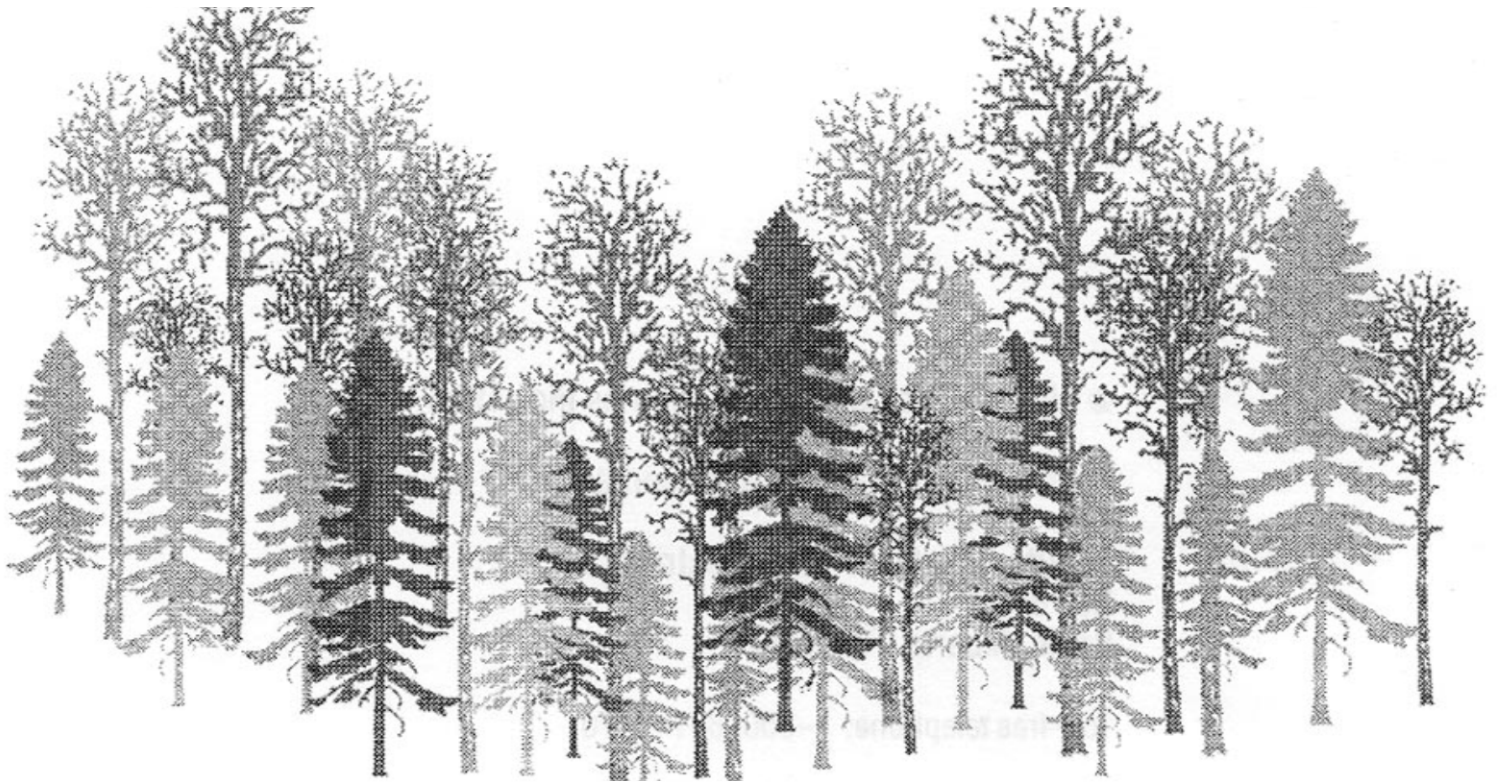


**ALBERTA
PACIFIC**
FOREST INDUSTRIES INC

Forest Harvest Plan



Planning Unit 067254

Planning Unit 067254 Forest Harvest Plan

1. Introduction

This Forest Harvest Plan (FHP) for Planning Unit 067254 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 2017-18 Alberta-Pacific Forest Industries Inc. (Alberta-Pacific) Annual Operating Plan (AOP).

This FHP has been discussed with Alberta Agriculture and Forestry (AAF).

2. Planning Unit Specific Comments

Planning Unit 067254 is located east of September Lake.

The planning unit is located in Forest Management Unit (FMU) S23. Alberta-Pacific has rights to D as deciduous landbase.

This planning unit falls within the Big Bend Integrated Resource Plan (IRP) area. The approved Forest Management Plan (FMP) dealt with the relevant portions of this IRP and this FHP follows the intent of the FMP.

The harvest design utilizes the 2006 Spatial Harvest Sequence (SHS).

Integration

Since this FHP is in FMU S23 it has been provided for review to Ed Bobocel Lumber (1993) Ltd.

Alberta-Pacific has received their agreement for this plan on September 1, 2017.

Watershed

No channelled watercourses or waterbodies within this planning unit have been surveyed as fish bearing or navigable.

All unsurveyed channelled creeks have been buffered and crossed as though they were fish bearing.

Stand Structure

An average of 5% of the merchantable volume will be left in stand structure over the FMU. The structure will be left as layout patches, and as single trees and small clumps of timber at the operators' discretion.

Stand structure has been planned (delineated) in the planning unit to create residual areas. These areas are identified as Retention Areas (RAs) within the lists and on the maps. These blocks have a 9 at the end of the block number.

Debris Management

All but one of the blocks in this unit are within FireSmart Community Zones as identified by AAF. The following debris management strategy applies for blocks within this planning unit:

- Methods described in the Forest and Prairie Protection Act and Regulations

Blocks within this planning unit will not utilize the retention of debris piles as a management strategy.

The deciduous utilization standard will be 15/10. The coniferous utilization standard will be 15/11.

Design Comments

During the layout phase of this operation, Alberta-Pacific looked for signs of insect or disease infestations. No signs were found.

3. Block Information

The following table summarizes the volumes within Alberta-Pacific's FHP blocks.

Landbase Volume Summary

Company	Area (ha)	Decid (m3)	Conif (m3)	Inc Conif (m3)	Total (m3)
Alberta-Pacific	625	137,410	78	9,947	147,435

The following Alberta-Pacific FHP blocks will have their coniferous volume hauled as quota (CTL – Ed Bobocel Lumber Co. Ltd.) primary coniferous chargeable:

06725403241
06725423521

Alberta-Pacific Deciduous First Entry Block Listing

(Values Affected by Rounding)

Source Id	Opening Num	Harv Season	Conif Charge	Detail Plan	Area (ha)	Decid (m3)	Conif (m3)	Inc Conif (m3)	Total (m3)
06625428671	4250662867	F	INC		5	1,039	0	124	1,163
06625433841	4250663384	F	INC		78	17,110	0	1,581	18,691
06625434441	4250663444	F	INC		15	3,702	0	119	3,821
06625434651	4250663465	F	INC		17	4,020	0	515	4,535
06724407231	4240670723	F	INC		27	4,910	0	435	5,344
06724407481	4240670748	F	INC		12	2,657	0	318	2,975
06725402121	4250670212	F	INC		26	6,782	0	235	7,017
06725402281	4250670228	F	INC		10	1,616	0	192	1,807
06725403241	4250670324	F	CTL		6	928	0	35	963
06725403571	4250670357	F	INC		17	4,021	0	127	4,148
06725403661	4250670366	F	INC		8	2,086	0	68	2,154
06725403871	4250670387	F	INC		3	569	0	18	587
06725410341	4250671034	F	INC		14	1,283	0	52	1,335
06725410561	4250671056	F	INC		2	419	0	168	587
06725411241	4250671124	F	INC	U	71	17,858	0	809	18,667
06725412251	4250671225	F	INC		25	6,267	0	218	6,485
06725412391	4250671239	F	INC	U	38	7,903	66	882	8,852
06725412551	4250671255	F	INC		15	4,017	0	173	4,190
06725412781	4250671278	F	INC		5	1,287	0	154	1,441
06725413931	4250671393	F	INC		2	337	0	84	422
06725414171	4250671417	F	INC	U	25	6,190	0	264	6,454
06725414331	4250671433	F	INC		44	11,362	0	365	11,727

**Alberta-Pacific Deciduous First Entry Block Listing
(Cont.)**

(Values Affected by Rounding)

Source Id	Opening Num	Harv Season	Conif Charge	Detail Plan	Area (ha)	Decid (m3)	Conif (m3)	Inc Conif (m3)	Total (m3)
06725414571	4250671457	F	INC		12	2,043	0	229	2,271
06725414771	4250671477	F	INC		39	8,195	0	430	8,624
06725415421	4250671542	F	INC		5	986	0	276	1,261
06725415551	4250671555	F	INC		6	775	12	110	898
06725416781	4250671678	F	INC		26	2,680	0	277	2,957
06725422261	4250672226	F	INC		5	1,066	0	140	1,206
06725422441	4250672244	F	INC		11	2,959	0	114	3,073
06725422861	4250672286	F	INC		19	4,345	0	650	4,995
06725423131	4250672313	F	INC		4	847	0	74	921
06725423521	4250672352	F	CTL		1	214	0	43	257
Total					595	130,472	78	9,279	139,830

The blocks in the above table with a CTL for Conif Charge will be considered White Spruce cover type for coniferous volume chargability.

Retention Area Listing

(Values Affected by Rounding)

Retention Id	Area (ha)	Decid (m3)	Conif (m3)	Inc Conif (m3)	Total (m3)
06625434139	3	468	0	39	507
06625434579	2	510	0	57	567
06725403919	3	384	0	12	396
06725410619	4	948	0	29	977
06725412359	3	900	0	28	928
06725412499	3	877	0	34	911
06725412669	2	467	0	14	482
06725413849	6	1,368	0	342	1,711
06725423439	1	154	0	17	172
06725423659	3	860	0	96	956
Total	30	6,937	0	668	7,606

4. Access and Road Information

Landuse agreements will be in place prior to use of any third party dispositions being used.

Planning Unit Temporary Road Information

Existing access has been utilized where possible to minimize the clearing of new Right of Way (RoW).

New access and channelled watercourse crossings will be reclaimed in order to restrict access. All terrain vehicle (ATV) access may be left to facilitate silviculture activities.

New access and channelled watercourse crossings will be reclaimed as per Section 11.3.4 of the OGRs. Road reclamation and abandonment details are listed in the AOP when the blocks and roads are scheduled.

Inter Block Roads and Crossings

Road No.	Class	Length (Km)	Construction Season	Crossing Location	Field Call	Navigability
02121	4W	1.99	Frozen			
02281	4W	0.52	Frozen			
03241	4W	0.37	Frozen			
03571	4W	1.23	Frozen			
03661	4W	0.32	Frozen			
03871	4W	1.57	Frozen	0387	E	U
07231	4W	0.71	Frozen	0715	B	U
				0716	B	U
				0726	B	U
07481	4W	0.82	Frozen			
10341	4W	0.56	Frozen			
10561	4W	0.26	Frozen			
11241	4W	2.77	Frozen	1126	E	U
12251	4W	1.98	Frozen			
12391	4W	1.82	Frozen			
12551	4W	0.24	Frozen			
12781	4W	0.78	Frozen	1259	E	U
13931	4W	0.52	Frozen	1393	B	U
14171	4W	1.68	Frozen	1427	E	U
				1434	E	U
14331	4W	1.77	Frozen	1423	E	U
				1431	E	U
				1441	E	U
14571	4W	0.43	Frozen	1468	E	U
14771	4W	3.58	Frozen			
15421	4W	1.28	Frozen			
15551	4W	1.04	Frozen			
16781	4W	0.21	Frozen			
22261	4W	0.28	Frozen			
22441	4W	1.51	Frozen			
22861	4W	1.30	Frozen			
23131	4W	0.22	Frozen			
23521	4W	0.24	Frozen			
28671	4W	0.30	Frozen			
33841	4W	2.54	Frozen	3423	E	U
34441	4W	2.25	Frozen	3452	E	U
34651	4W	0.80	Frozen	3456	E	U
				3465	E	U
				3466	E	U
Total Class 4W:		35.85				
Total Class 4S:		0.0				
Total Class 4P:		0.0				

In the above table, possible “Field Call” channelled watercourse classifications are ephemeral (E), intermittent (I), transitional (T), small permanent (SP), beaver pond (B) or no channelled watercourse (NW). The “Navigability” rating identifies channelled watercourse as being potentially navigable (N) or potentially unnavigable (U) based on the possibility of traveling the stream with a vessel. The “Field Call” channelled watercourse classifications in the above table are based on Table 1 of the OGRs at the time, and during the conditions, when layout was conducted.

5. Non Timber Values

Public Involvement

Copies of this harvest plan are available for viewing at www.alpac.ca.

The Public Involvement for this plan was completed during this year's GDP review meetings.

No concerns have been identified through the public involvement process to date.

Aboriginal Consultation

The Aboriginal Consultation for this plan was completed during this year's GDP review meetings.

No concerns have been identified through the Aboriginal Consultation process to date.

Trappers

The holders of the following Registered Fur Management Areas (RFMA) have been contacted regarding harvesting activities within Planning Unit 067254 and their concerns have been noted below:

- 1953
- 2216
- 2227

RFMA 2227 has expressed concerns over the potential loss of a highly productive fisher area. Alberta-Pacific has agreed to remove a portion of Block 06725402121 from the harvest sequence. This area will be deferred from the harvest sequence.

Alberta-Pacific has also taken steps to leave a buffer on an active cabin belonging to RFMA holder 2216. This area will be deferred from the harvest sequence.

Guides and Outfitters

The holders of the following permits within Wildlife Management Unit (WMU) 510 have been notified of Alberta-Pacific's harvest plans within Planning Unit 067254:

- 0066 - 0401 - 0809 - 1017 - 1139
- 0163 - 0453 - 0913 - 1026 - 1159
- 0260 - 0480 - 0936 - 1078 - 1203

No concerns have been identified through the Guide and Outfitter Consultation process to date.

Forest Recreation Groups

Alberta Pacific's Trapper Coordinator met with the President and several members of the Athabasca Snowmobile Club on October 17, 2017. There are no concerns at this time.

During harvesting operations, ATV/snowmobile trails within this planning unit will be left clear of decking piles and debris. Roads, wherever possible, have been planned to avoid using recreational trails.

Signage will be placed at major public access points (roads and major trails) into this planning unit prior to harvest operations.

Historical Resources

Known historical resource sites have been addressed during the design of this plan. Lands on which historical resource sites are likely to occur will be checked prior to commencement of operations.

Forest Aesthetics

No concerns have been identified.

Land Use

As per a review of the Alberta Government's Digital Integrated Dispositions (DIDs) digital mapping program on May 1, 2017 and Alberta-Pacific's Landuse files from Evergreen Land Use Consulting on August 25, 2017 – there are currently no dispositions within this planning unit that restrict harvesting timber . The following dispositions are of note:

CNT 090003	No Restrictions
PNT 10922	No Agricultural Disposition – No Restrictions
PNT 110017	No Agricultural Disposition – No Restrictions

Wildlife

Portions of the planning unit are within a key Wildlife and Biodiversity Zone. Operations will adhere to section 7.7.5 of the OGRs.

The harvest design has been developed to mitigate the direct impacts on wildlife. Initial operations will commence within the blocks that fall outside of the key Wildlife and Biodiversity Zone (east side of the planning unit).

In subsequent years, blocks will be sequenced progressively to mitigate impact on wildlife.

No areas of concentrated terrestrial lichens were identified during layout.

All known sensitive wildlife sites have been buffered according to section 7.7.6.2 of the OGRs. These buffers have been placed into RAs.

Access and Access Management

Existing access has been utilized where possible to minimize the clearing of new RoW.

Continuous flow roads have been utilized in larger blocks to reduce skidding distances and cycle times. Their use outside of blocks has been minimized to control access and reduce potential wildlife disturbance.

The following policies have been implemented to mitigate access management concerns:

- Temporary road systems will be closed as soon as possible after the harvesting, hauling, and silviculture activities have been completed.

The following access control practices will also be implemented:

- If a significant delay occurs between harvesting and hauling, temporary access controls on roads will be utilized to restrict access by motorized vehicles. These controls may include the placement of logs on the road, snow berms, and/or removal of creek crossings.
- Slash rollback at strategic points (such as at the ends of the block or at the junction of the temporary road and permanent road) will be completed as soon as possible after logging to discourage access by all terrain or four wheel drive vehicles.

Timing

Since a portion of this planning unit falls within a key Wildlife and Biodiversity Zone, harvest and haul activities within in the zone will commence as early as possible, and will be completed in a timely manner to exit the key Wildlife and Biodiversity Zone as quickly as possible.

6. Spatial Harvest Sequence Summary

The table below summarizes the variance (in area) from the SHS, for Alberta-Pacific harvesting.

The variance exceeds the 20% allowable by cover type for acceptance as per the OGRs.

Non-SHS deciduous area has been incorporated into this harvest design in order to create an operationally functional plan. Due to the high number of stake holders in the area, the harvest design was adjusted in order to alleviate some concerns that were brought forward. To offset these additions there is 413.1 ha of deferrals from the SHS from townships 66-25-4 and 67-25-4. This planning unit has been pre-blocked in Alberta-Pacific's 2015 SHS.

SHS Tracking

SHS Tracking	Decid. Cover Type	Sw Cover Type	Sb Cover Type	Pj Cover Type	Total Cover Type
Total SHS in Planning Unit	637.5	0.0	0.0	0.0	637.5
FHP SHS Harvest ha.	154.6	0.0	0.0	0.0	154.6
Deleted SHS ha. (reportable)	35.1	0.0	0.0	0.0	35.1
Deferred SHS ha. (reportable)	413.1	0.0	0.0	0.0	413.1
Variance % ⁽¹⁾ (reportable)	70.3%	0.0%	0.0%	0.0%	70.3%
Addition ha. (reportable)	448.3	0.0	0.0	0.0	448.3
Bypassed ha.	0.0	0.0	0.0	0.0	0.0
Total Harvest ha. ⁽²⁾	602.9	0.0	0.0	0.0	602.9
SHS Variance ha. (unreportable) ⁽³⁾	34.7	0.0	0.0	0.0	34.7
Additions ha. (unreportable) ⁽⁴⁾	15.4	2.3	0.4	0.4	18.4

(1) Variance % is the reportable Deleted and Deferred SHS ha. expressed as a percentage of the Total SHS in the Planning Unit.

(2) Total Harvest ha. is the sum of FHP SHS Harvest ha. and Additions ha. (reportable).

(3) SHS Variance ha. (unreportable) are the deletions and deferrals from the SHS that are less than 2.0 ha. in size.

(4) Additions ha. (unreportable) are the additions to the FHP design that are less than 2.0 ha. in size.

7. Silviculture Information

The following table outlines the initial silviculture declarations for FHP blocks within Planning Unit 067254. Cover group balanced declarations will be submitted post harvest.

Alberta-Pacific Silviculture Declarations

Source Id	Opening Num	Area (ha)	Landbase Desig
06625428671	4250662867	4.8	ALPC0501
06625433841	4250663384	77.6	ALPC0501
06625434441	4250663444	15.5	ALPC0501
06625434651	4250663465	17.2	ALPC0501
06724407231	4240670723	26.7	ALPC0501
06724407481	4240670748	12.2	ALPC0502
06725402121	4250670212	26.5	ALPC0501
06725402281	4250670228	9.7	ALPC0501
06725403241	4250670324	5.9	ALPC0501
06725403571	4250670357	16.5	ALPC0501
06725403661	4250670366	8.4	ALPC0501
06725403871	4250670387	3.4	ALPC0501
06725410341	4250671034	14.1	ALPC0501
06725410561	4250671056	2.2	ALPC0501
06725411241	4250671124	70.9	ALPC0501
06725412251	4250671225	24.7	ALPC0501
06725412391	4250671239	38.2	ALPC0501
06725412551	4250671255	15.4	ALPC0501
06725412781	4250671278	5.4	ALPC0501
06725413931	4250671393	1.5	ALPC0501
06725414171	4250671417	24.7	ALPC0501
06725414331	4250671433	44.0	ALPC0501
06725414571	4250671457	12.2	ALPC0501
06725414771	4250671477	38.8	ALPC0501
06725415421	4250671542	5.1	ALPC0501
06725415551	4250671555	6.5	ALPC0501
06725416781	4250671678	26.2	ALPC0501
06725422261	4250672226	4.6	ALPC0501
06725422441	4250672244	11.4	ALPC0501
06725422861	4250672286	19.2	ALPC0501
06725423131	4250672313	3.8	ALPC0501
06725423521	4250672352	1.4	ALPC0501

All deciduous blocks will be Leave for Natural (LFN).

8. OGRs Variances

Blocks

The harvest area (ha) exceeds the SHS (ha) by cover type for this planning unit Refer to Section 6 of this document for further details.

The following table identifies blocks greater than 7.0 ha that may exceed 5% road disturbance once turnabouts are constructed.

Road Percent

Source Id	% Road Class	Comments
06625434441	5	Narrow block and/or irregular shaped block.
06625434651	6	Narrow block and/or irregular shaped block.
06724407481	6	Extra road required; Access to other blocks.
06725403571	7	Extra road required; Access to other blocks.
06725403661	6	Extra road required; Access to other blocks.
06725411241	5	Extra road required; Access to other blocks.
06725412251	6	Extra road required; Access to other blocks.
06725412391	5	Extra road required; Access to other blocks.
06725414171	5	Extra road required; Access to other blocks.
06725414571	7	Narrow block and/or irregular shaped block.
06725414771	5	Utilizing existing access.
06725416781	6	Narrow block and/or irregular shaped block.
06725422441	10	Extra road required; Access to other blocks.
06725422861	8	Narrow block and/or irregular shaped block.

The percent road class values have been achieved by rounding the road disturbance percent to the nearest whole number.

Block 06725415551 was AVI identified as having ≥ 600 stems/ha of White Spruce understorey. This block was field verified as containing < 400 stems/ha of White Spruce understorey. This block will not undergo understorey protection.

Block 06724407231 was identified as having ≥ 600 stems/ha of White Spruce understorey. However, all of the understorey was found to be on a snowmobile trail that passes through the middle of the block. This block will not undergo understorey protection.

Roads

Road Comments

Road No.	Class	Comments
03241	4W	Contains a spur road that may be within 200m of a lake (once a loop road is built) at grid location 0332.
