



**TUNDRA  
ENERGY MARKETING LIMITED**

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Ms. Stacy McBride

Petroleum Branch  
Ministry of Innovation, Energy and Mines  
Box 1359, 227 King Street West  
Virden, Manitoba  
ROM 2C0

March 1, 2016

RE: Virden Pipeline System Watercourse Crossing Replacements

Dear Ms. McBride,

Tundra Energy Marketing Limited hereby makes application under section 150 (1) of the Oil and Gas Act for a Pipeline Modification for watercourse crossings at 6-27-10-26 WPM, 6-10-11-26 WPM and 4-22-11-26 WPM.

Documentation requested by Manitoba Innovation, Energy and Mines Department for such Application is included in the enclosed package.

Sincerely,

Sam Stephenson  
VP, Engineering & Construction  
Tundra Energy Marketing Limited

cc. Petroleum Branch, Winnipeg, MB



**An Application to  
Manitoba Innovation, Energy and Mines  
Petroleum Branch**

**to  
Modify Crude Oil Pipelines**

**At  
6-27-10-26 WPM  
6-10-11-26 WPM  
4-22-11-26 WPM**

## **Table of Contents**

<b>1. Introduction.....</b>	<b>1</b>
<b>2. Description.....</b>	<b>1</b>
<b>3. Environmental Protection Plan .....</b>	<b>3</b>

## **List of Appendices**

<b>Appendix A</b>	<b>Survey Plans</b>
<b>Appendix B</b>	<b>Crossing Sketches</b>
<b>Appendix C</b>	<b>Line List</b>

## **1. Introduction**

Tundra Energy Marketing Limited (hereafter referred to as “TEML”) proposes to replace watercourse crossings at the following locations:

- 6-27-10-26 WPM
- 6-10-11-26 WPM
- 4-22-11-26 WPM

The crossings are being replaced to restore adequate depth of cover as per standard CSA Z662. In accordance with Section 150 (1) of the Oil and Gas Act, TEML hereby makes application to Manitoba Innovation, Energy and Mines - Petroleum Branch, for approval of such modifications.

## **2. Description**

As a component of TEML’s Pipeline Integrity Management Plan, depth of cover surveys are conducted to identify potential areas of concern where compliance with current industry standards are not being met. TEML has identified three such areas on the recently acquired Virden Pipeline System (VPS) where insufficient depth of cover through watercourse crossings exists. TEML proposes to modify the operating pipelines to provide additional depth of cover through the watercourses.

The intent of this rehabilitation program is to install the new pipeline segments via Horizontal Directional Drill (HDD) as a primary crossing method with an isolation (flowing) or open cut (dry) as a secondary method should HDD prove technically unfeasible. Once the new segments are installed, the existing pipelines will be purged to evacuate product. New pipe segments will be tied in and old pipe will be removed through the crossing area.

These three pipelines are covered under Operating License 2015-03.

Particulars of the pipelines are listed in the table below.

Name	RL-01	SC-01	SC-02
Legacy Database Licence #	8737	1149	528
Size	NPS 4	NPS 6	NPS 4
Crossing Number	146X	149X	150X
Watercourse Name	Scallion Creek	Little Scallion Creek	Scallion Creek
Location	6-27-10-26, WPM	6-10-11-26, WPM	4-22-11-26, WPM
Segment To/From	12-30-10-25, WPM To 6-27-10-26, WPM	5-15-11-26, WPM To 5-27-10-26, WPM	5-27-11-26, WPM To 5-15-11-26, WPM
Licence #	2015-03	2015-03	2015-03
ROW Width	9.14 m	9.14 m	9.14 m
Additional ROW Required	TBD, per detailed design	TBD, per detailed design	TBD, per detailed design
Temporary Workspace Required	Yes	Yes	Yes
Replacement Pipe Specs (Preliminary)	Steel WT 4.8 mm GR 359 SS YJ2K	Steel WT 5.4 mm GR 359 SS YJ2K	Steel WT 4.8 mm GR 359 SS YJ2K

The items below have been included with this application in accordance with the requirements of Manitoba Petroleum Guideline 12:

- i. The expected timeline for the proposed works is April 15 to July 15, 2016.
- ii. There will be no change to P&IDs. Pipeline alignment sheets will be updated. Surveys are included in Appendix A. Shape files will be submitted under separate cover.
- iii. No additional equipment is required to complete the proposed works (replace & remove pipeline segments only).

- iv. Additional right of way (ROW) and temporary workspace (TWS) requirements are identified within the above table, subject to detailed design. Land acquisition is underway as per the line list (Appendix C).

All modifications will conform to the latest edition of CSA Z662 standard. The replacement sections will be installed to maintain a minimum clearance of 2 meters below the lowest point of the watercourse for a minimum distance of 20 meters from each watercourse bank.

### **3. Environmental Protection Plan**

TEML has a general EPP to be used to govern all construction. The TEML EPP can be provided upon request.

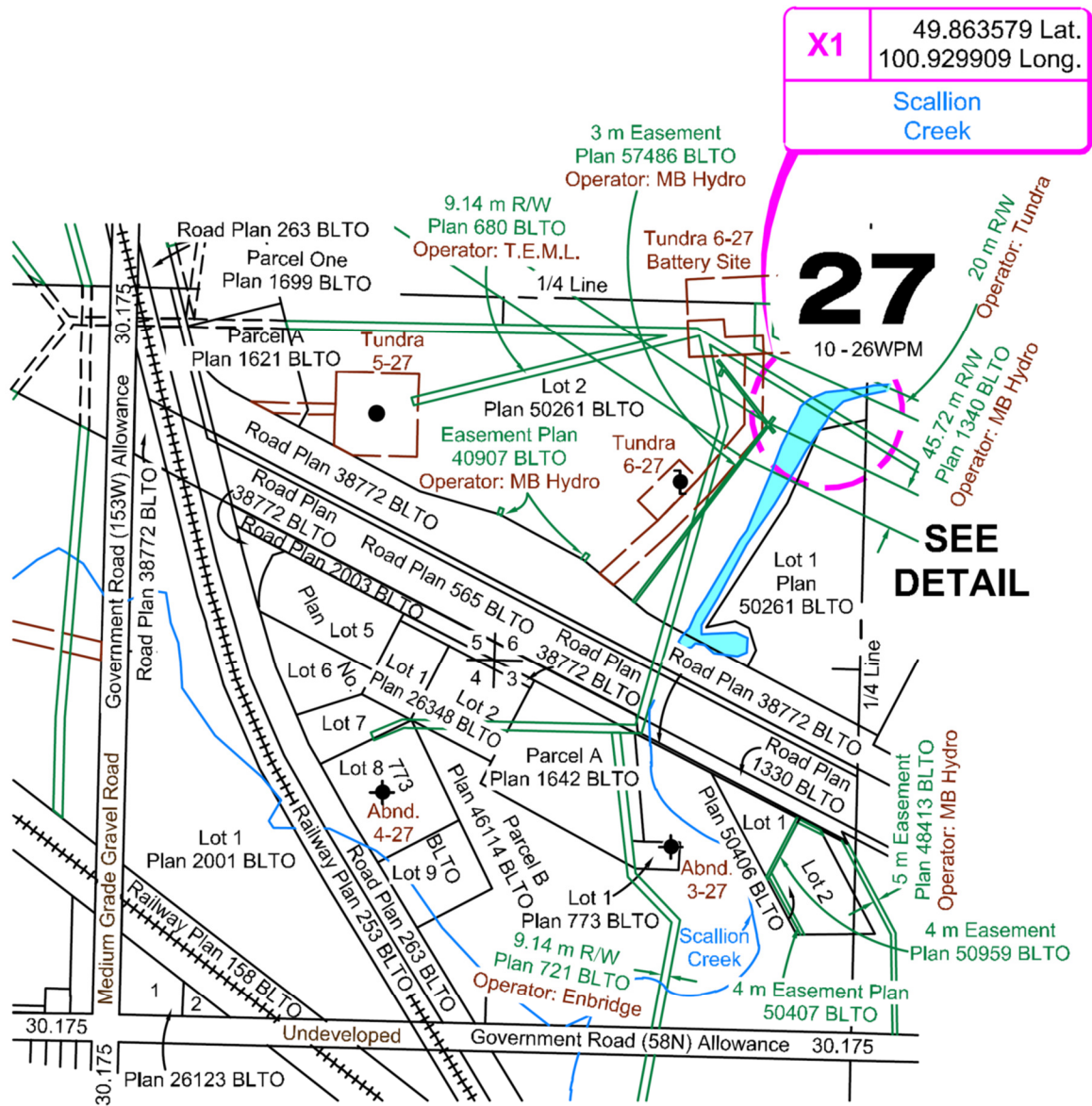
TEML will engage the services of an Environmental Consultant to conduct a pre-construction assessment of the crossing replacements and will monitor the work to ensure environmentally responsible construction.

TEML will use a corporate level Emergency Response Plan (ERP) which is intended to handle any emergency situations that may arise. Tundra's emergency telephone number (1-844-333-6789) is attended to 24 hours a day, 7 days a week.

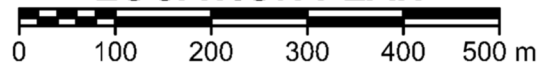
## Appendix A

### Survey Plans

# Tundra Energy Marketing Limited Pipeline Modification Application



## LOCATION PLAN

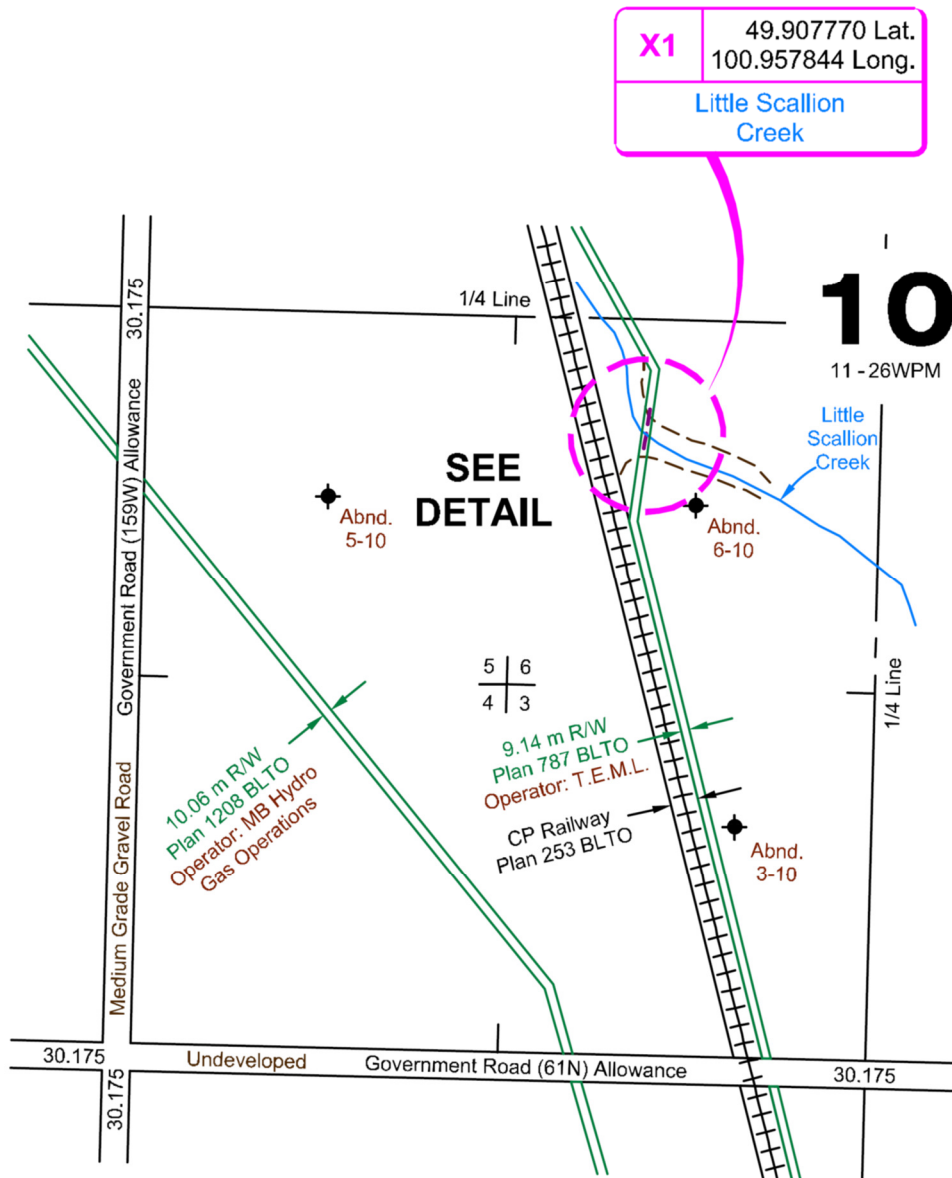


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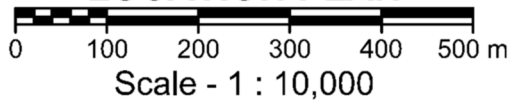
6-27-10-26, WPM



Tundra Energy Marketing Limited  
Pipeline Modification Application

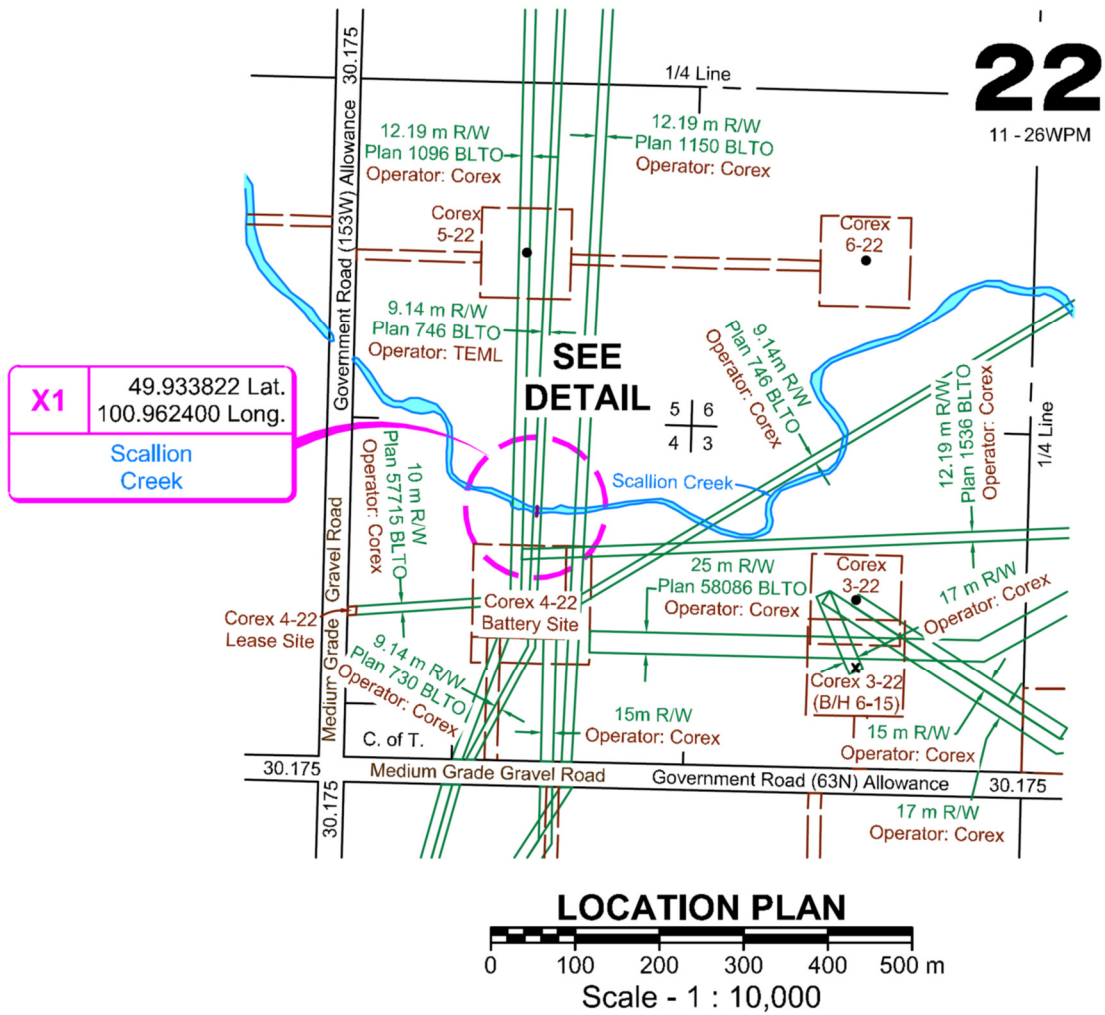


**LOCATION PLAN**



6-10-11-26, W1M

Tundra Energy Marketing Limited  
Pipeline Modification Application



4-22-11-26, W1M

## Appendix B

# Crossing Sketches

To be provided subsequent to original submission