

April 8, 2016

Prince Rupert Gas Transmission Ltd.
450 - 1st Street SW
Calgary, Alberta
T2P 5H1

Attention: Keri-Lynn Bruce

RE: Temporary Occupation of Crown Land – Road Permit

Date of Issuance: April 8, 2016
Commission No.: 9641882
Road Permit No.: 03380
Road Name: PRGT Borden Lake Mainline Spur 3185

AUTHORIZATIONS

1. The BC Oil and Gas Commission (the Commission), under section 39 of the *Land Act*, Authorization #950985, hereby authorizes Prince Rupert Gas Transmission Ltd. (the “permit holder”) to occupy and use the Crown land area identified in plan number Job: 3111-22807, Document No: T9-15_OGC_20k, revision 2, dated November 5, 2015 (the “construction plan”), submitted to the Commission dated July 22, 2015 to construct and operate a road for the purposes of carrying out oil and gas activities as defined in the *Oil and Gas Activities Act* (the “site”), subject to the conditions set out below.
 - a. Permission to construct is limited to required modifications within the operating area except as otherwise restricted by this permit.
 - b. The permission to occupy and use Crown land expires if this permit expires, or is suspended, cancelled, surrendered or declared spent.
 - c. The authorization to occupy and use Crown land does not entitle the permit holder to exclusive possession of the site.
2. A licence authorized under section 39 of the *Land Act* for the Crown land portion of the site is attached. The permit holder is subject to the conditions contained in the licence.

CONDITIONS

1. 30 days prior to beginning construction activities on Disposition No. 893865, the permit holder must submit, to BC Hydro the following information, in tabular or other format;
 - a. a description of the works;
 - b. a summary, including any outcomes, of engagement with BC Hydro and any other road tenure holders;
 - c. the approximate dates and maximum time that the works are expected to restrict or obstruct traffic;
 - d. maximum vehicular weights expected during construction activities.
2. The permit holder must abide by and comply with all applicable laws, bylaws, orders, directions, ordinances, and regulations of any government authority having jurisdiction in any way affecting its use or occupation of the site, including, without limitation, the provisions of the *Land Act* and the provisions of this permit.

3. The permit holder must not assign, sublicense or transfer this permit or permit any person to use or occupy the site, other than its employees, contractors, or representatives, without the Commission's written consent.
4. A notice of construction start must be submitted to the Commission a minimum of 72 hours prior to the commencement of construction or modification activities under this permit. Notification must be sent to OGC.ExternalNotifications@bcogc.ca.
5. Within 60 days of the completion of construction activities under this permit, the permit holder must submit to the Commission a Post Construction Plan as an ePASS shape file and PDF plan accurately identifying the location of the total area actually disturbed under this permit. The shape file and plan must be submitted to PostConstructionPlan@bcogc.ca.
6. The permit holder must ensure that the site is free of garbage, debris and unused equipment.
7. Prior to commencement of any ground disturbing activities, the permit holder must have an archaeological overview assessment completed by a qualified professional and complete any applicable archaeological impact assessments, based on the recommendations of the qualified professional.
8. The permit holder must restrict all activities to the previously cleared road right of way. Where new cut is required, the permit holder must submit an amendment application to request authorization to clear new area.
9. The permit holder must ensure that the site is maintained in a condition so as to minimize hazards, including but not limited to hazards associated with storage of materials and equipment.
10. The permit holder must notify Nisga'a Lisims Government a minimum of five (5) days prior to commencing any construction activities under this permit.
11. The permit holder must notify Gitanyow Hereditary Chiefs a minimum of five (5) days prior to commencing any construction activities under this permit.
12. When using aircraft to undertake activities associated with the permit, the permit holder must provide written instructions to the pilot specifying that flights must not, except in the event of an emergency situation, directly approach, hover over, circle, or land near mountain goats, moose, elk, or caribou.
13. At least 14 days before carrying out any road deactivation activities within the GLUUP Area, the permit holder must submit, to the Commission's satisfaction, a notice of intent to deactivate the road. The notice of intent to deactivate the road must identify the road to be deactivated, the date when deactivation is proposed to begin, and any relevant measures that will be taken in consideration of the objectives of the GLUUP. A copy of the notice must be provided to Gitanyow Hereditary Chiefs.
14. Within 30 days of completing deactivation within the GLUUP Area, the permit holder must provide to the Commission and the Gitanyow Hereditary Chiefs a written statement of deactivation that is signed by the permit holder and specifies the date the statement is made. The written statement must confirm that the permit holder has complied with the road deactivation requirements set out in Section 24 of the Oil and Gas Road Regulation, including restoration as per Section 19 of the Environmental Protection and Management Regulation, and has completed the relevant measures, if any, identified in the notice of intent provided in accordance with Condition 13.

Design and Construction

15. The permit holder must ensure that the road is designed, constructed and maintained in a manner that does each of the following:
 - a. enables industrial and non-industrial users of the road to use the road safely
 - b. preserves the integrity of the topography of the area
 - c. maintains the drainage of water in the area, and
 - d. protects stability of the terrain in the area.
16. The permit holder must ensure that bridges are designed and fabricated in compliance with:
 - a. the Canadian Standards Association Canadian Bridge Design Code, CAN/CSA-S6; and
 - b. soil property standards, as they apply to bridge piers and abutments; set out in the Canadian Foundation of Engineering Manual.

17. Unless exempted by the Commission, the permit holder must ensure that culverts are designed and fabricated in compliance with the applicable:
- Canadian Standards Association CSA G401, Corrugated Steel Pipe Products; or
 - Canadian Standards Association Standard CSA B1800, Section B182.2, Plastic Non-pressure Pipe Compendium.
18. Unless exempted by the Commission, the permit holder must ensure that bridges or culverts are designed to pass the highest peak flow of the stream that can reasonably be expected within the return periods set out in column 2 the table below for the period the permit holder anticipates the structure will remain on site, as set out in column 1:

Column 1 Anticipated period crossing structure will remain on site	Column 2 Peak flow period
Bridge or culvert, 3 years or less	10 years
Bridge other than a bridge within a community watershed, more than 3 years but less than 15	50 years
Bridge within a community watershed, more than 3 years	100 years
Bridge, 15 years or more	100 years
Culvert, more than 3 years	100 years

19. A road permit holder may construct or install a bridge that does not comply with d) above if
- the bridge is designed to pass expected flows during the period the bridge is anticipated to remain on the site,
 - the construction, installation and use of the bridge occurs during a period of low flow, and
 - the bridge, or a component of the bridge that is vulnerable to damage by high flow, is removed before any period of high flow begins.

Road Operations and Maintenance

20. The permit holder must perform the maintenance and undertake modifications necessary to ensure that:
- The road prism and all access structures related to the road are stable;
 - Watercourse crossing structures and any other instream works associated with the road are functional and appropriate for the uses of the road; and
 - Road surface and slope drainage systems are functional and prevent pooling of water on the road surface
21. If a structural deficiency occurs on a bridge authorized under this permit during the construction or maintenance of the road, the permit holder must do at least one of the following:
- Correct the defect or deficiency;
 - Close, remove or replace the bridge;
 - Restrict traffic loads to a safe level.
22. The permit holder must place and maintain a sign, at a distance from each bridge sufficient to enable to users to stop safely before reaching the bridge, that states the maximum load capacity of the bridge.
23. The permit holder must ensure that each bridge or major culvert is regularly inspected by a qualified person. Records of inspections must be retained by the permit holder for at least one year after the bridge or major culvert is removed from the site or the permit holder's responsibility for the road ceases.
24. The permit holder must ensure that the activities associated with this permit do not result in any deleterious materials being deposited into a stream, wetland or lake.
25. The permit holder must not operate a motor vehicle at a speed that is unsafe for the conditions and exceeds the lesser of 80km/h or the speed posted on a relevant traffic control device.

26. The permit holder must not close or restrict access to the road by another person except temporarily as set out below:
 - a. To address an existing or imminent threat to the road or environment, or that may endanger human life or property;
 - b. To address something that would impede the permit holder from using the road; or
 - c. To carry out maintenance on the road as required by this permit.
27. If access to the road is restricted in accordance with condition 26, the permit holder must notify the Commission immediately via OGC.ExternalNotifications@bcogc.ca.

Changes in and about a Stream Authorization under section 11 of the *Water Sustainability Act*

28. Following initial construction, stream crossings are authorized for necessary road modification or maintenance activities on the operating area except for
 - a. construction or replacement of a bridge or major culvert on a S1, S2, S3 or S5 stream;
 - b. installation of a closed bottom structure in a fish bearing stream; or
 - c. excavation or grading of a stream bank or stream bed.
29. Stream crossings must be constructed, maintained and deactivated according to the following requirements, as applicable:
 - a. only bridges, culverts, ice bridges or snow fills may be constructed at stream crossings;
 - b. snow fills must consist of clean snow and may only be located on streams that are dry or frozen to the bottom during the period of construction, maintenance and use. Where periodic thaws are anticipated, culverts must be installed to allow meltwater to pass through. Snow fill and any installed culverts must be removed prior to spring snow melt;
 - c. ice bridges on fish bearing streams may only be constructed where sufficient water depth and stream flows prevent the bridge structure from coming in contact with the stream bottom;
 - d. water applied to construct an ice bridge on a water body must be sourced in accordance with the *Water Act* unless
 - i. the water body is a stream with a stream channel width of at least 5 metres and is not designated as a sensitive stream under the *Fish Protection Act*, or has a riparian class of W1, W3, or L1,
 - ii. the water is sourced from the same water body proximal to the location on which the ice bridge is constructed,
 - iii. the water body is not within the boundaries of a public park,
 - iv. pump intakes do not disturb beds of streams or wetlands and are screened with a maximum mesh size and approach velocity in accordance with the Fisheries and Oceans Canada Freshwater Intake End-of-Pipe Fish Screen Guideline, and
 - (i) where the water body is a stream, the flow of water in the stream at the time and location of pumping exceeds 60 litres per second and the instantaneous pumping rate does not exceed 1% of the water flowing in the water body at the time and location the pumping occurs, or
 - (ii) where the water body is a lake or pond, the cumulative volume of water withdrawn does not exceed 10 cm of lake or pond depth, calculated as the product of lake or pond surface area x 10 cm;
 - e. records of water withdrawal and corresponding streamflow measurements are maintained by the permit holder and provided to the Commission upon request;
 - f. in-stream activities within a fish bearing stream, lake or wetland must occur:
 - i. during the applicable reduced risk work windows as specified in the Skeena Region Reduced Risk In-stream Work Windows and Measures, May 2005,
 - ii. in accordance with alternative timing and associated mitigation recommended by a qualified professional and accepted by the Commission, or

- iii. in accordance with an authorization or letter of advice from Fisheries and Oceans Canada that is provided to the Commission;
- g. bridge or culvert abutments, footings and scour protection must be located outside the natural stream channel and must not constrict the channel width;
- h. equipment used for activities under this authorization must not be situated in a stream channel unless it is dry or frozen to the bottom at the time of the activity.

Deactivation

- 30. Except with leave of the Commission, the permit holder must deactivate the road when the road is no longer needed. At minimum, deactivation must include:
 - a. Barricade of the road surface width in a clearly visible manner to prevent access by motor vehicles, other than all-terrain vehicles;
 - b. Removal of stream pipe culverts and arch culverts;
 - c. Removal of bridge and log or box culvert superstructures; and
 - d. Stabilization of the road prism and the clearing width of the road.
- 31. Prior to deactivating any road segment authorized under this permit, the permit holder must provide written notice of the intention to users of the road known to the permit holder, and the Commission via the Declaration of Road Deactivation Form to OGC.ExternalNotifications@bcogc.ca.
- 32. The permit holder must not begin deactivating the road for 14 days from the date of submission of their intent to deactivate the road.
- 33. Any road segment authorized by this permit that is not included in the notice to deactivate must continue to be maintained by the permit holder.
- 34. If natural surface drainage pattern was altered by the carrying out of the activity, the permit holder must
 - a. restore, to the extent practicable, to the drainage pattern and its condition before the alteration,
 - b. re-vegetate any exposed soil on the operating area using seed or vegetative propagules of an ecologically suitable species that
 - i. promote the restoration of the wildlife habitat that existed on the area before the oil and gas activity was begun, and
 - ii. stabilize the soil if it is highly susceptible to erosion.
- 35. Following completion of the activities authorized under this permit, any surface soils removed from the site must be redistributed so that the soil structure is restored, to the extent practicable, to its condition before the activity was begun.

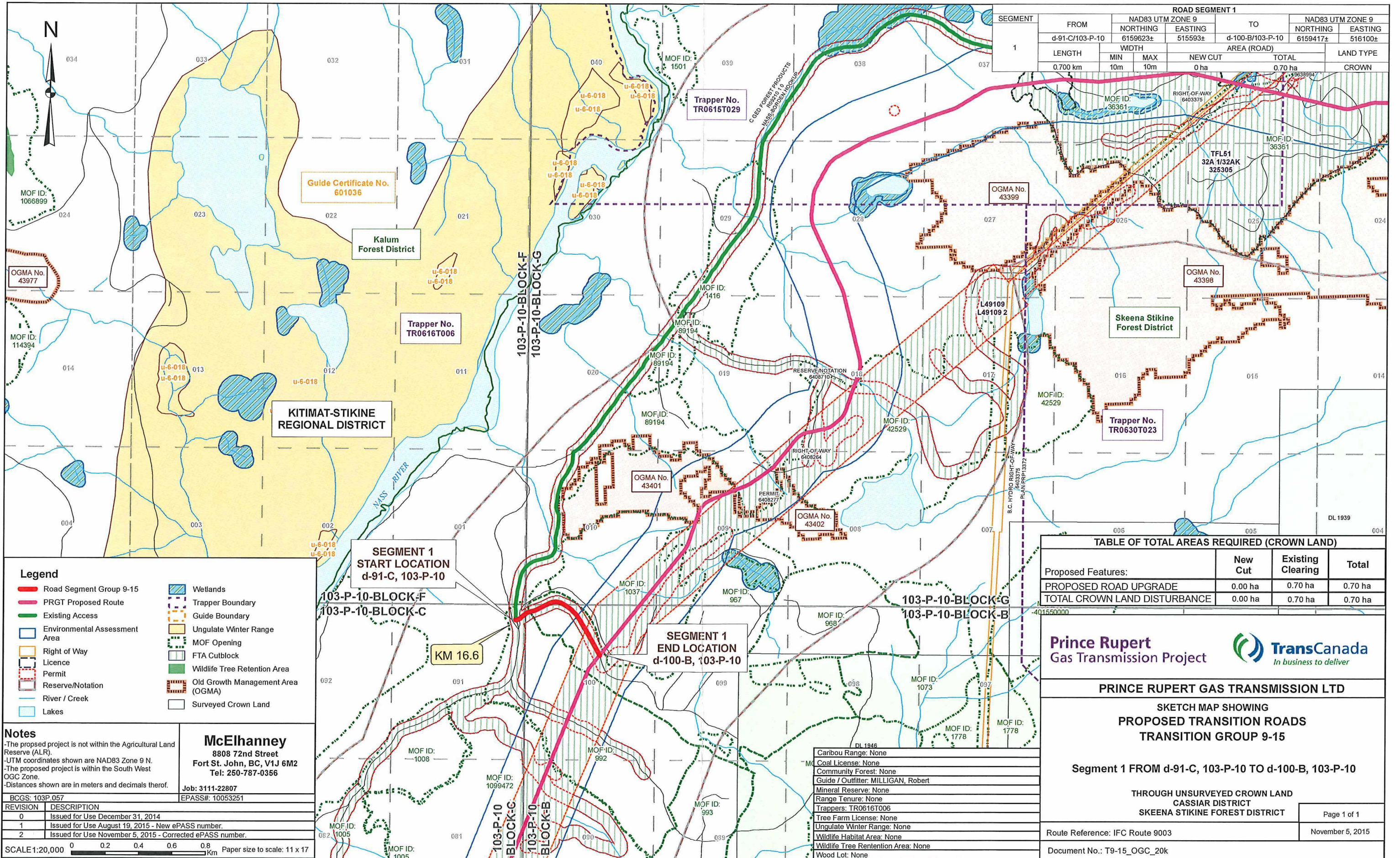
ADVISORY GUIDANCE

- 1. Appropriate tenure will be issued upon acceptance of the Post Construction Plan. Submission of the original application and submission of the Post Construction Plan is considered an application for any subsequent applicable *Land Act* tenures. Upon the Commission's acceptance of the Post Construction Plan, no further applications for replacement tenure are required.
- 2. A major culvert means a culvert crossing a stream or wetland that is:
 - a. One of;
 - i. A pipe having a diameter of 2000 mm or greater;
 - ii. A pipe arch having a span greater than 2130 mm;
 - iii. An open bottom arch having a span greater than 2130 mm, or
 - b. Has a design discharge rate of 6 m³ per second or greater.
- 3. Unless a condition or its context suggests otherwise, terms used in this approval have the same meaning as the Environmental Protection and Management Regulation under the *Oil and Gas Activities Act*.



Johannes Bendle
Authorized Signatory
Commission Delegated Decision Maker

pc: Roy Northern Land Service Ltd.
Commission File: 9641882
First Nations: GHC, NGAA



ROAD SEGMENT 1						
SEGMENT	FROM	NAD83 UTM ZONE 9		TO	NAD83 UTM ZONE 9	
		NORTHING	EASTING		NORTHING	EASTING
1	d-91-C/103-P-10	6159623±	515593±	d-100-B/103-P-10	6159417±	516100±
	LENGTH	WIDTH		AREA (ROAD)		LAND TYPE
	0.700 km	MIN	MAX	NEW CUT	TOTAL	CROWN
		10m	10m	0 ha	0.70 ha	

TABLE OF TOTAL AREAS REQUIRED (CROWN LAND)			
Proposed Features:	New Cut	Existing Clearing	Total
PROPOSED ROAD UPGRADE	0.00 ha	0.70 ha	0.70 ha
TOTAL CROWN LAND DISTURBANCE	0.00 ha	0.70 ha	0.70 ha

- Legend**
- Road Segment Group 9-15
 - PRGT Proposed Route
 - Existing Access
 - Environmental Assessment Area
 - Right of Way
 - Licence
 - Permit
 - Reserve/Notation
 - River / Creek
 - Lakes
 - Wetlands
 - Trapper Boundary
 - Guide Boundary
 - Ungulate Winter Range
 - MOF Opening
 - FTA Cutblock
 - Wildlife Tree Retention Area
 - Old Growth Management Area (OGMA)
 - Surveyed Crown Land

Notes

- The proposed project is not within the Agricultural Land Reserve (ALR).
- UTM coordinates shown are NAD83 Zone 9 N.
- The proposed project is within the South West OGC Zone.
- Distances shown are in meters and decimals thereof.

McElhanney
8808 72nd Street
Fort St. John, BC, V1J 6M2
Tel: 250-787-0356

Job: 3111-22807
EPASS#: 10053251

REVISION	DESCRIPTION
0	Issued for Use December 31, 2014
1	Issued for Use August 19, 2015 - New ePASS number.
2	Issued for Use November 5, 2015 - Corrected ePASS number.

BCGS: 103P.057
SCALE 1:20,000
Paper size to scale: 11 x 17

- Caribou Range: None
- Coal License: None
- Community Forest: None
- Guide / Outfitter: MILLIGAN, Robert
- Mineral Reserve: None
- Range Tenure: None
- Trappers: TR0616T006
- Tree Farm License: None
- Ungulate Winter Range: None
- Wildlife Habitat Area: None
- Wildlife Tree Retention Area: None
- Wood Lot: None

Prince Rupert Gas Transmission Project

TransCanada
In business to deliver

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SKETCH MAP SHOWING
PROPOSED TRANSITION ROADS
TRANSITION GROUP 9-15

Segment 1 FROM d-91-C, 103-P-10 TO d-100-B, 103-P-10

THROUGH UNSURVEYED CROWN LAND
CASSIAR DISTRICT
SKEENA STIKINE FOREST DISTRICT

Route Reference: IFC Route 9003
Document No.: T9-15_OGC_20k

Page 1 of 1
November 5, 2015