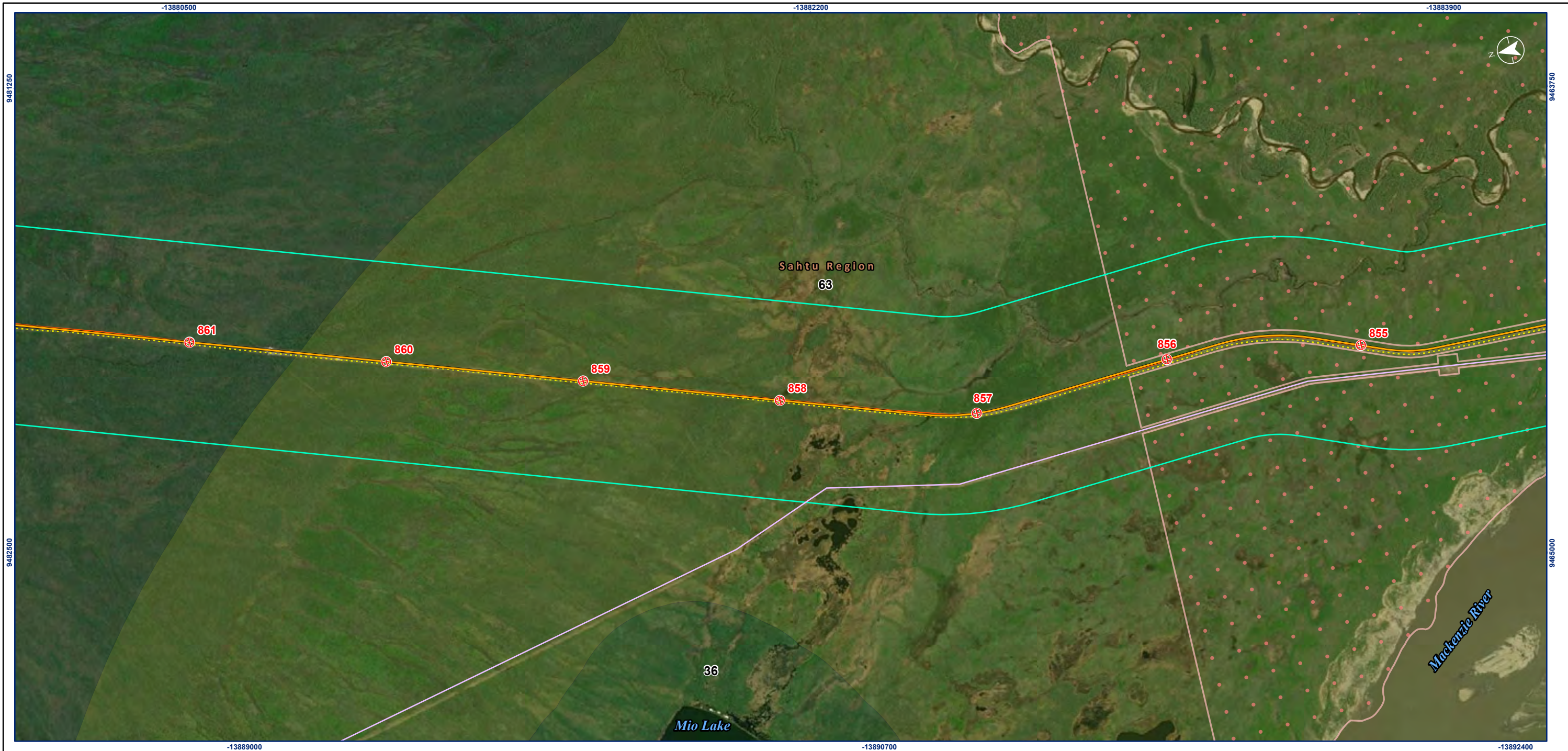
Notes
 1. Coordinate System: NAD 1983 UTM Zone 10N
 2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
 3. Sahtu Land Use Planning Board, July 28, 2021
 4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada
 World Imagery: Earthstar Geographics
 World Hillshade: Esri, USGS. Imagery date: 2021.



Project Location: Wrigley to Norman Wells, Northwest Territories
 Client/Project: 144903025-0078 REV8
 Prepared by CES on 2023-08-04
 TR by DS on 2023-08-04
 IR by EB on 2023-08-04

Government of the Northwest Territories
 Mackenzie Valley Highway

Figure No. **5A.25**
 Title: **Mackenzie Valley Highway Project Alignment Route Mapbook**



- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
 - Municipal Boundary
 - Region Boundary
 - Sahtu Land
 - Surface Land Withdrawal Dehcho Region (R-048-2014)
- Sahtu Land Use Plan Zoning³**
- Conservation Zone
 - Special Management Zone



Notes

1. Coordinate System: NAD 1983 UTM Zone 10N
2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
3. Sahtu Land Use Planning Board, July 28, 2021
4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada

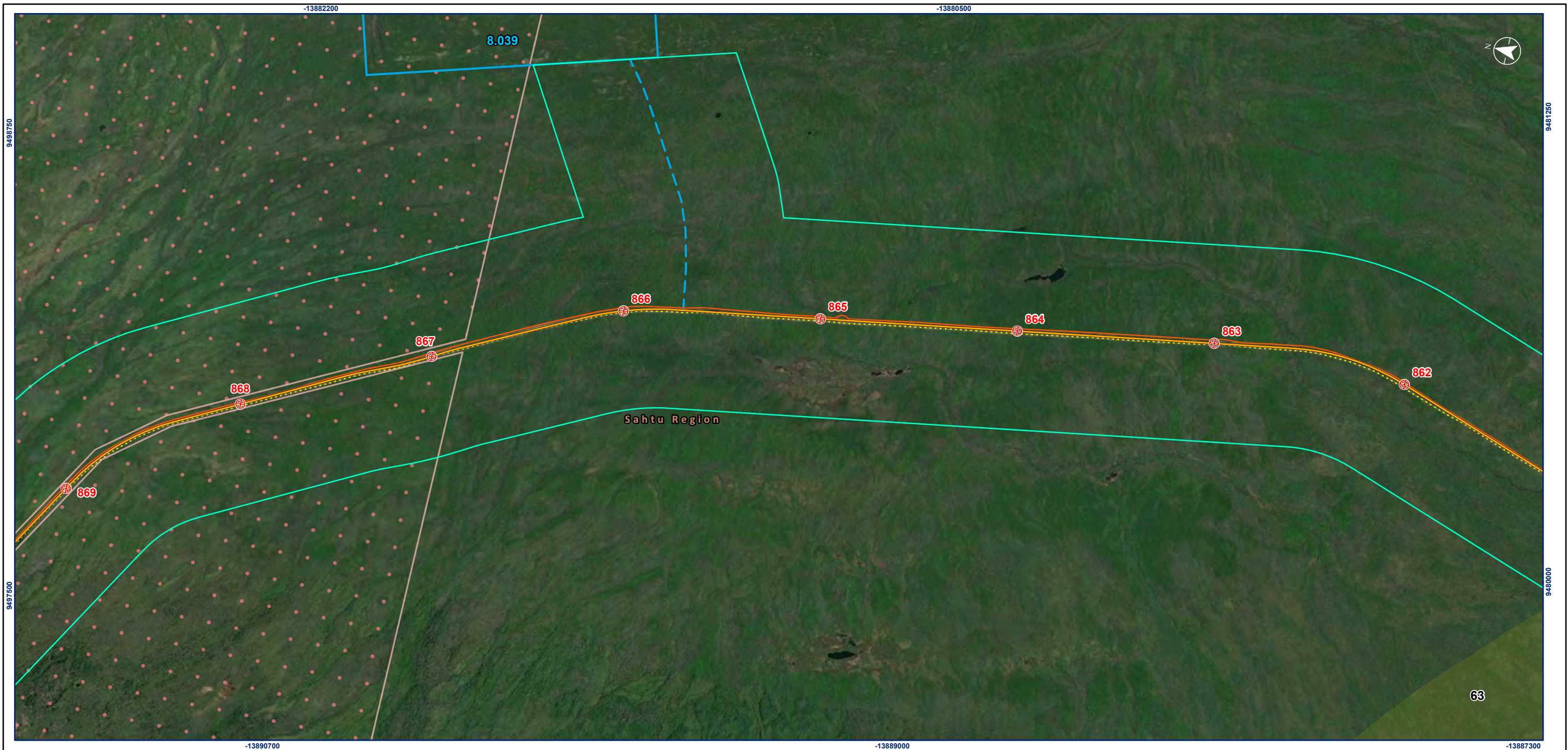
World Imagery: Earthstar Geographics
World Hillshade: Esri, USGS. Imagery date: 2021.



Project Location: Wrigley to Norman Wells, Northwest Territories
Client/Project: 144903025-0078 REV8

Government of the Northwest Territories
Mackenzie Valley Highway

Figure No. **5A.26**
Title: **Mackenzie Valley Highway Project Alignment Route Mapbook**



- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
 - Municipal Boundary
 - Region Boundary
 - Sahtu Land
 - Surface Land Withdrawal Dehcho Region (R-048-2014)
- Sahtu Land Use Plan Zoning³**
- Special Management Zone



Notes

1. Coordinate System: NAD 1983 UTM Zone 10N
2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
3. Sahtu Land Use Planning Board, July 28, 2021
4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada

World Imagery: Earthstar Geographics
World Hillshade: Esri, USGS. Imagery date: 2021.



Project Location
Wrigley to Norman Wells,
Northwest Territories

Prepared by CES on 2023-08-04
TR by DS on 2023-08-04
IR by EB on 2023-08-04

Client/Project
144903025-0078 REV8

Government of the Northwest Territories
Mackenzie Valley Highway

Figure No.
5A.27
Title
**Mackenzie Valley Highway Project
Alignment Route Mapbook**

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
 - Municipal Boundary
 - Region Boundary
 - Sahtu Land
 - Surface Land Withdrawal Dehcho Region (R-048-2014)
- Sahtu Land Use Plan Zoning³**
- Special Management Zone



Notes

1. Coordinate System: NAD 1983 UTM Zone 10N
2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
3. Sahtu Land Use Planning Board, July 28, 2021
4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCan, Parks Canada

World Imagery: Earthstar Geographics
World Hillshade: Esri, USGS. Imagery date: 2021.



Project Location
Wrigley to Norman Wells,
Northwest Territories

Prepared by CES on 2023-08-04
TR by DS on 2023-08-04
IR by EB on 2023-08-04

Client/Project
144903025-0078 REV8

Government of the Northwest Territories
Mackenzie Valley Highway

Figure No.
5A.28

Mackenzie Valley Highway Project
Alignment Route Mapbook



Notes
 1. Coordinate System: NAD 1983 UTM Zone 10N
 2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
 3. Sahtu Land Use Planning Board, July 28, 2021
 4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada
 World Imagery: Earthstar Geographics
 World Hillshade: Esri, USGS. Imagery date: 2021.

- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
- Municipal Boundary
- Region Boundary
- Sahtu Land
- Surface Land Withdrawal Dehcho Region (R-048-2014)
- Sahtu Land Use Plan Zoning³**
- Special Management Zone



Project Location: Wrigley to Norman Wells, Northwest Territories
 Prepared by CES on 2023-08-04
 TR by DS on 2023-08-04
 IR by EB on 2023-08-04
 Client/Project: 144903025-0078 REV8

Government of the Northwest Territories
 Mackenzie Valley Highway

Figure No.
5A.29
 Title

**Mackenzie Valley Highway Project
 Alignment Route Mapbook**



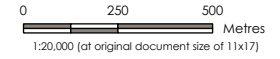
Notes
 1. Coordinate System: NAD 1983 UTM Zone 10N
 2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
 3. Sahtu Land Use Planning Board, July 28, 2021
 4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada
 World Imagery: Earthstar Geographics
 World Hillshade: Esri, USGS. Imagery date: 2021.

- ⊕ Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- ⊕ Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- - - Proposed Bear Rock Alignment Option

- - - Proposed Permanent Borrow Source Access Road Route
- - - Proposed Permanent Quarry Source Access Road Route
- - - Proposed Temporary Borrow Source Access Road Route
- - - Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- ⊗ Existing Bridge
- ⊕ Existing Crossing Culvert
- ⊕ Potential Water Source
- Northwest Territories Highway
- - - Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
- - - Municipal Boundary
- - - Region Boundary
- ▨ Sahtu Land
- ▨ Surface Land Withdrawal Dehcho Region (R-048-2014)
- Sahtu Land Use Plan Zoning³**
- Special Management Zone



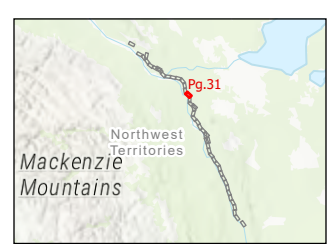
Project Location: Wrigley to Norman Wells, Northwest Territories
 Client/Project: 144903025-0078 REV8
 Prepared by CES on 2023-08-04
 TR by DS on 2023-08-04
 IR by EB on 2023-08-04

Government of the Northwest Territories
 Mackenzie Valley Highway

Figure No. **5A.30**
 Title

**Mackenzie Valley Highway Project
 Alignment Route Mapbook**

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
 - Municipal Boundary
 - Region Boundary
 - Sahtu Land
 - Surface Land Withdrawal Dehcho Region (R-048-2014)
- Sahtu Land Use Plan Zoning³**
- Special Management Zone



Notes

1. Coordinate System: NAD 1983 UTM Zone 10N
2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
3. Sahtu Land Use Planning Board, July 28, 2021
4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada
- World Imagery: Earthstar Geographics
- World Hillshade: Esri, USGS. Imagery date: 2021.



Project Location
Wrigley to Norman Wells,
Northwest Territories

Prepared by CES on 2023-08-04
TR by DS on 2023-08-04
IR by EB on 2023-08-04

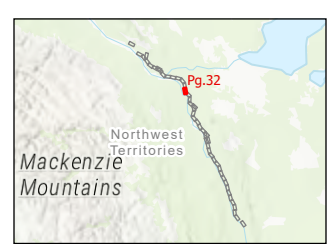
Client/Project
144903025-0078 REV8

Government of the Northwest Territories
Mackenzie Valley Highway

Figure No.
5A.31

Title
**Mackenzie Valley Highway Project
Alignment Route Mapbook**

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
- Municipal Boundary
- Region Boundary
- Sahtu Land
- Surface Land Withdrawal Dehcho Region (R-048-2014)
- Sahtu Land Use Plan Zoning³**
- Special Management Zone



Notes

1. Coordinate System: NAD 1983 UTM Zone 10N
2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
3. Sahtu Land Use Planning Board, July 28, 2021
4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada
- World Imagery: Earthstar Geographics
- World Hillshade: Esri, USGS. Imagery date: 2021.



Project Location
Wrigley to Norman Wells,
Northwest Territories

Prepared by CES on 2023-08-04
TR by DS on 2023-08-04
IR by EB on 2023-08-04

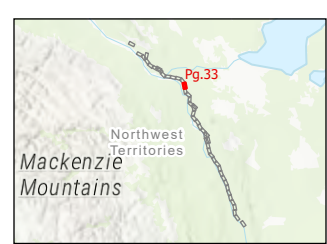
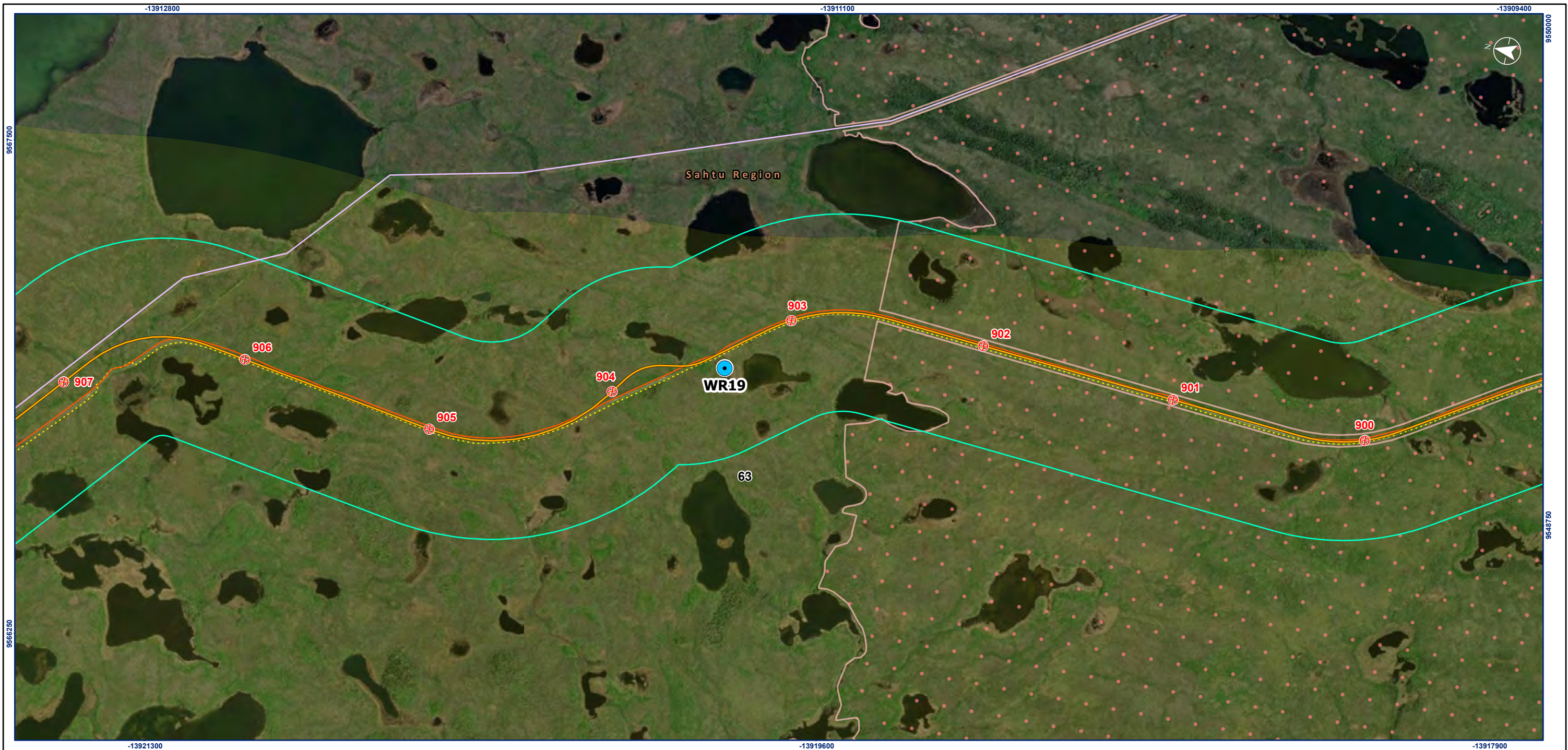
Client/Project
144903025-0078 REV8

Government of the Northwest Territories
Mackenzie Valley Highway

Figure No.
5A.32

Title
**Mackenzie Valley Highway Project
Alignment Route Mapbook**

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
 - Municipal Boundary
 - Region Boundary
 - Sahtu Land
 - Surface Land Withdrawal Dehcho Region (R-048-2014)
- Sahtu Land Use Plan Zoning³**
- Special Management Zone



Notes

1. Coordinate System: NAD 1983 UTM Zone 10N
2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
3. Sahtu Land Use Planning Board, July 28, 2021
4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada

World Imagery: Earthstar Geographics
World Hillshade: Esri, USGS. Imagery date: 2021.



Project Location
Wrigley to Norman Wells,
Northwest Territories

Prepared by CES on 2023-08-04
TR by DS on 2023-08-04
IR by EB on 2023-08-04

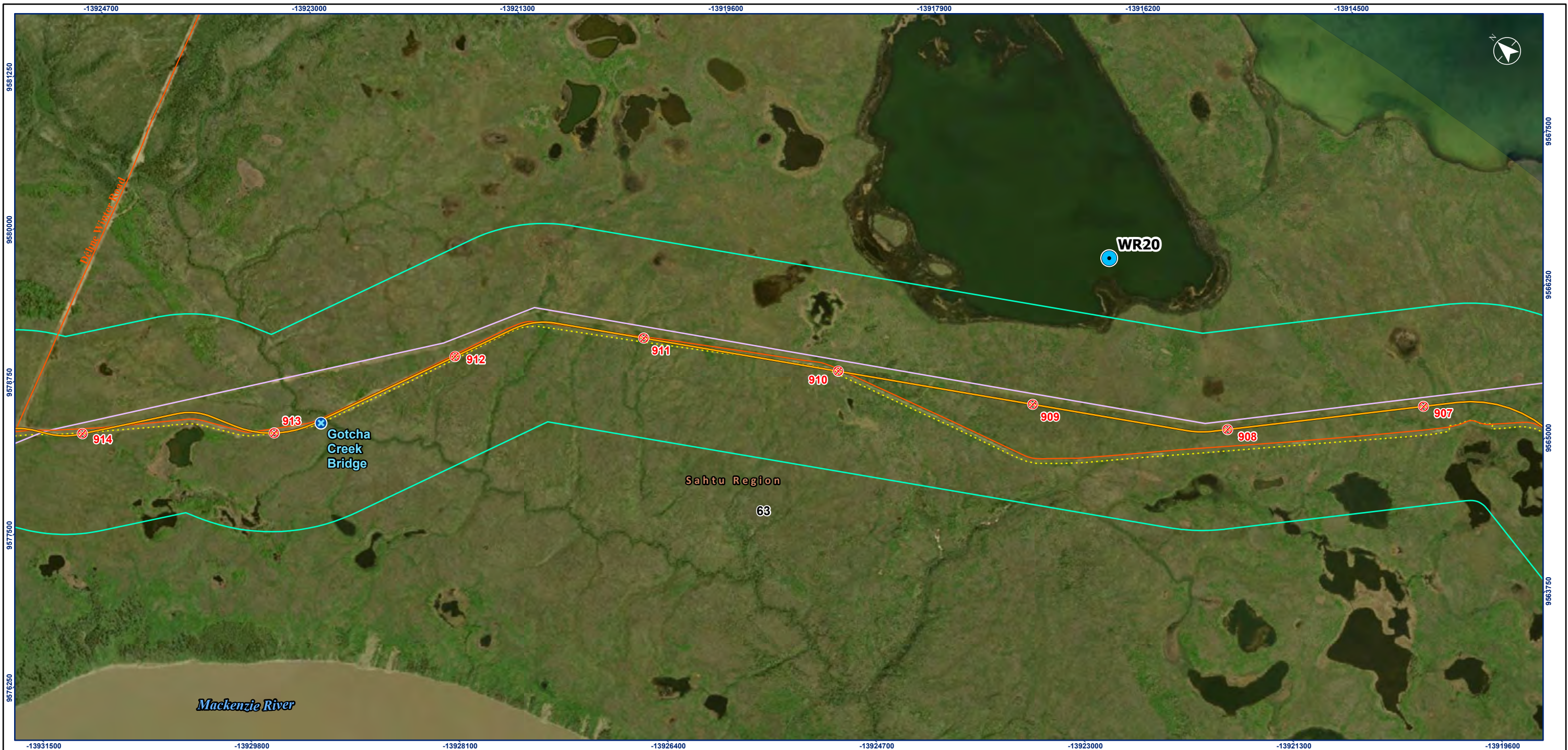
Client/Project
144903025-0078 REV8

Government of the Northwest Territories
Mackenzie Valley Highway

Figure No.
5A.33

**Mackenzie Valley Highway Project
Alignment Route Mapbook**

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
- Municipal Boundary
- Region Boundary
- Sahtu Land
- Surface Land Withdrawal Dehcho Region (R-048-2014)
- Sahtu Land Use Plan Zoning³**
- Special Management Zone



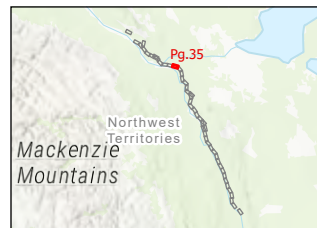
Project Location: Wrigley to Norman Wells, Northwest Territories
 Prepared by CES on 2023-08-04
 TR by DS on 2023-08-04
 IR by EB on 2023-08-04
 Client/Project: 144903025-0078 REV8

Government of the Northwest Territories
 Mackenzie Valley Highway

Figure No. **5A.34**
 Title: **Mackenzie Valley Highway Project Alignment Route Mapbook**

Notes
 1. Coordinate System: NAD 1983 UTM Zone 10N
 2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT, Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
 3. Sahtu Land Use Planning Board, July 28, 2021
 4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada
 World Imagery: Earthstar Geographics
 World Hillshade: Esri, USGS. Imagery date: 2021.

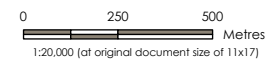
Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



Notes

1. Coordinate System: NAD 1983 UTM Zone 10N
2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
3. Sahtu Land Use Planning Board, July 28, 2021
4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada
- World Imagery: Earthstar Geographics
- World Hillshade: Esri, USGS. Imagery date: 2021.

- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option
- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source
- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)
- Winter Road
- Municipal Boundary
- Region Boundary
- Sahtu Land
- Surface Land Withdrawal Dehcho Region (R-048-2014)
- Sahtu Land Use Plan Zoning³**
- Special Management Zone



Project Location
Wrigley to Norman Wells,
Northwest Territories

Prepared by CES on 2023-08-04
TR by DS on 2023-08-04
IR by EB on 2023-08-04

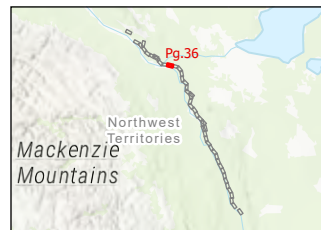
Client/Project
144903025-0078 REV8

Government of the Northwest Territories
Mackenzie Valley Highway

Figure No.
5A.35

Title
**Mackenzie Valley Highway Project
Alignment Route Mapbook**

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



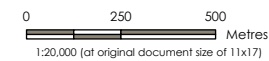
Notes
 1. Coordinate System: NAD 1983 UTM Zone 10N
 2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
 3. Sahtu Land Use Planning Board, July 28, 2021
 4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada
 World Imagery: Earthstar Geographics
 World Hillshade: Esri, USGS. Imagery date: 2021.

- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
- Municipal Boundary
- Region Boundary
- Sahtu Land
- Surface Land Withdrawal Dehcho Region (R-048-2014)
- Sahtu Land Use Plan Zoning³**
- Special Management Zone



Project Location: Wrigley to Norman Wells, Northwest Territories
 Prepared by CES on 2023-08-04
 TR by DS on 2023-08-04
 IR by EB on 2023-08-04
 Client/Project: 144903025-0078 REV8

Government of the Northwest Territories
 Mackenzie Valley Highway

Figure No.
5A.36
 Title

**Mackenzie Valley Highway Project
 Alignment Route Mapbook**



- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
 - Municipal Boundary
 - Region Boundary
 - Sahtu Land
 - Surface Land Withdrawal Dehcho Region (R-048-2014)
- Sahtu Land Use Plan Zoning³**
- Special Management Zone



Notes

1. Coordinate System: NAD 1983 UTM Zone 10N
2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
3. Sahtu Land Use Planning Board, July 28, 2021
4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada

World Imagery: Earthstar Geographics
World Hillshade: Esri, USGS. Imagery date: 2021.



Project Location
Wrigley to Norman Wells,
Northwest Territories

Prepared by CES on 2023-08-04
TR by DS on 2023-08-04
IR by EB on 2023-08-04

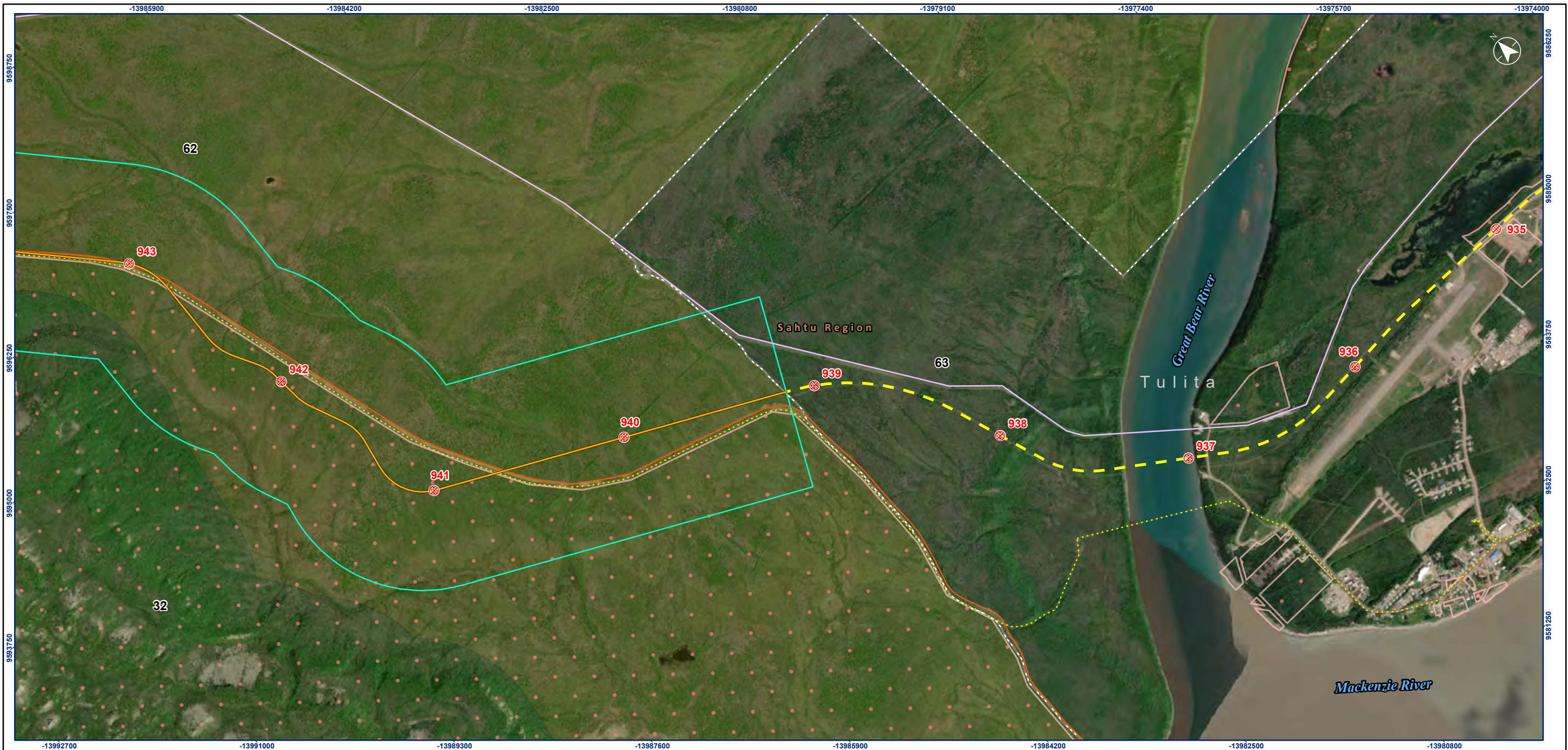
Client/Project
144903025-0078 REV8

Government of the Northwest Territories
Mackenzie Valley Highway

Figure No.
5A.37

Title
**Mackenzie Valley Highway Project
Alignment Route Mapbook**

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
 - Municipal Boundary
 - Region Boundary
 - Sahtu Land
 - Surface Land Withdrawal Dehcho Region (R-048-2014)
- Sahtu Land Use Plan Zoning³**
- Conservation Zone
 - Special Management Zone



Notes

1. Coordinate System: NAD 1983 UTM Zone 10N
2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
3. Sahtu Land Use Planning Board, July 28, 2021
4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada

World Imagery: Earthstar Geographics
World Hillshade: Esri, USGS. Imagery date: 2021.



Project Location
Wrigley to Norman Wells,
Northwest Territories

Client/Project
144903025-0078 REV8

Government of the Northwest Territories
Mackenzie Valley Highway

Figure No.
5A.38

**Mackenzie Valley Highway Project
Alignment Route Mapbook**

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



Notes

1. Coordinate System: NAD 1983 UTM Zone 10N
2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT, Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
3. Sahtu Land Use Planning Board, July 28, 2021
4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada

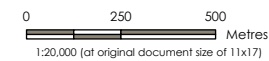
World Imagery: Earthstar Geographics
World Hillshade: Esri, USGS. Imagery date: 2021.

- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
 - Municipal Boundary
 - Region Boundary
 - Sahtu Land
 - Surface Land Withdrawal Dehcho Region (R-048-2014)
- Sahtu Land Use Plan Zoning³**
- Conservation Zone
 - Special Management Zone



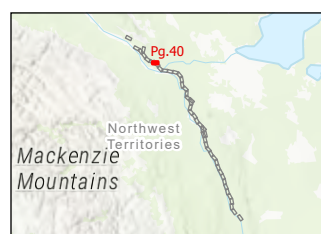
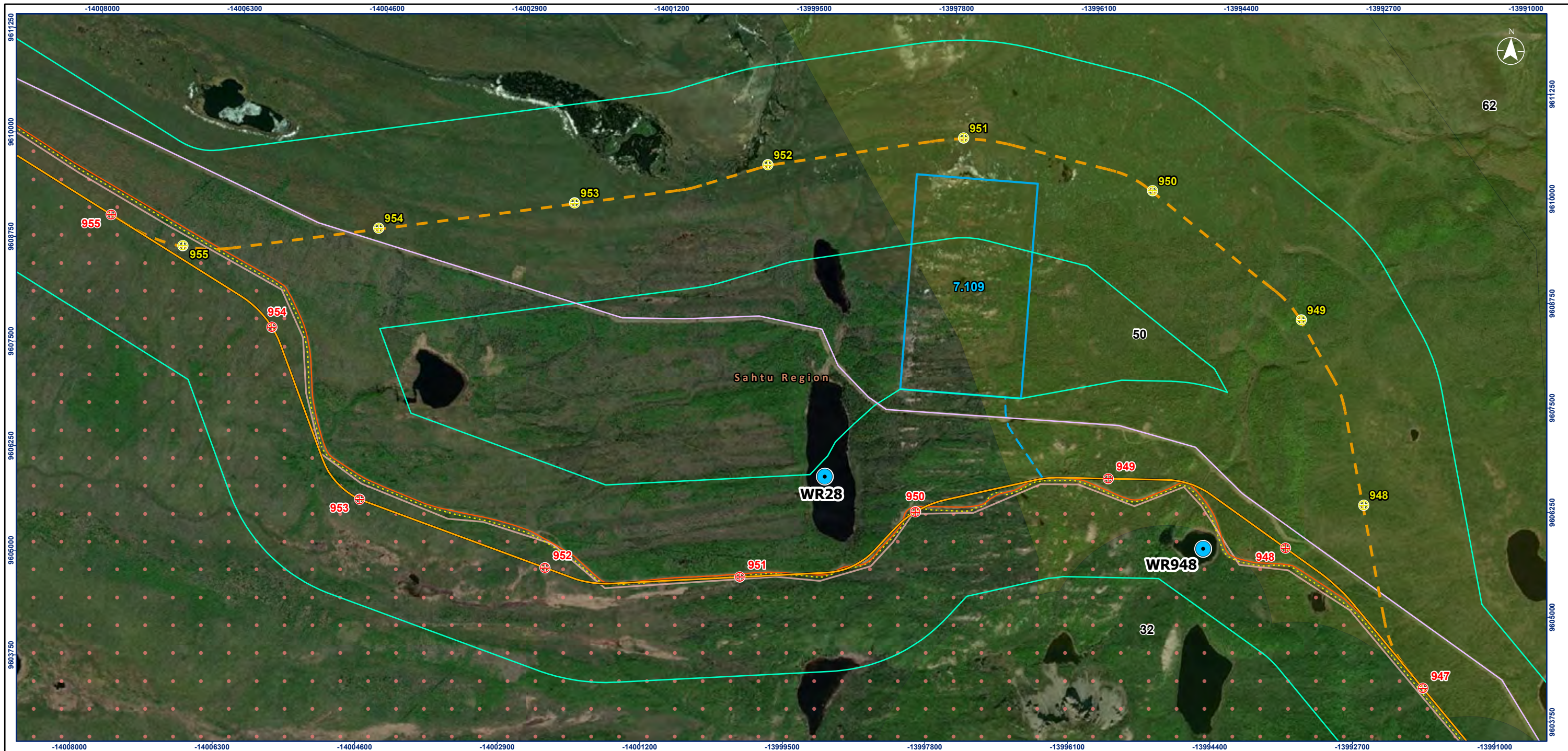
Project Location: Wrigley to Norman Wells, Northwest Territories
 Prepared by CES on 2023-08-04
 TR by DS on 2023-08-04
 IR by EB on 2023-08-04

Client/Project: 144903025-0078 REV8

Government of the Northwest Territories
 Mackenzie Valley Highway

Figure No. **5A.39**
 Title

**Mackenzie Valley Highway Project
 Alignment Route Mapbook**



- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
 - Municipal Boundary
 - Region Boundary
 - Sahtu Land
 - Surface Land Withdrawal Dehcho Region (R-048-2014)
- Sahtu Land Use Plan Zoning³**
- Conservation Zone
 - Special Management Zone



Notes

1. Coordinate System: NAD 1983 UTM Zone 10N
2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
3. Sahtu Land Use Planning Board, July 28, 2021
4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada

World Imagery: Earthstar Geographics
World Hillshade: Esri, USGS. Imagery date: 2021.



Project Location
Wrigley to Norman Wells,
Northwest Territories

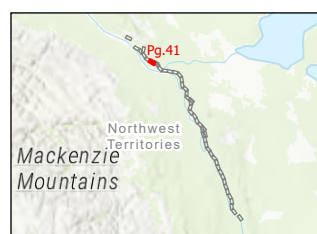
Client/Project
144903025-0078 REV8

Government of the Northwest Territories
Mackenzie Valley Highway

Figure No.
5A.40

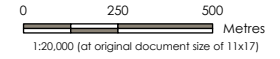
Title
**Mackenzie Valley Highway Project
Alignment Route Mapbook**

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



Notes
 1. Coordinate System: NAD 1983 UTM Zone 10N
 2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
 3. Sahtu Land Use Planning Board, July 28, 2021
 4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada
 World Imagery: Earthstar Geographics
 World Hillshade: Esri, USGS. Imagery date: 2021.

- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option
- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source
- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)
- Winter Road
- Municipal Boundary
- Region Boundary
- Sahtu Land
- Surface Land Withdrawal Dehcho Region (R-048-2014)
- Sahtu Land Use Plan Zoning³**
- Special Management Zone

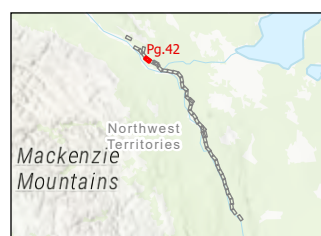
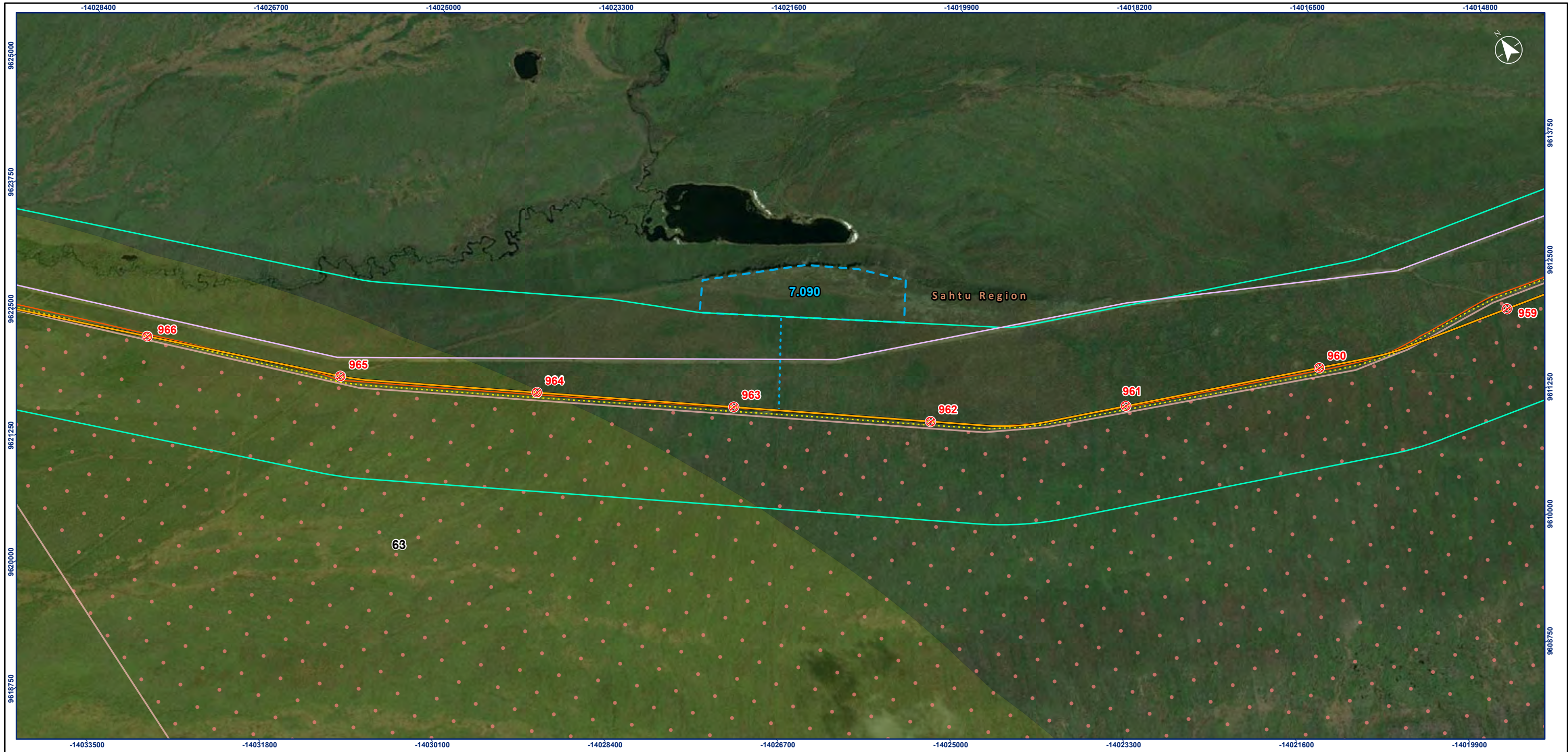


Project Location: Wrigley to Norman Wells, Northwest Territories
 Prepared by CES on 2023-08-04
 TR by DS on 2023-08-04
 IR by EB on 2023-08-04
 Client/Project: 144903025-0078 REV8

Government of the Northwest Territories
 Mackenzie Valley Highway

Figure No. **5A.41**
 Title: **Mackenzie Valley Highway Project Alignment Route Mapbook**

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



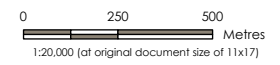
Notes
 1. Coordinate System: NAD 1983 UTM Zone 10N
 2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
 3. Sahtu Land Use Planning Board, July 28, 2021
 4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada
 World Imagery: Earthstar Geographics
 World Hillshade: Esri, USGS. Imagery date: 2021.

- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
 - Municipal Boundary
 - Region Boundary
 - Sahtu Land
 - Surface Land Withdrawal Dehcho Region (R-048-2014)
- Sahtu Land Use Plan Zoning³**
- Special Management Zone



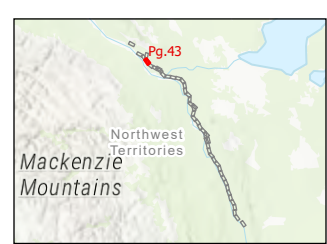
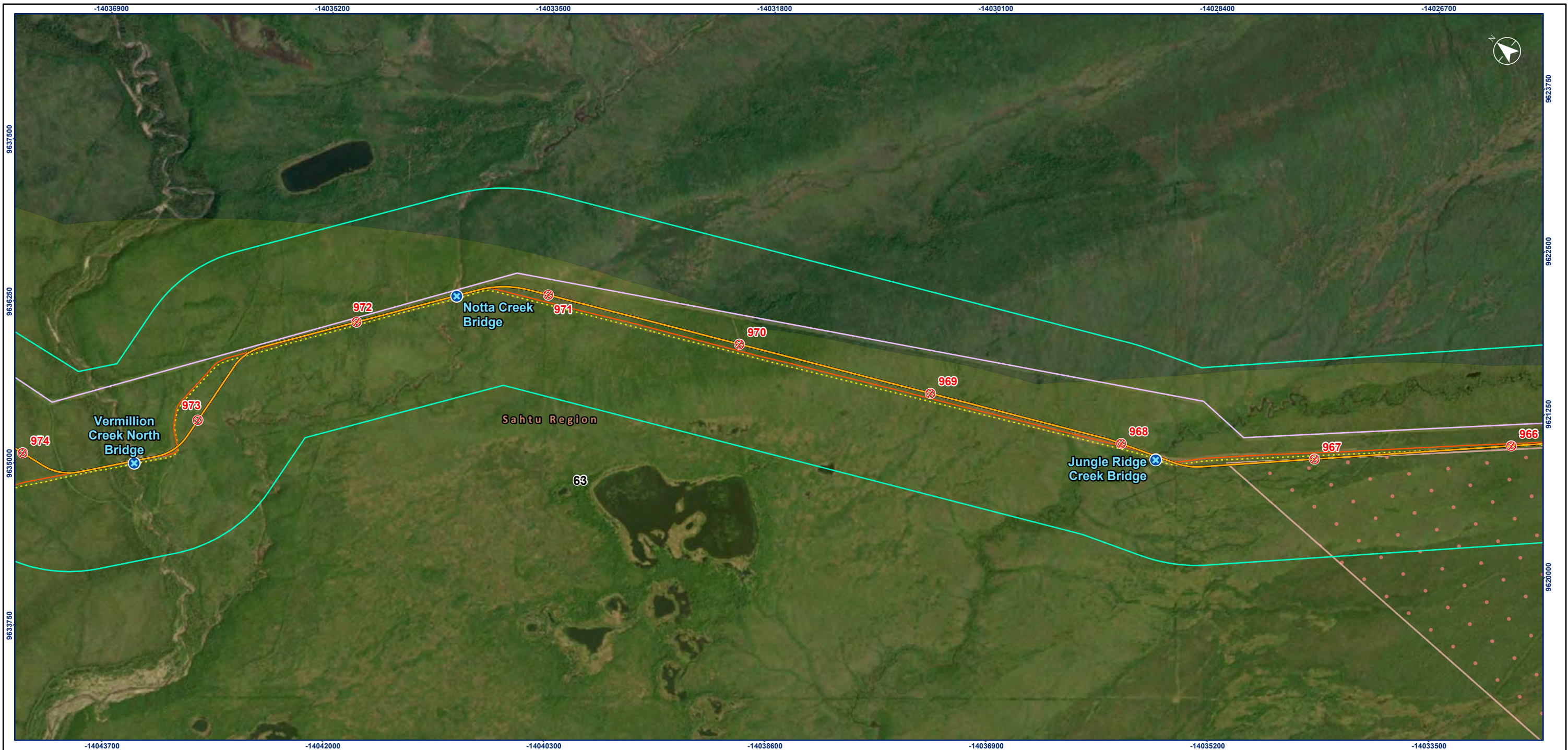
Project Location: Wrigley to Norman Wells, Northwest Territories
 Prepared by CES on 2023-08-04
 TR by DS on 2023-08-04
 IR by EB on 2023-08-04
 Client/Project: 144903025-0078 REV8

Government of the Northwest Territories
 Mackenzie Valley Highway

Figure No. **5A.42**
 Title

**Mackenzie Valley Highway Project
 Alignment Route Mapbook**

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
- Municipal Boundary
- Region Boundary
- Sahtu Land
- Surface Land Withdrawal Dehcho Region (R-048-2014)
- Sahtu Land Use Plan Zoning³**
- Special Management Zone



Notes

1. Coordinate System: NAD 1983 UTM Zone 10N
2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT, Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
3. Sahtu Land Use Planning Board, July 28, 2021
4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada
- World Imagery: Earthstar Geographics
- World Hillshade: Esri, USGS. Imagery date: 2021.



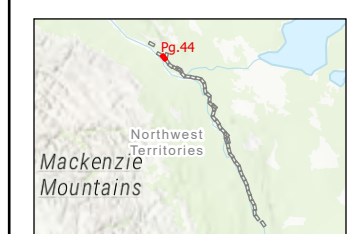
Project Location: Wrigley to Norman Wells, Northwest Territories
 Prepared by CES on 2023-08-04
 TR by DS on 2023-08-04
 IR by EB on 2023-08-04
 Client/Project: 144903025-0078 REV8

Government of the Northwest Territories
 Mackenzie Valley Highway

Figure No. **5A.43**
 Title

**Mackenzie Valley Highway Project
 Alignment Route Mapbook**

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
 - Municipal Boundary
 - Region Boundary
 - Sahtu Land
 - Surface Land Withdrawal Dehcho Region (R-048-2014)
- Sahtu Land Use Plan Zoning³**
- Special Management Zone



Notes

- Coordinate System: NAD 1983 UTM Zone 10N
- Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT, Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
- Sahtu Land Use Planning Board, July 28, 2021
- Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada
- World Imagery: Earthstar Geographics
- World Hillshade: Esri, USGS. Imagery date: 2021.



Project Location: Wrigley to Norman Wells, Northwest Territories
 Prepared by CES on 2023-08-04
 TR by DS on 2023-08-04
 IR by EB on 2023-08-04

Client/Project: 144903025-0078 REV8
 Government of the Northwest Territories
 Mackenzie Valley Highway

Figure No. **5A.44**
 Title: **Mackenzie Valley Highway Project Alignment Route Mapbook**

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.

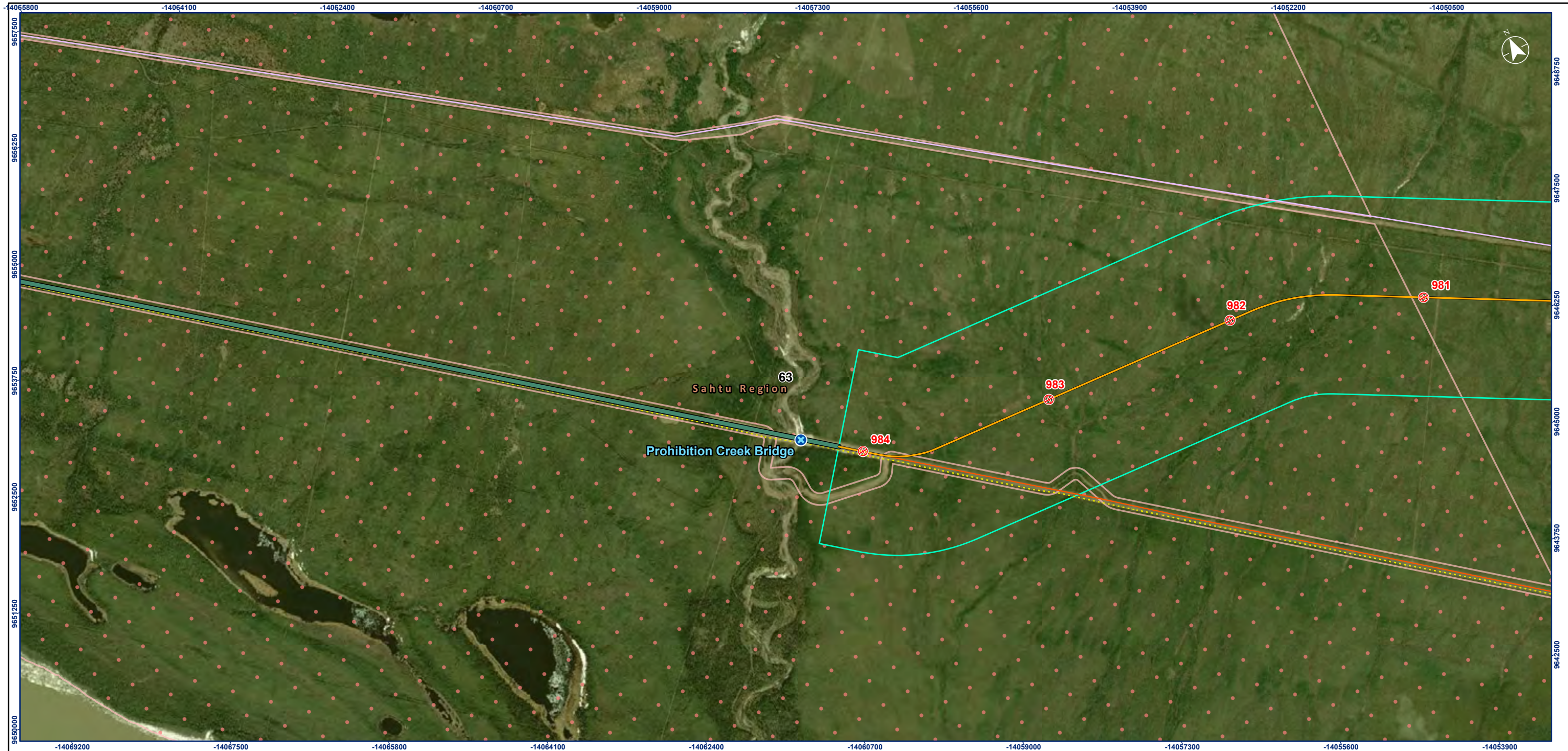


Project Location

Client/Project

Figure No.

Title



- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
- Municipal Boundary
- Region Boundary
- Sahtu Land
- Surface Land Withdrawal Dehcho Region (R-048-2014)
- Sahtu Land Use Plan Zoning³**
- Special Management Zone



Notes

1. Coordinate System: NAD 1983 UTM Zone 10N
2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT. Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
3. Sahtu Land Use Planning Board, July 28, 2021
4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada
- World Imagery: Earthstar Geographics
- World Hillshade: Esri, USGS. Imagery date: 2021.



Project Location
Wrigley to Norman Wells,
Northwest Territories

Prepared by CES on 2023-08-04
TR by DS on 2023-08-04
IR by EB on 2023-08-04

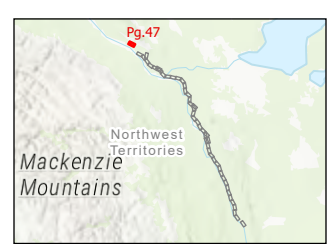
Client/Project
144903025-0078 REV8

Government of the Northwest Territories
Mackenzie Valley Highway

Figure No.
5A.46

Mackenzie Valley Highway Project
Alignment Route Mapbook

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



- Proposed Mackenzie Valley Highway Kilometre Marker (KM)
- Proposed Bear Rock Alignment Option Kilometre Marker (KM)
- Proposed Mackenzie Valley Highway Alignment Route
- Proposed Bear Rock Alignment Option

- Proposed Permanent Borrow Source Access Road Route
- Proposed Permanent Quarry Source Access Road Route
- Proposed Temporary Borrow Source Access Road Route
- Proposed Temporary Quarry Source Access Road Route
- Proposed Permanent Borrow Source
- Proposed Permanent Quarry Source
- Proposed Temporary Borrow Source
- Proposed Temporary Quarry Source

- Alignment Routing Corridor
- Existing Bridge
- Existing Crossing Culvert
- Potential Water Source
- Northwest Territories Highway
- Mackenzie Valley Fibre Line
- Norman Wells Pipeline (Enbridge)
- Canyon Creek All Season Access Road (Constructed)
- Prohibition Creek Access Road (In Construction)
- Great Bear River Bridge (Proposed)

- Winter Road
 - Municipal Boundary
 - Region Boundary
 - Sahtu Land
 - Surface Land Withdrawal Dehcho Region (R-048-2014)
- Sahtu Land Use Plan Zoning³**
- Special Management Zone



Notes

1. Coordinate System: NAD 1983 UTM Zone 10N
2. Data Sources: GNWT (Government of the Northwest Territories) Centre for Geomatics. n.d. Inventory of Landscape Change Map Viewer, GNWT, Centre for Geomatics. n.d. Open Data, MVLWB. n.d. Public Registry, Sahtu Land and Water Board. n.d. Public Registry, Environment and Natural Resources GNWT, Government of Canada, Stantec, Wilson and Haas 2012, and Caslys Consulting Ltd., SLUP (2023)
3. Sahtu Land Use Planning Board, July 28, 2021
4. Background: World Topographic Map: Northwest Territories, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada

World Imagery: Earthstar Geographics
World Hillshade: Esri, USGS. Imagery date: 2021.



Project Location
Wrigley to Norman Wells,
Northwest Territories

Client/Project
144903025-0078 REV8

Government of the Northwest Territories
Mackenzie Valley Highway

Figure No.
5A.47

**Mackenzie Valley Highway Project
Alignment Route Mapbook**

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.