# TIMBER SALE LICENCE TA0915

BETWEEN:

THE TIMBER SALES MANAGER, on behalf of
HER MAJESTY THE QUEEN IN RIGHT
OF THE PROVINCE OF BRITISH COLUMBIA,
(the "Timber Sales Manager")

AND:

Kootenay Innovative Wood Ltd.
Box 3000
Castlegar, British Columbia
V1N 3L8

(the "Licensee")

**WHEREAS**:

A. On May 12, 2017 the Minister approved a forest stewardship plan identifying the areas authorized to be harvested under this Licence, except for areas exempted from the requirement for a forest stewardship plan;

B. The Crown timber authorized to be harvested under this Licence is certified pursuant to Sustainable Forestry Initiative (SFI) forest certification, registration # PRI-SFI-FM-057, and the Timber Sales Manager has subscribed to specific objectives in planning the Licence as set out in the BC Timber Sales Provincial SFI Sustainable Forest Management Plan;

C. Applications for this Licence were invited by advertising in the prescribed manner under SECTION 20 OF THE *FOREST ACT*;

D. Applications were restricted to BC timber sales enterprises;

E. The Licensee is registered as a BC timber sales enterprise in the appropriate category;

F. The Licensee has offered, among other things, to pay stumpage under Part 7 of the *Forest Act* and a bonus bid of $18.00/m³ in respect of timber authorized to be harvested under this Licence;

G. The Licensee's application was approved by the Timber Sales Manager under SECTION 20 OF THE *FOREST ACT*; and

H. The parties have entered into this Licence as required under SECTION 20 OF THE *FOREST ACT***.**

**THE PARTIES** agree as follows:

## 1.00 GRANT OF RIGHTS AND TERM

1.01 Subject to this Licence, the Licensee

(a) may during the term of this Licence harvest merchantable Crown timber from the areas of land authorized to be harvested on the map attached as Exhibit "A" to this Licence (the cutting authority area), and

(b) for the purpose of exercising the rights under this Licence may enter onto these areas.

1.02 The Licensee must not fell, buck or remove timber that is standing, dead or down, as the case may be, if

(a) the timber is specified as reserved timber elsewhere in this Licence, or

(b) under an operational plan or the forestry legislation, the Licensee must not fell, buck or remove the timber, for any reason, including silviculture, biodiversity or other forest management reasons, unless otherwise provided in Schedule "A" to this Licence.

1.03 The term of this Licence commences on the date the Timber Sales Manager signs this agreement and ends on the earlier of 18 months after that date or the date that the Timber Sales Manager gives notice to the Licensee that all contractual and legislative obligations associated with this Licence have been completed.

1.04 This Licence is not replaceable under the *Forest Act*.

## 2.00 EXTENSIONS

2.01 The term of this Licence may be extended subject to the *Forest Act*.

## 3.00 SURRENDER

3.01 The surrender of this Licence is subject to the *Forest Act*.

## 4.00 SPECIAL CONDITIONS AND REQUIREMENTS

4.01 The Licensee will meet with the Timber Sales Manager at a mutually agreed upon location, date and time

(a) before beginning primary logging on the cutting authority area, or

(b) if primary logging is delayed for more than 90 calendar days after the date of the meeting held in accordance with subparagraph (a), at a date and time not less than seven days before commencing primary logging,

at which meetings the Timber Sales Manager and the Licensee will review the current operational requirements applicable to the cutting authority area.

4.02 (a) The Licensee must, before beginning operations on the cutting authority area or related permit areas, notify the Timber Sales Manager of the name of the person(s) who will be responsible for supervising operations on those sites and who will be present on the site at all times ("the supervisor"), and

(b) If after beginning operations, the supervisor identified in (a) is changed, the Licensee must notify the Timber Sales Manager as to the name of the new supervisor within 5 days of the change occurring.

4.03 The Licensee must implement the Environmental Management System pertaining to this Licence.

4.04 The Licensee must not erect or operate a sawmill on the cutting authority area.

4.05 The Licensee must not manufacture special forest products on the cutting authority area.

4.06 The Licensee must provide notice to the Timber Sales Manager of each harvest method that the Licensee intends to use on the cutting authority area at least 5 days before commencing operations on the cutting authority area.

4.07 If, at any time during the term of this Licence, the Licensee intends to use a harvest method that is different from a method given in the notice under paragraph 4.06, the Licensee will notify the Timber Sales Manager of that decision and method no less than 5 days before the Licensee begins to use that method.

4.08 The Licensee must comply with the conditions and requirements set out in the Schedules to this Licence.

4.09 The Licensee must have a plan that covers primary forest activities on the cutting authority area prior to commencement of primary forest activities.

4.10 The Licensee must amend the plan referred to in paragraph 4.09 before the Licensee intends to conduct primary forest activities in a way that is different from what is described in the plan.

4.11 The Licensee must submit the plan or amendment referred to in paragraphs 4.09 or 4.10 if requested by the Timber Sales Manager.

4.12 The licence is subject to and the licensee must comply with the Selkirk Natural Resource District Forest Stewardship Plan #601 – 2017-2022.

## 5.00 SAFETY

5.01 The Licensee must ensure, prior to commencing activities on the cutting authority area, and throughout the term of this Licence,

(a) that all individuals, corporations or partnerships who provide direction to workers or contractors on or in relation to the cutting authority, and on or in relation to the area described in the Exhibit "A" to the Road Permit issued to the holder of this Licence, are

(i) certified in the BC Forest Safety Council SAFE Company program as an independent small employer, or

(ii) endorsed by the BC Forest Safety Council SAFE Company program as a new entrant to the industry, or

(iii) certified under another safety certification scheme recognized by BC Forest Safety Council or BC Timber Sales, or

(iv) work for an employer who satisfies the qualifications in clauses (i), (ii), and (iii) above, and

(b) that an individual, corporation or partnership does not provide direction on or in relation to the areas described in this paragraph unless the required certification or endorsement referred to in this paragraph is maintained and in good standing.

5.02 (a) The Licensee will keep a list of the names of employers or parties directing works on the area described in paragraph 5.01.

(b) That list must include:

(i) the names of each employer or firm as it is registered with WorkSafeBC, and

(ii) the certification status of each employer or firm with the BC Forest Safety Council SAFE Company program or other recognized safety certification schemes, and

the Licensee, upon request, will provide a copy of that list to the Timber Sales Manager.

## 6.00 WASTE ASSESSMENT

6.01 The Licensee must notify the Timber Sales Manager that primary logging has been completed on a cutblock when it has been completed.

6.02 The Licensee will determine the volume and quality of waste on a cutblock in accordance with the *Provincial Logging Residue and Waste Measurement Procedures Manual,* as amended from time to time.

6.03 The Licensee will pay waste assessments to the government for the volume and quality of timber that is assessed as waste under paragraph 6.02.

6.04 The amount payable under a waste assessment will be calculated in accordance with the *Provincial Logging Residue and Waste Measurement Procedures Manual,* as amended from time to time.

6.05 If the Licensee fails to comply with paragraph 6.02, then

(a) the volume and quality of waste will be determined by the Timber Sales Manager in accordance with the *Provincial Logging Residue and Waste Measurement Procedures Manual,* as amended from time to time,

and

(b) the Licensee will pay to the government

(i) the sum of money equal to the Timber Sales Manager's cost of determining the volume and quality of waste, and

(ii) the waste assessments.

6.06 Subject only to the mandatory requirements of the *Wildfire Act*, or its Regulations or Orders issued thereunder, the Licensee shall not dispose of the waste until after the volume and quality of the waste has been conclusively determined and accepted by the District Manager.

## 7.00 TIMBER MARK

7.01 The timber mark(s) for the timber harvested under this Licence (is/are):

**A 0 9**

**1 5**

7.02 If directed by the Timber Sales Manager, the Licensee must erect signs at all exits from the cutting authority area, clearly showing the timber mark(s) referred to in paragraph 7.01.

7.03 The Licensee must mark all timber in the prescribed manner before transporting timber from the cutting authority area.

## 8.00 SCALE-BASED STUMPAGE

8.01 For the purpose of determining the amount of stumpage payable in respect of timber authorized to be harvested under this Licence, the volume and quality of timber harvested will be determined using information provided in a scale of the timber.

8.02 The Licensee must ensure that

(a) all timber harvested under this Licence is scaled, and

(b) the scale of the timber is conducted in the prescribed manner.

## 9.00 LEGISLATIVE FRAMEWORK

9.01 This Licence is subject to the forestry legislation.

9.02 The Licensee must

(a) comply with the forestry legislation, and

(b) ensure that its employees, agents and contractors comply with the forestry legislation when engaging in or carrying out activities or operations under or associated with this Licence.

9.03 Nothing in this Licence is to be construed as authorizing the Licensee to cut timber or engage in or carry out any other forest practices until

(a) all applicable operational plans have been prepared, submitted, or approved according to the forestry legislation in force at the time of work, and

(b) in the case of road construction, where required by regulation, a road layout and design and a site plan has been prepared by or submitted to the Timber Sales Manager.

## 10.00 ABORIGINAL RIGHTS, ABORIGINAL TITLE, TREATY RIGHTS

10.01 Notwithstanding any other provision of this Licence, if a court of competent jurisdiction

(a) determines that activities or operations under or associated with this Licence will unjustifiably infringe an aboriginal right or title, or a treaty right,

(b) grants an injunction further to a determination referred to in subparagraph (a), or

(c) grants an injunction pending a determination of whether activities or operations under or associated with this Licence will unjustifiably infringe an aboriginal right or title, or a treaty right,

the Timber Sales Manager, in a notice given to the Licensee, may vary or suspend this Licence, in whole or in part, or refuse to issue a Road Permit or other permit given to the Licensee, to be consistent with the court determination.

10.02 Subject to this Licence and the forestry legislation, if

(a) the Timber Sales Manager has varied a Timber Sale Licence or Road Permit or other permit given to the Licensee under paragraph 10.01,

(b) a court of competent jurisdiction subsequently overturns, sets aside or rescinds the determination or injunction referred to in that paragraph, and

(c) it is practical to do so,

the Timber Sales Manager, at the request of the Licensee, may vary the Timber Sale Licence or permit to reflect as closely as possible, for the remainder of its term, the terms and conditions of the permit or authorization given before the variation under paragraph 10.01.

10.03 Subject to this Licence and the forestry legislation, if

(a) the Timber Sales Manager has suspended a Timber Sale Licence or Road Permit or other permit given to the Licensee under paragraph 10.01,

(b) a court of competent jurisdiction subsequently overturns, sets aside or rescinds the determination or injunction referred to in that paragraph, and

(c) it is practical to do so,

the Timber Sales Manager, at the request of the Licensee, may reinstate the Timber Sale Licence or permit for the remainder of its term.

10.04 Subject to this Licence and the forestry legislation, if

(a) the Timber Sales Manager has refused to issue a Road Permit or other permit given to the Licensee under paragraph 10.01,

(b) a court of competent jurisdiction subsequently overturns, sets aside or rescinds the determination or injunction referred to in paragraph 10.01, and

(c) it is practical to do so,

the Timber Sales Manager, at the request of the Licensee, may issue the permit.

## 11.00 ROADS

11.01 The Licensee may construct, maintain and use roads on the cutting authority area under authority of this Licence.

11.02 The Licensee must ensure that a road specified in either Schedule C of this Licence or a Road Permit issued pursuant to this Licence is constructed by or on behalf of the Licensee in accordance with the specifications contained in either Schedule C or the Road Permit, as the case may be.

11.03 The Licensee must ensure that all roads constructed or maintained by or on behalf of the Licensee are constructed or maintained in accordance with the forestry legislation.

11.04 Before constructing, maintaining or using the road under this Licence, the Licensee, unless the Timber Sales Manager determines otherwise, must

(a) obtain all necessary permits or authorizations for crossing alienated lands including power lines, pipelines, railroads, public roads, and agricultural land reserves, and

(b) obtain all necessary permits or authorizations from other resource agencies.

11.05 The Licensee may, where necessary, construct a junction with a Forest Service Road, and must ensure that any junction with a Forest Service Road is constructed such that

(a) it provides at least the minimum sight distance to ensure user safety,

(b) it has sufficient junction angle and suitable road grade and surface for the expected traffic, and

(c) culverts are installed, as required, to maintain drainage patterns.

11.06 The Licensee must provide to the Timber Sales Manager a report describing the costs incurred by the Licensee to construct, maintain or deactivate any road authorized or required to be constructed by this Licence or a Road Permit when that report is required by the Timber Sales Manager.

11.07 The Licensee must ensure that any access control structure erected to restrict motor vehicle traffic will not be a hazard to the users of the road by

(a) placing any control structure in a conspicuous location,

(b) adequately marking that structure with permanent reflective material, and

(c) erecting warning signs at such a distance so as to provide adequate warning of the structure.

11.08 If the Licensee wishes to communicate by means of radio, the Licensee must

(a) post the radio frequency at the start of the road,

(b) erect kilometre markers along that road, and

(c) ensure that all vehicles working for and on behalf of the Licensee use the posted frequency in an appropriate manner.

11.09 The Licensee must maintain all roads that the Licensee uses under the authority of this Licence, or a Road Permit (the "road authorizations"), to transport timber timber harvested in accordance with the forestry legislation and such road authorizations.

## 12.00 FINANCIAL AND DEPOSITS

12.01 In addition to any money payable in respect of this Licence or a Road Permit under the forestry legislation, the Licensee must pay to the Province, immediately upon receipt of a notice, statement or invoice issued on behalf of the Province,

(a) the amount specified in respect of stumpage under Part 7 of the *Forest Act* in respect of the timber authorized to be harvested under this licence or a Road Permit,

(b) a bonus bid in the amount of $18.00/m^3$ in respect of timber authorized to be harvested under this Licence, and

(c) waste assessments under Part 6.00 of this Licence and

(d) where applicable, the Timber Sales Manager's costs incurred in carrying out an assessment under Part 6 of this Licence.

12.02 During the term of this Licence, the Licensee must maintain with the Province a deposit, or standing deposit, in the amount prescribed under the *Forest Act* or the regulations made under that Act, in a form acceptable to the Minister, as security for the Licensee's performance of its obligations under or in respect of this Licence or any Road Permit.

12.03 If the Timber Sales Manager gives the Licensee a notice that an amount has been realized as security from the deposit or standing deposit, under this Part, the Licensee, within four (4) weeks of the date on which the notice is given, must pay to the Province, in a form acceptable to the Minister, an amount sufficient to replenish the deposit or standing deposit.

12.04 If the Licensee fails

(a) to pay money that the Licensee is required to pay to the government under
  (i) this Licence, or a Road Permit, or
  (ii) the forestry Legislation in respect of this Licence, or a Road Permit or
(b) to otherwise perform its obligations under
  (i) this Licence, or a Road Permit, or
  (ii) the forestry legislation in respect of this Licence, or a Road Permit,

the Timber Sales Manager, after at least four (4) weeks notice to the Licensee, may cause an amount to be withdrawn from the deposit, or standing deposit, referenced in paragraph 12.02:

(c) equal to the money which the Licensee failed to pay, and,
(d) sufficient to cover all costs incurred by the Timber Sales Manager in remedying the Licensee's failure to perform its obligations, or
(e) equal to the Timber Sales Manager's estimate of the costs that the Timber Sales Manager could reasonably expect to incur in remedying the Licensee's failure to perform its obligations,

and, for that purpose an amount of the security included in the deposit, or standing deposit, may be realized.

12.05 A notice referred to in paragraph 12.04 must specify

(a) the money which the Licensee has failed to pay or the obligation which the Licensee has failed to perform, and
(b) the amount of the security the Timber Sales Manager intends to realize from the deposit, or standing deposit.

12.06 Subject to paragraphs 12.08, 12.09 and 12.10, if

(a) under paragraph 12.04, , an amount of security realized from the deposit, or standing deposit, is equal to the Timber Sales Manager's estimate of the costs which the Timber Sales Manager could reasonably expect to incur in remedying the Licensee's failure to perform its obligations, and
(b) the costs reasonably incurred by the Timber Sales Manager in remedying the Licensee's failure to perform its obligations are less than the amount of the security realized from the deposit, or standing deposit, the Timber Sale Manager will as soon as feasible,
(c) return an amount equal to the difference between the amount of the security realized from the deposit, or standing deposit, and the costs incurred by the Province to
  (i) the Licensee, if the deposit, or standing deposit, has been replenished in accordance with paragraph 12.03, or
  (ii) to the deposit, or standing deposit, if the Licensee has not yet replenished the deposit, or standing deposit, in accordance with paragraph 12.03.

12.07 If

(a) under paragraph 12.04, the amount of security realized from the deposit, or standing deposit, is equal to the Province's estimate of the costs which the Province could reasonably expect to incur in remedying the Licensee's failure to perform its obligations, and

(b) the costs reasonably incurred by the Province in remedying the Licensee's failure to perform its obligations are greater than the amount taken from the deposit, or standing deposit,

the Timber Sales Manager may cause to be withdrawn an additional amount from the deposit, or standing deposit, equal to the difference between the costs incurred by the Province and the amount originally realized from the deposit, or standing deposit, and for that purpose an additional amount of the security included in the deposit, or standing deposit, may be realized

12.08 If under paragraph 12.04 the amount of the security realized from the deposit, or standing deposit, is equal to the Province's estimate of the costs under Subparagraph 12.04(e), the Province is under no obligation to remedy the Licensee's failure, and subject to paragraph 12.10, the Province may retain the amount of the security realized from the deposit, or standing deposit, under paragraph 12.04.

12.09 If security is realized under paragraph 12.04 and the Province decides not to remedy the Licensee's failure to perform its obligations, the Timber Sales Manager must give notice to the Licensee indicating that the Province will not be remedying the Licensee's failure to perform its obligations;

12.10 If, after receiving a notice referred to in paragraph 12.09, the Licensee

(a) remedies the failure to perform its obligations, and

(b) gives a notice to that effect to the Timber Sales Manager within three (3) months of the date on which the notice referred to in paragraph 12.09 is given to the Licensee, or within such longer period as the Timber Sales Manager may approve,

(c) the Province will as soon as is feasible return an amount equal to the difference between the amount of the security realized from the deposit, or standing deposit, and the costs incurred by the Province in respect of the Licensee's failure to perform its obligations to

(i) the Licensee if the deposit, or standing deposit, has been replenished in accordance with paragraph 12.03, or

(ii) to the deposit, or standing deposit, if the Licensee has not yet replenished the deposit in accordance with paragraph 12.03.

12.11 Subject to the Forest Act and the regulations made under that Act, the Province will return to the Licensee the deposit, or standing deposit, less deductions made under paragraphs 12.04 and 12.07, when:

(a) this Licence expires**,** or is surrendered; and

(b) the Timber Sales Manager is satisfied that the Licensee has fulfilled its obligations under this Licence and the forestry legislation.

## 13.00 REPORTING

13.01 The Licensee will submit such information as the Timber Sales Manager requires regarding the Licensee's obligations or activities under or in respect of this license as and when required by the Timber Sales Manager.

13.02 Following the completion of primary forest activities, the Licensee will submit to the Timber Sales Manager a conformance certificate, signed by a Registered Professional Forester or a Registered Forest Technologist that confirms that all primary forest activities conducted under this licence are consistent with the Forest Stewardship Plan results and strategies applicable to this Licence.

13.03 The Licensee will submit the signed conformance certificate, referenced in section 13.02 of this Timber Sale Licence, to the Timber Sales Manager prior to final deposit release of this Licence and in the format provided in Appendix III of this Licence.

## 14.00 LIABILITY AND INDEMNITY

14.01 The Licensee must indemnify the government against and save it harmless from all claims, demands, suits, actions, causes of action, costs, expenses and losses faced, incurred or suffered by the government as a result, directly or indirectly, of any act or omission of

(a) the Licensee,

(b) an employee or agent of the Licensee,

(c) a contractor of the Licensee who engages in any activity or carries out any operation, including but not restricted to harvesting operations, under or associated with this Licence or a Road Permit, or

(d) any other person who on behalf of or with the consent of the Licensee engages in any activity or carries out any operation, including but not restricted to harvesting operations, under or associated with this Licence or a Road Permit.

14.02 For greater certainty, the Licensee has no obligation to indemnify the government under paragraph 14.01 in respect of any act or omission of

(a) an employee, agent or contractor of the government, in the course of carrying out his or her duties as employee, agent or contractor of the government, or

(b) a person, other than the Licensee, to whom the government has granted the right to use or occupy Crown land, in the course of exercising those rights.

14.03 Amounts taken under part 12.00 from the deposit and any payments required under part 6.00 are in addition to and not in substitution for any other remedies available to the government in respect of a default of the Licensee.

## 15.00 LIMITATION OF LIABILITY

15.01 The Province is not liable to the Licensee for injuries, losses, expenses, or costs incurred or suffered by the Licensee as a result, directly or indirectly, of an act or omission of a person who is not a party to this Licence, including but not restricted to an act or omission of a person disrupting, stopping or otherwise interfering with the Licensee's operations under this Licence by road blocks or other means.

## 16.00 TITLE to IMPROVEMENTS and TIMBER

16.01 Title to all

(a) improvements, including roads and bridges, constructed under the authority of this Licence,

(b) improvements, including roads and bridges, constructed under the authority of a road permit issued pursuant to this Licensee, unless otherwise specified in the permit, and

(c) timber, standing, felled or otherwise fallen, including logs and special forest products, felled or bucked under the authority of this Licence and located on the cutting authority area upon the expiry, cancellation, surrender or other termination of this Licence,

will vest in the Province, without right of compensation to the Licensee.

16.02 The Licensee must leave all improvements and timber referred to in paragraph 16.01 on the cutting authority area, unless otherwise authorized by the Timber Sales Manager.

## 17.00 BANKRUPTCY, ASSIGNMENT, AND INSOLVENCY

17.01 The Licensee must refrain from committing an act of bankruptcy, making a general assignment for the benefit of its creditors, or otherwise acknowledging its insolvency.

## 18.00 NOTICE

18.01 A notice given under this Licence must be in writing.

18.02 A notice given under this Licence may be

(a) delivered by hand, or

(b) sent by mail.

(c) subject to Paragraph 18.05, sent by facsimile transmission to the address or facsimile number, as applicable, specified on the first page of this Licence, or to such other address, or facsimile number as is specified in a notice given in accordance with this Part.

18.03 If a notice is given under this Licence, it is deemed to have been given

(a) if it is given in accordance with subparagraph 18.02(a), on the date it is delivered by hand, or

(b) if it is given in accordance with subparagraph 18.02 (b), subject to paragraph 18.04, on the eighth day after its deposit in a Canada Post Office at any place in Canada.

(c) if it is given in accordance with subparagraph 18.02(c), subject to paragraph 18.05, on the date it is sent by facsimile transmission.

18.04 If, between the time a notice is mailed in accordance with subparagraph 18.02 (b) and the time it is actually received, there occurs a postal strike, lockout or slowdown that might reasonably affect delivery of the notice, the notice is not deemed to be given until the party actually receives it.

18.05 If a notice is sent by facsimile transmission, the party sending the notice must take reasonable steps to ensure that the transmission has been successfully completed.

18.06 Either party may, from time to time, advise the other party by notice in writing, of any change of address or facsimile number of the party giving such notice and, from and after giving of such notice, the address or facsimile number specified will, for purposes of this licence, be considered to be the address or facsimile number of the party giving such notice, until changed in accordance with this subsection.

## 19.00 MISCELLANEOUS

19.01 The Exhibit “A”, Exhibit “B”, Schedules to this Licence and Road Permits issued pursuant to this Licence are deemed to be part of this Licence.

19.02 This Licence will enure to the benefit of, and be binding on, the Parties and their respective heirs, executors, successors and permitted assigns.

19.03 Any power conferred or duty imposed on the Timber Sales Manager under this Licence may be exercised or fulfilled by any person authorized to do so by the Timber Sales Manager.

19.04 The laws of British Columbia will govern the interpretation of this Licence and the performance of the Parties' obligations under this Licence.

19.05 If there is a conflict between the *Workers’ Compensation Act* or a regulation under that Act, and a provision of this Licence, the *Workers’ Compensation Act*, or the regulation made under that Act, prevails to the extent of the conflict, and the Licensee must immediately notify the Timber Sales Manager of the conflict and follow any direction given by the Timber Sales Manager with respect to the conflict, provided such direction is consistent with the *Workers’ Compensation Act* and the regulations under that Act.

19.06 Nothing in this Licence authorizes the Licensee to in any way restrict the government's access to the cutting authority area or the right-of-way of any other authorized entrant, user or occupier of that area.

## 20.00 INTERPRETATION

20.01 In this Licence, unless the context otherwise requires,

(a) "deposit" means the deposit referred to in paragraph 12.02,

(b) "standing deposit” means a standing deposit under section 16.1 or 16.5(2) of the BC Timber Sales Regulation,

(c) “extension” means an increase to the term of this Licence,

(d) "*Forest Act*" means the *Forest Act*, R.S.B.C. 1996, c. 157, as amended from time to time, or the successor to this Act, if it is repealed,

(e) “*Forest and Range Practices Act*” means the *Forest and Range Practices Act*, R.S.B.C. 2002, as amended from time to time,

(f) "forest stewardship plan” means a forest stewardship plan referred to in the *Forest and Range Practices Act*, that is prepared by the Timber Sales Manager and approved by the Minister in respect of this Licence,

(g) “forestry legislation” means:

(a) the *Forest Act*;

(b) the *Forest and Range Practices Act*;

(c) the *Wildfire Act;*

and the regulations and standards under those Acts, and, as amended from time to time;

(h) "harvest" and its derivatives means to cut and remove timber from a cutting authority area,

(i) "merchantability specifications" means the merchantability specifications described in the *Provincial Logging Residue and Waste Measurement Procedures Manual*,

(j) "merchantable Crown timber" means timber referred to in paragraph 1.01 that meets the merchantability specifications,

(k) "Minister" means the minister responsible for administering the *Forest Act* and the *Forest and Range Practices Act*,

(l) "month" has the same meaning as in the *Interpretation Act,*

(m) "person" includes an individual and a corporation,

(n) "primary forest activity" has the same meaning as in Section 1(1) of the *Forest Planning and Practices Regulation*,

(o) "primary logging" means cutting, or felling timber, yarding, forwarding the timber to central landings or road-sides, or removing the timber from these landings or road-sides,

(p) "Province" means Her Majesty the Queen in Right of the Province of British Columbia,

(q) "Road Permit" means a Road Permit under the *Forest Act* issued to the Licensee in relation to this Licence,

(r) "site plan" means a site plan referred to in the *Forest and Range Practices Act,* that is prepared by the Timber Sales Manager in respect of this Licence,

(s) "timber authorized to be harvested" means merchantable Crown timber in the areas of land authorized as the cutting authority area under paragraph 1.01(a),

(t) "Timber Sales Manager" means

(i) a Timber Sales Manager appointed under the *Ministry of Forests Act*, for a BC Timber Sales business area in which all or part of the cutting authority area is situated, and

(ii) any person authorized by the Timber Sales Manager to exercise a power or fulfill a duty in respect of this Licence,

(u) "waste" has the same meaning as in the *Provincial Logging Residue and Waste Measurement Procedures Manual*,

(v) "*Wildfire Act*" means the *Wildfire Act*, S.B.C. 2004, as amended from time to time,

(w) "year" has the same meaning as in the *Interpretation Act.*

20.02 Unless otherwise provided in paragraph 20.01, if a word or phrase used in this Licence is defined in the *Forest Act,* the *Forest and Range Practices Act*, or the *Wildfire Act*, the definition in the Act applies to this Licence, and where the word or phrase in the Act is replaced by a new word or phrase, this Licence is deemed to have been amended accordingly.

20.03 If a provision of the *Forest Act* the *Forest and Range Practices Act* or the *Wildfire Act* referred to in this Licence is renumbered, the reference in this Licence is to be construed as a reference to the provision as renumbered.

20.04 In this Licence, unless the context otherwise requires,

(a) the singular includes the plural and the plural includes the singular, and

(b) the masculine, the feminine and the neuter are interchangeable.

20.05 This Licence is divided into parts, paragraphs, subparagraphs, clauses and subclauses, illustrated as follows:

1.00 part,
1.01 paragraph,
(a) subparagraph,
(i) clause,
(A) subclause;

and a reference to a subparagraph, clause or subclause is to be construed as a reference to a subparagraph, clause or subclause of the paragraph, subparagraph or clause, as the case may be, in which the reference occurs.

IN WITNESS WHEREOF each of the parties has executed this Licence on the respective date set forth below.

THE COMMON SEAL of the Licensee was affixed in the presence of:

AFFIX COMMON SEAL

..... Signature of Witness

..... Date

..... Print Witness Name

**Or**

SIGNED by the Licensee in the presence of:

Corey D. Scott
Signature of Witness

Signature of Licensee or Authorized Signatory

Sept 10, 2020
Date

COREY D. SCOTT
Print Witness Name

Kootenay Innovative Wood Ltd.....
Print Name of Licensee or Authorized Signatory

SIGNED by the Timber Sales Manager on behalf of Her Majesty the Queen in Right of the Province of British Columbia in the presence of:

Signature of Witness

George Edney, RPF
A/Timber Sales Manager
BC Timber Sales Kootenay Business Area

Sept. 18, 2020
Date

Sarah McKirdy
Print Witness Name

# SCHEDULE "A"
# SPECIAL CONDITIONS AND REQUIREMENTS

## 1.00 ADMINISTRATION

1.01 The Licensee must

(a) notify the Timber Sales Manager of the date that the Licensee intends to begin timber harvesting or road construction at least **7 days** before the date that the Licensee intends to begin either of those activities, informing the Timber Sales Manager of the date that the Licensee intends to begin each of those activities respectively and,

if the Licensee intends to stop operations on the cutting authority area for longer than 14 consecutive days, the Licensee will

(b) notify the Timber Sales Manager within 5 days after commencing that shutdown, and

(c) notify the Timber Sales Manager at least 2 working days before recommencing operations on the cutting authority area.

## 2.00 DANGEROUS TREES

2.01 The Licensee may cut a tree that is reserved from cutting and is located within the cutting authority area if the person authorized by the Licensee reasonably believes that

(a) the tree represents a safety hazard, and

(b) a “no work zone” does not need to be established.

2.02 The Licensee must not buck or remove any tree felled pursuant to paragraph 2.01 unless authorized by the Timber Sales Manager.

2.03 The Licensee may cut a tree that is located outside of the cutting authority area if a person authorized by the Licensee reasonably believes that the tree represents a safety hazard, and

(a) the Licensee must not buck or remove that tree unless authorized by the Timber Sales Manager.

## 3.00 ENVIRONMENTAL

See Schedule "D"

3.01 The Licensee must

(a) supply, use and maintain at least one self-contained chemical toilet for every ten (10) persons working in the cutting authority area on or near a landing approved by the Timber Sales Manager when conducting operations under this licence, and

(b) discharge those toilets only at an approved disposal site that is not on the cutting authority area.

## 4.00 HARVESTING

4.01 The Licensee must full-tree skid all cut trees to landings or roadside locations situated within either the cutting authority area or the area of a Road Permit issued in accordance with this Licence.

4.02 The Licensee may cut a tree that is either reserved from cutting or located outside of the cutting authority area for the purpose of using the stumps of those trees as tail holds or guy-line anchors, unless that tree is on private property.

4.03 The Licensee must not buck or remove any tree felled for the purpose of creating a stump for use as a tail-hold or guy-line anchor without first notifying the Timber Sales Manager.

4.04 The Licensee must pile and dispose of all roadside and landing debris.

4.05 The Licensee must

(a) rip all landings, and

(b) revegetate those landings using a suitable mix of grass seed.

4.06 The Licensee must conduct operations in a manner that will not result in debris accumulating within **10 metres** of standing trees, immature trees and seedlings, or otherwise negatively impact other resource values or private property.

4.07 If the Licensee pushes over, knocks over, or otherwise causes a tree to lean over, the Licensee must cut that tree, and if the Licensee chooses not to remove that tree, must

(a) buck that tree into lengths, and

(b) lop and scatter all branches

in such a manner that lengths and branches lie close to the ground and are clear of all reserved trees, immature trees and seedlings and private property.

4.08 The Licensee will not conduct timber harvesting operations on cutblocks 1 and 2 from April 30th to September 1st and on cutblock 3 from April 30th to November 1st of each year during the term of this licence.

4.09 Any residual fibre that the licensee leaves at roadside, or on a landing, that is a minimum of four (4) metres in length and a minimum of ten (10) centimetres butt diameter, must be decked.

## 5.00 FOREST HEALTH

5.01 The Licensee may cut and remove live (standing or blowdown) Douglas-fir trees that are of reaching distance within a *Reserve* that are either diseased or infested (green or red attack) from Douglas-fir bark beetle.

5.02 The Licensee must skid all (species) slabs containing live bark beetles to a landing or roadside located within the cutting authority area and remove, burn or otherwise dispose of those chunks and slabs.

5.03 Upon commencing operations on the cutting authority area, and subject to Schedule B (Reserved Timber), the Licensee must dispose of all green, IBD infected Douglas-fir timber that

(a) were previously felled as trap trees, located at the sites within Blocks 2 and 3 (See Trap Tree Location Maps)

(b) meets the timber merchantability specifications, and

(c) the Licensee is authorized to harvest within the cutting authority area but, at the Licensee's discretion has not been removed from the cutting authority area (the remaining timber)

by ensuring that the remaining timber is cut and yarded to a roadside or landing and either

(i) chipped,

(ii) burned, or

(iii) disposed of by other means by April 1st of the following year.

## 6.00 OTHER UTILITIES AND OCCUPIERS OF LAND

6.01 The Licensee, before operating within two tree lengths of a statutory right-of-way, utility, or private property, must

(a) notify the offices of BC Timber Sales - Kootenay at least seven (7) days before commencing those operations and

(b) comply with that party's guidelines and applicable Workers' Compensation Act regulations in respect of conducting activities in the vicinity of that right-of-way.

## 7.00 ROADS

No clauses are applicable to this Part.

## 8.00 SPECIAL CONDITIONS

8.01 The Licensee must ensure that the area occupied by permanent access structures does not exceed:

(a) for Block 1: 3.0% of the total area or 0.31 hectares, and

(b) for Block 2: 6.9% of the total area or 2.13 hectares, and

(c) for Block 3: 2.8% of the total area or 1.67 hectares.

## 9.00 SILVICULTURE

9.01 Where cut or decked timber remains on the cutting authority area after the expiry of the license, the Timber Sales Manager may require that the Licensee pay to the government immediately upon receipt of a notice, statement or invoice issued on behalf of the government, and in addition to any payment required under part 12.00 of this licence, an amount equal to the Timber Sales Manager's estimate of the silviculture costs that the Timber Sales Manager could reasonably expect to incur as a result of the Licensee not removing the cut or decked timber from the cutting authority area by that date.

## 10.00 SKID TRAILS

10.01 If the Licensee determines that excavated skid trails are required, the Licensee must

(a) mark the location of those trails in the field,

(b) build those trails using an excavator,

(c) rehabilitate those trails, and

(d) revegetate rehabilitated trails using a suitable grass seed mix following completion of operations.

## 11.00 SLASHING

11.01 The Licensee must cut all live trees three (3) metres and over in height within the cutting authority area.

## 12.00 TIMBER PROCESSING

No clauses are applicable to this Part.

# SCHEDULE "B"
# RESERVED TIMBER and MERCHANTABILITY SPECIFICATIONS

## 1.00 MERCHANTABILITY SPECIFICATIONS AND WASTE ASSESSMENT

1.01 For the purposes of the waste assessment and subject to Part 6.00 of this Licence, standing timber, alive or dead, will be measured in accordance with the specifications and procedures stated in the *Provincial Logging Residue and Waste Measurements Procedures Manual*.

1.02 For the purposes of waste assessment and subject to Part 6.00 of this Licence, felled or dead-and-down timber will be measured in accordance with the specifications and procedures stated in the *Provincial Logging Residue and Waste Measurements Procedures Manual*.

## 2.00 RESERVED TIMBER

2.01 The Licensee must ensure that the cutblock boundary is clearly marked following completion of timber harvesting operations, by

(a) not cutting those trees marked as being on a cutblock boundary (boundary trees)

2.02 The following timber is specified as reserved timber:

(a) timber identified within Table 1: Layer 1 Reserved Timber and Table 2: Other Reserved Timber.

2.03 Selection Priority:
Reserve timber is to be retained in the order of priority specified in Table 1 and Table 2. Selection of priority includes both species and size. In attaining the required number of reserve stems per hectare and distribution, lower ranked trees will only be retained where trees of a higher ranking are not present.

| Table 1. - Layer 1 Reserved Timber[5, 6] | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Merchantable** | | | | | | | | | | | |
| **Block** | **HU** | **Selection Priority[1]** | **Species** | **Size** | **Retention** | | | **Distribution[2, 3]** | | | |
| | | | | **DBH Class(cm)** | **Target** | **Min** | **Max** | **S** | **G** | **I** | **R** |
| 1 | 1 Ground | 1 - All | Py | ≥ 20 | 17 BA[7] | 15 BA | 20 BA | **Pref** | **Acc** | **Acc** | **Pref** |
| | | 2 | Fd | ≥ 70 | | | | | | | |
| | | | Lw | | | | | | | | |
| | | | Pw | | | | | | | | |
| | | | Cw | | | | | | | | |
| | | | Bg | | | | | | | | |
| | | | Hw | | | | | | | | |
| | | | Pl | | | | | | | | |
| | | 3 | Fd | ≥ 35 but ≤ 65 | | | | | | | |
| | | | Lw | | | | | | | | |
| | | | Pw | | | | | | | | |
| | | | Cw | | | | | | | | |
| | | | Bg | | | | | | | | |
| | | | Hw | | | | | | | | |
| | | | Pl | | | | | | | | |
| | | 1 - All | At, Ep | ≥ 20 | 95% | 90% | 100% | **As Per Natural Distribution[9]** | | | |
| 2 | 1 Ground | 1 - All | Py | ≥ 20 | 17 BA[7] | 15 BA | 20 BA | **Pref** | **Acc** | **Acc** | **Pref** |
| | | 2 | Fd | ≥ 70 | | | | | | | |
| | | | Lw | | | | | | | | |
| | | | Pw | | | | | | | | |
| | | | Cw | | | | | | | | |
| | | | Bg | | | | | | | | |
| | | | Hw | | | | | | | | |
| | | | Pl | | | | | | | | |
| | | 3 | Fd | ≥ 35 but ≤ 65 | | | | | | | |
| | | | Lw | | | | | | | | |
| | | | Pw | | | | | | | | |
| | | | Cw | | | | | | | | |
| | | | Bg | | | | | | | | |
| | | | Hw | | | | | | | | |
| | | | Pl | | | | | | | | |
| | | 1 - All | At, Ep | ≥ 20 | 95% | 90% | 100% | **As Per Natural Distribution[9]** | | | |
| | 2 Cable | 1 - All | Py | ≥ 20 | 35 st/ha | 25 st/ha | 45 st/ha | **Acc** As required for veteran or | **Pref** 2-10 groups/ha[8] | **Acc** | **Pref** |
| | | 2 | Fd | ≥ 70 | | | | | | | |
| | | | Lw | | | | | | | | |
| | | | Pw | | | | | | | | |
| | | | Cw | | | | | | | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Bg | | | | | higher priority trees | | | |
| | | | Hw | | | | | | | | |
| | | | Pl | | | | | | | | |
| | | 3 | Fd | ≥ 35 but ≤ 65 | | | | | | | |
| | | | Lw | | | | | | | | |
| | | | Pw | | | | | | | | |
| | | | Cw | | | | | | | | |
| | | | Bg | | | | | | | | |
| | | | Hw | | | | | | | | |
| | | | Pl | | | | | | | | |
| | | 1 - All | At, Ep | ≥ 20 | 90% | 80% | 100% | **As Per Natural Distribution[10]** | | | |
| 3 | 1 Ground & Skyline | 1 - All | Py | ≥ 20 | 20 BA[7] | 17 BA | 23 BA | **Pref** | **Acc** | **Acc** | **Pref** |
| | | 2 | Fd | ≥ 70 | | | | | | | |
| | | | Lw | | | | | | | | |
| | | | Pw | | | | | | | | |
| | | | Cw | | | | | | | | |
| | | | Bg | | | | | | | | |
| | | | Hw | | | | | | | | |
| | | | Pl | | | | | | | | |
| | | 3 | Fd | ≥ 35 but ≤ 65 | | | | | | | |
| | | | Lw | | | | | | | | |
| | | | Pw | | | | | | | | |
| | | | Cw | | | | | | | | |
| | | | Bg | | | | | | | | |
| | | | Hw | | | | | | | | |
| | | | Pl | | | | | | | | |
| | | 1 - All | At, Ep | ≥ 20 | 95% | 90% | 100% | **As Per Natural Distribution[9]** | | | |
| | 2 Skyline & Cable | 1 - All | Py | ≥ 20 | 35 st/ha | 25 st/ha | 45 st/ha | **Acc** As required for veteran or higher priority trees | **Pref** 2-10 groups/ha[8] | **Acc** | **Pref** |
| | | 2 | Pw | ≥ 70 | | | | | | | |
| | | | Lw | | | | | | | | |
| | | | Fd | | | | | | | | |
| | | | Cw | | | | | | | | |
| | | | Bg | | | | | | | | |
| | | | Hw | | | | | | | | |
| | | | Pl | | | | | | | | |
| | | 3 | Pw | ≥ 35 but ≤ 65 | | | | | | | |
| | | | Lw | | | | | | | | |
| | | | Fd | | | | | | | | |
| | | | Cw | | | | | | | | |
| | | | Bg | | | | | | | | |
| | | | Hw | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Pl | | | | | | | |
| | | 1 - All | At, Ep | ≥ 20 | 90% | 80% | 100% | **As Per Natural Distribution[10]** | | | |
| | 3 Ground | 1 - All | Py | ≥ 20 | 11 BA[7] | 7 BA | 15 BA | **Pref** | **Acc** | **Acc** | **Pref** |
| | | 2 | Fd | ≥ 70 | | | | | | | |
| | | | Lw | | | | | | | | |
| | | | Pw | | | | | | | | |
| | | | Cw | | | | | | | | |
| | | | Bg | | | | | | | | |
| | | | Hw | | | | | | | | |
| | | | Pl | | | | | | | | |
| | | 3 | Fd | ≥ 35 but ≤ 65 | | | | | | | |
| | | | Lw | | | | | | | | |
| | | | Pw | | | | | | | | |
| | | | Cw | | | | | | | | |
| | | | Bg | | | | | | | | |
| | | | Hw | | | | | | | | |
| | | | Pl | | | | | | | | |
| | | 1 - All | At, Ep | ≥ 20 | 95% | 90% | 100% | **As Per Natural Distribution[9]** | | | |

Table 1 Additional Requirements:

[1] Preference for leave trees must be given to larger diameter, fire resistant, more windfirm stems, free of obvious signs of health issues
(bark beetle attack, thinning or yellowing crowns, mistletoe, or evidence of root rot). Preference for leave tree location adjacent to NCDs.

[2] Where groups of reserve trees are retained, lower-ranked and non-target species may be included, provided that the majority of trees retained are in accordance with the selection priority.

[3] Distribution Types: S: Single Trees, G: Groups of Trees, I: Irregularly, R: Regularly.

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

[6] Refer to *Schedule B Appendix I - 1.00 Table of Reserve Timber Abbreviations and Definitions*.

[7] Target stems have been marked in the field with blue paint. Except for skid trails, where removal is required for operational and safety requirements, marked trees should be exchanged for other leave trees meeting retention criteria on a 1:1 basis. Marking has been done to a slightly higher retention to accommodate for skid trails however minimum BA retention still needs to be met. Skid trail corridors should be kept to a minimum in terms of length, width, and placement.

[8] Three examples of different group distribution, roughly achieving the Target of 35st/ha:
2 groups/ha (with 17.5st/group) = Target approx. 70m between group centres.
6 groups/ha (with 6st/group) = Target approx. 40m between group centres.
10 groups/ha (with 3.5st/group) = Target approx. 30m between group centres.

[9] The intent is to leave all (95%) of the trees meeting the specified criteria, except where precluded by operations or safety.

[10] The intent is to leave nearly all (90%) of the trees meeting the specified criteria, except where precluded by operations or safety, acknowledging that cable yarding systems have more restrictive operating requirements than ground yarding systems.

**Table 2. - Other Reserved Timber[5, 6]**

**Non-Merchantable**

| Block | HU | Location | Species | Layer | Stems per Hectare | |
|---|---|---|---|---|---|---|
| | | | | | Target | Min |
| All | All | Within 3m of all reserve trees<br>Within 5m of NCDs & streams | All | 2, 3, 4 | All existing | N/A |

**Dead Trees to be Stubbed** (where Mechanical Falling is utilized)[5]

| Block | HU | Species | DBH Class (cm) | Stubbing Height | Stems per Hectate | | | Distribution[3] | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Target | Min | Max | S | G | I | R |
| All | All | Any | ≥12.5 | 2-5m | 4 | 0 | 6 | X | X | X | X |

**Coarse Woody Debris**

| Block | HU | Species | Size | Number per Hectare | | Distribution[3] | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Target | Min | S | G | I | R |
| All | All | Any[12] | Logs ≥2m in length<br>&<br>≥7.5cm diameter at one end[11] | 10[4] | 4[11] | X | X | X | X |

Table 2 Additional Requirements:

[3] Distribution Types: S: Single Trees, G: Groups of Trees, I: Irregularly, R: Regularly.

[4] Selection priority for larger diameter CWD to meet Chief Forester Guidance. Logs ≥10m in length & ≥20cm diameter at one end recommended. Refer to Silviculture Plan CWD Management Strategy Information.

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

[6] Refer to *Schedule B Appendix I - 1.00 Table of Reserve Timber Abbreviations and Definitions*.

[11] FPPR Section 68 requirements. Refer to Silviculture Plan CWD Management Strategy Information.

[12] Active IBD infestation in TSL. Do not retain green-attack Fd impacted stems as CWD. Avoid retaining larger green Fd stems as CWD to mitigate risk of perpetuating IBD infestation. Refer to Silviculture Plan CWD Management Strategy Information.

# APPENDIX I
## 1.00 TABLE OF RESERVE TIMBER ABBREVIATIONS AND DEFINITIONS

| Name / Term | Abbreviation / Definition |
|---|---|
| **Tree Species** | |
| Douglas-Fir | Fd |
| Western Larch | Lw |
| Lodgepole Pine | Pl |
| Engelmann Spruce | Se |
| Interior Spruce | Sx |
| Western Hemlock | Hw |
| Western Red Cedar | Cw |
| Ponderosa Pine | Py |
| Subalpine Fir (Balsam) | Bl |
| Grand Fir | Bg |
| Western White Pine | Pw |
| Birch | Ep |
| Aspen | At |
| Cottonwood | Ac |
| **Distribution** | |
| Single | Individual Trees |
| Group | More than 1 Tree |
| Regular | An approximately even distribution of reserve trees or groups throughout the prescribed area. The minimum of the range must be retained within every hectare of the prescribed area. |
| Irregular | A mosaic, scattered or variable distribution that may include areas of high density as well as voids. (E.g., some areas may be within, above, or below the specified density range, although the range is achieved overall within the TU/HU.) |
| **Measurement Height** | |
| Diameter Breast Height (1.3 m) | DBH or dbh |
| Diameter Stump Height (30 cm) | DSH or dsh |
| **Harvesting Categories** | |
| Treatment Unit (TU) | An area within the block where a specific leave tree strategy is applied. |
| Harvest Unit (HU) | An area within the block where a specific harvest system is applied (eg: cable-yarding or ground skidding). |
| Standards Unit (SU) | A silviculture treatment unit |
| Block | BLK or blk |
| Layer 1 | Merchantable Layer / Tallest Trees |
| Layer 2 | Poles (7.5-12.49 cm dbh) |
| Layer 3 | Saplings (>1.3m ht. to 7.49 cm dbh) |
| Layer 4 | Understory (<1.3 m ht) |
| **Measurement Units** | |
| Hectare | ha |
| Centimetre | cm |
| Metre | m |
| Stems per hectare | sph or SPH |

# SCHEDULE "C"

# ROAD AND STRUCTURE ENGINEERING REQUIREMENTS

This schedule applies with respect to roads the Licensee is authorized to construct, maintain, or use in accordance with Part 11.00 of the agreement.

## 1.00 GENERAL ROAD CONSTRUCTION, MAINTENANCE, DEACTIVATION, REHABILITATION, AND LOCATION REQUIREMENTS

1.01 The Licensee is authorized to construct, use, maintain and deactivate roads or to rehabilitate the area occupied by those roads that are

(a) shown on either the Exhibit "A" of this Licence or the map provided in Appendix II to this Schedule, and,

(b) described in column 1 of Table 1 of this Schedule.

### Table 1: Road Sections

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| **ROAD NAME** | **ROAD SECTION LENGTH (M)** | **START STATION** | **STOP STATION** | **ROAD LOCATION** | **APPLICABLE CONSTRUCTION SPECIFICATION** | **LICENSEE RESPONSIBLE DEACTIVATION/ REHABILITATION** |
| Block 3: KLTA0915Garrity3110 (Proposed, Temporary) | 0+270 | Hub 1 0+000 | Hub 12 0+270 | Must Follow Location | General & Detailed | Rehabilitate |
| Block 1: KL6877.17Smallwood2000 (Existing, Temporary) | 0+121 | Hub 82 1+277 | Hub 88 1+398 | Existing | N/A - Existing | Rehabilitate |

1.02 Where in Table 1 of this Schedule:

(a) the words "must follow location" in column 5 appear opposite the road name in column 1, the Licensee must construct that road in the location as identified in the field by the Timber Sales Manager,

(b) the word "optional" in column 5 appears opposite the road name in column 1, the Licensee may, at its discretion, construct that road,

(c) the word "deactivate" in column 7 appears opposite the road name in column 1, the Licensee must deactivate that road, and,

(d) the word "rehabilitate" in column 7 appears opposite the road name in column 1, the Licensee must deactivate that road and rehabilitate the area occupied by that road.

1.03 The Licensee must maintain all roads constructed or used under this Licence in accordance with the specifications set out in Part 4.00 of this Schedule.

## 2.00 ROAD CONSTRUCTION SPECIFICATIONS

2.01 Where in Table 1 of this Schedule:

(a) the word "general" in column 6 appears opposite the road name in column 1, the Licensee must construct that road in accordance with the General Construction Specifications set out in Part 3.00 of this Schedule;

(b) the word "detailed" in column 6 appears opposite the road name in column 1, the Licensee must construct that road in accordance with the Detailed Construction Specifications set out in Appendix I to this Schedule;

(c) the word "none" in column 6 appears opposite the road name in column 1, and unless otherwise directed by the Timber Sales Manager, the Licensee may construct that road in accordance with the General Construction Specifications set out in Part 3.00 of this Schedule.

## 3.00 GENERAL CONSTRUCTION SPECIFICATIONS

3.01 Subject to paragraph 2.01(a), the Licensee must

(a) construct curves according to the following curvature specifications:

**Table 2: Curvature Specifications**

| **Radius of Curve (m)** | 180 | 90 | 60 | 45 | 35 | 25 | 20 | 15 |
|---|---|---|---|---|---|---|---|---|
| **Minimum Stabilized Surface Width (metres)** | 4.3 | 5.3 | 5.8 | 6.0 | 6.5 | 7.5 | 8.0 | 9.0 |

(b) ensure that each road constructed under this Licence conforms to

(i) subject to clause (ii), the Government of British Columbia CL-625 standard design load vehicle configuration, or

(ii) any variation from the Government of British Columbia CL-625 standard design load vehicle configuration authorized by the Timber Sales Manager before the commencement of construction of the road,

and

(c) ensure that each road constructed under this Licence conforms to the General Construction Specifications set out below:

### Table 3: Other General Construction Specifications

| OTHER GENERAL CONSTRUCTION SPECIFICATIONS | TEMPORARY ROADS | PERMANENT ROADS |
|---|---|---|
| Stumps/roots/logs allowed in road prism outside the road subgrade width (YES/NO) | Yes | Yes |
| Stumps/Roots/Logs allowed under the road subgrade width (YES/NO) | Yes | No |
| Maximum stripping width (metres) | 12 | 12 |
| Minimum road subgrade width other than curves (metres) | 4 | 4 |
| Maximum road subgrade width other than curves (metres) | 5 | 5 |
| Maximum distance between turnouts (metres) | 500 | 500 |
| Useable length /width of turnouts | 30m X 8m | 30m X 8m |
| Adverse (%) | -5 | -5 |
| Favourable (%) | 15 | 15 |
| Adverse; for a maximum of 100 meters (%) | -9 | -9 |
| Favourable: for a maximum of 100 meters with slack grade preceding or following on a straight runout (%) | 18 | 18 |
| Switchback maximum gradient (%) | 8 | 8 |
| Ditch depth (0.3/0.5 metres) | 0.3 (Rock) 0.5 (O.M.) | 0.3 (Rock) 0.5 (O.M.) |
| Minimum cross-drain culvert diameter (round pipe) (mm) | 450 | 450 |
| Other shapes (opening size) (mm) | Alternative functional drainage structures may be used in place of standard round pipes. Structures such as skid culverts, bundled logs wrapped in geotextile, wood box culverts, or other functional cross drains may be used provided the opening area equals or exceeds the opening area of the originally prescribed structure. | N/A |
| Stabilizing required of road surface, with rock ballast or pit-run gravel (YES/NO) | No | No |

## 4.00 ROAD MAINTENANCE SPECIFICATIONS

4.01 The Licensee must regularly maintain and repair roads constructed or used under this Licence to ensure safe industrial use of those roads, including the use by third parties, in a timely manner and fashion by doing the following:

Drainage systems:

(a) ensuring that road surface and slope drainage systems (including ditches, culverts and road crowning, in-sloping and out-sloping) are functional at all times;

Brushing:

(b) cutting all vegetative growth, including trees and other vegetation on roadway surfaces and roadsides such that

(i) sight distances are consistent with the road design speed,

(ii) snow removal and placement is accommodated without impeding sight distance, and

(iii) usable road widths will permit the safe passage of vehicles at road widenings or turnouts;

(c) identifying and falling all hazard trees adjacent to all rights-of-way before commencing industrial operations;

Surface grading:

(d) utilizing a grader to perform surface grading to the road, except for those roads with ballast rock surfaces, to

(i) thoroughly loosen surfacing material, by cutting, scarification or other methods to address the depth of potholes, rutting or wash-boarding, without causing contamination of the surfacing with the subgrade material or with unsuitable ditch materials,

(ii) provide proper road surface drainage and prevent water pooling on the road by shaping the surface crown or sloping the road surface as indicated by the character of the existing surface, and removing grader berms, and

(iii) produce a surface that is smooth, uniform, consistent to grade, all to provide haul speeds commensurate with road alignment;

(e) grading only when moisture content is suitable, or with the addition of water;

(f) placing or replacing surface aggregate where necessary to achieve the objectives in subparagraph (d) above;

Turnouts:

(g) ensuring that turnouts are either inter-visible or of a sufficient number and size to accommodate both the traffic volumes and vehicle sizes commonly using that road;

Sign maintenance:

(h) cleaning, replacing, and reconditioning signs, posts, and markers, including but not limited to, radio frequency call signs, information signs, kilometer markers, traffic control signs, and bridge delineators;

Winter maintenance:

(i) ceasing all industrial use on the road or sections of the road that display any of the following conditions:

(i) rutting to the point that subgrade material mixes with surfacing material;

(ii) damage to the subgrade is occurring;

(iii) erosion of surfacing material;

(j) requesting the district manager to authorize closure of the road temporarily while the risk of damage to the road is unacceptably high;

(k) conducting winter maintenance in a manner such that

(i) snow is removed from all or part of the traveled way, including sufficient turnouts, when operations become inefficient, and/or the road would be otherwise unsafe for industrial use,

(ii) cut slopes are not undercut,

(iii) surfacing material and gravel is not bladed off the road,

(iv) snow is removed only from the usable road surface having roadbed support, including turnouts,

(v) snow banks are breached or "winged" backed to facilitate drainage at a sufficient number of locations to reduce water flow along road surfaces during periods of melt,

(vi) roadbed drainage ditches, drainage dips, and culverts are functional during periods of melt,

(vii) sand is applied to the bladed road surface as needed to provide proper traction for industrial vehicles where chains will not be suitable or sufficient, and

(viii) roads are closed to wheeled vehicles at times when use would be unsafe or when damage to the road could occur.

4.02 The Licensee is exempt from the maintenance requirements of paragraph 4.01(d)(iii) in respect of roads scheduled for deactivation or rehabilitation.

4.03 Upon completion of timber harvesting operations, for all roads constructed under this Licence and for which the Licensee is not responsible to deactivate or rehabilitate, the Licensee must

(a) immediately before relinquishing its rights under this Licence, leave the road in a condition that conforms to the maintenance specifications in paragraph 4.01, or

(b) if necessary, return to the cutting authority area after breakup or snowmelt to complete road maintenance obligations in accordance with the maintenance specifications in paragraph 4.01.

## 5.00 ROAD DEACTIVATION

5.01 The Licensee must deactivate, before the expiry of the Licence, the road sections identified in columns 2, 3 and 4 of Table 1 of this Schedule, where the word "deactivate" appears in column 7 on the same line as that road section, in accordance with

(a) section 82 of the Forest Planning and Practices Regulation,

(b) every other provision of the Forest Planning and Practices Regulation that regulates road deactivation, either specifically or by reference to primary forest activities, and

(c) any specifications provided in Part 7.00 of this Schedule.

## 6.00 REHABILITATION OF AREAS OCCUPIED BY ROADS

6.01 The Licensee must rehabilitate, before the expiry of the Licence, the area occupied by the road sections identified in columns 2, 3 and 4 of Table 1 of this Schedule, where the word “rehabilitate” appears in column 7 on the same line as that road section, by

(a) de-compacting compacted soils,

(b) returning displaced surface soils, retrievable side-cast and berm materials onto the area occupied by that road,

and either

(c) placing wood debris on the exposed soils, or

(d) revegetating the exposed mineral soils.

## 7.00 SPECIAL CONDITIONS

No clauses are applicable to this Part.

# APPENDIX II

## 1.00 DETAILED CONSTRUCTION SPECIFICATIONS

| **Road Recommendations Summary Table: TSL TA0915** |
|---|
| **Refer to related Terrain Stability Assessment (SCL# 20-1561) and *TSA Maps*** for additional recommendations and background information. **Use of this table and associated maps should not replace referencing the TSA**, as not all information is presented. |
| **Construction should be modified or suspended when there is abundant hill slope runoff occurring at the site,** which is likely to occur during times such as spring break-up or periods of high runoff from prolonged heavy precipitation. This is intended to reduce the likelihood of concentrated or redirected drainage, excessive erosion and sediment delivery, and potential instabilities associated with excavation and placement of saturated material. |
| **Cut slopes** should be constructed at 1H:1V for temporary roads, with a lower angle appropriate for areas of seepage or loose soils. **Cut slopes in bedrock** can generally be constructed at 0.25H:1V, but appropriate angles may range from vertical to 0.5H:1V dependent on rock properties encountered during excavation. |
| **Fill slopes** should be constructed at 1.5H:1V, with allowance for steeper fills of 1.1H:1V to 1.25H:1V where sufficient sound wood support or keyed rock is used. The use of sound wood support in fills and woody debris placement in the road sub-grade is only acceptable for roads with a term of less than 5 years, and provided it is done consistent with typical good construction practices (road use and stability not adversely affected). **Sound wood supported and/or keyed rock fills are recommended for temporary road sections crossing side slopes of 50% or greater**, in order to reduce benching requirements and fill slope lengths while increasing fill slope stability and reducing effort required for rehabilitation. Refer to the typical section diagrams depicting these construction types. |
| **Road Drainage Systems:** Drainage structures have been prescribed based on a field traverse of the proposed road alignments prior to construction, taking into account local drainage divides and anticipated subsurface conditions (refer to applicable *TSA Maps*). **Additional drainage control may be warranted** based on conditions encountered during construction. For temporary one season construction, cross drain requirements are also dependant on the season and time frame the road is to be in place prior to full rehabilitation. **For temporary roads, there is the option to use alternative functional cross drains and crossings** (e.g. skid culverts, bundled logs, wood box culverts, or other functional cross drains), as opposed to traditional round pipes. However, the following additional recommendations then apply:<br>a) All prescribed culvert locations should have functional cross drain structures installed;<br>b) All watercourse crossings must be appropriately sized to span the active channel and accommodate possible high flows;<br>c) All watercourse crossings should be pulled prior to over-winter (not to be in place through the spring runoff), with the natural channel re-established and left free of debris (slash or soil); and<br>d) All remaining ditch relief cross drains should be backed up or replaced with cross ditches prior to overwinter.<br>**Post harvesting drainage management** should be planned for if construction and/or harvesting are to take place in the fall and winter months – frozen road surfaces can be difficult to install cross-ditches on, but having effective drainage control in place for spring runoff is required for the risk ratings of the TSA to remain applicable. |
| **Field Reviews:** If site conditions encountered vary significantly from those described in the TSA (e.g., unexpected and significant seepage, unexpected material textures encountered in excavations, etc.), or if any stability or erosional concerns become apparent during operations, then it is recommended to contact a qualified registered professional to confirm if a field review is warranted. Timely mitigation of problem sites can significantly reduce potential adverse effects. |

**Maintenance and Deactivation** (recommended for proposed roads associated with the development, as well as existing roads used for access in the vicinity of the proposed development): Ditches and cross drains should be maintained functional and left free of excess slash or debris during and after harvesting. Seasonal deactivation measures (back up cross ditches and intermediate waterbars as appropriate) should be installed during periods of non-industrial use, including overwintering periods. Regular road inspections for additional required maintenance work (possible ditch cleaning, culvert cleaning, additional cross ditch placements, or cross ditch improvement) should be carried out during and subsequent to operations. Inspections should be semi-annually at minimum, once in the fall and once during the spring freshet, for the first two years following construction, taking into account the results of previous inspections. The intent is for timely identification and mitigation of stability or drainage related concerns to avoid more significant terrain stability concerns.

**Full rehabilitation is recommended for all temporary roads within a 2 year term,** with seasonal deactivation measures implemented as appropriate prior to rehabilitation. Rehabilitation will require removal of all culverts, decompaction of the road bed, and recontouring of the road prism to its original slope profile. The construction of swales on the re-contoured surface is recommended to re-establish drainage at natural drainage features. The intent of slope recontouring is to restore natural subsurface drainage patterns as much as practical in order to limit down slope hydrological effects of the road drainage systems.

## Site Specific Recommendations

**Smallwood 2000 Existing Temporary Road (Hub 82 to POT; Block 1):**

1. Full rehabilitation as described above.

**Garrity 3110 Proposed Temporary Road (Block 3):**

1. The use of wood supported fill is recommended on side slopes of 50% to 60% gradient from the POC to Hub 5 to minimize cut and fill and improve rehabilitation opportunities.
2. Some rock excavation may be required between Hub 6 and 7, exiting the gully. Use wood and/or rock supported fill to minimize cut and fill and improve rehabilitation opportunities.
3. Full rehabilitation as described above.

## 2.00 MAP

See Road Construction Overview Map in tender documents for full scale map

# SCHEDULE "D"
# ENVIRONMENTAL MANAGEMENT SYSTEM

The information contained in this Schedule is provided for the applicant to use when formulating an application for this Timber Sale Licence, and when conducting operations on the cutting authority area.

## 1.00 DEFINITIONS

1.01 In this Schedule

(a) "BCTS EMS" means the BC Timber Sales Environmental Management System contained in the Ministry of Forests' publication "BC Timber Sales (BCTS) Environmental Management System", as amended from time to time, that is available on the BC Timber Sales website at: https://www2.gov.bc.ca/gov/content/industry/forestry/bc-timber-sales/forest-certification/ems-sfm

(b) "EFP" means environmental field procedure,

(c) "EOP" means environmental operating procedure,

(d) "ERP" means emergency response plan, and

## 2.00 OPERATIONAL CLAUSES

2.01 The Licensee must ensure that all persons working on the cutting authority area or related permit areas for the benefit of the Licensee, ("the Licensee's agents"), conform to the requirements of the Environmental Management System.

2.02 The Licensee must ensure that all persons working on the cutting authority area or related permit areas for the benefit of the Licensee, ("the Licensee's agents"), achieve and maintain training in the BCTS EMS.

2.03 If the Timber Sales Manager notifies the Licensee that the Licensee's agents must have educational requirements consistent with revised EMS training content by a date specified in the notice, the Licensee must ensure that beginning on that date the Licensee's agents have the educational requirements consistent with the revised EMS training content.

2.04 The Licensee must, before beginning operations on the cutting authority area or related permit areas, notify the Timber Sales Manager of the name

(a) of the person(s) who will be responsible for supervising operations on those sites and who will be present on site at all times ("the supervisor"), and

(b) of an alternate(s) should the supervisor not be on site,

and after beginning operations must notify the Timber Sales Manager of any change to the supervisor referred to in subparagraph (a) of this paragraph, or alternate, within 5 days of making the change.

2.05 The Licensee must maintain records of the nature and extent of the BCTS EMS training received by the Licensee and the Licensee's agents sufficient to allow the Timber Sales Office to determine whether the Licensee is in compliance with paragraphs 2.01 and 2.02. The records will contain, but not be limited to:

(a) Employee / agent name;

(b) EMS Training Level achieved;

(c) Date that training was taken.

2.06 The Licensee must ensure that those environmental field procedures (EFPs), environmental operating procedures (EOPs) and checklist/report forms applicable to the phases of work are made available on the cutting authority area or related permit areas to be viewed and read by the Licensee's agents.

2.07 The Timber Sales Manager, at any reasonable time, may notify the Licensee that the EFPs, EOPs or checklist/report forms as required by the EMS must be amended within a time specified to conform to the current edition of the BCTS EMS.

2.08 If the Timber Sales Manager notifies the Licensee under paragraph 2.07, BCTS must provide the Licensee with the amended EFPs, EOPs and checklist/report forms at substantially the same time as the notification.

2.09 If the Licensee receives a notice under paragraph 2.07, the Licensee must ensure that, by the date specified in the notice, the EFPs, EOPs and checklist/report forms are amended.

2.10 The Licensee must ensure that the Licensee's agents conform to the requirements of all applicable EFPs, EOPs and checklists/reports as required by the EMS.

2.11 The Licensee must inspect its own operations for conformance with the Licence, related permit(s), operational plans and the BCTS EMS. This does not preclude the requirement of the Licensee to conduct monitoring of its own operations for conformance.

2.12 Where operations do not conform to the requirements of the Licence, related permits, operational plans and the EMS, the Licensee must take appropriate corrective and preventive action.

2.13 The Licensee will conduct and document pre-work meetings and inspections as directed by BCTS staff at the pre-work meeting prior to the start up of field operations.

2.14 The Licensee will maintain records of pre-work meetings and inspection results and provide proof that operations are conforming or that corrective and preventive action has been taken, or is taking place.

2.15 On request of the Timber Sales Manager, the Licensee must make available to the Timber Sales Manager the records as required by the EMS and this Schedule.

2.16 The Licensee may be audited by an internal auditor and/or an independent third party auditor on conformance with the requirements of the BCTS EMS, and is committed to both

(a) providing time and resources for such audits and,

(b) improving practices in response to audit results indicating that practices require improvement.

## 3.00 ENVIRONMENTAL EMERGENCY RESPONSE PLAN

3.01 The Licensee, if providing an activity or service with associated risks related to hazardous material spills, fuel, oil and pesticides, forest fires, landslides or other major erosion events, must comply with the BC Timber Sales Emergency Response Plan, as amended from time to time.

3.02 Before commencing operations on the cutting authority area or related permit areas, the Licensee must prepare and maintain on the cutting authority area an emergency response plan consistent with the approved BC Timber Sales Emergency Response Plan and submit such plan to the Timber Sales Manager upon request.

3.03 The Licensee must make its emergency response plan available on site for viewing by the Licensee's agents.

3.04 The Licensee must

(a) maintain a spill kit for every operation using herbicides or fuel on the cutting authority area or related permit areas and

(b) must ensure that all of the Licensee's agents have been trained in the use of that spill kit.

3.05 The Licensee must

(a) test emergency preparedness and

(b) maintain documentation of tests referred to in subparagraph (a) including

(i) the date of the test,

(ii) start and end times,

(iii) names of people involved,

(iv) results, and

(v) any actions to be taken as a result of those tests.

3.06 The Licensee must operate on the cutting authority area or related permit areas according to its emergency response plan.

3.07 The Licensee must report and document any incident in accordance with the BC Timber Sales Emergency Response Plan, identifying

(a) the time and date of the incident,

(b) location of the incident,

(c) description of the incident,

(d) impact(s),

(e) contributing factors,

(f) action taken and

(g) agencies to which the incident was reported.

# APPENDIX III

BCTS
BC Timber Sales

***Licensee Conformance Certificate***

**TO BE COMPLETED BY A REGISTERED PROFESSIONAL FORESTER or REGISTERED FOREST TECHNOLOGIST AFTER COMPLETION OF PRIMARY FOREST ACTIVITIES**

**Timber Sale Licence (TSL) Number:** **TA0915**

**BC Timber Sales Business Area:** **Kootenay BC Timber Sales**

I am a Registered Professional Forester or Registered Forest Technologist, registered and in good standing, with the Association of British Columbia Forest Professionals. I have taken steps as regulated under the *Foresters Act* and as required by good practice, including ensuring that I am qualified and competent, in order to sign and seal this Conformance Certificate.

In my professional opinion, as per section 106.2 (1) (a) and (b) of the *Forest Planning and Practices Regulation*, and except as noted below under 'Exceptions':

□ the timber harvesting activities conducted under this TSL were consistent with the intended results and strategies identified by the Timber Sales Manager in the Forest Stewardship Plan applicable to this TSL; and

□ the road construction, maintenance, and deactivation activities conducted under this TSL were consistent with the intended results and strategies identified by the Timber Sales Manager in the Forest Stewardship Plan applicable to this TSL.

**Signature of Registered Professional Forester or Registered Forest Technologist:**

**Name of Registered Professional Forester or Registered Forest Technologist (please print):**

**Please affix professional seal here:**

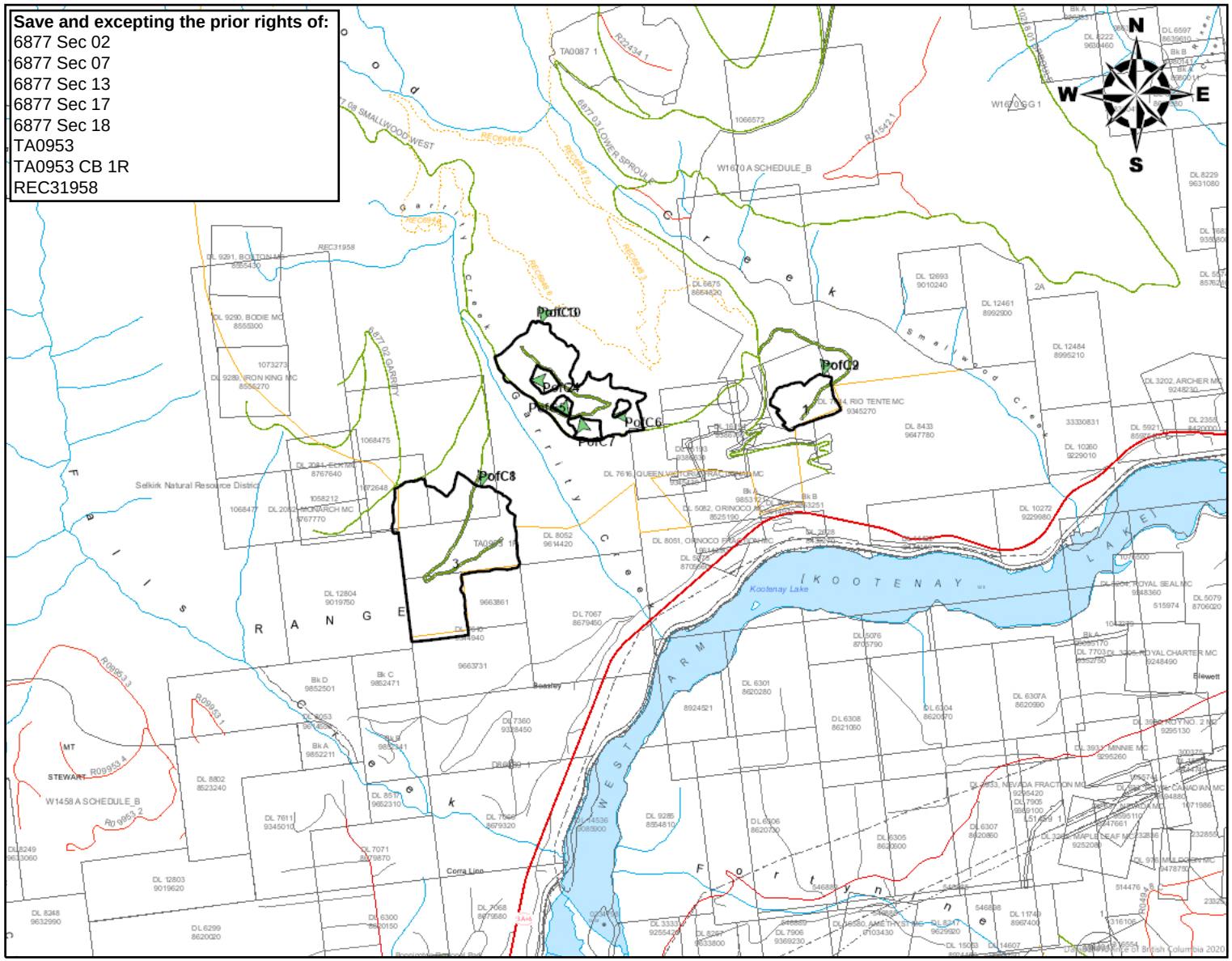
**Date Signed (YYYY/MM/DD):**

**Employer's name and address (please print):**
**Phone No.:**
**Email address:**
Please note: submission of a completed conformance certificate does not mean that the licensee will not be subject to compliance actions by the Government, if necessary.

# Province of British Columbia

EXHIBIT A

| MAP OF : TA0915 (shown in bold black) | | | |
|---|---|---|---|
| FOREST REGION : RKB<br>FOREST DISTRICT : DSE | TSA : 13<br>LAND DISTRICT : KOOTENAY DISTRICT | PULPWOOD AGREEMENT : | MGT UNIT TYPE : TIMBER SUPPLY AREA<br>MGT UNIT NO : 13 |
| ESF SUBMISSION ID : 1977110<br>BCGS MAPSHEET NO : 82F.043 | SCALE : 1:20000 at ANSI A Size<br>Area (Ha): 100.428 | UTM : 11<br>NAD : NAD 83 | DRAWN BY : FTA<br>DATE : Jun 16, 2020 |




## Legend

- Tenure Application
- Tenure Road Application
- Retired Tenure Road
- P of C
- P of T
- Crown Tenures
- Survey Parcels
- Freeway
- Arterial/Collector Road
- Local Road
- Forest Service Road
- Road Permit Road
- SUP Road
- Right of Way
- Non Status Road
- Recreation Trails
- Transmission Lines
- Pipelines
- Railway Tracks
- MSMA Treated Trees
- Lakes/Rivers/Streams
- Ocean
- Prov. Parks & Eco. Reserves

(100.428 Ha)
PofC1 UTM11 465871, 5482419
PofC2 UTM11 468179, 5482856
PofC3 UTM11 466400, 5483431
PofC4 UTM11 466280, 5483069
PofC5 UTM11 466500, 5482804
PofC6 UTM11 466785, 5482772
PofC7 UTM11 466575, 5482789
3 (59.19 Ha)
PofC8 UTM11 465871, 5482419
1 (10.301 Ha)
PofC9 UTM11 468179, 5482856
2 (30.922 Ha)
PofC10 UTM11 466400, 5483431
PofC11 UTM11 466280, 5483069
PofC12 UTM11 466500, 5482804
PofC13 UTM11 466785, 5482772
PofC14 UTM11 466575, 5482789