

REPORT OF THE ACTING DIRECTOR OF PUBLIC WORKS RE: CENTENNIAL ARENA WOOD CONTINUED STRUCTURE MITIGATION EFFORTS

RECOMMENDATION

That Council approve the use of the negotiation method as described in the City's procurement policy to sole source the continued provision of services to mitigate the potential for collapse of the Centennial Arena to Wood Research and Development Canada at an upset limit of \$86,027 plus applicable taxes.

And that the associated costs be drawn from the City's Buildings and Facilities Capital Reserve

BACKGROUND

Following a preliminary report from Wood Research and Development (WRD) arising from a September 11th 2023 site inspection of the Centennial Arena, Council met on October 3, 2023 to review a report from the Acting Director of Public Works detailing a plan for WRD to conduct a full canvas inspection of the arena's wood structural components.

This full canvas inspection was initially anticipated so last approximately two weeks. WRD mobilized inspectors to attend on October 24, 2023 to begin the inspection. WRD was able to provide a presentation to the City's Recreation and Culture Standing Committee on November 6, 2023, which detailed progress of this inspection, and provided preliminary results. At that meeting, it was disclosed that additional time was required to complete the canvas inspection.

Attached to this report for review is a quotation from WRD to re-attend site to complete the canvas inspection beginning on November 27, 2023.

City forces continue to work on site to install shoring towers and to remove interior finishes. In anticipation of the return of WRD, further on site coordination will be required to facilitate WRD's inspection efforts. By the time of their return staff anticipates that the facility will be generally available for WRD to complete their work.

ANALYSIS

Previous reporting on proposed mitigation efforts detailed the process as follows:

- 1. WRD Installs Real Time Health-Monitoring in the Facility**
 - WRD has offered the City a proposal to install devices that monitor the potential movements of structural elements in the facility on a real-time basis. That proposal is titled *Centennial Arena – Elliot Lake, Ontario Structural Health Monitoring Proposal*, and is attached to this report for Council’s review.
- 2. WRD Designs Preliminary Shoring**
 - WRD has quantified the anticipated costs to design temporary shoring in place to mitigate the potential for collapse without snow load in place. The offered quote Q7380 named *Temporary Shoring Design – No Winter* is attached to this report for Council’s review. It would be the City’s responsibility to put this shoring in place.
- 3. City Installs Preliminary Shoring**
- 4. WRD Offers Formal Guidance on Occupancy**
 - Once the Health Monitoring and Temporary Shoring is in place, WRD is willing to provide the City with formal guidance on occupancy. This is identified in quote Q7380 named *Temporary Shoring Design – No Winter* attached to this report.
- 5. City Forces Tear Out Interior Finishes to Facilitate Full Canvas Inspection for WRD**
 - With occupancy guidance and monitoring in place, the City would move forward with removing the interior finishes and insulation from the entirety of the wooden structure at the Arena to facilitate a thorough inspection (or Canvas) by WRD.
- 6. WRD Does Full Canvas Inspection of All Structural Wood Components**
 - Quote Q7831 named *Elliot Lake Canvas Inspection of the Hockey Arena* is attached to this report for Council’s review.

The attached quotes from WRD represent charges to continue to realize step 6, as well as charges to design shoring that can tolerate anticipated loads through the winter season.



FINANCIAL IMPACT

The following table details approved and recommended expenses for the project to date:

<i>Mitigation Step</i>		<i>Cost</i>
1.	WRD Installs Real Time Health-Monitoring in the Facility	\$58,356 Plus: \$9,930 per month for Health Monitoring
2.	WRD Designs Preliminary Shoring	\$26,535
3.	City Installs Temporary Shoring	Upset Limit of \$50,000
4.	WRD Offers Formal Guidance on Occupancy	Inc. Above
5.	City Forces Tear Out Interior Finishes to Facilitate Full Canvas Inspection for WRD	Inc. Above
6.	WRD Does Full Canvas Inspection of All Structural Wood Components	\$129,015 Plus Contingency for Extra Day: \$5,000
<i>Subtotal - Previously Approved Expenses</i>		\$268,906 Plus \$9,930 per month for Health Monitoring (anticipated for approximately 6 months) Plus Applicable Taxes
7.	WRD Continues Full Canvas Inspection of All Structural Wood Components	\$66,827 Inc. Extra Day Mobilization as per Quote
8.	WRD Provides Winter Shoring Design	\$19,200
<i>Subtotal - New Expenses To Be Approved In This Report</i>		\$86,027
<i>Total Mitigation Design Expenses To Date (Approved + Recommended)</i>		\$372,933



LINKS TO STRATEGIC PLAN

This issue directly relates to the following key section of the strategic plan:

- Continued investment into infrastructure
- Health and community wellness

SUMMARY

Staff recommends that Council give approval to sole source structural mitigation services for Centennial Arena as described in the attached proposals to Wood Research and Development Canada (WRD) for work totalling \$86,027 and recommends that these expenses be drawn from the Building and Facilities Capital Reserve.

