

Mass Timber Demonstration Program (MTDP) – Expression of Interest Guide – Intake 2

Call for Proposals Issued: July 16, 2021

Call for Proposals Closes: October 8, 2021 at 20:00 Pacific Daylight Saving Time

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1. Preface

This guide outlines the general intent of the Mass Timber Demonstration Program (MTDP) and the Expression of Interest (EOI) process and contains information to support the submitting of an Expression of Interest for the program. Interested applicants are required to submit an Expression of Interest by **20:00 Pacific Daylight Saving Time on October 8, 2021**. Submissions received after this deadline will not be eligible for funding consideration under this EOI.

Submission of an EOI does not guarantee funding under the MTDP. To be considered, submissions must meet the mandatory requirements as laid out in this guide. Expressions of Interest meeting the mandatory requirements will also be evaluated against desired criteria. Priority may be given to projects that have a near term horizon.

Any approvals under this process will be conditional on due diligence carried out on behalf of FII and the execution of a funding agreement. Until both parties sign a written funding agreement, no commitment or obligation exists on the part of FII to make a financial contribution to any project. Any costs incurred in responding to this EOI will be solely the responsibility of the funding applicant.

Proponents are required to review and comply with the information contained in this Expression of Interest Guide and to consult any additional information as outlined in this document.

For additional information, please contact Forestry Innovation Investment at info@masstimberbc.ca or by phone at 1-866-992-2266. Information about the program can be found at www.masstimberbc.ca.

Specific terminology included in this document is summarized in Section 4.8.

2. Program Description

2.1 Overview

The Mass Timber Demonstration Program (MTDP) is a collaboration between Forestry Innovation Investment and the Ministry of Jobs, Economic Recovery and Innovation. The program is intended to maximize the use of mass timber in British Columbia (B.C.), to support jobs by fostering increased mass timber construction activities, to help position B.C. as a global leader in advanced wood product and system technologies and services, and to support B.C.'s economic recovery.

This funding program aims to help qualified mass timber projects by offsetting some of the incremental costs associated with this type of wood-intensive building. The funded projects will provide valuable information and materials that will be shared and used to support future mass timber projects and aid in the growth of the mass timber construction sector. Lessons learned from funded projects, such as optimized applications and construction processes, innovative and replicable design, and sustainability considerations will be shared with B.C.'s building industry, including design practitioners, developers, construction contractors, provincial and municipal regulators, and permitting and approval agencies.

The program will provide non-repayable contributions, up to 100% of a project's eligible incremental costs. Eligible funding for this program will:

- a) Address technical challenges, research, testing or other impediments to the use of mass timber in construction projects in BC;
- b) Support companies as they overcome one-time, or the first-time costs associated with using mass timber on a construction project in B.C.
 - a. Applications from proponents with an interest in building with mass timber, but without prior experience, are encouraged.
- c) Support incremental costs associated with the design, engineering, code equivalency, or construction of mass timber building – that would otherwise not be incurred if the building was built with traditional materials;
- d) Undertake the virtual design or 3D modelling to support off-site prefabrication, taking advantage of the speed of construction and other benefits associated with mass timber and prefabrication of building components;
- e) Undertake life cycle assessment and related carbon accounting research;
- f) Demonstrate the performance and commercial success of B.C.-based mass timber technologies, design, and construction expertise and services. Showcase best practices and share lessons to support future uptake of mass timber technologies; and
- g) Prove-out the business case for mass timber use and support the costs related to the learning curve associated with regularizing mass timber use in the development and construction sector.

2.2 Program Duration

The focus of the program will be to support near term costs that will help accelerate the use of mass timber and support B.C.'s economic recovery. The program intake period will occur between July 16, 2021, and October 8, 2021 20:00 Pacific Daylight Saving Time. Following that time, projects must identify a timeline for the funding in accordance with a Contribution Agreement. Projects that have a near-term horizon for conducting eligible activities under the program may be given priority.

2.3 Maximum Amount Payable and Stacking Provisions

The maximum amount payable by MTDP may be up to 100% of a project’s eligible incremental costs up to a total of \$500,000.

The total of all federal, provincial, and municipal government assistance cannot exceed 100% of the total eligible incremental costs outlined in the applicant’s Expression of Interest Application.

Proponents must disclose all expected sources of funding applicable to the proposed project, including contributions from other federal, provincial or territorial, municipal, and private sector sources.

Priority may be given to projects that do not already have or anticipate receiving significant financial contribution from other Government programs or sources.

2.4 Eligible Applicants

Eligible Applicants include:

- For-profit building sector organizations registered in British Columbia (e.g. Owners, Developers);
- Not-for-profit organizations incorporated as a not-for-profit corporation or society formed under an Act of Canada or the Province of BC and in good standing under the relevant Act;
- British Columbia local governments (i.e. municipalities and regional districts); and
- First Nations governments and organizations.

Applications submitted as part of a consortium are encouraged, however, the lead applicant must be one of the eligible applicants listed above.

2.5 Eligible Buildings

Projects proposed by applicants must be associated with an eligible building. Eligible buildings are categorized by type and height.

The eligible buildings are:

Type	Height
Residential	7+ Stories
Mixed-use Commercial	3+ Stories
Institutional	2+ Stories
Industrial	1+ Storey

Priority will be given to projects that advance innovation and demonstrate mass timber use that has *not already* been widely accepted or commercialized in your region of BC. Details and explanation as to how mass timber is innovative in material, system, type and/or location and its relevance for future projects in addressing cost, design or constructability opportunities and challenges are important considerations when the project is being evaluated for eligibility and funding consideration.

Applications should be for buildings that meet or exceed the heights listed in the table above. *However, if you are in a geographic area outside of the Lower Mainland / Southern Vancouver Island where mass timber buildings of other heights could be new or innovative, consideration may be made for funding.* The objective is to be inclusive in determining what constitutes innovation, acknowledging it could vary from region to region. Applicants must clearly explain how their proposed building is uniquely innovative in their specific context/location. Examples could include, but are not limited to:

- Mass timber use is not common in your region
- The proposed building is considerably taller or more complex than usual for wood/hybrid buildings in your region
- The construction of the building offers a new approach for your region
- A specific and significant aspect or component of the project is a first in B.C.

2.6 Eligible Activities

Available funds from the Program are designated to support selected activities in the following areas:

Design development, permitting, and construction drawings, including:

- Incremental costs associated with the mass timber design (architectural, structural, fire safety, building envelope, etc.);
- Code analysis and the preparation and detailing of alternative solutions; including feasibility, engineering, and scientific studies;
- Costs associated with the validation of the design concept, engineering calculations and analysis, product and system testing, and other demonstrations that may be required to support the approval of the project by Authorities Having Jurisdiction (AHJ);
- Research associated with the use of mass timber or mass timber hybrid systems (acoustic, fire, seismic, connections, etc.);
- Virtual design and 3D modeling; and
- GHG emission mitigation documentation.

Construction and related activities including;

- Additional project construction fees associated with mass timber construction that would not otherwise be required such as improving construction site fire safety and moisture protection¹;
- Monitoring costs, to assure building and occupant safety, for the critical building components or assemblies; and
- Costs related to activities not noted above but directly attributable to the innovative design, approval process, use of materials, construction of the building, and the additional educational, training and communications required for such projects may likewise be considered Eligible Activities.

2.7 Eligible Costs

For the funding provided by the MTDP, eligible costs can only be incurred after the date on which the funding agreement has been signed and executed by both parties (the funding recipient and the Financial Administrator). Costs are considered incurred once the work is completed and they are paid by the developer or owner to the goods or services provider.

Note that until a funding agreement is signed by both parties, no commitment or obligation exists for FII or the Administrator to make a financial contribution to any proposed project.

Eligible costs under this Program are directly related to program objectives and include:

- Incremental costs associated with the mass timber solution, including:

¹ Note: the cost of mass timber products used to construct the building cannot be claimed and will not constitute an eligible expenditure.

- construction documentation;
- engineering and testing costs;
- other related expenditures;
- Professional, consulting, and/or technical services;
- Salaries and benefits;
- Data acquisition and the acquisition of technical equipment or materials, software, and licenses;
- Incremental course of construction insurance or other related fees associated with the premiums placed on mass timber buildings;
- Publicity, design, publishing fees, promotional and printing services; and
- Other unique expenses required for the implementation of the mass timber solution.

Any costs associated with the production or purchase of any building materials such as mass timber or softwood lumber products are not eligible under this program.

3. MTDP Application and Evaluation Process

3.1 Expression of Interest Evaluation Process

Projects not meeting the mandatory criteria will be identified and eliminated from further evaluation through this process.

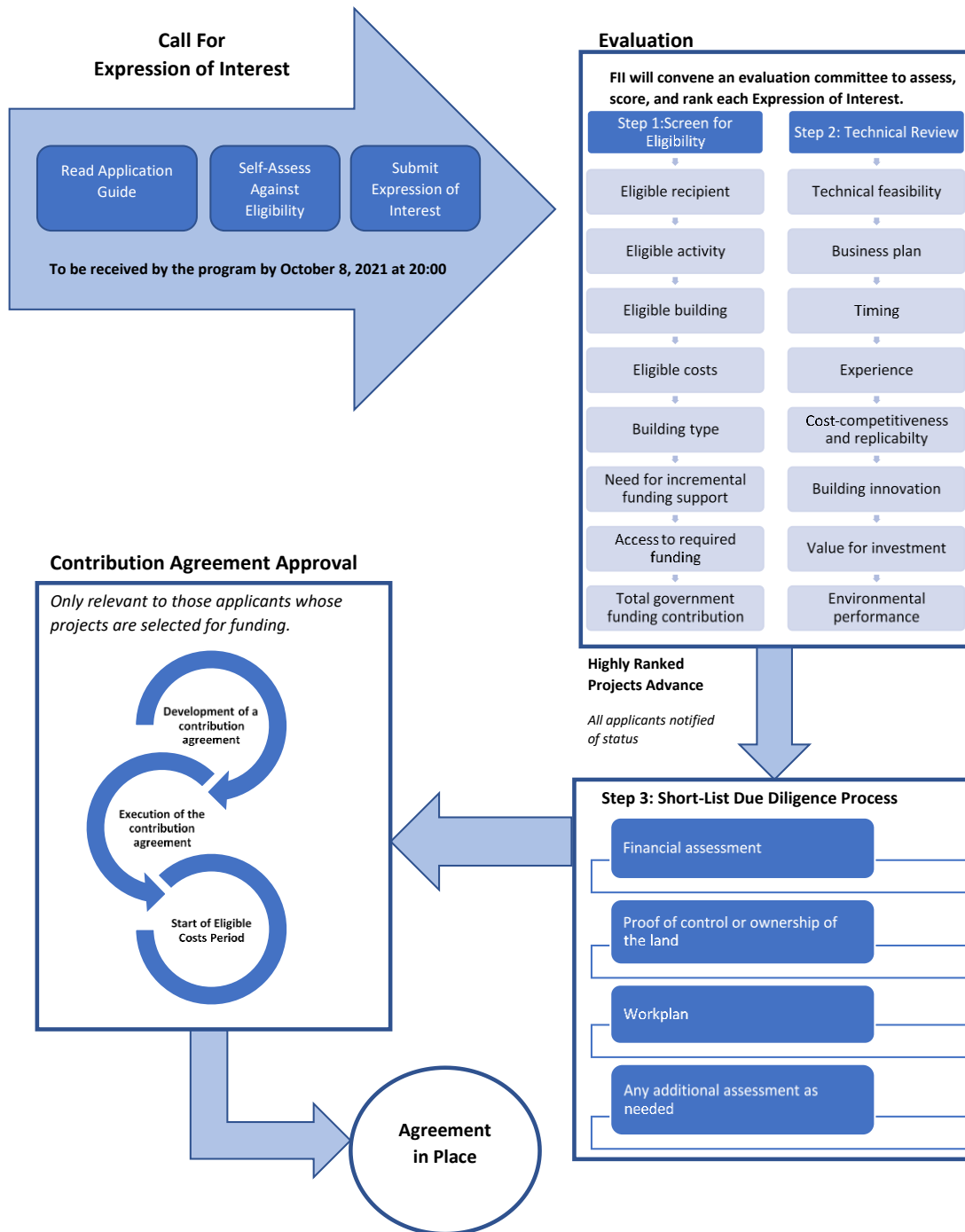
For projects meeting the mandatory criteria FII will use a two-part selection process to identify projects for funding consideration.

- In Part 1, projects meeting the mandatory criteria will be assessed against the program’s desired criteria (see section 3.3.2 below) by a Technical Review Panel.
- Following this process, a recommended short-list of highly ranked projects will advance to the Due Diligence process (Part 2). All applicants will be notified of the status of their application following the review in Part 1.
- Short-listed applicants advancing to the Due Diligence process may be asked to submit additional information. The documentation and the due diligence analysis that may be required for projects will be determined on a case-by-case basis.

Note: The Due Diligence process for the MTDP will occur between October 9, 2021, to January 31, 2022, and applicants must be available, or have a designated representative available, to correspond with MTDP Management during this period of time to provide supplementary information.

Once the final decision has been made, short-listed applicants will be notified of the results of their application. Successful applicants will work with FII to develop funding agreements based on the proposed projects. No payments will be made before the successful execution of the funding agreement and any other applicable contractual conditions.

Figure 1: Expression of Interest Evaluation Process



3.2 Part 1: Evaluation Criteria

3.2.1 Mandatory Criteria

To be eligible for funding through the MTDP, projects must meet all the mandatory criteria. It is the responsibility of the applicant to demonstrate that the proposed project clearly meets **each** mandatory criterion (this should be done through the Expression of Interest Application Form).

The mandatory criteria are:

- The application must be complete and/or provide enough information for a proper evaluation;
- The application must be submitted by an Eligible Applicant (see Section 2.4);
- The proposed project must support an Eligible Building (see Section 2.5);
- The proposed project must support an Eligible Activity (see Section 2.6);
- The costs outlined in the application must be Eligible Costs (see Section 2.7);
- The building must be in B.C.
- The main structural building system must be mass timber or mass timber-hybrid (such as mass timber wood frame, mass timber-concrete or mass timber-steel);
- The application must demonstrate the need for incremental funding support through the MTDP, and how requested funding will advance this project in the immediate term.
- The proponent must commit to contributing the majority of the total project cost, and must provide evidence of funds and/or in-kind support for their share of project costs;
- The proponent must demonstrate they have access to the funding required to successfully complete the project.
 - a. Any other Government of British Columbia or federal/other government contributions received or applied for must be clearly identified in the EOI application; and
- The total Canadian government assistance (federal, provincial and municipal) cannot exceed 100% of the total eligible incremental project costs being funded through the MTDP.

3.2.2 Desired Criteria

Projects which **clearly** meet each of the mandatory criteria will then be evaluated against the program’s desired criteria by the Technical Review Panel, as outlined below.

Feasibility (40% weighting)

1. **Technical Feasibility:** Applicants should demonstrate the degree to which the project is expected to be technically feasible and generate the desired outcomes.
2. **Business Plan:** Applicants should demonstrate strong financial analysis, sound budgeting, and a credible and complete business plan.
3. **Timing:** Preference will be given to applicants who propose the most credible and defensible project schedule information. Priority will also be given to projects that can be completed or will begin completion in a near-term horizon.
4. **Experience:** Applicants (and their project teams) should demonstrate sufficient experience and capacity to deliver an innovative mass timber or mass timber hybrid building.

Cost-Competitiveness (20% weighting)

5. **Cost-Competitiveness and Replicability:** Applicants should clearly demonstrate a cost-competitive project design and implementation plan including a Class “D” cost analysis.
 - a. How were the incremental costs of using wood for the building construction quantified and how were the areas of design, approval, and construction activities identified?
 - b. How will your use of a design strategy or building assembly impact the B.C. market in a significant way or how will it illustrate design strategies that have a high potential to be used in other locations or applications?

Innovation and Value (25% weighting)

6. **Building Innovation:** Applicants should demonstrate and thoroughly explain the degree of building innovation and novelty, as demonstrated using new innovative engineered wood products, systems, designs, construction methodology and design for adoptability and dismantling.
 - a. Includes the use of Building Information Modelling.
7. **Value for Investment:** Applicant should demonstrate how the project will help to achieve program results related to:
 - i. Supporting mass timber implementation where traditional building materials would have otherwise been used.
 - ii. Where a B.C. based supply of mass timber is available, projects that demonstrate the use of B.C. based products in their projects may be given preference. It should be noted that any local preference would be within the scope of trade agreements.
 - iii. Supporting mass timber usage in innovative construction in your specific region or context.

Environmental Performance (15% weighting)

8. **Environmental Performance:** Projects should demonstrate how the building solution will reduce or mitigate GHG emissions compared to a similar building constructed with traditional materials and systems. Projects should also provide an initial estimate of carbon dioxide equivalent (CO₂e) and how the GHG mitigation estimate was calculated. Preference will be given to projects which can demonstrate additional “green” performance measures such as energy efficiency.

- a. Describe how the building solution will reduce or mitigate GHG emissions compared to a similar building constructed with traditional materials and systems.
- b. Applicants should describe how their project targets environmental or social building certifications (e.g. BOMA BEST, Green Globes, LEED, Living Building Challenge, WELL, Zero Carbon Building Standard).

3.3 Part 2: Short-List Projects and Due Diligence

The highly ranked projects emerging from the Part 1 evaluation listed above will move to the Program’s “short-list”. These applicants may be required to provide additional information to support the final funding decisions. Short-listed project applicants may be asked to provide key documentation, which may include:

- Financial information that will be used to support a project’s financial risk assessment;
- Proof that the project team owns or controls the land where the project will be built;
- A detailed work plan (including key milestones); and
- Additional supporting materials to demonstrate the applicant’s commitment to the project.

Applicants advancing to Part 2 will be provided with specific instructions relating to the assessment of the financial risk, the permits/approvals, and the work plan.

The due diligence process for the MTDP occurs between October 9, 2021, and January 31, 2022, and applicants must be available for correspondence during this period of time to provide supplementary information.

Failure to submit any information supporting the short-list project analysis in a timely fashion will result in the elimination of the Proponent from the Application Process.

4. Additional Information for Applicants

4.1 Reporting Requirements

Specific reporting requirements will be defined in the funding agreement but will likely include the information as laid out below. Regular communication between FII and the recipients will be implemented to monitor progress.

Life Cycle Assessment (LCA)

- If the Applicant becomes a successful Recipient, they should be prepared to provide details of any previously completed LCAs that informed design.
- The recipient must make available Class A cost estimates with material quantities for the purpose of a post-construction LCA which will be funded and managed separately by FII, and conducted by an LCA consultant, in consultation with the Recipient.
- The LCA consultant will sign a confidentiality agreement and work closely with the Applicant during the process.
- The results of any LCA will be shared with the Applicant.

Regular quarterly reporting requirements for recipients include:

- A financial report signed by the Chief Financial Officer or Duly Authorized Officer of the organization which outlines eligible costs incurred by task; receipts demonstrating expenses related to eligible costs and proof of payment must be included;
- A description of milestones met during the period (including results obtained and description of performance measures where applicable), and identification of any concerns that the Administrator should be made aware of, and if so, details and mitigation plans regarding these issues; and

At the end of the project, recipients will provide:

- A financial report that demonstrates how the contribution was spent, with a declaration as to the total amount of contributions or payments received from other sources in respect of the Project;
- A final narrative report to describe how project activities have contributed to the achievement of the objectives of the Project and Program and details on lessons learned, costs, and replicability considerations pertaining to the Project; and

Recipients are expected to participate and support communications activities related to the preparation of case studies, project profiles, summaries of lessons learned and technical information developed by FII or its agents.

Details on reporting requirements can be found in the Contribution Agreement Template.

To ensure the accuracy of the reporting, external, third-party consultants may be hired for measurement and verification of activities, as needed.

4.2 Working Language of the Province

The working language of FII is English. All responses to this Call for Expressions of Interest must be in English.

4.3 Changes to Proposal Wording

The proponent may not change the wording of its proposal after closing, and no words or comments may be added to the proposal unless requested by MTDP Management for purposes of clarification.

4.4 Irrevocability of Proposals

By submission of a clear and detailed written notice, the proponent may amend or withdraw its proposal prior to the closing date and time. All proposals submitted by the closing date and time will be subject to evaluation as submitted and without further changes. After closing, a proponent may withdraw its proposal by providing written notice.

4.5 Currency

Prices/cost are to be quoted in Canadian dollars.

4.6 Taxes

FII will pay GST where applicable. If GST is applicable, the recipient must provide an invoice including the recipient's GST registration number to support the amount of GST being charged.

4.7 Ownership of Proposals

All documents submitted to FII, including proposals submitted via the online application system, become the property of FII. They will be received and held in confidence by FII, subject to the provisions of the Freedom of Information and Protection of Privacy Act.

4.8 Expression of Interest Terminology

Applications	Project proposals submitted by Proponents in response to a Call for Proposals.
Building Information Modelling (BIM)	A highly collaborative process that allows multiple stakeholders and professionals to collaborate on the planning, design, and construction of a building within one 3D model.
Carbon Accounting Analysis	Assessment of greenhouse gas emissions to quantify the greenhouse gases produced directly and indirectly from a business or the organization's activities.
Class “D” Cost Estimate	A class “D” estimate is prepared when a project is at the “Conceptual Design” stage. Conceptual design is defined as the beginning of a project when preliminary spatial needs have been identified, and a space program is being developed. At this stage of a project, conceptual drawings of physical space layouts and elevations are being developed by the architect, and the remainder of the design team are developing and evaluating different ideas regarding the types of systems to be used in the project. Project development at this stage is approximately 30% complete.
Contract	The written Recipient Agreement resulting from this Request for Expression of Interest executed and signed by Forestry Innovation Investment and the recipient.
Dissemination	The sharing of findings and lessons learned.
Due Diligence Process	A process where short-listed applicants are required to provide additional information (e.g., financial statements of the company).
Eligible Activities	The activities eligible for funding through the Program as defined in Section 2.5.
Eligible Applicant	The list of proponents eligible for funding under the Program as defined in Section 2.4.
EOI Submission	The response to the RFEIOI provided by the proponent applying to the program.
FII	Forestry Innovation Investment Ltd.
Funding Agreement	A funding agreement between FII and Recipients.
GHG	An abbreviation for Greenhouse Gas.
Incremental Costs	Eligible costs associated with the additional design (architectural, structural, fire safety, building envelope, etc.), approval, and construction activities required to construct the building with wood over traditional methods. To be eligible, such items must be identified in the project cost estimate and approved by FII.
Incremental Costs Differential	The difference in costs between the based case and the proposed case.
Incurred Costs	Costs are considered incurred once the services have been provided/goods are received, and they are paid by the developer/owner to the goods or services provider.
Life Cycle Assessment	A method to evaluate the environmental impact of a product (or in this case, a building) through its lifecycle. This includes the extraction and processing of the raw materials, the manufacturing, distribution, use, recycling, and the final disposal.

Life Cycle Costs	Capital costs and long-term costs.
Mass Timber	A category of framing styles generally characterized by using large solid wood panels for walls, floors, and roof construction.
Mass Timber Building	A building where the primary load-bearing structure is made of either solid or engineered wood.
MNP	The service provider contracted to manage and administer the Program.
MTDP Management (“Management”)	The service provider contracted to manage and administer the Program.
MTDP Team	The employees of Forestry Innovation Investment responsible for the Program.
MTDP Technical Review Panel (“the Panel”)	This review panel is responsible for evaluating applications for funding and making recommendations for funding approval.
MTDP (“the Program”)	Abbreviation for Mass Timber Demonstration Program.
Must or Mandatory	This means a requirement that must be met for a proposal to receive consideration.
Pre-Screening	The process where MTDP Management checks applications against the mandatory criteria and prepares compiles application packages for the Technical Review Panel.
Professional and Consulting Services Costs	The nature of goods or services to be acquired shall be set out in the proposal estimates. The amount eligible for a sub-contractor or a consultant shall be the actual contract amount.
Project Start Date	The date on which a successful Proponent enters a Project Funding Agreement with FII.
Proponents	Entities that submit Applications for funding in response to a Request for Expression of Interest.
Recipient	A successful Proponent that is awarded funding through the MTDP.
RFEOI	Abbreviation for Request(s) for Expressions of Interest. It is the process by which Management solicits funding applications.
Salaries and Benefit Costs	Benefits are defined as a reasonable prorated share of expenses associated with the direct labour cost such as the employer’s portion of Canada Pension Plan, Employment Insurance, employee benefits (such as health plan and insurance), Worker’s Compensation, sick leave, vacation, and any other employer-paid payroll-related expenses. Those items which have no relationship to the project charged on an indirect basis are not eligible.
Should or Desirable or Desired	This means a requirement having a significant degree of importance to the objectives of the Call for Proposals and proposal evaluation.

The Mass Timber Demonstration Program is led by Forestry Innovation Investment through its Wood First Program. We gratefully acknowledge the financial support of the Province of British Columbia through the Ministry of Jobs, Economic Recovery and Innovation.