

## Mass Timber Research and Options

<b>Date:</b>	April 15, 2021
<b>Department, GM:</b>	Kate Zanon, General Manager of Community Development
<b>Project Manager:</b>	Mary De Paoli, Manager of Policy Planning
<b>Staff Lead:</b>	Laura Sampliner (supported by Robyn MacLeod and André Boel)
<b>Project Origin:</b>	<input checked="" type="checkbox"/> Council Motion #RC21/124a <input type="checkbox"/> Staff Initiated <input type="checkbox"/> Other: [Other]
<b>Strategic Priority Area:</b>	<input type="checkbox"/> Exceptional Service <input checked="" type="checkbox"/> Environmental Leadership <input type="checkbox"/> Healthy City <input type="checkbox"/> Economic Prosperity <input type="checkbox"/> Community Evolution

### Project Description

Under the Mass Timber Research and Options project staff plan to work with a consultant to understand implications of mass timber construction and to outline options and implementation considerations for incentivizing mass timber in Port Moody construction projects. Staff will present options and background information to Council for further direction.

On March 9, 2021 Council passed a the following motion based on a report by Councillor Steve Milani:

RC21/124a and RC21/125

THAT staff report back to Council with options on how best to:

- a) prioritize and incentivize Mass Timber (Cross-Laminated Timber (CLT)) construction for buildings over six storeys in height; and
- b) discourage the use of concrete as the main component of buildings over six storeys in height.

### Relevant Background

In June of 2019, the City of Port Moody declared a state of climate emergency. In July of 2020, City Council endorsed the Climate Action Plan. One of the six goals included in the Climate Emergency Declaration is to cut the carbon content of construction projects by 40% (compared to 2018) by the year 2030.

Councillor Milani's report from March 9, 2021 outlines the following benefits of mass timber:

- Achieving Climate Action Plan goals through reduction in embodied emissions;
- Reducing energy use from large buildings;
- Less construction noise;
- Less traffic;
- Supporting forest workers;
- Better thermal performance;
- Reduced soil liquefaction risk; and
- Opportunity for carbon sequestration.

In 2019 Council passed the following motion based on a report Councillor Madsen brought forward regarding cement use:

RC19/445

THAT Council direct staff to report back with an assessment of the benefits, costs, feasibility, and implementation steps that would be required for the City to require that Portland-Limestone Cement (or its enhanced variant, Contempra) be used wherever cement might be called for in any future civic/public projects within the City of Port Moody, per the report dated September 28, 2019 from Councillor Hunter Madsen titled Recommendation to Reduce Local GHG Emissions by Requiring Portland-Limestone Cement in All Future Construction within Port Moody;

AND THAT staff's assessment include consultation with the Cement Association of Canada, regional cement providers, and a selection of construction firms that would be affected by this change;

AND THAT, if staff's assessment supports this recommendation, then the use of Portland-Limestone Cement/Contempra shall be encouraged in all private construction within our city through its inclusion and positive weighting in the Planning Department's Sustainability Checklist, and through consideration of its use in City evaluation of all rezoning applications;

AND THAT, if staff's assessment supports this recommendation, then the Mayor shall be directed on behalf of Council to petition the Province for modification of the B.C. building code to require use of PLC/Contempra cement in all B.C. construction; and also bring this same proposal for consideration at the next general sessions of the Lower Mainland Local Government Association and the Union of B.C. Municipalities.

**The City's Community Development – Policy Planning division staff are incorporating the reduction of embodied emissions, including the use of low-emissions materials such as Portland-limestone cement, in rezoning tools such as the Sustainability Report Card. Updates to the Sustainability Report Card are anticipated to be completed summer 2021.**

In 2020, Port Moody passed the following resolution in regards to the Tall Wood Early Adoption Initiative:

RC20/223

WHEREAS Council is aware that the Province is considering changing the regulation pursuant to section 3 of the *Building Act*, SBC 2015, c. 2, which will authorize and regulate the construction of encapsulated mass timber buildings 7-12 stories in height (the "Tall Wood Early Adoption Initiative");

AND WHEREAS Council, together with the Planning and Development Department and Port Moody Fire-Rescue, support participation in the Province of BC's Tall Wood Early Adoption Initiative;

THEREFORE BE IT RESOLVED THAT staff be directed to submit a request to register the City of Port Moody with the Province of BC to include the City of Port Moody as a participating local authority in the regulation for the Tall Wood Early Adoption Initiative as outlined in the report dated

April 28, 2020 from the Planning and Development Department – Building, Bylaw, and Licensing Division regarding Tall Wood Early Adoption Initiative.

**This resolution was completed by the City's Community Development – Building, Bylaws, and Licensing division.**

## Project Objectives

- Understand the trade-offs and benefits of mass timber (CLT) construction as compared to other construction methods in relation to the climate emergency goal
- Research and outline ways in which the municipality may incentivize mass timber for construction of buildings over six stories in height
- Research and outline ways in which the municipality may discourage the use of concrete as the main component of buildings over six storeys in height

## Scope

<b>In Scope</b>	<ul style="list-style-type: none"> <li>• Research and recommendations</li> <li>• Consultation with industry experts and municipal staff</li> </ul>
<b>Out of Scope</b>	<ul style="list-style-type: none"> <li>• Policy and bylaw amendments</li> <li>• Public engagement</li> </ul>

## Work Plan Overview

<b>Project start date:</b> TBD based on Council priority assignment	<b>Project end date:</b> TBD
<i>Deliverable/Milestone:</i>	<i>Date:</i>
<u>Phase 1 - Ground truthing</u> Research to understand best practices, review of other municipalities, technical background on mass timber and its merits compared to other construction methods in terms of achieving Climate Action goals. This phase also involves a legal review to understand the City's jurisdiction and opportunities to incentivize/de-incentivize.	2-4 months
<u>Phase 2 - Consult industry experts</u> Engage with industry experts and local builders to share research findings and receive feedback to inform options.	1-2 months

<u>Phase 3 - Draft Options</u> Based on phase 1 & 2 research and review, form options to meet project objectives described above. Outline information on amendments to policies/bylaws needed and incentive roll out for the options.	1-2 months
<u>Phase 4 - Prepare Documents</u> Prepare supporting documents and report to Council to present options, including presentation	4-6 weeks
<u>Phase 5 - Report to Council</u> Present report and attachments to Council	TBD

Budget	
<b>Budget Source:</b> TBD	<input type="checkbox"/> <b>Request Referral to Finance Committee</b>
<i>Item:</i>	<i>Cost:</i>
Consultant – research, stakeholder engagement, options, document preparation	\$30,000-\$50,000 estimated range.
Program Management Fee (including staff time from at least 4 City Divisions, communications materials etc.)	\$10,000 - \$15,000 estimated
<b>Total:</b>	\$40,000 - \$65,000

Council Decision on Project Proposal:	<input type="checkbox"/> Approve as submitted <input type="checkbox"/> Approve with amendments <input type="checkbox"/> Request re-submission <input type="checkbox"/> Defer project <input type="checkbox"/> Remove project from consideration
Council Direction on Priority Level:	<input type="checkbox"/> Priority 1 – “Must Do” <input type="checkbox"/> Priority 2 – “High Priority” <input type="checkbox"/> Priority 3 – “Medium Priority – As Resources Allow”
Council Motion #:	

Date of Motion:	
Notes:	