

#### HARVESTING INSTUCTIONS – OPENING#TS1

ACCESS ROAD: TA568D CUTTING PERMIT: NO. 3 TIMBERMARK: K2D 003

#### **EMPLOYEE REQUIREMENTS**

1) All employees, supervisors and contractors associated with this Logging Plan approval 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 the water quality.

2) All ditches and culverts **must** remain as free flowing as possible through all phases of harvesting.

3) Cutblock TS1 is within Rainfall Shutdown Area "5"

Shutdown Criteria: Activities must shut down if: The total rainfall reaches 72 mm in 24 hours. Onsite rain gages should be used and monitored daily.

Start-Up Criteria: Activities may start-up when: The total rainfall is equal to or less than 50 mm in 48 hours. Refer to the Return to work guide in the tender document for more information.

#### **Foresty**

1) Invasive Plants: Broom occurs along sections of TA568. 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. A field survey was completed by the Hupacasath First Nation. 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 the WCB 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 WCB regulations.

3) Wildlife tree patches and OGMA's have been established, and are marked on the 1:5000 map. Any danger trees felled within the WTP or OGMA 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 second growth 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 high to very high 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 >400cm<sup>2</sup> on the stem.

# SAFETY Road and in-block safety hazards associated with block TS1 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 Harvest and Road instruction Plan Map en route to the setting. 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 TS1 will not be 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 step grade decent guidelines. The Ministry of Transportation guidelines are to be followed when hauling on the highway.

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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. $\mathbf{HARVESTING\ ISSUES}$

MACHINE OPERATORS SHOULD BE AWARE OF STEEP HOE CHUCK AREAS, SMALL ROCK OUTCROPS, ROCK FALL HAZARDS, SLOPE INSTABILITY AND SENSITIVE AREAS ALONG THE FALLING BOUNDARY. ALL THESE AREAS ARE IDENTIFIED ON THE HARVESTING MAP. NOTE THE ROCK FALL HAZARDS WORKER SAFETY ALERT LOCATIONS.

E.1 RIPARIAN MANAGEMENT STRATEGIES		
Creek I.D.	CLASS	MANAGEMENT STRATEGIES FOR RIPARIAN MANAGEMENT ZONES (RMZ) INCLUDING PROTECTING STREAM
	NCD	- NCD(s) within the harvest area will be FX and YX. No RMZ is required.
		<ul> <li>Note all streams lie within the Sproat Lake Community Watershed, minimize sedimentation at all costs.</li> </ul>
		STREAM REACH AND RMA IS OUTSIDE OF THE HARVEST AREA
		STREAM REACH OUTSIDE HARVEST AREA, PORTIONS OF THE RMA WITHIN THE HARVEST AREA
9	S2	STREAM REACH OUTSIDE HARVEST AREA, PORTIONS OF THE RMA WITHIN THE HARVEST AREA FA YA. AC
10	S6	FA YA, AC
		PORTIONS OF STREAM REACH AND RMA ARE WITHIN THE HARVEST AREA
		PURTIONS OF STREAM REACH AND RMA ARE WITHIN THE HARVEST AREA
1	S4	FX YX AC
2	S4	FX YX AC
3	S4	FX YX AC
4	S4	FX YX AC
5	S4	FA YA AC
5A	S4	FA YA AC
6 7	S4 S4	FX YX AC FX YX AC
8	S4	FA YA AC
0	34	TATAC
	AC	Cleaning to be assessed post-yarding prior to block completion.
	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.
	НН	100% harvested (no retention of saplings)
	RS	Retain saplings on the streambanks (non-merchantible)
	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 <b>must</b> be felled and will be left for future LWD or be removed if detrimental to the stream.
	FX	Fall Across.
	YX	Yard Across. Maximize deflection to minimize stream bank disturbance.
	YV	Yard vertically.
	MFZ	Machine free zone.
	MC	Machine Clean transportable introduced large woody debris (LWD) and accumulations concurrent with yarding.
	HC	Hand Clean introduced transportable debris.
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