TASR Technical Session Commitment 7: Elder Site Visit along the Tłįcho All-Season Road (TASR) October 11, 2017

Background

In August 2017, the Tłįchǫ Government and Government of Northwest Territories (GNWT) participated in technical sessions as part of the Tłįchǫ All Season Road (TASR) Environmental Assessment. In these sessions, the GNWT advised that the current design allows for culverts to be installed at 11 of the 15 water crossings along the TASR alignment with permanent bridges constructed at the remaining crossings. Elders raised concerns about the use of culverts at stream crossings instead of bridges, citing the potential for culverts to disrupt the water flow and vitality of fish habitat. In response to the elder's concerns, the GNWT committed to take the elders on a tour of the TASR alignment, and provide further information on culverts.

Commitment 7: GNWT commits to review concerns regarding culverts, including a site visit with elders to view potential culvert locations, and commits to bring a harvester along with the DFO water crossing review, as feasible.

Attendees

- Francis Simpson (Elder)
- Joe Champlain (Elder)
- Charlie Apples (Elder)
- Louis Flunkie (Elder)
- John Beaverho (Harvester)
- Isadore Zoe (Tłycho Government)
- Phoebe Rabesca (Tłıcho Government)
- Russ Neudorf (GNWT)
- Michael Conway (GNWT)

Summary of Site visit

On October 11, the GNWT participated in a site visit with Tłįchǫ elders, Tłįchǫ Government staff and a harvester to tour the proposed culvert locations, and share in a mutual exchange of learning with the elders on how to best manage stream crossings along the TASR alignment. The GNWT provided a presentation on the location and types of culverts and bridges that are proposed to be constructed at the stream crossings along the proposed TASR.

The GNWT travelled with the elders, Tłįchǫ Government staff and the harvester along the TASR alignment via helicopter. The group travelled from Whatì to Highway 3, landing at James River and low level hovering over various proposed culvert locations. The elders and the GNWT examined the culvert crossings, the flow, health and current conditions of the streams.

During an open discussion, the elders shared the history of roads in the Tłıcho area and how they were built in the past. The GNWT learned from the elders how culverts can be best managed in certain environments (i.e., staying on high ground, more culverts may be required where ground is soft, using natural rocks instead of blasted rocks). The elders expressed support for the engineering design of the culverts; they liked bridges and arch culverts at the river and stream crossings. The elders stated, that it is important to use many culverts at "slushy" (i.e., wetland) areas.

The elders agreed that care must go into bridge and culvert design in order to minimize damage to the road. Elder Charlie Apples commented on the importance of building the road well:

"Road will last for very long time. If good road is built to Whatì, it will benefit the people [of] Whatì." (Charlie Apples, October 11, 2017).

Key points raised and information communicated by the elders during the site visit and debrief include:

- A gravesite possibly located near the James River Bridge location should be identified if possible at permitting time.
- Cabins (specifically Joe Migwi's) and traplines along the alignment should be considered.
- The elders expressed familiarity with older culverts, like ones that were built in the 70's, and are pleased by the changes in culvert design over the years.
- They liked the bridges at the river crossings and culverts at stream crossings in order to maintain water flow.
- They liked the idea of multiple culverts in areas that have a wide drainage pattern.
- The elders emphasized that each area is a different type of environment, with different moist areas, slushy areas and clays, noting that the flow will vary in each setting.
- They expressed the need for a supportive culvert base to avoid culvert sinking, particularly in muskeg or slushy areas.
- Elders suggested that the GNWT not use blasted rocks under culverts, but instead use natural rocks, and use the blasted rocks for road construction.
- There is an increase in water volumes this year from previous years due to climate change, and there is a need for culverts to help drain the water away.
- The elders expressed the need to ensure the road is constructed for safety, including constructing enough culverts to allow proper drainage.
- Elders identified the type of damage that has been done to the river areas in the past, some by ATVs, and some by muskrats.

The GNWT will continue to work the Tłįchǫ Government and Community Government of Whatì on effectively managing and monitoring culvert installations along the TASR alignment.

Signature of party representative:

| June | October 25, 2017 |
|--|------------------|
| Jessica Hum (Tłįchǫ Government) | Date |
| Signature of developer representative: | |
| £ | OCT 2 6 2017 |
| Michael Conway (GNWT) | Date |



Figure 1 Between Water Crossing 7 & 8



Figure 2 Between Water Crossing 9 & 13



Figure 3 Lots of good discussion with the elders at James River



Figure 4 Elder and interpreter



Figure 5 Oct 11, 2017 TASR Elders Tour Participants at James River

Site Visit Schedule:

9AM

• GNWT pick up 2 elders and Tłįchǫ Government staff at Frank Channel via helicopter and proceed to Whatì

10:00AM- 12:00PM

- GNWT presentation to Elders at the Johnny Nitsiza Cultural Center in Whatì (presentation attached)
- Open discussion and lunch

1:00PM-3:00PM

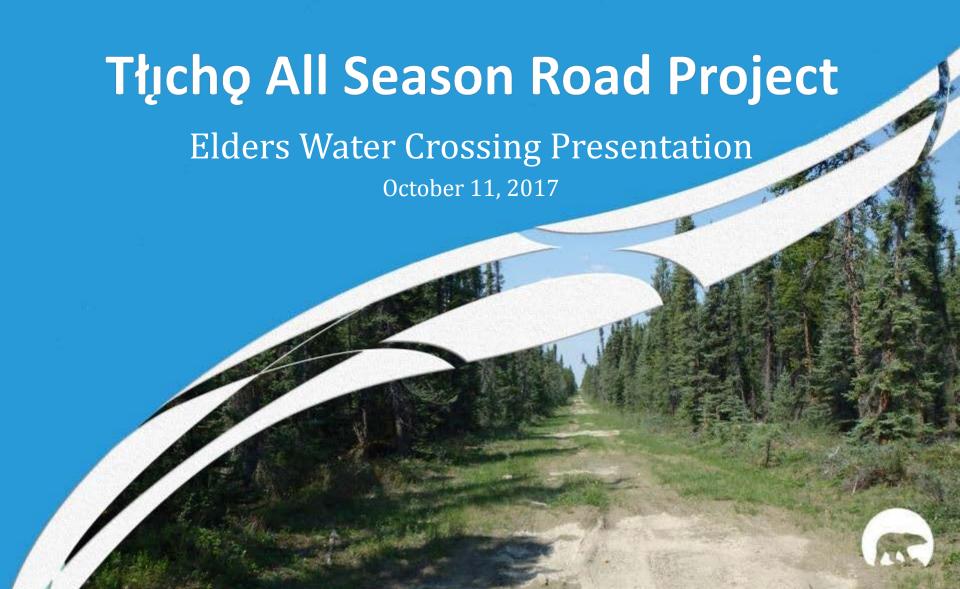
- Flyover TASR alignment from Whatì to Highway 3:
 - Stop at James River
 - o Low level hovering over various proposed culverts locations
 - o Photos (attached)

3:00PM - 4:00PM

• Debrief in Whatì at Johnny Nitsiza Cultural Center

4:30 PM

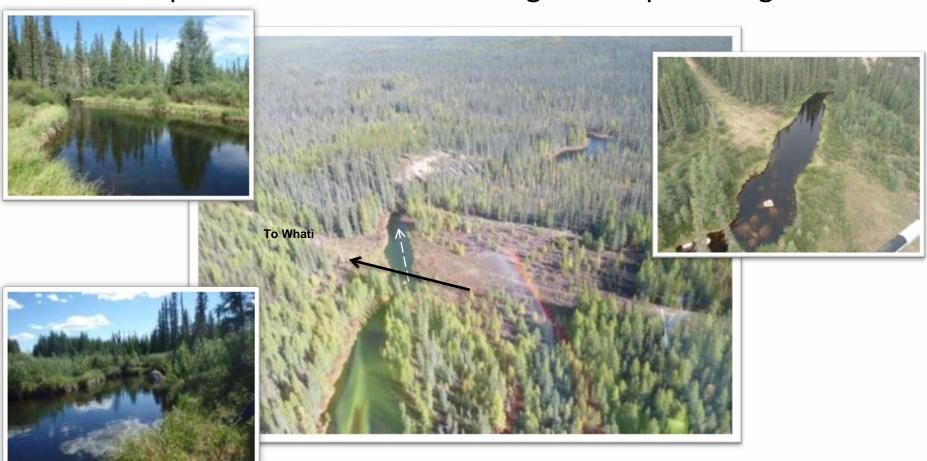
• Drop off 2 elders and Tłıcho Government staff at Frank Channel





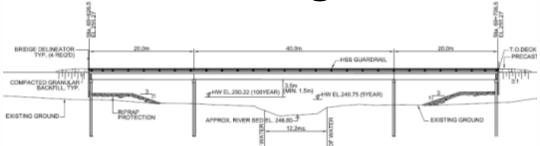
James River

permanent flow •80 m long three-span bridge





What James River Bridge Could Look Like

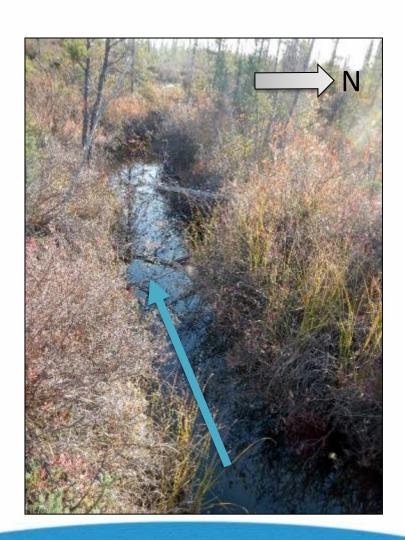




 Bridge doesn't touch water



Crossing 10a – Intermittent Stream

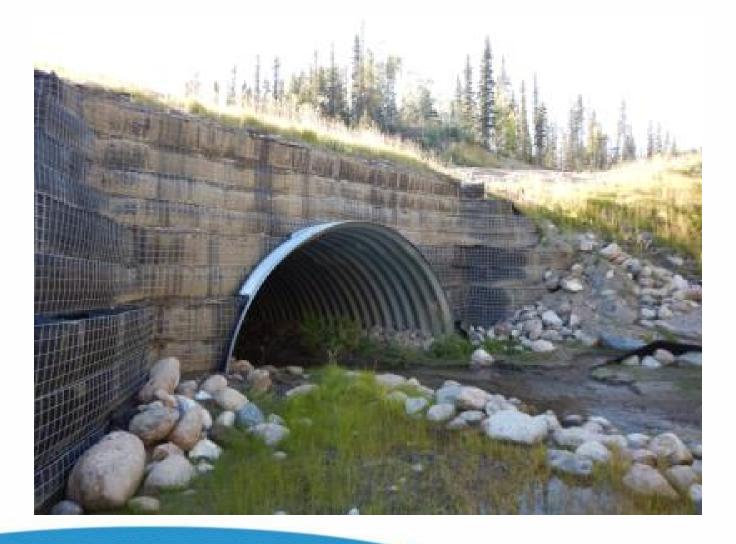


 Seasonal stream that only flows for part of the year





Arch Culvert





Crossing 6 – Ephemeral Stream



 Stream that is dry for most of year



 Flows during rainfall and spring melt



Large Culverts – 2.43m wide

• Likely to be used for crossing 6







Crossing 3 – Small & Dry





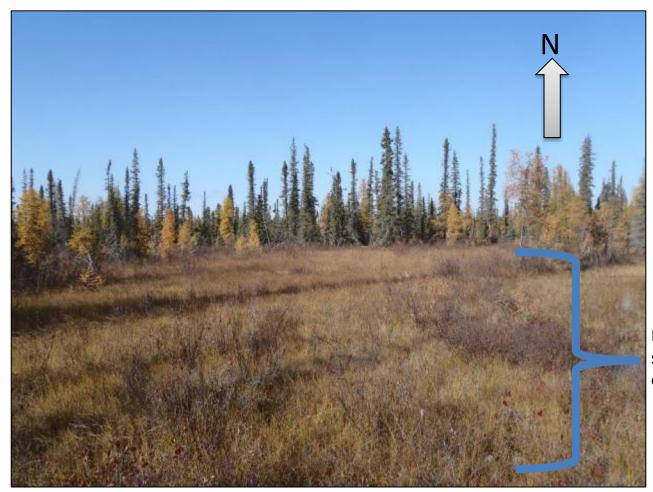
Smaller Culverts





Crossing 10 - Low and marshy area of land

Non-fish bearing



No defined streambed or banks



Masi Cho

Questions?



