



Harriet VanWart Director,  
Land and Resources Department,  
Lil'wat Nation  
82 IR No. 10 Road, Mount Currie, BC, V0N 2L0

Email: [Harriet.Vanwart@lilwat.ca](mailto:Harriet.Vanwart@lilwat.ca)

**Re: TSL A94822, Twin One, Notification of Operations**

As per Sections 6.01 of TSL A994822 in the vicinity of Twin One Creek, please accept this as formal notification of our intentions to commence operations on Block LZ1001-1004. This notification is required to provide 14 days' notice prior to the commencement of operations.

Our current plan is to construction the roads accessing the timber sale this August/September with harvesting occurring no sooner than one month after the blocks are snow free next year. This should provide reasonable and safe access to Lil'wat Nation members to strip bark and to gather botanical resources and bough this fall or spring of 2019.

I have attached a copy of the block maps for your reference. Confirmation of receipt of this notification would be greatly appreciated. If you wish to discuss our operations further please do not hesitate to give me a call.

Thank-you  
BLACK MOUNT LOGGING INC



Dave Rollins, RPF, P.Eng  
Operations Engineer  
Cell: 250-202-7848



# Detailed Location Map Blocks LZ001, LZ002, LZ003 & LZ004

## Driving Directions:

All distances are approximate.

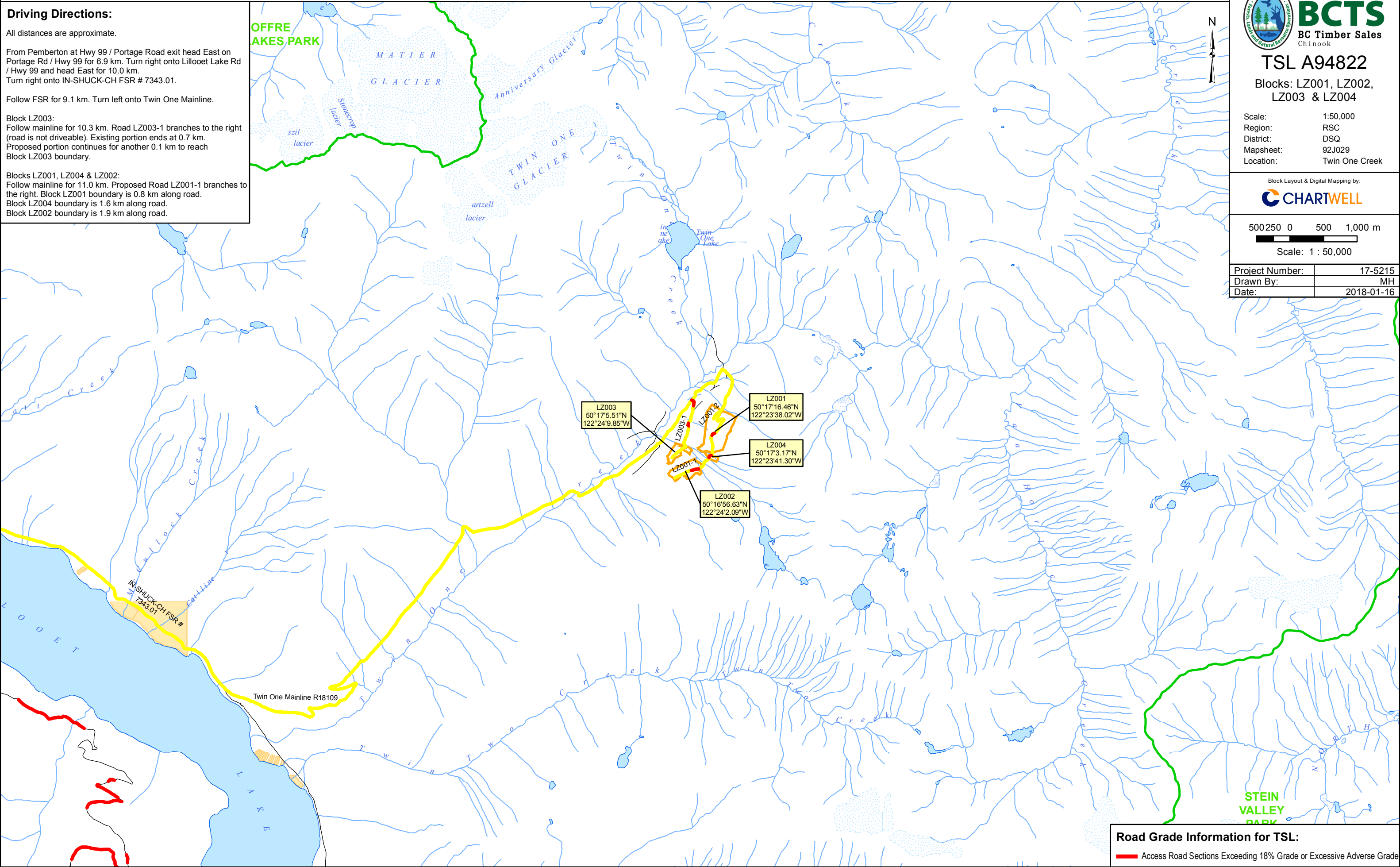
From Pemberton at Hwy 99 / Portage Road exit head East on Portage Rd / Hwy 99 for 6.9 km. Turn right onto Lillooet Lake Rd / Hwy 99 and head East for 10.0 km. Turn right onto IN-SHUCK-CH FSR # 7343.01.

Follow FSR for 9.1 km. Turn left onto Twin One Mainline.

Block LZ003:  
Follow mainline for 10.3 km. Road LZ003-1 branches to the right (road is not driveable). Existing portion ends at 0.7 km. Proposed portion continues for another 0.1 km to reach Block LZ003 boundary.

Blocks LZ001, LZ004 & LZ002:  
Follow mainline for 11.0 km. Proposed Road LZ001-1 branches to the right. Block LZ001 boundary is 0.8 km along road.  
Block LZ004 boundary is 1.6 km along road.  
Block LZ002 boundary is 1.9 km along road.

OFFRE  
LAKES PARK



TSL A94822

Blocks: LZ001, LZ002,  
LZ003 & LZ004

Scale: 1:50,000  
Region: RSC  
District: DSQ  
Mapsheet: 92J029  
Location: Twin One Creek

Block Layout & Digital Mapping by:



500 250 0 500 1,000 m

Scale: 1 : 50,000

Project Number:	17-5215
Drawn By:	MH
Date:	2018-01-16

STEIN  
VALLEY  
PARK

## Road Grade Information for TSL:

— Access Road Sections Exceeding 18% Grade or Excessive Adverse Grade

### Management Features

- Riparian Stream Class-FISH:  
 S1, S2, S3, S4  
 Unknown
- Riparian Stream Class-NO FISH:  
 S5, S6  
 Unknown
- Non-classified Drainage  
 Seepage
- Stream Class, Reach Break
- Riparian Lake (L1-L4)
- Riparian Wetland (W1-W5)
- Water Body ID #
- Retention Patch (Engineered)
- Retention Patch (Proposed)
- Dispersed Retention Trees
- Wildlife Tree Retention Area
- Adjacent Wildlife Tree Retention Area
- Road Right-of-Way
- Riparian Reserve Zone
- Riparian Management Zone  
 (if different than SU prescription)
- Ground-Based Yarding Area
- Cable Yarding Area
- Helicopter Harvest Area
- Non-Productive
- Ground Based Area >35% Slope
- Windthrow Management Area
- Machine Free Zone
- Special Management Zone
- Park
- Water Supply Intake
- Previous Harvest
- Old Growth Mgmt. Area
- Ungulate Winter Range
- Approx. Snow Avalanche Path

### Harvest System

- Ground Based  
 Skyline  
 Grapple
- Harvest System Split Line  
 Yarding Split Line

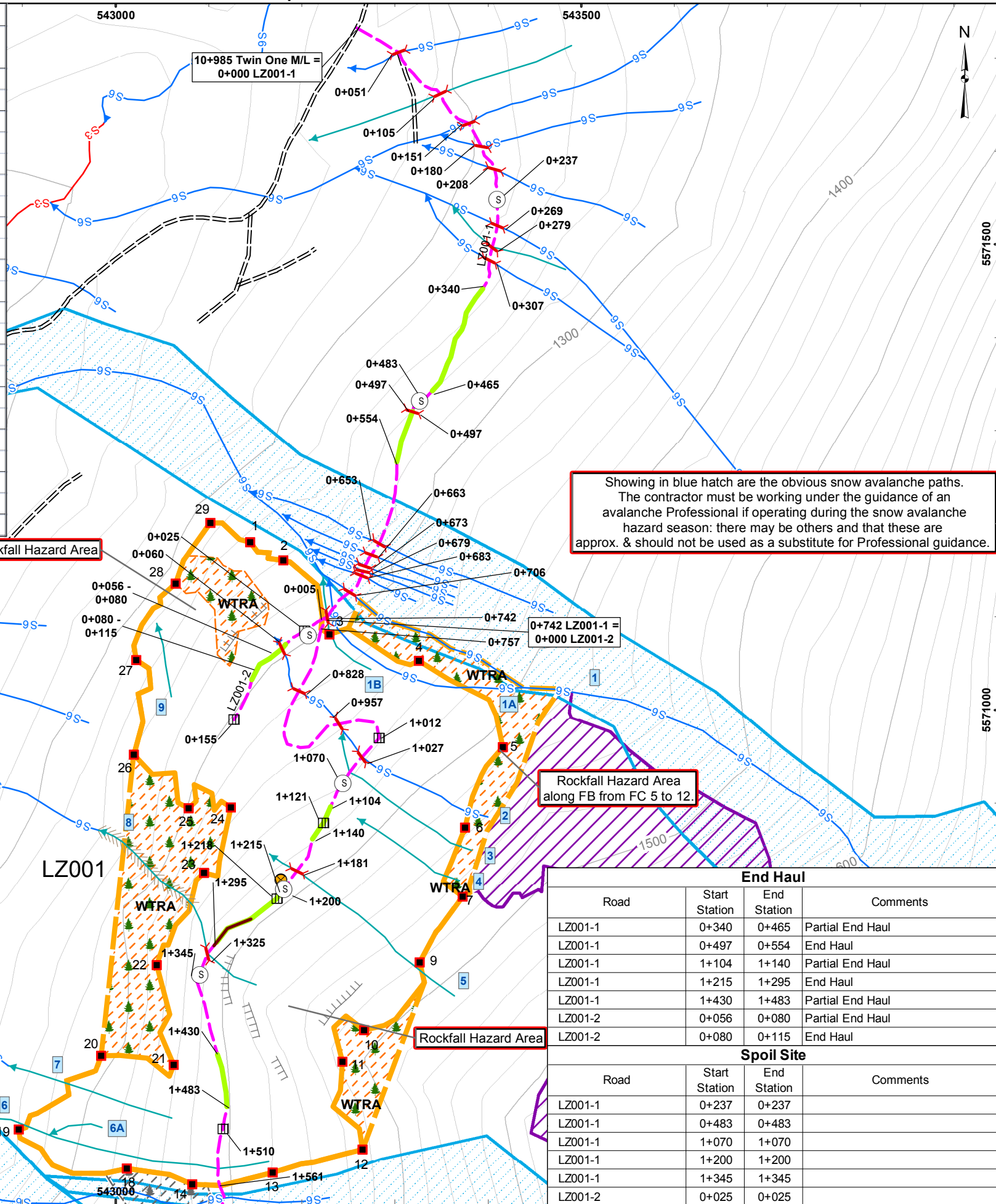
### Field Marking

- Falling Boundary:**  
 Orange FB Ribbon & Orange Paint
- Retention Patch:**  
 Orange Black Stripe Ribbon & Orange Paint
- Road Right of Way:**  
 Orange Ribbon & Orange Paint
- Road Centre Line:**  
 Pink Ribbon & Pink Tag
- Falling Corner:**  
 Orange Tag & FC # Marked
- Dispersed Retention Trees**  
 Orange Painted Dot Each Side & Base
- Station Marks**  
 White Ribbon
- Fish Stream:** Red White Stripe Ribbon  
**Non Fish Stream:** Blue White Stripe Ribb.
- Deflection Line:** Green Ribbon  
**Machine Free Zone:** Red Ribbon  
**Cruise Lines & Plots:** Blue Ribbon

## Road Overview Map Block LZ001

Road Number	Road Station	Culvert Type	Culvert Dimensions		Culvert Skew
			Diameter	Length	
LZ001-1	0+051	CMP	600	9	90
LZ001-1	0+105	CMP	600	9	90
LZ001-1	0+151	CMP	600	9	90
LZ001-1	0+180	CMP	600	9	90
LZ001-1	0+208	CMP	600	9	90
LZ001-1	0+269	CMP	600	9	90
LZ001-1	0+279	CMP	600	9	90
LZ001-1	0+307	CMP	600	9	90
LZ001-1	0+497	CMP	600	9	90
LZ001-1	0+653	CMP	600	9	90
LZ001-1	0+663	CMP	600	9	90
LZ001-1	0+673	CMP	800	9	90
LZ001-1	0+679	CMP	600	9	90
LZ001-1	0+683	CMP	600	9	90
LZ001-1	0+706	CMP	800	9	90
LZ001-1	0+742	CMP	600	9	90
LZ001-1	0+828	CMP	600	9	90
LZ001-1	0+957	CMP	600	9	90
LZ001-1	1+027	CMP	600	9	90
LZ001-1	1+181	CMP	600	9	90
LZ001-1	1+325	CMP	600	9	90
LZ001-2	0+060	CMP	600	9	90

Road Construction Summary		Length (km)
Road Section		
LZ001-1 Stn. 0+000 - 1+561		1.561
LZ001-2		0.155
<b>Total Roads</b>		<b>1.716</b>



End Haul			
Road	Start Station	End Station	Comments
LZ001-1	0+340	0+465	Partial End Haul
LZ001-1	0+497	0+554	End Haul
LZ001-1	1+104	1+140	Partial End Haul
LZ001-1	1+215	1+295	End Haul
LZ001-1	1+430	1+483	Partial End Haul
LZ001-2	0+056	0+080	Partial End Haul
LZ001-2	0+080	0+115	End Haul

Spoil Site			
Road	Start Station	End Station	Comments
LZ001-1	0+237	0+237	
LZ001-1	0+483	0+483	
LZ001-1	1+070	1+070	
LZ001-1	1+200	1+200	
LZ001-1	1+345	1+345	
LZ001-2	0+025	0+025	



TSL A94822

Scale: 1:5,000  
 Region: RSC  
 District: DSQ  
 Mapsheet: 092J029  
 Location: Twin One Creek  
 UTM Zone: 10  
 UTM Easting: 543178  
 UTM Northing: 5570818  
 Latitude: 50°17'16.46"N  
 Longitude: 122°23'38.02"W  
 TAUP (ha): 22.9

- ### Legend
- Total Area Under Prescription (TAUP):
- Falling Boundary
  - External to Falling Bdy
  - Falling Corner
  - SP Plot
  - Standard Unit Boundary
  - Existing Road
  - Existing Trail
  - New Road Construction:
    - Haul Road
    - Temporary (Rehab)
    - Bladed Skid Trail
    - Designated Skid Trail
    - Backspar Trail
  - Favourable Grade > 18%
  - Excessive Adverse Grade
  - Detailed Engineering - EH
  - Prescribed Reconstruction
  - Road Chainage
  - Bridge (Existing)
  - Bridge (Proposed)
  - Culvert (Existing)
  - Culvert (Proposed)
  - Rock Outcrop Area
  - Proposed / Designated Stream Crossing
  - Gravel Pit
  - Transmission Line
  - Slide
  - Gully
  - Rock Outcrop
  - Windfall/Snag
  - Marsh/Swamp
  - Index Contour and Label
  - Intermediate Contour  
 Contour Interval is 20m
  - Landing/Temporary Landing
  - Log Dump/Helipad
  - Spoil Site
  - Quarry
  - Geographic Centre

25m 0 25 50 100 150m  
 Scale: 1:5,000  
 Digital Mapping by:  
**CHARTWELL**  
 Project Number: 17-5215  
 Drawn By: MH  
 Date: 2018-01-25

### Management Features

- Riparian Stream Class-FISH: S1, S2, S3, S4
- Unknown
- Riparian Stream Class-NO FISH: S5, S6
- Unknown
- Non-classified Drainage
- Seepage
- Stream Class, Reach Break
- Riparian Lake (L1-L4)
- Riparian Wetland (W1-W5)
- Water Body ID #
- Retention Patch (Engineered)
- Retention Patch (Proposed)
- Dispersed Retention Trees
- Wildlife Tree Retention Area
- Adjacent Wildlife Tree Retention Area
- Road Right-of-Way
- Riparian Reserve Zone
- Riparian Management Zone (if different than SU prescription)
- Ground-Based Yarding Area
- Cable Yarding Area
- Helicopter Harvest Area
- Non-Productive
- Ground Based Area >35% Slope
- Windthrow Management Area
- Machine Free Zone
- Special Management Zone
- Park
- Water Supply Intake
- Previous Harvest
- Old Growth Mgmt. Area
- Approx. Snow Avalanche Path

### Harvest System

- Ground Based
- Skyline
- Grapple
- Harvest System Split Line
- Yarding Split Line

### Field Marking

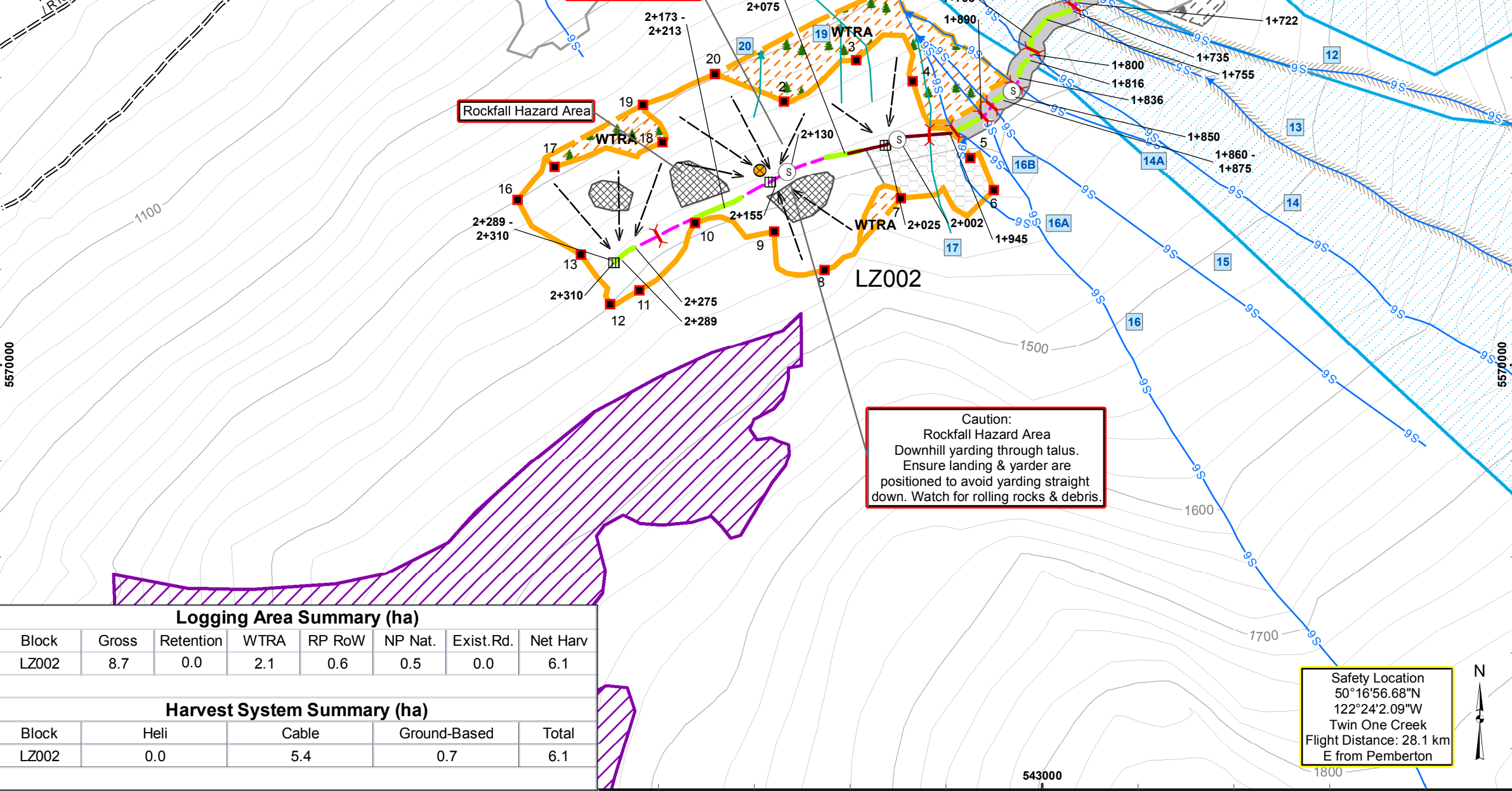
- Falling Boundary:** Orange FB Ribbon & Orange Paint
- Retention Patch:** Orange Black Stripe Ribbon & Orange Paint
- Road Right of Way:** Orange Ribbon & Orange Paint
- Road Centre Line:** Pink Ribbon & Pink Tag
- Falling Corner:** Orange Tag & FC # Marked
- Dispersed Retention Trees:** Orange Painted Dot Each Side & Base
- Station Marks:** White Ribbon
- Fish Stream:** Red White Stripe Ribbon
- Non Fish Stream:** Blue White Stripe Ribb.
- Deflection Line:** Green Ribbon
- Machine Free Zone:** Red Ribbon
- Cruise Lines & Plots:** Blue Ribbon

## Harvest Plan Map Block LZ002

End Haul			
Road	Start Station	End Station	Comments
LZ001-1	1+685	1+722	End Haul
LZ001-1	1+735	1+755	End Haul
LZ001-1	1+755	1+793	Partial End Haul
LZ001-1	1+793	1+800	End Haul
LZ001-1	1+816	1+836	End Haul
LZ001-1	1+860	1+875	End Haul
LZ001-1	1+890	1+945	End Haul
LZ001-1	2+038	2+075	Partial End Haul
LZ001-1	2+173	2+213	End Haul
LZ001-1	2+275	2+289	End Haul
LZ001-1	2+289	2+310	Partial End Haul

Spoil Site			
Road	Start Station	End Station	Comments
LZ001-1	1+850	1+850	
LZ001-1	2+002	2+002	
LZ001-1	2+130	2+130	

Stream Summary			
Stream Reach ID	Stream Class	Reserve Zone Width (m)	Mgmt. Zone Width (m)
Twin One Creek	S3	20	20
13	S5	0	30
10, 12, 14, 14A, 15, 16, 16A, 16B	S6	0	20
11, 11A, 17, 18A, 19, 20	NCD	0	0



Showing in blue hatch are the obvious snow avalanche paths. The contractor must be working under the guidance of an avalanche Professional if operating during the snow avalanche hazard season: there may be others and that these are approx. & should not be used as a substitute for Professional guidance.

Caution: Rockfall Hazard Area  
Downhill yarding through talus. Ensure landing & yarder are positioned to avoid yarding straight down. Watch for rolling rocks & debris.

### Logging Area Summary (ha)

Block	Gross	Retention	WTRA	RP RoW	NP Nat.	Exist.Rd.	Net Harv
LZ002	8.7	0.0	2.1	0.6	0.5	0.0	6.1

### Harvest System Summary (ha)

Block	Heli	Cable	Ground-Based	Total
LZ002	0.0	5.4	0.7	6.1

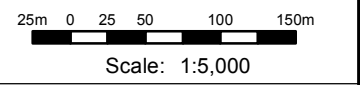


TSL A94822

Scale: 1:5,000  
 Region: RSC  
 District: DSQ  
 Mapsheet: 092J028  
 Location: Twin One Creek  
 UTM Zone: 10  
 UTM Easting: 542706  
 UTM Northing: 5570203  
 Latitude: 50°16'56.68"N  
 Longitude: 122°24'2.09"W  
 TAUP (ha): 8.7

### Legend

- Total Area Under Prescription (TAUP):
  - Falling Boundary
  - External to Falling Bdy
- Falling Corner
- SP Plot
- Standard Unit Boundary
- Existing Road
- Existing Trail
- New Road Construction:
  - Haul Road
  - Temporary (Rehab)
  - Bladed Skid Trail
  - Designated Skid Trail
  - Backspar Trail
- Favourable Grade > 18%
- Excessive Adverse Grade
- Detailed Engineering - EH
- Prescribed Reconstruction
- Road Chainage
- Bridge (Existing)
- Bridge (Proposed)
- Culvert (Existing)
- Culvert (Proposed)
- Rock Outcrop Area
- Proposed / Designated Stream Crossing
- Gravel Pit
- Transmission Line
- Slide
- Gully
- Rock Outcrop
- Windfall/Snag
- Marsh/Swamp
- Index Contour and Label
- Intermediate Contour
- Landing/Temporary Landing
- Log Dump/Helipad
- Spoil Site
- Quarry
- Geographic Centre



Scale: 1:5,000  
 Digital Mapping by: CHARTWELL

Project Number: 17-5215  
 Drawn By: MH  
 Date: 2018-01-25

Safety Location  
 50°16'56.68"N  
 122°24'2.09"W  
 Twin One Creek  
 Flight Distance: 28.1 km  
 E from Pemberton

# Harvest Plan Map Block LZ003



TSL A94822

Scale: 1:5,000  
 Region: RSC  
 District: DSQ  
 Mapsheet: 092J028  
 Location: Twin One Creek  
 UTM Zone: 10  
 UTM Easting: 542551  
 UTM Northing: 5570475  
 Latitude: 50°17'5.51"N  
 Longitude: 122°24'9.85"W  
 TAUP (ha): 4.6

## Management Features

- Riparian Stream Class-FISH: S1, S2, S3, S4
- Unknown
- Riparian Stream Class-NO FISH: S5, S6
- Unknown
- Non-classified Drainage
- Seepage
- Stream Class, Reach Break
- Riparian Lake (L1-L4)
- Riparian Wetland (W1-W5)
- Water Body ID #
- Retention Patch (Engineered)
- Retention Patch (Proposed)
- Dispersed Retention Trees
- Wildlife Tree Retention Area
- Adjacent Wildlife Tree Retention Area
- Road Right-of-Way
- Riparian Reserve Zone
- Riparian Management Zone (if different than SU prescription)
- Ground-Based Yarding Area
- Cable Yarding Area
- 90% Retention Includ in Merch
- Non-Productive
- Ground Based Area >35% Slope
- Windthrow Management Area
- Machine Free Zone
- Special Management Zone
- Park
- Water Supply Intake
- Previous Harvest
- Old Growth Mgmt. Area
- Approx. Snow Avalanche Path

## Harvest System

- Ground Based
- Skyline
- Grapple
- Harvest System Split Line
- Yarding Split Line

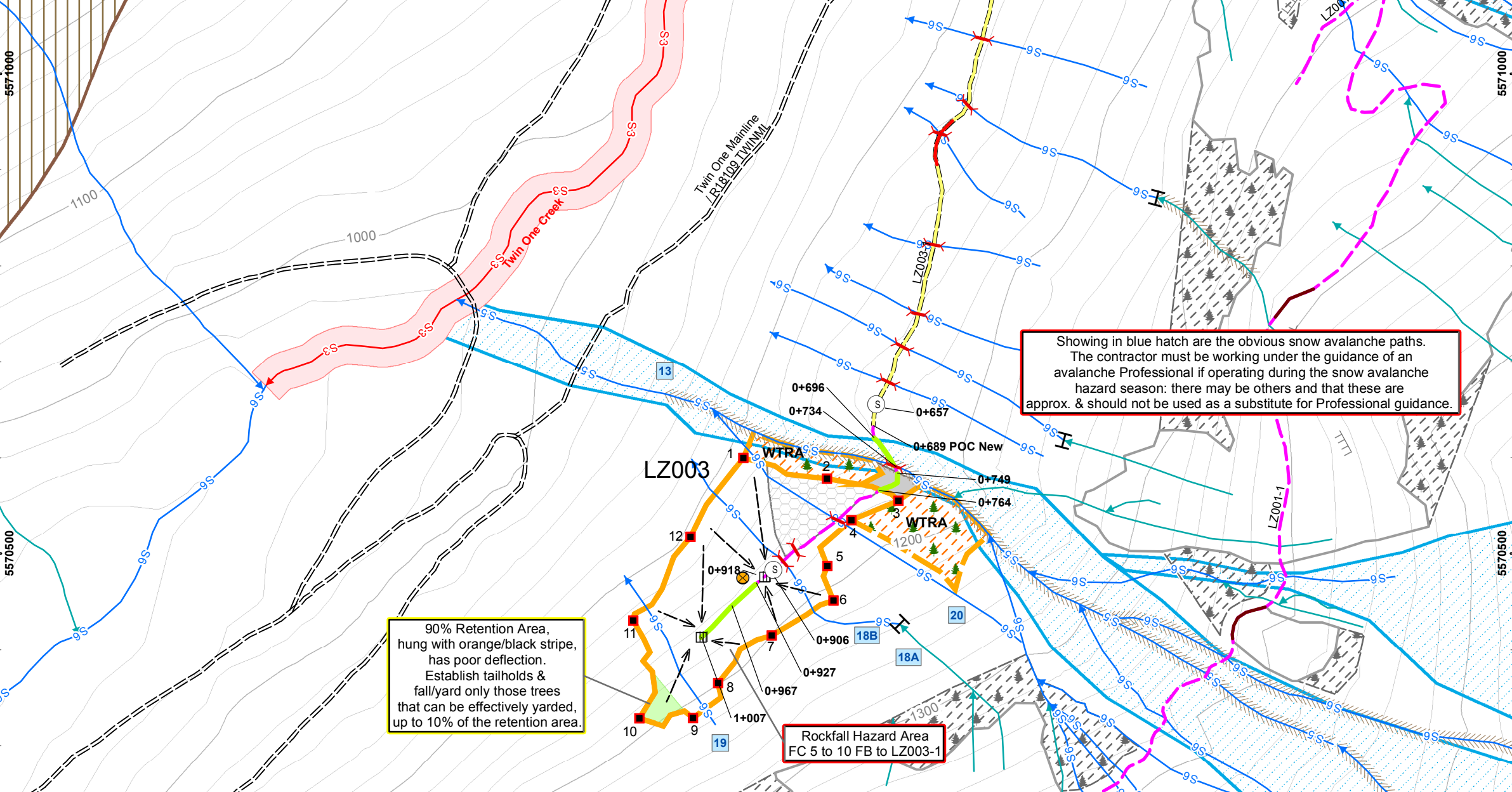
## Field Marking

- Falling Boundary:** Orange FB Ribbon & Orange Paint
- 90% Retention Includ. in Merch:** Orange Black Stripe Ribbon & Orange Paint
- Road Right of Way:** Orange Ribbon & Orange Paint
- Road Centre Line:** Pink Ribbon & Pink Tag
- Falling Corner:** Orange Tag & FC # Marked
- Dispersed Retention Trees:** Orange Painted Dot Each Side & Base
- Station Marks:** White Ribbon
- Fish Stream:** Red White Stripe Ribbon
- Non Fish Stream:** Blue White Stripe Ribb.
- Deflection Line:** Green Ribbon
- Machine Free Zone:** Red Ribbon
- Cruise Lines & Plots:** Blue Ribbon

End Haul				
Road	Start Station	End Station	Comments	
LZ003-1	0+696	0+734	End Haul	
LZ003-1	0+749	0+764	End Haul	
LZ003-1	0+927	0+967	Partial End Haul	
LZ003-1	0+967	1+007	End Haul	

Spoil Site				
Road	Start Station	End Station	Comments	
LZ003-1	0+657	0+657		
LZ003-1	0+906	0+906		



### Logging Area Summary (ha)

Block	Gross	Retention	WTRA	RP RoW	NP Nat.	Exist.Rd.	Net Harv
LZ003	4.6	0.0	1.1	0.1	0.0	0.0	3.5

### Harvest System Summary (ha)

Block	90% Ret incld. In Merch	Cable	Ground-Based	Total
LZ003	0.1	2.8	0.6	3.5

### Stream Summary

Stream Reach ID	Stream Class	Reserve Zone Width (m)	Mgmt. Zone Width (m)
Twin One Creek	S3	20	20
13	S5	0	30
18B, 19, 20	S6	0	20
18A	NCD	0	0

## Legend

- Total Area Under Prescription (TAUP):
  - Falling Boundary
  - External to Falling Bdy
- Falling Corner
- SP Plot
- Standard Unit Boundary
- Existing Road
- Existing Trail
- New Road Construction:
  - Haul Road
  - Temporary (Rehab)
  - Bladed Skid Trail
  - Designated Skid Trail
  - Backspar Trail
- Favourable Grade > 18%
- Excessive Adverse Grade
- Detailed Engineering - EH
- Prescribed Reconstruction
- Road Chainage
- Bridge (Existing)
- Bridge (Proposed)
- Culvert (Existing)
- Culvert (Proposed)
- Rock Outcrop Area
- Proposed / Designated Stream Crossing
- Gravel Pit
- Transmission Line
- Slide
- Gully
- Rock Outcrop
- Windfall/Snag
- Marsh/Swamp
- Index Contour and Label
- Intermediate Contour
- Landing/Temporary Landing
- Log Dump/Helipad
- Spoil Site
- Quarry
- Geographic Centre

25m 0 25 50 100 150m  
 Scale: 1:5,000  
 Digital Mapping by: CHARTWELL  
 Project Number: 17-5215  
 Drawn By: MH  
 Date: 2018-01-25

Safety Location  
 50°17'5.51"N  
 122°24'9.85"W  
 Twin One Creek  
 Flight Distance: 27.9 km  
 E from Pemberton

# Harvest Plan Map Block LZ004



TSL A94822

Scale: 1:5,000  
 Region: RSC  
 District: DSQ  
 Mapsheet: 092J029  
 Location: Twin One Creek  
 UTM Zone: 10  
 UTM Easting: 543116  
 UTM Northing: 5570407  
 Latitude: 50°17'3.17"N  
 Longitude: 122°23'41.30"W  
 TAUP (ha): 1.3

## Management Features

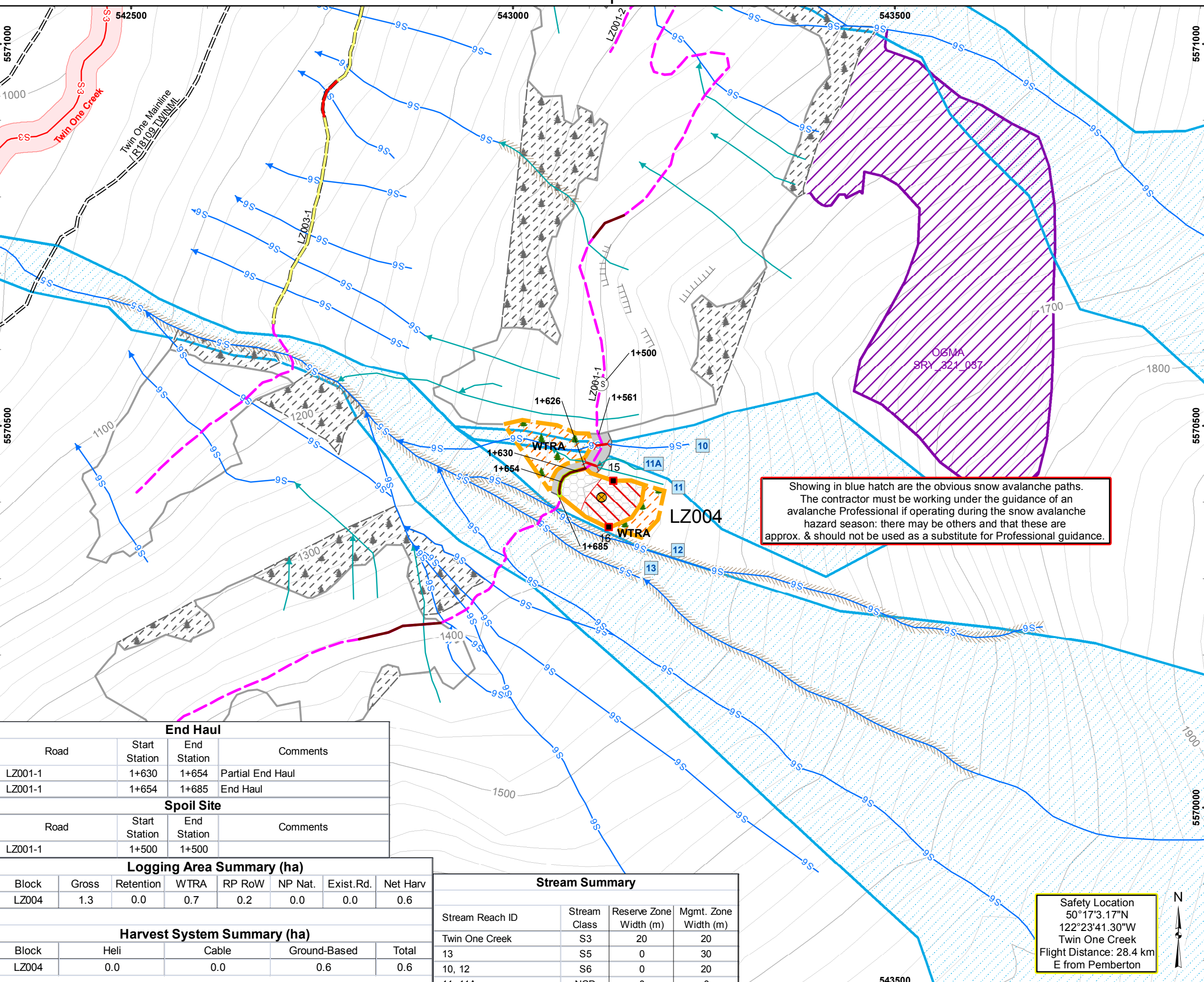
- Riparian Stream Class-FISH: S1, S2, S3, S4 (Red line)
- Unknown (Red line)
- Riparian Stream Class-NO FISH: S5, S6 (Blue line)
- Unknown (Blue line)
- Non-classified Drainage (Green line)
- Seepage (Dashed blue line)
- Stream Class, Reach Break (Blue line with 'S' and 'S' in boxes)
- Riparian Lake (L1-L4) (Blue area)
- Riparian Wetland (W1-W5) (Blue area)
- Water Body ID # (AT in box)
- Retention Patch (Engineered) (Green hatched)
- Retention Patch (Proposed) (Yellow hatched)
- Dispersed Retention Trees (Tree icon)
- Wildlife Tree Retention Area (WTRA) (Green hatched)
- Adjacent Wildlife Tree Retention Area (WTRA) (Green hatched)
- Road Right-of-Way (Grey area)
- Riparian Reserve Zone (Pink area)
- Riparian Management Zone (if different than SU prescription) (Pink area)
- Ground-Based Yarding Area (White area)
- Cable Yarding Area (White area)
- Helicopter Harvest Area (White area)
- Non-Productive (Cross-hatched)
- Ground Based Area >35% Slope (Red hatched)
- Windthrow Management Area (Black hatched)
- Machine Free Zone (Yellow area)
- Special Management Zone (SMZ) (Green area)
- Park (Green area)
- Water Supply Intake (Water tap icon)
- Previous Harvest (NSR, SR, GU in boxes)
- Old Growth Mgmt. Area (Purple hatched)
- Approx. Snow Avalanche Path (Blue hatched)

## Harvest System

- Ground Based (Arrow with 'G')
- Skyline (Arrow with 'SL')
- Grapple (Arrow with 'G')
- Harvest System Split Line (Dashed green line)
- Yarding Split Line (Dashed green line)

## Field Marking

- Falling Boundary:** Orange FB Ribbon & Orange Paint
- Retention Patch:** Orange Black Stripe Ribbon & Orange Paint
- Road Right of Way:** Orange Ribbon & Orange Paint
- Road Centre Line:** Pink Ribbon & Pink Tag
- Falling Corner:** Orange Tag & FC # Marked
- Dispersed Retention Trees:** Orange Painted Dot Each Side & Base
- Station Marks:** White Ribbon
- Fish Stream:** Red White Stripe Ribbon
- Non Fish Stream:** Blue White Stripe Ribb.
- Deflection Line:** Green Ribbon
- Machine Free Zone:** Red Ribbon
- Cruise Lines & Plots:** Blue Ribbon



Showing in blue hatch are the obvious snow avalanche paths. The contractor must be working under the guidance of an avalanche Professional if operating during the snow avalanche hazard season: there may be others and that these are approx. & should not be used as a substitute for Professional guidance.

End Haul			
Road	Start Station	End Station	Comments
LZ001-1	1+630	1+654	Partial End Haul
LZ001-1	1+654	1+685	End Haul

Spoil Site			
Road	Start Station	End Station	Comments
LZ001-1	1+500	1+500	

Logging Area Summary (ha)							
Block	Gross	Retention	WTRA	RP RoW	NP Nat.	Exist.Rd.	Net Harv
LZ004	1.3	0.0	0.7	0.2	0.0	0.0	0.6

Harvest System Summary (ha)				
Block	Heli	Cable	Ground-Based	Total
LZ004	0.0	0.0	0.6	0.6

Stream Summary			
Stream Reach ID	Stream Class	Reserve Zone Width (m)	Mgmt. Zone Width (m)
Twin One Creek	S3	20	20
13	S5	0	30
10, 12	S6	0	20
11, 11A	NCD	0	0

Safety Location  
 50°17'3.17"N  
 122°23'41.30"W  
 Twin One Creek  
 Flight Distance: 28.4 km  
 E from Pemberton

## Legend

- Total Area Under Prescription (TAUP):
  - Falling Boundary (Orange line)
  - External to Falling Bdy (Orange line)
- Falling Corner (Red square)
- SP Plot (Purple circle)
- Standard Unit Boundary (Dashed red line)
- Existing Road (Double line)
- Existing Trail (Dashed green line)
- New Road Construction:
  - Haul Road (Pink dashed line)
  - Temporary (Rehab) (Pink dashed line with 'X')
  - Bladed Skid Trail (Orange dashed line)
  - Designated Skid Trail (Yellow dashed line)
  - Backspar Trail (Purple dashed line)
- Favourable Grade > 18% (Red line)
- Excessive Adverse Grade (Red line)
- Detailed Engineering - EH (Yellow line)
- Prescribed Reconstruction (Yellow line)
- Road Chainage (0+200)
- Bridge (Existing) (Red line with arch)
- Bridge (Proposed) (Red line with arch)
- Culvert (Existing) (Red line with 'X')
- Culvert (Proposed) (Red line with 'X')
- Rock Outcrop Area (Black hatched)
- Proposed / Designated Stream Crossing (Blue diamond)
- Gravel Pit (GP in box)
- Transmission Line (Red line with 'S')
- Slide (Red line with 'S')
- Gully (Red line with 'S')
- Rock Outcrop (Black hatched)
- Windfall/Snag (Black hatched)
- Marsh/Swamp (Blue hatched)
- Index Contour and Label (Grey line with '100')
- Intermediate Contour (Grey line with '100')
- Landing/Temporary Landing (Blue diamond)
- Log Dump/Helipad (LD in box)
- Spoil Site (S in box)
- Quarry (QU in box)
- Geographic Centre (Yellow circle)

Scale: 1:5,000

Digital Mapping by: CHARTWELL

Project Number: 17-5215  
 Drawn By: MH  
 Date: 2018-01-25