

661 Eighth Ave. Midway, B.C. VOH 1M0

REQUEST FOR PROPOSAL RFP# CRI-505 - Fritz TU 2025-01

Contractor Services

FOR

Wildfire Risk Reduction Treatment

Closing Time: 2:00 pm (Pacific Time), April 8th, 2025

Closing Location: Regional District of Kootenay Boundary 202 - 843 Rossland Ave Trail, BC, Canada, V1R 4S8

Date Issued: March 12th, 2025

Contact Person: Carlene Pires, RDKB Emergency Program & FireSmart Coordinator 250.368.0259 epc@rdkb.com



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All Appendices are available as separate attachments, including:

Appendix A – Village of Midway Fuel Management Prescription Appendix B – Service Contract



INTRODUCTION

1.1. Background

The Village of Midway obtained funding from the Community Resiliency Investment Program's FireSmart Community Funding and Supports (FCFS) to implement their FireSmart Program. They have contracted the RDKB to manage and administer these funds, which will include executing their fuel treatment prescription.

This prescription addresses an area identified in the 2022 Community Wildfire Protection Plan (CWPP) for wildfire risk reduction treatment. The area under prescription overlaps a newly acquired parcel of municipal land located on the south side of the Kettle River, and adjacent to the West Boundary Community Forest. The south boundary of the treatment area abuts the border with the United States, where continuous forest stands extend. Portions of the area under prescription were selectively harvested before the completion of field works, and several new trails were built for this purpose. Fine woody debris accumulations from harvesting remain; this prescription will abate this hazard. The prescription area is broken into two separate treatment units that differ based on the type of forest stand and expected treatment: TU - 1, and TU - 2. The successful proponent will be required to carry out the work based on the objectives below, plus all other items included in the prescription and treatment standards listed in Appendix A.

1.2. Purpose

The Village of Midway is seeking proposals from qualified forestry or arborist contractors ("Proponents") in response to this request for proposals ("RFP") to implement a wildfire risk reduction fuel treatment on approximately 20 hectares of land within Midway's municipal boundaries.

1.3. Timeline

The proposed timeline for this RFP is as follows:

Date	Action
March 12, 2025	Release of RFP
10:00 a.m. (Pacific Time) March 25, 2025	Pre-Proposal Site Inspection (Mandatory)
April 8, 2025	RFP Closes
April 9 - 25, 2025	Proposal evaluation, selection of Preferred Proponent and any backup Proponents and commencement of any negotiations leading to a completed Agreement
April 29, 2025	Award of Contract
Start of Contract	May 5, 2025



2. INSTRUCTIONS TO PROPONENTS

2.1. Submission of Proposals

Proposals are to be submitted by email until the Closing Time specified. It is the Proponent's sole responsibility to ensure its Proposal is received at the email set out below by the Closing Time.

The Proponent is to submit only the Proposal by email at: <u>epc@rdkb.com</u>. PDF Proposals are preferred and the Regional District will confirm receipt of emails (not the contents). Note that the maximum file size the Regional District can receive is 25Mb. If sending large or unusual email attachments, Proponents should email to confirm receipt. Proponents should reference the RFP # CRI-505 "Fritz TU".

Complete copies of your proposal must be submitted and titled: <u>"RFP – Midway Wildfire Risk Reduction</u> <u>Treatment"</u>

Proposals will be accepted via email to:

Carlene Pires, *FireSmart Coordinator,* Regional District of Kootenay Boundary Email: <u>epc@rdkb.com</u> Phone: (250) 368-0259 Proposals must be received on or before the **Closing Time** of: TIME: **2:00 PM Pacific Time** DATE: **April 8, 2025**

Proposals will not be opened publicly. The Proponent bears all risks associated with delivering its Proposal by electronic submission, including but not limited to delays in transmission between the Proponent's computer and the Regional District's mail system.

Proponents wishing to make changes to their Proposals after submission but prior to the Closing Time may do so by submitting the revised version by email to the address above.

It also is the Proponent's sole responsibility to ensure their revisions were received, at the e-mail address set out above, prior to the Closing Time.

Proposals received after the Closing Time will not be considered or evaluated.



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2.2. Enquiries

All enquiries related to this RFP are to be directed, in writing, to the following person, **no later than 5 business days prior to the Closing Time**.

Carlene Pires FireSmart Coordinator Regional District of Kootenay Boundary Email: <u>epc@rdkb.com</u>

Information obtained from any other source is not official and should not be relied upon. Upon submitting a Proposal, Proponents are deemed to have received all Addenda and deemed to have considered the information for inclusion in the Proposal submitted. No consideration will be given after the submission of a Proposal to any claim that there was any misunderstanding concerning the conditions imposed.

Proponents shall carefully examine the RFP documents and shall fully inform themselves as to the intent, existing conditions and limitations which may affect their Proposal submission. No consideration will be given after the submission of a Proposal to any claim that there was any misunderstanding concerning the conditions imposed.

Proponents finding discrepancies or omissions in the RFP or Contract or having doubts as to the meaning or intent of any provision, should immediately notify the above-listed project contact. If there are any changes, additions, or deletions to the Proposal scope, conditions, or closing date, Proponents will be advised to utilize the issuance of an Addenda.

Verbal discussion between the Village of Midway council or staff and a Proponent shall not become a part of the RFP or modify the RFP unless confirmed by written Addendum. The Village shall not be responsible for Proponents adjusting their Proposals based only on oral instructions by any representative of the municipality.

2.3. Site Meeting or Pre-Proposal Meeting

There will be a mandatory viewing for this project on March 25th, 2025. Bidders are encouraged to visit the worksite and make themselves familiar with the conditions, nature of the ground, means of access, water supply and all other local conditions affecting the execution of work. Failure to attend and stay for entirety of meeting will result in your submission not being accepted. Proponents must confirm their attendance prior to 4:00 pm March 20th, 2025, by contacting Carlene Pires, FireSmart Coordinator, at 250.368.0259 or epc@rdkb.com



3. <u>GENERAL TERMS OF PROPOSAL PROCESS</u>

3.1 <u>Definitions</u>

- "Addenda" means all additional information regarding this RFP including amendments to the RFP;
- "Agreement" or "Contract" means a contract that is issued to formalize the Work with the preferred Proponent based on the proposal submitted and incorporated by reference the Request for Proposal, any addenda issued, the Proponent's response and acceptance by the Village of Midway.
- "Closing Time" means the date and time listed in the RFP documents by which Proposals are to be received by the Village.
- "Contractor" means the person(s), firm(s) or corporation(s) appointed by the Village to carry out all duties, obligations, work, and services first contemplated in the Request for Proposal and all associated documentation, which may also include mutually agreed revisions after submission of a Proposal.
- "must" or "mandatory" or "shall" means a requirement that must be met for the proposal to receive consideration.
- **"Proponent"** means the responder to this RFP with the legal capacity to contract.
- "Proposal" means a written response to the RFP that is submitted by a Proponent.
- "Regional District" or "RDKB" means the Regional District of Kootenay Boundary.
- "The Village" means the Village of Midway
- "Request for Proposals" or "RFP" means the solicitation described in this document, including any attached or referenced appendices, schedules or exhibits and as may be modified in writing from time to time by the Village.
- "Services" means any effort expended directed towards the accomplishment of the activities described in this Request for Proposals including but not limited to all labour materials, equipment, supplies and all else necessary for the implementation of this fuel management treatment.
- "Scope of Services" means and includes the provision by the preferred Proponent of all Services
- "Should" or "may" means a requirement having a significant degree of importance to the objectives of the RFP but is not a mandatory requirement.
- "Third Party Service Providers" mean any person, contractor, or sub-contractor to a Third-Party Service Provider, consultant, non-profit society, organization, or business entity who provides a service to the Village.
- "Work" means and includes anything and everything required to accomplish the project in accordance with this RFP and Proposal.



3.2. Acceptance of Terms and Conditions

Submitting a proposal indicates acceptance of all the terms and conditions set out in the RFP, including those that follow and that are included in all appendices and any addenda. The Proponent shall provide a brief listing of all proposed modifications and /or deletions to the terms and conditions set out in the RFP, or it will be deemed that every clause will be strictly adhered to.

The Village of Midway reserves the right to waive formalities in, accept or reject any or all Proposals, cancel this RFP or accept the Proposal deemed most favourable in the interest of the Village that provides the best value. No alterations, amendments or additional information will be accepted after the Closing Time unless invited by the Village. By submission of a Proposal, Proponents agree the Village may disclose the name of the preferred Proponent and the total price of the Contract. Should a Proposal be accepted by the Village, the Village may enter negotiations with the preferred Proponent to enter the Contract with such Proponent.

A Proposal must be signed by a person authorized to sign on behalf of the Proponent with the intent to bind the Proponent to the RFP and the statements and representations in the Proponent's Proposal.

3.3. No Liability of the Village of Midway

Except as expressly and specifically permitted in these instructions to Proponents, the Village will not be responsible for any liabilities, costs, expenses, loss or damage incurred, sustained or suffered by Proponents because they participated in this RFP, the consideration or non-consideration by the Village of any Proposal, or for any other reason related to this RFP, whether for costs, expenses, losses, damages, loss of anticipated profits or any other matter. The receipt by the Village of any information (including any submissions, ideas, plans, drawings, models, or other materials) communicated or exhibited by any intended Proponent, or on its behalf, shall not impose any obligations on the Village and shall not confer any rights on the Proponent.

3.4. Proposal Validity

Proposals will be open for acceptance for at least 30 days after the Closing Time.

3.5. Addendum

All subsequent information regarding this RFP including changes made to this document will be posted on BC Bid for Proponents to access. It is solely the responsibility of the Proponents to check BC Bid from time to time to ensure that they have all amendments to this RFP in the form of addenda and to ensure that they have obtained, read, and understood the entire RFP including all addenda that may have been issued prior to Closing.

3.6. Proposal Evaluation

Evaluation of proposals will be by a committee formed by the Village of Midway. Incomplete proposals will be rejected without further consideration. Proposals not including all appendices will be considered incomplete.



Acceptance is not guaranteed solely on low price or any singular proposal. Proposals will be evaluated based on the overall best value to the Village of Midway, the thoroughness of the project approach, clarity/completeness of the proposal, quality, experience with projects of similar scope, past performance, price and any other criteria set out herein.

By responding to this RFP, Proponents will be deemed to have agreed that the decision of the evaluation committee will be final and binding. The Village reserves the right to interview for clarification, any or all Proponents, after the RFP closing date.

Following a review, if a proposal is recommended for contract award, the successful firm will be given a formal notice of award.

3.7. Evaluation Criteria

The evaluation team will not be limited to the criteria listed below, and the evaluation team may consider other criteria that the team identifies as relevant during the evaluation process. However, any criteria considered will be applied evenly and fairly to all Proposals.

- 1. Proponent's Qualifications, Experience, Resources and References (100 Points) This includes:
 - 1. The Proponent's qualifications and experience in completing similar projects
 - **2.** Knowledge of the Scope of Services
 - 3. Proponent staff named in the Proposal and their roles, qualifications
 - **4.** Approach and Methodology
 - 5. Completeness and relevance of the safety plan
 - **6.** The proposed schedule associated with the work and consideration given to minimizing delays in completing the Work
 - 7. Resources assigned and level of effort reflected in addressing all the Village's needs/services
 - 8. References
 - **9.** Corporate social responsibility and sustainability
 - **10.** Any innovative methods or approaches to the work
 - 11. How realistic the Proposal is in meeting the Proponent's and Village's needs/services

Pricing/Cost (100 Points)

Total price will be calculated as follows:

Provide the cost per hectare and calculated lump sum cost to complete the implementation of this fuel treatment based on the following:

- Pre-treatment (including danger tree assessment, safety planning, and public notification)
- Thinning (including pruning, spacing, tree falling, and brushing)
- Debris management (chipping and removal or pile & burn)



Points will be calculated as follows:

The lowest-cost proposal (based on lump sum total only) will receive full points.

All others will be based on the following.

(lowest total cost Proposal divided by Proposal being evaluated) x (100 available points) = points awarded.

3.8. Village of Midway's Discretion

The Village, at its sole discretion, reserves the right to:

- 1. reject any or all Proposals whether complete or not,
- 2. reject any Proposal it considers not in its best interests,
- 3. waive any minor irregularity or insufficiency in the Proposal submitted,
- 4. not be liable for misunderstandings or errors in the Request for Proposals,
- 5. issue addenda to the Request for Proposals,
- 6. contact references provided by the Proponents,
- 7. retain independent persons or contractors for assistance in evaluating Proposals,
- 8. request points of clarification to assist the Village in evaluating Proposals,
- 9. negotiate changes with the preferred Proponent,
- 10. award separate contracts for separate work components, and
- 11. withdraw the Request for Proposals.

3.9. Not A Tender

This RFP is not a tender and does not commit the Village in any way to select a preferred Proponent. By submitting a Proposal and participating in the process as outlined in this RFP, Proponents expressly agree that no contractual, tort or other legal obligation of any kind is formed under or imposed on the Village of Midway by this RFP or submissions prior to the completed execution of a formal written Contract. The Proponent may withdraw their Proposal at any time until the signing of a formal written Contract. The Village may cancel the RFP process at any time until the signing of a formal written Contract.

3.10. No Contract

This is not a tender process. No contractual, tort, or other legal obligations are created or imposed on the Village of Midway, or any other individual, officer or employee of the Village with respect to the RFP or consideration by the Village of any Proposal.

3.11. No Obligation to Proceed

The Village of Midway fully intends currently to proceed with the proposed project; however, the Village is under no obligation to proceed with the award of the Contract. The receipt by the Village of any information (including any submissions, ideas, plans, drawings, models, or other materials communicated



or exhibited by any intended Proponent, or on its behalf) shall not impose any obligations on the Village of Midway.

There is no guarantee by the Village that the process initiated by the issuance of this RFP will continue, or that this RFP process or any RFP process will result in a Contract with the Village for the purchase of the equipment, service, or project.

3.12. Negotiation with Preferred Proponent

The Proponent that submits the most advantageous Proposal may be awarded the Contract. The Village of Midway reserves the right to accept or reject all or parts of the Proposal, however, the Village is not precluded from negotiating with the preferred Proponent to modify its Proposal to best suit the needs of the Village.

The Village will enter negotiations with a preferred Proponent to finalize any scope changes necessary to implement the project, as generally described in this RFP. If the Village considers that it is unlikely to settle such agreements with the preferred Proponent despite having negotiated with the preferred Proponent, the Village is entitled to cease negotiations with the preferred Proponent and begin negotiations with another Proponent.

3.13. Acceptance of Proposal

This RFP shall not be construed as an agreement to purchase goods or services. The Village of Midway is not obligated to enter into an Agreement (defined herein) with the Proponent who submits the lowest-priced Proposal or with any Proponent.

The acceptance of a Proposal will be made in writing from the Village and will be addressed to the preferred Proponent at the address given in the submitted Proposal. Following acceptance and approval to proceed with the Proposal, the Proponent is expected to enter a contract with the Village to perform the works or services set out and agreed upon in the Proposal.

The acceptance of a Proposal for the Work will be made in writing from the Village and will be addressed to the preferred Proponent at the address given in the submitted Proposal. Following acceptance and approval to proceed with the Proposal, the Proponent is expected to enter a contract with the Village to perform the works or services set out and agreed upon in the Proposal.

The agreement that the preferred Proponent will be expected to execute with the Village will contain terms like those contained in the draft Contracting Services Agreement provided in Appendix A. The agreement attachments will include the entire Request for Proposal, the Proponent's total Proposal submission and any mutually agreed upon modifications, changes or negotiated adjustments. Any agreement arising from this Request for Proposals will be governed in accordance with the laws of the Province of British Columbia.

3.14. No Liability of the Village of Midway

While the Village of Midway has expended considerable efforts to ensure an accurate representation of information in this RFP, the information contained in this Request for Proposal is supplied solely as a



guideline for Proponents. The information is not guaranteed or warranted to be accurate by the Village, nor is it comprehensive or exhaustive.

Except as expressly and specifically permitted in these instructions to Proponents, the Village will not be responsible for any liabilities, costs, expenses, loss, or damage incurred, sustained, or suffered by Proponents by reason of their participation in this RFP, the consideration or non-consideration by the Village of any Proposal, or for any other reason related to this RFP, whether for costs, expenses, losses, damages, loss of anticipated profits or any other matter. The receipt by the Village of any information (including any submissions, ideas, plans, drawings, models, or other materials) communicated or exhibited by any intended Proponent, or on its behalf, shall not impose any obligations on the Village and shall not confer any rights on the Proponent. Nothing in this Request for Proposals is intended to relieve Proponents from forming their own opinions and conclusions with respect to the matters addressed in the Scope of Work

3.15. Freedom of Information and Protection of Privacy

Proponents should be aware that the Village of Midway is a "public body" as defined in and subject to the provisions of the *Freedom of Information and Protection of Privacy Act*.

Village of Midway is subject to the provisions of the *Freedom of Information and Protection of Privacy Act*. As a result, while the Act offers some protection for third-party business interests, the Village cannot guarantee that any information provided to the Village can be held in confidence.

If the Proponent believes any of the information requested in this RFP and provided by them is confidential, then they should identify it as such and provide a rationale as to why it should not be released under "Freedom of Information" legislation. The Village will consider all Proposals submitted as confidential but reserves the right to make copies of all Proposals received for its internal review and for review by its financial, accounting, legal, and technical consultants. All submissions become the property of the Village and will not be returned to the Proponent.

The rationale for keeping information confidential under this legislation includes:

- 1. Trade secrets of the Proponent.
- 2. Financial, commercial, scientific, or technical information, the disclosure of which could reasonably be expected to result in material financial loss or gain or could reasonably be expected to prejudice the competitive position of the Proponent; or
- 3. Information the disclosure of which could be reasonably expected to interfere with contractual or other negotiations of the Proponent.

3.16. Confidentiality of Information

All Proponents and any other person who through this RFP process gains access to confidential information of the Village of Midway are required to keep strictly confidential all information which in any way reveals confidential business, financial or investment details, programs, strategies, or plans, learned through this RFP process. This requirement will continue with respect to such information learned by the preferred proponent, if any, throughout any Agreement which may arise out of this RFP process.



Information pertaining to the Village obtained by the Proponent because of participation in this process is confidential and must not be disclosed without written authorization from the Village.

3.17. Conflict of Interest

A Proponent shall disclose in its Proposal any actual or potential conflicts of interest and existing business relationships it may have with the Village, its elected or appointed officials or employees, and any property ownership direct or indirect in the project area. The Village may rely on such disclosure.

3.18. No Collusion

Except as otherwise specified or as arising by reason of the provision of the contract documents, no person whether natural or body corporate, other than the Proponent has or will have any interest or share in this Proposal or in the proposed contract which may be completed in respect thereof.

There is no collusion or arrangement between the Proponent and any other actual or prospective Proponents in connection with Proposals submitted for this project and the Proponent has no knowledge of the contents of other Proposals and has made no comparison of figures or agreement or arrangement, express or implied, with any other party in connection with the making of the Proposal.

3.19. Not an Employee

The preferred Proponent will acknowledge and agree that neither the Proponent nor any person employed by or associated with the preferred Proponent in the performance of the services or otherwise, is an employee of, or has an employment relationship of any kind with the Village is in any way entitled to terms or conditions of employment or employment benefits of any kind whatsoever from the Village under any collective agreement or otherwise including but not limited to private programs or coverages and statutory programs and coverages, whether under the *Employment Standards Act* of British Columbia (as amended from time to time), the *Workers Compensation Act* of British Columbia (as amended from time to time), the *Employment Insurance Act* of Canada (as amended from time to time), health pay contributions or otherwise.

3.20. Waiver of Proponents Rights

No Proponent shall have any claim for any compensation of any kind whatsoever, because of participating in this RFP and by submitting a Proposal each Proponent shall be deemed to have agreed that it has no claim.

By submitting a Proposal, the Proponent acknowledges the Village of Midway's rights under this RFP and absolutely waives any right, or cause of action against the Village, its officers, directors, employees, or agents by reason of the Village's failure to accept the Proposal submitted by the Proponent, whether such right or cause of action arises in contract, negligence, bad faith or otherwise.

3.21. Contract Performance Reviews

From time to time, as deemed necessary, the Manager may request that the Contractor participate in a Contract performance review. Documented performance arising from such reviews may be used as the basis for alteration of the scope of work or suspension/termination of the Contract.



3.22. Litigation

Proponents who, either directly or indirectly through another corporation or entity, have been or are in litigation, or who have served notice with intent to proceed with court action against the Village in connection with any contract for works or services, may be considered ineligible Proponents. Receipt of Proposals from such Proponents may be disqualified from the evaluation process.

4. PROPOSAL SUBMISSION FORM AND CONTENTS

Proponents should complete the Form of Proposal attached as Schedule C in full. The schedules attached to Schedule C consist of the following:

- C-1 Contractor Information
- C-2 Questionnaire
- C-3 Pricing Proposal

Proponents are encouraged to use the forms provided and attach additional pages as necessary.

The legal name of the person or firm submitting the Proposal should be inserted in Schedule C. The Proposal must be signed by a person or persons authorized to sign on behalf of the Proponent.

5. <u>WORK</u>

5.1. Term of Work

The term of the proposed contract will be for 7 months, starting May 5, **2025**, and expiring on December 1, 2025.

The term of contract may be extended by up to 2 months at the sole discretion of the Village of Midway.

5.2. Location of Work

The work is to take place within the prescription area as referenced in the Village of Midway Fuel Management Prescription in Appendix A.

5.3. Scope of Services

The preferred Proponent will provide services to implement a wildfire risk reduction fuel treatment on approximately 20 hectares of land within the Village of Midway's municipal boundaries.

The scope of services will include but not be limited to the following.

1. Provide all management and operational aspects of the Program including but not limited to the following objectives:



The objectives of the fuel management work are to:

- Reduce wildfire risk to adjacent residents along Fritz Road and Central Avenue
- Enhanced safety and efficacy of first responders from Midway Fire & Rescue and/or BC Wildfire Service
- Demonstrate the principles and practices of vegetation and fuels management to community members and the public.
- Minimize negative impacts on wildlife habitat, forest health, and air quality through appropriate stand management, and where possible enhance these values.

The treatment work will target the following conditions and defined objectives:

- Reducing fine surface fuel loading
- Reducing vertical and horizontal fuel continuity
- Removing standing dead/leaning hazard trees
- Retaining all live deciduous trees and shrub species in both TU's

The prescription strategies require the following operational methods:

- Reduce surface fuel loads of fine woody debris, by cleaning up pre-existing accumulations and removing fuels introduced through treatment.
- Manual hand thinning, pruning, understory thinning, falling hazard trees and dead-standing trees
- Slash disposal through pile burning, chip and burn, or chip and haul.

The treatment description will provide the following information:

- A comprehensive list of all work, tools, equipment, and materials, necessary to complete the fuel management prescription.
- As treatment activities will begin during the migratory bird breeding season (Early April Mid August), a plan must be provided to monitor breeding bird activity by a qualified professional.
- Clear methodology for debris management.
- Plan for the cleanup of any dirt tracked offsite by equipment, which will be the contractor's responsibility.
- A plan of how the adjacent residents and facilities will be notified of upcoming work prior to commencement of work, and planned pile burning activities.
- A plan for coordinating overall worksite safety measures, including Wildlife/Danger Tree Assessment by a certified DTA, a Traffic Control Plan, and notification to Midway Fire &



Rescue services for a burning permit, and informing Southeast Fire Centre when undertaking pile and burning activities.

Contractors must be able to demonstrate prescription targets are achievable to be considered for contract award.

The Village has retained the services of Cabin Resource Management to conduct the pre-proposal meeting, pre-work meeting, site visits, and verify the prescription objectives are met. Cabin Resource Management (RPF) will have project oversight for the operational treatment.

2. Reporting. The successful proponent will submit a final report addressing the details of the deliverables as outlined above and adhere to the reporting schedule as specified by RPF overseeing the project implementation.

The "Services" as identified above, collectively, are all to be provided, with consideration being given to a focus on value to the Village of Midway, customer service, responsiveness, and effectiveness.

5.4. Liability for Errors

While the Village of Midway has used considerable effort to ensure an accurate representation of information in this RFP, the information contained herein is given solely as a guideline for Proponents. The information is not guaranteed to be accurate, nor is it necessarily comprehensive or exhaustive. The preferred Proponent: along with any required sub-consultants, will work collaboratively with Village staff to ensure successful project completion.

5.5. Sub-Consultants

The Proposal shall include the company name of all subcontractors and sub-consultants proposed to be used in the performance of the Work with a description of the work they would be performing.

The subcontractors and sub-consultants listed in the Proposal may not be changed without the written consent of the Village. If the Village of Midway so requires, the Proponent shall be prepared to confirm to the Village the competence of subcontractors and sub-consultants prior to acceptance of the Proposal.

5.6. Safety Requirements

The Proponent, and any proposed sub-contractors and sub-consultants, shall provide a WorkSafeBC (Workers Compensation Board) Registration Number in the Proposal and shall at the time of signing a contract agreement, provide proof of payment of claims in good standing with WorkSafeBC. Prior to any onsite work, the preferred Proponent will provide applicable Health and Safety manuals or documents to the Village of Midway.

5.7. Workers Compensation Act

Prior to undertaking any of the Work in this Contract, the Contractor will provide the Village of Midway with a Clearance Letter confirming they are in good standing with WorkSafeBC and will pay and keep



current all assessments required by WorkSafeBC in relation to the Contract. Out-of-province contractors will be compliant with BC's registration requirements pertaining to out-of-province firms. Where WorkSafeBC registration requirements allow for a contractor to be registered with another Province's Worker's Compensation Board, or like organization, the contractor will provide the Village of Midway with the registration number and written documentation confirming that the contractor is in good standing with the appropriate Worker's Compensation Board, or like organization. The contractor will pay and keep current all assessments required to maintain good standing in relation to the Contract amount. Where the Contractor may not be eligible for WorkSafeBC coverage, the Contractor should provide a copy of a letter from WorkSafeBC confirming ineligibility.

The Contractor will use due care and take all necessary precautions to assure the protection of persons and property while undertaking the Work and will comply with the Workers Compensation Act of the Province of British Columbia. The Contractor will maintain an Occupational Health and Safety Plan (OHSP) and ensure that their employees and Sub-Contractors are well-trained and aware of OHSP.

During completion of the Work, the Contractor is required to meet at minimum, any requirements as detailed at the place of Work, which includes but not limited to all OHS regulations or standards. Prior to any onsite work, the Contractor will provide their Health and Safety Manual to the Village of Midway.

5.8. Insurance

At the time of submission, the Contractor must provide proof that they are fully insured and covered for the following:

- 1. premises, activities and operations liability
- 2. blanket contractual liability
- 3. cross liability
- 4. contingent employer's liability
- 5. owners' and Contractors' protective liability
- 6. employees as additional insureds
- 7. personal injury
- 8. broad form loss of use
- 9. broad form property damage
- 10. owned and non-owned automobile liability
- 11. the Village of Midway as an additional insured

The Contractor must maintain and pay for Comprehensive General Liability Insurance on an occurrence basis for the Contractor with limits of not less than \$5,000,000.00 inclusive per occurrence for bodily injury and property damage.

This insurance shall be maintained continuously from the commencement of the Work until the date of the completion certificate.

All required policies of insurance must be issued by insurers duly authorized by law to do business in the



Province of British Columbia and must include a provision that coverage may not be cancelled or amended in any way unless thirty (30) days' written notice has been given to the Village of Midway.

The premiums for all insurance maintained by the Proponent shall be deemed to be included in the fees payable. No separate payment shall be made to the Proponent in respect of insurance premiums which the Proponent is required to provide in accordance with the Contract.

At the time of signing the Contracting Services Agreement, the Proponent must provide proof of insurance that the Village of Midway has been added as an additional named insured.



SCHEDULE C - FORM OF PROPOSAL

Dear Sir/Madame:

1.0 I/We, the undersigned duly authorized representative of the Proponent, having received and carefully reviewed all of the Proposal documents, including the RFP and any issued addenda posted on BC Bid (or having received directly), and having full knowledge of the Site, and having fully informed ourselves as to the intent, difficulties, facilities, and local conditions attendant to performing the Services, submit this Proposal in response to the RFP.

2.0 I/We confirm that the following are attached to and form a part of this Proposal:

Schedule C-1 – Proponent Information; Schedule C-2 – Questionnaire; Schedule C-3 – Proponent's Pricing Proposal

Mandatory Requirements

Proof of Insurance Proof of WorkSafeBC coverage Site Visit/Safety Plan

3.0 I/We confirm that this pro	I/We confirm that this proposal is accurate and true to the best of my/our knowledge		
This Proposal is submitted this	day of		
20 .			

I/We have the authority to sign on behalf of the Proponent.

(Name of Proponent)

(Signature of Authorized Signatory) (Signature of Authorized Signatory)

(Print Name and Position of
Authorized Signatory)

(Print Name and Position of Authorized Signatory)



<u>C-1 – PROPONENT INFORMATION</u>

TO:

Village of Midway Representative: **Carlene Pires, RDKB FireSmart Coordinator,** Email Address: <u>epc@rdkb.com</u>

RFP Project Title:
RFP Reference No.:
Legal Name of Proponent:
Contact Person and Title:
GST Number:
WorkSafe Number:
Health and Safety Coordinator:
Business Address:
Telephone:
Fax:
Email Address:



SCHEDULE C-2 – QUESTIONNAIRE

Proponents should respond to the questions under each heading clearly and concisely. Please limit your response to 10 pages (not including Appendix).

Through the information provided in your Proposal, the Village of Midway expects to gain an indepth understanding of a Proponent's experience, capabilities, and capacity to provide the Work.

Points will be awarded based on the completeness, clarity and quality of responses and the degree to which the proponent addresses the key criteria listed.

Corporate Experience

Q1: Provide a short overview of the Proponent's history of implementing Fuel Management Treatments in similar ecotypes using hand treatments and pile burning for Wildfire Risk Reduction. Demonstrate relevant corporate expertise by summarizing experience, qualifications and technical capability to provide the Scope of Services. Include any sustainability or corporate social responsibility policies or practices that play a role in your business and how they are reflected in your submission.

It is particularly important to prove recent experience in implementing fuel treatment prescriptions of comparable geographic size and scope to the Village of Midway Fuel Management Prescription. The Proposal should include details on only the most recent project of related work occurring within the previous ten years

For prior experience in implementing treatments of comparable scale and scope to the Village of Midway's fuel prescription, provide the following:

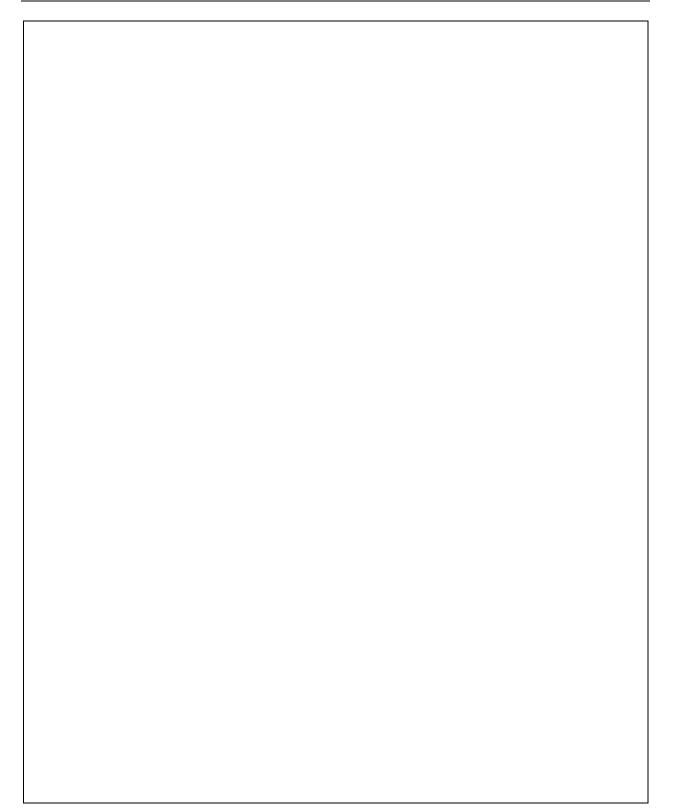
- 1. Location of work
- 2. Objectives of Fuel Management work
- 3. Project timeline
- 4. Approximate project value
- 5. Which key personnel (resources) included below were involved

Points available = 25

A1:



Midway Wildfire Risk Reduction Treatment RFP # CRI-505 Fritz TU Page **22** of **37**





Midway Wildfire Risk Reduction Treatment RFP # CRI-505 Fritz TU Page **23** of **37**

Corporate Experience

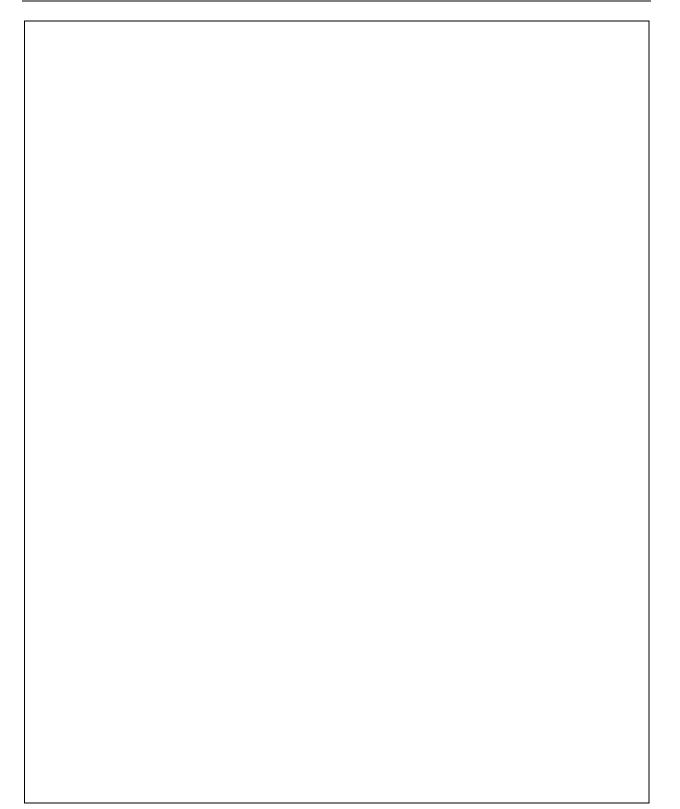
Q2: Provide a list of key personnel who will be actively involved in completing the work, including the Project Manager, and their qualifications and experience.

Points available = 20

A2:

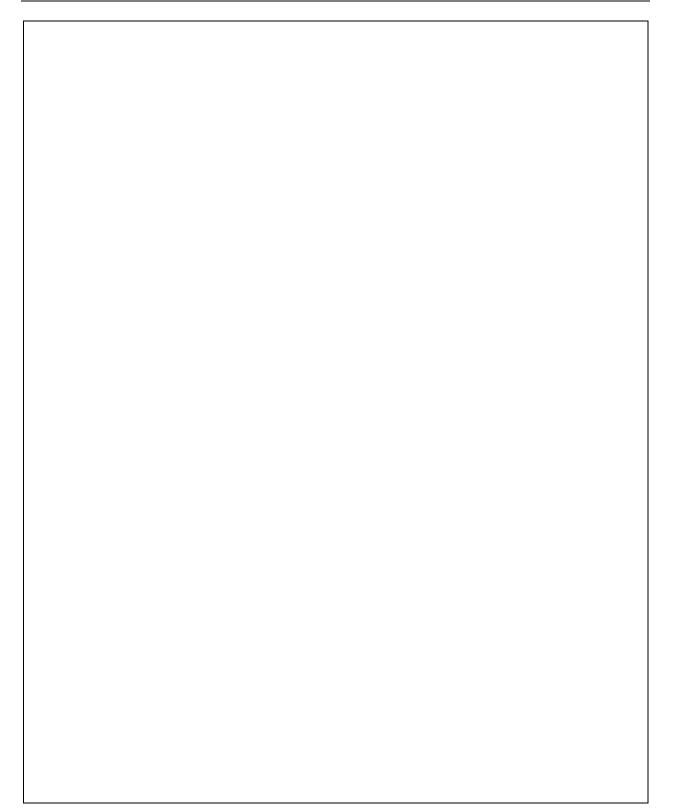


Midway Wildfire Risk Reduction Treatment RFP # CRI-505 Fritz TU Page **24** of **37**





Midway Wildfire Risk Reduction Treatment RFP # CRI-505 Fritz TU Page **25** of **37**





Approach & Methodology:

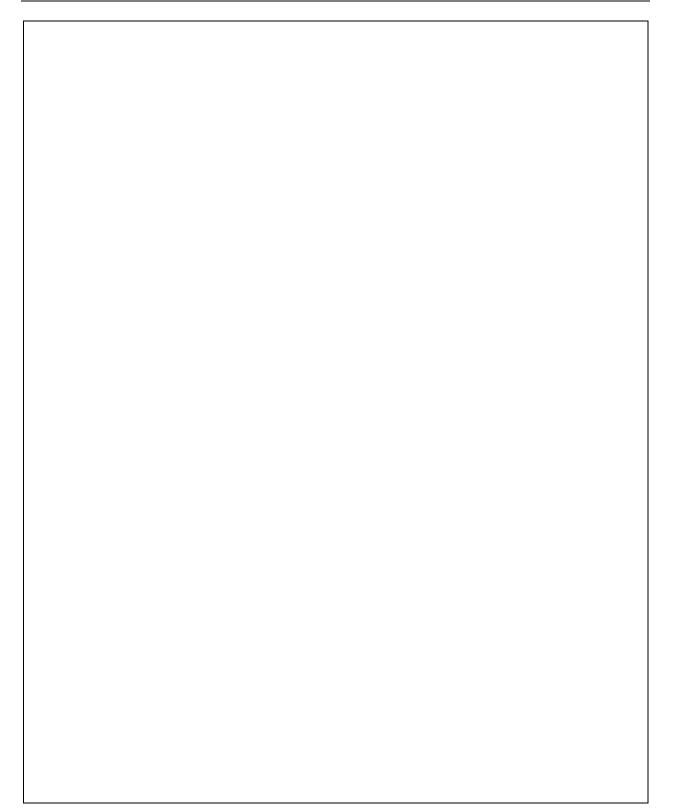
Q1: Describe your project plan and methodology to meet the fuel management prescription requirements. Include:

- 1. Outline of the treatment schedule,
- 2. A comprehensive list of all work, tools, equipment, and materials necessary to complete the fuel management prescription
- 3. Detailed description of the intended fuel reduction approach and methodology,
- 4. Resources assigned to address the Village needs/services
- 5. Migratory Bird Habitat Plan to monitor breeding bird activity
- 6. Overall worksite safety measures, including Wildlife/Danger Tree Assessment, Traffic Control Plan and Falling within striking distance of public trails, roads, and homes, and/or on steep slopes,
- 7. Clear methodology for debris management, including dirt tracked offsite by equipment
- 8. Public education and communication strategy,
- 9. Reporting strategy.

Points available = 25

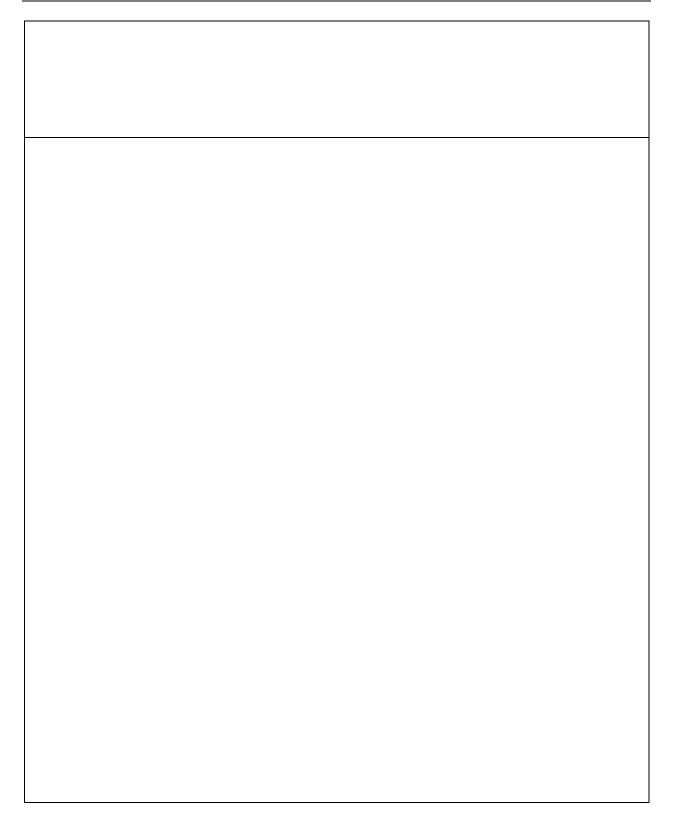


Midway Wildfire Risk Reduction Treatment RFP # CRI-505 Fritz TU Page **27** of **37**





Midway Wildfire Risk Reduction Treatment RFP # CRI-505 Fritz TU Page **28** of **37**





Midway Wildfire Risk Reduction Treatment RFP # CRI-505 Fritz TU Page **29** of **37**

Methodology

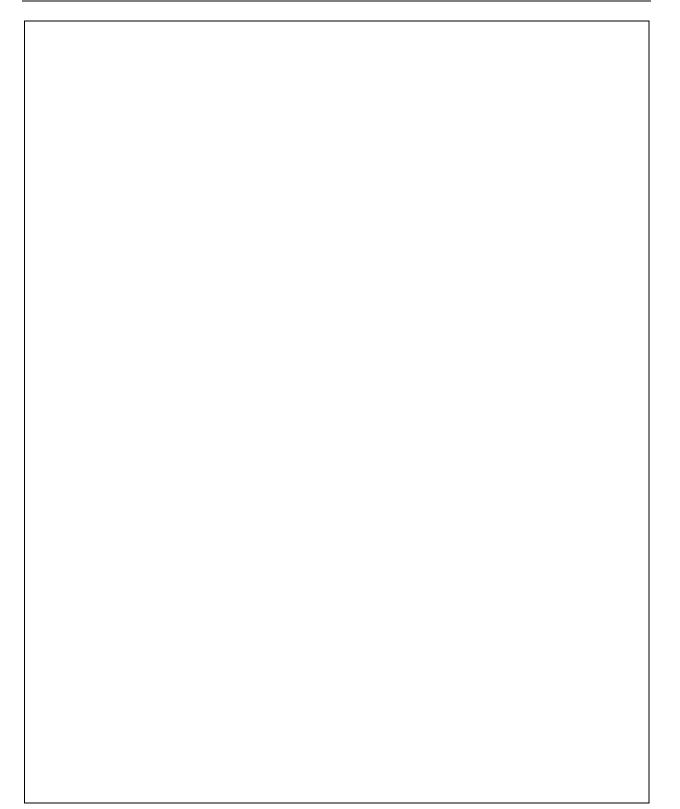
Q2: Provide a discussion of the Scope of Services and your approach to the work to demonstrate a clear and thorough understanding of requirements. Explain how your methodology would be adjusted, if at all, during a challenging wildfire season that include venting and open burning restrictions. Also include any suggested innovations to improve the Fuel Treatments effectiveness or efficiency and how they would corelate to monies saved by the Village of Midway.

Points available = 20

A2:



Midway Wildfire Risk Reduction Treatment RFP # CRI-505 Fritz TU Page **30** of **37**





Midway Wildfire Risk Reduction Treatment RFP # CRI-505 Fritz TU Page **31** of **37**

References

Provide a reference for each comparable Fuel Treatment example included above in the Corporate Experience section.

Include the following:

- 1. Project name (match name included in Corporate Experience Section)
- 2. Name of reference and contact information (email address and phone number)

References will be contacted to confirm the information provided and the satisfaction level of the work completed. If a reference cannot be reached within 72 hours of initial contact, it will not be included in the evaluation.

Points Available = 10



Midway Wildfire Risk Reduction Treatment RFP # CRI-505 Fritz TU Page **32** of **37**



SCHEDULE C-3 – PROPONENT'S PRICING PROPOSAL

Provide the cost per hectare and calculated lump sum cost to complete the implementation of this fuel treatment based on the following:

- Pre-treatment (including danger tree assessment, safety planning, and public notification)
- Thinning (including pruning, spacing, tree falling, and brushing)
- Debris management (chipping and removal or pile & burn)

Fees should be quoted as follows:

Lump Sum Price Schedule (excluding taxes)

FRITZ TU-1 (15.4 ha)	Description	Total
Pre-Treatment	Danger Tree Assessments,	\$
	Safety Planning, Migratory Bird Plan, Public Notification	
Cost of thinning	Pruning, thinning, tree falling, brushing	\$
Cost of debris management	Slash Disposal: Pile burning, chip and burn, chip and haul	\$
		\$

FRITZ TU-2 (4.74 ha)	Description	Total
Pre-Treatment	Danger Tree Assessments, Safety Planning, Migratory Bird Plan, Public Notification	\$
Cost of thinning	Pruning, thinning, tree falling, brushing	\$
Cost of debris management	Slash Disposal: Pile burning, chip and burn, chip and haul	\$
		\$

Summary Table:

Area	Lump Sum Total
Fritz TU-1	\$
Fritz TU-2	\$
Total	\$



Area	\$/ha	Area (ha)	Total
TU-1A		14.52	\$
TU-1B		0.88	\$
TU-2A		0.94	\$
TU-2B		0.81	\$
TU-2C		0.53	\$
TU-2D		2.46	\$
Total Price		20.14	\$

Please break out costs as follows (All found costs to carry out the work):

Charge Out Rates

Provide per-hour charge-out rates for personnel.

Please identify all project contributors, their per-hour charge-out rates, individual tasks and any subcomponents as required under the <u>2024 CRI FCFS Final Report Worksheet 2</u>, hours and all disbursements including travel. Should the category's list differ please provide your alternate or equivalent titles.

Category 1 (personnel)	Price / Rate per hour
Prime Contractor	
Sub-Contractor / Tree Faller	
Labour/Support Staff (if applicable)	
Other Personnel (if Applicable)	

Be aware that during the term of the work, the Village of Midway at its sole discretion may modify or reduce the Scope of Services; hence appropriate fee adjustments may be required, and the preferred Proponent shall have no claim for loss or compensation if this occurs.

All pricing shown on the Proposal is to be net, with Goods and Services Tax, (and Provincial Sales Tax if applicable), shown separately. All other taxes, duties, insurance, fuel, equipment, and other costs are to be included in the net price. **Points available = 100**

Proposed Sub-Contractors

Provide the following Sub-Contractor information of any individual or company that you intend to use for this work. Any changes or additions to this list must be submitted to the Village of Midway for approval before any work is started by the proposed Subcontractor.



Midway Wildfire Risk Reduction Treatment RFP # CRI-505 Fritz TU Page **35** of **37**

Work to be Sub-Contracted	Name of proposed Sub-Contractor



Midway Wildfire Risk Reduction Treatment RFP # CRI-505 Fritz TU Page **36** of **37**

APPENDIX A: Village of Midway Fuel Management Prescription





A. PROJECT IDENTIFICATION					
PREPARED BY:	SUBMITTED TO:				
Monica Nederend, FIT	Michael Daloise, Fire Chief				
Quentin Schmidt, FIT	Village of Midway				
Bruce Blackwell, RPF, RPBio	661 Eighth Ave, Midway, BC V0H 1M0				
PROJECT ID AND UNIT ID:	LAND OR TENURE HOLDER:				
Village of Midway FMP 2022	 Municipal – Village of Midway 				
"FRITZ" treatment unit	Crown Provincial				
CRI-505					
LATITUDE/LONGITUDE:	GEOGRAPHIC DESCRIPTION:				
49.0019983, -118.7783801	This prescription area is located on the south side of the Kettle River, in the Village of Midway. It is located on a municipal parcel of land and Crown Provincial land. It is adjacent to the West Boundary Community Forest. It overlaps the Midway hiking and biking trail network. The south boundary of the treatment area abuts the border with the United States, where continuous forest stands extend. The prescription area is broken into two separate treatment units that differ based on the type of forest stand and expected treatment: TU-1 and TU-2.				
HIGHER-LEVEL PLAN(s):	MAP REFERENCE NUMBER:				
 Village of Midway Community Wildfire Protection Plan 2022 	082E007 (1:20,000)				

B. PROJECT DES	CRIPTION							
OBJECTIVE:	PUBLIC SAFETY							
	ECOSYSTEM RESTORATION	RECREATION						
	WILDLIFE HABITAT							
	DESCRIPTION:							
	 This prescription addresses an area identified in the 2022 Village of Midway Community Wildfire Protection Plan (CWPP) for wildfire risk reduction treatment. To the south of the prescription area is the United States border and extensive forested areas. The area under prescription overlaps a newly acquired parcel of municipal land. Portions of the area under prescription were selectively harvested prior to the completion of field work, and a number of new trails were built for this purpose. Fine woody debris accumulations from harvesting remain; this prescription will abate the hazard produced by this. The objectives of the prescription are to: Reduce wildfire risk to adjacent residents along Fritz Road and Central Avenue. Enhanced safety and efficacy of first responders from Midway Fire & Rescue and/or BCWS. Demonstrate the principles and practices of vegetation and fuels management to community 							
	 members and the public; Minimize negative impacts to wildlife habitat, forest health and air quality through appropriate stand management, and where possible enhance these values. 							
STRATEGIES:	 stand management, and where possible enhance these values. The prescription objectives will be achieved by performing the following strategies: Reducing fine surface fuel loading to limit critical surface fire intensity to below 2000 kW/m (Rank 3 fire) based on 90th percentile weather conditions¹; Reducing vertical and horizontal fuel continuity in the stand to decrease the likelihood of a surface fire transitioning into a passive and/or active crown fire, or a fast-moving surface fire; 							

¹ Nearby BCWS weather station was chosen for comparison – ROCK CREEK FWX. See Appendix C: Fire Behaviour Calculations & ISI Roses for further detail.





	 Removing standing dead/leaning hazard trees proactively to provide for the safety and speed of first-responder efforts, as well as increase everyday safety for local residents; and Retaining all live deciduous trees and shrub species in both TUs;
METHODS: ²	 The prescription strategies will be operationalized through the following methods: Reducing surface fuel loads of fine woody debris (FWD) to 0.2 or 0.5 kg/ m2 depending on the location, by cleaning up pre-existing accumulations and removing fuels introduced through treatment; Thinning from below (TFB) to increase the fuel strata gap and to decrease the overall stand density and canopy bulk density; Pruning (PRU) a subset of retained trees to no lower than 2 m in height; Falling hazard trees and dead standing trees that provide low wildlife value, and retaining the largest portions of their boles as recruited coarse woody debris (CWD).
	·

FIELD MARKING:

The external boundary of TU-1 has been marked with orange and black (tiger) striped flagging tape. Falling corners are marked with a double tiger-stripe ribbon and an informational white ribbon. Stand plots are marked with a yellow ribbon. *Project boundaries of TU-2 were not ribboned in the field.* It is an expectation of this prescription that all trees and/or surface fuels directly on the boundary or intersecting the boundary are subject to the treatment specifications.

C. TREA	TMENT UNI	T DESCR	IPTION			
ти	Sub-unit	NET AREA (ha)	GROSS AREA (ha)	LEAVE AREAS (ha)	TREATMENT REGIME	GENERAL DESCRIPTION
TU-1	TU-1A	14.52	14.52	0.0	TFB, PRU, HTR, SFR	This TU is characterized by mature mixed-species stands, dominated overall by Douglas-fir (<i>Pseudotsuga menziesii</i> , Fd), but with large proportions of western larch (<i>Larix</i> <i>occidentalis</i> , Lw), and ponderosa pine (Pinus ponderosa, Py) as well. In some areas, dead standing makes up a significant proportion of the understory, but this is not consistent throughout. Stand structure is highly variable, with dense clusters, open spaces, and more homogenously spaced areas existing in a mosaic across the treatment unit. Surface vegetation in this treatment unit consists of continuous pine grass cover, and scattered herbs and shrubs. Fine woody debris surface fuel is distributed patchily, and occurs from a variety of sources: fine woody
	TU-1B	0.88	0.88	0.0		debris left over from recent selective harvesting, pine needle beds around the dripline of conifers in some areas, and deadfall in mortality patches. The stand averages about 330 stems per hectare for Layer 1 and Layer 2 stems, and about 1213 stems per hectare in the understorey (Layer 3 + Layer 4 stems). Crown closure very roughly averages 35% - however, the significant variability in density means that there are areas with 10- 15% crown closure, and areas with 80-95% crown closure. Parts of this treatment unit were selectively harvested two months prior to data collection. This treatment unit is also criss-crossed with a network of double-wide and singletrack trails. TU-1A encompasses an open, rolling area

² Additional treatment specifics and measurables can be found in Table H. STAND AND STOCK TABLES and Table I. TREATMENT DESCRIPTION.





					with good access throughout due to the established double-wide trail network. TU-1B encompasses a steep section, with slopes of 40-70% consistently, and without existing trail access. Stand structure in TU-1B is more homogenous, and with a higher component of dead standing. The emphasis of treatment in this unit should be removing dead standing stems (unless otherwise identified for wildlife habitat purposes), and reducing the density of understory conifers. This prescription gives specifications for the retention of select healthy, vigorous understory trees. The intention of retaining these select understory trees is to maintain diversity in age classes and stand structure in the treatment unit, while ensuring the post- treatment projected fire behaviour in the stand remains low-threat.
	TU-2A	0.94	0.94	0.0	This TU is characterized by mature ponderosa pine and Douglas-fir dominated stands. Secondary components of dead standing, western larch, and black cottonwood (<i>Populus trichocarpa</i> , At) are also present. Stand structure is variable across TU-2, as in TU-1, with thickets, open
	TU-2B	0.81	0.81	0.0	patches, and homogenously stocked areas present. Surface vegetation consists of pine grass and scattered shrubs. Fine woody debris surface fuels are present in patches, primarily resulting from deadfall. Crown closure is similar to TU-1. Slopes are moderate, with some rolling
TU-2	TU-2C	0.53	0.53	0.0	and gentle terrain, and several short, steep (60%) cut slopes leading down embankments on the north side of the road. This TU represents roadside buffers of varying widths around Fritz Road. It was not selectively harvested like TU-
	TU-2D	2.46	2.46	0.0	1. Subunits TU-2C represents areas that are buffered 5 meters off the edges of Fritz Road. Subunit TU-2D represents areas that are buffered 10 meters off the edges of Fritz Road. TU 2A represents an area between Fritz Road and the doublewide track used to access TU-1A. TU-2B is the right-of-way between Fritz Road and Central Avenue.
		20.15	20.15	0.00	

D. SITE CHARACTERISTICS							
τυ	CFFBPS FUEL TYPE	TIMBER TYPE ³ (>17.5cm DBH)	BGC SUBZONE, VARIANT & SITE SERIES	ELEVATION RANGE (m)	SLOPE POSITION	SLOPE RANGE (%)	ASPECT
TU-1	C-7	Fd ₆₅ Py ₂₅ Lw ₅ Dead ₅	IDF dh 101 (104)	565-660	Mid - Lower	Majority of TU - 50% (Range: 25-80%)	NE

³ Percent of stand composition by basal area.





Village of Midway

TU-2	C-7	$Fd_{55}Py_{30}Decid_{15}$	IDF dh 101 (104)	580-600	Lower / cut-slope	Majority of TU -45% (Range: 25-80%)	SE
FUEL TYPE DETERMINATION FUEL types were determined via closest fit with the BC Wildfire Fuel Typing and Fuel Type Layer Description document ⁴ , using a plot-based data and observations, empirical observations and professional judgement.							

L. JOIL CHANACILNISTICS	E. SOIL	CHARACTERISTICS
-------------------------	---------	-----------------

	5011	DUFF	COARSE	SOIL	SOIL HAZARD RATING			
TU	TEXTURE	SOIL DEPTH FRAGMENTS XTURE (cm) (%)	DISTURBANCE LIMIT (%)	Compaction	Erosion	Displacement		
Both TUs	SiL	3	15	5	High	Moderate	Moderate	

F. VALUES – FOREST AND RANGE PRACTICES ACT							
RIPARIAN & LAKESHORE AREAS - Forest Planning and Practices Regulation (FPPR) division 3, Government Action Regulation							
(GAR) section 6, Forest and Range Practices Act (FRPA) sections 180 and 181							
Is the proposed cutting, modification or removal of				One stream was identified spatially (iMap BC: July 15 th , 2022) and confirmed in the field as a non-classified drainage (NCD).			
trees, or site prep		Yes	No	The Kettle River is classified as an S1 waterbody (not a large river).			
an area that cont		<u>105</u>	110	Portions of TU-2 are located within the riparian management area			
lakes or wetlands				of the Kettle River.			
RIPARIAN MANAGEMENT AREAS (RMAs) - FPPR sections 51 and 52							
STREAM, LAKE, WETLAND ID	CLASS	RRZ (m)	RMZ (m)	SPECIFICATIONS FOR RIPARIAN OR LAKESHORE MANAGEMENT AREAS			
NCD 1	NCD	0	0	 This is an intermittent, ephemeral drainage feature. Water flows through it seasonally only. No channel features were identified. Treatment specifications will apply within the NCD, but the following will occur: Limit the number of machine crossings. Crossings should be pre-identified and agreed upon by the contract supervisor. The natural drainage pattern of these areas should be maintained during treatment and post-treatment. Equipment including power saws should not be refuelled within 5 m of the drainage, unless an appropriate spill kit is used. Piling and burning must not occur in the drainage bottom of the NCD, so that ash and burned debris is not swept into other waterbodies by intermittent flow. 			
Kettle River	S1 (except large rivers)	50	20	 Portions of TU-2 overlap the RRZ and RMZ of the Kettle River. These portions of TU-2 are located on municipal land, so RRZ and RMZ specifications are not legally binding. Additionally, the impact of treatment to riparian ecology structure and function is considered negligible due to: Minor reduction in basal area prescribed, Removal of only hazardous overstory stems Low-impact treatment methods (e.g., staging off existing roads) Treatment locations on low-value habitat areas (cut & fill slopes from road construction and immediate roadside rights-of-way.) 			

⁴ Perrakis, D.B., Eade, G., and Hicks, D. (2018). *BC wildfire fuel typing and fuel type layer description.*





			Since no modifications to prescription works are proposed, the Kettle River RRZ and RMZ are not highlighted on the prescription map.			
TEMPERATURE SENSITIVE STRE	AMS - FPPR s	ection 53, G/	AR section 15, FRPA sections 180 and 181			
Are there temperature sensitive streams or direct tributaries to temperature sensitive streams within or adjacent to the proposed treatment area?	Yes	<u>No</u>	There are no temperature sensitive steams or direct tributaries to temperature sensitive streams within or adjacent to the prescription area (iMapBC: July 15 th , 2022).			
ROAD CONSTRUCTION IN RIPA	RIAN MANAG	EMENT ARE	AS - FPPR section 50			
Is road construction proposed in riparian management areas within the treatment area or an associated road permit (RP)?	Yes	No	No road construction is proposed through this prescription area.			
STREAM CROSSINGS - FPPR sec	tion 55					
Will stream crossings be constructed within the proposed treatment area or a road permit road providing access to the treatment area?	Yes	<u>No</u>	No stream crossings will be constructed within the TUs, nor will a road permit be required for access.			
MAINTAINING STREAM BANK	AND CHANNE		ON S2, S3, S4, S5, and S6 STREAMS - FPPR section 52 (2)			
Is the proposed treatment in the RMZ of an S4, S5 or S6 stream that is directly tributary to an S1, S2 or S3 stream and the activity is likely to contribute significantly to the destabilization of the stream bank or the stream channel?	Yes	<u>No</u>	The proposed treatment area is not in the RMZ of an S4, S5, or S6 stream that is a direct tributary to an S1, S2, or S3 stream. Activities are not likely to contribute significantly to the destabilization of any stream bank or stream channel (iMapBC: July 15 th , 2022).			
DOMESTIC WATER LICENCES (ir	nside or outsic	le of commu	nity watershed) - FPPR section 59			
Does the proposed treatment area contain water sources that are diverted for human consumption by a licensed waterworks?	Yes	<u>No</u>	The proposed treatment area does not overlap any water sources that are diverted for human consumption by a licensed waterworks (iMapBC: July 15 th , 2022).			
LICENCED WATER WORKS (inside or outside of a community watershed) - FPPR section 60						
Does the proposed treatment include areas that are within 100 m of a licensed waterworks?	Yes	<u>No</u>	The proposed treatment area does not include any areas within 100 meters of a licensed waterworks.			
FISHERIES SENSITIVE WATERSH	ED - GAR sect	ion 14, FPPR	section 8.1			
Are any activities proposed within a fisheries sensitive watershed?	Yes	<u>No</u>	No activities are proposed in a fisheries sensitive watershed (iMapBC: July 15 th , 2022).			





COMMUNIT	COMMUNITY WATERSHED - GAR section 8, FPPR section 8.2, 61, 62 and 84							
area include within a com watershed?	-	Yes			The proposed treatment area does not include areas within a community watershed. (iMapBC: July 15 th , 2022).			
	ect require road or deactivation imunity	Yes	<u>No</u>			will not require road construction or deactivation munity watershed.		
WATERSHED	ASSESSMENT CON	SIDERATION	S - FRPA	sect	ion 180 areas	with "significant watershed sensitivity"		
Does the proposed treatment area include areas that have watershed assessment considerations?		Yes	<u>No</u>		The proposed treatment area does not include any areas that have watershed assessment considerations (iMapBC: July 15 th , 2022).			
SOIL DISTURBANCE AND PERMANENT ACCESS STRUCTURES - FPPR sections 35 and 36								
Treatment Units	Proposed Max. Allowable Soil Disturbance (%) (5% or 10%)	Proposed M Soil Disturba for Roadside Work Areas	urbance Permane side Access			Comments		
All TUs	5%	25%		N/A		The soil protection objectives are derived from provincial legislation regarding soil hazard assessments and protection. They are designed to minimize site disturbance and potential long-term productivity losses. All debris removal operations are restricted to conditions that will ensure soil disturbance does not exceed 5%. The existing, extensive, network of double-wide trails through the main treatment units should ensure that this target is achievable. The contract supervisor will monitor for soil disturbance, and may need to develop an appropriate rehabilitation plan if soil disturbance is likely to exceed thresholds.		
	osed Permanent tures exceed 7% area?	Yes	No permane		No permanei	nt access structures are proposed.		
LANDSLIDES	AND TERRAIN STA	BILITY - FPPR	section	37				
Does the proposed treatment area include areas where terrain stability is a concern?		<u>Yes</u>	s No		The prescription area does not overlap with any terrain stability polygons, rated as unstable or potentially unstable (iMapBC: July 15 th , 2022). No indicators of potential slope instability were noted during field work.			
SUITABLE SE	CONDARY STRUCT	URE - FPPR se	ction 43	3.1				
	posed treatment a "targeted pine d"?	Yes	<u>No</u>		The TUs are not within a mountain pine beetle affected stand in which a targeted pine leading stand may be identified.			
UNGULATE	WINTER RANGE - G	AR section 12	, FRPA s	ectio				
	posed treatment areas within an nter Range?	<u>Yes</u>	No		TU-2B, TU-2C, and TU-2D overlap partially with approved Ungulate Winter Range for mule deer (iMapBC: July 15 th , 2022; UWR number u-8-008 ⁵). The total area of overlap is 1.4 ha. Treatment proposed			

⁵ Government Actions Regulation (BC Reg. 582/2004). Order – Ungulate Winter Range #U-8-008. <u>https://www.env.gov.bc.ca/wld/documents/uwr/U-8-008_ord.pdf</u>





			by this prescription will not negatively decrease mule deer habitat
			attributes; the healthy overstory component of this stand will be retained. This will result in no decrease of the forest cover area, will retain mature forest attributes (complying with snow interception cover attributes), largely maintain crown closure, and comply with the required retained snow interception cover of 15%.
			No <u>proposed</u> Ungulate Winter Range area overlaps the TUs.
WILDLIFE HABITAT AREA - GAR	section 10, F	RPA sections	180 and 181, FPPR section 69
Does the proposed treatment area include any wildlife habitat areas (WHA)?	Yes	<u>No</u>	The prescription area does not include any wildlife habitat areas, proposed wildlife habitat areas (iMapBC: July 15 th , 2022).
MIGRATORY BIRD CONVENTIO	N ACT - 1994	T	
Does the proposed treatment have the potential to impact migratory bird habitat?	Yes	No	Migratory Birds The treatment area falls within Bird Conservation Region 10 (Northern Rockies), in Nesting Zone A2, which has a regional nesting period of Early April – Mid August. As of July 2022, the Migratory Bird Regulation (MBR 2022) states that all nests of migratory birds (as defined in the Migratory Birds Convention Act) must not be disturbed, damaged, destroyed or taken when the nest contains a live bird or egg. Any treatment that occurs during this nesting period will need to ensure that this regulation is followed – which could be accomplished by a breeding bird survey by a qualified individual, activities reviewed and approved by a RPBio competent migratory birds nesting and habitat. As well, Schedule 1 of the MBR 2022 provides year-round protection for nests of a subset of species, until the nest can be deemed abandoned and the appropriate waiting period has been met. Pileated woodpeckers are identified in Schedule 1 with a 36-month waiting period, and are known to inhabit the treatment area. If a nesting cavity (active or abandoned) is identified, appropriate measures will have to be to be taken by the contract supervisor to ensure that the nest is protected.
OBJECTIVES SET BY GOVERNM	ENT FOR WILI	DLIFE - FPPR	F
Does the proposed treatment area include areas to which objectives for wildlife under FPPR section 7 apply?	<u>Yes</u>	No	Species at Risk (SAR): An occurrence of the American badger (<i>Taxidea taxus</i>) overlaps the entirety of the treatment area. (iMapBC: July 15 th , 2022). The primary threat facing American badgers throughout their range are road-kill, to which they are highly susceptible, and habitat loss and degradation from land conversion (agriculture, housing development), and forest ingrowth and encroachment. ⁶ Contractors should be aware of the risk of road-kill when operating vehicles and machinery and accessing treatment units. Land conversion will be an outcome of this prescription. Forest in-growth and encroachment will be reduced by the prescribed measures of this document. Critical Habitat for Federally Listed Species at Risk TU-1 and TU-2 overlap with critical habitat for the following federally listed species at risk (iMapBC, January 23, 2023): western rattlesnake (<i>Crotalus oreganus</i>); Great basin gophersnake (<i>Pitouphis catenifer deserticola</i>); Lewis's woodpecker (<i>Melanerpes lewis</i>); and American badger (<i>Taxidea taxus jeffersonii</i>).

⁶ BC Badger Recovery Team. (2016). *Recovery Plan for American Badger (Taxidea taxus) in British Columbia*. Retrieved from: <u>https://a100.gov.bc.ca/pub/eirs/finishDownloadDocument.do;jsessionid=0173B6EB177A391A88B143324BA6CF37?subdocumentId=10483</u>





	Critical habitat is the habitat needed for the survival or recovery of
	a threatened or endangered species listed on Schedule 1 of the
	Species at Risk Act, and it is formally identified in the final recovery
	strategy that is made for every species listed on Schedule 1.
	Destruction of critical habitat is a contravention of SARA.
	Critical habitat occurrences within the TUs, and measures taken to
	prevent damage or destruction of critical habitat are as follows:
	Great Basin gophersnake and western rattlesnake:
	Critical habitat includes biophysical features such as cliffs, talus,
	and rocky bluffs; open conifer forests, grassy shrub-steppe areas,
	and retreat structures (live and dead shrubs, coarse woody debris,
	rodent burrows). Cliffs, talus and bluffs have been excluded from
	the treatment area. Open conifer forests and grassy shrub-steppe
	areas will be maintained or enhanced through this treatment.
	Retreat structures such as live and dead shrubs and coarse woody
	debris will not be affected by this treatment. Contractors should
	minimize creation of new trails, and use the existing trail network
	to avoid ground disturbance that may inadvertently damage
	earthen burrow structures. Contractors should be aware of
	possible earthen burrow features in the TUs. Ground disturbance
	and machinery use overtop of earthen burrow features should be
	avoided.
	Lewis' woodpecker:
	Critical habitat includes nest trees/potential nest trees (>30 cm
	DBH, with large cavities or Decay Class 2), preferred species include
	Py, Fd, or Act. Where a potential nest tree exists, the 400 m radius
	around it is also critical habitat for foraging. A best management
	practice for higher canopy closure stands is the retention of the
	highest value potential nest trees on a site. Wildlife Danger Tree
	Assessments should incorporate this best practice*. Removal of
	understory shrubs (necessary for foraging) is not a treatment
	recommended by this prescription. Other activities likely to result
	in destruction of habitat, including replacements of open forest
	habitats with a closed canopy, and significant removal of standing
	mature trees within 400 m of a known nest tree, should not occur
	as a result of prescribed activities in this document.
	American badger: 7
	Both 'safe movement' and 'core' critical habitat polygons overlap
	the TUs. Critical habitat encompasses the following biophysical
	features: barrier free landscapes, diggable soils, dens, open
	habitats suitable for foraging, and prey. Treatment activities will
	not affect quality of barrier free landscapes, or prey populations.
	Treatment activities should enhance the availability of open
	grassland habitats. Many areas of TU-1 and TU-2 currently have
	lower quality soils for digging due to the extensive trail network in
	place. To prevent further soil compaction, and also to prevent
	ground disturbance that may impact earthen dens, expansion of a
	trail network should be limited, and contractors should be aware of
	the potential presence of earthen dens. Ground disturbance and
н — — — — — — — — — — — — — — — — — — —	

⁷ Currently the critical habitat area proposed for the American badger is 'proposed', not finalized – however, accommodations and considerations are outlined in this document, a) as a best practice, and b) in case this area is finalized between the time of writing for this document and prescription implementation.





	r	1	
			machinery use overtop of earthen burrow features should be avoided.
			Regionally important wildlife: There are no regionally important wildlife listed in this area.
			Winter survival of ungulate species:
			As reviewed in the UWR section above, winter habitat features of
			ungulate species are not expected to be negatively affected.
			Canopy closure will largely be maintained across all TUs which will
			continue to provide for adequate snow interception to ease
			ungulate movement.
OBJECTIVES SET BY GOVERNMI	ENT FOR BIOD	DIVERSITY O	BJECTIVES (Landscape Level) - FPPR section 9
			The proposed treatment area is in the IDFdh, which is provincially
			categorized as having a natural disturbance regime of frequent
			stand-maintaining fires (NDT4). The LMH75 describes a mixed-
Does the proposed treatment			severity fire regime throughout the IDFdh, with frequent low-
area include areas to which			intensity wildfires creating mosaics of open forests, interspersed
objectives for landscape level	Voc	No	with grassy and shrubby openings – such as the ecosystems the
-	<u>Yes</u>	NO	
biodiversity under FPPR			treatment units overlap. Treatments will largely mimic that of a
section 9 apply?			low-severity understory burn – retaining the largest and healthiest
			trees, retaining higher moisture-content shrub and deciduous
			species, cleaning up surface fuel accumulations, and pruning away
			decadent ladder fuels.
OBJECTIVES SET BY GOVERNM	ENT FOR BIOD	DIVERSITY O	BJECTIVES (Stand Level) - FPPR section 9.1
			Wildlife Trees: These will be targeted for retention, as cutting
			specifications will focus on a thin-from-below approach. It is also
			recommended that a comprehensive wildlife danger tree
			assessment (WDTA) occur prior to or concurrent with treatment.
			While hazard trees and standing dead stems with low habitat
			quality will be targeted for removal through this prescription, any
			hazard trees that exhibit high-quality wildlife characteristics should
			be retained with a no-work-zone (NWZ) established if required.
Are considerations for			Large diameter Py, Fd, or Act trees that are >30 cm DBH, with >5
maintaining stand structure			cm cavities present or are identified as Decay Class 2, are potential
(wildlife trees, wildlife tree		No	nest trees for Lewis' woodpecker, and should be prioritized for
reserves, etc.), coarse woody	<u>Yes</u>		retention (see SPECIES AT RISK – FPPA Section 7). NWZ's must be
debris, and maintaining tree			identified and communicated to the contract supervisor to ensure
and vegetation species			that they do not unduly compromise risk-reduction efforts.
composition incorporated			Coarse Woody Debris: There is a moderate amount of small-size (7-
into this prescription?			20 cm diameter) CWD in all treatment units, and a low amount of
			large CWD. Recruitment of large CWD should focus on long, large-
			diameter pieces; however CWD of >7cm diameter may be retained
			per specifications in Section H. 'Biodiversity And Forest Health
			Considerations And Targets.'
			Tree/Vegetation Composition: The cutting specifications of this
			prescription will maintain the pre-treatment diversity of healthy
			overstory conifer species, and will allow for all deciduous and shrub
			components to be maintained.
RECREATION FEATURES - FRPA	section 56 an	d 149, FPPR	section 70
Does the proposed treatment			There are no interpretive sites, recreation sites, or recreation
area contain interpretive	Vac		facilities that are provincially within the prescription area (iMap BC:
sites, recreation trails,	Yes	<u>No</u>	July 15th, 2022). There is a network of local trails, which primarily
recreation sites, recreation			are located west of TU-1, but which overlap some areas under
. coreation sites, recreation	1	1	and reactor most of no 1, but which overlap some areas ander





facilities that are considered			prescription. Trails are marked on the prescription map. Machine
to be of significant recreation			access along trails should be confirmed with the Village of Midway
value and are designated a			and must be returned to pre-treatment condition prior to contract
resource feature?			completion.
	GAR section 7	, FRPA section	ons 180 and 181, FPPR section 9.2
Is the proposed treatment within a scenic area?	Yes	No	The TUs are within two provincially designated scenic areas: Visual Landscape Inventory (VLI) Polygon #526, with a visual quality objective of 'Modification' and VLI Polygon #523, with a Visual Quality Objective of 'Partial Retention'. These objectives are enacted by Government Action Regulation 7.1/7.2: DM 31 December 2005. The proposed treatment area specifications will focus on fuel management objectives by thinning understory stems and removing standing dead/hazard tree stems from the overstory. Most healthy dominant and co-dominant stems in the prescription area will be retained, mimicking a 'retention' treatment through most of the area, and not exceeding the alteration requirements of the 'Partial Retention' requirement. As such, treatment is not
			expected to significantly impact the overall visual quality of the scenic area.
ARCHAEOLOGICAL RESOURCES	/CULTURAL H	IERITAGE RE	
Are there any known archaeological sites or cultural heritage resources that are important to First Nations within the proposed area?	Yes	No	Through a data request to the provincial Archaeological Branch, there are no known archaeological sites recorded within the proposed treatment area. Archaeological potential modelling of the treatment area does not indicate a high potential for previously unidentified archaeological sites to be found. <i>There is still a</i> <i>possibility for previously unidentified arch sites and culturally</i> <i>modified trees (CMTs) to exist in the area, all individuals involved in</i> <i>treatment implementation need to be aware that if archaeological</i> <i>material is encountered, activities must stop immediately, and the</i> <i>Archaeology Branch must be contacted for direction at 250-953-</i> <i>3334.</i>
INVASIVE PLANTS - FRPA sectio	n 47 and FPPF	R section 17	
Is the introduction and spread of invasive plants likely as a result of the proposed treatment?	<u>Yes</u>	No	 The following invasive species occurrences were spatially identified via the Invasive Alien Plant Program (iMapBC: July 15th, 2022) in the prescription area. Knapweed (<i>Centaurea diffusa</i>) Hoary alyssum (<i>Berteroa incana</i>) Common tansy (<i>Tanacetum vulgare</i>) Wormwood (<i>Artemesia absinthium</i>) Sulphur cinquefoil (<i>Potentilla recta</i>) Baby's breath (<i>Gypsophila panicula</i>) Operations should minimize the introduction and/or spread of invasive plants through the following measures: 1) Clean clothing, boots, and equipment thoroughly when entering and exiting the treatment area. Wash in designated wash sites and prevent run-off from entering waterways or riparian areas. 2) Avoid driving through, walking through, or parking on weed infestations. 3) Burn piles should be effectively scarified/raked and covered with adjacent materials from the undisturbed forest floor.





		9 EDDD cost	 4) Ensure crews are aware of the importance of invasive species management and can identify all the common invasive species in the region. Report any identified infestations through any of the following methods: a) Report-A-Weed/Report-A-Species App: <u>https://www.reportaweedbc.ca/</u>. b) Boundary Invasive Species Society (email): <u>https://www.boundaryinvasives.com/contact</u>
NATURAL RANGE BARRIERS - F Are there natural range	RPA section 4	8, FPPR sect	
barriers within the proposed treatment area that are likely to be removed or rendered ineffective?	Yes	<u>No</u>	There are no natural range barriers within the treatment area (iMapBC: July 15, 2022).
SPECIES AT RISK – FPPA Section	i 7		
Are there species at risk present within the boundaries of the prescribed treatment area?	<u>Yes</u>	No	An occurrence of the American badger (<i>Taxidea taxus</i>) overlaps the entirety of the treatment area. (iMapBC: July 15th, 2022). The primary threat facing American badgers throughout their range are road-kill, to which they are highly susceptible, and habitat loss and degradation from land conversion (agriculture, housing development), and forest in-growth and encroachment. Contractors should be aware of the risk of road-kill when operating vehicles and machinery and accessing treatment units. Land conversion will be an outcome of this prescription. Forest in- growth and encroachment will be reduced by the prescribed measures of this document. Critical habitat for species at risk overlaps the TUs. This is discussed in SPECIES AT RISK – FPPA Section 7.
LAND USE OBJECTIVES (Higher)	evel Plans ar	nd objective	s set by Government under the <i>Land Act</i>)
Are there land use objectives (higher level plans or objectives under the Land Act) that apply to the proposed treatment area or a road permit necessary to provide access to the treatment area?	Yes	No	The LRMP for the area (Kootenay Boundary) has been retired and many legal Orders associated with it have also been varied or cancelled. The Implementation Strategy associated with this LRMP is still active; however, no spatially explicit, legal objectives overlap the treatment area (iMapBC, July 15th, 2022). ⁸ A road permit is not necessary to provide access to the treatment area.
Do the proposed activities conflict with land use objectives (higher level plans or objectives under the <i>Land</i> <i>Act</i>)?	Yes	<u>No</u>	The proposed activities do not conflict with land use objectives.
Known and potential species at risk, windthrow hazard, and old growth management areas	<u>Yes</u>	No	Species at risk occurrences overlap the TUs. These are addressed above in SPECIES AT RISK – FPPA Section 7. Old Growth Management Areas are not present in the TUs. Land use objectives are reviewed in this section, LAND USE OBJECTIVES (Higher Level Plans and objectives set by Government under the <i>Land Act</i>). No other old growth management areas enabled by any other legislation are present in the TUs. Windthrow hazard is determined not to be significant within the TUs. Windthrow hazard is discussed in BIODIVERSITY AND FOREST HEALTH CONSIDERATIONS AND TARGETS .

⁸ https://www2.gov.bc.ca/gov/content/industry/crown-land-water/land-use-planning/regions/kootenay-boundary/kootenay-boundary-rlup





G. OTHER CONSIDERATION	IS AND REQUIREMENTS
CONSULTATION – FIRST NA	
First Nation	Responses / Concerns Identified and Measures to Address
Okanagan Nation Alliance	An information sharing package was forwarded on June 23, 2022, with a project description and a KMZ file of the proposed prescription area. A follow up email was sent in February 2023 to confirm interest in commenting or providing feedback. No response was received by the time of finalization.
Osoyoos Indian Band	An information sharing package was forwarded on June 23, 2022, with a project description and a KMZ file of the proposed prescription area. A follow up email was sent in February 2023 to confirm interest in commenting or providing feedback. No response was received by the time of finalization.
Penticton Indian Band	An information sharing package was forwarded on June 23, 2022, with a project description and a KMZ file of the proposed prescription area. A response was received on July 14, 2022, indicating that Penticton Indian Band would defer further consultation and engagement to Osoyoos Indian Band.
Lower Similkameen Indian Band	An information sharing package was forwarded on June 23, 2022, with a project description and a KMZ file of the proposed prescription area. A follow up email was sent in February 2023 to confirm interest in commenting or providing feedback. No response was received by the time of finalization.
Upper Nicola Band	An information sharing package was forwarded on June 23, 2022, with a project description and a KMZ file of the proposed prescription area. A follow up email was sent in February 2023 to confirm interest in commenting or providing feedback. No response was received by the time of finalization.
Okanagan Indian Band	An information sharing package was forwarded on June 23, 2022, with a project description and a KMZ file of the proposed prescription area. A response was received on August 8, 2022, indicating that Okanagan Indian Band would like to keep informed of any changes to the project, and would defer at this time to Osoyoos Indian Band and Lower Similkameen Indian Band for a more in depth review.
Splats'in First Nation	An information sharing package was forwarded on June 23, 2022, with a project description and a KMZ file of the proposed prescription area. A follow up email was sent in February 2023 to confirm interest in commenting or providing feedback. No response was received by the time of finalization.
Simpcw First Nation	An information sharing package was forwarded on June 23, 2022, with a project description and a KMZ file of the proposed prescription area. A follow up email was sent in February 2023 to confirm interest in commenting or providing feedback. No response was received by the time of finalization.
Shuswap Band	An information sharing package was forwarded on June 23, 2022, with a project description and a KMZ file of the proposed prescription area. A follow up email was sent in February 2023 to confirm interest in commenting or providing feedback. No response was received by the time of finalization.
Adams Lake Indian Band	An information sharing package was forwarded on June 23, 2022, with a project description and a KMZ file of the proposed prescription area. A follow up email was sent in February 2023 to confirm interest in commenting or providing feedback. No response was received by the time of finalization.
Skw'lax	An information sharing package was forwarded on June 23, 2022, with a project description and a KMZ file of the proposed prescription area. A follow up email was sent in February 2023 to confirm interest in commenting or providing feedback. No response was received by the time of finalization.
Tk'emlups Band	An information sharing package was forwarded on June 23, 2022, with a project description and a KMZ file of the proposed prescription area. A follow up email was sent in February 2023 to





	confirm inter finalization.	est in com	menting or	providing feedba	ck. No response was received by the time of
Skeetchestn Indian Band	An information a KMZ file of	the propos	ed prescrip	otion area. A follo	une 23, 2022, with a project description and w up email was sent in February 2023 to ck. No response was received by the time of
First Nations consultation c	omplete?	Yes			No
CONSULTATION – GENERA	L				
n/a					
EXISTING TENURE HOLDER	S				
n/a					
PRIVATE PROPERTY			•	1	
Does private property bord proposed treatment area?	er the	<u>Yes</u>	No	roadside units (should be notifie and a civic surve	 parcels are located along portions of the rU-2 – all subunits). Private property owners ed prior to commencement of treatment, ey of property lines may need to be spass concerns are present.
SMOKE MANAGEMENT			T	Γ	
Does a smoke management plan exist for the proposed treatment area?		Yes No A smoke management plan does not exist for the propose be conducted in compliance with Division 2 of the Open Burning Smoke Control Regulation (OBSCR) ⁹ , unless an ai curtain incinerator is used, in which case the more permissive regulations of Division 5 apply.			All operations requiring open burning are to compliance with Division 2 of the Open Control Regulation (OBSCR) ⁹ , unless an air tor is used, in which case the more
SAFETY		1	I		
Have any specific safety con identified in or adjacent to treatment area?		Yes	No	with the works i buffering Fritz R Pedestrian traff popular for loca Loose Rock/Foo of loose exposed	This is a primary safety concern associated n TU-2, which is a roadside treatment unit oad and Central Avenue. ic: The trail network that TU-1 overlaps is I recreationalists. ting: Portions of TU-1 and TU-2 have areas d rock. TU-2 overlaps cut/fill slopes built for creates areas of some slip/trip hazards.
UTILITIES					
Are utilities located in or ac proposed treatment area? lines, gas lines, etc.	•	Yes	<u>No</u>	area. TU-1 is loc management in	lities located in the proposed treatment ated adjacent to a septic field / sewage frastructure on municipal land, which is ss to this area should not be required for
ACCESS CONTROL			I		
Are there any foreseen issu access and access control of post treatment?		Yes	No	is via Fritz Road,	reatment units within the prescription area and the network of doublewide trails / dirt hese are illustrated on the prescription map.
TRAFFIC CONTROL					

⁹ General factsheet for reference: https://www2.gov.bc.ca/assets/gov/environment/air-landwater/air/factsheets/community_wildfire_risk_reduction.pdf





Is traffic control required at any point during operations?	Yes	No	Roadside works in TU-2, and the portions of TU-1 which are adjacent to public roads must consider traffic control. Access should be restricted when falling L1 and L1s trees within 1.5 tree lengths of the road edge. During debris removal or staging on Fritz Road, simple traffic control should be supplied in order to avoid issues with public and/or work traffic. In TU-2 and TU-1, workers can expect recreational traffic (hikers/bikers) throughout the treatment area. Adequate signage and enforcement must be employed at potential points of entry (considering both sanctioned and unsanctioned trails) to the area in order to ensure the safety of workers, the public, and trail users.
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OTHER Raptors

Raptors are not protected in the Migratory Bird Act but are protected in the Wildlife Act (disturbance or destruction of nests prohibited). Their breeding season is outside the typical breeding bird season in which we would require a QP to monitor (April - August). Assessment by a QP for raptors is recommended prior to treatment. Raptor conservation guidance document located here: <u>https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/best-management-practices/raptor_conservation_guidelines_2013.pdf</u>

H. STAND AND STOCK TABLES

Is merchantable timber cutting prescribed? If yes, please provide details below.

🗆 Yes 🛛 No

Due to the low amount of merchantable volume to be removed, commercial timber harvesting is not a practicable option.

Are there any challenges to utilizing merchantable material? If yes, please provide details below.

🗆 Yes 🛛 No

See above.

<u>Statement of Limitations</u>: Stand descriptions and pre-harvest stand structure numbers are estimates only and should not be relied upon by Contractors for estimating budgets used in bidding or tender preparation. Contractors are responsible for conducting site visits to gather sufficient information for tender preparation.

	TU-1									
LAYER	Species Composition by Basal Area or <i>Density</i>	SPH	BA (m²/ha)	DBH (cm)	Height (m)	Volume (m³/ha)	Crown Closure (% Cover)	HTLC (m) ¹⁰ Min/Max		
L1 Merch	Fd65 Py25 Lw5 Dead5	154	10	33	19	52				
L1 Submerch	Fd40 Lw30 Py30	175	2	15	12	7	Avg: 40 Range: 15-95	5 / 8.5		
L2	Py50 Fd45 Lw5	200								
L3	Fd50 Py40 Dead10	875								
L4	Fd55 Dead45	138								

STEMS PER HECTARE VOLUME PER HECTARE (m ³ /ha
--

¹⁰ CBH of merch/submerch layers based on fixed radius plots and stand observations.





Species and Diameter Class	Minimum Crown to Base Height (m)	Average Tree Height (m)	Existing	Cut	Leave	Existing	Cut	Leave
			Layer 1 (> 27.5	i cm DBH)				
Fd	5	19	39	0	39	23	0	23
Lw	5	19	9	0	9	4	0	4
Ру	5	19	13	0	13	10	0	10
Total Dead Potential			6	0	6	3	0	3
Total Live			61	0	61	37	0	37
Total All Species			61	0	61	37	0	37
Total Conifers			61	0	61	37	0	37
		Laye	er 1 (> 22.5 cm -	- 27.5 cm DBH	I)			
Fd	5	19	27	0	27	6	0	6
Lw	5	19	0	0	0	0	0	0
Ру	5	19	0	0	0	0	0	0
Total Dead Potential			0	0	0	0	0	0
Total Live			27	0	27	6	0	6
Total All Species			27	0	27	11	0	11
Total Conifers			27	0	27	6	0	6
		Laye	er 1 (> 17.5 cm -	- 22.5 cm DBH	I)			
Fd	5	19	45	0	45	5	0	5
Lw	5	19	0	0	0	0	0	0
Ру	5	19	16	0	16	2	0	2
Total Dead Potential			0	0	0	0	0	0
Total Live			60	0	60	7	0	7
Total All Species			60	0	60	7	0	7
Total Conifers			60	0	60	7	0	7
		Layer 1 – S	Submerch (≥ 12	.5 cm - 17.5 cı	n DBH)			
Fd	5	13	113	109	4			
Lw	5	13	13	3	10			
Ру	5	13	50	46	4			
Total Dead Potential ¹¹			0	0	0			
Total Live			176	158	18			
Total All Species			176	158	18			
Total Conifers			176	158	18			
			Total Lay	ver 1				
Total Layer - All Species			324	158	165	49	0	49
Total Layer - Conifers Only			324	158	165	49	0	49
		La	yer 2 (≥ 7.5cm -	12.5cm dbh)				
Fd	3	11	88	83	5			
Lw	3	11	13	3	10			
Ру	3	11	100	95	5			
Total Dead Potential ¹¹			0	0	0			
Total Live			200	180	20			

¹¹ No dead recorded in plots, but all dead <17.5cm DBH should be removed per **TREATMENT SPECIFICATIONS SUMMARY**





Village of Midway

Total Layer 2 - All Species			200	180	20			
Total Layer 2 - Conifers Only			200	180	20			
		Layer 3 – S	Sapling (≥ 1.3m	Height - 7.5ci	n DBH)			
Fd	2	6	463	419	44			
Lw	2	6	0	0	0			
Ру	2	6	350	306	44			
Total Dead			63	63	0			
Total Live			813	725	88			
Total All Species			876	788	88			
Total Conifers			813	725	88			
		Laye	er 4 – Regen (<1	.3m in Height	t)			-
Fd	0.5	1	75	75	0			
Lw	0.5	1	0	0	0			
Ру	0.5	1	0	0	0			
Total Dead			63	63	0			
Total Live			75	75	0			
Total All Species			138	138	0			
Total Conifers			75	75	0			
Total All Species Layer 1			324	158	165	49	0	49
Total All Species Layer 2			200	180	20			
Total All Species Layer 3			876	788	88			
Total All Species Layer 4			138	138	0			
TOTAL ALL LAYERS			1538	1264	273	49	0	49

*Due to the variability of stand densities, qualitative descriptions for tree removal / retention in **TREATMENT SPECIFICATIONS SUMMARY** will take precedent over stock and stand table specifications.

	SURFACE FUEL LOADING					
	Fine & Medium Woody Debris (FWD & MWD) <7.0cm Diameter ¹²	Large Diameter Woody Debris 7-20 cm diameter	Coarse Woody Debris (CWD) >20 cm diameter			
Existing Fuel Load & Distribution	0.6 kg/m² Consistent low surface fuel loading throughout the TU, with occasional pockets of higher accumulations.	3.4 kg/m² Scattered, moderate coarse woody debris surface fuel loading.	1.2 kg/m² Scattered, moderate coarse woody debris surface fuel loading.			
Target Fuel Load	MAINTAIN to a maximum of 0.5 kg/m ² as an average across the TU. REDUCE to 0.2 kg/m ² within 2 m of any retained tree with a CBH of < 3 m across the TU. Thick beds of pine needles (>5 cm thick) should be removed within 2m of retained trees and 2 m of trails.	REDUCE OR MAINTAIN both large woody debris to 2.5 kg/m² togethe the large diameter pieces (high val however, large dead/hazardous ov provide this.	er, on average. Preference to retain ue CWD is >20 cm diameter),			
Target Distribution	A scattered and even distribution. Avoid excessive accumulations at the	Scattered throughout the TU, avoiding piles or jackpots. See	Scattered throughout the TU, avoiding piles or jackpots. See			

¹² FWD includes any and all <u>dead</u> woody debris, whether pre-existing or introduced through treatment activities.



Village of Midway



	base of retained trees or in natural depressions.	the WILDLIFE LOG RETENTION TARGET section for specifications	the WILDLIFE LOG RETENTION TARGET section for specifications
		on piece distribute on.	on piece distribute on.
Method used	to measure:		

The USFS Photoload Sampling Technique was used to assess surface fuel loads for FWD and CWD at stand plots throughout the TU. One 30m Brown's transect was completed in a representative location to more accurately quantify the average FWD and CWD loads throughout the stand.

Crown Closure (%)	Existing: 40% average	Target: Altering crown closure is not an objective of this prescription.
(dominant, co-dominant	Range of 15 – 90%	Minor decreases may occur where hazard trees and/or snags are
stems)	Kunge 0j 15 – 90%	removed.

			т	U-2				
LAYER	Species Composition by Basal Area or <i>Density</i>	SPH	BA (m²/ha)	DBH (cm)	Height (m)	Volume (m³/ha)	Crown Closure (% Cover)	HTLC (m) ¹³ Min/Max
L1 Merch	Fd55 Py30 Decid15	356	23	33	21	140		
L1 Submerch	Fd50 Dead50	150	95	2	15	9	Avg: 30	5/9
L2	Fd55 Dead30 Lw15	350						
L3	Dead70 Fd30	150						
L4	n/a	0						

	Minimum	Avorago	STEN	AS PER HECT	ARE	VOLUME	PER HECTAF	RE (m³/ha)
Species and Diameter Class	Crown to Base Height (m)	Average Tree Height (m)	Existing	Cut	Leave	Existing	Cut	Leave
		L	ayer 1 (>27.	5 cm dbh)				
Fd	5	22	73	0	73	64	0	64
Lw	5	22	0	0	0	0	0	0
Ру	5	22	56	0	56	32	0	32
Deciduous	-	22	22	0	22	7	0	7
Total Dead			0	0	0	0	0	0
Total Live			151	0	151	104	0	104
Total All Species			301	0	301	104	0	104
Total Conifers			129	0	129	97	0	97
		Layer	1 (>22.5 cm	- 27.5 cm db	h)			
Fd	5	22	35	0	35	9	0	9
Lw	5	22	0	0	0	0	0	0
Ру	5	22	18	0	18	4	0	4
Deciduous	-	22	17	0	17	4	0	4
Total Dead			0	0	0	0	0	0
Total Live			70	0	70	17	0	17
Total All Species			70	0	70	34	0	34
Total Conifers			53	0	53	13	0	13
		Layer	1 (>17.5 cm	- 22.5 cm db	h)			

¹³ CBH of merch/submerch layers based on fixed radius plots and stand observations.



Midway

Fd	5	22	77	0	77	13	0	13
Lw	5	22	0	0	0	0	0	0
Ру	5	22	34	0	34	2	0	2
Deciduous	-	22	24	0	24	3	0	3
Total Dead			0	0	0	0	0	0
Total Live			135	0	135	19	0	19
Total All Species			135	0	135	19	0	19
Total Conifers			111	0	111	16	0	16
		Layer	1 (>12.5 cm	- 17.5 cm db	h)			
Fd	5	22	100	90	10	-	-	-
Lw	5	22	50	45	5	-	-	-
Ру	5	22	0	0	0	-	-	-
Deciduous	5	22	0	0	0	-	-	-
Total Dead			0	0	0	-	-	-
Total Live			150	135	15			
Total All Species			150	135	15	-	-	-
Total Conifers			150	135	15	-	-	-
			Total Lay	1	1			1
				-	522	140	0	140
Total Layer - All Species			657	135	522	140	0	140
Total Layer - Conifers only			443	135	308	125	0	125
		Layer	2 – Pole (≥ 7	.5 - 12.5 DB	H)			
Fd	3	11	200	180	20	-	-	-
Lw	3	11	50	45	5	-	-	-
Ру	3	11	0	0	0	-	-	-
Deciduous	-	11	0	0	0	-	-	-
Total Dead			100	0	100	-	-	-
Total Live			350	315	35	-	-	-
Total All Species			450	315	135	-	-	-
Total Conifers			250	225	25			
		aver 3 – Sai	oling (≥ 1.3m	Height - 7 5	cm DBH)	•		<u> </u>
Fd	2	6	50	45	5	-	_	-
Lw	2	6	0	4 <u>5</u> 0	0	_		
Py	2	6	0	0	0	-		_
Deciduous	-	6	0	0	0	_	-	_
Total Dead		0	100	90	10	_		_
Total Live			50	45	5	_	-	_
Total All Species			150	135	15		-	-
Total Conifers			50	45	5	-	-	_
Total Conners				1		-		-
		-	4 – Regen (<:		-	1		1
Fd	0.5	1	0	0	0	-	-	-
Lw	0.5	1	0	0	0	-	-	-
Py	0.5	1	0	0	0	-	-	-
Deciduous	0.5	1	0	0	0	-	-	-
Total Dead			0	0	0	-	-	-
Total Live			0	0	0	-	-	-
Total All Consist			0	0	0	-	-	-
Total All Species Total Conifers			0	0	0			





		SUR	FACE FUEL LOADING			
	Fine & Medium V (FWD & N <7.0cm Diau	IWD)	Large Diameter Woody Debris >7.0cm Diameter	Coarse Woody Debris (CWD) >20 cm diameter		
Existing Fuel Load & Distribution	0.4 kg/m² Consistently sparse th TU.	nroughout the	1.5 kg/m²1.2 kg/m²Moderate amounts of CWD, primarily small diameter, esulting from suppression of ubmerch stems.1.2 kg/m² Scattered, moderate coarse woody debris surface fuel loading.			
Target Fuel Load	 MAINTAIN levels of FWD & MWD introduced during treatment below 0.5 kg/m² as an average across the TU. REDUCE levels of FWD & MWD introduced during treatment below 0.2kg/m² within 2 m of any retained tree with a CBH of < 3 m across the TU. Thick beds of pine needles (>5 cm thick) should be removed within 2m of 		REDUCE OR MAINTAIN both large diameter woody debris and coarse woody debris to 2.5 kg/m ² together, on average. Preference to retain the large diameter pieces (high value CWD is >20 cm diameter), however, large dead/hazardous overstory trees may be scarce to provide this.			
Target Distribution	A scattered and even Avoid excessive accur base of retained trees depressions.	nulations at the	Scattered throughout the TU, avoiding piles or jackpots. See the WILDLIFE LOG RETENTION TARGET section for specifications on piece distribution.			
at stand plots		ne 30m Brown's ti	ng Technique was used to assess sur ransect was completed in a represen the stand.			
Crown Closur (dominant, co	e (%) p-dominant stems)	Existing : 30% average	Target : Altering crown closure is not an objective of this prescription.Minor decreases may occur where snags are removed.			

BI	ODIVERSITY AND FOREST HEALTH CONSIDERATIONS AND TARGETS
WILDLIFE LOG RETENTION TARGET	 TU-1 & TU-2: Coarse woody debris provides valuable habitat for small mammals, amphibians, plants, insects, and other organisms. Since large diameter pieces (>20cm) provide the most habitat value, the retention and recruitment of these features should be prioritized. Within the allowable CWD fuel loading target of 25 t/ha, crews should: 1) Limb and buck pieces to a maximum length, so that the largest proportion of the piece is in contact with the ground. Limbing cuts should be flush with the bole and not leave a protrusion greater than 1 cm. 2) Physically separate pieces where practicable, and orient individual pieces perpendicular to the slope (where it is greater than >15 %, and where it is practicable). 3) Avoid scorching retained pieces when burning piles.
WILDLIFE TREE RETENTION TARGET	TU-1 & TU-2: A comprehensive Wildlife Danger Tree Assessment should be conducted by a qualified assessor prior or concurrent to treatment commencing. All trees that exhibit high-value wildlife characteristics should be retained unless they pose an immediate safety risk to workers and/or the public. Page 9 of BC's Wildlife Tree Guidance Document can be referenced for generic attributes of high-value wildlife trees. If NWZs are established, these need to be identified and approved by the contract supervisor to confirm that they do not

¹⁴ FWD includes any and all <u>dead</u> woody debris, whether pre-existing or introduced through treatment activities.





	BIODIVERSITY AND FOREST HEALTH CONSIDERATIONS AND TARGETS
	unduly compromise the risk-reduction efforts. No more than 2% of either TU should be designated as NWZs.
FOREST HEALTH	 TU-1 & TU-2: In TU-1, forest health amongst mature L1 stems varies. In the rolling, open grown flat areas (TU-1A), mature stems of all species are generally healthy and well-spaced. In the sloped area (TU-1B), there are pockets of overstory mortality where drought stress, or shallow rooting on rocky sites, precipitates windthrow. Self-thinning is occurring throughout the understory on these sloped areas as well, resulting in a high percentage of standing dead L2s, L3s, and L4s. Self-thinning and self-pruning in mature stems are contributing to fine woody debris accumulations. On the rolling / flat sites of TU-1, understory stems are generally still healthy, vigorous, and not yet self-thinning – however, densities are still very high. In TU-2, mature overstory stems are generally well-spaced and in good health – logical as this TU is close to the roadside and hazardous trees may have already been prioritized for removal. There is variability in forest composition, with some open-grown areas, and some denser pockets. Similar to TU-1, understory and overstory stems are generally healthy in open-grown areas, and in denser patches, self-thinning dynamics have resulted in a higher standing dead understory component. Windthrow hazard was assessed for this site and considered not to be significant. The majority of the site is open grown, and the prescribed treatment does not call for significant removal of merchantable stems and creation of a new live edge.
TREATMENT SPECIFICATIO	NS SUMMARY

τU TREE REMOVAL/RETENTION STRATEGY BY SIZE/SPECIES 400 DBH Stand Class TU-1 Cut Layer 350 Midpoint Leave L4 0 100% 300 L3 5 90% Stems per Hectare (sph) 90% L2 10 250 L1s 15 90% 20 0% 200 25 0% 30 0% 150 40 0% 100 50 0% L1 60 0% 50 70 0% 80 0% 0 90 0% 5 10 15 0 20 25 30 40 50 60 70 80 90 100 100 0% Diameter Class Midpoint (cm) TU-1 SPH Retained 279 Figure 1: Estimated cutting specifications (left) and change in diameter class distribution (right) in TU-1 Tree Removal/Retention Measurable Target: • Remove all L4 conifer trees < 1.3 m ht and 7.5 cm DBH. For trees 7.5 – 17.5 cm DBH, remove 90% of conifers (including *all* dead stems). • Retain a small number of the healthiest, most vigorous stems. Lw is preferred for 0 retention. Retain these trees only where they can be spaced 5 m apart (between branch tips), and where they can be pruned to retain >50% of their live crown (likely at least 5 m tall). The intent of this specification is to maintain structural diversity in the stand in while still meeting the objectives of the prescription to promote low-intensity fire behaviour. Above 17.5 cm DBH, remove only hazard trees. ٠





	Pruning:
	Throughout the TU crown base heights vary significantly:
	• In areas where crown base heights are >4m, no pruning is necessary.
	• In areas where a retained conifer has a crown base height of <4 m, pruning to at least 2
	meters is required (must maintain at least 50% of the live crown).
	Surface Fuel Removal:
	 High crown base heights (>4 m): remove all FWD+MWD introduced through treatment, to achieve
	a maximum average of 0.5 kg/m ² .
	 Low crown base heights (2-4 m): reduce FWD+MWD to 0.2 kg/m² within 2 m of any point where a retained conifer has a CBH of <4 m.
	Stand DBH
	Layer Class TU-1 Cut Layer
	300
	L1s 15 90%
	L3 5 90% L2 10 90% L1s 15 90% 20 0% 25 0% 30 0% 40 0%
	30 0%
	40 0% 50 0%
	70 0%
	80 0%
	90 0% 0 5 10 15 20 25 30 40 50 60 70 80 90 100
	100 0% SPH Retained 279
	Figure 2: Estimated cutting specifications (left) and change in diameter class distribution (right) in TU-1
	Tree Removal/Retention Measurable Target:
	 Remove all L4 conifer trees < 1.3 m ht and 7.5 cm DBH.
TU-2	 For trees 7.5 – 17.5 cm DBH, remove 90% of conifers (including <i>all</i> dead stems).
10-2	• Retain a small number of the healthiest, most vigorous stems. Lw is preferred for
	retention. Retain these trees only where they can be spaced 5 m apart, where they are
	not below the dripline of another conifer, and where they can be pruned to retain >50%
	of their live crown (likely at least 5 m tall).
	 The intent of this specification is to maintain structural diversity in the stand in
	while still meeting the objectives of the prescription to promote low-intensity fire
	behaviour.
	Above 17.5 cm DBH, remove only hazard trees.
	Pruning:
	Throughout the TU crown base heights vary significantly:
	• In areas where crown base heights are >4m, no pruning is necessary .
	• In areas where a retained conifer has a crown base height of <4 m, pruning to at least 2
	meters is required (must maintain at least 50% of the live crown).
	Surface Fuel Removal:
	• High crown base heights (>4 m): remove all FWD+MWD introduced through treatment, to achieve
	a maximum average of 0.5 kg/m ² .
	• Low crown base heights (2-4 m): reduce FWD+MWD to 0.2 kg/m ² within 2 m of any point where a
	retained conifer has a CBH of <4 m.





TREATMENT SPECIFICATION RATIONALE

Treatment units under prescription are intended to limit fire behaviour potential through the strategies laid out in **B. PROJECT DESCRIPTION**, and the prescription specifications laid out in **H. STAND AND STOCK TABLES** in order to meet the public safety and wildfire risk reduction objectives laid out in **B. PROJECT DESCRIPTION**. Overall, the prescription calls for pruning, and a reduction of surface fuel loading and ladder fuels to decrease vertical and horizontal fuel continuity, while maintaining natural stand dynamics. Increasing crown base heights will raise the critical surface fire intensity threshold, and reducing surface fuel loading will lower expected wildfire intensity, thus reducing the possibility of crown fire initiation and improving the effectiveness and safety of ground fire suppression (based on 90th percentile weather conditions). Thinning will reduce torching and crowning potential, and reduce future surface loading by removing dead stems before they accumulate on the forest floor. The retention of select healthy and vigorous L2 and L3 stems is recommended to maintain structural and age class diversity in the stand. There is a mosaic of natural openings within the stand that would likely cause a crown fire to be discontinuous and allow heat from a surface fire to actively vent through the canopy. These openings also allow for a more effective deployment of aerial firefighting resources. The proactive removal of hazard trees and snags will provide a safer working environment for first responders and speed up the DTA and DTF process in the event of a fire. This removal will also provide for the immediate safety of recreationalists that frequent the prescription area.

Post-treatment fire behaviour was analyzed as part of this prescription development process (**Appendix C: Fire Behaviour Calculations & ISI Roses**) to support this rationale. This prescription recommends pruning and surface fuel removal specifications that will result in a post-treatment surface fire intensity, that is below the critical surface fire intensity threshold, above which crown combustion may begin to occur.

- Post-treatment surface fire intensities are expected to approximate the following:
 - 1050 kw/m where FWD+MWD is abated to 0.5 kg/m2, in areas where CBHs are high (>5 m)
 - o 420 kw/m where FWD+MWD is abated to 0.2 kg/m2 in areas where CBHs are low (3-5 m)
- The post-treatment critical surface fire intensity thresholds are expected to approximate the following:
 - 1773 kw where FWD+MWD is abated to 0.5 kg/m2, in areas where CBHs are high (>5 m)
 - \circ ~ 824 kw where FWD+MWD is abated to 0.2 kg/m2 in areas where CBHs are low (3-5 m)

This prescription does not call for reduction of dead and matted grass, or reduction of pinegrass cover value. Wildfire hazard associated with grass surface vegetation was not assessed using the tools available (Wildfire Threat Assessment card). However, it is noted (see also I. TREATMENT DESCRIPTION) that prescribed burning, or other grass management treatments may be implemented after thinning and pruning take place to reduce grass cover value for treatment maintenance, and to further achieve wildfire risk reduction objectives.

I. TREATMENT DESCRIPTION

MERCHANTABLE TIMBER HARVESTING

ROADS, LANDINGS AND TRAILS:

Proposed treatments will not require any roads or landings to be constructed. Existing roads and trails are shown on the prescription map. If additional trails are to be constructed, approval is required from the Site Supervisor. Machinery use, existing trail use, and additional access trails should be approved by the Village of Midway.

FELLING:

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Any hand falling of timber >15 cm diameter at stump height shall be performed by BCFSC certified fallers or appropriately supervised trainees. Stump heights should not exceed 10cm, and should be cut at 0°, not parallel to any slopes.

YARDING/SKIDDING:

Yarding nor skidding are not expected to be required as cutting specifications do not call for removal of live trees >17.5cm DBH and machine access is limited in most areas. Use of small machinery to move debris in aid of piling and burning may occur.

LOADING AND HAULING:

Loading and hauling of non-merchantable debris may occur depending on the desired method of debris disposal.

SLASH DISPOSAL:

Slash may be disposed of through pile burning, chipping and burning, chipping and hauling, or hauling to meet surface fuel loading specifications. Pile burning must be in accordance of setbacks and requirements with Division 2 of the OBSCR.

SITE DISTURBANCE:

Treatments will abide by site disturbance thresholds as outlined above.





SPECIAL MEASURES:

N/A

STAND MODIFICATION TREATMENTS

MERCHANTABLE TIMBER UTILIZATION: Was commercial timber harvest considered? Yes \Box No \boxtimes

Due to the low amount of merchantable volume to be removed, commercial timber harvesting is not a practicable option, and is not proposed.

BRUSHING:

The retention of all deciduous trees and shrubs is an objective of this prescription. These should only be targeted for brushing as required for any safe falling procedures. A brush saw may be used to cut small conifer regeneration.

PRUNING:

Any retained trees that have a CBH lower than 2m will be pruned to 2m. CBH will be measured as the distance between the ground and the lowest point on either a live branch or a cluster of dead branches (especially with needles and fine branches or volatile mosses or lichens) dense enough to allow vertical wildfire to spread. Pruning should be within 1cm of the branch collar and should not result in any egregious damage to the stem. See also descriptions **TREATMENT SPECIFICATIONS SUMMARY** for pruning specifications.

THINNING:

Pre-treatment stand conditions and estimated cutting specifications are outlined in **H. STAND AND STOCK TABLES** and **TREATMENT SPECIFICATIONS SUMMARY**

DEBRIS PILING:

Debris may only be piled within the treatment area for the purpose of pile burning.

PILE BURNING:

Pile burning is a potential method of debris disposal in the prescription area. All burning is to be conducted in compliance with the Open Burning Smoke Control Regulation (OBSCR). All burning is to be conducted in compliance with the Open Burning Smoke Control Regulation (OBSCR). Contractors should also consider the following parameters:

- Burn piles must be constructed to facilitate effective ignition and complete combustion.
- Burn piles must be within the treatment area boundary.
- Burn piles should be placed to avoid scorching any retained pieces of CWD or retained boles.

It is the Prime Contractor and contract supervisor's responsibility to obtain a burn registration number from the BCWS prior to burning, and complete notifications as per OBSCR requirements, including but not limited to: residents, business, schools, community care facilities

MULCHING/CHIPPING:

Chipping may be employed as an alternative debris disposal method to pile and burning, but chips must be removed from the treatment area. Chips may cover a maximum of 5% of the treatment area and be left only as a result of loading chips for removal.

MASTICATION:

Mastication is not appropriate for this treatment area, as chips cannot be left on site.

GRINDING:

See Mulching/Chipping above.

PRESCRIBED FIRE:

Fuel reduction targets will need to be achieved without the use of prescribed fire. As the post-treatment stand conditions are designed to effectively protect against a wildfire under 90th percentile weather conditions, a post-treatment prescribed burn under more moderate conditions would be a realistic, cost-effective and beneficial maintenance treatment to protect against future accumulations of surface fuels and/or conifer ingress. In TU-1, a low-intensity prescribed burn regime would be an appropriate maintenance treatment

PLANTING:

Planting is not prescribed.

OTHER: n/a

AUTHORIZATION AND TIMBER TENURE

FRPA Section 52: N/A

Forestry Licence to Cut (FLTC): An FLTC will be required to treat TU areas that overlap Crown Provincial land.

Park Use Permit: N/A





Road Permit or Road Use Permit: N/A

Other (i.e., local government, utilities, etc.): N/A

J. POST TREATMENT

EXPECTED VEGETATION RESPONSE:

Thinning the suppressed stems will decrease competition within the stand and allow for positive growth responses in retained trees through an increased availability of light, nutrients, and water.

While opening the canopy is not a direct objective of this prescription, the removal of snags and hazard trees in all size classes may increase insolation to the forest floor. In these areas thicker grass growth, and some herb and shrub growth, is the expected vegetation response. This vegetation response is not aligned with risk reduction objectives, but is not expected to characterize a significant enough proportion of the treatment area to change prescription effectiveness.

ADDITIONAL TREATMENTS OR MAINTENANCE:

This prescription is intended to achieve risk-reduction objectives for an approximate period of 10-15 years, at which point the site should be reviewed by a qualified professional for maintenance requirements. Maintenance treatments could be focused on brushing out excessive conifer regeneration, falling new snags/hazard trees, and abating accumulated surface fuels. As discussed in **I. TREATMENT DESCRIPTION**, prescribed burning would be an ecologically suitable treatment to abate the wildfire risk posed by the extensive cover of pine grass which the specifications of this prescription do not mitigate. Development of a burn plan could be considered and/or implemented after thinning and pruning treatments.

SILVICULTURE OBLIGATIONS: Do silvicultural obligations apply to the treatment area? Yes \Box No \boxtimes

PLANTING: Is planting a treatment identified in this prescription or required as a legislative obligation? Yes \Box No \boxtimes **STOCKING STANDARDS:** N/A.

K. OUTSTANDING WORKS

- All operations must be conducted in compliance with the Migratory Bird Convention Act and the BC Wildlife Act. If treatment activities are proposed during the bird breeding season (Early April – Mid-August), breeding bird activity must be monitored by a qualified professional. Nest sites may be temporarily excluded from the treatment area. Operators must adhere to survey results and recommendations including reserve zones, should they be necessary to protect breeding birds.
- 2) WorkSafe BC Notice of Project.
- 3) Notify adjacent residents of planned works.
- 4) It is recommended that prior to the commencement of treatment activities or concurrent with felling, a Wildlife/Danger Tree Assessment be performed by a person who holds a valid certificate issued under the Wildlife/Danger Tree Assessor's Certificate Program.
- 5) OBSCR Notification submitted to <u>OBSCR@gov.bc.ca</u> within two months of any planned pile burning taking place. Notification must be given to nearby residences and community facilities prior to pile burning.
- 6) Traffic Control Plan should be prepared for any treatment that may impact road users of Fritz Road, Central Avenue, or other.





L. ADMINISTRATION	
PREPARATION	
Monica Nederend, FIT Quentin Schmidt, FIT Bruce Blackwell, RPF	
FOREST PROFESSIONAL NAME (Printed) Bruce Blackwell, RPF, RPBio	FOREST PROFESSIONAL SIGNATURE
MEMBER NUMBER	DATE
2073	January 23, 2023

A. ATTACHMENTS	
MAPS: Yes ⊠ No□	FIELD DATA CARDS: Yes 口 No ⊠
VUI WTA Plots and Photos: Yes 🗵 No 🗖	CRUISE DATA: Yes 🗖 No 🗵
AIR PHOTOS/IMAGERY: Yes 🗖 🛛 No 🖾	BURN PLAN: Yes 🗖 No 🖾
AODELING/DATA ANALYSIS: Yes 🔲 🛛 No 🗵	OTHER: Yes □ No ⊠
ERRAIN STABILITY ASSESSMENT Yes 🗖 🛛 No 🖾	VISUAL IMPACT ASSESSMENT Yes 🗖 🛛 No 🖾
Completed By:	Completed By:
Date:	Date:
ARCHAEOLOGY IMPACT ASSESSMENT Yes 🗖 No 🛛	BIOLOGIST ASSESSMENT Yes 🗖 No 🛛
Completed By:	Completed By:
Date:	Date:
ADDITIONAL COMMENTS:	
I/A	





Appendix A: Photographs of Treatment Units



Figure 3: Photos of TU-1, showing consistent variability throughout the stand: A) thickets of conifer saplings occurring in open-grown stands; B) rolling, open-grown conditions with thickets of conifers; C) selectively harvested areas with remaining accumulations of FWD; D) homogenous, stands with higher canopy closure (particularly TU-1B).





TU-2 Representative Photos

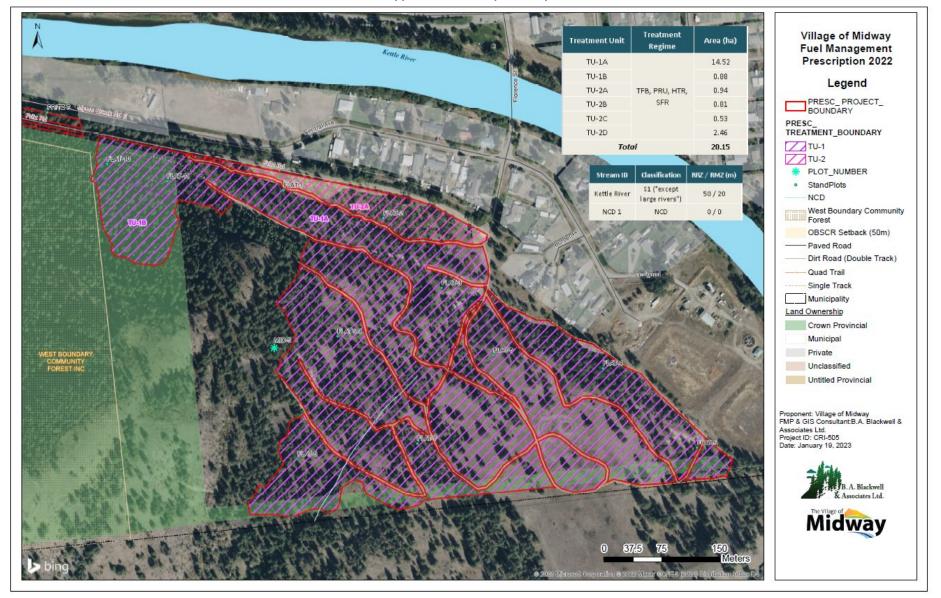


Figure 4: Photos of TU-2, showing clusters of understory conifer (A) & (B); low crown base heights (C) & (D) creating ladder fuels; and steep slopes with some loose rocky fill (C).



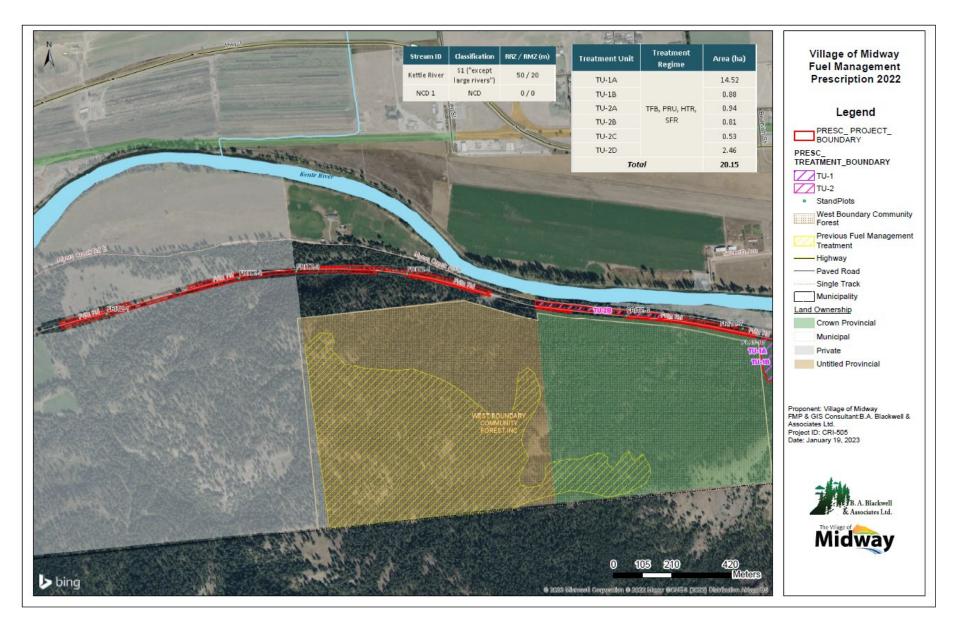


Appendix B: Prescription Map











Appendix C: Fire Behaviour Calculations & ISI Roses

Representative Weather Station: Rock Creek Wx

Rock Creek Wx is located about 12 kilometers away from the treatment units, at a similar elevation (600 meters). It is located on an area without a strong aspect influence, which is similar to some parts of the treatment units, and dissimilar to others where a north or northeastern aspect is present. Rock Creek Wx is located on the boundary between the IDFdh and IDFxx1 BEC zones, similar to the treatment units.

90th Percentile Conditions:

	FFMC	BUI	ISI	Core Fire Season
ROCK CREEK FWX	96.21	240.21	16.01	1 May - 15 September

Rate of Spread Values:

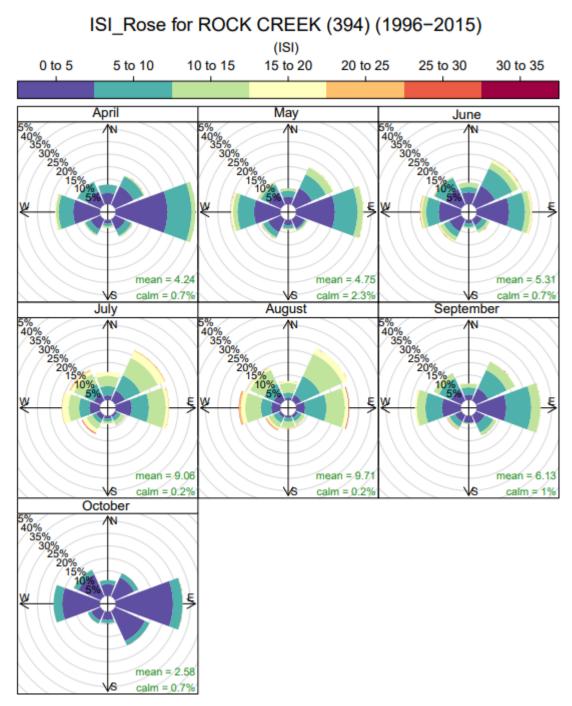
FBP Red Book: 7 m/min (C-7 – Both TU's)

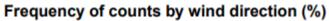
Post-Treatment Fire Behaviour:

TU	Crown	Post-Treatment Base Height, FWD Fuel Loading & Fire Intensity	Post-Treatment Critical Surface Fire Intensity	Implication
All TUs	CBH: 2m FWD: 0.2kg/m ²	Wildfire Intensity (I = HWR) BryamTo find:	Critical Surface Fire Intensity for Initial Crown Combustion (Van Wagner 1977) To find:	Where crown base heights are pruned to 2 meters, wildfire intensity will not exceed critical surface fire intensity threshold, given an extra cleanup of surface fuels within 2.5 m. This scenario applies to open-grown mature trees and sub-merch & sapling thickets on the rolling and flatter parts of TU-1.
	CBH: >4m FWD: 0.5kg/m ²	Wildfire Intensity (I = HWR) BryamTo find:To find:1050.0Wildfire Intensity1050.0EnterWeight of the fuel (kg/m²)0.5andRate of Spread (m/min)7	Critical Surface Fire Intensity for Initial Crown Combustion (Van Wagner 1977) To find:	Where crown base heights are already high, pruning is not required and extra clean-up is not necessary. Maintaining FWD at 0.5 kg/ m2 is adequate.



Fuel Management Prescription







Midway Wildfire Risk Reduction Treatment RFP # CRI-505 Fritz TU Page **37** of **37**

APPENDIX B: Village of Midway Service Contract



Village of Midway 661 Eighth Ave, Midway, BC V0H 1M0 **Phone**(250)449-2222 **Fax** (250)449-2258

SERVICE CONTRACT

File # CRI-505 -FRITZ TU 2025-01 Purchase Order #

THIS AGREEMENT executed in duplicate and dated for reference the					
XX day ofXXX,20XX					
The Village of Midway AND	The Contractor				
(hereinafter called the "Village")	(hereinafter called the "Contractor")				
at the following address:	at the following address:				
661 Eighth Ave, PO Box 160,					
Midway, BC V0H 1M0	WorkSafe BC Account Number:				
AGREE AS FOLLOWS					
SCHEDULE of SERVICES					
(a) THE CONTRACTOR "	" shall provide the following Services:				
Implement a wildfire risk reduction fuel treatment on approximately 20 hectares of land within the Village of Midway's municipal boundaries as defined in the Midway Wildfire Risk Reduction Treatment RFP, and as prescribed in the Village of Midway Fuel Treatment Prescription.					
The scope of services will include but not be limited to	the following:				
Provide all management and operational aspects of the objectives:	e fuel treatment including but not limited to the following				
The objectives of the fuel management work are to:					
Reduce wildfire risk to adjacent residents along Fr	itz Road and Central Avenue				
Enhanced safety and efficacy of first responders fit	rom Midway Fire & Rescue and/or BC Wildfire Service				
 Demonstrate the principles and practices of vegetation and fuels management to community members and the public. 					
 Minimize negative impacts on wildlife habitat, forest health, and air quality through appropriate stand management, and where possible enhance these values. 					
(b) TERM: Notwithstanding the date of execution of this hereof ("the Services") commencing on _May 5, 2025	Agreement provide the services described in Schedule "A" _and ending on <u>December 1, 2025</u> (the "Term)				
(c) LOCATION: The work is to take place within the defin Fuel Treatment Prescription in Appendix A of the Mid	ed prescription area as reference in the Village of Midway way Wildfire Risk Reduction Treatment RFP				
SCHEDULE B – CONTRACT PAYMENT					
All work shall be done to the satisfaction of the CRI Fires the Village of Midway before any payment shall become					
(a) CONTRACT PRICE/RATE: Total not to exceed s	\$XXXXX.				
 All hours will be tracked and coordinated on an \$XX.XX/hour (2025 rates) – Prime Contractor 	hourly basis at the following hourly rates:				

staff					
(b) BILLING DATE: Unless otherwise agreed upon, the Contractor () will provide invoicing monthly.					
In signing this Agreement, the Contractor certifies understanding the additional conditions following this form.					
IN WITNESS WHEREOF the parties hereto have duly executed this Agreement as of the day and year first above written.					
THE CORPORATE SEAL OF THE CONTRATOR					
Signing Officer					
Position					

THE CONTRACTOR

- 1. The Contractor shall:
 - (a) Undertake all work and supply all materials necessary to perform the Services, unless stipulated otherwise in Schedule A.
 - (b) Upon the request of the VILLAGE OF MIDWAY fully inform the VILLAGE OF MIDWAY of the work done by the Contractor in connection with the provision of the Services and permit the VILLAGE OF MIDWAY at all reasonable times to inspect, review and copy all works, productions, buildings, accounting records, findings, data, specifications, drawings, working papers, reports, documents and materials, whether complete or otherwise, that have been produced, received or acquired by the Contractor as a result of this agreement;
 - (c) Comply with all applicable municipal, provincial and federal legislation and regulations.
 - (d) At its own expense, obtain all permits and licenses necessary for the performance of the Services, and on request provide the VILLAGE OF MIDWAY with proof of having obtained such licenses or permits.
 - (e) Promptly pay all persons employed by it.
 - (f) Not assign this Agreement, not subcontract any of its obligations under this Agreement, to any person, firm or corporation without the prior written consent of the VILLAGE OF MIDWAY.
 - (g) At all times, exercise the standard of care, skill and diligence normally exercised and observed by persons engaged in the performance of services similar to the Services.
 - (h) At all times, treat as confidential all information and material supplied to or obtained by the Contractor or subcontractor because of this Agreement and not permit the publication, release or disclosure of the same without the prior written consent of the VILLAGE OF MIDWAY.
 - (i) Not perform any service for any other person, firm or corporation which, in the reasonable opinion of the VILLAGE OF MIDWAY, may give rise to a conflict of interest.
 - (j) Be an independent Contractor and not the servant, employee or agent of the VILLAGE OF MIDWAY.
 - (k) Ensure all persons employed by it to perform the Services are competent to perform them, adequately trained, fully instructed and supervised;

- Accept instructions from the VILLAGE OF MIDWAY, provided that the Contractor shall not be subject to the control of the VILLAGE OF MIDWAY in respect of how such instructions are carried out.
- (m) At its own expense, obtain Workers Compensation Board (WorkSafeBC) coverage for itself, all workers and any shareholders, directors, partners or other individuals employed or engaged in the execution of the *Workers Compensation Act* and regulations thereunder. Upon request, the Contractor shall provide the VILLAGE OF MIDWAY with proof of such compliance.
- (n) Be responsible for all fines, levies, penalties and assessments made or imposed under the Worker's Compensation Act and regulations relating in any way to the Services, and indemnify and save harmless fines, levies, penalties and assessments.
- (o) Ensure that all personnel hired by the Contractor to perform the Services will be the employees of the Contractor and not to the VILLAGE OF MIDWAY with the Contractor being solely responsible for the arrangement of reliefs and substitutions pay supervision, discipline, employment insurance, workers compensation, leave and all other matters arising out of the relationship of employer and employee.
- (p) Not in any manner whatsoever commit or purport to commit the VILLAGE OF MIDWAY to the payment of any money.
- (q) Establish and maintain time records and books of account, invoices, receipts, and vouchers of all expenses incurred.
- (r) Notwithstanding the provision of anv insurance coverage by the VILLAGE OF MIDWAY, indemnify and save harmless the VILLAGE OF MIDWAY, its successor(s), assign(s) and authorized representative(s) and each of them from and against losses, claims, damages, actions, and causes of action (collectively referred to as "Claims"), that the VILLAGE OF MIDWAY may sustain, incur, suffer or be put to at any time either before or after the expiration or termination of this Agreement, that arise out of errors, omissions or negligent acts of the Contractor or its subcontractor(s), servant(s), agent(s) or employee(s) under this Agreement, excepting always that this indemnity does not apply to the extent, if any, to which the Claims are caused by errors, omissions or the negligent acts of the VILLAGE OF MIDWAY its other contractor(s), assign(s) and authorized representative(s) or any other persons;

- (s) Use due care that no person or property is injured and no rights infringed in the performance of the Services, and shall be solely responsible for all losses, damages, costs and expenses in respect to any damage or injury, including death, to persons or property incurred in providing the Services or in any other respect whatsoever.
- (t) Obtain and maintain in force, during the Term, adequate insurance as determined by the Contractor, and not less than as specified by the VILLAGE OF MIDWAY in the VILLAGE OF MIDWAY WILDFIRE RISK REDUCTION RFP indicated on Pages 18 and 19, Section 5, Work, subsection, 5.8 Insurance. The VILLAGE OF MIDWAY requires the Contractor to purchase and maintain a policy of General Liability Insurance with limits of not less than \$5,000,000 inclusive per occurrence for bodily injury and property damage, the policy shall name the VILLAGE OF MIDWAY as an Additional Insured.
- (u) Inspect the site where the Services are to be performed (the "Site") and become familiar with all conditions pertaining thereto prior to commencement of the Services.
- (v) Where materials and supplies are to be provided by the Contractor, use only the best quality available.
- (w) Where samples of materials or supplies are requested by the VILLAGE OF MIDWAY, submit them to the VILLAGE OF MIDWAY for the VILLAGE OF MIDWAY's approval prior to their use.
- (x) Not cover up any works without the prior approval or consent of the VILLAGE OF MIDWAY and, if so, required by the VILLAGE OF MIDWAY, uncover such works at the Contractor's expense; and
- (y) Keep the Site free of accumulated waste material and rubbish caused by it or the Services and, on the completion of the Services or at the end of each workday, at the determination of the VILLAGE OF MIDWAY, leave the Site in a safe, clean and sanitary condition at a frequency at the discretion of the VILLAGE OF MIDWAY up to and including daily.

(z) Warranted that neither it nor any of its officers or directors, or any employee with authority to bind the Bidder, has any financial or personal relationship or affiliation with any elected official or employee of the VILLAGE OF MIDWAY or their immediate families which might in any way be seen by the VILLAGE OF MIDWAY to create a conflict.

THE VILLAGE OF MIDWAY

- 2. The VILLAGE OF MIDWAY shall:
 - (a) Subject to the provisions of this Agreement, pay the Contractor, in full payment for the Services which in the opinion of the VILLAGE OF MIDWAY at the times set out is Schedule "B" of this Agreement, and the Contractor shall accept such payment as full payment for the Services.
 - (b) Notwithstanding Subsection 2(a), not be under any obligation to advance to the Contractor more than 90% of the Contract Price for Services rendered per Schedule "A" to the satisfaction of the VILLAGE OF MIDWAY. The 10% holdback shall be retained for 40 days after completion of the Services, and interest shall not be payable on the amount held back by the VILLAGE OF MIDWAY.
 - (c) At its discretion, holdback from the Contract Price in addition to the 10% holdback contemplated in Subsection 2(c), sufficient monies to indemnify the VILLAGE OF MIDWAY completely against any lien or claim of lien arising in connection with the provision of the Services.
 - (d) Make available to the Contractor all available information considered by the VILLAGE OF MIDWAY to be pertinent to the Services.
 - (e) Give the Contractor reasonable notice of anything the VILLAGE OF MIDWAY considers likely to materially affect the provision of the Services; and
 - (f) Examine all studies, reports, sketches, proposals and documents provided by the Contractor under this Agreement, and render decisions pertaining thereto within a reasonable time.

TERMINATION

- 3. In the event of a substantial failure of a party to perform by the terms and conditions of this Agreement, it may be terminated by the other party on five days written notice.
- 4. The VILLAGE OF MIDWAY may, at its sole discretion, terminate this Agreement on 10 days' notice, and the payment of funds required to be made according to Section 5 shall discharge the VILLAGE OF MIDWAY of all its liability to the Contractor under this Agreement.
- 5. Where this Agreement expires or is terminated before 100% completion of the Services, the VILLAGE OF MIDWAY shall pay to the Contractor that portion of the Contract Price which is equal to the portion of the Services completed to the satisfaction of the VILLAGE OF MIDWAY prior to expiration or termination.

 Where the Contractor fails to perform or comply with the provisions of this Agreement, the VILLAGE OF MIDWAY may, in addition to terminating this Agreement, pursue such remedies as it deems necessary.

GENERAL

- 7. The VILLAGE OF MIDWAY shall be the sole judge of the work, material and the standards of workmanship in respect of both quality and quantity of the Services, and his decision on all questions in dispute with regard thereto, or as to the meaning and intentions of this contract, and as to the meaning or interpretation of the plans, drawings and specifications, shall be final, and no Services shall be deemed to have been performed as to entitle the Contractor to payment therefrom, until the VILLAGE OF MIDWAY is satisfied therewith.
- 8. The VILLAGE OF MIDWAY certifies that the Service purchased according to this Agreement are for the use of and are being purchased by the VILLAGE OF MIDWAY and are therefore SUBJECT TO THE FEDERAL GOODS AND SERVICES TAX.
- 9. This Agreement shall be governed by and construed in accordance with the VILLAGE OF MIDWAY.
- 10. Time shall be of the essence of this Agreement.
- 11. Any notice required to be given hereunder shall be delivered or mailed by prepaid certified or registered mail to the addresses above (or at such other address as either party may from time to time designate by notice in writing to the other), and any such notice shall be deemed to be received 72 hours after mailing.
- 12. This Agreement shall be binding upon the parties and their respective successors, heirs and permitted assigns.
- 13. A waiver of any provision or breach by the Contractor of any provision of this Agreement shall be effective only if it is in writing and signed by the VILLAGE OF MIDWAY.
- 14. A waiver under Section 13 shall not be deemed to be a waiver of any subsequent breach of the same or any other provision of this Agreement.
- 15. Everything produced, received or acquired (the "Material") by the Contractor or subcontractor because of this Agreement, including any property provided by the VILLAGE OF MIDWAY to the Contractor or subcontractor, shall:
 - (a) be the exclusive property of the VILLAGE OF MIDWAY; and
 - (b) be delivered by the Contractor to the VILLAGE OF MIDWAY immediately upon the VILLAGE OF MIDWAY giving notice of such request to the Contractor.
- 16. The copyright in the Material belongs to the VILLAGE OF MIDWAY.

- 17. The VILLAGE OF MIDWAY may, at its discretion, notify the Contractor that the terms, amounts and types of insurance required to be obtained by the Contractor hereunder be changed.
- 18. Where the Contractor is a corporation, it does hereby covenant that the signatory hereto has been duly authorized by the requisite proceedings to enter and execute this Agreement on behalf of the Contractor.
- 19. Where the Contractor is a partnership, all partners are to execute this Agreement.
- 20. Sections 1 b), i), j), r), and 16 of this Agreement will, notwithstanding the expiration or earlier termination of the Term, remain and continue in full force and effect.