Completing the Mackenzie Valley Highway to Tuktoyaktuk

"The First Step"

Presentation to Northern Transportation Conference

Anchorage, September 20, 2011

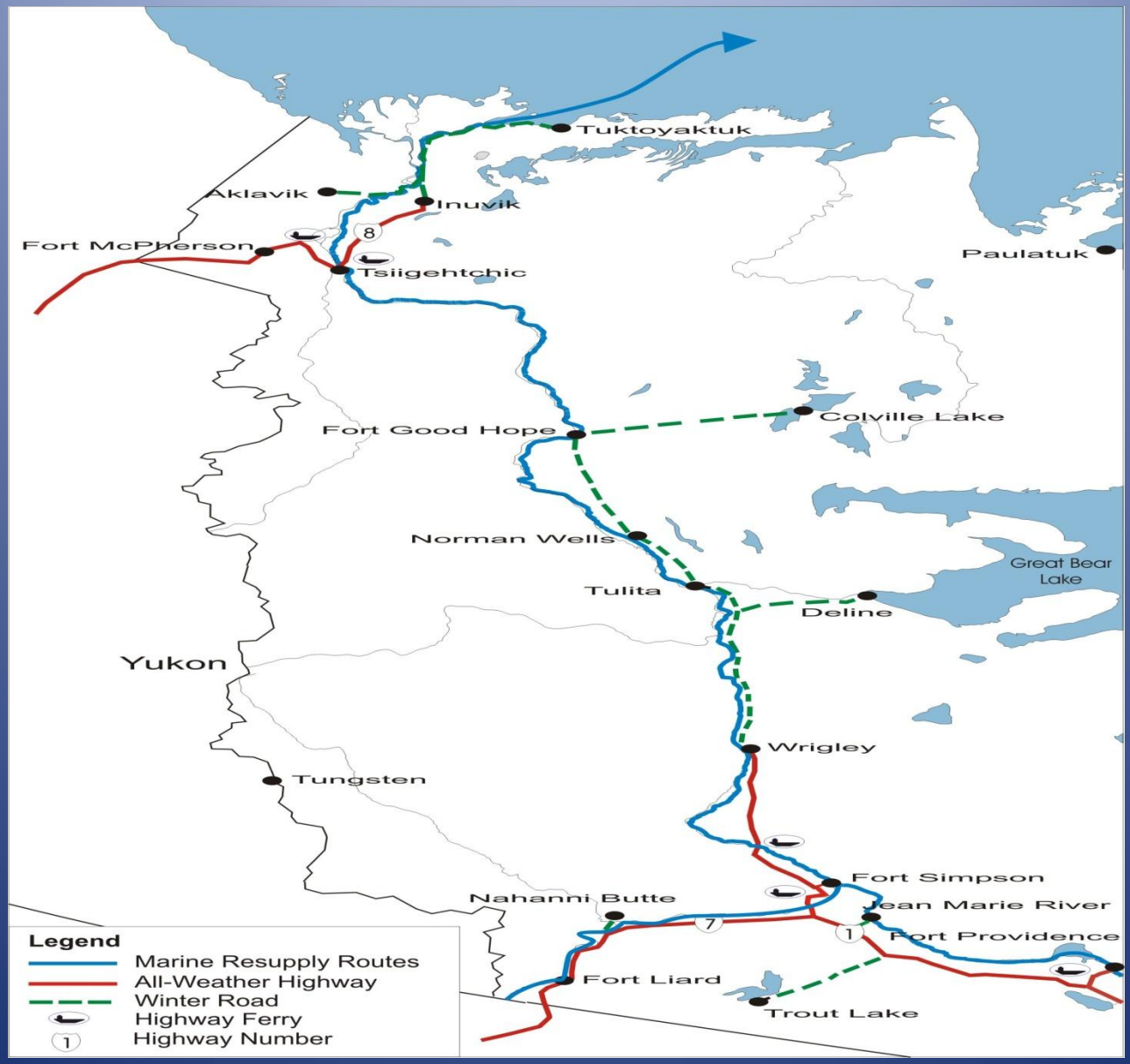
Background

- Long Standing Goal for Canada- 1950's Roads to Resources
- Open up the Northern Regions to create easier access to its resources for development possibilities
- In 1972 Public Works Canada completed surveys, geotechnical, environmental studies, design work and initiated construction

Background

- 1977 construction halted
- Road completed to Wrigley in 90's
- Approximately 90 km remaining to be constructed in Dehcho
- GNWT position that funding for the construction of this road remains a federal responsibility
- Since 2000's ongoing winter road improvements (34 bridges)

Existing Network



Mackenzie Valley Winter Road

Mackenzie Valley Winter Road

Mackenzie Valley Winter Road

Background

- 1990 GNWT Transportation Strategy & 1999 GNWT Highway Strategy identified MVH as a goal
- Highway Strategy included
  - Environmental Scoping Study
  - Pre-Engineering Study
  - Benefit Cost and Economic Impact Analysis
  - Financing Study
  - Land Issues Study

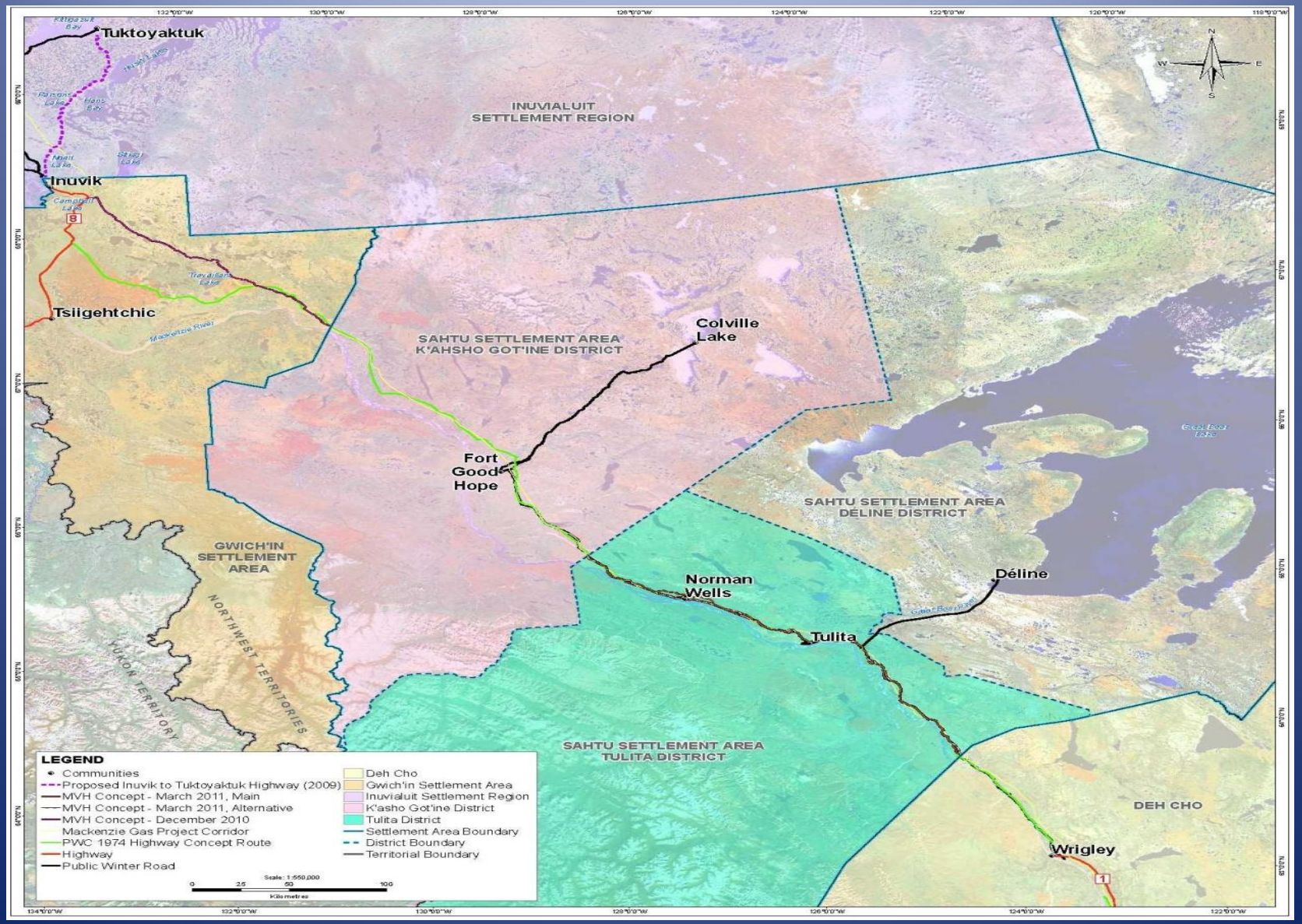
Background

- Highway Strategy followed by a number of strategic funding proposals

Current Status

- 16TH Assembly considered the MVH a priority
- Planning has to be completed before any decisions to construct
- Preparation of a Project Description Report (PDR) will enable additional consideration
- PDR funding ($8 million) from CanNor and GNWT
- Work on PDR is being positioned as a partnership between GNWT DOT and respective land claims groups

Planning on a Regional Basis

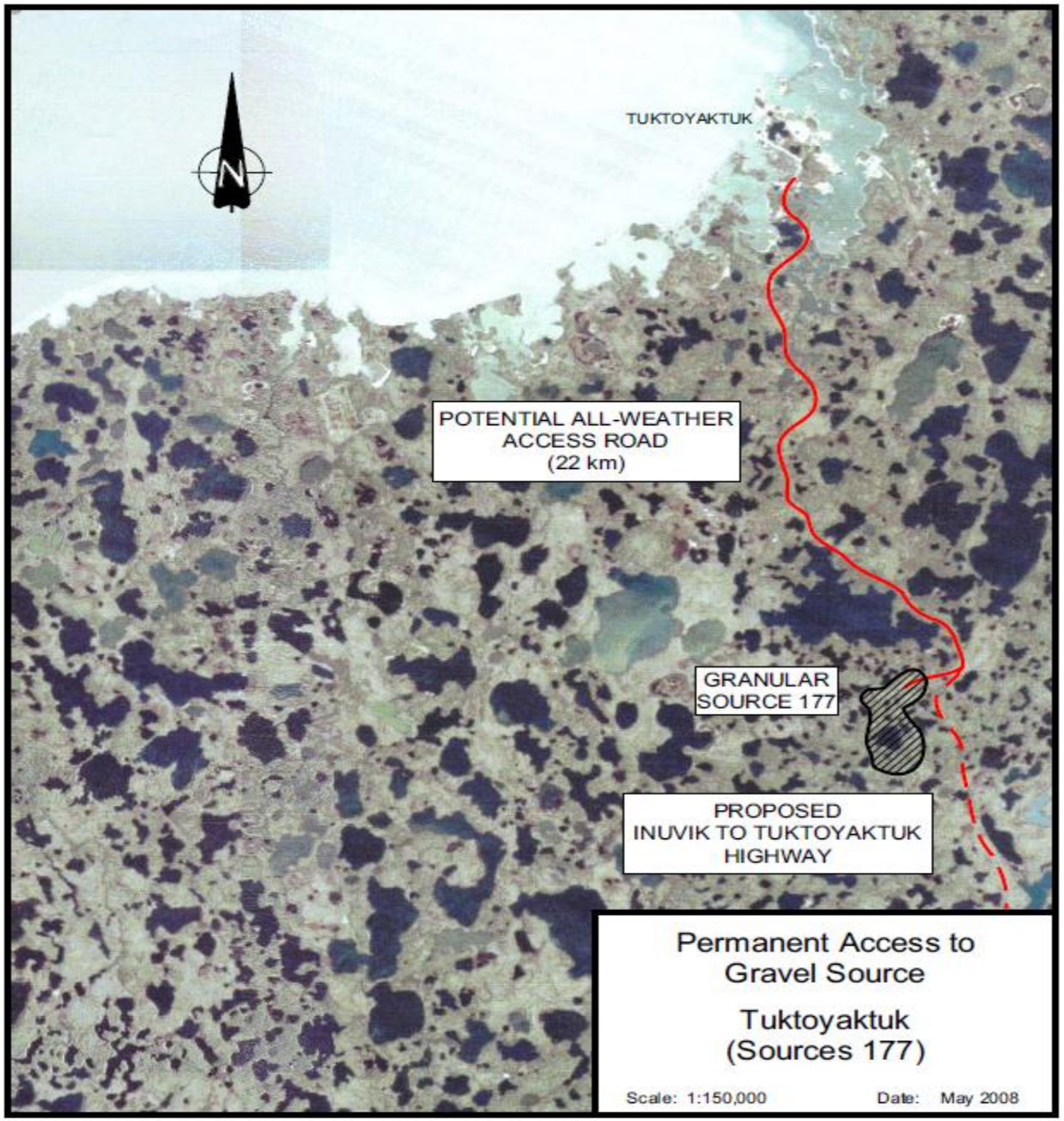


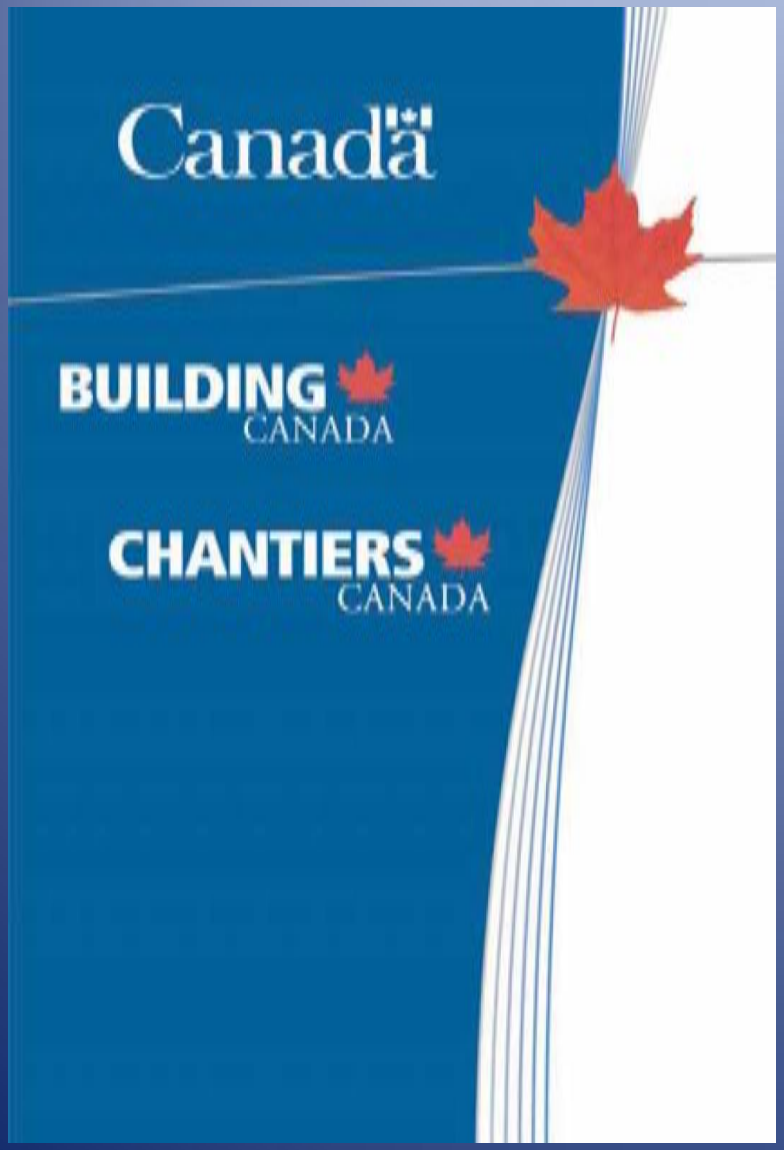
Current Status

- Work completed or underway in all regions
- Gwich'in PDR completed June 15th
- Tulitia District September 2011
- Kahsho Gotine October 2011
- Dehcho November 2011
- Potential application to MVLWB January 2012

…. Got to crawl before you step…

Learning from Source 177 Access Road


N
TUKTOYAKTUK
POTENTIAL ALL-WEATHER ACCESS ROAD (22 km)
GRANULAR SOURCE 177
PROPOSED INUVIK TO TUKTOYAKTUK HIGHWAY
Permanent Access to Gravel Source
Tuktoyaktuk (Sources 177)
Scale: 1:150,000
Date: May 2008



Budget 2007 provided funding from Building Canada Plan for Access Road to Source 177

Source 177

Source 177

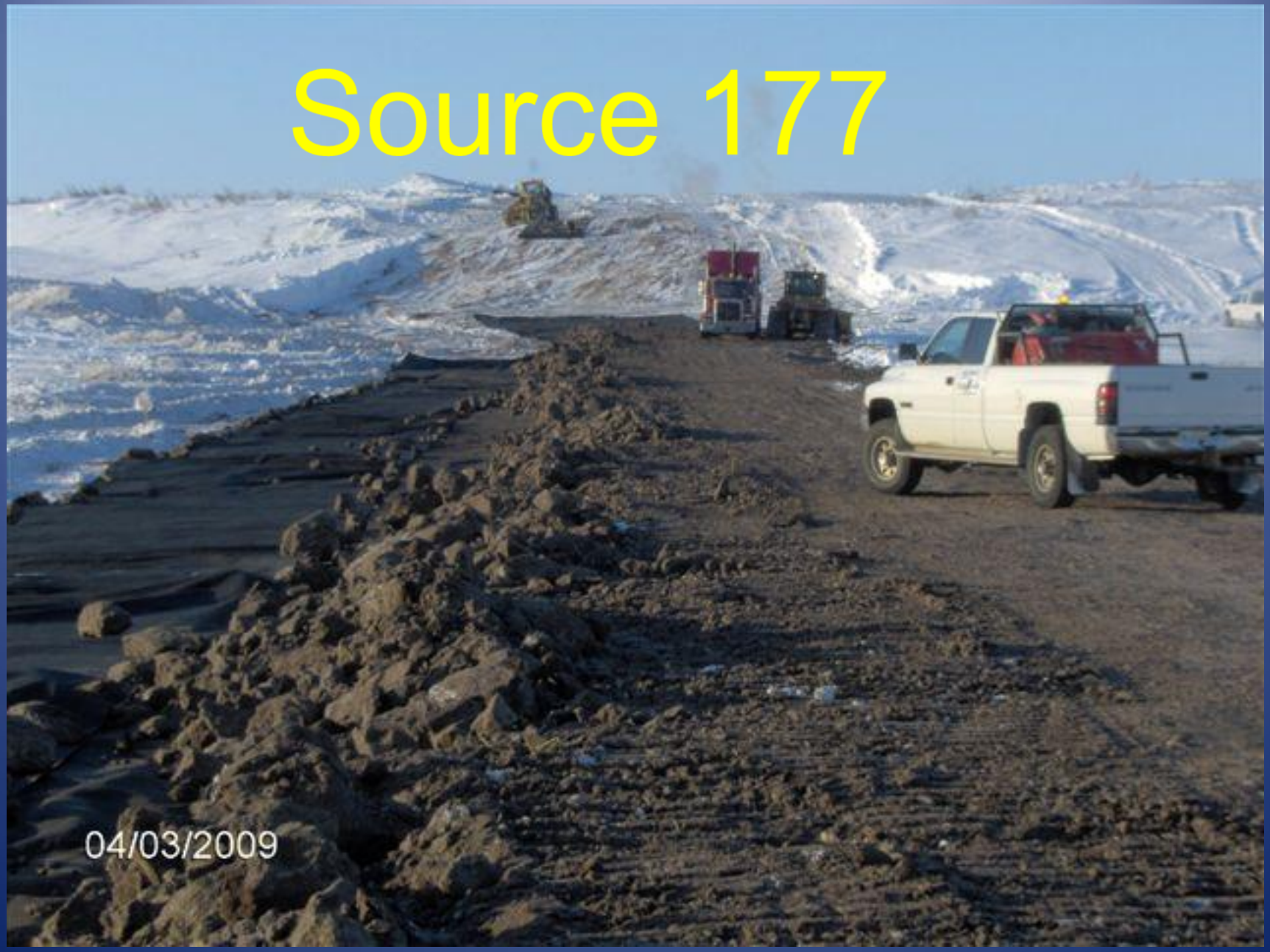
Source 177

Source 177

Source 177

Source 177

Source 177



Source 177

Source 177

Source 177

Source 177

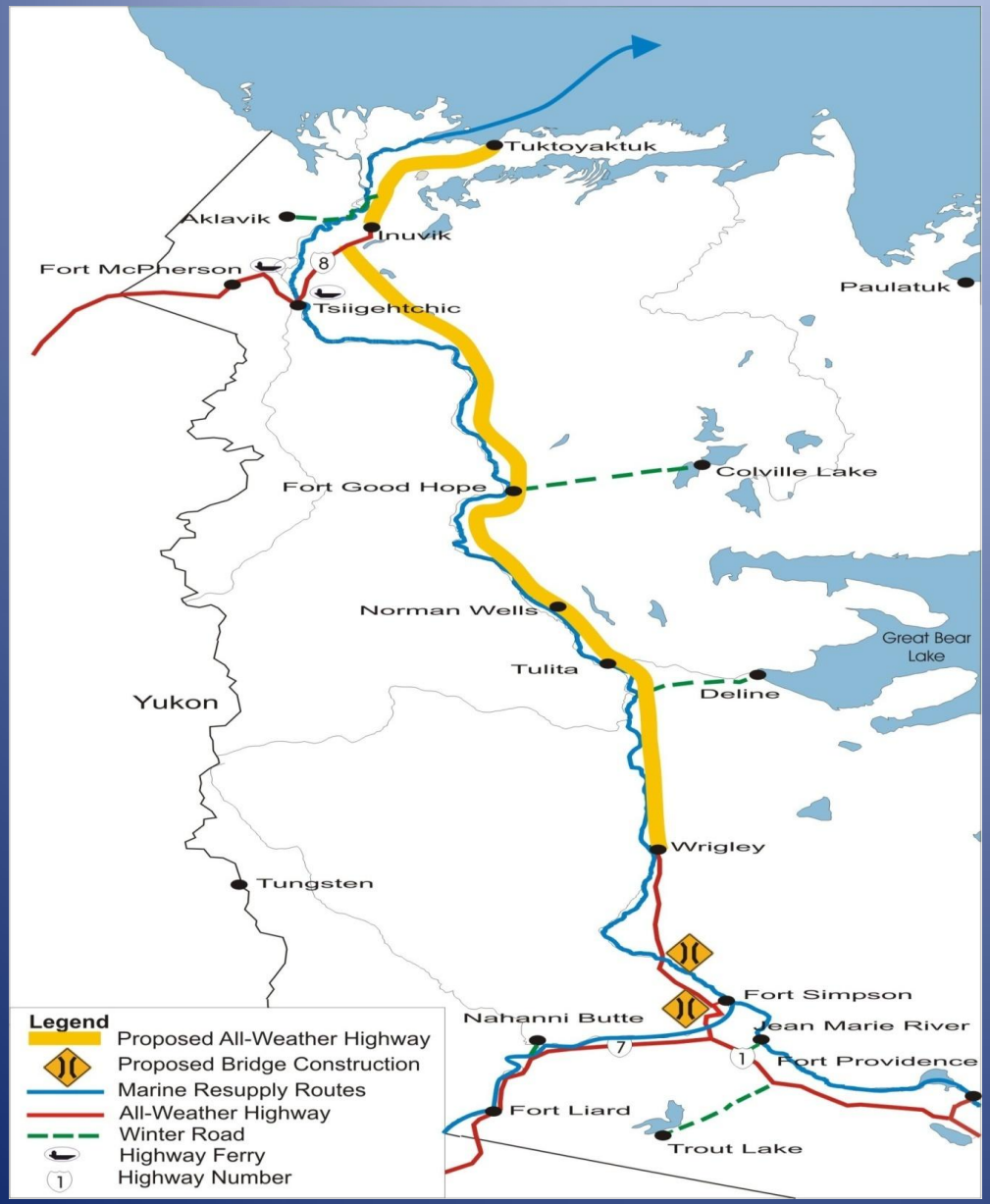
Vetting by Experts

…Lessons learned, progress made…

“The First Step”

Inuvik to Tuktoyaktuk Highway

"The First Step"



HAMLET OF TUKTOYAKTUK, TOWN OF INUVIK
GOVERNMENT OF NORTHWEST TERRITORIES

ENVIRONMENTAL IMPACT STATEMENT FOR CONSTRUCTION OF THE INUVIK TO TUKTOYAKTUK HIGHWAY, NWT

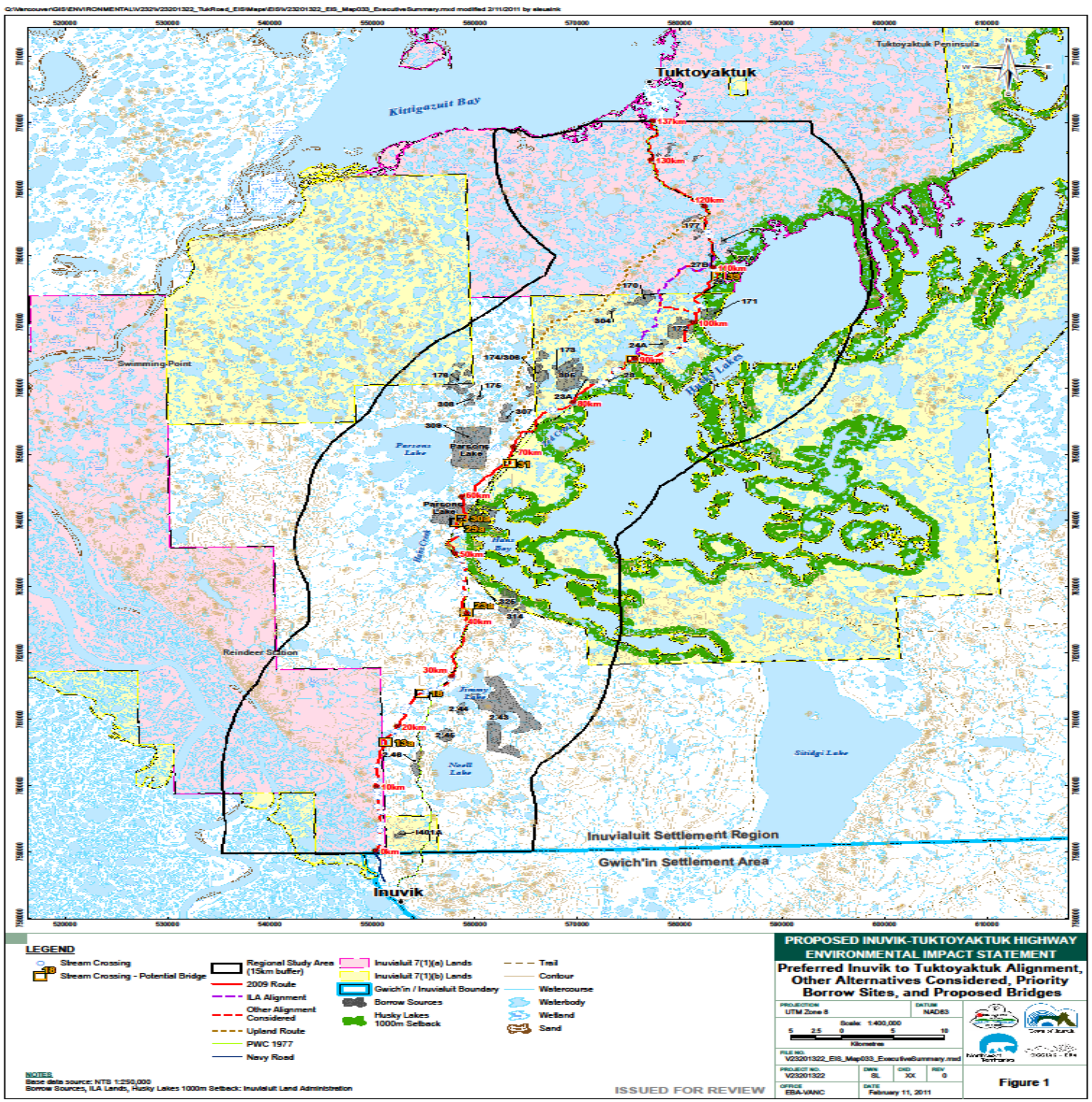




REPORT

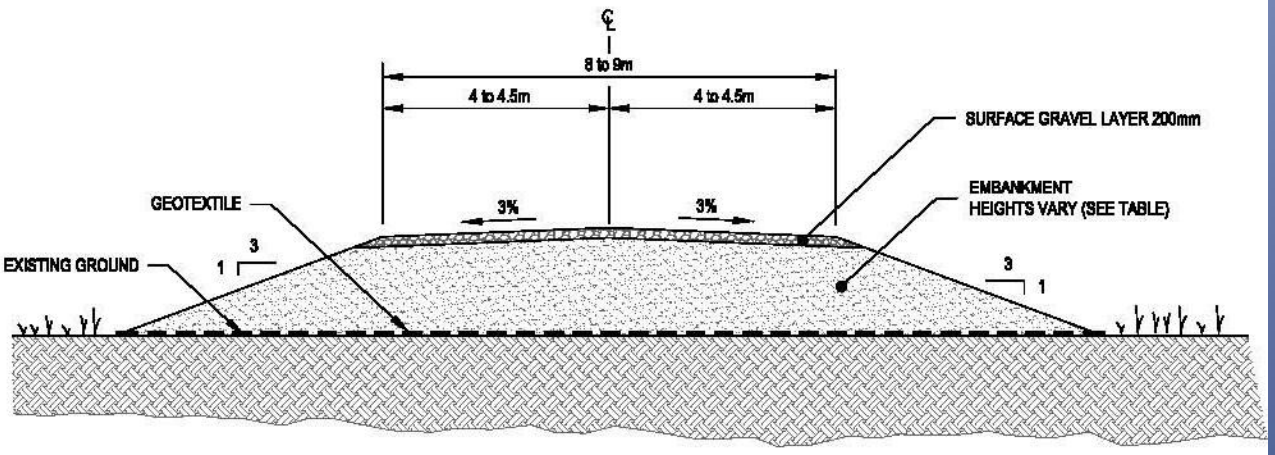
APRIL 2011
ISSUED FOR REVIEW
EBA FILE: V23201322.006

KIGGIAK - EBA


Tuktoyaktuk
Tuktoyaktuk Peninsula
Kittigazuit Bay
Swimming Point
Parsons Lake
Husky Lakes
Reindeer Station
Jimmy Lake
Noell Lake
Sitidgi Lake
Inuvialuit Settlement Region
Gwich'in Settlement Area
Inuvik
LEGEND
Stream Crossing
Stream Crossing - Potential Bridge
Regional Study Area (15km buffer)
2009 Route
ILA Alignment
Other Alignment Considered
Upland Route
PWC 1977
Navy Road
Inuvialuit 7(1)(a) Lands
Inuvialuit 7(1)(b) Lands
Gwich'in / Inuvialuit Boundary
Borrow Sources
Husky Lakes 1000m Setback
Trail
Contour
Watercourse
Waterbody
Wetland
Sand
NOTES
Base data source: NTS 1:250,000
Borrow Sources, ILA Lands, Husky Lakes 1000m Setback: Inuvialuit Land Administration
ISSUED FOR REVIEW
PROPOSED INUVIK-TUKTOYAKTUK HIGHWAY ENVIRONMENTAL IMPACT STATEMENT
Preferred Inuvik to Tuktoyaktuk Alignment, Other Alternatives Considered, Priority Borrow Sites, and Proposed Bridges
PROJECTION UTM Zone 8
DATUM NAD83
Scale: 1:400,000
Kilometres
FILE NO. V23201322_EIS_Map033_ExecutiveSummary.mxd
PROJECT NO. V23201322
DWN SL
CKD XX
REV 0
OFFICE EBA-VANC
DATE February 11, 2011
Figure 1

Contributing $150 million toward the construction of an all-season road between Inuvik and Tuktoyaktuk that completes the Dempster Highway, connecting Canadians from coast to coast to coast.

Typical Highway Design Cross Section



TYPICAL HIGHWAY CROSS SECTION

TERRAIN TYPE	DESCRIPTION	EMBANKMENT HEIGHTS
1	DRY (ICE POOR) TILL AND OUTWASH DEPOSITS	1.4 m
2	WET (ICE-MEDIUM TO ICE-RICH) TILL AND OUTWASH DEPOSITS	1.4 to 1.6 m
3	WET SILTS AND CLAYS (ICE-RICH)	1.6 to 1.8 m
4	THICK ORGANIC PEATLANDS AND ICE-RICH PERMAFROST	1.8 m

Quantity and Cost Estimates

TABLE 1: SUMMARY OF QUANTITY AND COST ESTIMATES FOR ALIGNMENTS CONSIDERED			
Element	**Primary 2009 Route**	**Alternative 1 (2009 Minor Realignment)**	**Alternative 2 (Upland Route)**
Estimated Highway Length	137 km	142 km	134 km
Estimated Embankment Quantity	4.5 million m^3	4.8 million m^3	5.4 million m^3
Estimated Surfacing Quantity	250,000 m^3	259,000 m^3	242,000 m^3
Estimated Capital Construction Cost	$221,000,000	$233,000,000	$258,000,000

Generalized Construction Schedule

TABLE 3: GENERALIZED CONSTRUCTION SCHEDULE	
Schedule	Activities
Spring 2012	Initiate upgrading of Tuktoyaktuk to Source 177 Access Road to Highway Standards
Summer 2012	Complete biophysical (e.g., rare plant, wildlife, and fish), archaeological, and engineering surveys and plans, as necessary, for permitting needed for the upcoming year of work
October 2012	Strip and develop initial borrow source(s) Pre-position equipment at next borrow source (e.g., pit located south of Source 177)
Nov - Dec 2012	Continue work at borrow sources, construct winter access and haul roads
Jan - April 2013	Transport, spread borrow material, construct road and install bridge(s) and culverts
June - Sept 2013	Complete installation of bridges and culverts. Compact and grade Year 1 embankment
Fall 2013 - Summer 2016	Repeat cycle of construction similar to Year 1

Next Steps

- Complete EA process and supporting field studies
- Land tenure negotiations
- Funding agreement with federal government
- Assessment of project as P3
- Initiate final design activity
- Decision to proceed rests with 17th Assembly

Thank You