BCTS
BC Timber Sales
Kootenay

SITE PLAN
KOOTENAY
BC TIMBER SALES

Report Date 2021/08/03

ORIGINAL

TENURE IDENTIFICATION

LICENCE #	CP	BLOCK	UBI	OPENING NUMBER	FDU	LOCATION	LATITUDE / LONGITUDE
TA0906	-	5	BF791			Lavington Fire 2	50 06 01 / 116 02 05

AREA UNDER THE PLAN

GROSS AREA (TAUP)	PAS	NP	WTRA / WTP	RESERVES	OTHER	NAR
8.5	0.2	0.0	0.5	0.0	0.0	7.8

ADDITIONAL COMMENTS

CONSISTENCY STATEMENT
This site plan is consistent with the results and strategies identified in the 2017-2022 BCTS Kootenay Business Area FSP. This block has been referred through Operating Plan # 21-2. This block is within the Rocky Mountain FDU as identified under the FSP.

SOIL DISTURBANCE

SU	Max. Allowable Soil Disturbance (%)	Max. Amount TAS May Exceed MASD Prior To Rehab (%)	Max. Allowable Soil Disturbance For Roadside Work Areas (%)	Maximum Permanent Access Structures (%)
1	10.0	5.0	25.0	7.0

SU	CRITICAL SITE CONDITIONS THAT AFFECT THE TIMING OF OPERATIONS. AND HOW THEY AFFECT THE TIMING
1	SU1 has been impacted by wildfire. Danger trees possible throughout area. Avoid operations during periods of excessive soil moisture such as during spring freshet and after periods of excessive rainfall . Heavy windthrow has occured in this SU. Boulders on steeper slopes may present a rolling hazard.

RESULTS AND STRATEGIES

RESULT OR STRATEGY		HOW THE STRATEGY OR RESULT APPLIES TO THE SITE or RATIONALE (IF NOT APPLIED)
Biodiversity Emphasis		Harvest of this block is consistent with the result for biodiversity emphasis as identified in the 2017-2022 BCTS Kootenay Business Area FSP as implemented through the strategies for Old-Growth Management Areas (OGMA) and Mature Management Areas (MMA). This block nor its associated access overlap any mapped OGMA or MMA.
Community Watersheds		This block is not within a community or domestic watershed.
Connectivity		This block is not within an area mapped for connectivity.
Consumptive Use Streams		Harvest of this block is not anticipated to impact any consumptive use stream or water intakes licensed for domestic use.
Cultural Heritage Resources		This block has been referred to First Nations through Operating Plan # 21-2. This block does not overlap any mapped Archelogical Overview Assessment Polygons . An Archelogical Impact Assessment is not required . Chance Find: If during operations, a suspected First Nations artifact is found, operations in vicinity of the find are to cease immediately and the site supervisor is to notify the Timber Sales Manager (TSM) of the find. The TSM is to cease or modify operations to the extent necessary to protect the resource, and undertake the following steps: a: record the location of the artifact; b. evaluate the direct impact of the activities on the artifact; c. if the above evaluation determines it necessary, alter the design and/or prescription of the license, permit, or road to conserve, mitigate or protect the artifact; and d. communicate the outcome of the evaluation to the First Nation's whose artifact may be affected and offer to meet with the First Nation.
Enhanced Resource Development Zones		Harvest of this block is consistent with the result specified for Enhanced Resource Development Zones-Timber as specified in the 2017-2022 BCTS Kootenay Business Area FSP. As per sec 64 and 65 of the Forest Planning and Practices Regulation (FPPR), maximum cutblock size and green-up requirements do not apply as timber harvesting on this block will be to recover timber damaged by wildfire.
Fire Maintained Ecosystems		This block is not within a fire maintained (NDT4) ecosystem.
Fisheries Sensitive Watersheds		This block is not within a fisheries sensitive watershed.
Green-Up		Green-up and cutblock size requirements do not apply to this block as timber harvesting is to recover timber damaged by wildfire (FPPR sec 64(2) and sec 65(4)).

Invasive Plants		Mapping by the Invasive Alien Plan Program (IAPP) does not indicate any known occurrences of invasive plants within or in close vicinity of the block, however there are mapped occurrences along the access route. As the block has been subject to wildfire resulting in exposed mineral soil, it is highly susceptible to the introduction of invasive plant species. As result, the following measures are to apply to harvesting and road building operations: a. Vehicles, mechanized equipment, culverts, bridges, and cattleguards are to be inspected for the presence of soil or plant material, including documentation on inspection forms, prior to being transported to or from work sites and if present, plant and soil materials are to be removed; b. To reduce the seedbed available to invasive plants, grass seeding is required: On all newly constructed landings once forestry operations and slash disposal are complete. On all rehabilitated temporary roads (CRR23527 sec10 seg 2) Grass seeding is to be completed during the first available spring or fall after the completion of road construction and deactivation/rehabilitation activities, and no later than 12 months following mineral soil exposure. If utilizing a dry grass seeding method, seed shall be applied at a rate of 30-50 kilograms per hectare. Grass seeding is to use a high quality seed mix (a mix recommended by a MFLNRORD range specialist, if available, otherwise Canada Common #1 Forage mix or better grade) and obtain a certificate of analysis, providing a copy to the TSM upon request, to confirm that invasive plant seeds are not present in the seed mixes being utilized. 3. Personnel completing post-harvest surveys will be required to identify and report all new observed infestations.
Old and Mature Forests		This block and associated road section does not overlap any mapped Old Growth Management Area (OGMA) or Mature Management Area (MMA).
Other Resource Features		No other resources either as identified under sec 5 of the Goverment Action Regulation or as established under the Forest Practices Code are known to occur within the block or its immediate vicinity. Coarse Woody Debris: A a result of harvesting within the MS biogeoclimatic subzone, for all SU's within the net area to be reforested retain a minimum of 1.24m3/ha of coarse woody debris from a minimum of 4 logs/ha each being a minimum 2 meters in length, but 5 meters greater in length if available, and with a minimum of 20cm diameter at one end. To reduce the potential for build-up of Douglas-Fir Beetle and Spruce Beetle , to the extent practicable: select dead and dry over green material, retain material from species other than Douglas-Fir and Spruce, and leave Douglas-Fir and Spruce Stumps as low to the ground as possible.
Range		No known range developments are within or adjacent to the block. Harvest of this block will not render inffective any known natural range barrier(s).
Recreation Sites & Trails		Harvest of this block will not impact any authorized recreation site, trail, interpretative site, UREP or any other feature authorized for recreational use.
Riparian		No streams, lake, wetlands, or non-classified drainages were observed in or within close proximity to this block.
Road Site Plan		Consistent with section 5.8.3 of the 2017-2022 BCTS Kootenay Business Area FSP, as the soil erosion hazard is high, upon completion of road construction and deactivation/rehabilitation activities, exposed soils on cut and fill slopes of new roads, landings, and rehabbed areas will be grass seeded. Grass seeding is to be completed concurrent with, or during the first available spring or fall after completion of road construction and rehab activities; and no later than 12 months following soil exposure. If uitilizing a dry grass seeding method, seed is to be applied at a rate of 30-50kg/ha. Grass seeding is to uitlize a high quality seed mix (a mix recommended by MFLNRORD range specialist if available; otherwise Canada Common #1 Forage Mix or better grade). Obtain a certificate of analysis, providing a copy to the TSM upon request, to confirm that invasive plant seed is not within the seed mixes being utilized.

Soils		Avoid harvesting operations during periods of excessive moisture such as spring freshet or after periods of heavy rainfall. All temporary trails and temporary roads are to be rehabiltated where soil conditions permit after completion of operations and/or hazard abatement. If trails/ roads cannot be fully rehabiltated due to unfavorable soil conditions, they must be left in a hydrologically stable state. Where rehabiltation occurs, scatter large woody debris and/or logging slash on rehabbed corridors to reduce soil erosion. Grass seed rehabbed areas as per FSP requirements as soil erosion hazard is high . Soil information from adjacent areas was used to infer soil characteristics for this block as result of safety concerns. Adjacent block (A90480-2) was found to consist of silt loam with 30-40% course fragments. Completion of a soil hazard assessment key using inferred soil charactersitics and onsite terrain characteristics indicates no sensitive soils are present (no hazards rated as very high). Soils disturbance limits for Standard Units within this block are as follows based on soil hazard determinations: SU1: 10% of the Net Area to be reforested (NAR) of the SU. Roadside Work Areas: Soil disturbance must not exceed 25% of the area covered by roadside work areas. Temporary Access Structures: The maximum soil disturbance limit within each productive SU may be temporarily exceeded by 5% for the purpose of constructing temporary access structures, excluding the area covered by a roadside work area. Temporary access structures must be rehabiltated by the completion of harvest to a level not exceeding the maximum allowable soil disturbance limit for each SU. Permanent Access Structures: Maximum allowable PAS is 7% of the gross cutblock area (0.6ha). Planned PAS is 0.2ha. There is no terrain over 60% in this block. There are no concerns regarding terrain stability.
Visual Quality		This block is not subject to visual quality objectives.
Wildife - Species at Risk		WHAs: This block does not overlap any established wildlife habitat area (WHA). Wildlife Habitat Features: No wildlife habitat features as specified under Ministerial Order M213 "Wildlife Habitat Features in the Kootenay Boundary Region" are known to be present in this block based on observations at time of layout or based on current available BCTS mapping. Where a wildlife habitat feature is encountered during operations, the following actions are to be taken: a. Stop all primary forest activities that could impact the WHF and report the WHF to the project supervisor and BCTS representative. b. Determine a course of action, considering existing management strategies, BMPs, professional guidance documents and/or recommendations from a QRP. c. Document the decision(s) made with a rationale, implementing the elements from 2b as appropriate, through an updated or amended project plan before proceeding with any primary forest activites in accordance with the updated or amended project plan. Conservation Data Center (CDC): Publically available mapping by the BC Conservation data Center (CDC) does not indicate any overlap with the known habitat of any regionally important species, species at risk, or species of management concern. Williamson Sapsucker: This block is outside of the East Kootenay Area of Occupation for Williamson Sapsucker as identified in "Best Management Practices for Timber Harvesting, Roads, and Silviculture for Williamson Sapsucker in British Columbia- East Kootenay Area of Occupancy". BMP's for Williamson Sapsucker therefore do not apply to this block. Species of Management Concern: No species of management concern or their habitat as identified in "Species of Management Concern in the Kootenay Business Area" (VAST 2014) were observed or readily identified within this block at time of layout. In the event that a known species of risk or species of management concern is observed in the field during harvesting or road building activities notify the BCTS Project Supervisor as soon as possible. For observations note the location (gps coordinate) of the observation, the date of observation, the species, and the number of individuals seen or heard. Additionally (if possible), provide contact details of observer, details of the surrounding habitat where the observation occurred, and health of the animal observed. The BCTS supervisor once notified of the observation is to along with other planning staff /QPs recommend appropriate site level measures in mitigating impacts to the surrounding habitat.
Wildlife - Grizzly Bear Habitat		This block is not within an area specified for grizzly bear. Coarse woody debris is to be left in all SU's to provide habitat for insects and possible foraging for grizzly bears. Operators are to leave large diameter (>20cm dbh at one end and min 2m in length, 5+ meters in length if available) non-merchantable logs onsite. Minimum target is 4 pieces/ha. Also, where available operators are to leave green advanced regeneration and/or alder >1.3m along the edge of the proposed road corridor to act as visual screening between the road and the harvest area. Avoid roadside decking where opportunities for hedging exist .
Wildlife - Ungulate Winter Range		A part of this block falls within area mapped as Managed Forest Moist Habitat as established under UWR order U-4-008. As per the Order, the specified general wildlife measures do not apply for the purposes of timber salvage to address wildfire.

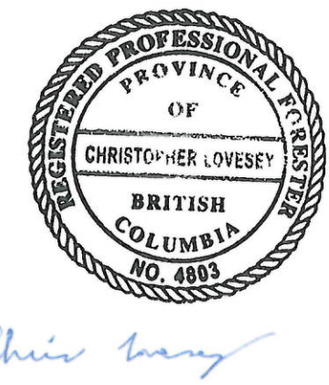
Wildlife - Wildlife Tree Retention		One WTRA has been identified for this block. 0.5ha of WTRA has been identified. This is equivalent to 5.6% of the gross cutblock area and therefore exceeds the cutblock-level requirement of 3.5% as identified within the 2017-2022 BCTS Kootenay Business Area FSP.

STOCKING REQUIREMENTS

SU	NAR	STANDARDS ID #	OTHER PERFORMANCE STANDARDS
1	7.8	1062255	BL #208 - refer to specific advance regeneration requirements. **Additional information or requirements are contained in the text of the latest version of the approved Rocky Mountain Natural Resource District Stocking Standards and is the complete standard (more footnotes apply).
COMMENTS	2017-2022 BCTS Kootenay Business Area FSP #601 Consolidated to Amendment #5.		

ADMINISTRATION

Amendment number	Date Typed (Yr Mo Dy)	Map Required?
ORIGINAL		

RPF PRINTED NAME	RPF'S SIGNATURE and SEAL
Chris Lovesey, RPF	
DATE SIGNED	
August 6, 2021	
I certify that the work described herein fulfils standards expected of a member of the Association of British Columbia Forest Professionals, and that I did personally supervise the work.	

Map attached forms an integral part of the site plan.

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THE FOLLOWING INFORMATION IS ATTACHED FOR INFORMATION ONLY AND DOES NOT FORM PART OF THE SITE PLAN

SILVICULTURE PLAN

ORIGINAL

LICENCE #	CP	BLOCK	UBI	OPENING NUMBER	FDU	LOCATION	LATITUDE / LONGITUDE
TA0906	-	5	BF791			Lavington Fire 2	50 06 01 / 116 02 05

ECOLOGICAL INFORMATION

SU	Ecology Unit	Area	Zone	Subzone	Variant / Phase	Site Series (series - %)	Elevation Avg (m)	Slope Avg (%)	Aspect	Slope Position	Rooting Depth (cm)	Soil Texture
1	1	7.81	MS	dk		104-100	1,208	15	NE	Lower Slope	40	SiL

STOCKING REQUIREMENTS

ASSESSMENT DATES

Standard Unit	Standards ID	Regen Delay (yrs)	Freegrow Early (yrs)	Freegrow Late (yrs)
1	1062255	7	0	20

Min/Max Elevation Regime: 1175 / 1240

SU : 1 REGENERATION LAYER

PREFERRED SPECIES			ACCEPTABLE SPECIES			POST SPACING DENSITY(sph)				MAX CONIFEROUS (sph)	
Species	Min Ht. (m)	Footnotes	Species	Min Ht. (m)	Footnotes	Min 3000	Max 4000				
						WELL SPACED TREES (sph)					
Sx Hybrid Spruce (SE x SW)	0.8		Bl Subalpine Fir	0.8		Target Pref/Acc	Minimum Pref/Acc	Minimum Pref	Min Horizontal Dist. Pref/Acc (m)		
Pli Lodgepole Pine - Interior	1.4					1200	700	600	2.0		
								Height Relative to Competition (%)			
								125			

OTHER REQUIRED STOCKING INFORMATION

2017-2022 BCTS Kootenay Business Area FSP #601 Consolidated to Amendment #5.

ACTIVITIES

SILVICULTURE ACTIVITY COMMENTS

ACTIVITY	COMMENT

MANAGEMENT STRATEGY

COARSE WOODY DEBRIS MANAGEMENT STRATEGY INFORMATION

Maintain 1.24m3/ha of CWD comprised of a minimum of 4 logs/ha with a minimum length of 2 meters (>5m if available) and a minimum diameter of 20cm at one end.

Avoid retaining green FD or Sx as result of bark beetle concerns. Keep stumps of Fd, Sx as short as possible.

Performance Std. (%):	Block Target (%):	Coarse Woody Debris (m3/ha):	1.2

ADMINISTRATION

Amendment number	Date Typed (Yr Mo Dy)	Map Required?
ORIGINAL		

RPF PRINTED NAME	RPF'S SIGNATURE and SEAL
Chris Lovesey RPF	REGISTERED PROFESSIONAL FORESTER PROVINCE OF BRITISH COLUMBIA CHRISTOPHER LOVESEY NO. 4803
DATE SIGNED	
August 6/2021	
I certify that the work described herein fulfils standards expected of a member of the Association of British Columbia Forest Professionals, and that I did personally supervise the work.	Chris Lovesey

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