



21 September 2021

# Forest Harvest Plan

PU091244



ALBERTA  
PACIFIC  
FOREST INDUSTRIES INC.



*Vanderwell*  
Contractors (1971) Ltd.

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# Report

## 1.0 Introduction

Alberta – Pacific Forest Industries Inc. (Al-Pac) and Vanderwell Contractors (1971) Ltd. has prepared a Forest Harvest Plan (FHP) for the harvest of stands within Planning Unit 091244.

The Planning Unit is located within Forest Management Unit (FMU) S22.

Copies of this Forest Harvest Plan are made available on the Al-Pac website, at [www.alpac.ca](http://www.alpac.ca).

## 2.0 General Planning Unit Information /Design Considerations

This FHP has been validated by a Registered Forestry Professional from Al-Pac.

This FHP includes maps and reports that clearly show and document the planned harvest area boundaries, roads and water crossings within the Planning Unit.

This plan is being submitted for appraisal, for a 5-year FHP approval under the 2021-2022 Al-Pac Annual Operating Plan (AOP).

This Planning Unit is located about 16 km southwest of the community of Chipewyan Lake and is accessed through a network of roads in the current FHP PU091234. The Seaforth Creek is the primary natural boundary that divides this planning unit from PU091234.

### 2.1 Operating Ground Rules

This Planning Unit is designed in accordance with the Northeast Alberta Operating Ground Rules (OGRs). Al-Pac is requesting certain deviations from the OGRs, due to field verified factors. These requests, along with corresponding information are listed under the section “OGR Deviations”.

## 3.0 Maps

Individual block maps have been included in the submission package, outlining the information pertinent to these blocks. A Planning Unit overview map and a Spatial Harvest Sequence (SHS) Variance map have been included in the submission package.

## 4.0 Block Information

See the following Block Summary Tables which outline opening numbers with expected volumes for harvest areas.

**Table 1: Block Summary Table**

This table provides a brief description of the proposed harvest blocks within the Planning Unit.

Al-Pac Deciduous Blocks						
Source ID	Opening Number	Harvest Season (Frozen/ Non-Frozen)	Area (ha)	Deciduous Volume (m <sup>3</sup> )	Incidental Coniferous Volume (m <sup>3</sup> )	Total Volume (m <sup>3</sup> )
FB09123418511	4230911851	Non-Frozen	134.5	22,608	5,045	27,654
FB09124401081	4240910108	Frozen	17.3	3,283	529	3,812
FB09124402351	4240910235	Frozen	99.8	21,251	1,885	23,136
FB09124411311	4240911131	Non-Frozen	141.7	24,971	8,431	33,402
FB09124412051	4240911205	Non-Frozen	20.3	4,137	186	4,323
FB09124412191	4240911219	Frozen	55.6	9,794	1,773	11,567
FB09124412451	4240911245	Non-Frozen	42.9	7,682	1,128	8,810
FB09124412781	4240911278	Frozen	10.7	1,352	803	2,155
FB09124413461	4240911346	Frozen	44.4	8,010	1,171	9,181
FB09124413531	4240911353	Non-Frozen	15.7	2,745	526	3,271
FB09124413941	4240911394	Non-Frozen	26.2	4,506	900	5,406
FB09124414331	4240911433	Frozen	79.6	11,006	1,920	12,926
FB09124414881	4240911488	Non-Frozen	80.0	15,722	1,432	17,154
FB09124415791	4240911579	Frozen	112.3	20,623	2,230	22,853
FB09124421251	4240912125	Frozen	119.0	22,649	3,880	26,529
FB09124422011	4240912201	Frozen	106.6	22,952	2,187	25,139
FB09124423051	4240912305	Frozen	51.5	9,867	727	10,594
FB09124423881	4240912388	Non-Frozen	166.2	33,662	3,173	36,835
FB09124424031	4240912403	Frozen	5.7	1,193	118	1,311
FB09124424701	4240912470	Frozen	45.6	8,722	1,313	10,035
FB09124427961	4240912796	Frozen	224.6	44,374	4,975	49,349
FB09124428821	4240912882	Frozen	82.6	17,909	1,523	19,432
FB09124433471	4240913347	Frozen	11.3	1,682	87	1,769
FB09124434051	4240913405	Frozen	16.8	3,546	511	4,057
FB09124434731	4240913473	Frozen	19.2	3,952	347	4,299
<b>Total</b>			<b>1,730</b>	<b>328,199</b>	<b>46,799</b>	<b>374,997</b>
Al-Pac Coniferous Blocks						
Source ID	Opening Number	Harvest Season (Frozen/ Non-Frozen)	Area (ha)	Conifer Volume (m <sup>3</sup> )	Incidental Deciduous Volume (m <sup>3</sup> )	Total Volume (m <sup>3</sup> )
FB09124411531	4240911153	Non-Frozen	17.4	2,246	2,065	4,311
<b>Total</b>			<b>17.4</b>	<b>2,246</b>	<b>2,065</b>	<b>4,311</b>



Vanderwell Coniferous Blocks						
Source ID	Opening Number	Harvest Season (Frozen/ Non-Frozen)	Area (ha)	Conifer Volume (m <sup>3</sup> )	Incidental Deciduous Volume (m <sup>3</sup> )	Total Volume (m <sup>3</sup> )
NB09124413504	4240911350	Frozen	44.4	6,737	3,158	9,895
NB09124422974	4240912297	Frozen	2.4	280	246	525
NB09124433184	4240913318	Frozen	3.6	424	60	484
NB09124434154	4240913415	Frozen	54.4	6,279	2,526	8,805
NB09124434744	4240913474	Frozen	2.4	282	78	360
NB09124435024	4240913502	Frozen	5.8	606	188	794
<b>Total</b>			<b>113</b>	<b>14,608</b>	<b>6,255</b>	<b>20,863</b>

Understory Block: White Spruce understory within deciduous landbase will be protected utilizing high effort understory protection in stands identified as greater than 600 stems/ha.

Any blocks found to have understory amounting to between 400 stems/ha and 600 stems/ha will be protected utilizing the avoidance method.

#### 4.1 Utilization

Deciduous and coniferous stands will adhere to the 15/10 utilization standard

#### 4.2 Field verification

Field verification was conducted to assess the timber quality, potential sensitive and historical sites, operability of the harvest area, and classification of water courses within the Planning Unit boundary. Where applicable, the findings of the layout team have been noted in the corresponding sections of this report.

#### 4.3 Understorey Assessment

White Spruce understory within deciduous landbase will be protected utilizing high effort understorey protection in stands identified as greater than 600 stems/ha by the Alberta Vegetation Inventory (AVI), as well as any potential areas found to have understorey present that is not identified by the AVI. Any deciduous blocks found to have understorey amounting to between 400 stems/ha and 600 stems/ha will be protected utilizing the avoidance method. An understorey high effort detailed block plan was developed for Block FB09124427961 (4240912796).

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#### 4.4 Structure Retention

For Al-Pac, an average of 5% representative of all harvested area at the FMU level by stewardship reporting period will be retained. A harvest area may have zero structure but the FMU average shall be 5%. Non merchantable structure is not to be tracked as part of the 5%. Structure retention will be left in the following methods:

- Laid out patches
- Individual trees
- Small clumps left at the operators' discretion

#### 4.5 Debris Management

The Planning Unit is situated within Alberta's Fire Control Zone number 46 as identified by Alberta Agriculture and Forestry (AAF). None of the planned harvest and road locations are within the 10km Community Firesmart Zone for Chipewyan Lake.

Debris management of the Planning Unit will be accomplished in a manner consistent with Section 7.3 of the OGRs.

#### 4.6 Camp Location

The companies have identified a camp location for logging operations within this Planning Unit. The campsite will be reclaimed as indicated in Section 11.3.4.4 of the Northeast Alberta Timber Harvesting Planning and Operating Ground Rules (OGRs).

Table 2. Camp Locations

SOURCE ID	OPENING NUMBER	LATITUDE	LONGITUDE
FB09123418511	4230911851	56.884487	-113.702906
FB09123418511	4230911851	56.907007	-113.701352

### **5.0 Watercourse Protection**

The potential watercourses were identified during preliminary planning using wet areas mapping, LiDAR data, aerial imagery, as well as the available AVI data. Where harvest areas and roads are in proximity to potential watercourses, the layout team conducted field assessments utilizing the methodology and classification standards outlined in Section 6.0 of the OGRs. Any confirmed watercourses have been buffered in accordance with section 6.0. of the OGRs Section.

See **Appendix 2 – FHP Road Xing List** for details of crossings and watercourse types. Any deviations from the OGRs in relation to the watercourse buffers are noted in



this report; please refer to the *OGR Deviations* section of the report for further information.

**Table 2: Watercourse Crossing Summary**

A list of road crossings over field verified watercourses within the Planning Unit.

Road Name	Crossing Number	Stream Class
RB09123418511	0747	Large Permanent
RB09123418511	1830	Intermittent
RB09124402351	0215	Intermittent
RB09124402351	0383	Ephemeral
RB09124402351	0392	Ephemeral
RB09124402351	0393	Ephemeral
RB09124411531	1165	Beaver Pond
RB09124411531	1183	Small Permanent
RB09124412051	1193	Small Permanent
RB09124412051	1194	Transitional
RB09124412191	1300	Ephemeral
RB09124414881	1317	Ephemeral
RB09124415791	1409	Ephemeral
RB09124415791	1567	Ephemeral
RB09124415791	1587	Intermittent
RB09124415791	2280	Ephemeral
RB09124421251	2172	Beaver Pond
RB09124422011	1548	Beaver Pond
RB09124422011	2222	Ephemeral
RB09124423051	2274	Ephemeral
RB09124423881	2361	Intermittent
RB09124424701	2442	Ephemeral
RB09124427961	2743	Ephemeral
RB09124427961	3530	Ephemeral
RB09124428821	2186	Ephemeral
RB09124428821	2209	Ephemeral
RB09124428821	2219	Ephemeral
RB09124428821	2229	Ephemeral

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## 6.0 Road Information

Overview maps have been attached showing roads in accordance with Section 3.4.7. of the OGRs; all spatial data requirements have also been included with this submission.

**Table 3: Road Attributes**

Summary of the proposed inter-block roads of the Planning Unit.

Al-Pac MAIN ROAD LENGTH			
Road Name	Road Classification	Haul Season	Length, m
RB09123418511	Temp	Frozen	655
		Non-Frozen	7,656
RB09124402351	Temp	Frozen	8,712
RB09124411311	Temp	Non-Frozen	2,993
RB09124411531	Temp	Frozen	487
		Non-Frozen	1,631
RB09124412051	Temp	Frozen	641
		Non-Frozen	1,592
RB09124412191	Temp	Frozen	1,446
RB09124412451	Temp	Frozen	182
		Non-Frozen	3,428
RB09124412781	Temp	Frozen	1,468
RB09124413461	Temp	Frozen	1,029
RB09124413531	Temp	Non-Frozen	364
RB09124413941	Temp	Non-Frozen	1,124
RB09124414331	Temp	Frozen	2,107
RB09124414881	Temp	Non-Frozen	4,429
RB09124415791	Temp	Frozen	12,366
RB09124421251	Temp	Frozen	1,916
RB09124422011	Temp	Frozen	4,885
RB09124423051	Temp	Frozen	1,585
RB09124423881	Temp	Non-Frozen	843
RB09124424701	Temp	Frozen	2,991
RB09124427961	Temp	Frozen	3,893
RB09124428821	Temp	Frozen	3,543
RB09124433471	Temp	Frozen	1,516
RB09124434051	Temp	Frozen	781
RB09124434731	Temp	Frozen	266

VANDERWELL MAIN ROAD LENGTHS			
Road ID	Road Classification	Haul Season	Length, m
RB09124413504	Temp	Frozen	2,750
RB09124422974	Temp	Frozen	179
RB09124433184	Temp	Frozen	12
RB09124434154	Temp	Frozen	3,475
RB09124435024	Temp	Frozen	411

Roads will be constructed, maintained, and reclaimed in a manner consistent with Section 11.3 of the OGRs.

When new access is necessary, reclamation processes will adhere to Section 11.3.4, Section 11.3.4.3 and Section 11.3.4.4 of the OGRs. To enable for silviculture activities, all-terrain vehicle (ATV) access may be left throughout the harvest area.

## 7.0 Land Use Information

A search of the Geographic Land Information Management and Planning System (GLIMPS) and Digital Integrated Dispositions (DIDs) was completed to identify active dispositions within the FHP. Any necessary agreements with the disposition holder will be in place prior to the commencement of harvest operations.

**Table 5: Land Use Summary Table**

Active dispositions impacted by Harvest Plan:

Disposition Number	Disposition Holder	Disposition Type
LOC090874	CANADIAN NATURAL UPGRADING LIMITED	LOC
LOC980322	CANADIAN NATURAL RESOURCES LIMITED	LOC

The FHP design incorporates use of existing access dispositions for temporary roads. The agreements will be in place prior to use and construction of these crossings.



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## 8.0 Integration with Other Forest Users

### 8.1 Integration with Other Harvest Operators

This plan is integrated with Vanderwell Contractors (1971) Ltd. Areas of non-SHS were added into the plan through integration efforts with Vanderwell to avoid isolating timber within the planning unit.

### 8.2 Registered Fur Management Areas (RFMAs)

Notification letter were sent to RFMAs within the FHP who will be affected by operations. Any requests from the RFMA holders have been considered, and, where possible, the harvest design has been planned to accommodate the request.

**Table 6:** Trapper Areas Table

RFMA ID	Notification Method	Month & Year
1460	Letter	September 2021
1634	Letter	September 2021

### 8.3 Wildlife Management Unit(s) (WMU)

Planning Unit is located within **WMU 518**. The Guides and Outfitters operating within this unit have been sent notification, via registered mail, on the FHP design, as well as a timeline for the commencement of harvest operations. Any requests from Guides and Outfitters have been considered, and, where possible, the harvest design has been planned to accommodate the request. A table with the active Guides and Outfitters in the WMU is included below.

**Table 7:** Guide and Outfitters

G&O Name	Date	Contact Method
unnamed	July, 2020	Registered Mail
Valid Outfitter's Ltd	July, 2020	Registered Mail
Antlerhill Outfitters Ltd.	July, 2020	Registered Mail
MCO/7314485 Canada Inc.	July, 2020	Registered Mail
MOA Outfitters Ltd.	July, 2020	Registered Mail
unnamed	July, 2020	Registered Mail
Interlake Safaris Ltd.	July, 2020	Registered Mail
Buffalo Hill Outfitters Inc.	July, 2020	Registered Mail
Northern Wilderness Outfitters	July, 2020	Registered Mail
Misty River Outfitters Ltd.	July, 2020	Registered Mail

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#### 8.4 Indigenous Groups

During the General Development Plan (GDP) process, Al-Pac conducts consultations with indigenous groups every year. Al-Pac works with First Nations to address concerns on an ongoing basis, and considerations are incorporated into the planning process.

#### 8.5 Other Forest Users

There are no other forest user groups identified within the Planning Unit area.

#### 8.6 Forest Aesthetics

As outlined in Section 5.5. of the OGRs, Al-Pac follows the objective to mitigate the impact of timber operations on the visual quality of the forest landscape.

This FHP is not adjacent to any park or recreational areas, and no other aesthetics concerns have been noted to date by other forest users.

### **9.0 Species and Areas of Concern**

#### 9.1 Woodland Caribou

Planning Unit 091244 is located within a Woodland Caribou Range. All operations will be consistent with section 7.7.2. of the OGRs.

#### 9.2 Key Wildlife and Biodiversity Zone (KWBZ)

Planning Unit 091244 is **partially located** within a Key Wildlife and Biodiversity Zone (KWBZ). All Blocks and Roads within the KWBZ will be consistent with section 7.7.4. of the OGRs.

#### 9.3 Other Species

All known sensitive wildlife sites have been buffered in accordance with Section 7.7.5 of the OGRs.

#### 9.4 Cultural Sites

A review of the block design and landscape of the FHP was completed by professional archaeologists. Any sites identified as being of high historical significance (historical resource sites) have been removed from the harvest design.

There were no signs of rare plants, including signs of terrestrial lichen found within the Planning Unit.

If any sites are identified post submission, Alberta – Pacific will take the appropriate action to protect these sites.



## 9.5 Forest Health

During the field verification, a team evaluated the current state of the forest health in the FHP area, as outlined in Section 10.1 of the OGRs. No forest health concerns were identified.

If any sites are identified post submission, Al-Pac will take the appropriate action to protect these sites as per Section 10.1.2 of the OGRs.

## 10.0 SHS Information / Variance Summary

Variances from the Spatial Harvest Sequence (SHS) within the Planning Unit boundary are shown in **Appendix 4 - SHS Variance Table**.

## 11.0 OGR Deviations

Road deviations which contain blocks that are greater than 7 hectares, with potentially more than 5% road disturbance are listed in the table below. Roads requiring non-frozen road construction within a watercourse buffer are listed in a separate table below.

**Table 8.** Blocks requiring greater than 5% road and landing disturbance

Source ID	Opening Number	Company	Block Area (ha)	Harvest Season (Frozen/ Non-Frozen)	Road Percentage	Road Percentage Reason
FB09124401081	4240910108	ALPAC	17.3	Frozen	4.6	Narrow
FB09124402351	4240910235	ALPAC	99.8	Frozen	5.2	Narrow
FB09124411311	4240911131	ALPAC	141.7	Non Frozen	5.3	Access to other blocks
FB09124411531	4240911153	ALPAC	17.0	Non-Frozen	7.58	Access to other blocks
FB09124412051	4240911205	ALPAC	20.3	Non Frozen	6.0	Access to other blocks
FB09124412191	4240911219	ALPAC	55.6	Frozen	4.5	Access to other blocks
FB09124412451	4240911245	ALPAC	42.9	Non Frozen	7.2	Narrow
FB09124412781	4240911278	ALPAC	10.7	Frozen	7.6	Access to other blocks
FB09124413941	4240911394	ALPAC	26.2	Non Frozen	6.6	Narrow
FB09124414881	4240911488	ALPAC	80.0	Non Frozen	4.7	Access to other blocks
FB09124415791	4240911579	ALPAC	112.3	Frozen	5.2	Access to other blocks
FB09124433471	4240913347	ALPAC	11.3	Frozen	6.5	Access to other blocks
FB09124434051	4240913405	ALPAC	16.8	Frozen	6.2	Access to other blocks
FB09124434731	4240913473	ALPAC	19.2	Frozen	5.0	Access to other blocks
NB09124434154	4240913415	VAND	54.4	Frozen	4.8	Access to other blocks



**Table 9. Roads requiring a watercourse buffer OGR deviation**

Variance Reason				
Source ID	Road ID	Harvest Season (Frozen/ Non-Frozen)	Buffer	Reason
FB09124412451	RC09124412451	Non Frozen	100m	<b>Reason:</b> High ground utilized for non-frozen road construction and haul <b>Details:</b> Road is within 100m of large permanent creek in multiple places for a total of 225m
FB09124412781	RC09124412781	Frozen	100m	<b>Reason:</b> High ground utilized for non-frozen road construction and haul <b>Details:</b> Road is within 100m of large permanent creek in multiple places for a total of 55m

## 12.0 Validation by Registered Forest Practitioner

This plan is being prepared and submitted on behalf of Alberta-Pacific. And Vanderwell.

### ALBERTA-PACIFIC FOREST INDUSTRIES INC.



Keagan Richardson, RPF 1946  
Woodlands Operations Planner  
Alberta-Pacific Forest Industries Inc.  
780-213-4204 (Cell)

### VANDERWELL CONTRACTORS (1971) LTD.



Kyle Chisholm, RPF 1855  
Operations Forester  
Vanderwell Contractors (1971) Ltd.  
Phone: 780-805-3075  
Cell: 780-805-5729