A. Recommendations

THAT Council receive Staff Report CSOPS.20.037, entitled “West Side Water Storage Class Environmental Assessment Public Information Centre #1” for their information;

AND THAT Council grant approval for staff to proceed with holding a virtual Public Information Centre.

B. Overview

This Staff Report provides Council with the materials and information that will be presented at the Public Information Centre (PIC) for the West Side Water Storage Class Environmental Assessment

C. Background

In 2019, the Town completed a Town-Wide Water Distribution System Master Plan. This study identified the need for a subsequent Schedule ‘B’ Municipal Class EA to address water storage and distribution needs in the western pressure zones in the Town, including the approximate settlement areas of Camperdown, Thornbury and Lora Bay.

The purpose of this project is to enable the construction of municipal water infrastructure which will meet the Town’s immediate, long-term and build-out needs.

In 2020, the Town initiated the West Side Water Storage Class EA and retained the engineering consultant, JL Richards Ltd to lead the project. As part of the project scope, Town staff identified the need for two public consultation sessions. Ordinarily this would include a Public Open House/ Public Information Centre where the public can review the information and ask questions in-person. However, due to the COVID-19 situation and the limitations on social gatherings, this type of public consultation is not currently possible. In lieu of a traditional PIC, Town staff have proposed a “Virtual PIC” event where the project will be presented to the public via online streaming (similar to Council Meetings). The public will also be able to write-in comments which can be responded to live or following the meeting.
The presentation slide deck has been attached to this Staff Report. Town staff are hoping to proceed with the Virtual PIC on June 25, 2020. The Notice of Study Commencement and Public Information Centre is attached to this report.

### D. Analysis

Public consultation is an integral part of the Municipal Class EA process. In lieu of a regular drop-in PIC, the public will be encouraged to view a live-stream presentation of the project. A recording of the presentation will be made available following the PIC.

Residents will be encouraged to attend the live-stream session, send questions in advance and/or ask questions live. The questions will be moderated and responded to either during the live-stream or following the PIC.

The comments received during the virtual PIC will be recorded and considered as part of the overall project. These will become part of the public record as with other comments received during public consultations.

### E. The Blue Mountains Strategic Plan

| Goal #2: Engage Our Communities & Partners |
| Objective #1 Improve External Communication with our Constituents |
| Objective #2 Use Technology to Advance Engagement |
| Objective #3 Strengthen Partnerships |

| Goal #5: Ensure Our Infrastructure is Sustainable |
| Objective #3 Implement Best Practices in Sustainable Infrastructure |
| Objective #4 Ensure that Infrastructure is Available to Support Development |

### F. Environmental Impacts

None

### G. Financial Impact

None

### H. In Consultation With

None

### I. Public Engagement

The topic of this Staff Report will be the subject of a PIC in accordance with the following schedule:
Committee of the Whole
June 2, 2020
CSOPS.20.037

- June 2, 2020 Committee of the Whole – Initial staff report (CSOPS.20.037 Westside Water Storage EA PIC #1) with recommendation to proceed to public consultation;
- June 4, 2020 and June 18, 2020 – Notice of Study Commencement and Virtual PIC #1 advertised in Collingwood Connection;
- June 15, 2020 Council – Recommendations from June 2, 2020 Committee of the Whole confirmed;
- June 25, 2020 – Virtual Public House/ PIC #1 to be held.

Comments regarding this report should be submitted to Thomas Nightingale, WestSideWaterStorage@thebluemountains.ca.

J. Attached

1. Notice of Study Commencement/ Notice of PIC
2. Presentation material

Respectfully submitted,

Thomas Nightingale, P. Eng.
Senior Infrastructure Capital Project Coordinator

Shawn Carey
Director of Operations

For more information, please contact:
Thomas Nightingale, P. Eng.
tnightingale@thebluemountains.ca
519-599-3131 extension 304
Notice of Commencement and Public Information Centre

Town of The Blue Mountains Schedule B Municipal Class Environmental Assessment for Drinking Water Storage and Pumping Capacity Deficiencies in West Pressure Zones 1, 2 and 3

The Town of The Blue Mountains has initiated a Municipal Class EA to select the preferred solution to address the Town’s Water Storage and Distribution System needs in the West Pressure Zones 1, 2 and 3.

How Will This Affect Me?
In November 2019, a Water Distribution System Master Plan was completed to evaluate the Town’s long-term water distribution and storage needs. As part of the Master Plan, potential near and long-term storage and/or pumping deficiencies were identified in the Town’s West Pressure Zones 1, 2, and 3. The purpose of this Schedule B Class EA is to evaluate and select the preferred water storage alternative(s) for these pressures zones. The storage alternatives proposed may have an impact on stakeholders and property owners, therefore, public consultation will be a key element of the process and input will be sought throughout the study.

How Do I Get More Information?
An initial Virtual Public Open House (PIC 1) is being held to gather input from stakeholders on existing storage opportunities or deficiencies. All those interested in the project are invited to attend the initial Virtual Public Open House on:

Date: June 25, 2020
Time: 5:00 – 7:00 pm

To register for this event please email: WestSideWaterStorage@thebluemountains.ca

If you wish to add your contact information to the study mailing list, or if you have any questions regarding the study, please contact one of the people listed below. Project information will also be available to the public on the Town’s website https://thebluemountains.ca/west-side-water-storage-ea.cfm

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<td></td>
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<td>Thomas Nightingale, P.Eng.</td>
<td>Senior Infrastructure Capital Project Coordinator</td>
<td>Town of The Blue Mountains</td>
<td>519-599-3131 Ext. 304</td>
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<td>32 Mill Street, P.O. Box 310</td>
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<td>Thornbury, ON N0H 2P0</td>
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This study is being conducted according to the requirements of Phases 1 to 2 of the Municipal Class Environmental Assessment which is an approved process under the Environmental Assessment Act.
Town of The Blue Mountains Westside Storage Class EA

Presented by: J.L. Richards & Associates
Date: June 25, 2020
JLR No.: 29304
Agenda

- Project Overview
- Class Environmental Assessment (EA) Process
- Existing Storage and Pumping Infrastructure
- 2019 Master Plan Findings
- West Pressure Zone Storage and Options
- Proposed Additional Studies
- Future Consultation Opportunities and Next Steps
JL Richards (JLR) has been retained to prepare a Municipal Class Environmental Assessment (Class EA) for improving water storage and pumping for the Town’s west pressure zones.
Class EA Process Overview

- Under the Environmental Assessment Act, municipalities **must** consider potential environmental effects before a potential water and/or wastewater project begins.

- The streamlined MEA Class EA process allows municipalities to consider impacts without having to obtain project-specific approval under the Environmental Assessment Act.
Existing Storage

Existing storage/pumping in the EA area is provided by:

• Victoria Tower – 747m³
• Thornbury Reservoir - 3,400m³
• Camperdown Reservoir – 2,600m³
• 10 Line Booster Pumping Station

Additional Town Storage:

• Happy Valley Road Reservoir – 5,000m³
• Swiss Meadows Standpipe – 536m³
Existing Water System
2019 Master Plan Findings

JLR completed a Town-Wide Master Plan under the Municipal Class EA framework in 2019. The findings related to pumping capacity and storage in the preliminary recommendations in the western pressure zones were:

- Conduct a Schedule B Class EA
- Replace the Victoria St. Tower with a tower at Tomahawk Golf Course
- Build a new storage facility in Lora Bay (location/type unknown)

Preferred solution needs to address (1) aging infrastructure in Pressure Zone 1 (Thornbury) and (2) inadequate storage and/or pumping to Pressure Zone 2 and 2a (Lora Bay).
Future Water Distribution, 20-Years and Build Out Pressure Zones 2 and 2a (Lora Bay)
Future Water Distribution, 20-Years and Build Out Pressure Zones 1-West (Thornbury and Clarksburg)

Legend:
- Existing Watermain
- 20-year Watermain
- Build-Out Watermain
- Infill
- Pressure Zones

5 to 20-year Timeline:
- Construct new 1,000 m³ elevated tower at new site (Tomahawk Municipal Lands) in Zone 1
- Upgrade 0.3 km watermain from new elevated tank to existing feeder main to 300 mm.

*Final solution for storage and distribution improvements will be subject to Schedule 0 Class EA.

5 to 5-year Timeline:
- Complete Schedule 0 Class EA for East Side Water Supply

5 - 20-year Timeline:
- Decommission the Victoria Tower

Town of The Blue Mountains

www.jlrichards.ca
Future Water Distribution, 20-Years and Build Out Pressure Zones 1a, 1-West and 3 (Camperdown)
Why is Water Storage Important?

Treated water storage facilities should be designed to allow maintenance of adequate flows and pressures in the distribution system during peak hour water demand, and to meet critical water demands during fire flow and emergency conditions.

Examples of when the Town needs water storage:

- Everyday to maintain system water pressures (e.g. for your shower)
- On a hot summer day to water your vegetable garden (peak hour flows)
- During a big fire event (fire flow)
- If a water main breaks or during an extended power outage (emergency)
Updates to the 2019 MSP

- Update to 20-year and Build-Out Growth Projections

- Confirmation of Design/Service Life Horizon (typical lifespan 40 – 60+ years)

- Confirmation of Design Water Demands (2019 MSP used 350 L/cap/day)

- Consideration of un-serviced Lots in Clarksburg

- Calculation of Fire Component of Storage Volume

Goal: Determine how much storage and/pumping is required to meet the fire, equalization, and emergency needs in each pressure zone.
What are the Storage and Pumping Alternatives?

- Elevated tower
- At grade storage reservoir
- Below ground storage reservoir
- Max day and/or fire pumps
Elevated Tower

- Similar to existing Victoria St. Tower
- ~60 year service life
- Low energy costs (less pumping)
- Steel tanks require periodic re-coating
- High visual impact
At Grade Storage

- Similar to existing in Camperdown
- 40 to 60 year service life
- Low energy costs (less pumping)
- Requires minimal maintenance
- Construction may be very challenging if located on the escarpment
- Moderate visual impact
Below Ground Storage

- Similar to existing Thornbury Reservoir
- 40 to 60 year service life
- Requires a booster pumping station
- Pumping station requires maintenance
- Tank requires minimal maintenance
- High energy costs
- Moderate visual impact
### Potential Storage & Pumping Alternatives

<table>
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<th>Preliminary Option</th>
<th>Replace Thornbury Tower</th>
<th>Expand Thornbury Reservoir</th>
<th>Floating Storage in Lora Bay</th>
<th>In-Ground Storage at 10th Line</th>
<th>Upgrade Feedermain and Pumps at 10th Line</th>
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Proposed Studies and Investigations

• Geotechnical investigation
• Ecological study
• Archeological assessment
• Cultural heritage assessment
Future Consultation

• Public opinion and input is important to determine the best alternative
• There will be additional presentations to update the public on project progress (PIC 2 Fall 2020)
• Questions, concerns, and comments can be directed via the online form at https://www.thebluemountains.ca/west-side-water-storage-ea.cfm?is=2
Class EA Process Overview

- Under the Environmental Assessment Act, municipalities **must** consider potential environmental effects before a potential water and/or wastewater project begins.

- The streamlined MEA Class EA process allows municipalities to consider impacts without having to obtain project-specific approval under the Environmental Assessment Act.

Phase 2 – Alternative Solutions

Consult with Council and Public

Identify Preliminary Alternatives

Prepare EA document for comment and review
Questions?