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SJohnson@hydro.mb.ca

May 23, 2014

Director
Environmental Approvals Branch
Manitoba Conservation
Suite 160, 123 Main Street
Winnipeg, MB R3C 1A5

Dear Ms. Braun:

Re: Notice of Alteration for the Pointe du Bois Transmission Project

Manitoba Hydro submitted an application for license of the Pointe du Bois Transmission Project on April 11, 2014. This letter is to inform you of an alteration to the project. Based on the location of the Final Preferred Route of the PW75 115 kV transmission line in relation to the proposed location of a new Lee River Distribution Supply Center (DSC; see Map), Manitoba Hydro has decided to Tap the proposed PW75 line and construct a 115 kV line from the Tap location to the proposed Lee River DSC.

The Lee River DSC will be located adjacent to the existing Manitoba Hydro right-of-way (ROW) for the P1 – P4 Transmission Lines (Figure 1). The DSC is currently being designed. It will be similar to the existing Selkirk DSC (see attached photo and drawing).

Approximately 1.6 km of 115 kV transmission line will be required from the Tap location to the DSC location (Map 1). The route will replace the existing P1-P4 lines, currently planned for decommissioning.

The new route will be centered on the existing ROW similar to the proposed Pointe du Bois to Whiteshell Transmission Line (Figure 2). An additional 30 m of ROW will be required (15 m on the north side and 15 m on the south side). The transmission line design parameters (tower design, span length and ROW width) will be the same as the Pointe du Bois Station to Whiteshell Station transmission line described in Chapter 2 of the EA Report.

This 115 kV Tap would replace the proposed 66 kV line from Pointe du Bois Station to the Lee River DSC project outlined in the EA Report. Section 7.6.2.2 of the Cumulative Effects Section included the following project:

Construction of a Lee River Distribution Supply Centre (DSC) along with a 66 kV sub-transmission line paralleling the north side of the proposed PW75 line. Manitoba Hydro is proposing to construct the project in order to ensure a reliable electrical supply to residences and cottages in the vicinity of Lee River. DSCs are an alternative to



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construction of conventional sub-stations. They are smaller in size than conventional sub-stations (approximately 50 x 60 m). The project ISD is fall of 2016. Construction of a DSC typically takes about 40 days, while construction of the 66 kV lines is estimated to take about 120 days. Construction of the transmission line will occur during the winter months.

The proposed project will change as follows:

The 23 km long 66 kV line (20 m ROW) will not be constructed. Instead 1.6 km of 115 kV transmission line (60 m ROW) will be constructed. The DSC will remain the same.

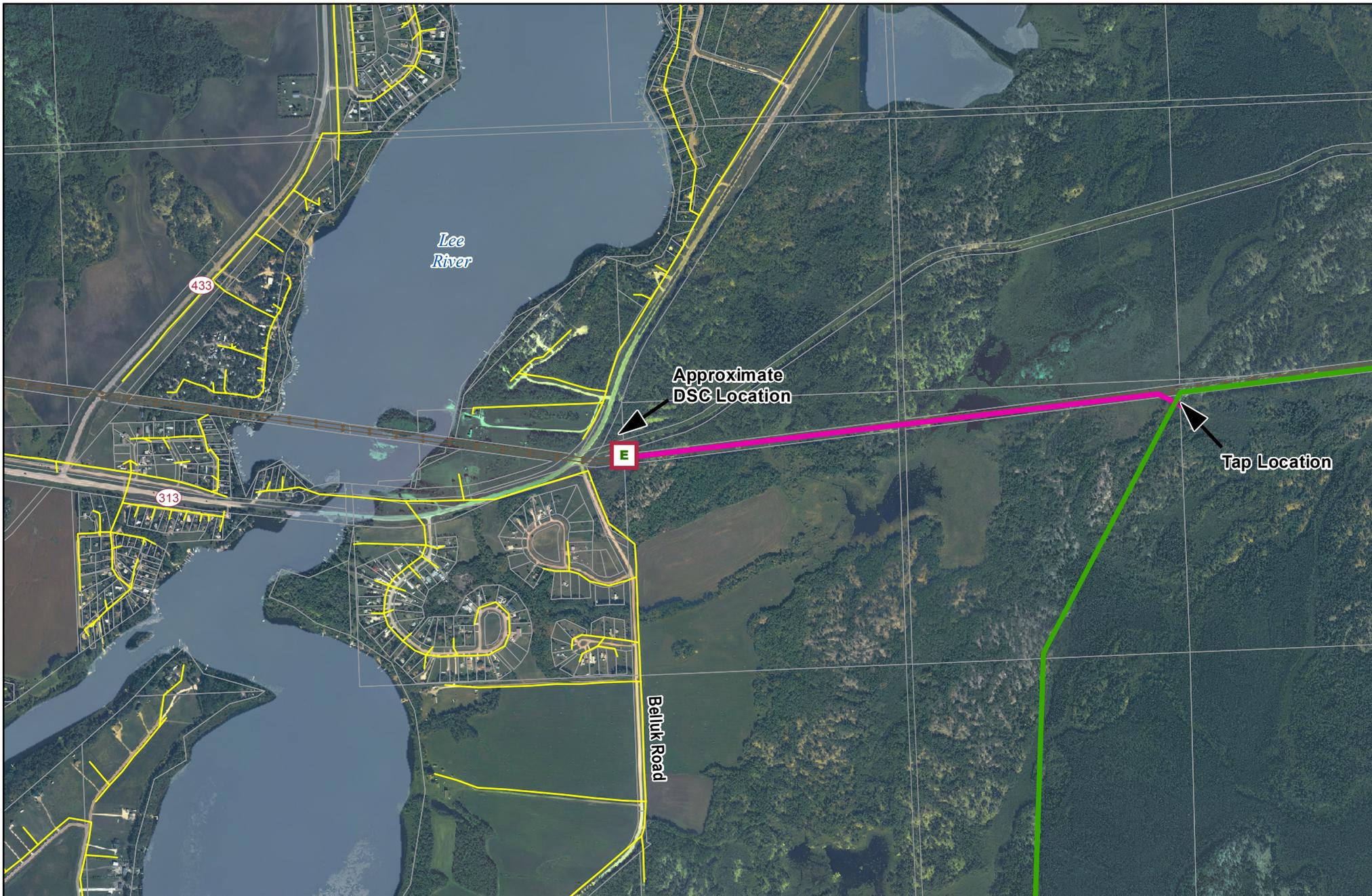
The potential effects of the additional 1.6 km of transmission line are outlined in the attached table.

In closing, should you require more information or have any questions, please contact me at 360-4394.

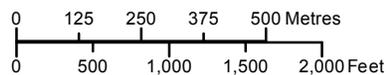
Yours truly,

A handwritten signature in blue ink, appearing to read 'Shannon Johnson'.

Shannon Johnson, Manager
Licensing & Environmental Assessment Department,
Transmission Planning & Design
Transmission



Coordinate System : UTM Zone 14 NAD 83
 Data Source: MBHydro, MMM, ProvMB, NRCan
 Date Created: April 25, 2014



- PW75
- Lee River DSC 115 kV Tap
- Transmission Line
- Distribution and Sub-Transmission Line
- Land Parcel

Pointe du Bois Transmission Project
Lee River DSC 115 kV Tap



Figure 1: DSC location

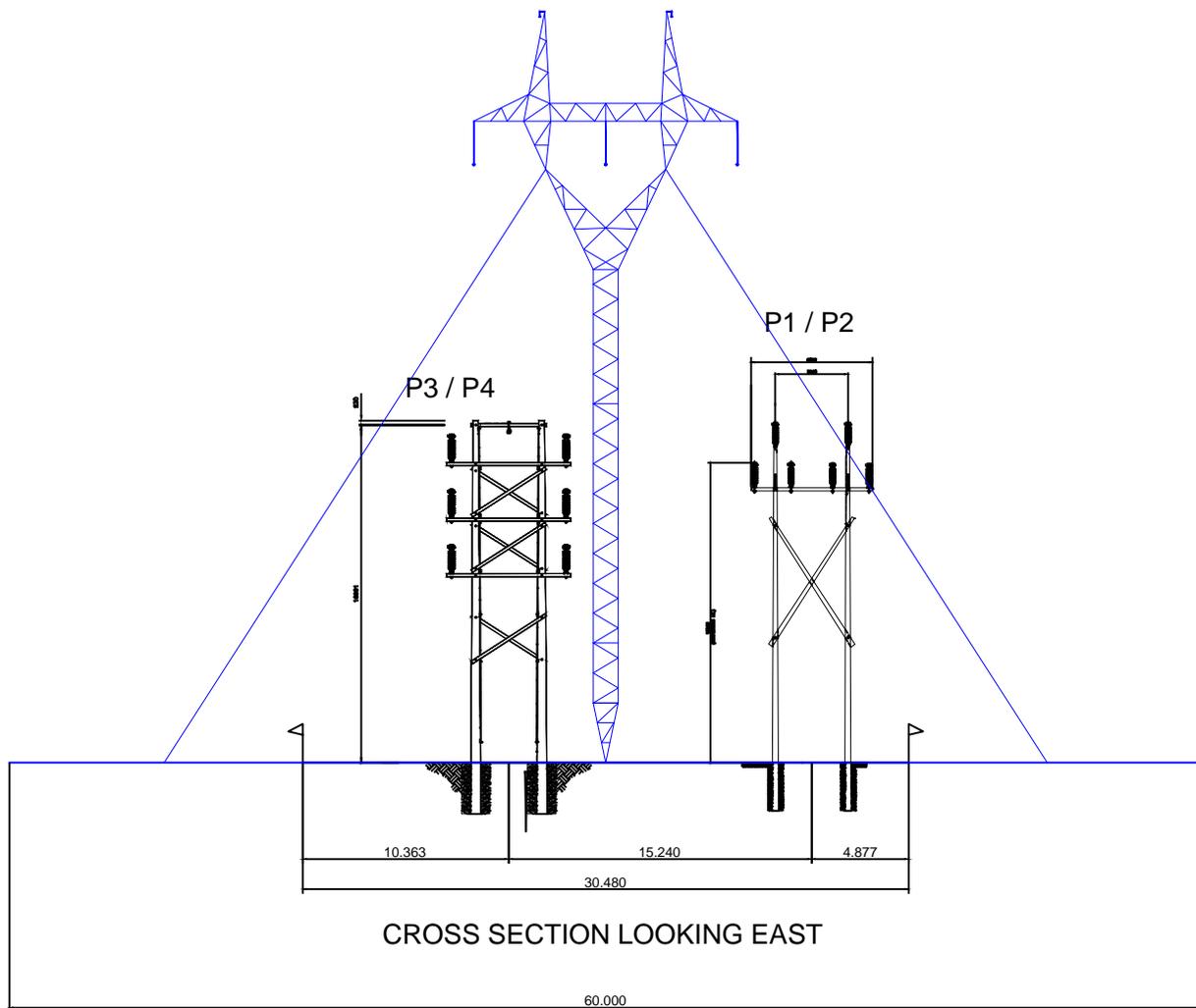


Figure 2: Pointe du Bois to Whiteshell Station proposed cross section along the existing P1-P4 ROW



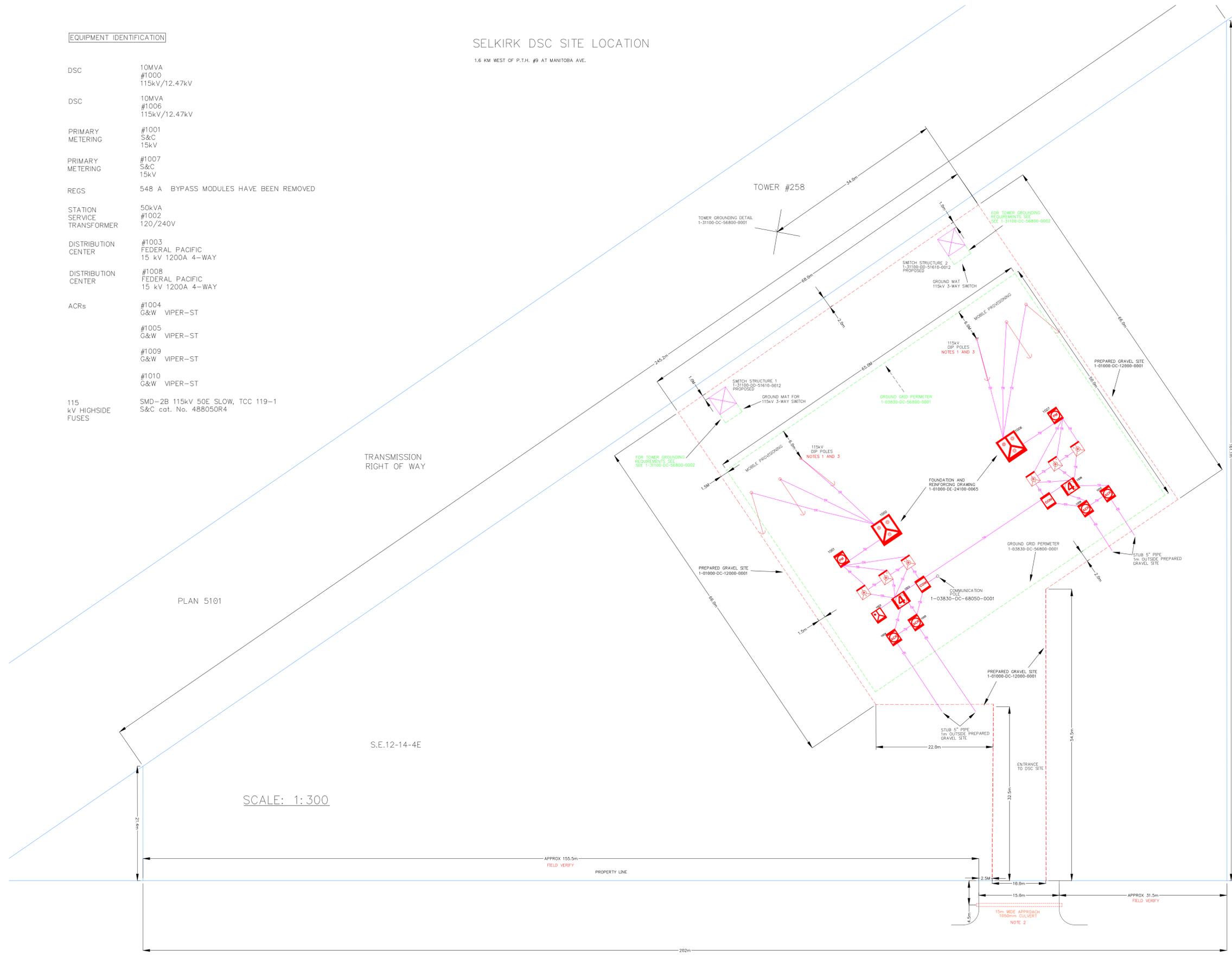
Photo of the Selkirk DSC

EQUIPMENT IDENTIFICATION

- DSC #1000 10MVA 115kV/12.47kV
- DSC #1006 10MVA 115kV/12.47kV
- PRIMARY METERING #1001 S&C 15kV
- PRIMARY METERING #1007 S&C 15kV
- REGS 548 A BYPASS MODULES HAVE BEEN REMOVED
- STATION SERVICE TRANSFORMER #1002 50kVA 120/240V
- DISTRIBUTION CENTER #1003 FEDERAL PACIFIC 15 kV 1200A 4-WAY
- DISTRIBUTION CENTER #1008 FEDERAL PACIFIC 15 kV 1200A 4-WAY
- ACRs #1004 G&W VIPER-ST
- #1005 G&W VIPER-ST
- #1009 G&W VIPER-ST
- #1010 G&W VIPER-ST
- 115 kV HIGHSIDE FUSES SMD-2B 115kV 50E SLOW, TCC 119-1 S&C cat. No. 488050R4

SELKIRK DSC SITE LOCATION

1.6 KM WEST OF P.T.H. #9 AT MANITOBA AVE.



NOTES :

CONSTRUCTION STANDARDS TO BE CONSTRUCTED IN ACCORDANCE WITH MANITOBA HYDRO DISTRIBUTION AND SUBTRANSMISSION STANDARDS, LATEST REVISION. NO MAJOR CHANGE SHALL BE MADE WITHOUT APPROVAL OF THE DESIGN ENGINEER OR DELEGATE.

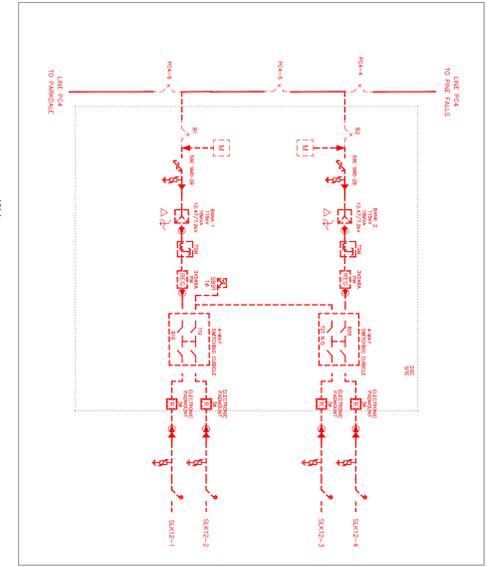
CONSTRUCTION NOTES:

- EQUIPMENT AREA #8300
- FEEDER# SLK12-1, SLK12-2, SLK12-3, SLK12-4
- 1. POLE LOCATIONS FOR REFERENCE ONLY FOR INSTALLATION DETAIL REFER TO DRAWING NO. 1-31100-DE-10100-0001
- 2. CULVERT SUPPLIED BY CIVIL CONSTRUCTION
- 3. FOR DIP POLE DETAILS REFER TO DRAWING NO. 1-31100-DE-25145-0001
- 4. PROPERTY FILE No. 13-023

CONTACTS:

DESIGN: KIRBY BATEMAN PH. 204-482-2409
 CONSTRUCTION: WARREN HELGASON PH. 204-794-4873
 UNDERGROUND CABLE TERMINATION: GEOFF REICHHORN PH. 204-771-2438
 CIVIL CONSTRUCTION: EARL BANGLE PH. 204-981-4496
 APPARATUS MAINTENANCE: DARREN REITER PH. 204-226-8311
 SYSTEM IMPROVEMENT ENGINEER: RODNEY BOYCHUK PH. 204-981-6684
 STANDARDS AND GROUND GRID: JORDAN RINGASH PH. 204-619-1198
 COMMISSIONING COORDINATOR: BRUCE PETERSON PH. 204-794-8165
 ASSISTANT DISTRICT SUPERVISOR: PAUL ERAMCHUK PH. 204-232-5397
 TRANSMISSION DESIGN: CHEN WANG PH. 204-360-3196
 COMMUNICATIONS: CHUCK ISAAC PH. 204-299-7308

AUTHORITY	NOTIFIED	NOT REQ'D	OBTAINED
DEPT. OF HIGHWAYS		X	
MUNICIPAL	2013/01/17		2013/04/10
M.T.S.		X	
GAS		X	
EASEMENTS		X	
CONTROL CENTER		X	
RAILWAY		X	
CATV		X	



SELKIRK DSC SINGLE LINE DIAGRAM



NO.	DATE	REVISIONS	BY	CKD.	APP.

DRAWING NUMBER	REFERENCE DRAWINGS	DRAWING NUMBER	REFERENCE DRAWINGS
1-03830-DC-68050-0001	ANTENNA POLE PROFILE / COMMUNICATION LAYOUT	1-01000-DE-24100-0065	TRANSFORMER FOUNDATION AND REINFORCING DETAILS
1-31100-DE-10100-0001	SELKIRK 115-12kV DSC INSTALLATION SITE PLAN	1-01000-DC-12000-0001	DSC SITE DEVELOPMENT DETAIL
1-31100-DC-56800-0001	TOWER #258 GROUNDING INSTALLATION DETAIL	1-03830-DC-56800-0001	GROUND GRID DETAIL DRAWING
1-31100-DE-25145-0001	115kV SINGLE PHASE DIP/RISER DEAD END POLE	1-04608-DE-50000-0530	SYSTEM IMPROVEMENT 12kV FEEDERS
1-31100-DC-56800-0002	SWITCH TOWER GROUND MAT DETAIL		

ORIGINAL DRAWING SEALED BY R. Q. BOYCHUK 2013 07 16

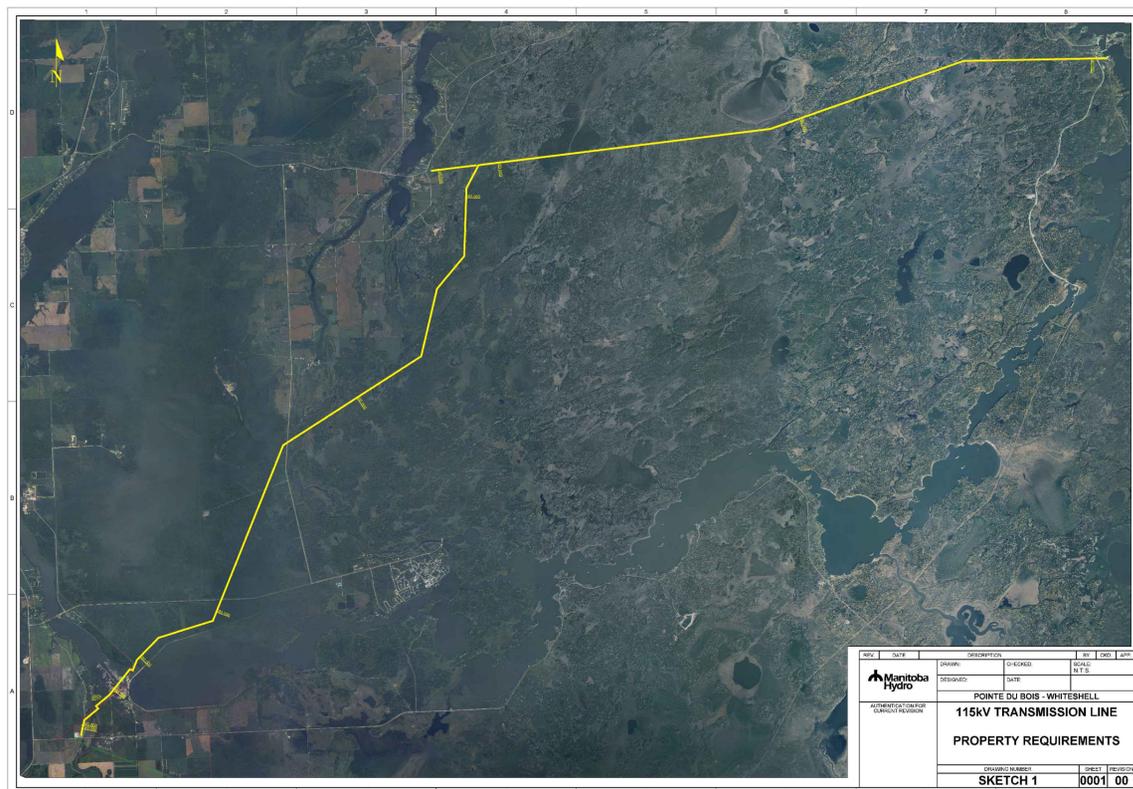
DRAWN: KB
CHECK: []
SCALE: AS SHOWN
DATE: 2013 02 22

AREA NUMBER: 6300
STATION NUMBER: 3830
FEEDER NUMBER: SLK12-1,2,3,4
SYSTEM VOLTAGE: 115-12KV

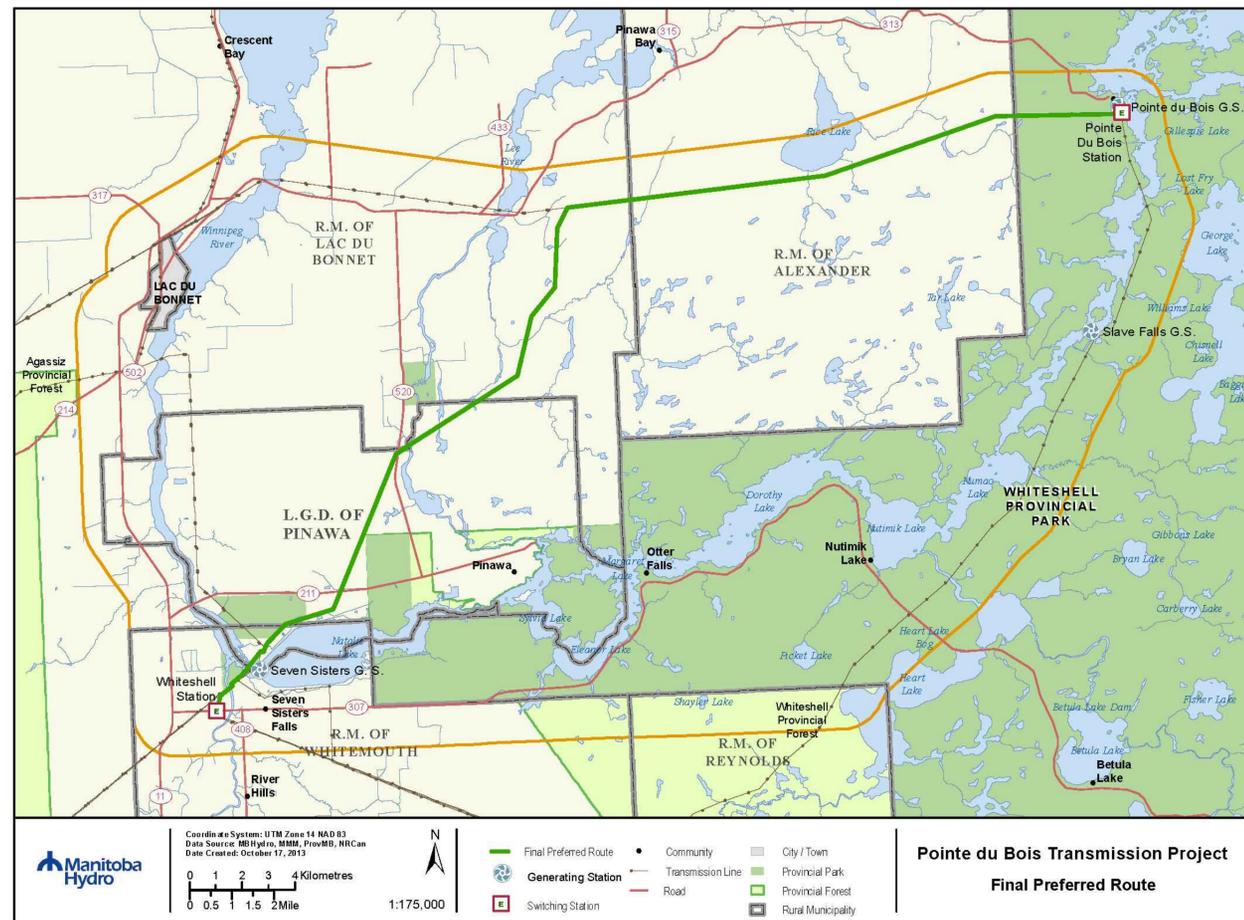
MANITOBA HYDRO DISTRIBUTION
WBS #:18824 NETWORK #529625
DISTRICT: SELKIRK
SELKIRK DSC
SITE LAYOUT

1-03830-DE-50000-0001 SH1. REV. 01-03 00

FOR MICROFILM USE ONLY



REV.	DATE	DESCRIPTION	BY	CHKD.	APP.
POINT DU BOIS - WHITESHELL 115kV TRANSMISSION LINE PROPERTY REQUIREMENTS					
DRAWING NUMBER	SHEET	REVISION			
SKETCH 1	0001	00			



IN-SERVICE DATE: SPRING 2017

T/L DESIGN

- LINE LENGTH - 46.5 km
- RIGHT-OF-WAY - 60m
- LENGTH OF AVERAGE SPAN - 425m
- PHASE CONDUCTOR - 795 MCM 26/7 ACSR (DRAKE)
- GROUND CONDUCTOR - SIZE 9-7 STRAND STEEL - ONE POSITION / OPGW - ONE POSITION
- 2 - HIGHWAY CROSSINGS
- 8 - TRANSMISSION LINE CROSSINGS
- 4 - NAVIGABLE WATER CROSSINGS

STRUCTURE QUANTITIES

- 90 - A-211
- 3 - A-210
- 19 - F-206
- 1 - G-201
- 1 - G-202

T/L DESIGN FOR DSC TAP

- LINE LENGTH - 1.6 km
- RIGHT-OF-WAY - 60m
- LENGTH OF AVERAGE SPAN - 425m
- PHASE CONDUCTOR - 795 MCM 26/7 ACSR (DRAKE)
- GROUND CONDUCTOR - SIZE 9-7 STRAND STEEL

STRUCTURE QUANTITIES

- 3 - A-211
- 4 - F-206
- 3 - 115kV SWITCH STRUCTURES

CIVIL DESIGN

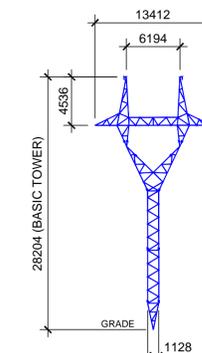
- SINGLE CIRCUIT SUSPENSION A-210 STRUCTURES REQUIRED FROM SEVEN SISTERS SOUTH TO WHITESHELL STATION

GEOTECHNICAL DESIGN

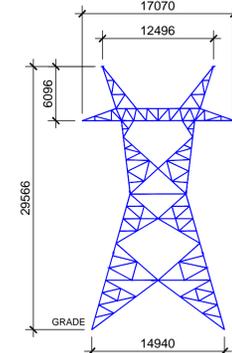
ASSUMPTIONS:

- ALL FOUNDATIONS FOUNDED ON FIRM/ CLAY BEDROCK

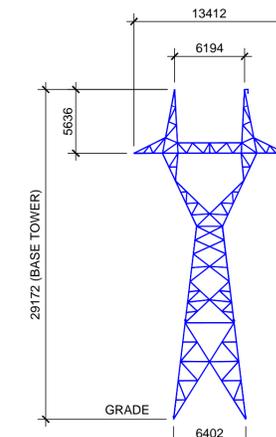
NOTE: THE INFORMATION CONTAINED WITHIN THIS DRAWING IS CONSIDERED PRELIMINARY AND IS SUBJECT TO CHANGE.



A211
STRUCTURAL STEEL LAYOUT
QTY 93
FOUNDATION TYPE: ROCK SET
TIMBER MAT



F206
STRUCTURAL STEEL LAYOUT
QTY 23
FOUNDATION TYPE: CFF1 CONCRETE MAT FOOTING



A210
STRUCTURAL STEEL LAYOUT
QTY 3

REV.	DATE	DESCRIPTION	BY	CKD.	APP.
		 AUTHENTICATION FOR CURRENT REVISION	DRAWN: DESIGNED:	CHECKED: DATE:	SCALE: NTS
POINT DU BOIS - WHITESHELL TRANS. LINE					
SCOPE OF WORK					
DRAWING NUMBER			SHEET	REVISION	
1-31560-DD-06900-0001			0001	00	

Topic	VEC	Potential Increased effects due to the proposed 115 kV Tap
Land Use	Property and Residential Development	<ul style="list-style-type: none"> New structures will not alter aesthetics as they are on an existing ROW currently with two sets of lines. The additional construction will have a slight increase in noise, dust etc.
	First Nation Lands	<ul style="list-style-type: none"> There are no existing First Nation Lands affected There will be a small decrease in available land for Reserve Lands.
	Protected Areas Initiative Lands	<ul style="list-style-type: none"> There are no existing Protected Areas (including proposed protected areas) affected There will be a small loss of lands potentially protected in the future.
	Infrastructure	<ul style="list-style-type: none"> No infrastructure (aerodromes, communication towers etc.) should be affected
Economy	Economic Opportunities	<ul style="list-style-type: none"> The project will have a small increase in job and business opportunities.
Services	Community Services	<ul style="list-style-type: none"> The additional construction (small workforce etc.) should have a negligible affect on community services.
	Travel & Transportation	<ul style="list-style-type: none"> The additional construction should cause a small increase in traffic.
Personal, Family & Community Life	Human Health	<ul style="list-style-type: none"> The proposed should not alter noise, dust & vibration; EMF & audible noise, or herbicide use / ROW management as it is replacing two existing lines.
	Aesthetics	<ul style="list-style-type: none"> The new line will not alter aesthetics as it is replacing two existing lines.
Resource Use	Mining & Aggregates	<ul style="list-style-type: none"> No existing mining claims, mineral leases, quarry leases etc. should be affected.
	Trapping	<ul style="list-style-type: none"> The new line is outside of the Eastern RTL District and should not alter population numbers of furbearers in the region, therefore there should not affect trapping.
	Recreation & Tourism	<ul style="list-style-type: none"> There should be no additional disruption / intrusion to Recreation & Tourism activities & facilities/sites or loss of business income as construction overlaps with the PW75 construction.
	Domestic Resource Use	<ul style="list-style-type: none"> There may be a small loss of traditional medicines, berries, etc, or disruption to hunting, fishing, and other traditional pursuits.
	Productive Forestland	<ul style="list-style-type: none"> Small reduction in AAC levels, productive forest area available for timber production, and timber volume.
	High Value Forest Sites	<ul style="list-style-type: none"> No high value forest sites will be affected
Culture & Heritage Resources	Heritage Resources	<ul style="list-style-type: none"> No recorded heritage sites will be affected
	Cultural Resources	<ul style="list-style-type: none"> No impairment of aesthetics or increase in noise, dust etc, as the new line replaces two existing lines.
Aquatics	Fish Habitat (as defined under the Fisheries Act)	<ul style="list-style-type: none"> There are no stream crossings along the proposed route.
Physical Environment	None	
Terrestrial Habitat & Ecosystems	Ecosystem Diversity	<ul style="list-style-type: none"> There will be a small loss of or alteration to terrestrial habitat/ecosystems, wetland or soils, or other priority habitats.
	Intactness	<ul style="list-style-type: none"> The new line will not affect intactness as it is not within the intact forest areas.
Terrestrial Plants	Priority Plants	<ul style="list-style-type: none"> There may be a small disturbance of sub-populations, an increase in plant mortality or loss or alteration of habitat due to: <ul style="list-style-type: none"> Clearing of the additional ROW, altered surface water flow, changes to fire regime, spread of invasive species
Wildlife	Moose	<ul style="list-style-type: none"> Some primary and secondary moose habitat will be altered.
	American Marten	<ul style="list-style-type: none"> No primary American Marten Habitat (forest habitat greater than 60 years old) will be altered A small portion of secondary habitat (broadleaf species greater than 35 years old and any age needleleaf species) will be altered.
	Canada Warbler	<ul style="list-style-type: none"> Some primary Canada Warbler habitat (deciduous and coniferous broad habitat types) will be altered.
	Bald Eagle	<ul style="list-style-type: none"> No primary bald eagle habitat (broadleaf species > 50 years old and needleleaf species > 60 years old within 500 m of waterbodies greater than 10 ha) or nests will be altered.
	Ruffed Grouse	<ul style="list-style-type: none"> Some primary Ruffed Grouse Habitat (deciduous and mixedwood forest) will be altered Potential for a small increase in mortality associated with bird-wire strikes.