



## 2 SERVICING ANALYSIS OF SABE AREAS

### 2.1 Area 1 – “The Bolton Study Area”

#### Overview

- Area 1 is split into two areas, Area 1A and Area 1B, and includes lands immediately west and north of Bolton urban area.
- Area 1A, located immediately west of Bolton, plus the two rounding out areas at the north limit of Coleraine Drive and some land north of King Street.
- Area 1B, located north of Columbia Drive and northwest of Humber Station and King Street, includes land generally higher than 268 m in elevation.

#### Water

##### Area 1A

- The majority of Area 1A is within Pressure Zone 6 serviceable area. Pressures would be limited along and north of King Street.
- Part of Area 1A would be better serviced by a new Pressure Zone (7) which can be supported via a new booster pumping station at Chickadee Lane.
- This presents the opportunity to realign the existing pressure zone boundary to promote some existing Zone 6 areas to Zone 7 in Bolton’s north hill.
- There is planned Zone 6 water infrastructure to service growth in Bolton West.

##### Area 1B

- Area 1B would be entirely in a new Pressure Zone (7).
- Full servicing for Area 1B would trigger the creation of a new Pressure Zone 7 (north of King St and Columbia Way), requiring a new pumping station and storage facility.
- Storage could be provided by an elevated floating storage facility, or an in-ground storage with a pumped system.

#### Wastewater

##### Area 1A

- This area would drain by gravity to the East Trunk System, discharging to existing trunk sewers on Albion-Vaughan Road or via a new pumping station to a future planned sewer on Humber Station Road.
- There is planned wastewater infrastructure to service growth in Bolton West, though further extension of sewers may be required.

##### Area 1B

- Lands north of Columbia Way would trigger significant new wastewater infrastructure and upgrades.
- Area 1B would require extension of sewers planned to service growth in Bolton West.

#### Summary

Area 1A is serviceable as there is planned infrastructure to service this growth. There are reasonable solutions to service Area 1A via new pumping stations (water) and by gravity to existing trunk sewer and/or new pumping station to future sewers (wastewater).

Area 1B will be difficult to service from a water perspective as the lands would trigger the need for a new pressure zone. Areas north of Columbia Way would also trigger significant wastewater upgrades and / or a new servicing strategy.

## **2.2 Area 2 – “Tullamore – East Extension”**

### **Overview**

- Includes lands bounded by Mayfield Road to the south, GTA West Corridor to the north, the Gore Road to the east, and Torbram Road to the west.

### **Water**

- Lands are located predominantly within Pressure Zone 6, with a minor area southeast of Old School Rd/Torbram Rd located within Pressure Zone 7.
- There is existing and planned Zone 6 water infrastructure to service growth in Tullamore, although additional watermains will be required.

### **Wastewater**

- This area would drain by gravity via the East Trunk System, discharging to existing trunk sewers on Airport Road, Goreway Drive, McVean Drive and/or The Gore Road.
- There is existing and planned wastewater infrastructure to service growth in Tullamore, although some extension of sewers to the north may be required.

### **Summary**

There is planned water infrastructure in place to support growth within Area 2. However, extension of watermains and/or additional local watermains will be required to service the site specific developments within Area 2. Water storage in reservoirs and pumping station capacities would need to be evaluated to determine capacity to support additional growth in Area 6 above the Region endorsed SGU numbers.

No additional major wastewater infrastructure is required to service Area 2. The planned wastewater infrastructure illustrated in the current Master Plan will support the growth within Area 2, although further sewer extensions may be required to service site specific development.

## **2.3 Area 3 – “Mayfield West - East Extension”**

### **Overview**

- Includes lands bounded by Mayfield Road and Mayfield West to the south, GTA West Corridor to the north, Torbram Road to the east, and McLaughlin Road to the west.

### **Water**

- Lands are located within existing Pressure Zone 7 (in the centre)
- There is existing and planned water infrastructure to service growth in and around Mayfield West
  - New Zone 7 infrastructure includes a transmission main and elevated tank (West Caledon ET-Anticipated In Service 2027), north of the GTA West Corridor at King St/Creditview Rd.

- New Zone 6 infrastructure includes a transmission main and Victoria Reservoir.

#### **Wastewater**

- This area would drain by gravity via both the East Trunk and West Trunk Systems, as follows:
  - East of Hwy 410: discharging to existing and future sewer extensions on Dixie road, Tomken Road, and Airport Road, Goreway Drive, McVean Drive, and/or The Gore Road.
  - West of Hwy 410: discharging to future sewers on Kennedy Road and existing sub-trunk sewers on Inder Heights Drive, Colonel Bertram Road and Van Kirk Drive. There may be some capacity constraints in these sewers, which may trigger improvements and/or upgrades.
- There is existing and planned wastewater infrastructure to service growth in Mayfield West, although some extension of sewers to the north may be required.

#### **Summary**

Part of Area 3 can be serviced through existing water infrastructure. However, new Zone 7 major infrastructure (i.e. transmission mains) will be required to expand the service areas to the east and west. In addition, water storage in reservoirs and pumping station capacities would need to be evaluated to determine capacity to support additional growth in Area 3 above the Region endorsed SGU numbers.

There are potential capacity constraints in the downstream wastewater trunk sewer if growth is to occur in Area 3. Growth in this area would trigger major wastewater improvements to be required.

## **2.4 Area 4 – “Alloa / Mayfield West - West Extension”**

#### **Overview**

- Includes lands north and west of Mayfield west, bounded by the GTA West Corridor up to Old School Road to the north, Heritage Road to the west, and Heart Lake Road to the east.

#### **Water**

- Lands are located within Pressure Zone 7.
- There is existing and planned water infrastructure to service growth in and around Mayfield West
  - New Zone 7 infrastructure includes a transmission main and elevated tank, north of the GTA West Corridor at King St/Creditview Rd.
  - New Zone 6 infrastructure includes a transmission main and Victoria Reservoir.

#### **Wastewater**

- This area would drain by gravity predominantly via the West Trunk System (west of Hurontario Street) and to a limited extent via the East Trunk System (east of Hurontario Street).

- There is existing and planned wastewater infrastructure to service growth in Mayfield West, however some extension of existing and future sewers may be required north on Mississauga Road and Creditview Road.

### **Summary**

There is planned water infrastructure in place that can be potentially expanded to service Area 4 without additional major infrastructure. Additional local watermains will be required to service the site specific developments within Area 4. Water storage in reservoirs and pumping station capacities would need to be evaluated to determine capacity to support additional growth in Area 6 above the Region endorsed SGU numbers.

The planned wastewater infrastructure illustrated in the current Master Plan will support the growth within Area 4. An extension of some trunk sewers may be required along Mississauga Road and Creditview Road to service parts of Area 4. Local wastewater sewers may be required to service site specific development.

## **2.5 Area 5 – “Wildfield”**

### **Overview**

- Includes lands north of Mayfield west, bounded by Mayfield Road to the south, Old School Road to the north, Hwy 410 extension to the west, and Humber Station Road to the east.

### **Water**

- Lands are located largely within Pressure Zone 6 with a small area cutting in within Zone 7 (along Old School Road from west of Bramalea Road to east of Torbram Road).
- There is existing and planned water infrastructure to service growth in and around Mayfield West
  - New Zone 6 infrastructure includes a transmission main and reservoir.
  - Extension of future distribution mains may be required for looping in this area.

### **Wastewater**

- This area would drain by gravity via the East Trunk System, discharging to existing trunk sewers on Airport Road, Goreway Drive, McVean Drive, and/or The Gore Road, and future sewers on Dixie Road and Tomken Road.
- There is existing and planned wastewater infrastructure to service growth around Tullamore, although some extension of future sewers to the north may be required on Centreville Creek Road and/or The Gore Road.

### **Summary**

There is existing and planned water infrastructure in place to support growth within Area 5. However, additional local watermains will be required to service the site specific developments within Area 5. Depending on the timing of the growth, major projects (i.e. transmission mains and reservoir) may need to be promoted to an earlier in service date. Water storage in reservoirs and pumping station capacities would need to be evaluated to determine capacity to support additional growth in Area 6 above the Region endorsed SGU numbers.

The existing and planned wastewater infrastructure illustrated in the current Master Plan will support the growth within Area 5. Local wastewater sewers may be required to service site specific development

## 2.6 Area 6 – “Mayfield West Extension to Victoria/Campbells Cross”

### Overview

- Includes lands north of Mayfield west, bounded by King Street to the north, Heart Lake Road to the east, and Chinguacousy Road to the west.
- Area 6 is split into two areas, Area 6A and Area 6B.
- Area 6B delineates the area located north of the GTA West Corridor.
- Area 6A delineates the area located south of the GTA West Corridor.

### Water

#### Area 6A and 6B

- Area 6 lands (6A and 6B) are located within entirely within Pressure Zone 7.
- There is existing and planned water infrastructure to service growth in and around Mayfield West
  - New Zone 7 infrastructure includes a transmission main and elevated tank, north of the GTA West Corridor at King St/Creditview Rd.
  - New Zone 6 infrastructure includes a transmission main and Victoria Reservoir.
- Requires extension of future watermains for looping in this area.
- Water Storage (i.e. the future West Caledon Elevated Tank and Mayfield West Elevated Tank) would need to be evaluated / reviewed if the entire focus area is located within Area 6.

### Wastewater

#### Area 6A

- This area would drain by gravity via the West Trunk System (west of Hurontario Street) and via the East Trunk System (east of Hurontario Street).
- There is existing and planned wastewater infrastructure to service growth in Mayfield West.

#### Area 6B

- This area would drain by gravity via the West Trunk System (west of Hurontario Street) and via the East Trunk System (east of Hurontario Street).
- Requires significant costs to extend servicing north of the GTA West Corridor.

### Summary

There is planned water infrastructure in place that can be potentially expanded to service Area 6A and 6B without additional major infrastructure. Additional local watermains will be required to service the site specific developments within Area 6. Water storage in reservoirs and pumping station capacities would need to be evaluated to determine capacity to support additional growth in Area 6 above the Region endorsed SGU numbers.

There are existing and planned wastewater infrastructure to service Area 6A via gravity to existing wastewater trunk sewer system. Area 6B, north of the GTA West corridor, would require extensions that would carry significant costs.

## 2.7 Area 7 – “Tullamore Extension to Sandhill”

### Overview

- Includes lands bounded by Mayfield Road to the south, King Street to the north, The Gore Road to the east, and Torbram Road to the west.

### Water

- There is existing and planned water infrastructure to service growth in Tullamore south of the GTA West Corridor only, including a new Zone 6 subtransmission main to service Bolton West.
- Requires significant costs to extend servicing north of the GTA West Corridor.

### Wastewater

- This area would drain by gravity via the East Trunk System, discharging to existing trunk sewer on Airport Road and the planned sewer on Goreway Drive/Innis Lake Road.
- There is existing and planned wastewater infrastructure to service growth in Tullamore, south of the GTA West Corridor only.
- Requires significant costs to extend servicing north of the GTA West Corridor.

### Summary

As parts of Area 7, including north of the GTA West Corridor, are above the existing Pressure Zone 6 serviceable area, a new Pressure Zone (7) will be required, including storage (elevated tank or reservoir) and major transmission infrastructure.

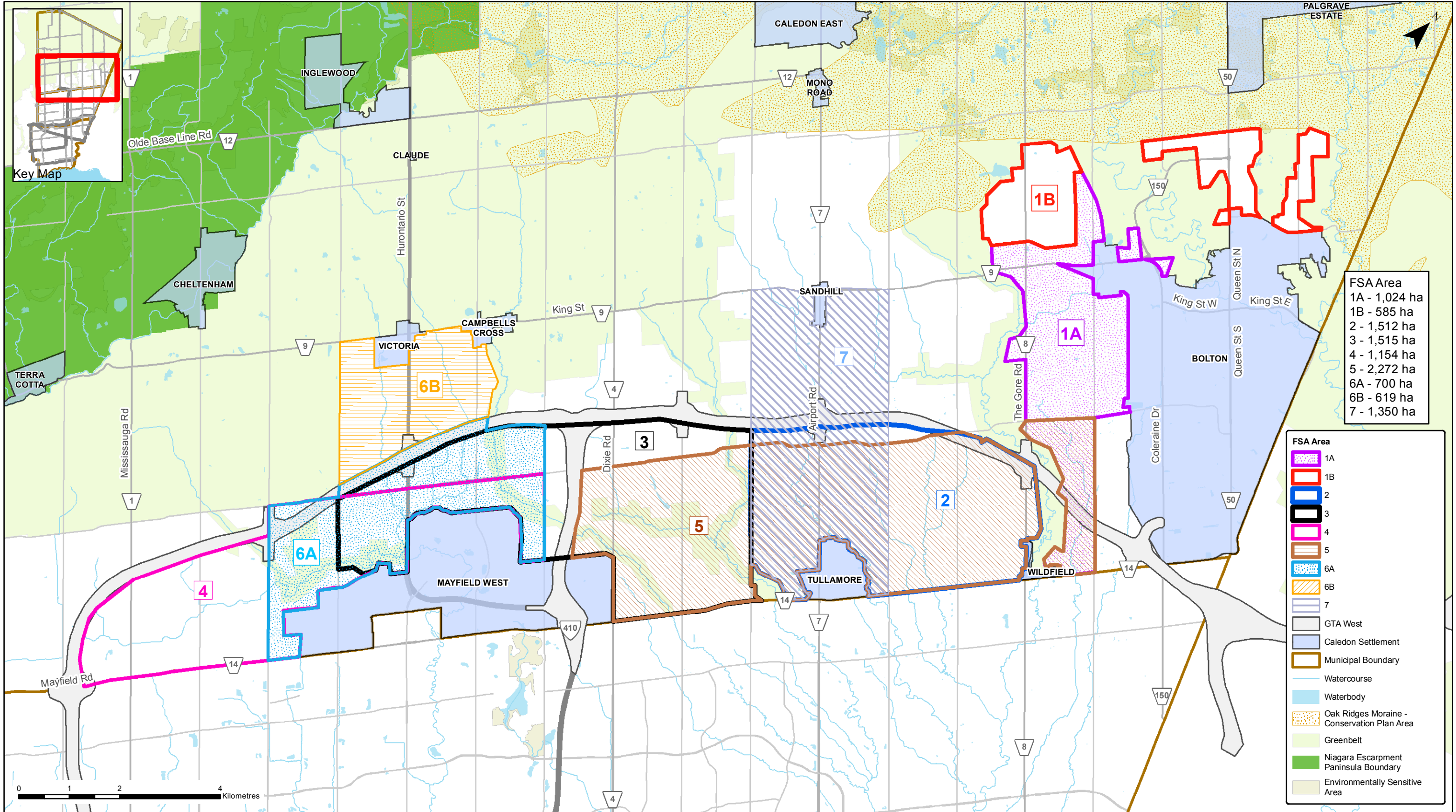
There are existing and planned wastewater infrastructure to service the areas south of the GTA West corridor of Area 6 via gravity to the existing wastewater trunk sewer system. However, north of the GTA West corridor would require extensions that would carry significant costs.

## 3 GENERAL RECOMMENDATIONS

In summary, additional water and wastewater infrastructure will be required beyond what is currently planned for all SABE areas. Based on the above high level analysis and without having modeled additional demands/flows, we note the following from a water and wastewater perspective:

- **Area 1A – better positioned for future servicing**
- Area 1B – not preferred based on complexity and cost of servicing
- **Area 2 – better positioned for future servicing**
- Area 3 – not preferred based on servicing requirements
- **Area 4 – better positioned for future servicing**
- **Area 5 – better positioned for future servicing**
- **Area 6A – better positioned for future servicing**
- Area 6B – not preferred based on cost of servicing
- Area 7 – not preferred based on cost of servicing

It should be noted that these recommendations are subject to change based on changes to the proposed settlement boundary. Once the Focus Study Areas are refined, water and wastewater modeling will be undertaken along with details on the preferred improvements and associated high level costs.



FSA Area	Area (ha)
1A	1,024
1B	585
2	1,512
3	1,515
4	1,154
5	2,272
6A	700
6B	619
7	1,350

**FSA Area**

- 1A
- 1B
- 2
- 3
- 4
- 5
- 6A
- 6B
- 7
- GTA West
- Caledon Settlement
- Municipal Boundary
- Watercourse
- Waterbody
- Oak Ridges Moraine - Conservation Plan Area
- Greenbelt
- Niagara Escarpment Paninsula Boundary
- Environmentally Sensitive Area

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