SP Area Summary (ha)				
SU		Area	NAR	Silv System
1		5.73	5.73	CCRES
PAS		0.55	0.00	
WTRA		0.54	0.00	
TOTAL		6.82	5.73	

Harvest Plan Area Summary (ha)			
Harvest Unit	Method	Area	Strategy
	Ground	6.06	Standard Practice
	Ground	0.00	Machine Free Zone
	Cable	0.00	Standard Practice
TOTAL		6.06	

675500 676000 676500

5439000 5438500 5438000

A93165-6 A93789-6 A93789-5 A93165-5 A93165-4 A95852-5

A00243 CP109-

SP PLOT #1 SP PLOT #2 WTRA #1 LDG #12

DALLY HILL FSR FSR 0030.16

CRPL A95852, Sec. 6

R1/S6 R2/S6 R3/S6 R4/S6 R5/S6 R7/S6

NCD13 NCD12

400mm 1600 1760 1800

East Kootenay Field Unit

HARVEST PLAN and SITE PLAN MAP

TSL: A95852
Block: 5

Location: Couldrey
Map Reference: 082G.008
Opening #: 82G08-1343
UBI #: BF68B

UTM	Zone	Easting						Northing						
Grid	1	1	6	7	5	9	3	6	5	4	3	8	3	6	4

Latitude: 49° 04' 22"N Longitude: 114° 35' 27"W

MFLNRO Region: Kootenay/Boundary
MFLNRO District: Rocky Mountain

Elevation Range:

Minimum: 1680m Maximum: 1820m

File: ..\COULDREY\A95852\SP\MXD \A95852_i3_map_SP_Blk5.MXD
Date: 27 November 2018

- Proposed Block Boundary
- **Permanent Access Structure**
  - Right-of-Way
  - E Existing Permanent Landing
  - P Proposed Permanent Landing
- **Reserves**
  - Wildlife Tree Reseve Area
  - Internal Reserve
- **Management Zones**
  - Machine Free Zone
  - Riparian Management Zone
  - Riparian Reserve Zone
  - Riparian Management Area Old Growth Management Area (OGMA)

- Highway / Paved Road
- Forest Service Road
- Road - Existing
- Road - Existing, Retired
- Trail - Existing
- Proposed Road - Permanent
- Proposed Road - Temporary
- Proposed Trail
- Recreation Trail
- Transmission Line
- Pipeline
- Fence Line
- GPS Station
- Proposed/Existing Culvert
- Cattleguard
- Areas with Slopes > 35%
- Forest Cover Typeline
- Skidding Drection
- YARD Yardding Drection
- DL 4 Deflection Line

- Ground Harvest Area
- Cable Harvest Area

Adjacent Blocks (Planning Status, Block Status)

- Planning or 196
- Planning or 196, WIP
- OPC, PP or WIP
- OPC, ADV
- PROP, PP
- PROP, WIP or ADV
- SP x
- Deferred
- HB or LC
- RG or SR
- GU
- FG not GU
- FG
- Surrendered

Block Features

- Stratum Boundary
- Slope Break
- Gully/Dry Draw
- # Exposed Bedrock
- 20% Side Slope
- SP Plot
- Proposed Designated Skid Trail Crossing

Streams, Lakes, and Wetlands

- Riparian Streams (Class S1 - S6, NCD, NVC)
- Lake (Class L1 - L4, NCL)
- Riparian Wetland (Class W1 - W5, NCW)
- R2-2/S4 Riparian Stream # - Reach # / Stream Class
- Reach Break

Contours

- Index - 100m interval
- Intermediate - 20m interval

N
True North
Magnetic North
Magnetic Declination: 13° 49'E

0 50 100 150
metres
UTM, NAD83
Scale: 1:5 000

1.5 RIPARIAN ASSESSMENT

Block	Riparian I.D. and Class	RMA	SU	Width (m)	BA or SPH Retained	Comments (Indicate if in a Community Watershed)
5	R11/S6	RMZ	1	20	400SPH	R11/S6 is located in the southwest portion of block 5, within WTRA #1. R11/S6 is also located outside of the block; proposed road CRPL A95852 Sec. 6 overlaps the RMA, however no culvert is required.
5	R3/S6	RMZ	N/A	20	N/A	R3/S6 is located outside of block 5, adjacent to the southwest block boundary. The RMA of R3/S6 does not overlap on the block or proposed roads.
5	R7/S6	RMZ	N/A	20	N/A	R7/S6 is located outside of block 5, adjacent to the southwest block boundary. The RMA of R7/S6 does not overlap on the block or proposed roads.

Management Strategies:

Trees must be felled and yarded away from all riparian features where practicable. Any debris entering a riparian feature as a result of harvesting operations must be removed concurrent with harvesting activities.

Safety Highlights:

The harvest area contains several danger trees. The Licensee should be aware of WorkSafe BC regulations (Section 26 of Occupational Health & Safety Regulation) surrounding danger trees.

Leave Tree Specifications:

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
5	1	N/A	Lw & Fd	30 - 45 cm dbh	10	0	20	✓	✓	✓	✓
5	1	N/A	Lw & Fd	≥ 45 cm dbh	All	N/A	N/A	✓	✓	✓	
5	1	N/A	At/Ac/Ep	≥ 17.5 cm dbh	All	N/A	N/A	✓	✓	✓	

Additional Requirements/Comments:

1. Retain 0 to 20 stems per hectare (sph) of Western Larch (Lw) and Douglas Fir (Fd) 30-45 cm dbh with a target of 10 sph. Reserve stems are to target the largest stems available.
2. Retain all Western Larch and Douglas fir ≥ 45 cm dbh regardless of the inter-tree spacing, and these stems count toward the target 10 sph of dispersed reserve stems.
3. Very few Douglas Fir observed during field work. Species retention should favor Fd where practicable to maintain species diversity.
4. Retain all deciduous trees where practicable.
5. Voids of 1 hectare or greater may exist post-harvest due to natural stand variability.
6. BCTS reserves the right to pre-mark reserve stems as per above leave tree specifications.

[1] Refer to *Appendix I* for *Table of Reserve Timber Abbreviations and Definitions*
[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.

Table 2. - Other Reserved Timber[1]

Non-Merchantable

Block	TU / HU	Location(s)	Species	Size	Stems per Hectare	
					Target	Minimum
5	1	Retain all good quality advanced understory, preferably in patches or clumps, throughout the harvest area.	Sx, Bl, Fd, Lw	< 17.5 cm dbh and > 1.3 m height	All	N/A

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
5	1	All	≥ 30 cm dbh	2-5m	3	0	5	✓	✓	✓	

Additional Requirements:

1. The stub snag is to be cut as high as possible where safe to do so.

Coarse Woody Debris

Block	TU / HU	Species	Size	Number per Hectare		Distribution[2]			
				Target	Minimum	S	G	I	R
5	1	All (Non-merchantable)	> 2 m in length and >7.5 cm in diameter at one end	> 4	4	✓	✓	✓	

[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

Note: Safety is a priority when conducting operations near reserved timber. Refer to TSL Schedule "A", Section 2.00 regarding Dangerous Trees.

Harvest / Operational Constraints:

- Operate during conditions that prevent excessive detrimental soil disturbance.
- Ensure natural surface drainage patterns are maintained during operations and by the completion of harvesting.
- Due to the moderately-high migratory bird risk rating for the block, layer 1 reserved timber is important to maintain nesting habitat for migratory birds.

COARSE WOODY DEBRIS MANAGEMENT STRATEGY INFORMATION

Efforts should be made to protect large coarse woody debris and large stumps (if present) as these sites are important habitat for small mammals and other wildlife. A minimum of 4 logs per hectare, each being > 2m in length and >7.5cm in diameter at one end, must be retained on site.

Block Target (%): N/A	Coarse Woody Debris (m3/ha): <10m3/ha

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.

Scott Blissett, RPF - #3318

RPF PRINTED NAME

December 10, 2018

DATE SIGNED

RPF'S SIGNATURE and SEAL