

Harvesting Plan
Gilbert Smith Forest Products Ltd. -

☒ Original
☐ Amendment #

TENURE IDENTIFICATION

Region	District	TSA	TSB	Licence No.	C / P	Timbermark	Cutting Permit #	Block
SIR	DKA	11	D	A18692	P	EU1906	906	16
Location Paxton Valley		Authority/Opening No. 82L052 /		Licensee Gilbert Smith Forest Products Ltd.				

Comments:

EMERGENCY CONTACT NUMBERS
Medical Emergency: 911
Yellowhead Helicopters (250) 674-3600 (Clearwater)
Clearwater Fire Zone: (250) 587-6775
Provincial Emergency Program (PEP): 1-800-863-3456

OTHER CONTACT NUMBERS
Gilbert Smith Forest Products Ltd. (250) 672-9435

HARVESTING PLAN

SEASON	HARVESTING METHOD
Any season. Critical site conditions: Moderate soil compaction, displacement and erosion hazard. Maximum Allowable Soil Disturbance Limits: 10% 25% for Roadside Areas.	Conventional 9.3ha
HARVESTING CONSTRAINTS The Migratory Bird Convention Act (MBCA) and the Migratory Birds Regulations identify the general geographic area around this block as having high migratory bird use starting April 15th through to September 1st. The MBCA does not allow for the incidental damage to nests, birds and eggs that may occur while conducting any activity including harvesting, fire fighting, site prep, road building, planting, etc. All workers should be aware of the requirements of the MBCA. GSFP Ltd has attempted to address the MBCA to the best of their ability. Key to that is general awareness and education of the MBCA by all woodlands employees, consultants and contractors working on behalf of GSFP. Best Management Practices to reduce the risk to migratory birds will be covered annually during the EMS spring training and individually as the need arises. "Best Management Practices" 1) Where possible, avoid planning operations during key periods of migratory bird use (nesting/breeding/rearing) as identified by Environment Canada. This may not always be possible given the location of GS traditional operating areas and other site specific variables that dictate timing of operations which are also legally binding. 2) During the pre-work field review and subsequent field inspections, try to locate active nest and develop a work strategy to avoid or protect. This can be done by avoiding that area of the block until the nest becomes vacant or buffer with retention of leave trees/clump and work around. 3) If an active nest is identified during operations and unsure of what to do, leave the area undisturbed and contact GS supervisor for strategy. Average slope 13%. Avoid constructing new trails or using existing trails along fenceline Right of Ways. Contractor to notify GSFP supervisor of operations adversely affecting fences, gates and cattleleguards. No skidding/decking along Paxton Valley Road. Several Wildlife Tree Retention Areas are located within the harvest area. No harvesting is to occur within these WTRAs.	HARVESTING PLAN COMMENTS LEAVE TREE SPECIFICATIONS In conventional harvest areas target 9 live conifer stems/ha greater than or equal to 17.5cm dbh dispersed throughout and/or in clumps up to 0.1ha in size. Also, where feasible, deciduous stems will be reserved from harvesting. PRE-EXISTING HAZARDS Remote work area, ensure emergency communication protocols are in place and tested. Pre existing hazards include but are not limited to snags, boulders, steep slopes, broken terrain and narrow roads. The access for this block is through Paxton Valley Road (public road). DRIVE SLOW! Yield to private vehicle access. Expect dogs, livestock and farm vehicles. No slopes greater than 35% were noted during fieldwork. If previously unidentified steep slopes are identified, then the following will apply: Slope limitations: 1) If the manufacturer's maximum slope operating stability limit for logging equipment is known, the equipment must be operated within that limit. 2) If the manufacturer's maximum slope operating stability limit for logging equipment is not known, the equipment must be operated within the following limits: (a) a rubber tired skidder must not be operated on a slope which exceeds 35%; (b) a crawler tractor, feller buncher, excavator and other similar equipment must not be operated on a slope which exceeds 40%; (c) any other forestry equipment specifically designed for use on a steep slope must not be operated on a slope which exceeds 50%. Logging equipment may be operated beyond the maximum slope operating stability limits specified above provided the contractor conducts a risk assessment of that operation, and written safe work practices acceptable to the Board are developed and implemented to ensure the equipment's stability during operation.

RIPARIAN MANAGEMENT

1 S6 stream located entirely within WTRA.

CP 906 Block 16 Site Plan
Gibert Smith Forest Products Ltd.

X

Original

18-Aug-2015

Amendment #

A. TENURE IDENTIFICATION

Region SIR	District DKA	TSA 11	TSB D	Licence No. A18692	Timbermark (s) EU1906	Cutting Permit 906	Block 16	Mapsheet/Opening No. 82L052 /
Area Under Tenure 13.0 (ha)	Location		Paxton Valley		UTM East UTM North UTM Zone		Licensee Gilbert Smith Forest Products Ltd.	
			Latitude: 50.32.45		Longitude: 119.44.18			

This Site Plan is consistent with the Tolko Industries Ltd. 2012-2017 FSP (FSP ID# 458), Forest Range and Practices Act and Regulations, and applicable Higher Level Plans.

A.1 Safety

Radio Frequency	Emergency Rendezvous	Steep Slopes	Weather Station
As posted on site	At discretion of contractor	Average 13%	Glimpse, Salmon Arm, GSFP
Other Safety Comments			

The haul road for this block connects to Paxton Valley Road. This road is used by the public, children and accesses private farms and residences - SLOW DOWN.

Remote work area - ensure emergency communication protocols are in place and tested.

Pre existing hazards include, but are not limited to snags, steep slopes, broken terrain, boulders and narrow roads.

No slopes greater than 35% were noted during fieldwork. If previously unidentified steep slopes are identified, then the following will apply:

Slope limitations:

- 1) If the manufacturer's maximum slope operating stability limit for logging equipment is known, the equipment must be operated within that limit.
- 2) If the manufacturer's maximum slope operating stability limit for logging equipment is not known, the equipment must be operated within the following limits:
 - (a) a rubber tired skidder must not be operated on a slope which exceeds 35%;
 - (b) a crawler tractor, feller buncher, excavator and other similar equipment must not be operated on a slope which exceeds 40%;
 - (c) any other forestry equipment specifically designed for use on a steep slope must not be operated on a slope which exceeds 50%.

Logging equipment may be operated beyond the maximum slope operating stability limits specified above provided the contractor conducts a risk assessment of that operation, and written safe work practices acceptable to the Board are developed and implemented to ensure the equipment's stability during operation.

B. AREA SUMMARY

AREA OF NO PLANNED REFORESTATION (ha) (NPR)						
Perm. Access	Rock	Water	Swamp	Other NP	NC > 4 HA.	IMM Reserves * see details below
0.2						2.3
						2.5

NET AREA TO BE REFORESTED INCLUDING RESERVES WITH MODIFICATIONS (ha)

SU	SU Area Description	Net Area To Be Reforested	
1	IDFx2 - 01: Mesic site with a medium soil nutrient regime. Located on middle slopes with a Northwest aspect and long uniform straight slopes ranging from 0-15%. Luvisolic soil composed of Silt Loam with approximately 14% Coarse Fragment Content. Parent material: Morainal. Elevation: 938-1021m.	10.5	

TOTAL NET AREA TO BE REFORESTED : 10.5

TOTAL AREA : 13.0

C. OBJECTIVES

C.1 MANAGEMENT OBJECTIVES

MANAGEMENT OBJECTIVES STATED IN THE FDP OR HLP(S):

Manage for timber production, wildlife, visuals, recreational and other resource objectives for the area.

The block is consistent with the Tolko Industries Ltd. 2012-2017 FSP (FSP id# 458), effective April 1, 2012. The block is located in Forest Development Unit #1.

C.2 CONDITIONS THAT MUST EXIST AFTER HARVEST OR TREATMENT TO ACCOMMODATE KNOWN FOREST RESOURCES

C.2a WILDLIFE

File ID: 906 16	Licence No.: A18692	Timbermark: EL J6	CP: 906	Block: 16
<p>The Conservation Data Center indicates that there are no known occurrences of rare or endangered species in the vicinity of this block. No FRPA Section 7 notices exist for the area covered by this block. No WHAs or GAR orders established for the area covered by this block.</p> <p>General usage by deer, moose, bear, birds and small mammals.</p> <p>Prescribed site conditions:</p> <p>In general, prescribed leave trees/clumps and WTRA's will provide habitat for wildlife such as cover, shelter and nesting/roosting. Where present and possible, reserve veteran Douglas fir.</p>				
C.2c FISHERIES	<p>There are no fish bearing streams located within the harvest area.</p> <p>Prescribed site conditions:</p> <p>No specific conditions or actions have been prescribed.</p>			
C.2d WATERSHEDS	<p>This block is not located within a community watershed.</p> <p>This block is located within the Paxton Creek watershed as identified by the Kamloops TSA Watershed Units map dated September 29, 2006. The watershed is not identified within the TSA SFM plan as a high risk watershed.</p> <p>Prescribed site conditions:</p> <p>No specific conditions or actions have been prescribed.</p>			
C.2e RECREATION	<p>There are no known recreation features, recreation trails or sites with established objectives within or adjacent to this block according to the Southern Interior Forest Region Recreation Inventory. Opportunities exist for hunting and other recreation.</p> <p>Prescribed site conditions:</p> <p>No specific conditions or actions have been prescribed.</p>			
C.2f BIOLOGICAL DIVERSITY	<p>CWD objectives stated in section E.5 and Leave Tree specifications in this section are prescribed measures to enhance stand level biological diversity.</p> <p>The total opening size is 9.3 hectares. Consistent with FPFR section 64/65 and section 5.8.2 of the FSP.</p> <p>Prescribed site conditions:</p> <p>In conventional harvest areas retain zero (0) to eighteen (18) live conifer stems/ha greater than or equal to 17.5cm dbh dispersed throughout and/or in clumps up to 0.1ha in size. Where present and possible, reserve veteran Douglas Fir. Also, where feasible, deciduous stems will be reserved from harvesting.</p>			
C.2g VISUAL RESOURCE MANAGEMENT	<p>The block is located within Visual Landscape Inventory Polygon 1992, which is not identified within the Kamloops LRMP as a visually sensitive area. It is not located within an identified Recreation and Tourism Area.</p> <p>Prescribed site conditions:</p> <p>No specific conditions or actions prescribed.</p>			
C.2h CULTURAL HERITAGE	<p>Efforts have been made to review and discuss Cultural Heritage Resources at the FSP and stand level. A referral map and description of the proposed roads and cutblocks was sent out to affected First Nations for review and comment. Completed AOA report received from Tk'emlúps te Secwépemc First Nation July 31, 2015. An area of archaeological potential - small bench feature was identified. As recommended, the block was amended to include a 50m WTRA buffer of the feature.</p> <p>Prescribed site conditions:</p> <p>If a previously unidentified Cultural Heritage Resource or archaeological material are encountered during harvesting, road construction or other primary forest activity, the activity will cease to the extent necessary to protect the feature until a Cultural Heritage Resource Evaluation (CHR) can be carried out and, subject to the results and recommendations of the CHR, the primary forest activities will be consistent with the recommendations to mitigate the impact on, conserve, or if necessary, protect the Cultural Heritage Resource.</p>			
C.2i RANGE	<p>Range tenure holders RAN077242, RAN077592 and RAN077243.</p> <p>Prescribed site conditions:</p> <p>1) All fences and gates affected by Gilbert Smith will be left in a pre-existing condition or better. 2) Avoid constructing and/or using trails that are immediately along fence right of ways. 3) No leave trees within two tree lengths of fences 4) Contractor to notify GSFP supervisor of operations adversely affecting fences, gates, and cattle guards.</p>			
C.2j OTHER RESOURCES	<p>Trapping registration number TR0326T008. A referral map and description of the proposed roads and cutblocks was sent to the trapper on July 7, 2015.</p> <p>Prescribed site conditions:</p> <p>Timing of operations will be communicated to trapper in advance of start up. Any trap boxes located within the harvest area will be collected and returned to the trapper. Attempt to create small 3-5m piles of stumps and/or debris on the block for small mammal habitat during stumping activities.</p>			
C.3 USER DEFINED OBJECTIVES				
MIGRATORY BIRDS				

File ID: 906 16

Licence No.: A18692

Timbermark: EL 6

CP: 906

Block: 16

The Migratory Bird Convention Act (MBCA) and the Migratory Birds Regulations identify the general geographic area around this block as having high migratory bird use starting April 15th through to September 1st.
The MBCA does not allow for the incidental damage to nests, birds and eggs that may occur while conducting any activity including harvesting, fire fighting, site prep, road building, planting, etc. All workers should be aware of the requirements of the MBCA.

GSFP Ltd has attempted to address the MBCA to the best of their ability. Key to that is general awareness and education of the MBCA by all woodlands employees, consultants and contractors working on behalf of GSFP. Best Management Practices to reduce the risk to migratory birds will be covered annually during the EMS spring training and individually as the need arises.

"Best Management Practices"

1) Where possible, avoid planning operations during key periods of migratory bird use (nesting/breeding/rearing) as identified by Environment Canada. This may not always be possible given the location of GS traditional operating areas and other site specific variables that dictate timing of operations which are also legally binding.

2) During the pre-work field review and subsequent field inspections, try to locate active nest and develop a work strategy to avoid or protect. This can be done by avoiding that area of the block until the nest becomes vacant or buffer with retention of leave trees/clump and work around.

3) If an active nest is identified during operations and unsure of what to do, leave the area undisturbed and contact GS supervisor for strategy.

RARE ECOSYSTEMS

Appendix 7 of the Nicola Thompson Fraser SFM Plan lists rare ecosystems which are present in the Kamloops TSA. No known occurrences of rare ecosystems are located within or adjacent to the block as identified on the CDC map application. There were also no rare ecosystems identified during fieldwork activities.

D. ECOLOGICAL INFORMATION AND SITE CHARACTERISTICS

D.1 ECOLOGY AND CRITICAL SITE CONDITIONS													
SU	AREA	IDF	xh	2	ELEVATION (m)			SLOPE (%)			SITE SERIES Dominant — Related	ASPECT	SITE TYPE
					Low	High	Avg	Min	Max	Avg			
1	10.5				938	960	949	5	15	10	01		Northwest

ECOLOGY HAZARDS	
Eco Unit	Hazard
1	Windthrow
1	Brush
1	Cattle

SU

Critical site conditions that affect the timing of operations, and how they affect the timing

1

Rehabilitation of temporary access structures and excavated/bladed trails will take place at completion of harvest and/or site prep activities.

E. MANAGEMENT STRATEGIES

E.1 Riparian Zone									
Riparian I.D.	Riparian Class	Harvesting	SU	# Within Block	# Adjacent to Block	RRZ Width (m)	RMZ Width (m)	Description and strategy for Riparian Zone including purpose and extent of removal or modification of trees and res. basal area or density.	
S6	S6		1	2			20	S6 Stream located entirely within block WTRA. No specific actions or conditions prescribed.	No NCDs were identified on the block.
N/A	NCD		1					If previously unidentified streams or NCDs are located during harvesting, leave trees will be retained within the RMZ consistent with section E.8 Leave Tree Characteristics.	

E.4 FOREST HEALTH MANAGEMENT STRATEGIES

Amillaria Ostoyae Root Disease: A walkthrough root disease survey was conducted while developing this block and incidence of root disease was noted. Deciduous trees may be retained and regeneration will consist of planting mixed species where possible. If the presence of root disease prevents free growing standards from being achieved, then stocking standards may be reduced provided that all measures to reduce the disease risk specified in the Site Plan have been undertaken.

Pest Codes			
SU(s)	Pest Code	% of Area Affected	Management Strategies
1	DRA	71	Stumping, planting mixed species, retention of deciduous where present will be used to mitigate the impact of root disease on the plantation.

E.5 COARSE WOODY DEBRIS MANAGEMENT STRATEGIES

Harvest operations are expected to leave sufficient CWD on site for biodiversity and nutrient cycling purposes. For immediate CWD retention, retain scattered large and non-merchantable downed stems during harvesting and site preparation activities. Additionally, prescribed leave trees will contribute to future recruitment of CWD for biodiversity and nutrient cycling purposes. Accumulations of CWD must not hinder the achievement of a free growing stand and should be dispersed throughout the entire harvest area where possible. If heavy accumulations exist post-harvest, debris piling and spot burning may be used to create plantable microsites.

File ID: 906 16	Licence No.: A18692	Timbermark: EU J6	CP: 906	Block: 16
Target a minimum of 10m3 per hectare of Coarse Woody Debris. The holder must retain a minimum of 4 logs per hectare, each being a minimum of 2m in length and 7.5cm in diameter at one end. However, there should also be a mix of larger CWD retention (pieces >20cm diameter and >10m in length) consistent with the Nicola Thompson Fraser SFM Plan. Large CWD plays and important role in the overall long-term CWD strategy because it takes longer to decompose than the minimum piece size requirements noted above.				
E.6 MANAGEMENT STRATEGIES FOR ARCHAEOLOGICAL SITES				
This block is located within the Low, Medium and High Potential as identified in the Kamloops AOA process. Efforts have been made to review and discuss Cultural Heritage Resources at the FSP and stand level. A referral map and description of the proposed roads and cutblocks was sent out to affected First Nations for review and comment. Completed AOA report received from Tk'emlúps to Secwépemc First Nation July 31, 2015. An area of archaeological potential - small bench feature was identified. As recommended, the block was amended to include a 50m WTRA buffer of the feature.				
E.7 VEGETATION MANAGEMENT STRATEGIES				
Livestock to be used for vegetation management: No				

E.8 Leave Tree Characteristics

SU(s)	Layer	Species	Total Stems	% of Stems	Description
1	1	Conifer	Target 9		In conventional harvest areas retain zero (0) to eighteen (18) live conifer stems/ha greater than or equal to 17.5cm dbh dispersed throughout and/or in clumps up to 0.1ha in size. Where present and possible, reserve veteran Douglas fir.
1	All	Deciduous	Target All		Also, where feasible, deciduous stems will be reserved from harvesting.

F. SOIL CONSERVATION

F.1 SITE DISTURBANCE			SOIL CHARACTERISTICS		SOIL DISTURBANCE LIMITS	
(if logging methods other than cable or aerial are proposed)			(if temporary access structures are proposed)			
Soil			UNFAVORABLE SUBSOIL		Max. allowable within the NAR (%)	Max. limits may be temporarily exceeded for Temp Access Structures (%)
SU(s)	Compaction	Displacement	Surface Erosion	Depth to (cm - cm)	Type	
1	M	M	M			10.0
1					Roadside Work Area	25.0
						5.0

Max Proportion of total area under the prescription allowed for perm access 1.5 %

Permanent Access Comments

The area occupied by permanent access structures is 1.5% due to existing right of way. The existing roads that run through/along the block are to be considered permanent access for ongoing forest operations. The existing roads have been in place for a long time and appear to be used by Range Tenure Holders.

F.2 SLOPE INSTABILITY INDICATORS:

There were no indicators of slope instability identified within or adjacent to the block. Measures required to address terrain instability: No Bladed trails restricted: No

F.3 REHABILITATION TIME FOR TEMPORARY ACCESS STRUCTURES

Maximum Allowable Time To Complete Rehabilitation (measured from completion of harvest): 1.0 yrs.

F.4 MANAGEMENT STRATEGIES FOR TEMPORARY ACCESS STRUCTURES

SU(s)	General Location (also refer to map)	Sediment Delivery Risk (in community watershed only)	Max Allowable Height of Cutbanks (m)	Average Height of Cutbanks (m)	Equipment To Be Used (if other than Excavator)
1	Bladed or excavated trails dispersed throughout the harvest area as required.	N/A	2.0	1.0	Crawler/FMC

Temp Access Strategies

Roads 906-12, 13, 14 are considered temporary and will be fully rehabilitated following harvest and/or site-prep activities. Other temporary access may be constructed provided that environmental risks are managed for and minimized and does not exceed the allowable limits within the NAR.

All temporary access structures will be rehabilitated. Upon completion of harvesting:

- (a) remove or redistribute woody materials that are exposed on the surface of the area and are concentrating subsurface moisture, to the extent necessary to limit the concentration of subsurface moisture on the area,
- (b) de-compact compacted soils, and
- (c) return displaced surface soils, retrievable side-cast and berm materials.
- (d) grass seed.

All temporary access structures will make up part of the NAR and where feasible, will be artificially planted.

SOIL DISTURBANCE

Other temporary access may be constructed provided that environmental risks are managed for and minimized and does not exceed more than 5% of the allowable limits within the NAR.

In addition to the soil disturbance limits above, soil disturbance must not exceed 25% of the area covered by a roadside work area.

G. SILVICULTURAL SYSTEMS

H. STOCKING REQUIREMENTS

FREE GROWING STOCKING REQUIREMENTS FOR SILVICULTURAL SYSTEMS									
SU	LAYER NAME	Preferred Species/ Free Growing Ht. (cm)	Acceptable Species/ Free Growing Ht. (cm)	Post Spacing Density (sph)		Max. Coniferous (sph)	Regen Date (years)	Free Growing (years)	
				Min	Max			Early	Late
1		Fdl/60 Py/60				10000	7		20

SU	Standards Id	Layer Name	Target Stocking (TSS) (wsph)	Minimum Stocking (MSSpa) (wsph)	Minimum Preferred (MSSsp) (wsph)	Minimum Horiz. Distance (m)	Minimum Pruning Ht. (m)	Residual Stand Structure		Height Relative to Comp.
								BA (m2/ha)	Density (sph)	
1	1041009		1000	500	400	2.00				125 %

J. ADMINISTRATION

PREPARED BY (RPF SIGNATURE AND SEAL):

Prepared by:

Dale Offermann

Name (Printed)

R.P.F.'s Approval:

Toby Jeffreys

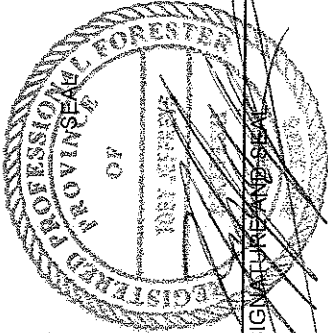
R.P.F. Name (Printed)

2016-04-19

Date Signed (YMD)

3888

R.P.F. Number



R.P.F. SIGNATURE AND SEAL

RPF LEGAL STATEMENTS AND COMMENTS

RPF Reviewed This Site Plan

Legal Statements and Comments

"I certify that I have reviewed this document and, while I did not personally supervise the work described, I have determined that this work has been done to the standards expected of a member of the Association of British Columbia Forest Professionals"

AMENDMENTS