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FEB 2 5 2014

To: Sharon Hadway, Regional Executive Director, West Coast Region

Heather MacKnight, Regional Executive Director, South Coast Region

From: The Honourable Steve Thomson, Minister of Forests, Lands and Natural Resource

Operations

Re: Amendment No. 1 to the Coast Appraisal Manual

I hereby approve Amendment No. 1 to the *Coast Appraisal Manual* and attach a copy for your use. The following section has been amended:

Section 5.3.4(6) Clarifies when mobilization and demobilization costs can be included.

Section 7.2 New district and updated community forest and woodlot rate table.

Appendix VI Updated list and coordinates for several appraisal log dumps.

Appendix VII Housekeeping,

This amendment will come into force on March 1, 2014. Further amendments or revisions to this manual require my approval.

Steve Thomson

Minister

Attachment

pc: Murray Stech, Director, Timber Pricing Branch



MANUAL REVISION TRANSMITTAL

FOR FURTHER INFORMATION OR IF YOU HAVE A CHANGE OF ADDRESS, PLEASE CONTACT:

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MANUAL TITLE

Coast Appraisal Manual

AMENDMENT Amendment No. 1 ISSUE DATE
March 1, 2014

MANUAL CO-ORDINATOR

Ashley Sasaki

Publication/Administrative Co-ordinator

AUTHORIZATION

Murray Stech

Director, Timber Pricing Branch

Please make the following changes to your copy of the above Ministry manual.

ACTION	(VOL.) CHAPTER-SECTION-SUBJECT		
(Remove/Insert)	TABLE OF CONTENTS	PAGE(S)	COMMENTS
Remove Insert	Table of Contents	1-6	After Table of Contents Tab
Remove Insert	Chapter 5	15-16	After Chapter 5 Tab
Remove Insert	Chapter 7	3-4	After Chapter 7 Tab
Remove	Appendix	13-14 25-26 27-28 35-36	After Appendix Tab
Remove Insert	Index	1-4	After Index Tab
INSERT	Letter from Minister and Transmittal Sheet		After Amendments Tab

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Table 5-4 Culvert Cost Estimate

Diameter (m)	Cost per lineal metre	Diameter (m)	Cost per lineal metre
0.3	\$56.00	0.9	\$172.00
0.4	\$66.00	1.0	\$184.00
0.5	\$92.00	1.2	\$323.00
0.6	\$115.00	1.4	\$320.00
0.7	\$132.00	1.6	\$536.00
0.8	\$148.00	1.8	\$610.00

5.3.4 Non-tabular Cost Estimates

- 1. The cost for any of the non-tabular projects identified in section 5.3.1.1(4)(a) will be estimated by preparing a non-tabular cost estimate. The regional manager may approve a standardized methodology to estimate the cost for the following projects:
 - a. end hauling,
 - b. road reconstruction and replacement,
 - c. stabilizing material, including:
 - i. capping,
 - ii. surfacing,
 - iii. material hauls (greater than 3.2 km),
 - iv. bridge approaches,
 - v. fords,
 - vi. culverts,
 - vii. keyed-in fills,
 - d. overlanding, including:
 - i. trucked in fills,
 - ii. large fills,

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- iii. stored fills,
- e. permanent bridge construction,
- f. bridge structural repair.
- g. regional manager approved tributary development projects.
- 2. The cost information contained in Appendix VIII is to be used in conjunction with the Detailed Engineering Estimates for Coast Stumpage Appaisal February 1, 2001 and as amended to September 1, 2002.
- 3. The following non-tabular cost estimate projects require notification by the licensee to the district manager prior to commencement of construction:
 - a. road reconstruction,
 - b. re-surfacing, or
 - c. permanent bridge construction.

Notification must allow a minimum of fifteen (15) work days, or such other time as may be mutually agreed to between the district manager and the licensee. Such notification is needed to provide time for a field review of pre-construction site conditions.

- 4. Regional manager approved development projects require notification by the licensee to the regional manager. Sufficient lead time will be determined on a project by project basis.
- 5. The road development project cost estimate will be based on the data that is required by the regional manager and the equipment and labour rates as specified in Appendix I. Where a piece of equipment required to complete the project is not included in Appendix I then the equipment rate may be obtained from the 2011 2012 Equipment Rental Rate Guide 'The Blue Book'. Where a required piece of equipment is in neither Appendix I nor the 'Blue Book', approval for any other rate must be obtained from the regional manager for use in the project cost estimate. All equipment rates are assumed to be for a 3 year old machine using the July 1, 2011 cost base.
- 6. Where equipment is not, or will not be already on site for adjoining tabular road, bridge or culvert construction, then the costs of mob and demob may be included in the non-tabular cost estimate.
- 7. Where the cost of a project is the subject of a contract entered into after arms-length competitive bids have been made for the contract, the cost of completing that project may be used as the development project cost estimate where that is authorized by the regional manager.

7.2 Community Forest Agreements and Woodlot Licences

1. a. Except as provided for under section 7.2.1, the sawlog stumpage rate (\$/m³) for each species of coniferous timber and zone harvested under a cutting authority issued under a community forest agreement or woodlot licence and their associated road permits will be:

	Zone				
Species	Northern Coast	Southern Coast			
Balsam	\$0.34	\$0.33			
Hemlock	\$0.29	\$0.41			
Cedar	\$0.51	\$0.93			
Cypress	\$0.54	\$0.38			
Fir	\$0.25	\$0.58			
Spruce	\$0.25	\$0.42			
Other	\$0.37	\$0.54			

- b. The Northern Coast Zone is the Haida Gwaii Forest District, North Coast Forest District and that part of the North Island-Central Coast Forest District within TFL 25 and all Crown land within the Mid-Coast Timber Supply Area boundaries.
- c. The Southern Coast Zone is the Coast Forest Region except the Northern Coast Zone as defined in 1(b).
- d. The stumpage rate determined under paragraph (a) of this subsection shall be redetermined on March 1st of each year in accordance with this subsection.
- 2. The sawlog stumpage rate for each species of coniferous timber harvested under a salvage permit issued under a woodlot licence is the rate prescribed in the table in section 7.2(1)(a) for the zone in which the salvage permit applies.
- 3. Section 7.3, 7.4, 7.4.1, 7.5 and 7.6 do not apply to community forest agreements, woodlot licences and associated road permits.

7.2.1 Woodlot Licences with Cutting Authorities under MPS

- 1. Where a cutting authority has been issued under a woodlot licence with an effective date after November 30, 2008, with an extended road amortization agreement that has been entered into under section 5.3.2.1, the stumpage rate will be calculated using the market pricing system.
- 2. The sawlog stumpage rate for a road permit is calculated using the procedures in section 7.3 until a cutting permit has been issued with tabular rates as specified under section 7.2(1)(a). Stumpage rates for road permits will also change to tabular rates on that date.

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District: Sunshine Coast							
	AL D	Co-oı	ordinates (Approximately)				
Location	ALD Code	Latit	tude	Long	Longitude		
	Code	Degrees	Degrees Minutes I		Minutes		
Toba Inlet - Higgins Bay	TOHB	50	22	124	40		
West Redonda Island - Desolation	WRDE	50	08	124	46		
West Redonda Island - Doctor Bay	WRDB	50	15	124	49		
West Redonda Island - Lewis Channel	WRLC	50	12	124	56		
West Redonda Island - Redonda Bay	WRRB	50	15	124	57		
West Redonda Island - Talbot Cove	WRTC	50	10	124	52		
West Redonda Island - Teakerne Arm	WRTA	50	11	124	49		

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Squamish Forest District

District: Squamish								
	ALD	Co-ordinates (Approximately)						
Location	Code		Latitude			Longitude		
		Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	
Squamish Mills DLS	SQUA	49	41	07	123	09	25	
West Barr DLS	WBAR	49	42	02	123	10	08	
Watts Point DLS	WATT	49	39	20	123	12	57	
¹ Harrison Lake – Head	HLHE	49	44	14	122	08	49	
¹ Indian Arm	INDA	49	27	50	122	52	39	

Haida Gwaii Forest District

District: Haida Gwaii							
	ALD	Co-ordinates (Approximately)					
Location	Code	Latitude			Longitude		
		Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
Cumshewa Inlet - Beatty Anchorage, Louise Island DLS	CUBE	53	01	29	131	53	49
Masset Inlet - Collison Point Dump	MICP	53	47	80	132	13	23
Masset Inlet - Dinan Bay DLS	MIDB	53	41	42	132	36	13
Masset Inlet - Ferguson Bay DLS	MIFB	53	40	13	132	17	25
Masset Inlet – McClinton Bay DLS	MIMB	53	38	53	132	35	27
Masset Inlet – Port Clements, Abfam Mill	MIAM	53	42	00	132	10	20
Masset Inlet – Port Clements, O'Brien DLS	MIOB	53	42	07	132	10	13
Naden Harbour - Colnett Point DLS	NHCP	53	58	34	132	40	22
Naden Harbour - Davidson DLS	NHDA	53	59	33	132	34	13
Rennell Sound - Clonard Bay Dump	RSCB	53	20	58	132	30	41
Rennell Sound - Rennell Sound DLS	RSRS	53	21	28	132	27	44
Sewell Inlet - Sewell Inlet DLS	SISI	52	52	42	131	58	28
Skidegate inlet - Alliford Bay DLS	SIAB	53	12	23	131	59	01
Skidegate Inlet - Long Inlet, Lagins Creek DLS	SILI	53	13	27	132	18	47
Skidegate Inlet - Queen Charlotte City, Skidegate DLS	SIQC	53	15	05	132	06	24
Skidegate Inlet - South Bay DLS (South of Sandilands Island)	SISB	53	09	37	132	04	02
Van Inlet - (South of Rennell Sound)	VIRS	53	17	07	132	30	22

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¹ Located in Chilliwack F.D., but can be used for Forest District appraisals.

District: North Island - Central Coast								
	ALD	Co-ordinates (Approximately)						
Location	Code		Latitude			Longitude		
		Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	
Hardy Inlet	HARD	51	41		127	33		
Hardy Inlet - MacNair DLS	HAMA	51	42		127	34		
Holberg	HOLB	50	39		128	00		
Holberg Inlet - Hushamu Creek	HOHU	50	36		127	46		
Holberg Inlet - Michelsen Point	HOMI	50	35		127	42		
Hopetown Passage	HOPE	50	55		126	50		
Jennis Bay DLS	JENB	50	55		127	01		
Jenny Inlet DLS - King Island	JNKI	52	14		127	36		
Johnson Channel	JOHN	52	12	18	127	54	30	
Kimsquit DLS	KIMS	52	52		127	05		
Kingcome Inlet DLS	KIDL	50	56		126	13		
Kingcome Inlet - Anchorage Cove	KIAC	50	54		126	12		
Knight Inlet – Head	KIHD	50	05		125	35		
Knight Inlet, Blind Creek	KIBC	50	41		125	42		
Knight Inlet, Escape Point	KIEP	50	52		125	41		
Knight Inlet, Glendale Cove	KIGC	50	40		125	44		
Knight Inlet, Hoeya Sound	KIHS	50	42		125	58		
Knight Inlet, Lull Bay	KILB	50	42		126	01		
Knight Inlet, Matsui Creek	KIMC	50	42		125	49		
Knight Inlet, Prominent Point	KIPP	50	40		126	01		
Knight Inlet, Protection Point	KIPR	50	39		126	10		
Knight Inlet, Sallie Creek	KISC	50	43		125	43		
Knight Inlet, Tsakonu Cove	KITC	50	38		126	10		
Kokish	KOKI	50	32		126	51		
Koprino Harbour	KOPR	50	30		127	52		
Kwatna Bay DLS	KWAT	52	06		127	24		
Kwatna Inlet, Quatlena	KWQU	52	03		127	35		
¹ Loughborough Inlet (Head) – Stafford Lake	LISL	50	43		125	28		
MacKenzie Sound DLS	MKSD	50	56		126	39		
Mahatta River	MAHA	50	28		127	48		
Malcolm Island, Mitchell Bay	MALC	50	38		126	51		
Mathieson Channel, Tom Bay	MATB	52	24		128	16		
Mereworth Sound DLS	MESD	51	13		127	24		
Moses Inlet	MOIN	51	49		127	22		

-

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¹ Located in Campbell River F.D., but can be used for North Island – Central Coast appraisals.

	ALD			ates (App	ates (Approximately)		
Location	Code		Latitude		· · · · · ·	Longitude	1
		Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
Neroutsos Inlet - Thurburn Bay	NETB	50	23		127	29	
North Broughton Island, Tracey Harbour	NBTH	50	51		126	51	
Nimpkish DLS	NIMP	50	33		126	52	
Ocean Falls, Link Lake DLS	OFLL	52	21		127	41	
Owikeno Lake, Macmell, Neechanz DLS	OLMN	51	40		126	41	
Owikeno Lake, Sheemahant DLS	OLSH	51	44		126	38	
Pack Lake	PACK	51	10		127	28	
Pooley Island - James Bay	PIJB	52	42		128	13	
Quatsino DLS	QUAT	50	28		127	31	
Quatsino Sound - Ingersoll	QUSI	50	29		127	41	
Port Hardy - Shushartie DLS	PHSH	50	43		127	29	
Port McNeill	PTMN	50	36		127	06	
Port McNeill - WFP DLS	PMWF	50	36		127	07	
Rivers Inlet - Kilbella Bay	RIKB	51	42		127	20	
Rivers Inlet - Owikeno First Nations DLS	RIOW	51	41		127	16	
Rivers Inlet - Ripon Island	RIRP	51	29		127	37	
Roderick Island - Griffen Passage, DLS	ROGP	52	44		128	21	
Sargeaunt Pass	SARG	50	42		126	12	
Seaforth Channel	SEAF	52	14		128	19	
Seymour Inlet - East Head	SEEH	51	12		126	39	
Seymour Inlet, Warner Bay	SEWB	51	02		127	06	
Seymour Inlet, Wigwam Bay	SEWI	51	08		126	43	
Seymour Inlet - Woods Lagoon	SEWO	51	01		127	18	
Shearwater DLS	SHEA	52	09		128	05	
Simoon Sound	SISO	50	51		126	32	
Smith Inlet, Walkum Bay	SIWB	51	21		127	07	
South Bentinck Arm, Bentinck Narrows	SBBN	52	00		126	41	
South Bentinck Arm, Larso Bay	SBLB	52	11		126	52	
South Bentinck Arm, Noeick River	SBNR	52	03		126	41	
South Bentinck Arm, Taleomy	SBTA	52	00		126	40	
South Bentinck Arm - West Side	SBWS	52	06		126	47	
Spiller Inlet – Snass Lake	SISL	52	30	49	128	05	48
Spiller Inlet – Ingram Lake	SIIL	52	37	34	128	02	07
Strachan Bay	STRA	51	10		127	28	

District: North Island - Central Coast						
	ALD Code	Co-ordinates (Approximately)				
Location		Latitude		Longitude		
		Degrees	Minutes	Degrees	Minutes	
Thompson Sound DLS	THSD	50	48	126	01	
Tribune Channel, London Point	TCLP	50	47	126	07	
Wakeman Sound	WAKE	51	02	126	31	
Walbran Island, Taylor Bay	WITB	51	30	127	36	
Wallace Bay - Cousins Inlet	WBCI	52	17	127	45	
Watson Island - Turnbull Cove	WITC	50	57	126	49	
West Cracroft Island - Port Harvey	WCPH	50	34	126	17	
West Cracroft Island - Potts North	WCPN	50	34	126	28	
West Cracroft Island - Potts South	WCPS	50	33	126	26	
Yeo Cove, Yeo Island	YCYI	52	18	128	11	

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Appendix VII Definition of 'Bankheight' Tabular Road Categories

OMLB Other Material – Local Ballast

Other material and rock/hardpan that does not require drilling and blasting - ballast/surface with local material (i.e., no truck haul) - includes patch ballasting and surfacing with endhaul material.

OMPR Other Material – Pit Run Ballast

Other material that does not require drilling and blasting and surfacing is pit run material (i.e., not drilled and blasted) or stored end haul material,

requiring truck haul.

OMRB Other Material – Rock Ballast

Other material that does not require drilling and blasting and surfacing is

quarried (i.e., drilled and blasted) rock.

TOE Low rock face height. Rock (including hardpan) that must be drilled

and blasted and results in up to 1.50 metre inside rock face. Includes

ditchlines or boulders less than 1.50 metres in height that require drilling and

blasting.

MRK Medium rock face height. Rock (including hardpan) that must be drilled and

blasted and results in a 1.51 to 3.00 metre inside rock face. Includes boulders

between 1.51 and 3.00 metres in height that require drilling and blasting.

HRK High rock face height. Rock (including hardpan) that must be drilled and

blasted and results in a 3.01 to 4.50 metre inside rock face. Includes boulders

between 3.01 and 4.50 metres in height that require drilling and blasting.

XRK Rock (including hardpan) that must be drilled and blasted and results in a 4.51

to 6.00 metre inside rock face. Includes boulders between 4.51 and 6.00

metres in height that require drilling and blasting.

XXRK Rock (including hardpan) that must be drilled and blasted and results in a 6.01

to 7.50 metre inside rock face. Includes boulders between 6.01 and 7.50

metres in height that require drilling and blasting.

- b. The cost estimates assume borrow pits are located adjacent to a road right-of-way. If an access road must be constructed to a borrow pit to build a road to a cutting authority area (the cutting authority area road), then a road cost estimate may be calculated for that access road and included as part of the road development adjustment in the appraisal of the first cutting authority area accessed by the cutting authority area road.
- c. Where the material to be used to stabilize the subgrade will be moved less than 0.1 km, the cost estimate for each material is:

i.	Gravel	\$5.65/m ³
ii.	Soft and Medium Rock	\$9.03/m ³
iii.	Hard Rock	\$11.86/m ³

Where: $m^3 = \text{cubic metre of stabilizing material}$

d. Where the material to be used to stabilize the subgrade must be moved a distance of 0.1 km or further, the cost estimate for each material is:

i.	Gravel	\$(7.74 + 0.616 d)/m ³
ii.	Soft and Medium Rock	\$(11.11 + 0.616 d)/m ³
iii.	Hard Rock	$(13.94 + 0.616 d)/m^3$

Where:

'd' is the distance that the material must be moved from the source of the material to the mid-point of the road section to be stabilized.

- e. In this section:
 - i. 'Soft-medium-Rock' is rock where less than 60 percent of the rock from the excavation is RMC 5.
 - ii. 'Hard Rock' is rock where 60 percent or more of the rock from the excavation is RMC 5.

VIII.5 Capping

- 1. Where the available material consists of large round or broken rock or 'dirty' or fine gravel which is unsuitable for normal traffic conditions, the appraisal may include a cost estimate for 'capping' of 0.2 m (loose depth) of suitable rock or gravel surfacing on road sections where required and providing the application is substantiated. This material is trucked in from a different borrow pit than the source of the stabilizing material unless the material has been sorted in the pit.
- 2. For further information, refer to the surfacing section in the regional manager's standardized methodology (i.e., Detailed Engineering Estimates for Coast Stumpage Appraisal, February 1, 2001).

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