

Master Servicing Plan for the Town of Walkerton

Presentation to Council

Tuesday April 9, 2024



Why are we here?

Presentation to Council

Presentation Objectives



Present the study area and objectives.



Present the environmental assessment process.



Present environmental and technical background relevant to the development of servicing alternatives.



Receive Council approval for the Master Servicing Plan.



November 30th, 2023

Notice of Study Commencement Issued
Master Servicing Plan (Version 1) posted on project website



December 12th, 2023

Public Open House and Presentation to Council

January 8th, 2024

End of Comment Period (Public and Agency)



February 13th, 2024

Notice of Master Plan Issued
Master Servicing Plan (Version 2-Draft) posted on project website

March 15th, 2024

End of Comment Period (Public and Agency)

What was this study about?

Background and Study Objectives



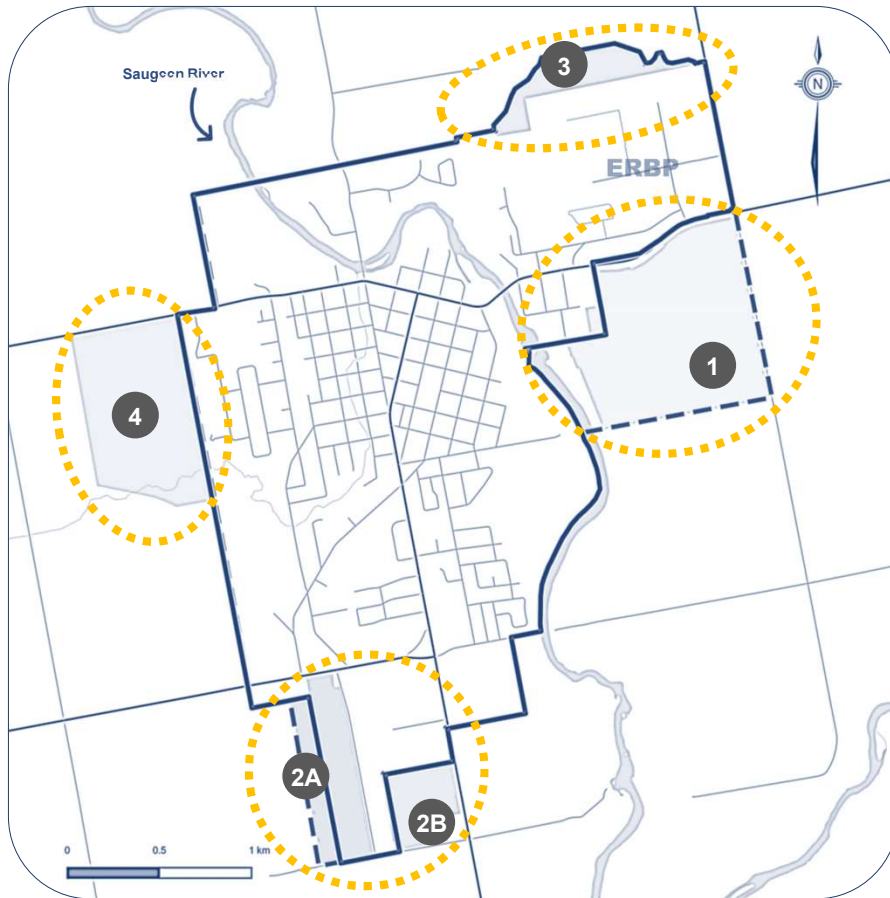
The **Master Servicing Plan** develops water, wastewater, and stormwater servicing strategies required to meet Walkerton's forecast population and employment growth.

Project Objectives

1. Review existing infrastructure condition and capacity.
2. Develop a management plan outlining short- and long-term system maintenance and upgrade needs.
3. Identify infrastructure needs required to support Walkerton's growth forecasts.
4. Review infrastructure improvements that may be necessary to provide adequate servicing to four development areas identified by the Municipality.

Why was this study conducted?

Managing and Servicing Future Growth



Planning for Future Servicing Upgrades and Needs

Growth Pressures

Limited Land Supply

Additional Potential Development Areas

Problem and Opportunity Statement

To undertake a comprehensive Master Servicing Plan for water, wastewater and stormwater to identify the current capacity of the existing systems and to clearly define the infrastructure requirements needed to support the community of Walkerton's population and employment growth forecasts to the year 2046.

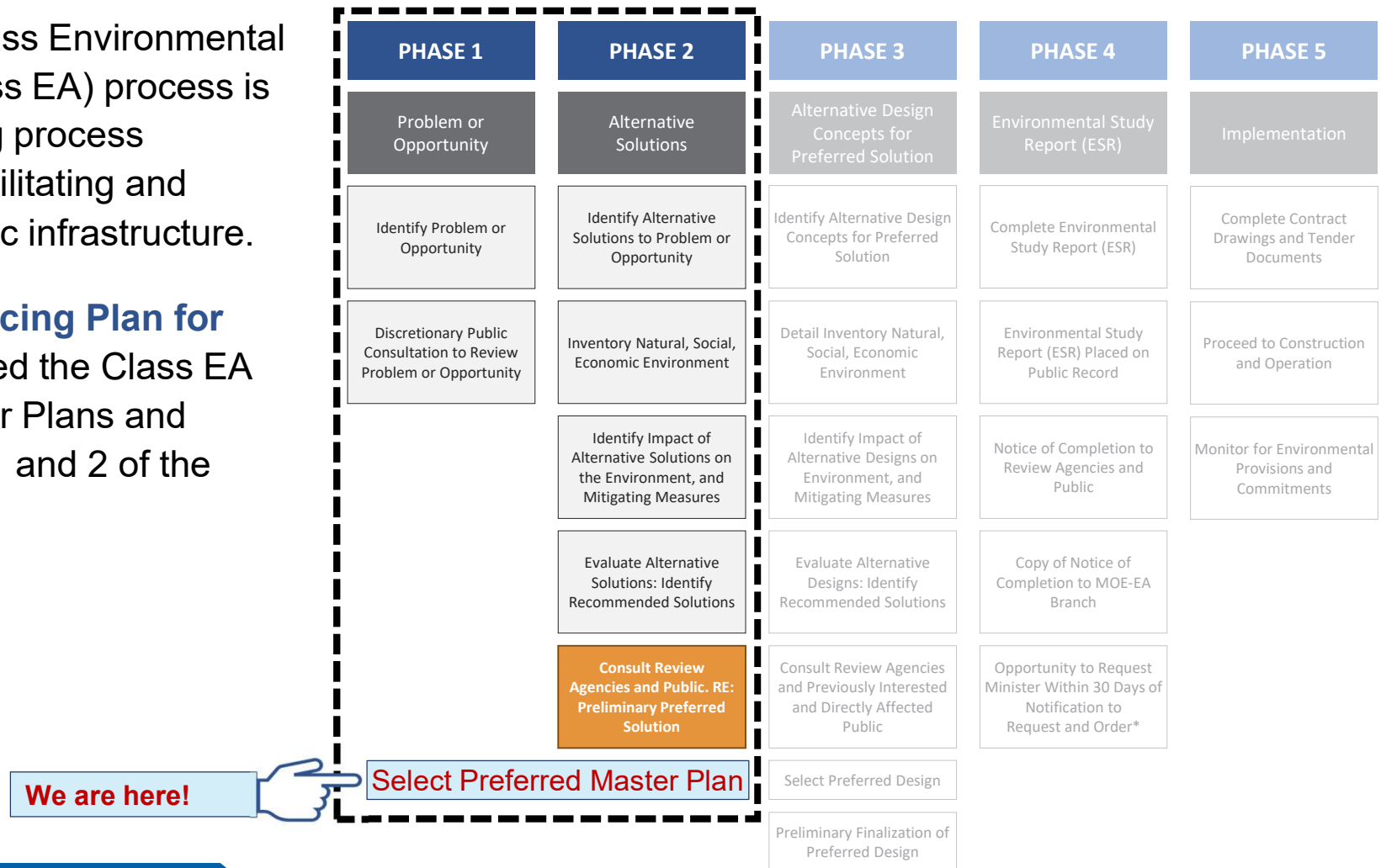
The Master Servicing Plan is intended to be the foundation document and roadmap for implementing cost-effective, safe, reliable, and efficient servicing strategies required to support long-term development and growth.

How was this study conducted?

Municipal Class Environmental Assessment Process

The Municipal Class Environmental Assessment (Class EA) process is a decision-making process followed for rehabilitating and building new public infrastructure.

The **Master Servicing Plan for Walkerton** followed the Class EA process for Master Plans and satisfied Phases 1 and 2 of the process.



What has been considered?

Key Issues and Considerations



Can the option be technically constructed?
Is there already existing infrastructure nearby?

Are there sensitive environmental features to consider or avoid?



What options have higher operations and maintenance costs?

Who pays for growth - related capital costs?

Where are demand or growth pressures today?

Are there sensitive archaeological resources or culturally significant features to consider or avoid?



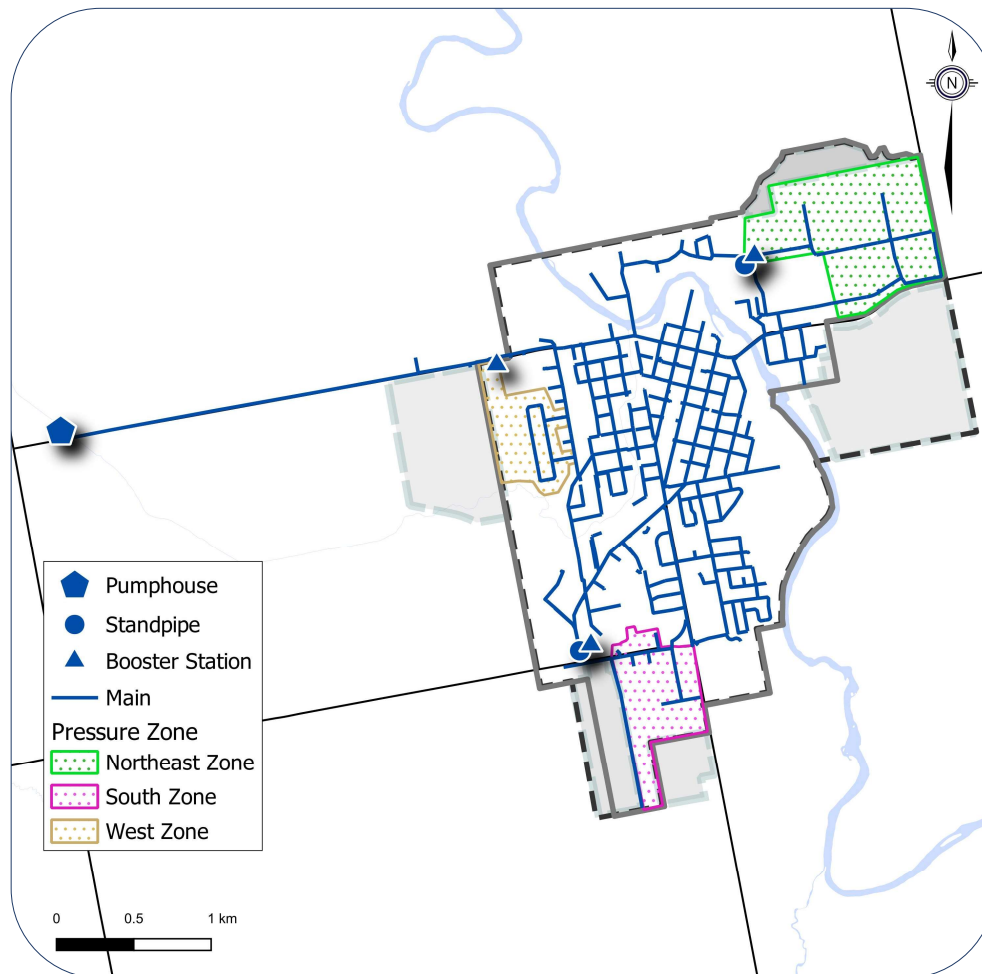
Consultation Feedback

Existing, but aging, infrastructure near Area 2A increases the priority and value of considering development in Area 2A. Including Area 2A in future studies would allow more water storage alternatives to be explored to facilitate overall growth.

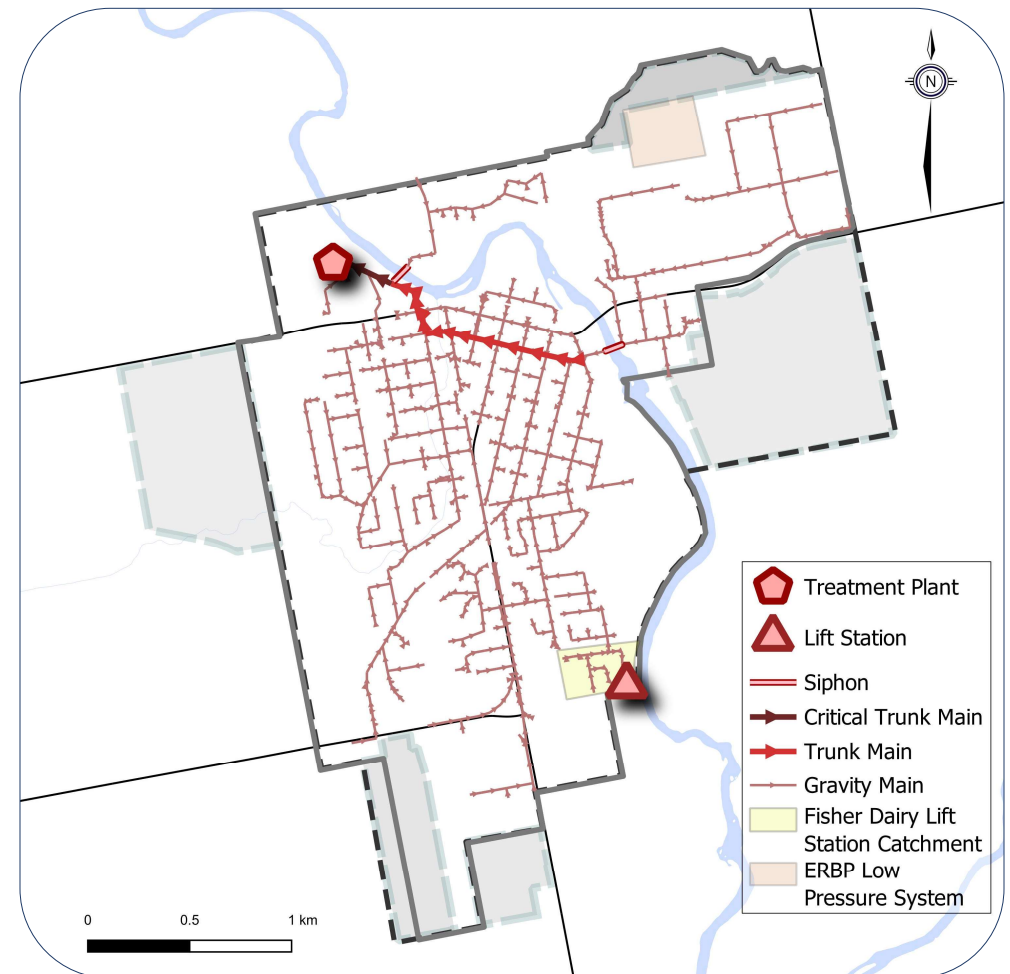
Committed business lands development in the East Ridge Business Park to be included in the capacity projections and timeline.

Existing Infrastructure System Evaluation

Water System



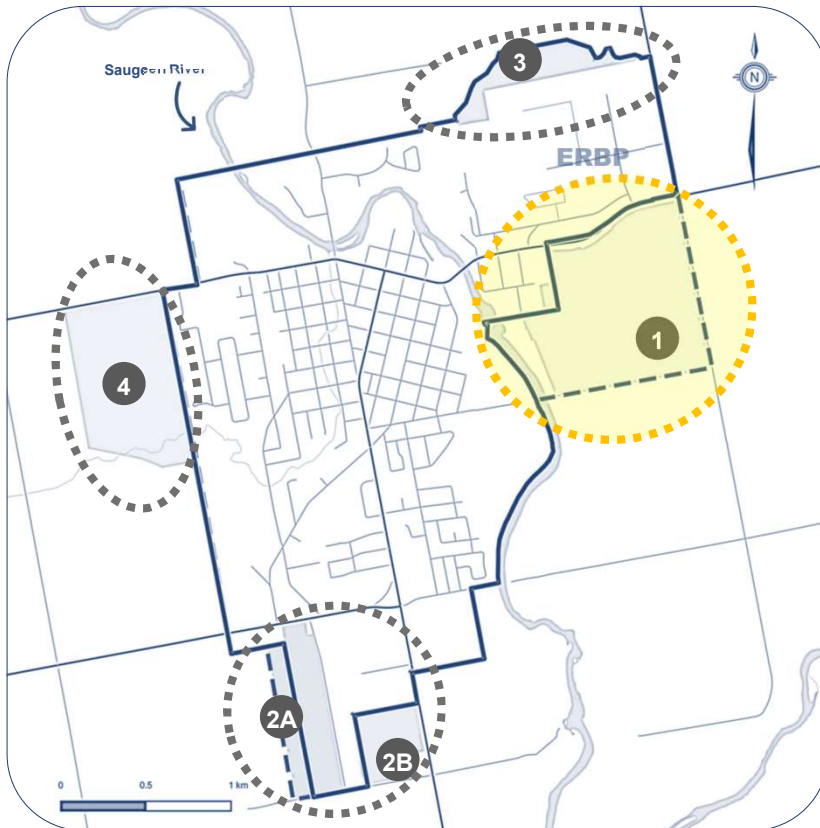
Wastewater System



Baseline Understanding – Opportunities and Considerations

Existing Infrastructure System Evaluation

Area 1



Population: 2,000 Persons (Estimated)

Estimated Development Area: 53.6 hectares

Type of Development: Residential and Employment

Status: Proposed Expansion Area

Development Phasing Recommended

System Evaluation

Water System: There is sufficient fire flow, water storage, water supply, and water treatment capacity to service this area.

Wastewater System: There is sufficient capacity for wastewater conveyance and treatment to service this area.

Stormwater System: Stormwater may be coordinated in the Secondary Plan or addressed by lot-level controls.

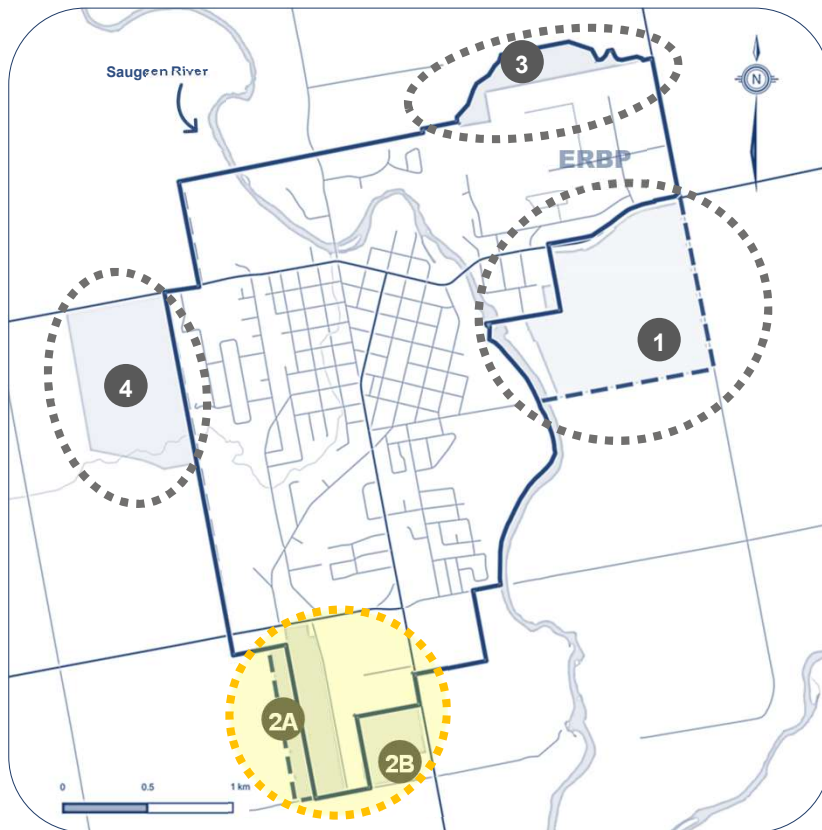
Difficulty to Service: **Easy to Moderate**

Capital Cost: \$2M to \$3M

Baseline Understanding – Opportunities and Considerations

Existing Infrastructure System Evaluation

Area 2A and 2B



Population: 1,600 Persons (Estimated)

Estimated Development Area: 41.8 hectares

Type of Development: Residential

Status: 2A Proposed Expansion; 2B Potential Future Expansion

Development Phasing Recommended

System Evaluation

Water System: There is insufficient fire flow in areas 2A and 2B. However, there is sufficient water storage, water supply, and water treatment capacity to service areas 2A and 2B.

Wastewater System: There is sufficient capacity for wastewater conveyance and treatment. However, wastewater trunk extension may be required to service this area.

Stormwater System: Municipally-owned stormwater management facilities prior to conveyance within the receiving drainage system.

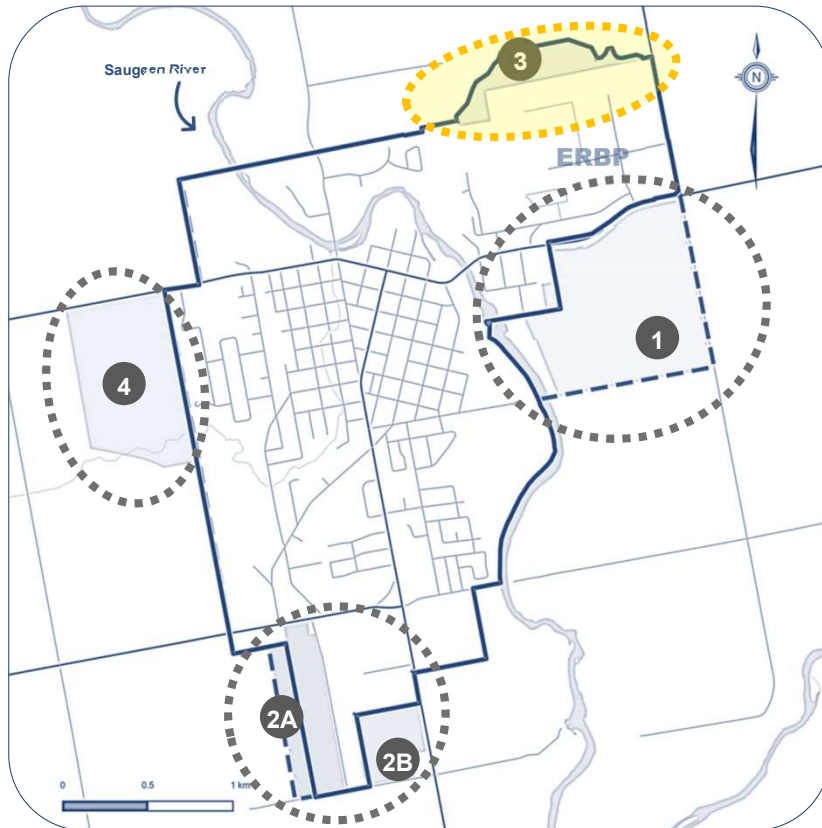
Difficulty to Service: **Moderate**

Capital Cost: \$2M to \$4M

Baseline Understanding – Opportunities and Considerations

Existing Infrastructure System Evaluation

Area 3



Population: 500 Persons (Estimated)

Estimated Development Area: 12.6 hectares

Type of Development: Employment

Status: Approved Expansion Area

Single Development Phase Recommended

System Evaluation

Water System: There is sufficient fire flow, water storage, water supply, and water treatment capacity to service this area.

Wastewater System: There is sufficient capacity for wastewater conveyance and treatment to service this area.

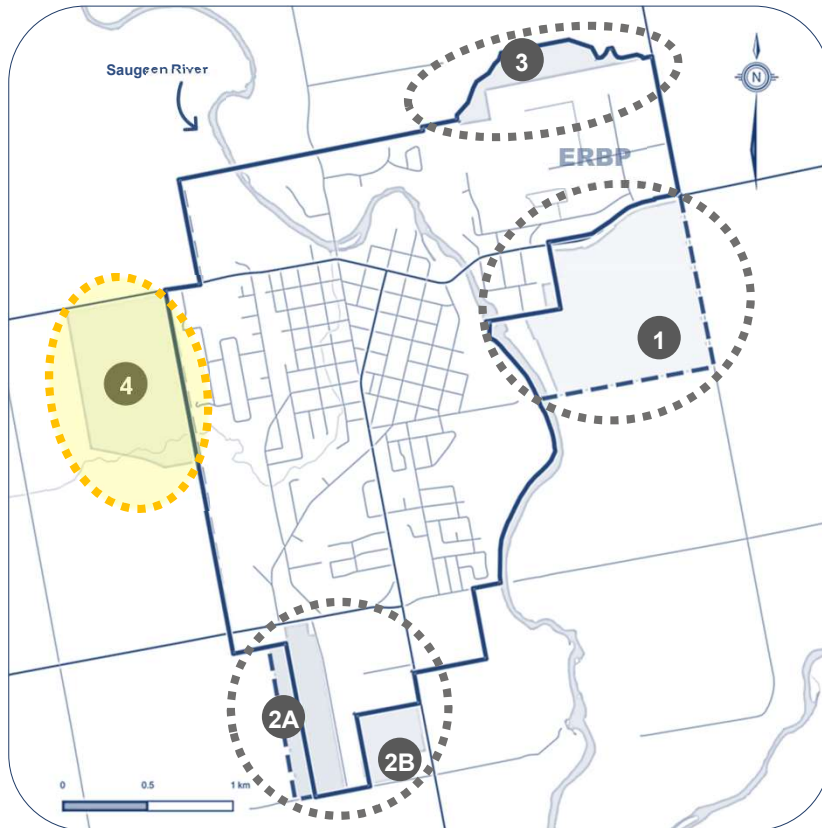
Stormwater System: Either municipally-owned stormwater management facility or on-site stormwater management facilities prior to conveyance to the receiving system.

Difficulty to Service: **Easiest**

Capital Cost: Negligible

Existing Infrastructure System Evaluations

Area 4



Population: 2,000 Persons (Estimated)

Estimated Development Area: 53.5 hectares

Type of Development: Residential

Status: Potential Future Expansion Area

Development Phasing Recommended

System Evaluation

Water System: There is insufficient fire flow. However, there is sufficient water storage, water supply, and water treatment capacity to service this area.

Wastewater System: There is sufficient capacity for wastewater conveyance and treatment. However, wastewater trunk extension may be required to service this area.

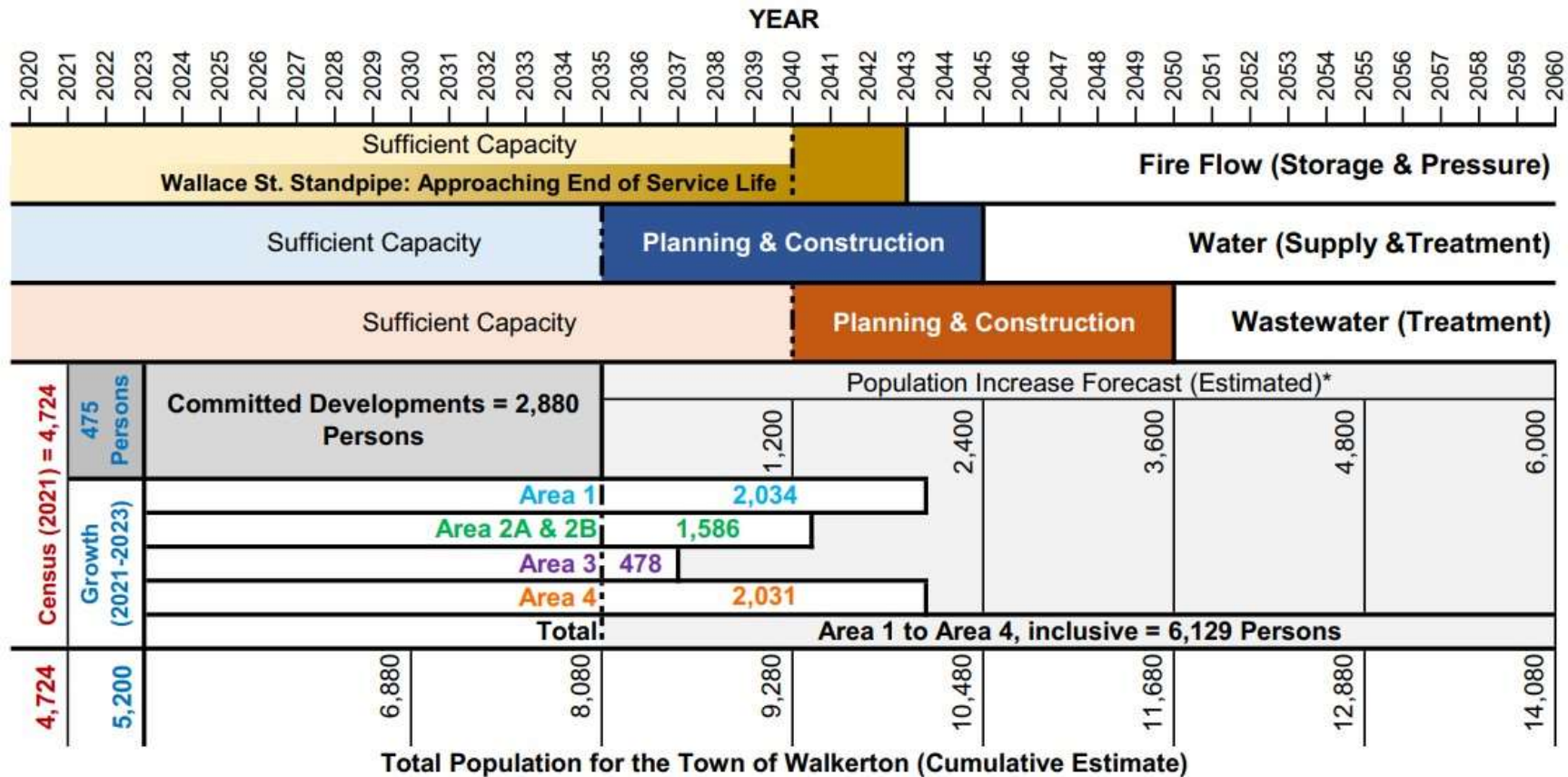
Stormwater System: Municipally-owned stormwater management facilities prior to conveyance within the receiving drainage system.

Difficulty to Service: **Most Complex**

Capital Cost: \$2M to \$4M

What are the servicing needs?

Comparison and Timeline



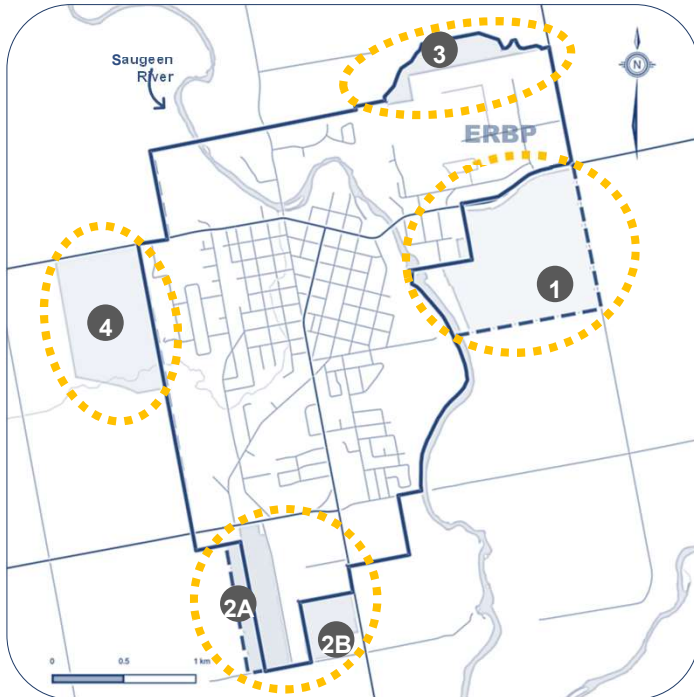
Notes:

- *Population projected based on a rate of approximately 240 persons per year (or 95 Equivalent Residential Units annually)
- Based on a population growth rate of 713 persons during the 3-year period between 2020 and 2023, it is estimated that the population increased by approximately 475 persons between the 2021 census and 2023.

Recommendations

1. Consider the Infiltration and Inflow Study recommendations, including continued efforts to locate contributing locations and CCTV investigations (B.M. Ross, April 2023).
2. Educational Program on Water Usage
3. Storage and Pressure Study: Prior to development in Area 2A & 2B
 - While it is estimated that there is sufficient fire flow and storage to service Walkerton to the year 2043, the Wallace Street standpipe may require replacement prior to this time at which point it is recommended that additional capacity for the Town also be reviewed.
 - A Class EA process focusing on the South Pressure Zone, the Wallace Street Standpipe, the existing booster station, and the potential for a new standpipe in Area 2A may be advanced at any time.
 - The inclusion of Area 2A within the settlement area boundary would provide the opportunity for the Town to consider, in more detail, the construction of a water tower in this Area at such a time that planning is initiated. Further, the Town could start pursuing funding for this project, as opportunities permit.
4. Financial Considerations: Equitable division of costs for expansion of facilities. This will be informed by the Development Charges Background Study that has been initiated.

Next Steps Council Resolution



What are we doing next?

- ❖ Council Endorsement of the Master Servicing Plan (or otherwise).
- ❖ Implement individual projects through specific planning processes.
- ❖ Master Servicing Plan update every 5 years (next one recommended for 2029)