BCTS
BC Timber Sales

SP/HP MAP

BCTS TSL TA0906
(LICENCEE & #)
BLOCK: 6 PRE: EK J01 1339
UBI: BF797
LOCATION: DOCTOR CREEK

Map Reference: 082J.001
Air Photos:
Forest Region: Southern Interior
District: Rocky Mountain
TSA: Invermere
Mag. 15.4° E of T.N.
Date: Aug 02, 2021
Land District: Kootenay
Elevation range: 1420 - 1520m
Scale: 1:5,000
Drawn By: D.Michel

UTM Coordinate:

Zone	Easting	Northing
11	573247	5544615
Lat.	50° 02" 58" N	Long. 115° 52' 37" W

SP/HP Legend

- Subject Block
- Right of Way
- Riparian Reserve Zone
- Slope Area (>35%)

Management Zones
- MFZ
- RMZ
- SMZ
- WMZ

Harvest Method
- Cable
- Ground

Standard Unit
- 1
- 2
- 3
- Non Productive
- PAS
- Reserve - Other
- WTP
- WTRA

- P / E Permanent Landing; Proposed/Existing
- Culvert; Existing/Proposed
- Block GPS Station
- Road GPS Station
- BC Block Center
- Major Culvert
- Pipeline Crossing
- Ecology Plot
- Cattleguard
- Gate
- Road Permit
- Forest Service Road
- Existing Road
- Proposed Road
- Unknown Road
- Deactivated Road
- Skid Trail
- Skid Direction
- Yarding Direction
- Gully, Draw
- Cliff
- Designated Crossing

Adjacent Blocks
(Planning Status, Block Status)
- PP and (Info or 196)
- PP and PROP
- PP and OPC
- WIP and (Info or 196)
- WIP and PROP
- WIP and OPC
- ADV
- HB
- LC
- RG
- GU
- FG
- Deferred
- Slide
- Slope Break
- Gully, Draw
- Fence Line
- Stream - Unclassified
- Stream classified
- NCD/NVC
- Waterbody
- Wetland
- BEC Zone
- Inoperable
- Recreation Area
- WMA
- VRI Polygon
- Indian Reserve
- Woodlots
- National Park
- Provincial Park
- Protected Area
- Ecological Reserve
- Fish Barrier
- Intermediate Contours
- Index Contours
- Fence
- Transmission Lines
- Pipeline
- Existing Trails
- Paved Road, Divided
- Gravel Road
- Area of Concern
- Reach Break

Meters
0 25 50 100 150 200

Appraisal Roads
- CRR23527Sec03 Short Term New Construct 789m
- CRR23527Sec04Seg1 Long Term New Constuct 380m
- CRR23527Sec04Seg2 Short Term New Construction 1099m
- CRR23527Sec05 Short Term New Construct 208m
- CRR23527Sec06 Short Term New Construct 387m
- CRR23527Sec09 Short Term New Construct 113m
- CRR23527Sec10Seg01 Long Term Reactivation 1429m
- CRR23527Sec10Seg02 Short Term New Construct 544m
- CRR23527Sec11 Short Term New Construct 832m
- CRR23527Seg12Seg01 Long Term Reactivate 871m
- CRR23527Sec12Seg02 Long Term New Construction 1081m
- CRR23527Sec12Seg03 Short Term New Construct 361m
- CRR23527Sec16 Short Term New Construct 236m
- CRR23527Sec18 Long Term Reactivate 3214m

Non-Appraisal Roads
- CRR23527Sec01 Short Term New Construction 35m
- CRR23527Sec02 Short Term New Construct 30m
- CRR23527Sec07 Short Term New Construct 80m
- CRR23527Sec08 Short Term New Construct 80m
- CRR23527Sec13 Short Term New Construct 59m
- CRR23527Sec14 Short Term New Construct 83m
- CRR23527Sec15 Short Term New Construct 58m
- CRR23527Sec17 Out of Block Skid Trail 92m
- CR0108.05BearMain Existing 6304m
- CR0108.08BearSouth Existing 5075m
- CR9693.01Dunn Existing 3205m
- CR9693.05 Whitebark FSR Existing 2287m

TA0906-6						
SU	NAR	Silv System	Harvest Method	BEC	Stocking Standard	Soil Disturbance Limit
1	5.2ha	CC/RES	Cable (tether/winch)	MSdw 104	1062265	5%
NP: 0.0ha						
PAS: 0.7ha						
WTRA: 1.3ha						
RES: 0.4ha						
Gross: 7.6ha						

VAST RESOURCE SOLUTIONS

File: \\Client\P$\19.0084.00_BCTS_Invermere_Multiphase Development\05-Dr Creek\GIS\MXD_Data\LRM\LRM_TA0906_B6_SPHP.mxd

RIPARIAN ASSESSMENT

Block	Riparian I.D. and Class	RMA	SU	Width (m)	BA or SPH Retained	Comments (Indicate if in a Community Watershed)
6	R5 (S6)	20RMZ ≥5m MFZ	1	-	-	This stream cuts through the NW corner of the block adjacent to the road. An MFZ has been hung along the in-block portion of the stream. No RMZ has been hung as retention along the stream edge will be minimal as result of fire damage to the RMZ. Trees are burnt and susceptible to windthrow/ sudden tree fall as result of fire damage. Green Fd/Lw ≥ are to be left adjacent to the stream where available.

Management Strategies:

Monitor for sedimentation entering streams and take corrective action where required.

Safety Highlights:

Fire Damaged Stands: Block has been damaged by wildfire. Trees have been structurally compromised. Fire damaged trees pose high risk of tree-fall due to damaged root systems. Increasing wind speeds elevate the risk of sudden tree fall posing a danger to workers and machinery. In areas of greater fire severity, trees may suddenly break due to burnt out boles, damaged branches creating widowmakers/overhead hazards. Dangers trees must be removed a safe distance from all landings/decking areas where they cannot strike workers.

Steep Terrain: This block is planned for tether/ winch-assist systems. Slopes >60% are present within the block. Complete steep slope hazard assessments as required by WCB prior to commencing work and follow all safety protocols in place for winch-assist/ tether operations.

Gullied terrain: Dry gullies are present in the block. Operators must exercise caution around gullies.

Boulders: Large boulders may become dislodged during operations and present a hazard to workers and vehicles/machinery working downslope.

Windthrow: Trees may be prone to windthrow as result of fire damage. Monitor winds.

Avalanche: Caution must be exercised if operations occur during snowpack. Assess avalanche hazard as steep terrain and ensure mitigation plans are in place.

Leave Tree Specifications:

Table 1 – Layer 1 Reserve Timber[1]

SU	Selection Priority	Species	Size	Stems per Hectare to Retain			Distribution[2]			
				Target	Min	Max	S	G	I	R
1				Cable harvest – No Leave trees						

Additional Requirements/ Comments:

1. **The block is planned for cable harvest. No leave trees are prescribed**
2. Trees that do not meet utilization standards for sawlog or pulp due to large defect are to be retained onsite where safe to leave and not posing a safety hazard. If felled as result of presenting a safety hazard, retain onsite as large woody debris.

[1] Refer to *Appendix 1* for *Table of Reserve timber Abbreviations and Definitions*

[2] Distribution types: S: Single Tree, G: Group 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.

Table 2- Other Reserved Timber

Non Merch							
SU	**Location**	**Species**	**Size**				**Stems/ha**
1,2	Where possible, retain clusters of green advanced regen	Fd, Lw, Sx, Bl	>1.3m height				- up to 3 clusters/ha
Coarse Woody Debris							
SU	**Size**	**# per Hectare**	**Distribution**				
			S	**G**	**I**	**R**	
1,2,	Min 2m length (≥5m m if available) Min 20cm diameter at one end Target larger logs where they occur and are not suited as sawtimber. Avoid leaving green Sx or Fd logs as CWD due to susceptibility to bark beetles.	Min 4 logs/ha 1.24m3/ha	**x**	**x**	**x**		• This is the minimum required as per the 2017-2022 FSP for MSdw
Dead Trees to be stubbed (where Mechanical Falling is utilized)							
		No stubbing prescribed					

Harvest / Operational Constraints:

- Operate during conditions that prevent excessive soil disturbance. Avoid harvesting during periods of excessive soil moisture such as spring freshet and after heavy rainfall.
- Maintain natural drainage patterns during and at completion of harvest. At completion of operations all road sections must be left in a hydrologically stable state.
- This block is sensitive to encroachment by invasive species. Ensure that all equipment entering the site is inspected for invasive plant material and washed if material is found. Document inspections and actions taken.
- Rehab all operational trails. Re-seed with a suitable seed mix (as directed by a qualified professional otherwise Canada #1 Forage Mix or better) within 1 year of soil exposure to mitigate the spread of invasive plants and to limit soil erosion.
- **Where available and operationally feasible, leave green alder and/or surviving advanced regen along the edges of roads to provide screening for wildlife. Avoid roadside decking where such screening exists.**

Kootenay Business Area Field Marking Standards

	Ribbon	Paint
Harvest Boundary	BCTS Block Boundary	
Falling Corners		FC#
WTRA Boundary	Reserve	
Reserve Boundary	Reserve	
Riparian Reserve Zone	Reserve	
Riparian Management Zone	Riparian Mgmt. Zone	
Management Zone	Management Zone	
Treatment Unit Boundary	Treatment Unit Boundary	
Reserve Trees		
Machine Free Zone	//// Machine Free Zone ////	
Cruising	Cruise Line	Plot Trees
Traverse Stations		
SP Plot Location		

	Ribbon	Paint
NCD & Stream Centers	Water Course	
Road P-Line		
Road Center Line	Road Centerline	
Landings	Landing	
Road Right of Way	R/W Boundary	
Road RP		
Culverts	Culvert	
Designated Crossing	Crossing	
Culvert RP Outside Right of Way		
Tail Holds / Guyline / Intermediate Supports		
Skid Trail / Back Spar Trail / Forwarding Trail	/ / / / / / Trail / / / / / /	
Recce Ribbon / D-Line / Skyline Roads	/ / / / / / / / / / / / / / /	

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.

Chris Lovesey, RPF # 4803

RPF PRINTED NAME

August 6, 2021

DATE SIGNED

RPF'S SIGNATURE and SEAL

REGISTERED PROFESSIONAL FORESTER
PROVINCE OF BRITISH COLUMBIA
CHRISTOPHER LOVESEY
NO. 4803

Chris Lovesey