Memorandum to the Council of

Corporation of the Municipality of Temagami

Subject: Tulloch Engineering - Temagami Fire Tower Structural Inspection & 2025 Rehabilitation

Memo No: 2025-M-158

Date: June 26, 2025

Attachment: None

Prepared By: Laala Jahanshahloo - CAO/Treasurer

Recommendation

BE IT RESOLVED THAT Council receives Memo 2025-M-158 as presented;

AND FURTHER THAT Council:

- Ratifies the \$6,000 expenditure from the 2025 Capital Budget for Priority 1A repairs (stair tread replacement);
- Approves an allocation of \$9,200 from Capital Reserves to complete Priority 1B repairs (North Lookout sonotube) by Fall 2025;
- Directs that Priorities 3–5, estimated at \$135,700 base cost, be incorporated into the 2026–2035 Capital Plan.

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1. Executive Summary

This report summarizes the findings of Tulloch Engineering's 2025 structural inspection of the Temagami Fire Tower and surrounding infrastructure, including the North Lookout, bridge, tower access ramp, and parking lot gazebo. The Fire Tower, a seasonal tourism destination with over 60,000 annual visitors, was assessed for structural safety and long-term sustainability.

As of June 2025, Priority 1A safety repairs — replacement of seven cracked stair treads — have been completed using custom aluminum treads fabricated by Mik-Mak Ltd. Twelve units were manufactured, with five retained as spares. Installation was completed by Public Works and approved by Tulloch Engineering on June 5, 2025. The Fire Tower will reopen for the 2025 season following final surface-level touch-ups.

A critical Priority 1B deficiency remains: a disintegrating sonotube support beneath the North Lookout. This must be replaced before the 2026 season to prevent structural failure. This memo recommends allocating \$9,200 from Capital Reserves for that repair and directing that remaining identified works be phased through the municipal 10-Year Capital Plan.

2. Background

In March 2025, Council authorized Tulloch Engineering to perform a full structural inspection of the Temagami Fire Tower and associated elements. The inspection was conducted May 13, 2025, and focused on visible deterioration, structural safety, and necessary remediation works.

Full report available at: <u>https://www.temagami.ca/public/download/files/270109</u>

Structure	Condition	Key Issues		
Fire Tower	Good	Split stair treads, missing bolts, flaking paint		
Parking Lot Gazebo	Fair	Rotted rafters, flooring defects, leaning railing		
West Lookout & Railing	Good	Split timber beam, minor foundational issues		
Tower Access Ramp	Good	Localized rot, uneven decking, leaning posts		
Bridge	Fair	Temporary plywood decking, eroded approaches		
North Lookout	Fair	Disintegrating sonotube, rotted joists and fascia		

3. Structural Assessment Summary

4. Urgent Repairs: Status & Timelines

4.1. Priority 1A: Stair Tread Replacement (Completed)

- 7 stair treads replaced due to cracking and deflection.
- Fabricated by Mik-Mak Ltd.; 12 total made, 5 retained as spares.
- Installed by Public Works; approved June 5, 2025.
- Cost: \$6,000
- Funded via 2025 Capital Budget.

4.2. Priority 1B: North Lookout Sonotube Replacement (Pending)

- Southeast sonotube has begun disintegrating, threatening load-bearing capacity.
- Scope: Shore existing platform, remove old footing, install new 12" reinforced concrete sonotube.
- Estimated Total Cost: \$9,200 (includes 15% contingency and 20% engineering on \$7,500 base)
- Should be completed before 2026 reopening to avoid public access restrictions.

Priority	Scope	Timeline	Base Cost	Total Cost
1A	Stair tread replacement	Completed	\$3,500	\$6,000 (5 Steps Retained)
1B	North Lookout sonotube	Fall 2025	\$7,500	\$9,200
3	Structural welds, timber, deck	2026–2027	\$59,650	\$73,100
4–5	Paint, erosion control, signage, etc.	2026–2035	\$51,150	\$62,600
Total			\$124,300	\$150,900

5. Long-Term Capital Forecast (2026–2035)

 Tulloch provides Class D estimates, suitable for preliminary budgeting with an expected variability of ±30%. All totals include 15% contingency and 20% engineering overhead unless otherwise noted.

7. Compliance & Monitoring

- CSA S37 Compliance: Full structural inspections every 6 years; visual inspections every 2 years.
- Seasonal Inspections: Public Works to perform checks before each season.
- Monitoring: Specific items (e.g. lean posts, deck erosion, paint deterioration) to be reevaluated annually.

8. Conclusion

The Temagami Fire Tower is safe for 2025 operations following completion of Priority 1A repairs. However, Priority 1B repairs to the North Lookout must proceed in 2025 to ensure safety for the 2026 season. Tulloch's recommendations form a sound basis for integrating remaining structural works into the 10-year capital plan. Council support for phased implementation is necessary to preserve this iconic asset.