



## PEACE RIVER REGIONAL DISTRICT

**DAWSON CREEK** 1981 Alaska Avenue (Box 810), Dawson Creek, BC (T) 250-784-3200..(F) 250-784-3201  
**FORT ST. JOHN** 9505 100<sup>TH</sup> Street, Fort St. John, BC V1J 4N4 (T) 250-785-8084 (F) 250-785-1125  
[Toll Free: 1-800-670-7773]

Receipt # \_\_\_\_\_

### Application for Development

#### 1. TYPE OF APPLICATION

	<b>FEE</b>
<input type="checkbox"/> Official Community Plan Bylaw Amendment	\$ 1,000.00
<input type="checkbox"/> Zoning Bylaw Amendment	650.00
<input type="checkbox"/> Official Community Plan / Zoning Bylaw Amendment combined	1,050.00
<input checked="" type="checkbox"/> Temporary Use Permit	350.00
<input type="checkbox"/> Development Permit	165.00
<input type="checkbox"/> Development Variance Permit	165.00
<input checked="" type="checkbox"/> Sign requirement	150.00

In regard to applications for:

- i) an official community plan and/or zoning bylaw amendment;
- ii) temporary use permit;

Sign provided by the PRRD and sign posted pursuant to Section 8 of Bylaw No. 2165, 2016, **attached**.

#### 2. PLEASE PRINT

Property Owner's Name <b>Tourmaline Oil Corp.</b>	Authorized Agent of Owner (if applicable) <b>Canada West Land Services Ltd.</b>
Address of Owner [REDACTED]	Address of Agent [REDACTED]
City/Town/Village [REDACTED]	City/Town/Village [REDACTED]
Postal Code [REDACTED]	Postal Code [REDACTED]
Telephone Number: [REDACTED]	Telephone Number: [REDACTED]
Fax Number: [REDACTED]	Fax Number: [REDACTED]
E-mail: [REDACTED]	E-mail: [REDACTED]

#### 3. PROPERTY DESCRIPTION

Full legal description of each property under application	Area of each lot
DL 2485, PID 012-686-263	259.01ha/640.03ac ha./acres
	ha./acres
	ha./acres
	<b>TOTAL AREA</b> ha./acres

#### **Notice of collection of personal information:**

Personal information on this form is collected for the purpose of processing this application. The personal information is collected under the authority of the *Local Government Act* and the bylaws of the PRRD. Documentation/Information submitted in support of this application can be made available for public inspection pursuant to the *Freedom of Information and Protection of Privacy Act*.

4. Civic Address or location of property: Approximately 109km North of Fort St. John, BC

**5. PARTICULARS OF PROPOSED AMENDMENT**

Please check the box(es) that apply to your proposal:

- ☐ Official Community Plan (OCP) Bylaw amendment:

Existing OCP designation: \_\_\_\_\_

Proposed OCP designation: \_\_\_\_\_

Text amendment: \_\_\_\_\_

- ☐ Zoning Bylaw amendment:

Existing zone: \_\_\_\_\_

Proposed zone: \_\_\_\_\_

Text amendment: \_\_\_\_\_

- ☐ Development Variance Permit – describe proposed variance request:

\_\_\_\_\_  
\_\_\_\_\_

- ☒ Temporary Use Permit – describe proposed use:

144 person temporary worker camp. The area required for the camp will be  
2.43ha/6.00ac.

- ☐ Development Permit: Bylaw No. \_\_\_\_\_ Section No. \_\_\_\_\_

6. Describe the existing use and buildings on the subject property:

Previously used as a 144 person temporary worker camp. Existing use is bare land,  
existing water well on the south side of the parcel. See attached survey.

7. Describe the existing land use and buildings on all lots adjacent to and surrounding the subject property:

(a) North Vacant Private land, forested

(b) East Vacant Private and Crown land, forested

(c) South Vacant Private and Crown land, with some existing oil and gas infrastructure

(d) West Vacant Private and Crown land, with some existing oil and gas infrastructure

8. Describe the proposed development of the subject property. Attach a separate sheet if necessary:

Area for campsite is cleared as it was previously used as a temporary worker camp.  
See attached supplement.

9. Reasons and comments in support of the application. Attach a separate sheet if necessary:

Area for campsite is cleared as it was previously used as a temporary worker camp.  
Agreement in place with landowner for worker camp within DL 2485. See attached  
supplement.

10. Describe the means of sewage disposal for the development:

See attached supplement.

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11. Describe the means of water supply for the development:

See attached supplement.

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**THE FOLLOWING INFORMATION IS REQUIRED. FAILURE TO PROVIDE MAY DELAY YOUR APPLICATION.**

12. Proof of ownership of the subject property or properties. (For example: Certificate of State of Title, BC Land Title Office Property Title Search or recent Property Tax Notice.)
13. A Sketch Plan of the subject property or properties, showing:
  - (a) the legal boundaries and dimensions of the subject property;
  - (b) boundaries, dimensions and area of any proposed lots (if subdivision is being proposed);
  - (c) the location of existing buildings and structures on the subject property, with distances to property lines;
  - (d) the location of any proposed buildings, structures, or additions thereto, with distances to property lines;
  - (e) the location of any existing sewage disposal systems;
  - (f) the location of any existing or proposed water source.

**ADDITIONAL OR MORE DETAILED INFORMATION MAY BE REQUESTED BY THE PEACE RIVER REGIONAL DISTRICT FOLLOWING REVIEW OF YOUR APPLICATION.**

**If it is necessary for the property boundaries and the location of buildings and structures to be more accurately defined, a plan prepared by a British Columbia Land Surveyor may be required.**

15. I / We the undersigned hereby declare that the information provided in this application is complete and is, to the best of my / our knowledge, a true statement of the facts related to this application.

  
Signature of Owner



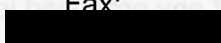


Sept. 9, 2020  
Date signed

X X X  
Signature of Owner

\_\_\_\_\_  
Date signed

16. **AGENT'S AUTHORIZATION**

If you have an agent act on your behalf in submission of this application, the following authorization **MUST** be signed by **ALL** property owners.

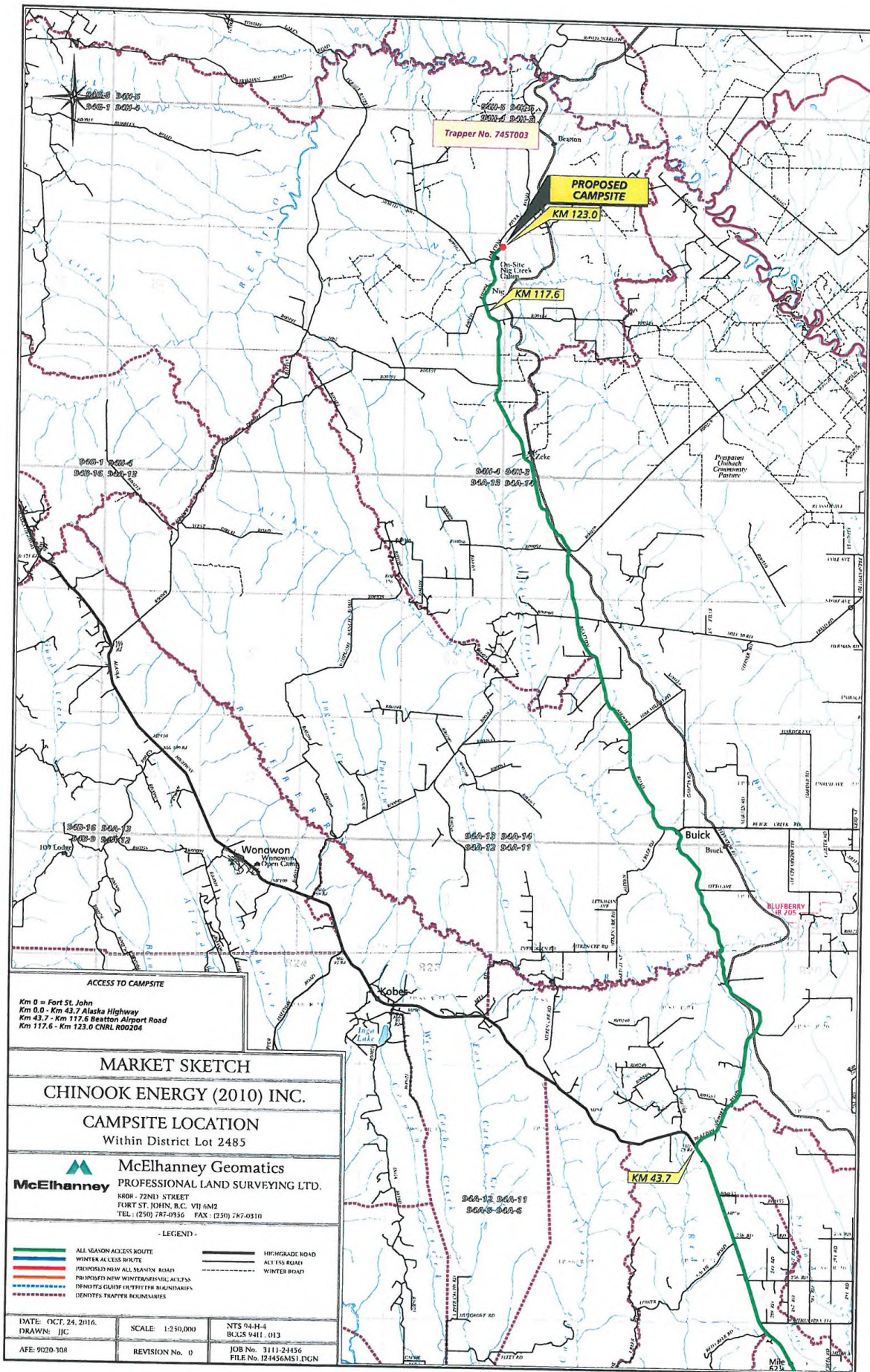
I / <del>we</del> <b>GERALDINE B. SHEPHERD</b> and <u>X X X</u> hereby authorize		
(name) Canada West Land Services Ltd. to act on my/our behalf regarding this application.		
Agent address: 		
Telephone: 	Fax: 	Email: 
Signature of Owner: 		Date: <u>Sept 9, 2020</u>
<u>X X X</u>		Date: _____

For Reference - excerpt from "Development Application Procedures and Fees Bylaw No. 2165, 2016."

## 8. Public Notice Sign Requirements

- (a) On those parcel(s) that are subject to an amendment to:
  - (i) an official community plan and / or zoning bylaw; or
  - (ii) temporary use permit;the applicant shall post a development application sign on the subject property, which shall be provided by the Peace River Regional District.
- (b) The sign shall be a minimum of 1.2 metres x 1.2 metres (4 feet x 4 feet) in dimension;
- (c) The sign shall be constructed of recyclable material;
- (d) The sign shall have a white background with black block lettering that is not less than 6 centimeters in height;
- (e) The sign shall contain the following wording:  
*'This site is subject to an application to change land use or density. For further information please contact the Peace River Regional District at 1-800-670-7773';*
- (f) The sign must be placed at the driveway entrance or midpoint of the property fronting the main service road, providing the most effective legibility and visibility for passersby from the road;
- (g) The sign shall be erected on the property at a minimum of fourteen (14) days prior to the Regional Board considering the application, and the applicant must submit to the Regional District a photograph clearly showing the sign posted on the property;
- (h) The sign shall be placed in a manner that does not interfere with pedestrian or vehicle traffic flow, or create a potential hazard by obstructing visibility from a highway, road or lane;
- (i) The sign shall be installed in a safe, sturdy manner, capable of withstanding typical wind and other weather conditions;
- (j) The sign shall remain in place continuously until the conclusion of the Public Hearing or issuing of the permit, as the case may be, and shall be removed within fourteen (14) days after the decision(s) of the Regional Board on the said application. Applicants are encouraged to dispose of the signs by recycling them.
- (k) Failure to post and keep the sign in accordance with this bylaw may result in a delay or postponement of the Public Hearing and / or Board decision process;
- (l) Any additional notification costs incurred by the Regional District as a result of the applicant failing to post the required sign shall be payable by the applicant prior to advertising of the Public Hearing or delivering public notification.
- (m) Where a sign required by this bylaw is removed, destroyed or altered due to vandalism or the actions of unknown persons, the validity of any bylaw that is the subject of the relevant application and Public Hearing shall not be impacted;
- (n) If a land owner receives any written comments regarding the land use application, those comments must be delivered to the Peace River Regional District office as soon as they are received so that this information may be considered with the subject application.
- (o) A non-refundable fee in the amount of \$150.00 shall be levied for the sign.












REV.	0	Original Plan Prepared	24/10/16	DR	FC	SP
REV.		REVISIONS	DDMM/YY	PC	CAD	CHKD

AREAS (MAXIMUM DISTURBANCE)			
DL 2485	NEW CUT	EXISTING CLEARING	TOTAL
CAMP SITE	0.00 ha	2.43 ha	2.43 ha
TOTAL DISTURBANCE =	0.00 ha	2.43 ha	2.43 ha


**NOTES:**

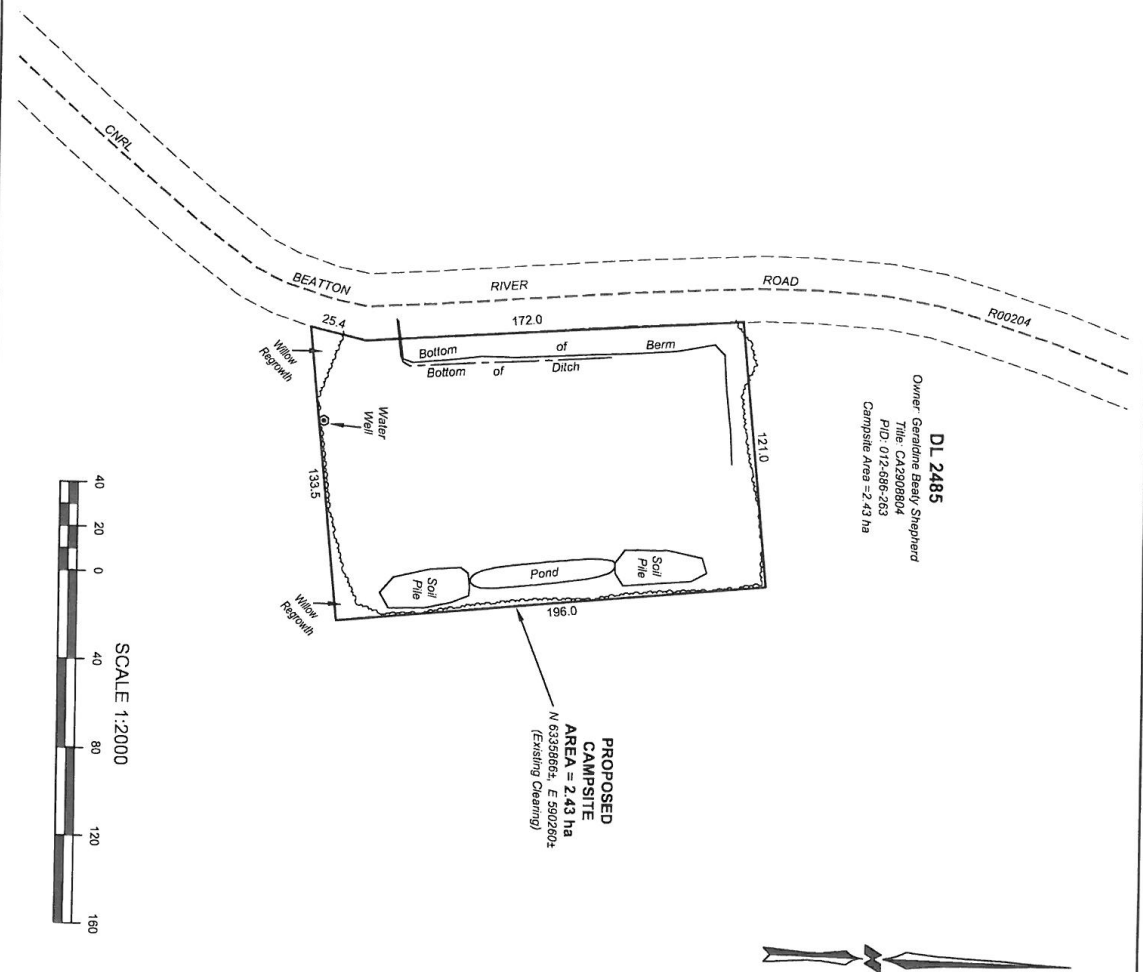
All coordinates shown are NAD 83 (CSRS) UTM Zone 10. All dimensions shown for ancillary sites are for the centroid. All dimensions are in metres and decimals thereof. The proposed disturbance does not fall within the Agricultural Land Reserve. The proposed disturbance does not fall within the Enhanced Management or Regulatory Policy areas of Area Based Analysis.

	Tree Line
	Centerline Road
	Ditch
	Berm
	Water Well

## CHINOOK ENERGY (2010) INC.

SKETCH PLAN SHOWING PROPOSED CAMP SITE  
WITHIN DISTRICT LOT 2485  
PRIVATE LAND,  
PEACE RIVER DISTRICT

FILE:	AFE: 9020-308	BCGS: 94H . 013	REVISION
	McElhanney Geomatics Professional Geomatics Ltd. 8808 - 72 Street, P.O. Box 125 Peace River, Alberta T8A 1A2 Phone: (250) 787-0356 Fax: (250) 787-0310	SHEET: 1 OF 1 JOB No.: 311124456 DRAWING: J24456SK1	0





Peace River Regional District  
P.O. Box 810  
1981 Alaska Avenue  
Dawson Creek, BC V1G 4h8

September 9, 2020

**Attention: Michael Blatz, Land Use Planner**

**Re: Tourmaline Oil Corp. Temporary Use Application - Work Camp**

Tourmaline Oil Corp. (Tourmaline) is hereby applying for a Temporary Use Permit (TUP) for the purpose of constructing a Tourmaline owned, closed, dry 144 man work camp on private land (DL 2485) that is directly off the Beaton River Airport Road, at Km 79. The site is an existing clearing that has previously been used as a forestry tree planting camp, and then as an oil & gas worker campsite by Chinook Energy (2010) Inc. Tourmaline is applying for the TUP for a three-year term. The site location is in the Birley/Umbach area approximately 109kms northwest of Fort St. John.

This camp location was previously in use by Tourmaline Energy (2010) Inc. Please note Tourmaline acquired all of the outstanding shares of Chinook Energy (2010) Inc. on February 14, 2020. As such, Chinook Energy is now a wholly owned subsidiary of Tourmaline. It is anticipated that Chinook Energy and Tourmaline will amalgamate on or about December 31, 2020. Tourmaline has full authority to apply and work on behalf of Chinook Energy.

Tourmaline is focusing on the development of the Montney formation in the Birley/Umbach area of northeastern British Columbia. Tourmaline has substantial mineral land holdings in the area and has multi-year plans to develop those minerals. Tourmaline's minerals are located off the Birley road, approximately 4km north of the proposed camp site. The Birley road is a privately maintained and radio-controlled road, used almost exclusively by oilfield traffic.

To date Tourmaline has been in the exploration phase of its Birley asset, and the proposed camp would help facilitate Tourmaline moving into the development phase of its property.

In order to be able to, cost effectively, and safely enter the development stage for those minerals Tourmaline requires the ability to house its' drilling, completions, facility construction workers and employees directly in our area of operations. There are several reasons why Tourmaline requires the ability to house its workers in our area of operations and those reasons are outlined below:

- During winter conditions, the Beaton River Airport Road can be very rough with lots of oilfield traffic. This increases the accident risk to our workers of having to commute from Fort St. John, which in the winter can be up to 2 hours one way. There is limited cellular service along the Beaton, so in the event of an accident, or even sliding into the ditch can make emergency response a significant challenge. Having a camp would work to mitigate those unnecessary risks for our contractors and workers.

- As a result of the length of the commute, and the nature of drilling operations being 24 hour operations, Tourmaline would be required to run three 8 hour drilling crews instead of the standard two 12 hour crews, to account for the commute to and from Fort St. John. This would impose significantly more vehicle trips adding to the stress on the transportation infrastructure on the highway and local road networks. Further, this would work to increase the costs of our drilling operations materially, and in a time of depressed commodity prices, our capital budget can't support this type of operation. With no work camp Tourmaline would experience a material limitation in its ability to develop its assets and grow as a company, which would negatively affect stakeholders and shareholders of Tourmaline.
- Housing workers in our area of operations allows for better response times in the event of an emergency, as we would have the necessary medical and technical people in the immediate area to respond to an emergency.
- Being that Tourmaline's proposed camp is a dry camp, it also provides a better ability for the company to ensure its staff and workers are in compliance with our health and safety policies. Commuting to and from Fort St. John opens up the ability for contractors or workers to be in breach of our health and safety policies and could potentially create risks for the broader public.
- During storms or bad weather, the Beatton River Airport Road can become almost impassable, which can put our operations and personnel at risk, should a shift change not be able to effectively take place. This could involve having to shut down operations, which carries with it numerous safety risks, and serves to further escalate costs.

Tourmaline can offer the following further details about our proposed work camp:

#### **Water**

Tourmaline intends to test the existing water well on site, to determine if the quality and volume are viable for use. If the well is not satisfactory Tourmaline will utilize water from a nearby existing water source dugout. This helps to reduce traffic from hauling water from Fort St. John and helps reduce the stress on the water system of the city. Tourmaline will obtain the required permits from Northern Health and the Ministry of Forest Land Natural Resource Operations permitting the diversion of well water volume required by the camp and ensuring the quality of treated water exceeds that required by Northern Health. The potable water plant will be maintained and operated by a certified trained technician as directed by Northern Health.

#### **Sewer**

Tourmaline plans to truck out the sewage volume generated by the camp.

#### **Transportation**

Chinook Energy retained McElhanney Consulting Services Ltd. (McElhanney) in October of 2016 to complete and Traffic Impact Analysis for our proposed camp. The conclusion of their report was that having a work camp in the subject area of operations would not only have minimal impact on the road network of the PRRD, it would actually serve to improve the operational and safety aspects of the highway network by displacing commuter traffic. As the majority of Tourmaline's operations in the area will be winter based, any commuting would largely be done during hours of darkness which would further increase the risks to staff and contractors.

Due to the fact that most operations are conducted during the winter months, there is minimal issues with dust control on the Birley or Beatton roads. Any work completed during summer would largely be directly off the Birley road itself, and dust control measures such as water trucks would be implemented. Further, the Birley road is a radio-controlled road, which helps anticipate oncoming traffic, allowing for reduced speeds when vehicles are passing, which reduces dust related safety issues.

## **Housing**

Tourmaline's camp would consist of a number of all-weather, Canadian manufactured, skidded modular complexes and utilities equipment. In particular, there will be a 7-unit kitchen/dining/management office complex with the ability to seat 130 people and offers men's and women's washrooms. We plan to have 144 single occupancy bedrooms; two 49-bed craft dorms, one 30-bed executive style dorm, and 4 individual wet sleeper units. Guests will enjoy private washrooms, in-room satellite entertainment, carpeted common areas and lockable cabinetry. Services for the camp will be connected to withstand the elements and mitigate spill risk, whereby each complex will tie into our potable water plant, sewer plant, diesel generators for power, and LPG bullets for heating. We will provide a fuel card lock station for vehicles, and associated parking.

## **Policing**

Tourmaline's camp has a staff of approximately 10 people with an onsite Camp Manager. The nature of Tourmaline's operations being largely 24-hour operations when the camp is manned, helps reduce the need for onsite security personnel, as all workers present in the area, and at the camp are either directly or indirectly employed by Tourmaline. Further, the fact that the camp is a dry camp helps to reduce any potential associated issues with drug or alcohol consumption. There are no weapons allowed in Tourmaline's camp and hunting is strictly prohibited. As there are no residences within 1500m of Tourmaline's site so we do not anticipate any offsite issues, or issues with noise. Due to the remote location and the fact the camp is proposed on a private land, we do not anticipate any issues requiring any police response.

## **Social**

Tourmaline will have two onsite medics at the camp 24 hours a day. Those medics are qualified to handle most minor procedures and are capable of making any medical related decisions with respect to evacuating a patient or seeking further care.

## **Reclamation**

As Tourmaline's site is on private land and an existing clearing that has been used as a forestry camp in the past, Tourmaline has committed to the landowner to leave the land as we have found it. All Tourmaline camp buildings would be demobilized from the site, and all above ground equipment removed. Tourmaline would then restore the land to the satisfaction of the landowner, and to the conditions required by any applicable legislation.

## **Solid Waste**

Tourmaline will have recycling bins at the camp site. All other garbage will be stored in animal proof steel bins. Once the bins become full, cardboard recycling will be delivered to the Eco-Depot recycling center in Fort St. John. Garbage will be periodically trucked off-site for disposal at the Fort St. John Landfill. Beverage containers will be collected and removed from camp via grocery truck and recycled at their distribution hub.

## **Emergency Management**

Tourmaline has comprehensive health and safety policies in place that govern the conduct at its camp. Further, Tourmaline has in place with OGC a Corporate Emergency Response Plan (ERP) which outlines our response to emergency situations, whether they be oilfield related, or personal injury. In accordance with that plan if the situation were of such a nature as notification to a local or provincial government agency was required then Tourmaline would communicate with the applicable agency in accordance with our ERP. Tourmaline has obtained certification that all fire extinguishers and hood suppression systems meet provincial fire code.

**Communications**

Tourmaline's proposed camp would use satellite internet as well as a cell signal boosting tower which would help to facilitate safe communications in this remote area. Further, contractors and employees are equipped with radio communications, which is the dominant form of communication in the area. Without a cell signal booster, there isn't sufficient cell service in the area. The fact that radio is the dominant form of communication and the internet is satellite provided; there is minimal impact to local communication infrastructure.

**BC Assessment**

Notification has been sent to BC Assessment informing them of our proposed camp, the size of the camp and our intent to file with the PRRD for a TUP.

While Tourmaline recognizes there have been a number of camps, substantially larger than what we are requesting, built throughout the PRRD and that this has created challenges for the PRRD in a number of areas, Tourmaline believes that installing a work camp for our operations will actually minimize a number of those challenges, as we have identified above.

We hope the above explanations satisfy any questions you may have with respect to Tourmaline's proposed camp. However, should you have further questions or require additional information, we would be pleased to hear from you at your convenience. We look forward to your decision on our TUP application in due course.

Sincerely,

**Tourmaline Oil Corp.**



For

Per: Brett Norrie

Senior Surface Landman



November 4, 2016

Michael Anderson  
Manager, Surface Land  
Chinook Energy Inc.  
Suite 1000, 517 – 10<sup>th</sup> Avenue SW  
Calgary AB T2R 0A8

## Re. Traffic Impact Analysis for Proposed Chinook Camp

Thank you for your request to update the traffic study concerning the Chinook Energy work camp. Our analysis and findings are outlined below.

### Site Description:

The proposed location of the camp is an existing clearing on the east side of Beatton River Road, 3.6 km south of the Birley Road intersection, and approximately 110 km north of Fort St. John (Figure 1). The camp footprint is expected to be approximately 2.4 ha.

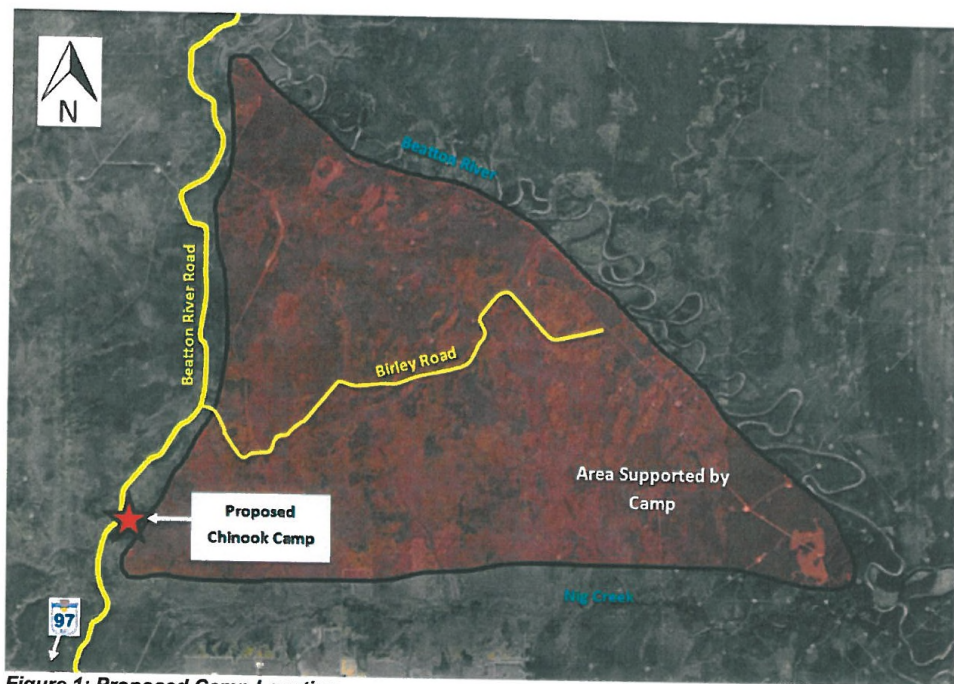


Figure 1: Proposed Camp Location





The camp is proposed to open in January 2017, and would be in operation for the foreseeable future. The typical camp occupancy is expected to be up to 100 residents at any one time, although the occupancy could increase to a maximum of 144 residents on occasion.

The purpose of the camp is to support the natural gas drilling and completions activities undertaken by Chinook Energy. The operational area supported by the camp would be between Beaton River Road, Beaton River, and Nig Creek (see Figure 1).

### Trip Generation

Camp traffic is expected to be comprised of the following:

- **Camp staff:** approximately 10 staff will stay at the camp as residents, providing such services as administration, maintenance, kitchen, cleaning, and medical services. The camp staff will remain on site for a few weeks, and will typically rotate in and out of the camp outside the peak hours.
- **Commuting workers:** at full occupancy, a maximum of 144 workers would reside in the camp. Approximately 60% of the workers are assumed to work the day shift (7am to 7pm), and the remaining 40% would work the night shift (7pm to 7am). All workers would commute by personal vehicle, with an expected occupancy of 1.5 persons per vehicle. Using these numbers, the expected trip generation is shown in Table 1.

**Table 1: Estimated Trip Generation**

	Inbound (vehicles per hour)	Outbound (vehicles per hour)
AM Peak Hour	38	58
PM Peak Hour	58	38

- **Camp Visitors and Deliveries:** camp guests and deliveries of fuel and supplies are expected a few times per week. The camp is planned to have its own water supply and sewage lagoon, so water/sewage trucks are not likely to be needed. Camp visitors and deliveries would typically be distributed throughout the day, and are not likely to coincide with the peak commuting hours for the camp.

### Trip Distribution:

Traffic between the camp and the work sites would use Birley Road and Beaton River Road, both of which are currently maintained by Canadian Natural Resources Ltd (CNRL). Camp traffic would rarely reach Alaska Highway 97, except for the rotation of workers every couple weeks and occasional camp deliveries and visitors. These trips are generally expected to be to and from Fort St John.



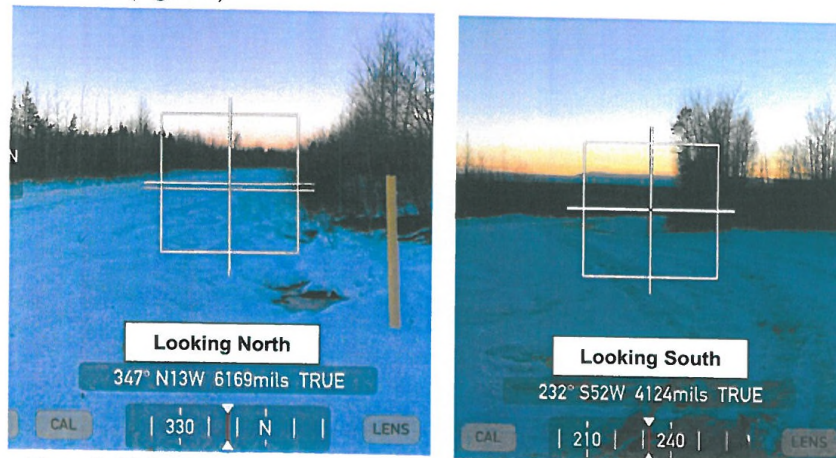
## Site Access

The camp is proposed to be accessed by an existing connection to Beaton River Road, on the outside of a curve (Figure 2). The access would be upgraded as required to accommodate the largest expected delivery truck.



**Figure 2: Proposed Camp Site and Access**

On a recent site visit, the sight distance looking north from the site access was confirmed to be 215 metres; this is limited by a horizontal curve. The sight distance looking south was confirmed to be 300 metres (Figure 3).



**Figure 3: Sight Distance at Site Access**





The sight distance looking south from the access is more than sufficient to satisfy the criteria from the Geometric Design Guide from the Transportation Association of Canada (TAC) for an 80 km/h road (Table 2). The sight distance looking north satisfies the Minimum and Decision Sight Distance criteria for a stop condition, but is slightly less than required to allow a vehicle turning south from the access to accelerate to the 80 km/h posted speed before impeding a southbound vehicle just coming into view at the time of the turning movement. However, the low volume of traffic on Beaton River Road, and the curves in the road alignment (though which vehicles would need to decelerate anyhow) should adequately mitigate this concern.

**Table 2: Sight Distance Criteria**

Criteria	Sight Distance Criteria (m)	Satisfied?	
		Looking North	Looking South
Minimum Stopping Sight Distance	140	Yes	Yes
Decision Sight Distance Condition A: Stop	155	Yes	Yes
Decision Sight Distance Condition C: Speed/Path Change	230	No	Yes
Intersection Turning Sight Distance (i.e. looking for approaching vehicles in lane being entered)	250	No	Yes


### Conclusion

Assuming a maximum occupancy of 144, the proposed Chinook Camp is expected to generate less than 100 trips during both the morning and evening Peak Hours. With relatively low volumes of existing traffic expected to be in the area, there should be no operational issues on the surrounding road network. Furthermore, although the proposed site access is located in the middle of an "S" curve, the sight distance at the access should also be sufficient to prevent conflicts on Beaton River Road.

If the camp is not constructed, the workers would need to stay in Fort St John, or in other camps accessed via Alaska Highway 97. This would cause the estimated 100 trips in each peak hour to use the provincial highway network, especially the Highway 97/Beaton River Road Intersection. For this reason, the establishment of the camp is expected to have operational and safety benefits to the highway network by displacing this commuter traffic. The camp would also be a safety benefit to the workers by reducing their travel distances, especially during winter months and hours of darkness.

If you have any questions regarding the above, please call me at 778-693-2199.

McElhanney Consulting Services Ltd.

  
Glenn Stanker PEng PTOE  
Senior Transportation Engineer

