

# **Planning Unit 085074**

## **Forest Harvest Plan**

### **1. Introduction**

This Forest Harvest Plan (FHP) for Planning Unit 085074 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 2014-15 Alberta-Pacific Forest Industries Inc. (Alberta-Pacific) Annual Operating Plan (AOP).

This FHP has been discussed with Alberta Environment and Sustainable Resource Development (ESRD).

### **2. Planning Unit Specific Comments**

Planning Unit 085074 is located south of Gregoire Lake.

The planning unit is located in Forest Management Unit (FMU) A14. Alberta-Pacific has rights to D and D(C) as deciduous landbase and DC, CD and C as shared coniferous landbase.

The harvest design utilizes the 2006 Spatial Harvest Sequence (SHS). The coniferous design (coniferous SHS) is shown for landbase integration purposes. The deciduous design integrates the previous conifer design.

#### **Integration**

This FHP is in FMU A14 and has been provided for review to the Millar Western Forest Products Ltd (Millar Western).

Alberta-Pacific has received their agreement for this plan.

#### **Watershed**

Gregoire River and Meadow Creek have been surveyed as fish bearing.

All unsurveyed 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 landscape. 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 larger blocks to create some larger (> 1 ha) 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**

One or more of the following debris management strategies apply for blocks within this planning unit:

- Methods described in the Forest and Prairie Protection Act and Regulations, and/or
- Thinly spread slash throughout the block, and/or
- Stump side processing.

Blocks within FireSmart Community Zones will not utilize the retention of debris piles.

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 significant signs were encountered during this phase.

### 3. Block Information

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

#### Landbase Volume Summary

Company	Area (ha)	Decid (m3)	Conif (m3)	Inc Conif (m3)	Total (m3)
Millar Western	444	16,537	69,669	5	86,211
Alberta-Pacific	831	189,207	1,003	11,241	201,451

The following Alberta-Pacific FHP blocks will have their coniferous volume hauled as quota (FMA) chargeable:

08507404121

#### Alberta-Pacific Deciduous First Entry Block Listing

(Values Affected by Rounding)

Source Id	Harvest Season	Conif Charge	Detail Plan	Area (ha)	Decid (m3)	Conif (m3)	Inc Conif (m3)	Total (m3)
08507402241	F	INC	U	59	13,324	0	483	13,807
08507402561	N	INC		15	3,307	0	112	3,419
08507402871	N	INC	U	41	9,351	0	650	10,001
08507403471	F	INC	U	61	13,487	0	447	13,934
08507403751	F	INC		11	2,884	0	89	2,973
08507404121	F	FMA		22	5,230	0	1,332	6,562
08507405231	F	INC		60	10,547	1,003	762	12,312
08507405381	F	INC		12	2,044	0	67	2,111
08507406451	F	INC		34	8,809	0	495	9,304
08507407321	F	INC		34	7,139	0	545	7,684
08507409891	F	INC		6	1,151	0	327	1,478
08507410581	N	INC	U	64	16,996	0	648	17,644
08507410751	N	INC		75	18,459	0	574	19,033
08507411221	N	INC		10	2,664	0	92	2,756
08507411351	F	INC		3	365	0	54	419
08507411571	F	INC		30	4,664	0	448	5,112
08507411811	F	INC		8	1,859	0	58	1,917
08507415911	F	INC		9	1,163	0	41	1,204
08507417641	F	INC		3	605	0	22	627
08507417741	F	INC		7	1,575	0	53	1,628
08507417891	F	INC		37	6,707	0	443	7,150
08507419341	F	INC		22	5,071	0	168	5,239

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

(Values Affected by Rounding)

<b>Source Id</b>	<b>Harvest Season</b>	<b>Conif Charge</b>	<b>Detail Plan</b>	<b>Area (ha)</b>	<b>Decid (m3)</b>	<b>Conif (m3)</b>	<b>Inc Conif (m3)</b>	<b>Total (m3)</b>
08507419371	F	INC		16	4,311	0	135	4,446
08507419421	F	INC		3	639	0	71	710
08507419891	F	INC		22	5,161	0	977	6,138
08507420271	F	INC		50	13,193	0	468	13,661
08507420851	F	INC		34	8,381	0	264	8,645
08507421291	F	INC		20	5,514	0	173	5,687
08507421531	F	INC		30	7,583	0	399	7,982
08507430511	F	INC		6	862	0	160	1,022
08507430741	F	INC		28	6,162	0	684	6,846
<b>Total</b>				<b>831</b>	<b>189,207</b>	<b>1,003</b>	<b>11,241</b>	<b>201,451</b>

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

**Retention Area Listing  
(Values Affected by Rounding)**

<b>Block Id</b>	<b>Harvest Season</b>	<b>Status</b>	<b>Area (ha)</b>	<b>Decid (m3)</b>	<b>Conif (m3)</b>	<b>Inc Conif (m3)</b>	<b>Total (m3)</b>
10719			17	4,640	0	143	4,783
15929			1	141	0	4	145
21379			1	328	0	10	338
30939			3	769	0	24	793
<b>Total</b>			<b>22</b>	<b>5,878</b>	<b>0</b>	<b>181</b>	<b>6,059</b>

#### 4. Access and Road Information

##### 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.

Road 19341 utilizes a 'T' intersection outside of Block 08507419341 at grid location 1913. This was required due to issues with terrain within Block 08507419341.

Road 06451 enters and exits Block 08507406451 at grid location 0622. This is due to issues with terrain within Block 08507406451.

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.

##### Main Access and Crossings

Road No.	Class	Length (Km)	Construction Season	Crossing Location	Field Call	Navigability
02241	4W	0.35	Frozen	0238	T	U
02561	4S	0.87	Non-Frozen	0265		
02871	4S	2.79	Non-Frozen	0271		
				0272		
				0273		
				0282		
				0283		
				0284		
				0293		
03471	4W	01.42	Frozen			
04121	4W	0.64	Frozen	0581	I	U
				0582	T	U
05231	4W	1.89	Frozen	0545	I	U
05381	4W	7.80	Frozen	0688	T	U
				0772	I	U
				0781	I	U
				1555		
				1565		
06451	4W	3.56	Frozen	0642	E	U
				0653	T	U
				0654	SP	U
07321	4W	3.18	Frozen			
09891	4W	0.48	Frozen	1096	I	U
10581	4S	1.58	Non-Frozen	1049	I	U

### Main Access and Crossings (Cont.)

Road No.	Class	Length (Km)	Construction Season	Crossing Location	Field Call	Navigability
10581				1068 1089	E	U
10751	4S	2.07	Non-Frozen			
11221	4S	1.09	Non-Frozen			
11351	4W	0.51	Frozen			
11571	4W	1.74	Frozen	1154	T	U
11811	4W	0.28	Frozen	0289 1181	NW SP	U U
15911	4W	0.53	Frozen			
17641	4W	0.12	Frozen	1778	B	U
17741	4W	0.65	Frozen	1793	I	U
17891	4W	3.14	Frozen	1615 1616 1794 1795 2061	I LP SP I E	U U U U U
19341	4W	1.96	Frozen	1926	I	U
19371	4W	0.26	Frozen	1947	E	U
19421	4W	1.52	Frozen	2032	E	U
19891	4W	1.17	Frozen			
20271	4W	2.00	Frozen	2038 2042 2043	E E E	U U U
20851	4W	2.28	Frozen	2067 2076 2113	E I E	U U U
21291	4W	0.09	Frozen			
21531	4W	0.94	Frozen			
30511	4W	0.10	Frozen			
30741	4W	1.31	Frozen	3074	E	U
<b>Total Class 4W:</b>		<b>37.92</b>				
<b>Total Class 4S:</b>		<b>8.40</b>				

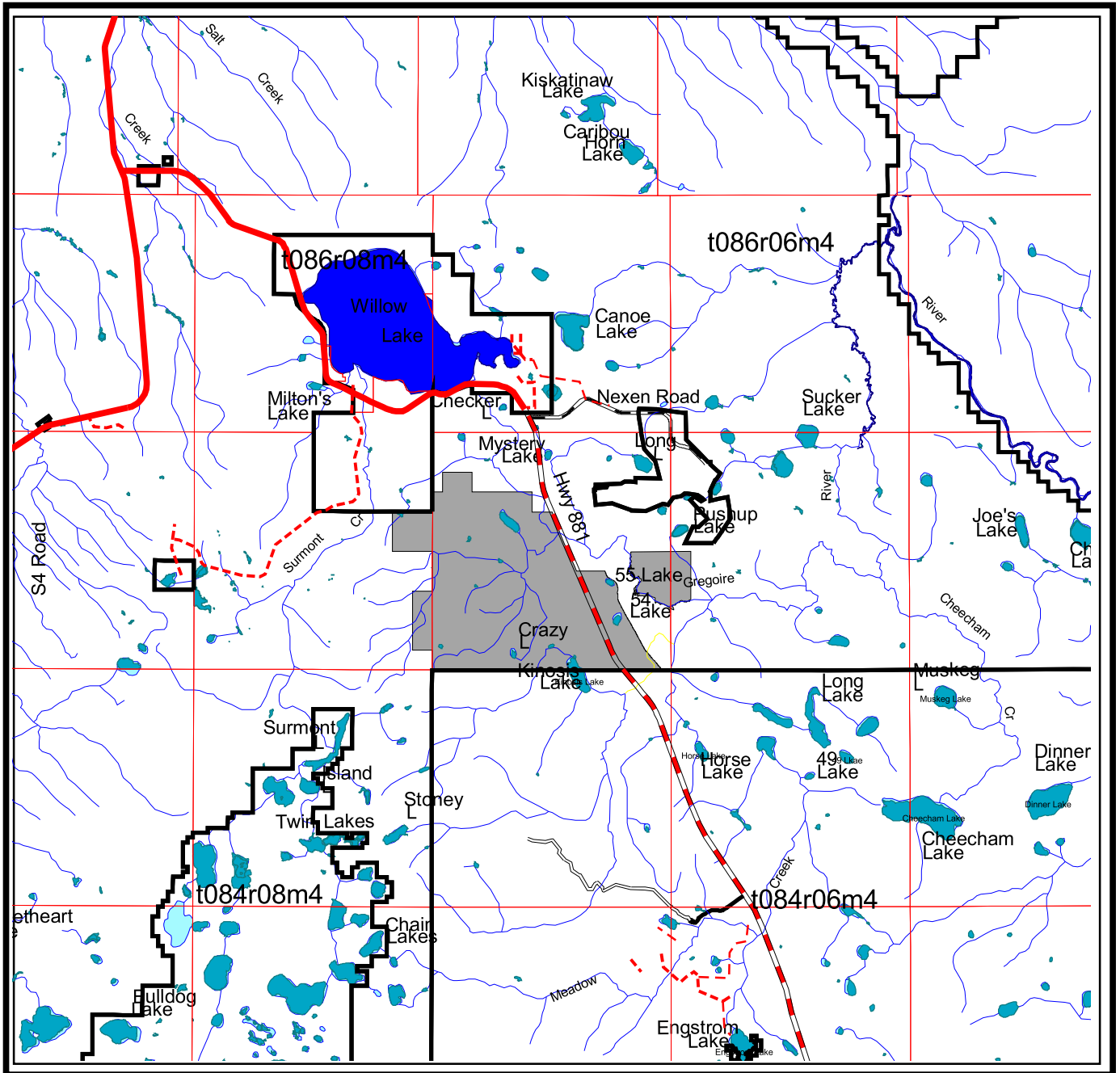
### Skid Trail Crossings

Road No.	Crossing Location	Base Info	Field Call	Navigability
10751	1094	UM	E	U

In the above tables, possible “Field Call” channelled watercourse classifications are ephemeral (E), intermittent (I), transitional (T), small permanent (SP), large permanent (LP), lake < 4 ha (SL), lake ≥ 4 ha (LL) beaver pond (B), spring (S), saturated soils (SS) 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.

# Planning Unit 085074

## Access Map



1:250000



Alberta-Pacific  
Forest Industries Inc.



## **5. Non Timber Values**

### **Public Involvement**

Copies of this harvest plan are available for viewing at the Athabasca, Fort McMurray and Lac La Biche libraries, TimberNorth-Athabasca, the Alberta-Pacific Wabasca field office and the Alberta-Pacific mill site.

The Public Involvement for this plan was completed during the previous 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 the previous 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 085074 and their concerns have been noted below:

- 0162
- 2013

In consultation with the holder of RFMA 2013 a trail of importance was identified in Section 3 of Twp. 085-07-4 and a cabin in Section 34 of Twp. 084-07-4.

To protect the trail, the block boundary was laid out on the east side of trail in Block 085074403751. In addition skid trails have been laid in Block 08507403471 to minimize crossing of the trail.

To protect a site of importance, 10 hectares was removed from Block 08507403751

An additional trail was also identified in Block 08507402871, boundary was moved west of this trail.

### **Guides and Outfitters**

The holders of the following permits within Wildlife Management Unit (WMU) 519 have been notified of Alberta-Pacific's harvest plans within Planning Unit 085074 and their concerns have been noted:

0260	0429	0446	0483	0709
0740	0818	0858	0861	0869



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

### **Forest Recreation Groups**

Block boundaries and road locations have been designed to minimize operations adjacent to the snowmobile trail system as well as minimize crossings of the trail system.

Consultation with the McMurray Sno-Drifters group responsible for the trail system is ongoing. Alberta-Pacific will notify the McMurray Sno-Drifters of operations prior to commencement of operations.

### **Grazing Lease Operators**

There are currently no grazing leases within this planning unit.

### **Historical Resources**

No known historical resource sites are located within this unit. Lands on which historical resource sites are likely to occur will be checked prior to commencement of operations or post harvest.

### **Forest Aesthetics**

This planning unit contains blocks that are adjacent to Secondary Highway 881. The stand structure and lesser vegetation left within these blocks will be concentrated along the boundary adjacent to the highway to minimize visual sensitivity.

### **Land Use**

As per a Land Status Automated System (LSAS) land standing report dated September 25, 2014, DML070065, DML070113, DML080031, SML060089 and SML120009 were removed from the design.

### **Wildlife**

This planning unit is not within or near Caribou Range or key Wildlife and Biodiversity Zone. Operations will adhere to the Alberta-Pacific wildlife plan submitted annually in the fall.

No areas of concentrated terrestrial lichens were identified during layout.

All known sensitive sites have been addressed as per 7.7.6.2 of the OGRs.

Block 08507405321 has been buffered according to section 7.1.1 of the OGR's

### ***Block Design***

Areas of timber to be used as stand structure have been strategically chosen to break up the line of sight in larger blocks. These have been delineated on the maps as RAs.

### ***Access and Access Management***

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

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

- Temporary road systems will be “signed” as temporary and closed as soon as possible after the harvesting, hauling, and silviculture activities have been completed.
- Road systems will be signed as “Temporary Access - Logging in Progress.”
- If a significant delay occurs between harvesting and hauling, temporary access controls on roads will be utilized to prevent 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.

## **6. Integration with Affected Forest Companies**

Millar Western signed off October 1, 2014 regarding this plan.

### **Millar Western Block Listing** (Values Affected by Rounding)

<b>Block Id</b>	<b>Harvest Season</b>	<b>Conif Charge</b>	<b>Detail Plan</b>	<b>Area (ha)</b>	<b>Decid (m3)</b>	<b>Conif (m3)</b>	<b>Inc Conif (m3)</b>	<b>Total (m3)</b>
04664	F			4	27	884	0	911
05744	F			9	261	2,322	0	2,583
05874	F			2	51	459	0	510
07774	F			174	5,945	34,301	5	40,251
08734	F			9	106	1,951	0	2,057
09274	F			20	43	1,380	0	1,423
09674	F			9	81	2,017	0	2,098
09864	F			5	23	779	0	802
10174	F			3	95	503	0	598
10224	F			3	14	452	0	466
16374	F			16	61	1,260	0	1,321
16654	F			31	138	2,114	0	2,252

## Millar Western Block Listing (Cont.)

(Values Affected by Rounding)

Block Id	Harvest Season	Conif Charge	Detail Plan	Area (ha)	Decid (m3)	Conif (m3)	Inc Conif (m3)	Total (m3)
17554	F			4	20	608	0	628
17734	F			2	115	115	0	230
18774	F			23	189	2,434	0	2,623
19754	F			102	6,864	13,847	0	20,711
20174	F			9	2,031	708	0	2,739
30144	F			19	473	3,535	0	4,008
<b>Total</b>				<b>444</b>	<b>16,537</b>	<b>69,669</b>	<b>5</b>	<b>86,211</b>

### 7. Spatial Harvest Sequence Summary

The variance exceeds the 20% allowable for acceptance under the OGRs. The primary cause for the variance is land use near or along highway 881, steep terrain, and or areas with terrain that have operational concerns.

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

#### SHS Tracking

SHS Tracking	Decid. Cover Type	Sw Cover Type	Sb Cover Type	Pj Cover Type	Total Cover Type
Total SHS in Planning Unit	925.5	0.0	0.0	0.0	925.5
FHP SHS Harvest ha.	648.0	0.0	0.0	0.0	648.0
Deleted SHS ha. (reportable)	189.8	0.0	0.0	0.0	189.8
Deferred SHS ha. (reportable)	0.0	0.0	0.0	0.0	0.0
Variance % <sup>(1)</sup> (reportable)	20.5	0.0	0.0	0.0	20.5
Addition ha.	148.4	0.0	0.0	0.0	148.4
Bypassed ha.	0.0	0.0	0.0	0.0	0.0
Total Harvest ha. <sup>(2)</sup>	796.4	0.0	0.0	0.0	796.4

(1) Variance % is the 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.

### 8. Silviculture Information

The following table outlines the initial silviculture declarations for FHP blocks within Planning Unit 085074. Cover group balanced declarations will be submitted post harvest.

### Alberta-Pacific Silviculture Declarations

Source Id	Area (ha)	Std_Mod	Open_Desig	Species_Gr	Silv_Harv
08507402241	59.0	D	PC	DE	UP
08507402561	14.5	D	AV	DE	CC
08507402871	40.6	D	PC	DE	UP
08507403471	61.4	D	PC	DE	UP
08507403751	11.3	D	CC	DE	CC
08507404121	21.8	D	CC	DE	CC
08507405231	59.6	D	CC	DE	CC
08507405381	12.2	D	CC	DE	CC
08507406451	34.4	D	CC	DE	CC
08507407321	33.8	D	CC	DE	CC
08507409891	6.2	D	CC	DE	CC
08507410581	64.2	D	PC	DE	UP
08507410751	74.7	D	AV	DE	CC
08507411221	10.5	D	CC	DE	CC
08507411351	3.4	D	CC	DE	CC
08507411571	30.4	D	CC	DE	CC
08507411811	7.9	D	CC	DE	CC
08507415631	4.4	D	CC	DE	CC
08507415911	9.0	D	CC	DE	CC
08507417641	2.7	D	CC	DE	CC
08507417741	6.7	D	AV	DE	CC
08507417891	37.0	D	CC	DE	CC
08507419341	21.8	D	CC	DE	CC
08507419371	16.2	D	CC	DE	CC
08507419421	2.8	D	CC	DE	CC
08507419891	21.9	D	CC	DE	CC
08507420271	50.0	D	CC	DE	CC
08507420851	34.0	D	CC	DE	CC
08507421291	19.7	D	CC	DE	CC
08507421531	30.0	D	CC	DE	CC
08507430511	5.8	D	CC	DE	CC
08507430741	28.0	D	CC	DE	CC

In the above table, the codes for “Std\_Mod”, “Open\_Type”, “Species\_Gr” and “Silv\_Harv” are as per the Alberta Regeneration Information System (ARIS) domain codes. “AV” under “Open\_Desig” is not an ARIS code but is used internally for the tracking of understorey avoidance blocks. If a block contains adequate amounts of Balsam Fir, so that fir is an acceptable coniferous regeneration species, a code of FA is used in the “Species\_Gr”.

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

## 9. OGRs Variances

### Blocks

The lakes bordering the southwest boundary of Block 08507417891 are less than 4.0 hectares in size and 30 metre buffer has been utilized.

### SHS Tracking

SHS Tracking	Decid. Cover Type	Sw Cover Type	Sb Cover Type	Pj Cover Type	Total Cover Type
Total SHS in Planning Unit	925.5	0.0	0.0	0.0	925.5
FHP SHS Harvest ha.	648.0	0.0	0.0	0.0	648.0
Deleted SHS ha. (reportable)	189.8	0.0	0.0	0.0	189.8
Deferred SHS ha. (reportable)	0.0	0.0	0.0	0.0	0.0
Variance % <sup>(1)</sup> (reportable)	20.5	0.0	0.0	0.0	20.5
Addition ha.	148.4	0.0	0.0	0.0	148.4
Bypassed ha.	0.0	0.0	0.0	0.0	0.0
Total Harvest ha. <sup>(2)</sup>	796.4	0.0	0.0	0.0	796.4

(1) Variance % is the 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.

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
08507402561	5	Extra road required; Access to other blocks.
08507402871	5	Extra road required for understorey concerns.
08507403471	5	Extra road required for understorey concerns.
08507403751	5	Narrow block and/or irregular shaped block.
08507405381	5	Narrow block and/or irregular shaped block.
08507406451	5	Extra road required due to rugged terrain.
08507407321	6	Extra road required due to rugged terrain.
08507411221	5	Extra road required; Access to other blocks
08507417891	5	Extra road required; Access to other blocks
08507420271	5	Extra road required due to rugged terrain.

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

Block 08507402561 is greater than 10ha and contains >2 ha clumps of  $\geq 600$  stems/ha of White Spruce understorey. However, due to the irregular block shape, it will not have high intensity understorey protection and will be harvested using avoidance methods.

Block 08507410751 is greater than 10ha and contains >2 ha clumps of  $\geq 600$  stems/ha of White Spruce understorey. However, due to terrain issues within the block and irregular block shape, it will not have high intensity understorey protection and will be harvested using avoidance methods.

Block 08507417741 contain  $\geq 600$  stems/ha of White Spruce understorey but is too narrow and small for understorey protection methods, and will not have the understorey protected by avoidance or high intensity understorey protection. No understorey assessment will be submitted for this block.

### **Roads**

Road 19341 utilizes a 'T' intersection outside of Block 08507419341 at grid location 1913. This was required due to issues with terrain within Block 08507419341.

### **Road Comments**

<b>Road No.</b>	<b>Class</b>	<b>Comments</b>
05381	4W	This road is within 200m of a Lake at grid locations 1633 and 1652.
11571	4W	This road is within 200m of a Lake at grid location 1154.
17891	4W	This road is within 200m of a Lake at grid location 2051.
19341	4W	This road is within 200m of a Lake at grid location 2051.
20271	4W	This road is within 200m of a Lake at grid location 2042
20851	4W	This road is within 200m of a Lake. At grid location 2068 to grid location 2085.
21291	4W	This road is within 200m of a Lake at grid location 2137.
21531	4W	This road is within 200m of a Lake at grid location 2136.