



2-Mar-22



ALBERTA
PACIFIC
FOREST INDUSTRIES INC.

Forest Harvest Plan

PU092244



Table of Contents

1.0 Introduction	5
2.0 General Planning Unit Information /Design Considerations	5
2.1 Operating Ground Rules	5
3.0 Maps	5
4.0 Block Information.....	6
4.1 Utilization	6
4.2 Field verification	6
4.3 Understory Assessment.....	6
Table 1: Block Summary Table	7
4.4 Structure Retention	8
4.5 Debris Management.....	8
4.6 Camp Location	8
5.0 Watercourse Protection	9
Table 2: Watercourse Crossing Summary.....	9
6.0 Road Information	9
Table 3: Road Attributes.....	10
7.0 Land Use Information	10
Table 4: Land Use Summary Table	11
8.0 Integration with Other Forest Users	11
8.1 Integration with Other Harvest Operators	11
8.2 Registered Fur Management Areas (RFMAs)	11
Table 5: Trapper Areas Table	11
8.3 Wildlife Management Unit(s) (WMU)	11
Table 6: Guide and Outfitters.....	12
8.4 Indigenous Groups	12
8.5 Other Forest Users.....	12
8.6 Forest Aesthetics.....	12

9.0 Species and Areas of Concern	12
9.1 Woodland Caribou	12
9.2 Key Wildlife and Biodiversity Zone (KWBZ).....	13
9.3 Other Species	13
All known sensitive wildlife sites have been buffered in accordance with Section 7.7.5 of the OGRs. .	13
9.4 Sensitive Sites	13
9.5 Forest Health.....	13
10.0 SHS Information / Variance Summary.....	13
11.0 OGR Deviations.....	14
Table 7: Road Percent Deviations Table	14
12.0 Validation by Registered Forest Practitioner.....	15

Appendices

Appendix 1- FHP Block Maps

Appendix 2- FHP Overview Maps

Appendix 3- Spatial Harevest Sequence Summary Tables

Appendix 4- Spatial Harvest Sequence Summary Map

Report

1.0 Introduction

Alberta – Pacific Forest Industries Inc. (Alberta–Pacific) and Vanderwell Contractors (1971) Ltd. (Vanderwell) have prepared a Forest Harvest Plan (FHP) for the harvest of stands within Planning Unit 092244

The Planning Unit is located within Forest Management Unit (FMU) S22 along the Al-Pac “Seaforth Road”.

Copies of this Forest Harvest Plan are available on the Alberta–Pacific website, at www.alpac.ca.

2.0 General Planning Unit Information /Design Considerations

This FHP has been validated by a Registered Forestry Professional from Alberta-Pacific and a representative from Vanderwell.

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 Alberta-Pacific Annual Operating Plan (AOP).

2.1 Operating Ground Rules

This Planning Unit is designed in accordance with the Northeast Alberta Operating Ground Rules (OGRs). Alberta–Pacific 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) Planning Unit map have been included in the submission package. These maps can be viewed in the *Appendices* of this document.

4.0 Block Information

A *Block Summary Table* has been included below outlining the expected volumes of the harvest area.

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 section of this report.

4.3 Understory Assessment

White Spruce understory within deciduous landbase will be protected utilizing high effort understory 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 understory present that is not identified by the AVI. Any deciduous blocks found to have understory amounting to between 400 stems/ha and 600 stems/ha will be protected utilizing the avoidance method.

Blocks requiring understory protection or understory avoidance are noted within the *Block Summary Table*.

Block Summary Table

(Values rounded to whole numbers)

Table 1: Block Summary Table

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

Al-Pac Deciduous Blocks						
<i>Source ID</i>	Opening Number	Harvest Season (Frozen/ Non-Frozen)	Area (ha)	Deciduous Volume (m³)	Incidental Conifer Volume (m³)	Total Volume (m³)
FB09224413231	4240921323	Non-Frozen	15	1,864	793	2,657
FB09224414611	4240921461	Frozen	19	3,060	734	3,794
FB09224415791	4240921579	Frozen	8	1,181	434	1,615
FB09224422911	4240922291	Non-Frozen	69	13,027	1,866	14,893
FB09224423291	4240922329	Non-Frozen	221	45,185	11,708	56,893
FB09224423591	4240922359	Non-Frozen	14	2,608	900	3,508
FB09224423611	4240922361	Non-Frozen	12	2,371	565	2,936
FB09224424091	4240922409	Frozen	14	2,424	1,060	3,484
FB09224424101	4240922410	Frozen	12	1,898	216	2,114
FB09224427771	4240922777	Frozen	15	1,740	277	2,017
Totals			399	75,358	18,553	93,911

*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.

Vanderwell Coniferous Blocks						
<i>Source ID</i>	Opening Number	Harvest Season	Area (ha)	Conifer Volume (m³)	Incidental Deciduous Volume (m³)	Total Volume (m³)
NB09224413114	4240921311	Frozen	8	892	624	1,516
NB09224413154	4240921315	Frozen	6	555	53	608
NB09224414394	4240921439	Frozen	47	5,245	1,742	6,987
NB09224426774	4240922677	Frozen	2	89	77	166
NB09224427674	4240922767	Frozen	7	788	203	991
Totals			70	7,569	2,699	10,268

4.4 Structure Retention

For Alberta-Pacific and Commercial Timber Permits, an average of 5%, and for Vanderwell an average of 3%, 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% and 3% respectively. Non merchantable structure is not to be tracked as part of the 5% / 3%. 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). No Blocks or Roads are located within a Community FireSmart Zone.

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).

SourceID	Opening Number	LATITUDE	LONGITUDE
FB09224423291	4240922329	56.99714	-113.754
FB09224422911	4240922291	56.99031	-113.767

5.0 Watercourse Protection

During 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 blocks are in proximity to any potential watercourses, the field 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 the OGRs Section 6.0.

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.

Watercourse Crossing Summary Table

Table 2: Watercourse Crossing Summary

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

<i>Road ID</i>	<i>Crossing ID (Road Crossing Number)</i>	<i>Watercourse Classification</i>
RC09224414394	2311	Ephemeral
RC09224422911	2313	Ephemeral
RC09224423291	2353	Ephemeral
RC09224424091	2398	Ephemeral

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.

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.

Road Attributes Table

(Values rounded to whole numbers)

Table 3: Road Attributes

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

<i>Road ID</i>	Road Classification	Haul Season	Length, m
LOC071233	Temp	Non-Frozen	155
LOC071233	Temp	Frozen	862
RC09224413231	Temp	Non-Frozen	610
RC09224414394	Temp	Frozen	852
RC09224415791	Temp	Frozen	202
RC09224422911	Temp	Non-Frozen	4,246
RC09224423291	Temp	Non-Frozen	150
RC09224424091	Temp	Frozen	647
RC09224424101	Temp	Frozen	269
RC09224426774	Temp	Frozen	379
RC09224427771	Temp	Frozen	935
RC09224413154	Temp	Frozen	498
RC09224427674	Temp	Frozen	373

7.0 Land Use Information

A search of the Geographic Land Information Management and Planning System (GLIMPS) and Digital Integrated Dispositions (DIDs) yielded active dispositions within the FHP. Any necessary agreements with the disposition holder will be in place prior to the commencement of harvest operations. None of the dispositions within the FHP will restrict harvest operations in the FHP.

Land Use Summary Table

Table 4: Land Use Summary Table
Active dispositions in the Planning Unit

Disposition Number	Disposition Holder	Disposition Type
DLO170052	ALBERTA-PACIFIC FOREST INDUSTRIES INC.	DLO

The FHP design incorporates pipeline crossings, for temporary roads. The agreements will be in place prior to the construction of these crossings.

8.0 Integration with Other Forest Users

8.1 Integration with Other Harvest Operators

This FHP is an integrated plan between the FMA holder and a CTL holder. Both companies have validated the plan.

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.

Trapper Areas Table

Table 5: Trapper Areas Table

RFMA ID	Notification Method
2266	Letter

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.

Guide and Outfitters Table

Table 6: Guide and Outfitters

OG Company	Date	Contact Method
Bateman	July 2021	Registered Mail
Valid Outfitter's Ltd	July 2021	Registered Mail
Antlerhill Outfitters Ltd.	July 2021	Registered Mail
MCO/7314485 Canada Inc.	July 2021	Registered Mail
Northern Wilderness Outfitters	July 2021	Registered Mail
Kirschner, Martin	July 2021	Registered Mail
Interlake Safaris Ltd.	July 2021	Registered Mail
Buffalo Hill Outfitters Inc.	July 2021	Registered Mail
Misty River Outfitters Ltd.	July 2021	Registered Mail

8.4 Indigenous Groups

During the General Development Plan (GDP) process, Alberta – Pacific and Vanderwell conduct consultation with indigenous groups every year. There have not been any issues identified prior to FHP submission.

8.5 Other Forest Users

There are no known forest user groups operating within the Planning Unit area.

8.6 Forest Aesthetics

As outlined in Section 5.5. of the OGRs, Alberta – Pacific and Vanderwell follow 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 092244 is located within Woodland Caribou Range; all operations within the Woodlands Caribou Zone will be consistent with section 7.7.2 of the OGRs.

9.2 Key Wildlife and Biodiversity Zone (KWBZ)

Planning Unit 092244 is not located within a Key Wildlife and Biodiversity Zone; all operations will be consistent with Section 7.7.5 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 Sensitive 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.

Upon completion of cutblock and road layout, a second review of the harvest blocks, and temporary roads is completed to identify potential conflicts, and to determine if any further changes are required to the Planning Unit.

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.

If any sites are identified post submission, Alberta – Pacific 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 3 - *Spatial Harvest Sequence Summary Table*.

11.0 OGR Deviations

Table 7: Road Percent Deviations Table

Road deviations which contain blocks that are greater than 7 hectares, with potentially more than 5% road disturbance.

Source ID	Opening Number	Block Area (ha)	Operations Type	Harvest Season (Frozen/ Non-Frozen)	Road Percentage	Road Percentage Reason
FB09224413231	4240921323	15	Deciduous	Non-Frozen	5.2	Access to other blocks
FB09224423591	4240922359	14	Deciduous	Non-Frozen	5.1	Narrow / Irregular Block
FB09224424091	4240922409	14	Deciduous	Frozen	5.5	Narrow / Irregular Block
FB09224427771	4240922777	15	Deciduous	Frozen	5.4	Access to other blocks
NB09224414394	4240921439	47	Coniferous	Frozen	5.0	Narrow / Irregular Block

12.0 Validation by Registered Forest Practitioner

This plan is being prepared and submitted on behalf of Alberta-Pacific Forest Industries Inc. and Vanderwell Contractors (1971) Ltd.

ALBERTA-PACIFIC FOREST INDUSTRIES INC.



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

VANDERWELL CONTRACTORS (1971) LTD.



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