

Highway 29 Halfway River – Geotechnical Investigation

**Category 1 Traffic Management Plan**

Prepared by: XYZ Engineering

Prime Contractor: ABC Consulting

January 1, 2020

## 1.0 Introduction

This Traffic Management Plan (TMP) outlines the traffic control procedures and requirements for the work outlined in this TMP. This TMP must be executed by a qualified Traffic Control Company. Any field adjustments to the plan shall be made by qualified personnel.

The Traffic Control Company shall implement the plan in accordance with the following guidelines and standards:

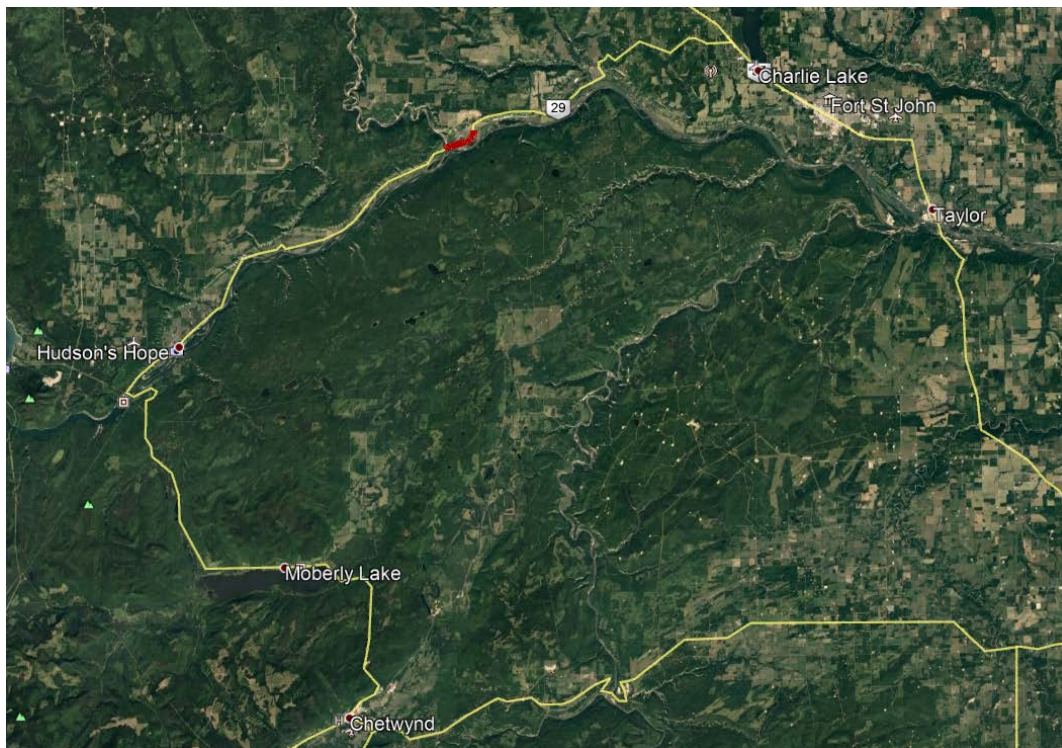
- BC Ministry of Transportation and Infrastructure (MoTI) 2020 Traffic Management Manual for Work on Roadways (2020 TMM)
- MoTI Manual of Standard Traffic Signs and Pavement Markings
- MoTI Standard Specifications – Section 194

## 2.0 Project Location

This section provides a geographical description of the project location and pre-construction traffic operations (traffic volume, speed limits, etc.).

Highway 29 at Halfway River is a rural undivided two-lane two-way highway with a posted speed limit of 90 km/h. It is located approximately 46 km west of Fort St. John and 100 km east of Chetwynd (see red line in Figure 1 below). Data from a temporary short count station, conducted in 2014 at 40 km west of Fort St. John, shows an Average Annual Daily Traffic (AADT) of approximately 700 vehicles per day.

This segment has rolling terrain and crosses Halfway River at an existing structure. There are a number of large radius curves, making the operating speed close to 90 km/h. Surrounding land use includes residential, agricultural and commercial. Minimal disruption to driveway accesses during the geotechnical investigation is expected.



**Figure 1: Project Location Map**

### 3.0 Work Activity

This section contains an overview of the work being carried out as part of this project.

ABC Consulting (ABC) will be conducting a phased geotechnical investigation close to Highway 29 in the Halfway River segment in the Attachie area. As part of ABC's work to determine and classify the subsurface conditions along the proposed highway alignment, there may be disruptions to vehicular traffic on Highway 29, especially when drilling equipment is positioned on or near the highway.

The project segment is approximately 3.8 km in length but the majority of geotechnical investigation work will be performed away from the highway.

The geotechnical investigation will consist of the following:

- 27 shallow pavement cores for assessing the pavement thickness of the highway) – The pavement coring process may take approximately 20 to 30 minutes to complete at each location. Pavement cores will be conducted in the centre of the travel lane (between the typical wheel paths), which will require approximately 200 m of SLAT. Occasionally, a shoulder core sample may also be extracted in close proximity to the core in the centre of the travel lane to assess the variance of the pavement thickness found within the shoulder relative to the travel lane. When the core is completed, high quality cold asphalt patch mix will be utilized to backfill the annulus. The total pavement core program is anticipated to take up to 4 days to complete, weather dependent.
- Establish 34 test pits, 12 test holes, and 5 Seismic Cone Penetration Testing (sCPTu) holes based on the information dated March 2019. The test pits are expected to be located in the vicinity of the existing Highway 29 in addition to the shallow pavement cores.

Start/end date: The following timelines for geotechnical investigation are anticipated:

- Phase 1 – April and May 2020
- Phase 2 – July 2020
- Phase 3 – October 2020 (if required)

Hours of work: The geotechnical investigation will be conducted during the daytime only.

Lanes affected by the works, and lane configuration in work zone: Lane closures with single lane alternating traffic (SLAT) will be implemented as needed when the geotechnical investigation is being carried out on Highway 29. The construction speed limit during active work will be:

- 70 km/h for single-lane alternating traffic
- 90 km/h for shoulder work

Lane closures will be removed at the end of each work period, conditions will be restored, and the speed limit will be 90 km/h during inactive work.

Maximum proposed delays or closure times: As written in Schedule 3 – Special Provisions, delay to vehicular traffic on Highway 29 during active work will not exceed 20 minutes.

### 4.0 Implementation Plan

Implementation of this Traffic Management Plan will be carried out by the following individuals:

Site Supervisor: The Site Supervisor for this project is John Smith. He will be responsible for conducting daily toolbox meetings, addressing issues as they occur, leading the crew, and being the point of contact with

the Ministry Representative. He will perform all duties of a Site Supervisor as listed in *Section 1.2.3.4: Site Supervisor/Foreman/Superintendent* of the 2020 TMM.

Traffic Control Manager/Supervisor: As previously accepted by the Ministry of Transportation, due to the project location and nature of the work activity, both the Traffic Control Manager and Traffic Control Supervisor roles will be designated to one person. Jane Smith will be responsible for preparing, implementing, and managing this Traffic Management Plan in accordance with the responsibilities listed in the *Section 1.2.3.6: Traffic Control Manager* and *Section 5.1.1 Traffic Control Supervisor* found in the 2020 TMM.

Traffic Control People (TCPs): The Traffic Control People (TCPs) used on this project will have current TCP certification and be adequately trained in a manner acceptable to WorkSafeBC. Their names will be recorded on the Daily Traffic Control Log. They will also be responsible for the duties listed in *Section 5.1.2: Traffic Control Persons (TCPs)* found in the 2020 TMM. TCPs will communicate with each other through radio communication.

## **5.0 Traffic Control Plan**

This Traffic Control Plan documents how traffic control will be achieved.

Traffic control people (TCPs) will be on-site at all times to ensure the safety of all road users and field staff. At the conclusion of each work day, all affected travel lanes will be reinstated, speed limits will be brought back to 90 km/h and all construction traffic control devices will be removed from the highway.

*Figure 2: Lane Closure – Single Lane Alternating Traffic (SLAT)* will be used as needed when equipment and/or workers are on, or encroaching onto the travelled roadway. In particular, it will be used for the following tasks:

- 27 shallow pavement cores to assess the highway pavement thickness
- 3 of the 4 test pit locations

*Figure 3: Shoulder Work* will be used for the geotechnical investigation at 1 of the 4 test pit locations which will be performed on the shoulder, but off the travelled roadway.

Active transportation road users (eg. pedestrians and cyclists) volumes are expected to be minimal during the geotechnical investigation on Highway 29. If these road users are encountered, TCPs will direct them through the work zone.

**Figure 2: Lane Closure – Single Lane Alternating Traffic (SLAT)**

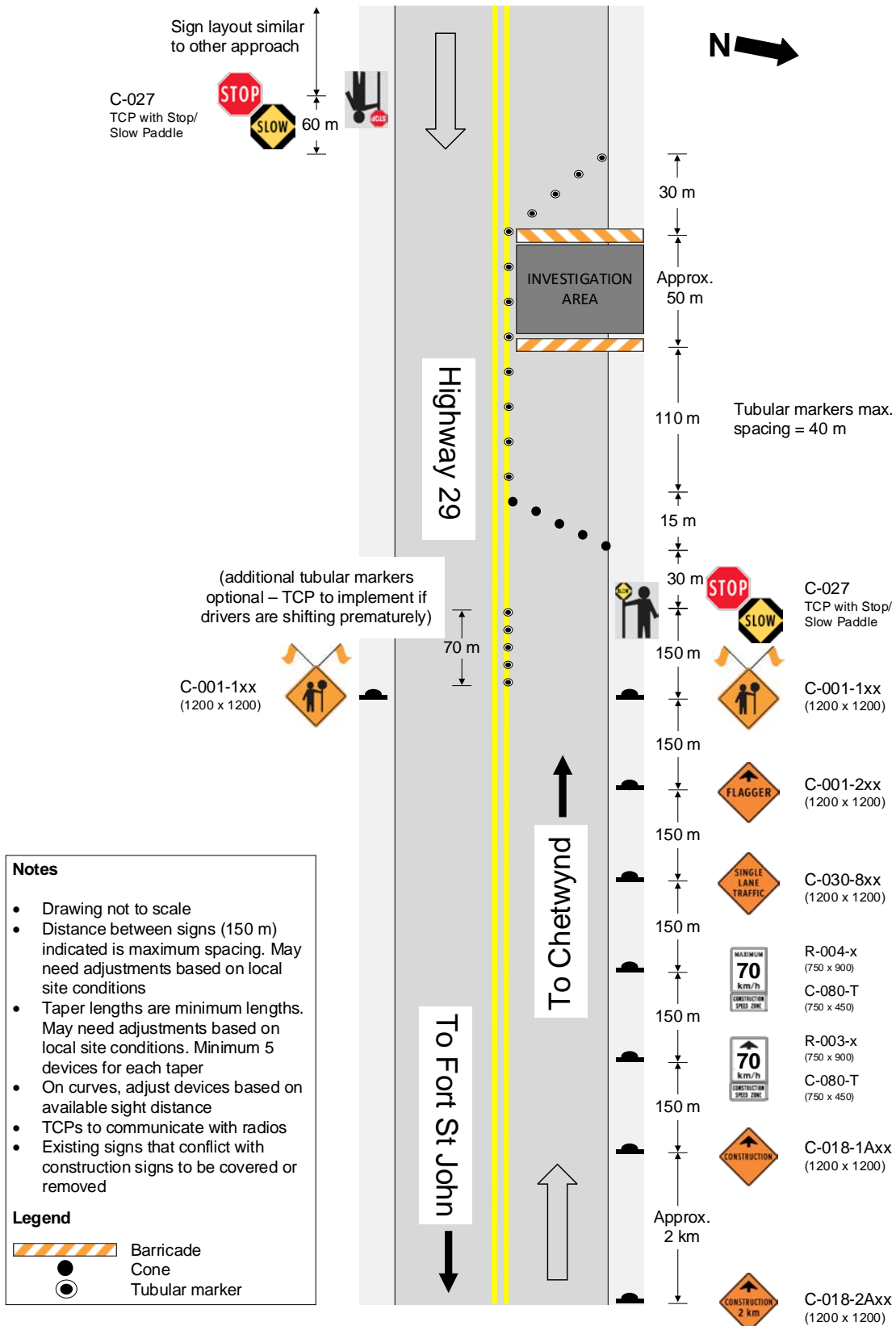
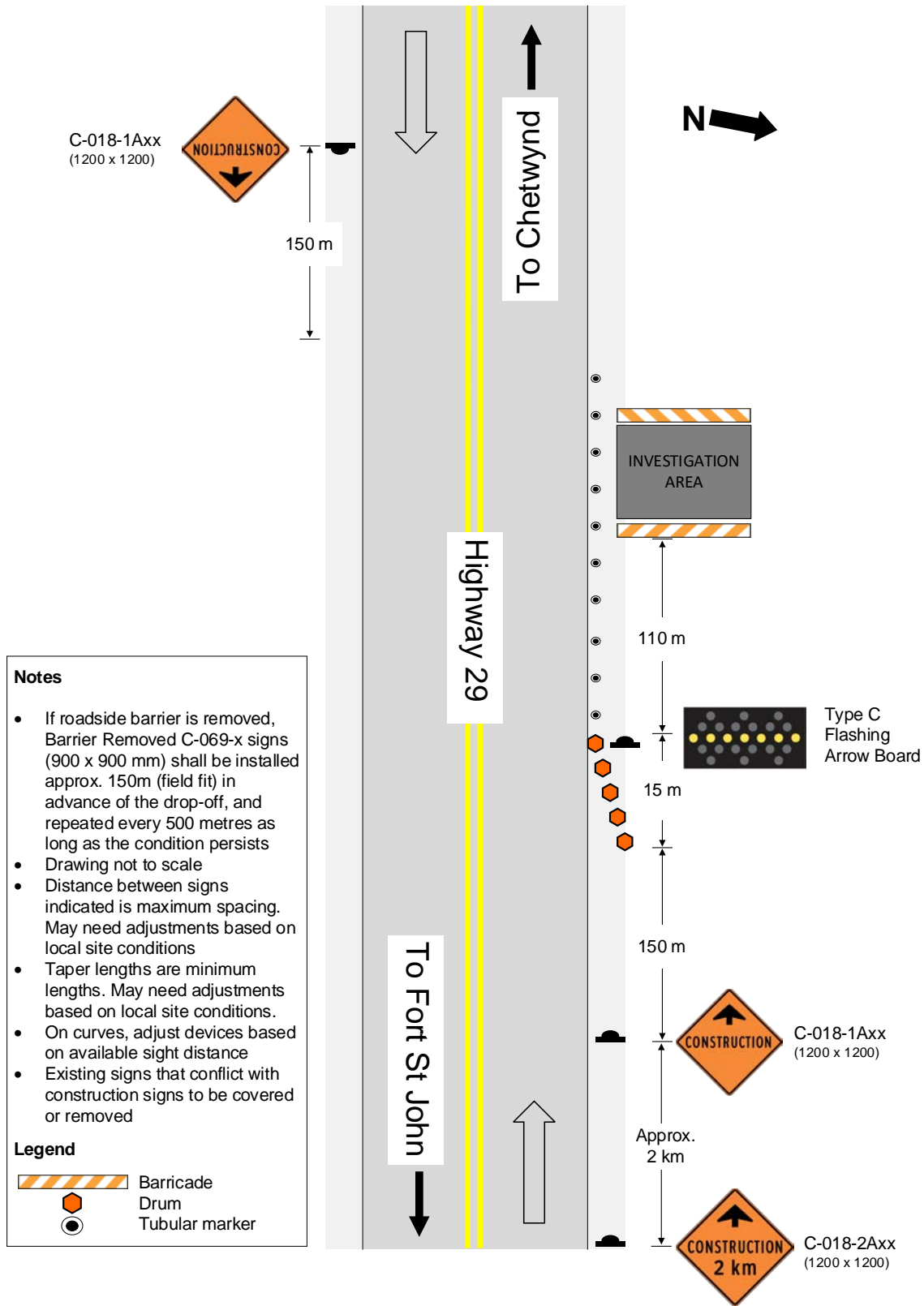


Figure 3: Shoulder Work



## 6.0 Incident Management Plan

This Incident Management Plan includes an emergency contact list as well as procedures, should an incident (such as a traffic collision) occur, or if emergency vehicles require access to and/or through the construction zone.

Contact list:

<b>Emergency/Public Services</b>	<b>Phone Number</b>
Emergency – Police, Fire, Ambulance	911
Local RCMP (non-emergency)	XXX-XXX-XXXX
Local Fire Department (non-emergency)	XXX-XXX-XXXX
BC Ambulance (non-emergency)	XXX-XXX-XXXX
Local Hospital (non-emergency)	XXX-XXX-XXXX
BC Hydro	XXX-XXX-XXXX
FortisBC Gas	XXX-XXX-XXXX
Telus	XXX-XXX-XXXX
Shaw	XXX-XXX-XXXX
WorkSafeBC	XXX-XXX-XXXX
Provincial Emergency Program	XXX-XXX-XXXX

<b>Ministry of Transportation</b>	<b>Phone Number</b>
Ministry Representative – Bob Jones	XXX-XXX-XXXX
Road Area Manager – William Lee	XXX-XXX-XXXX
Operations Manager – Liam Smith	XXX-XXX-XXXX
District Manager – Susan Andrew	XXX-XXX-XXXX

<b>Maintenance Contractor</b>	<b>Phone Number</b>
Local Road Maintenance Contractor	XXX-XXX-XXXX

<b>Contractor</b>	<b>Phone Number</b>
Site Supervisor – John Smith	XXX-XXX-XXXX
Traffic Control Manager/Supervisor – Jane Smith	XXX-XXX-XXXX

Procedures for emergency vehicles to pass through the work site: The Site Supervisor will direct a daily safety planning tool box meeting prior to start of work to ensure all crew members are aware of the incident management procedures.

The TCS will monitor the areas within, and in the vicinity of, the work zone. If an incident is detected, the TCS will immediately respond. If any of the crew members or TCPs detect an incident, they will relay all relevant information to the TCS.

Should an incident occur, the Traffic Control Supervisor and Site Supervisor will work together to provide efficient response and coordination, including any changes that may need to be made to the traffic control layout.

TCPs will ensure emergency vehicles are given priority in travelling through the work zone. If required, TCPs may halt work and remove lane closures, stop general traffic, and hold active transportation road users, to assist emergency vehicles with proceeding through the work zone.

## 7.0 Public Information Plan

This Public Information Plan details methods for communicating to the travelling public the impacts of the project, especially any delays in travel. It also outlines methods for providing work updates to the Road Authority.

Methods for communicating to the travelling public and the Road Authority: Two weeks prior to the beginning of the work, the Site Supervisor will notify the Ministry Representative of the proposed schedule and anticipated traffic impacts. The Ministry Representative will then notify TMCBC who will post the notification onto DriveBC. Any changes to the proposed schedule will require advanced notice of at least 24 hours.

Methods for providing work updates to the Road Authority: The Site Supervisor will inform the Ministry Representative in person or over the phone at least weekly of any work updates. In the event of an emergency, if the Ministry Representative is not on site, they will be contacted at the earliest convenience of the Site Supervisor.