

Big Thorne Stewardship Integrated Resource Timber Contract

Rush Peak Subdivision 2

Contract Report

Thorne Bay Ranger District

08/15/2013

Table of Contents

	<u>Page</u>
I. Introduction	3
A. Planning History and NEPA Document	3
II. Description of Timber Contract	3
A. Location	3
B. Size of Contract and Cutting Units	3
C. Timber Specifics	3
1. Timber Cruise	3-4
2. Volume and Grade	4
3. Sale Characteristics	4
III. Contract Management Aspects	5
A. Operating Period	5
B. Contract Type	5
C. Appraisal Point	5
D. Appraised Rate	5
E. Performance Bond	5
F. Bid Guarantee	5
G. Mobilization	5
H. Fire Liability Calculations	5
IV. Silvicultural Aspects	5-6
V. Logging Systems	7
VI. Harvest Designations	8
VII. Transportation Facilities	8
A. Specified Roads	8
B. Temporary Roads	8
C. MAF (Marine Access Facility)	9
D. Right-of-Way	9
VIII. Other Land Management Aspects and Special Conditions	9
IX. Summary of Constructed Costs	9
A. Road Maintenance Deposits	9
B. Surface Rock Replacement Deposits	9
C. Mandatory / Optional Stewardship Items	9
X. Slash Disposal	10
XI. Unit Summaries	10-12
XII. Quality Control Certification	13

I. Introduction

A. Planning, History and NEPA Document

The Big Thorne Stewardship Contract (IRTC) was analyzed and cleared by the Big Thorne Timber Sale FEIS. Forrest Cole, Forest Supervisor, signed the Record of Decision on [June 28, 2013](#). The Record of Decision and other relevant NEPA documents are available at the Thorne Bay Ranger District, Thorne Bay, Alaska and online at <http://www.fs.usda.gov/tongass/>.

II. Description of Timber Contract

A. Location

The Big Thorne Stewardship Contract –*Rush Peak Subdivision 2* is located on Prince of Wales, within the boundaries of the Thorne Bay Ranger District of the Tongass National Forest. It is approximately 7 air miles southwest of the City of Thorne Bay, Alaska. The USGS quadrangle coverage is [Craig C-2 and C-3](#). The short legal description of the project area is; [T71S, R82E, Sections 23, 24, 25, 26, 35 and 36; T72S, R82E, Sections 1, 2, 10, 11, 12, 13, 14, 15, 22, 23 and 24; T71S, R83E, Sections 13, 14, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35 and 36; T72S, R83E, Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 23, 24 and 26 ; T71S, R84E, Sections 19, 28, 29, 30, 31, 32, 33, 34, 35 and 36; T72S, R84E, Sections 1, 2, 3, 4, 5, 7, 9, 10, 11, 12, 14, 15, 16, 18 and 22; T71S, R85E, Section 31; and T72S, R85E, Section 6; Copper River Meridian.](#)

B. Size of Sale and Cutting Units

The Big Thorne Stewardship contract- *Rush Peak Subdivision 2* consists of [27](#) harvest units totaling approximately [496](#) acres; [336](#) acres are identified for Even Aged Harvest/Clearcutting and identified on the Contract Area Map as CC, [3](#) acres are identified for Individual Tree Marking/Cut Tree Mark and are identified on the Contract Area Map as CTM and [157](#) acres are identified for Uneven Aged Harvest/Designation and are identified on the Contract Map as DxPRE. Cutting Unit boundaries are marked with vertical stripe orange paint, orange tags and pink flagging. Sample Trees within the units were marked with white paint and red and white flagging during the cruise process.

C. Timber Specifics

1. Timber Cruise

The volume estimates for the Clearcut units and Uneven Aged Harvest units were derived from a PNT Variable Plot cruise. The cruise was calculated in MBF using FS Cruiser and Cruise Processor. The Net Sawlog combined sampling error for the *Rush Peak Subdivision 2* is [15.75](#) % which meets the Forest Service sampling error requirement for scaled sales. The minimum merchantable tree and piece size specification is 9.0 inches DBH, containing a 12-foot long log, and 6-inch top minimum diameter log.

The Individual Tree Marked/Cut Tree Marked Units were identified to allow for Reasonable Assurance of Wind Firmness (RAW). The volume estimates for the Individual Tree Marked/Cut Tree Marked Units in this contract were derived from a Sample Tree Cruise. The cruise was calculated in MBF using FS Cruiser and the Cruise Processor. 12% of the RAW units are in the **Rush Peak Subdivision 2**. The Net Sawlog combined sampling error for all of the RAW units is 19.19% which meets the Forest Service sampling error requirement for scaled sales. The minimum merchantable tree and piece size specification is 9.0 inches DBH, containing a 12-foot long log, and 6-inch top minimum diameter log.

**For Cruise Report Information and Cruise Plot Maps, please contact Stanley McCoy; TMA, at the Thorne Bay Ranger District at (907) 828-3244.*

2. Volumes and Grade Distribution:

Weighted Average Grade Distribution by Species - SAWLOG

Species	P/S	1	2	3	5	6	
Hemlock	36.74	248.27	2189.82	2480.44	0.00	0.00	4955.27
Sitka Spruce	119.38	326.88	1068.72	624.94	0.00	0.00	2139.92
Alaska Cedar	5.37	88.13	341.90	279.00	0.00	59.69	774.09
Western Red Cedar	0.00	0.00	0.00	0.00	1645.82	0.00	1645.82
Total	161.49	663.28	3600.44	3384.38	1645.82	59.69	9515.10

Derived from Cruise Report R003 Log Grade Summary.

3. Sale Characteristics

Rush Peak Subdivision 2
Sale Characteristics
32 ft. Logs/MBF Gross = 4.76
Ave. MBF Gross Removed/Acre = 15.28
% Woods Defect (with utility) = 41.86
% Scaling Defect (without utility) = 16.02
Weighted Average DBH = 17.24

**Numbers derived from Cruise Report R001 Appraisal Summary Report.*

III. Contract Management Aspects

A. Operating Period.

The Big Thorne Stewardship Contract is planned for operations to be completed in **ten (10)** normal operating seasons. The normal operating season runs from May 1st through October 31st. Termination date will be **September 25, 2023**.

B. Contract Type - This is an Integrated Resource Timber Contract (IRTC), FS-2400-13 Scaled.

C. Appraisal Point

The timber has been appraised for haul to **Klawock, Alaska**. The average truck haul from the **Rush Peak Subdivision 2** to Klawock is approximately **30** miles one-way.

D. Appraised Rates.

Rush Peak Subdivision 2	
Species	Species Volume by %
Western Hemlock Sawlogs	49%
Sitka Spruce Sawlogs	18%
Alaska Yellow Cedar Sawlogs	8%
Western Red Cedar	25%
Utility	
Western Hemlock Utility	85%
Sitka Spruce Utility	15%

E. Performance Bond – The Performance Bond for the Big Thorne Stewardship Contract is \$250,000.00.

F. Bid Guarantee. – No Bid Guarantee is required for this contract.

G. Mobilization - Cost of mobilization is included in the appraisal.

H. Fire Liability Costs for the contract are \$71,000.

IV. Silvicultural Aspects

The harvest unit prescriptions in this project are identified for Even Aged Clearcut (CC), Individual Tree Marking/Cut Tree Mark (CTM), and Uneven Aged Harvest/ Designation by Prescription (DxPre). Refer to contract Special Provision, K-C.3.5.5#, Designation by Prescription for individual

unit prescriptions and more detailed information on the silvicultural aspects of this contract.

V. Total Acres by Logging Systems and Estimated Sawlog Volume per Unit

**For cable units, lift trees may be within unit boundaries and should be designated before felling.*

Rush Peak Subdivision 2							
Acres by Logging System							
Unit Number	Appraised Logging Systems and Acres						Estimated Sawlog Volume per Unit
	Total Acres	Appraised Logging System Acres					
		Shovel Clearcut	Cable Clearcut	CTM 25% Removal	Helicopter 25% Removal	Helicopter 50% Removal	
33	7					7	153.83
34	8	8					147.87
35	12		12				226.8
36	38	8	30				702.35
37	18	5	13				332.69
38	36					36	692.23
42	47	30	17				887.18
43	10	7	3				184.83
44	10	10					184.83
46	19		19				351.18
47	18		18				332.69
48	13	13					240.29
50	27	27					499.04
52	24	1	23				443.59
54	24		24				443.59
55	16		16				295.73
56	18		18				332.69

58	12		12				221.8
59	22		22				406.62
834	2			2			59.26
850	1			1			19.1
936	17					17	326.88
937	34					34	653.78
944	24				24		461.49
946	8					8	153.83
947	18					18	365.35
959	13					13	249.97
Totals	496	109	227	3	24	133	
Estimated Sawlog Volume							9,370

Rush Peak Subdivision 2		
Volume by Logging System		
Logging System	Sawlog Volume (MBF)	% by Volume
Shovel	2,155	23%
Cable	4,498	48%
Helicopter	2,717	29%
Total	9,370	100%

**The above listed logging systems were used by the Forest Service in calculating the stump-to-truck cost in the appraisal. These logging systems are not required by the contract. However, the contractor is to include logging systems and yarding methods that will meet the end results as part of their technical proposal.*

VI. Harvest Designations:

Cutting Unit boundaries are marked with vertical orange stripes, orange tags and pink flagging. Sample Trees within the units are marked with white paint and red and white flagging during the cruise process.

Units that are identified as Individual Tree Marking/Cut Tree Marking (CTM), as designated on the Contract Area Map, are marked with blue paint bands and stump marks and designated for harvest.

Units that are identified for Uneven Aged Harvest/Designation by Prescription (DxPRE), as designated on the Contract Area Map, are required to meet the diameter by prescription requirements, DxPRE that are designated for harvest.

Units that are identified as Even Aged Harvest/ Clearcut (CC) are designated on the Contract Area Map.

VII. Transportation Facilities

A. Specified Roads

Refer to the Engineering Road package for road specifications. Specified road costs for the Rush Peak Subdivision are \$358,429.64.

Pre and Post Haul maintenance costs have been included in the RV Appraisal. Estimated costs for the Rush Peak Subdivision 2 are \$34,208.41.

B. Temporary Roads

In the *Rush Peak Subdivision 1* construction of approximately 2.14 miles of temporary road is included by the Forest Service in the appraisal. Additionally, approximately 0.58 miles of temporary road reconditioning costs have been included in the appraisal. Landings of approximately 500 square feet have been appraised for shovel and small yarder landings, and landings of approximately 1500 square feet have been appraised for large yarder landings. Cost included in the appraisal is \$426,503.78

**Construction of these roads is not required by the contract. However, the contractor is to include any proposed temporary road construction that will meet the end results as part of their technical proposal.*

TEMPORARY ROAD ESTIMATES USED FOR APPRAISAL PURPOSES ONLY

Rush Peak Subdivision 2		
<i>Unit Number</i>	<i>Length of Proposed Temporary Road</i>	<i>Length of Reconditioned Road</i>
34	0.11	0.00
36	0.12	0.00
37	0.22	0.00
42	0.41	0.00
44	0.07	0.00
46	0.13	0.00
47	0.40	0.00
50	0.43	0.43
52	0.04	0.00
54	0.03	0.00
55	0.04	0.00
56	0.14	0.15
Total	2.14	0.58

C. Marine Access Facility (MAF) - N/A

D. Right-of-Way- N/A

VIII. Other Land Management Aspects and Special Considerations – Refer to the Big Thorne Stewardship Summary – All Subdivisions report for information.

IX. Summary of Constructed Costs

A. Deferred Road Maintenance Deposit: Refer to the Big Thorne Stewardship Summary Report.

B. Surface Rock Replacement Deposits: Refer to the Big Thorne Stewardship Summary Report.

C. Stewardship Items

Item #	Mandatory Stewardship Items - Description
M1	Balls Lake Trail – Renovation of the 2.3 mile Balls Lake Trail; Trail connects to Eagle Nest’s Campground. Project will place step and run boardwalk in the remaining eroding sections of trail (4,250 feet).
M2	Boy Scout Trail – Renovation of a portion of the Boy Scout Lake area, All Terrain Vehicle (ATV) trail.
M3- M49	Wildlife Habitat Improvement – Pre-commercial thinning of 16’ X16’ Spacing

Item #	Optional Stewardship Items - Description
O50- O91	Wildlife Habitat Improvement – Pre-commercial thinning of 14’ X14’ Spacing
O92	Luck Creek Restoration Haul logs, rootwads, and harvest young growth for future instream spacing.

X. Slash Disposal

All logging debris shall be removed from road surfaces, cut banks, drainage ditches, and out of protected streams as directed by the Forest Service.

X1. UNIT SUMMARIES – The information in the following unit summaries was used by the Forest Service for Forest Service appraisal purposes *only*. Offerors are to make their own technical proposals on units.

Rush Peak Subdivision 2								
Unit Number	Appraised Logging Systems and Acres						Appraised Access	
	Total Acres	Appraised Logging System Acres					Access Road Number	Temporary Road Length
		Shovel Clearcut	Cable Clearcut	CTM 25% Removal	Helicopter 25% Removal	Helicopter 50% Removal		
33	7					7	FS Road 3012200 and FS Road 3012000	N/A
34	8	8					FS Road 3012000 and FS Road 3012200	.11 Miles
35	12		12				FS Road 3012000 and FS Road 3012100	N/A
36	38	8	30				FS Road 3012000 and FS Road 3012140	.12 Miles
37	18	5	13				FS Road 3012000 and FS Road 3012180	.22 Miles
38	36					36	FS Road 3012000	N/A
42	47	30	17				FS Road 3013000 and FS Road 3013100	.41 Miles
43	10	7	3				FS Road 3013000 and FS Road 3013200	N/A
44	10	10					FS Road 3013000	.07 Miles
46	19		19				FS Road 3013000	.13 Miles
47	18		18				FS Road 3013000	.40 Miles

48	13	13					FS Road 3013000, FS Road 3013150 and FS Road 3013155	N/A
50	27	27					FS Road 3013000, FS Road 3013150 and FS Road 3013155	.43 Miles and .43 Miles Reconstru ction
52	24	1	23				FS Road 3013000 and FS Road 3013150	.04 Miles
54	24		24				FS Road 3013000 and FS Road 3013150	.03 Miles
55	16		16				FS Road 3013000 and FS Road 3013150	.04 Miles
56	18		18				FS Road 3013000 and FS Road 3013150	.14 Miles and .15 Miles Reconstru ction
58	12		12				FS Road 3013000 and FS Road 3013150	N/A
59	22		22				FS Road 3013000 and FS Road 3013150	N/A
834	2			2			FS Road 3012000 and FS Road 3012200	Refer to Unit 34
850	1			1			FS Road 3013000, FS Road 3013150 and FS Road	Refer to Unit 50

							3013155	
936	17					17	FS Road 3012140 and FS Road 3012000	N/A
937	34					34	FS Road 3012180 and FS Road 3012000	N/A
944	24				24		FS Road 3012200 and FS Road 3013000	N/A
946	8					8	FS Road 3013000	N/A
947	18					18	FS Road 3013000	N/A
959	13					13	FS Road 3013150 and FS Road 3013000	N/A
							FS Road 3012200 and FS Road 3012000	N/A
Totals	496	109	227	3	24	133	FS Road 3012000 and FS Road 3012200	.11 Miles

IX. Quality control Certification

The District Ranger certifies that contract preparation and layout meet the specifications of the environmental document authorizing this project, and that:

- a. Silvicultural treatments, prescribed by a qualified silviculturist, are appropriate to the management objectives of the contract.
- b. Designated trees and harvest units represent proper silvicultural prescriptions.
- c. Considering quality land management objectives, the most economical logging systems were chosen.
- d. Resources other than timber were considered in the layout, and the contract. Adverse effects were avoided by careful layout.
- e. Fire protection, prescriptions, erosion control, and other phases of environmental protection were included in the field layout, and in the contract.
- f. The timber cruise for this contract meets all regional standards and guidelines.

Prepared by: /s/ Katherine J.D. O'Hagan
Forester

Date: 07/15/2013

Updated by: /s/Nancy Soriano
Timber Resource Specialist

Date: 08/13/2013

Reviewed by: /s/ Craig Anderson
Timber Sale Preparation Program Manager

Date: 8/15/2013

Approved by: /s/ Charles Streuli
Ecology, Fire and Forest
Management Staff Officer

Date: 8/16/2013