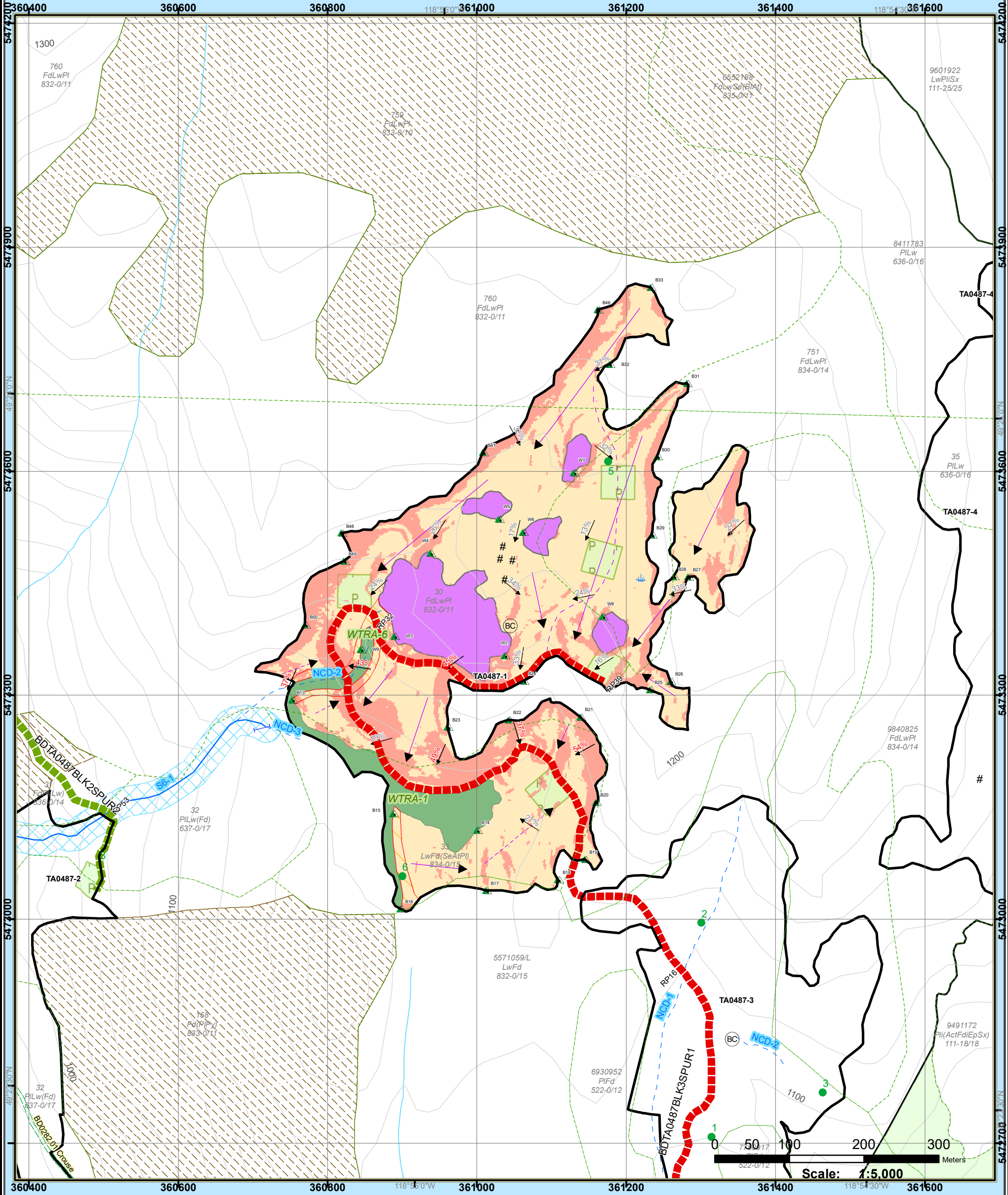




BC Timber Sales -
Kootenay Business Area

HARVEST PLAN MAP



TSL: TA0487
BLOCK: 1
Generated On: 1/7/2021

Pre Number: Kettle 22_23
UBI: BF6CL
Generated By: LBULMER

Location: Lost Horse Crouse Cr
Mapsheet: 082E036
Latitude: 49° 23' 50.4" N
Longitude: 118° 54' 54.4" W

Maximum Elevation: 1250
Minimum Elevation: 1140



- Blk_Contractor
- Reserve
- WTRA
- Non Productive
- NP Wet/ Water
- Recreation Sites and Reserves
- OGMA
- Wetlands

Harvest Strategies

- Special Management Area
- Machine Free Zone
- Riparian Reserve Zone
- Riparian Management Zone
- LiDAR > 35% Steep Slope
- Proposed Temporary Landing
- Existing Permanent Landing
- Proposed Permanent Landing

- Proposed Permanent Roads
- Proposed Temporary Roads
- Existing Roads
- Electrical Substation
- Mines; Pit; Abandoned Pit or Mine
- Campsite
- Golf Course
- Park or Field
- Cemetery
- Dump/Sewage;
- Fence
- Transmission Lines
- Pipeline
- Harvest Method**
- GROUND
- CABLE
- CABLE/ GROUND

- Stream
- Intermittent Stream
- Contours
- Cruise Slope
- Existing Trails
- Fence Line
- Gully, Draw
- Seepage
- Potential Skid Direction, Fav
- Potential Skid Direction, Ad
- Existing Skid Trails
- Proposed Skid Trails
- Falling Corner
- Proposed Culvert
- Existing Culvert

- Common Junction
- CRS
- Designated Skid Crossing
- Ecology Plot
- Gravel Pit
- Leave Tree
- Mine Shaft
- Survey Pin
- Reach Break
- Rock
- Seepage
- Slide
- Cabin
- Wildlife Feature

Harvest Plan Area Summary (ha)

Harvest Unit	Method	Area	Strategy
1	Ground	19.96	Standard Practice
MFZ		0.0	Machine Free Zone
SMA		0.57	Special Management Area
		20.5	

Table 1. - Layer 1 Reserved Timber ¹											
Block	TU / HU	Selection Priority	Species	Size	Stems per Hectare			Distribution ²			
					Target	Minimum	Maximum	S	G	I	R
1	TU1		Fdi	>/= 47.5cm dbh	10	5	15	X	X	X	X
1	TU1		Cw	>/= 37.5cm dbh	1	0	2	X	X	X	X
1	TU1		Lw	>/= 42.5cm dbh	2	1	5	X	X	X	X
1	TU1		Deciduous	All	95%	N/A	N/A	X	X	X	X
Additional Requirements: 1. Reserve trees may be felled for construction of roads, landings, trails or for worker safety. 2. Reserve trees that need to be felled harvested for safety, access or silviculture will be left on site for CWD. 3. The distribution of the retention is not expected to be even throughout the block as there are > 1ha areas that may not have any of the species prescribed for retention. 4. Reserve trees will be focused on trees that are of poor form (wolfy), have broken tops and/or trees that would otherwise be left on site as CWD and or put in the debris pile											
¹ Refer to <i>Appendix I</i> for <i>Table of Reserve Timber Abbreviations and Definitions</i>											
² Distribution Types: S: Single Trees, G: Groups of Trees, I: Irregularly Distributed, R: Regularly Distributed											
Note: Safety is a priority when conducting operations near reserved timber. Refer to TSL Schedule “A”, Section 2.00 regarding Dangerous Trees											

Table2. - Other Reserved Timber ¹											
Non-Merchantable											
Block	TU / HU	Location(s)	Species	Size	SPH or BAPH (m2)						
					Target			Minimum			
1	TU1	SMA of NCD-2	All except for Pli	Non-PI >/=17.5cm dbh	>/= 227 SPH			>/= 227 SPH			
1	TU1	SMA of NCD-2	All except for Pli	Non-PI </=17.5cm dbh	All where practicable			NA			
Dead Trees to be Stubbed (where Mechanical Falling is utilized)											
Block	TU / HU	Species	Size	Stubbing Height	Stems per Hectare			Distribution ²			
					Target	Minimum	Maximum	S	G	I	R
1	TU1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Additional Requirements:											
Coarse Woody Debris											
Block	TU / HU	Species	Size	Number per Hectare		Distribution ²					
				Target	Minimum	S	G	I	R		
1	TU1	All except Fd and Sx	2m long and 7.5cm diameter	4	4	X	X	X	X		
1	TU1	All except Fd and Sx	2-5m long and 20cm diameter	4	4 = 1.24m3/ha	X	X	X	X		
¹ Refer to Appendix I for Table of Reserve Timber Abbreviations and Definitions											
² Distribution Types: S: Single Stems/Logs, G: Groups of Stems/Logs, I: Irregularly Distributed, R: Regularly Distributed											
As per FPPR Section 68, a minimum of 4 logs per hectare, each being a minimum of 2 m in length and 7.5 cm in diameter at one end must be retained in the block. As this block is located in the IDF, a minimum of 1.24m3/ha of CWD from a minimum of 4 logs per hectare, each being a minimum of 2 meters in length, but not greater than 5m in length with a minimum of 20 cm in diameter at one end in addition to the minimum 4 logs required for FPPR Section 68. To reduce Douglas-fir and spruce bark beetle susceptibility and spread, CWD is to be selected from dead/dry material and from species other than Douglas-fir or spruce, and stumps must be cut as low to the ground as possible.											
Note: Safety is a priority when conducting operations near reserved timber. Refer to TSL Schedule “A”, Section 2.00 regarding Dangerous Trees.											

RIPARIAN ASSESSMENT						
Block	Riparian I.D. and Class	RMA	SU	Width (m)	BA or SPH Retained	Comments (Indicate if in a Community Watershed)
1	NCD-2	SMA	1	10	>/= 227 SPH	See retention specs below. This block is not within a Community Watershed.
Management Strategies: There are two NCDs (NCD-1 and NCD-2) associated with this block. The NCDs have a 10m buffer with an additional 8m Special Management Area (SMA). A 50% retention has been prescribed in the SMA. The SMA is flagged with yellow “Special Management Area” ribbon and identified on the SP and HP maps for these features. The SMA is a machine free zone. The management objectives in this Site Plan will comply with the practice requirements for riparian classes as listed in Section 5.3.1.5 of the FSP and RMZ Retention requirements specified in the associated table.						
This block is not within a Community Watershed.						

Safety Highlights:
Steep slopes (35-57% exist in places), some boulders and exposed surface rock exists throughout this block. Workers should be aware of the abrupt vertical bluff’s downslope of Block 1, and machinery should be kept a minimum of 5 m back from the break in slope. Overhead hazards exist from snags and newly dead and dying beetle damaged lodgepole pine.
Harvest / Operational Constraints:
It is recommended that this block be scheduled for winter harvest on frozen ground or on deep snowpack in order to minimize damage to the integrity of the soils in this block.
Steep slopes (35-57% exist in places), some boulders and exposed surface rock exists throughout this block. Bladed/excavated trails and/or hoe chucking may be required to harvest the steeper (> 35%) slopes.
In order to minimize the risk of Lodgepole Pine Dwarf Mistletoe infection to the new regenerating Lodgepole pine within this block post harvest, the Licensee must cut all standing Lodgepole pine trees that are over 50 cm in height, during the harvest and/or post harvest operations.

Kootenay Business Area Field Marking Standards					
	Ribbon	Paint		Ribbon	Paint
Harvest Boundary	BCTS Block Boundary		NCD & Stream Centers	Water Course	
Falling Corners		FC#	Road P-Line		
WTRA Boundary	Reserve		Road Center Line	Road Centerline	
Reserve Boundary	Reserve		Landings	Landing	
Riparian Reserve Zone	Reserve		Road Right of Way	R/W Boundary	
Riparian Management Zone	Riparian Mgmt. Zone		Road RP		
Management Zone	Management Zone		Culverts	Culvert	
Treatment Unit Boundary	Treatment Unit Boundary		Designated Crossing	Crossing	
Reserve Trees			Culvert RP Outside Right of Way		
Machine Free Zone	//// Machine Free Zone ///		Tail Holds / Guyline / Intermediate Supports		
Cruising	Cruise Line	Plot Trees	Skid Trail / Back Spar Trail / Forwarding Trail	///// Trail /////	
Traverse Stations			Recce Ribbon / D-Line / Skyline Roads	//////////	
SP Plot Location					

I certify that the work described herein fulfills standards expected of a member of the Association of British Columbia Forest Professionals, and that I did personally supervise the work.

Linden Priest, RPF

RPF PRINTED NAME

Aoril 29, 2021

DATE SIGNED

RPF’S SIGNATURE and SEAL