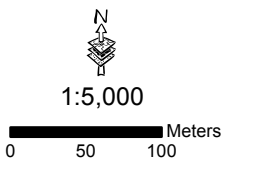


**Alberni Valley
Community Forest
K2D
Sprout FDU**

**Harvesting Plan Map
Block B15**



Licensee: Alberni Valley Community Forest Corporation
 Forest Region: Coast
 Forest District: South Island
 Reference Map: 92F024, 025, 026
 F035, 036
 Datum: NAD 83
 Projection: BC Albers
 TSA: 38 Arrowsmith
 TSB: A
 FIZ: B
 P.S.Y.U.: 471
 Inv. Reg.: 5
 Comp.: 4B (Sprout), 4C (Taylor)
 Drafted: February 23, 2015

- By:
- Falling Corner
 - ⊙ Landing, Perm., Temp.
 - △ Station
 - Culvert: New, Existing
 - ⊗ Bridge: New, Out
 - ⊕ Quarry
 - ⊗ Designated Crossing
 - ⊙ Spoil Site
 - ⊕ Swamp
 - 🌲 Wildlife Tree

- Roads & Trails**
- ▬ Highway / FSR
 - ▬▬▬ Road, existing
 - ▬▬▬ Road, engineered
 - ▬▬▬ Road, to be re-activated
 - ▬▬▬ Road, overgrown
 - ▬▬▬ >10% Adverse Grade
 - ▬▬▬ >18% Favourable Grade
 - Old Grade
 - Hiking Trail
 - ▬▬▬ Rock Bluff
 - Hydro Line

Falling Type	Ha	Volume	HARVEST METHODS			VOLUME BY TIMBERMARK				SPECIES		PROFESSIONAL SEAL AND SIGNATURE
			System	Ha	Volume	Timbermark	Type	Ha	Vol	Ha	Vol	
Handfalling	0	0	RW	0.0	0	K2D 007	CROWN	7.6	3276	Ba	3	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 standard expected of a member of the Association of British Columbia Forest Professionals. AVCF CORP: _____ DATE _____ Checked By: G.Knoll, RPF AVCF CORP: _____ DATE _____ CONTRACTOR _____ DATE _____
Mechanical	7.6	3276	Snorkel	0.0	0					Hw	2	
TOTAL	7.6	3276	Hoe Chuck	7.6	3276					Ced	15	
CRUISE VOL/HA (m3)	431		Grapple	0.0	0					Cy		
ENG VOL/HA (m3)	431		High Lead	0.0	0	TOTAL		7.6	3276	Fd	78	
HAUL DISTANCE			Helicopter	0.0	0	Field Work:	K2 Forestry			Dr	2	
			Harvest Area	7.6	3276	Checked By:	G.Knoll, RPF			Pw		
			RW Removed	0.5		AVCF CORP:				OG		
			WTRA	1.2						SG	100%	
			TLA	0.0						CONTRACTOR		
			Gross Area	9.3	3276							

Harvesting Feature

- ▭ TAUP
- ▭ Block
- ▭ HC Hoechuck, Clear Cut
- ▭ HC Hoechuck, Select
- Yarding Direction
- ▭ Slope > 35% in Ground Skidding Areas
- ▭ Sensitive Soils Area

Attention!
Refer to Back for Detailed Operating and Safety Instructions

Stream Classification

- S1-S4 Stream
- S5-S6 Stream
- - - NCD
- Stream, Non Classified

Other Feature

- ▭ Riparian Management Zone
- ▭ Riparian Reserve Zone
- ▭ Wildlife Tree Retention Area
- ▭ Timber Leave Area
- ▭ Non Productive, Rock
- ▭ Non Productive, Wetland
- ▭ Park
- ▭ Community Forest

Alberni Valley Community Forest manages waste wood to allow public to have opportunity to cut firewood

Always wear proper personal protective equipment

Do not leave debris on road or in ditches

Do not block roads when cutting wood

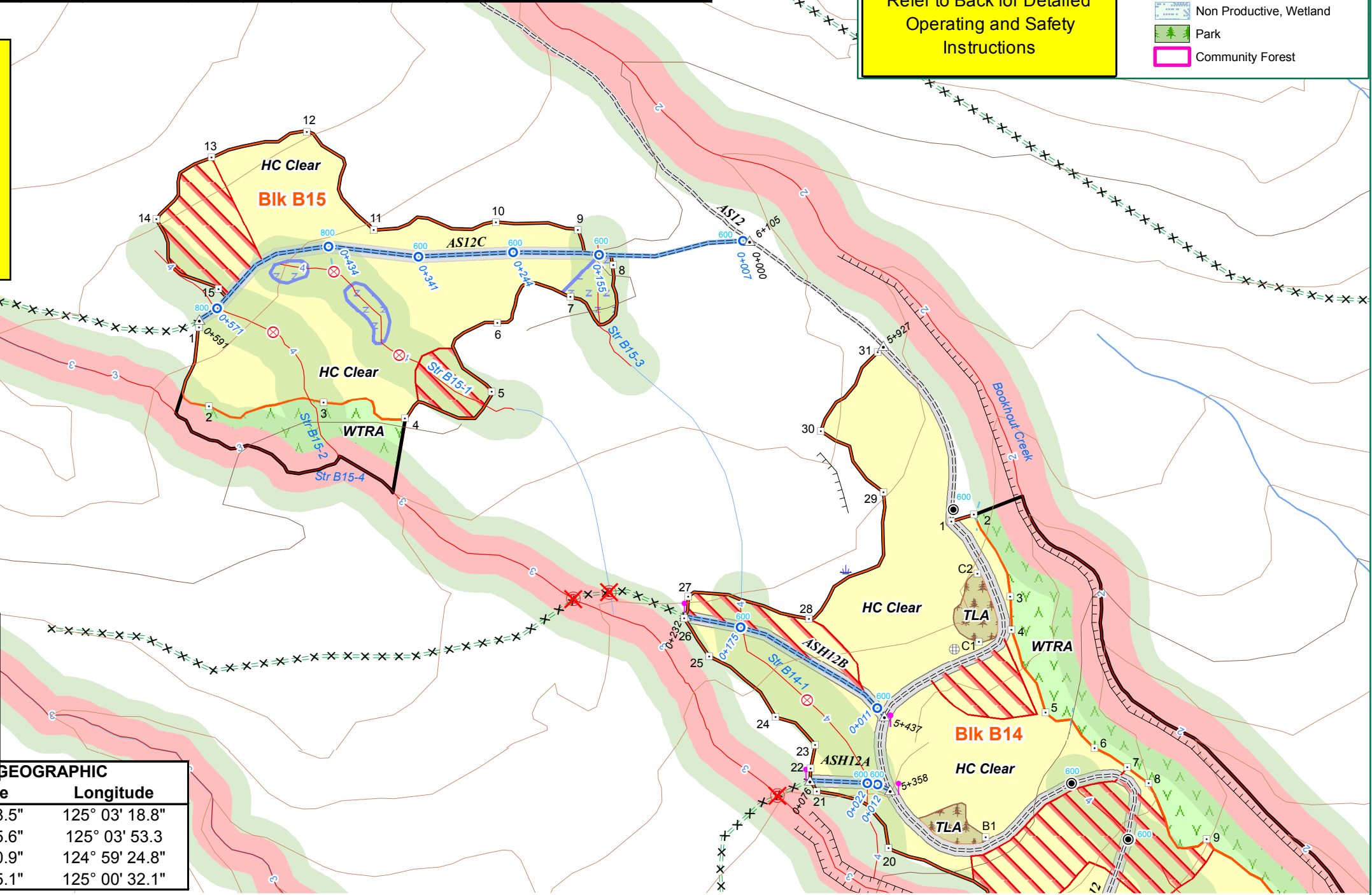
Emergency Information
 Community Forest Office (250-731-7377)
 Police & Ambulance 911
 Fire Reporting by cell *5555 or 1-800-663-5555
 Coastal Fire Centre 1-800-951-4200 (24hr)

Restrictions

- No Cutting without Permit
- No Cutting In High and Extreme Fire Hazard
- No Dumping or Littering
- Cutting only in Identified Areas
- No Cutting Standing Trees
- No Damaging Regenerating Seedlings
- No Leaving Debris In Streams

GEOGRAPHIC

BLOCK	Easting	Northing	Latitude	Longitude
B14	1068773	476374	49° 17' 58.5"	125° 03' 18.8"
B15	1068070	476893	49° 18' 15.6"	125° 03' 53.3"
W14	1073513	475898	49° 17' 40.9"	124° 59' 24.8"
W16	1072138	476934	49° 18' 15.1"	125° 00' 32.1"





HARVESTING INSTRUCTIONS – OPENING # B15

ACCESS ROAD: AS12
CUTTING PERMIT: NO. 7
TIMBERMARK: K2D 007

EMPLOYEE REQUIREMENTS

- 1) All employees, supervisors and contractors associated with these Harvesting Instructions shall be fully advised of its contents and requirements.
- 2) All litter including cable, oil buckets, grease tubes, newspapers and lunch garbage is to be removed from the site and disposed of appropriately.

WATER QUALITY

- 1) The overall objective of this cutblock is timber harvesting without impacting water quality.
- 2) All ditches and culverts **must** remain as free flowing as possible through all phases of harvesting.
- 3) Cutblock B 15 lies within the Sproat Lake Community Watershed, sedimentation into streams is to be minimized to the fullest extent possible.
- 4) Cutblock B 15 is within a Rainfall Shutdown Area with the following shutdown/start-up Criteria:
Shutdown Criteria: Activities must shut down if: The total rainfall reaches **75mm in 24 hours**. Onsite rain gauges should be used and monitored daily.
Start-Up Criteria: Activities may start-up when: The total rainfall is equal to or less than 30mm in 24 hours, or the water balance falls below 75mm. Soil drainage rate is 40mm in 24hrs. Refer to the Return to work guide in the tender document for more information.

FORESTRY

- 1) Invasive Plants: Broom occurs along sections of the high way on route to the setting. Follow FSP measures for invasive plants. Cut and remove plants in association with road reactivation, clean machinery as required. Monitor and treat broom and other invasive species during early establishment. Grass seed exposed soil on or adjacent to roads, trails, and landing sites as soon as possible following harvest.

FIRST NATIONS

- 1) This cutblock is in the Hupacusath traditional territory. If any additional potential culturally modified tree (CMT) (whether live or dead and standing or fallen) or any other cultural feature is encountered within the opening during any harvesting phase, operations will cease in the immediate vicinity of the CMT or cultural feature. Hupacusath First Nations is to be notified immediately upon discovery of any potential CMT or cultural feature.

FALLING of SNAGS and DANGER TREES

- 1) In accordance with WSBC Regulations, snags and danger trees within the cutblock and outside the cutblock boundaries for a distance of not more than 50 meters that endanger workers are approved for falling under the logging plan for this cutblock. Danger trees and snags outside this 50 meter hazard area that are required to be felled should be recorded on a map for future reference. Sanitation falling will proceed if the occasional stem is required to be removed along the cutblock boundary. The Ministry of Forests will be notified if danger trees and/or snags are identified in groups and removal will result in the cutblock boundary being substantially impacted. Snags and danger trees meeting utilization specifications will be recovered.
- 2) If a bear den or raptor nest is encountered during falling operations, the tree will be reserved from falling along with a protection patch of timber surrounding it. AVCF is to be notified immediately. If the bear den tree is partially cut operations will proceed in conformance with WSBC regulations.
- 3) Wildlife Tree Patches or Wildlife Tree Retention Areas have been established, and are marked on the 1:5000 map. Any danger trees felled within the WTP or WTRA will be left as Coarse Woody Debris.

CUTBLOCK BOUNDARY TREATMENTS

- 1) All marked boundary trees except snags and danger trees must remain standing during and after the completion of harvesting. Trees adjacent to edges that cannot be felled into the setting will require approval from AVCF prior to falling. AVCF is to be notified immediately.
- 2) Leave trees may be substituted if, for safety reasons, a faller feels it is necessary to do so, but alternate leave trees must be retained and should be well rooted and of the same species and diameter

YARDING and LOADING PRESCRIPTIONS

- 1) No roadside landing of logs within 3 meters of any streambank along all roadsides. All drainage structures will be maintained and remain functional.
- 2) Avoid excessive ground lead gouging due to surface erosion potential. If soil disturbance occurs, then grass seeding will be required.
- 3) During the bark peeling stage of growth, the tree bole is highly susceptible to damage. Contact with retention trees during harvesting operation should be avoided between April 1 st and June 15 th.
- 4) Leave trees may be substituted if, for safety reasons, a faller feels it is necessary to do so, but alternative trees must be retained and should be well rooted and of the same species, diameter and vigor.
- 5) No more than 10% of the retention trees in the aggregate or dispersed retention areas or single retention trees in this cutblock may have significant damage.
 Significant damage to Hw, Fd, and Cw is defined as a tree with:
 One or more wounds (i.e. exposed cambium) that girdle more than 1/3 the circumference of the stem.
 Any wounds on a supporting root within one metre of the stem. A gouge – a wound that penetrates (splintered) into the sapwood or deeper.
 Additionally, for Hw and Cw only: A wound >400cm² on the stem.

SAFETY

Road and in-block safety hazards associated with block B15 have been identified on the harvest and road instruction maps. In the event additional in-block safety hazards (temporary or permanent) are encountered or develop during road construction or harvesting phases, a plan must be developed to address the hazard. Any identified permanent hazards must be reported back to AVCF (using Hazard/Issue Report Form).

STEEP GRADES

Road segments with gradients > 18% have been identified on the Overview Map. Prior to commencing log hauling operations the contractor must perform a risk assessment of the current conditions and adjust hauling activities to suit the traction conditions. Hauling for B15 is not permitted when ice and or snow is on the logging roads leading to or in the given setting (very low traction level). This has been determined using FERRIC steep grade decent guidelines. The Ministry of Transportation guidelines are to be followed when hauling on the highway.

SPECIFIC BLOCK COMMENTS

MACHINE OPERATORS WILL MONITOR SOILS FOR COMPACTION DURING RAIN EVENTS, AND MOVE TO DRIER AREAS WITHIN THE CUTBLOCK SHOULD COMPACTION AND/OR RUTTING OCCUR. NOTE THE SENSITIVE SOILS AREAS HIGHLIGHTED ON THE HARVEST PLAN MAP.

HARVESTING ISSUES

MACHINE OPERATORS SHOULD BE AWARE OF STEEP HOE CHUCK AREAS WITHIN THE CUTBLOCK FALLING BOUNDARY. THESE AREAS ARE IDENTIFIED ON THE HARVESTING MAP.

RIPARIAN MANAGEMENT STRATEGIES

Creek I.D.	CLASS	MANAGEMENT STRATEGIES FOR RIPARIAN MANAGEMENT ZONES (RMZ) INCLUDING PROTECTING STREAM
	NCD	<ul style="list-style-type: none"> - NCD(s) within the harvest area will be FX and YX. No RMZ is required. - Note all streams lie within the Sproat Lake Community Watershed, minimize sedimentation at all costs.
STREAM REACH AND RMA IS OUTSIDE OF THE HARVEST AREA		
STREAM REACH OUTSIDE HARVEST AREA, PORTIONS OF THE RMA WITHIN THE HARVEST AREA		
B15-4	S3	FA YA NC
PORTIONS OF STREAM REACH AND RMA ARE WITHIN THE HARVEST AREA		
B15-1	S4	FA YA, YX at designated machine crossings only. NC
B15-2	S4	FA YA, YX at designated machine crossings only. NC
B15-3	S4	FX YX NC
PRESCRIPTION DEFINITIONS		
	YX	Yard across Acceptable
	FX	Fall Across Acceptable
	FA/BL	Fall Away. Timber is to be felled away. Leaners and hazard trees that cannot be safely felled away shall be felled and left bridging the stream.
	FA	Fall Away. Timber is to be felled away.
	YA	Yard Away. Timber is to be yarded away. In order to improve deflection, cables are allowed to be suspended above the stream. Non-fish streams: merchantable leaners and danger trees that have been felled across the stream will, by necessity, be yarded across the stream. Fish streams: Leaners and danger trees which have been felled across the stream will be left unless detrimental to the stream.
	HH	100% harvested (no retention of saplings)
	RS	Retain saplings on the streambanks (non-merchantable)
	FE	Feathered edge.
	BPT	Blue painted trees (selected for removal). Faller's choice of alternate tree if unable to fall painted tree safely.
	NHZ	No harvest zone. Trees are to be felled away from the zone. Safe trees that cannot be felled away are to be left as part of the NHZ. Danger trees must be felled and will be left for future LWD or be removed if detrimental to the stream.
	MFZ	Machine free zone.
	MC	Machine Clean transportable introduced large woody debris (LWD) and accumulations concurrent with yarding.
	HC	Hand Clean introduced transportable debris.
	NC	No cleaning required. Keep channel free on introduced debris concurrent with yarding.