Halton Region

Integrated Master Plan

Water, Wastewater, and Transportation

Executive Summary

1

Halton REGION

Integrated Master Plan Report Outline

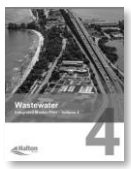
The Integrated Master Plan (IMP) for Water, Wastewater, and Transportation is a comprehensive document that describes the planning, evaluation, and decision-making process to develop long-term infrastructure strategies for water, wastewater, and transportation in Halton Region.

The IMP is organized into six volumes:

Volume 1 – Executive Summary
Provides a brief overview of the IMP including the problem and opportunity statement, study purpose, key planning policy and technical considerations, and descriptions of the recommended infrastructure strategies for water, wastewater, and transportation.

Volume 2 – Planning Overview and Foundations
Outlines the integrated planning framework and methodology used for the IMP. This volume summarizes the study vision, objectives, Municipal Class EA process, key planning policies, growth forecasts, and existing conditions. It provides the foundation for the subsequent volumes**.**

Volume 3 – Water
Provides documentation for the Region's water system. This volume outlines study objectives, baseline data/performance, methodologies, technical analyses, and evaluation that informed the recommended water servicing strategy and its components.



Volume 4 – Wastewater
Provides documentation for the Region's wastewater system. This volume outlines study objectives, baseline data/performance, methodologies, technical analyses, and evaluation that informed the recommended wastewater servicing strategy and its components.

Volume 5 – Transportation
Provides documentation for the Region's transportation infrastructure system. This volume outlines study objectives, baseline data/performance, methodologies, and technical analyses informed the recommended transportation strategy and its components that support all road users including transit, active transportation and auto.

Volume 6 – Consultation and Engagement
Provides documentation of the consultation and engagement process, including notices, presentation materials from Public Information Centres (PICs), and records from workshops with agencies, local municipalities, and other interested parties.

This report is the complete **Volume 1 – Executive Summary** which is one of six volumes that together form the complete Integrated Master Plan Report and should be read in conjunction with the other volumes.

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Acronyms and Abbreviations

AT	Active Transportation
BRT	Bus Rapid Transit
DC	Development Charge
GPL	General Purpose Lanes
HOV	High Occupancy Vehicles
IGMS	Integrated Growth Management Strategy
IMP	Integrated Master Plan
JBPE	Joint Best Planning Estimates
MCEA	Municipal Class Environmental Assessment
MTSA	Major Transit Station Areas
PS	Pumping Station
QJ	Queue Jump
Region	Regional Municipality of Halton
ROPA 49	Regional Official Plan Amendment 49
ROW	Right-of-Way
TMP	Transportation Master Pan
TSP	Transit Signal Priority
WTP	Water Treatment Plant
WWPS	Wastewater Pumping Stations
WWTP	Wastewater Treatment Plant

1.0 Introduction

1.0 Introduction

Halton Region has undertaken an Integrated Master Plan (IMP) to develop the next region-wide Water, Wastewater, and Multi-Modal Transportation Master Plans. The outcome of this work is a long-term integrated servicing strategy for Regional infrastructure to accommodate future growth to 2051. This IMP provides the strategies and tools required to meet future water, wastewater, and transportation infrastructure needs beyond 2031.

The IMP ensures that water and wastewater infrastructure and services are effectively planned and implemented to maintain appropriate levels of service for residents and businesses as the Region continues to grow. In parallel, the development of a robust multimodal transportation network supports Halton Region's long-term vision by accommodating increasing travel demand and enhancing connectivity. Together, these infrastructure strategies have been developed to align with local growth priorities and remain flexible to adapt to evolving needs through Halton's Enhanced Growth Monitoring process.

1.1 Master Plan Objectives

The key objectives of the IMP are to:

- guide the management and development of the Region's water, wastewater and transportation (including the active transportation network) systems;
- maximize capacity, system flexibility and life expectancy of Regional water, wastewater and transportation infrastructure;
- identify the need, timing and cost of servicing and infrastructure; and,
- provide the strategies and tools required to meet the water, wastewater and transportation infrastructure needs of the community now and in the future.

1.2 Components of the Integrated Master Plan

The IMP is comprised of three (3) key components:

- Water: focuses on the delivery of safe, clean drinking water to homes and businesses within the urban areas.
- Wastewater: addresses the collection and treatment of wastewater from the urban areas before returning the treated water to the environment.
- Transportation: focuses on a Regional transportation network for transit users, active transportation (e.g., pedestrians and cyclists), cars and trucks (including farm vehicles) that accommodates all users and all abilities.

Recognizing that the needs of the communities are changing, the IMP brings together these systems in a coordinated way that allows the Region to evolve and support a dynamic and resilient future.

1.3 Vision Statement and Considerations

The vision statement is a compact, high-level statement that guided the master planning process and informed the considerations developed for the plan. The overarching vision statement of the IMP is:

"Building a safe, equitable and sustainable future for the Region's Water, Wastewater and Transportation systems through responsible and proactive planning".

In support of this overarching vision, the IMP also includes two focused vision statements specific to the study components:

The Water and Wastewater vision focuses on:

"Planning for a future Regional water and wastewater system that is safe, efficient, resilient and prioritizes the environment".

Meanwhile, the Transportation vision focuses on:

"Planning for a future multi-modal Regional transportation system that is safe, continuous, and connected across Halton Region to support all modes of travel, all users and all abilities".

In addition to the vision statements, key considerations were developed to help guide the IMP decision making process and the development of the infrastructure strategies. The considerations include:

- **Equitable Infrastructure Services** – Provide for water and wastewater services in urban areas and access to multi-modal Regional transportation infrastructure (including active transportation, transit and auto).
- **Safe and Healthy Communities** – Support healthy and active lifestyles and community well-being. For example, the provision of active transportation infrastructure and the provision of safe drinking water.
- **Sustainability** – Balance social, environmental and economic goals to support growth in a sustainable manner.
- **Climate Change** – All phases of Regional water, wastewater and multi-modal transportation infrastructure planning must recognize and incorporate climate change.
- **Communication and Consultation** – Ensure the IMP process and strategies are clearly and openly communicated and consulted with stakeholders.
- **Integration of Planning for Regional Infrastructure** – Ensure a coordinated approach to implementation of Regional water, wastewater, and multi-modal transportation infrastructure.
- **Technical Innovation** – Include innovation in the development of Regional water, wastewater and multi-modal transportation infrastructure strategies.

Together the vision statements and considerations provide a strategic foundation for shaping priorities, evaluating alternative solutions, and making informed decisions throughout the course of the IMP.

1.4 Problem Opportunity Statement

The problem and opportunity statement serves as a foundation for the Master Plan process in accordance with the Municipal Class Environmental Assessment (MCEA) process and helps establish the overall scope of the project. The IMP problem or opportunity statement is defined as follows:

"The Integrated Master Plan has been initiated to update the Region's long-term servicing strategy and capital implementation plan for Water, Wastewater and Transportation to support future growth to 2051."

1.5 Study Area

Halton Region is located in southern Ontario and is bordered by the City of Hamilton to the west, the Region of Peel to the east, Wellington County to the north and Lake Ontario to the south. The Region is comprised of four Local Municipalities including the City of Burlington, the Town of Halton Hills (including the communities of Acton and Georgetown), the Town of Milton and the Town of Oakville.

Halton Region covers an area of 966 square kilometres with a population of over 650,000. The Region features a diverse range of urban centres, suburban communities, rural areas, and protected natural landscapes, including parts of the Niagara Escarpment and the Greenbelt, which contribute to its unique environmental and cultural character.

The overall study area can be seen in **Figure 1**.

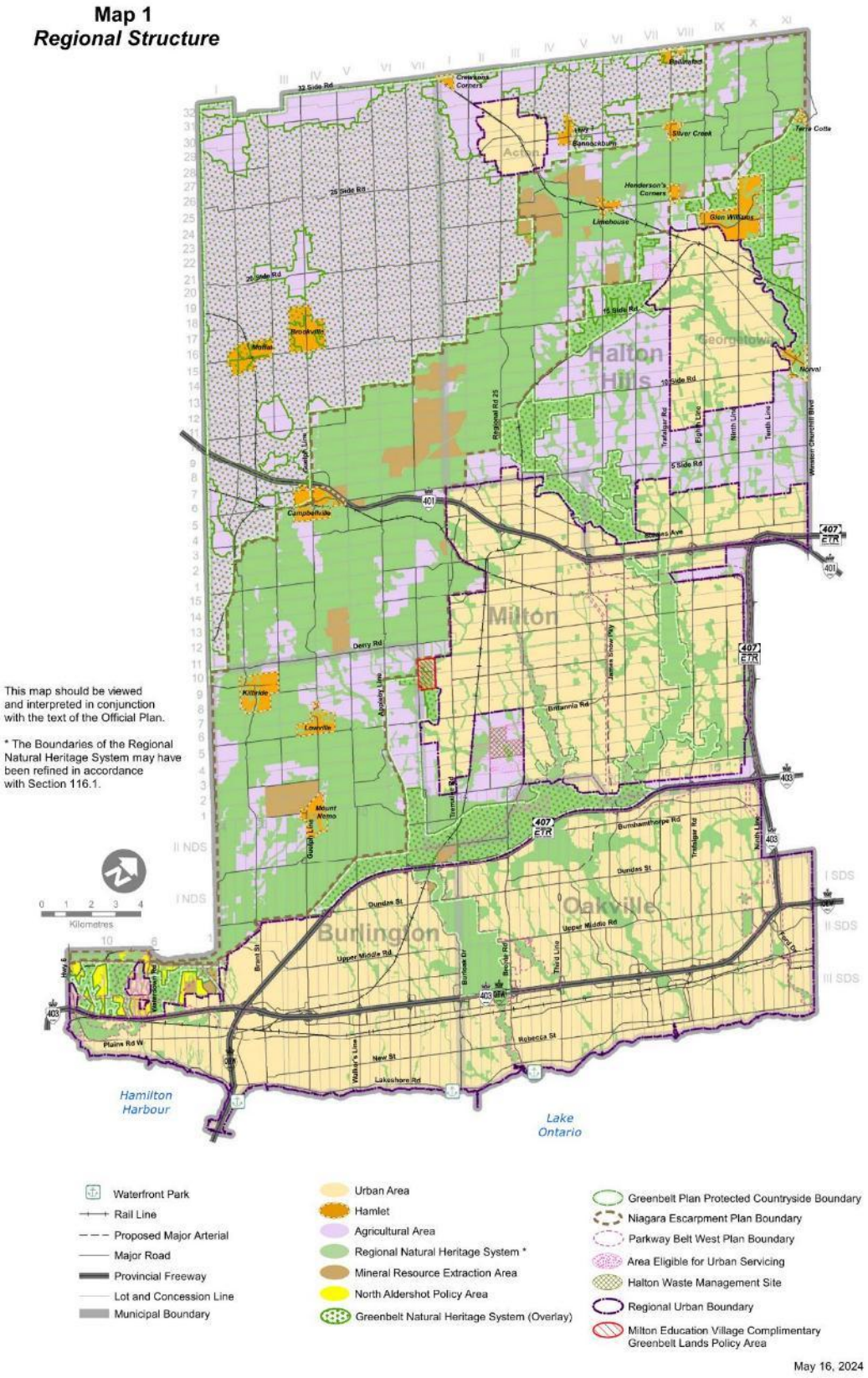

Figure 1 – Halton Region Study Area

2.0 Planning Context

2.0 Planning Context

2.1 Master Planning Process

The MCEA process defines master plans as:

> "Long range plans which integrate infrastructure requirements for existing and future land use with environmental assessment planning principles. These plans examine an infrastructure system(s) or group of related projects in order to outline a framework for planning for subsequent projects and/or developments."

This Master Plan was undertaken in accordance with the MCEA process developed by the Municipal Engineers Association (MEA) (October 2000, as amended in 2007, 2011, 2015, 2023 and 2024), which is an approved process under the Ontario Environmental Assessment Act. The IMP demonstrates the decision-making process of why infrastructure is needed, how the strategies will be implemented including future studies, and the costs associated with the recommendations.

The IMP follows Approach 1 of the MCEA process for Master Plans, which involves completing Preliminary Phases 1 and 2 and documenting the outcomes in a Master Plan. While this approach allows for a high-level assessment of infrastructure needs, more detailed investigations at a project-specific level are required to fulfill the MCEA requirements for the identified Schedule B and C projects including detailed consideration of the natural, social, and cultural environments. As such, the Master Plan will serve as the foundation for, and be used in support of, future studies for Schedule B and C projects.

2.2 Consultation and Engagement

Communication and consultation have been key elements of this study process. The key objectives of public consultation include:

- providing interested parties with clear, concise information at important stages of the study;
- gathering input from the public, First Nations and Indigenous Communities, agencies, development industry and other interested parties at key milestones; and,
- fulfilling the consultation requirements outlined in the MCEA process.

To meet the consultation requirements and to strengthen the overall MCEA process, consultation included:

- Public Information Centre #1 carried out virtually from November 27, 2023, to January 2, 2024, to seek feedback on the vision and key considerations as well as the opportunities and considerations for development of the infrastructure strategies. The Project website was viewed more than 2,000 times. A Frequently Asked Question response was posted on the project page to respond to inquiries received through Public Information Centre #1, such as protection of the natural environment, supporting active transportation and ensuring strategies are responsive to evolving legislation and technology.

- Public Information Centre #2: carried out virtually from April 10 and May 12, 2025, to present the preliminary preferred strategies. The project website was viewed approximately 2,600 times. A Frequently Asked Question was posted to the Region's website to respond to inquiries received through PIC #2, such as prioritizing infrastructure for transit, cycling and walking, as well as questions related to growth priorities and timing and phasing of infrastructure.
- In January 2025, a workshop was held with Regional Council to provide an overview of the IMP, the study status, the process for development of the infrastructure strategies and the preliminary preferred strategies for growth to 2051 for water, wastewater and transportation infrastructure.
- A second workshop was held for Regional Council in June 2025 to provide a more detailed discussion of the development of the Transportation Master Plan, including the vision, criteria, modelling and infrastructure plan and a summary of input collected during the second Public Information Centre.
- Local Municipalities were engaged as the study progressed to seek input at key milestones to ensure that the IMP reflects their visions and priorities, recognizing that the IMP must be adaptable to potential changes in growth forecasts.
- Two Technical Agency Committee meetings with Local Municipalities and agencies were held in advance of each Public Information Centre to obtain feedback on the material to be presented.
- First Nations and Indigenous Communities were informed through this study by letters and Notices at key study milestones.
- The development community was updated at key milestones to keep them informed and to receive feedback. Feedback was obtained through the Public Information Centres and through presentations at the Halton Developers' Liaison Committee and other related meetings.

2.3 Population and Employment Planning Forecasts

Following the completion of Halton's Integrated Growth Management Strategy (IGMS) and the Regional Official Plan Amendment 49 (ROPA 49), the Region developed the comprehensive Joint Best Planning Estimates (JBPE) update for population and employment in the fall of 2023 with the Local Municipalities. The JBPEs are essential input for planning and delivering Regional infrastructure, ensuring services like water, wastewater and transportation can accommodate future growth.

The 2023 JBPEs version 3.032 to the year 2051, align with the new housing targets set out in Bill 23. The updated forecasts consider new direction from the Province of Ontario as well as recently approved growth areas. As a result of the new housing targets, the JBPEs anticipate higher population growth over the next decade across all of the Halton Region's Area Municipalities than the initial IGMS and ROPA 49.

As the Region's population and employment base is forecasted to increase between 2031 and 2051, the IMP builds on the long-term servicing strategies previously outlined in the 2011 water, wastewater and transportation master plans to reflect the population and employment growth projections to 2051.

Table 1 highlights the residential population forecasts to the year 2051 as per the JBPEs, and **Table 2** highlights the employment population forecasts to the year 2051 as per the JBPEs.

Table 1 – Residential Population Forecasts (as per JBPEs version 3.032)

Municipality	2051*
Burlington	324,000
Halton Hills	167,000
Milton	455,000
Oakville	443,000
Total	**1,389,000**

**The 2051 forecasts are based on the Minister's decision on ROPA 49 through Bill 162, Get It Done Act, 2024, which received Royal Assent on May 16, 2024, as well as Bill 23, More Homes Built Faster Act, which received Royal Assent on November 28, 2022.*

Table 2 – Employment Population Forecasts (as per JBPEs version 3.032)

Municipality	2051*
Burlington	150,000
Halton Hills	87,000
Milton	175,000
Oakville	212,000
Total	**624,000**

**The 2051 forecasts are based on the Minister's decision on ROPA 49 through Bill 162, Get It Done Act, 2024, which received Royal Assent on May 16, 2024, as well as Bill 23, More Homes Built Faster Act, which received Royal Assent on November 28, 2022.*

3.0 Master Plan Strategy Development

3.0 Master Plan Strategy Development

Identifying and evaluating strategy alternatives is a core element of the master planning process. The development of strategies allows for a comprehensive review of potential solutions, supporting informed decision-making and ensuring the recommended strategies are both well-founded and defensible.

The IMP builds on the recommendations of previous Regional Master Plans and utilized the Joint Best Planning Estimates as a foundation to develop strategies for infrastructure requirements to accommodate future growth from 2031 to 2051. Inputs into the IMP included background studies and plans by the Region, Local Municipalities, as well as adjacent municipalities and other agencies such as the Ministry of Transportation and Metrolinx. Along with new/updated analysis tools, including new water, wastewater and transportation models, these inputs formed a comprehensive and integrated base for understanding and planning infrastructure in Halton Region. This was followed by identifying and evaluating strategy alternatives to allow for a comprehensive and transparent review of potential solutions, supporting informed decision-making and ensuring the recommended strategies are well-founded. As with previous water, wastewater, and transportation master plans, each system was assessed independently, considering the full range of opportunities and considerations.

The overall process is illustrated in **Figure 2** and includes the inputs describes above. For each component (water, wastewater and transportation), the process considered the identification of opportunities and considerations, development of alternative solutions and the identification of the preferred infrastructure solution and strategy.

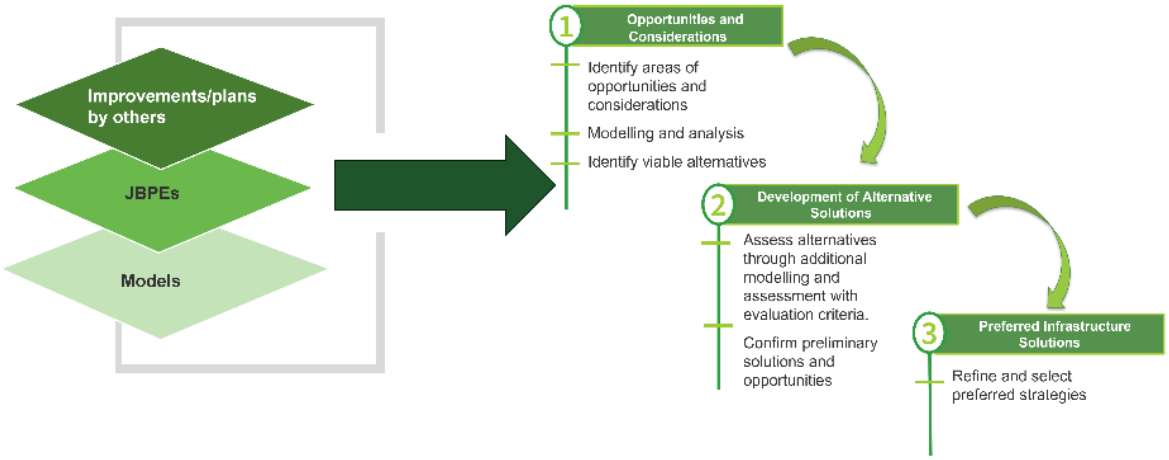

Figure 2 – Process for Development of Preferred Strategy

The preferred water, wastewater, and transportation strategies identified through this process will form the foundation of the Region's long-term capital and implementation programs to 2051. These programs provide a coordinated framework to guide infrastructure investments, ensure alignment with growth projections, and support sustainable, resilient, and adaptable systems through to 2051 and beyond.

Recognizing the importance of monitoring and responding to growth across the Region, the strategies identified through the IMP will be adaptable to support local growth priorities to 2051. In parallel, the annual Enhanced Growth Monitoring process will provide a consistent mechanism to track development activity, reassess servicing capacity, to ensure continued alignment of Regional infrastructure planning with local growth strategies.

4.0 Preferred Water Servicing Strategy

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4.1 Preferred Servicing Strategy

The preferred water servicing strategy combines system-wide recommendations, area-specific solutions, and facility upgrades to collectively address the Region's water needs through to 2051. This strategy was developed to ensure a reliable and efficient water supply system that supports long-term growth across the Region. Key considerations that informed the preferred strategy include:

System-Wide Supply Strategy

To accommodate projected growth to 2051, the Preferred Strategy includes phased expansions, upgrades and transition of select groundwater systems:

- Expansion of the Burloak Water Treatment Plant (WTP) to 400 ML/d in phased stages to meet long-term lake-based supply demands.
- Upgrades to the Oakville and Burlington WTPs to maximize existing capacity.
- Transition of select groundwater systems (e.g., areas of Milton and Georgetown) to lake-based servicing to maintain the safety and reliability of Halton's water resources.

System-Wide Transmission Strategy

To further support the delivery of water supply, the Preferred Strategy includes system-wide transmission upgrades/additions:

- A new south-north water supply spine from Burloak WTP to a proposed Central Facility (with pumping, storage, and transmission mains) will provide additional capacity to the northern lake-based growth areas in Milton, north Oakville, and Georgetown, while strengthening overall system resiliency.
- Improved interconnectivity between pressure zones to enhance system flexibility and resiliency.

Focus Area Servicing Solutions

In addition to system-wide supply and transmission strategies, the Preferred Strategy includes targeted solutions in areas with identified capacity constraints or strategic growth priorities:

- Milton Groundwater System: Transition areas of M5G to lake-based supply; decommissioning of aging wells.
- Georgetown Groundwater System: Continued use of wells with targeted upgrades; integration with lake-based supply in certain areas.
- Acton Groundwater System: Continued groundwater supply with ongoing capacity monitoring; no major changes recommended at this time.
- Zone O4 and North Pumping Strategy: Implementation of elevated storage solution in O4 and new Ashgrove Pumping Station (PS) to M5L. This alternative offers operational flexibility, phased implementation, and improved system resiliency.

Other Key Initiatives:

- Improvements to pumping stations and storage to address pressure zone deficits.
- Infrastructure coordination: Integration with the Region's Enhanced Growth Monitoring framework to ensure the strategy remains adaptive to local municipal growth priorities.

4.2 Capital Program for the Preferred Servicing Strategy

A detailed capital program has been developed to support the implementation of the Preferred Water Servicing Strategy and to outline the infrastructure investments required to service existing and future growth to 2051.

The capital program map for the Preferred Water Servicing Strategy is shown in **Figure 3.** It illustrates the general locations and extents of the projects that make up the preferred strategy, which will be further refined through further study and/or detailed design.

The IMP was developed following Approach 1 of the MCEA process and acknowledges that it does not fulfill the necessary requirements for Schedule B and C projects. These projects will require further detailed assessments through separate studies to meet the applicable MCEA requirements.

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Integrated Master Plan

Water, Wastewater and Transportation

Last updated: March 18, 2026

Proposed Capital Projects

- New / Upgrade
- Decommission
- Pressure Reducing Valve (PRV)

Proposed Projects (In-Service Years)

- Allocation Program
- 2028-2031
- 2032-2036
- 2037-2041
- 2042-2046
- 2047-2051

Existing Infrastructure

- Water Treatment Plant (WTP)
- Booster Pumping Station (BPS)
- Elevated Tank (ET) / Standpipe (SP)
- Reservoir (RES)
- Transmission Mains
- Distribution Mains
- Municipal Boundary

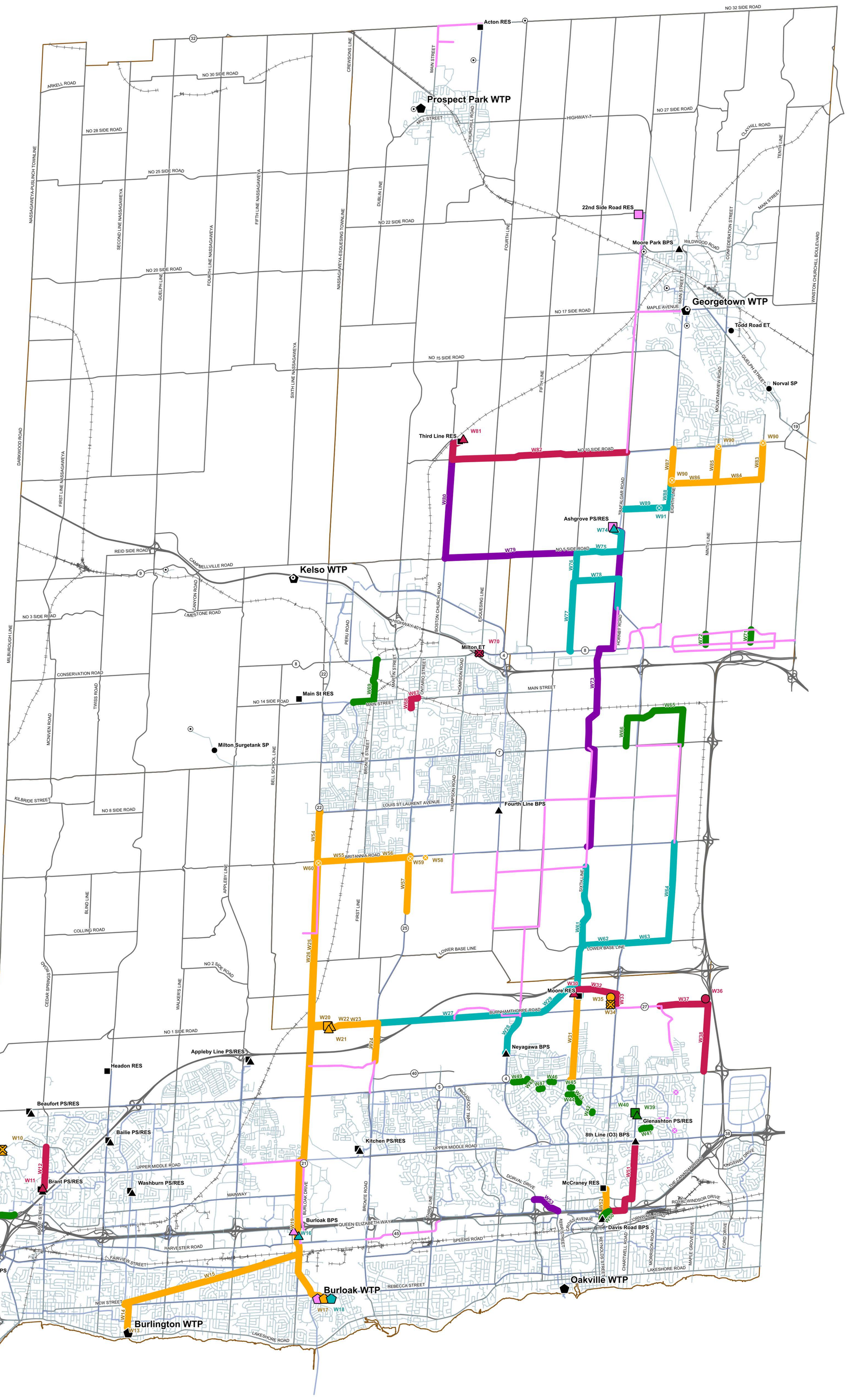

Figure 3 - Capital Program for the Preferred Water Servicing Strategy

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5.0 Preferred Wastewater Servicing Strategy

5.0 Preferred Wastewater Servicing Strategy

5.1 Preferred Servicing Strategy

The Preferred Wastewater Servicing Strategy includes a combination of system-wide initiatives and focus area solutions designed to address existing system constraints and support long-term growth to 2051. The strategy builds on previous planning efforts and incorporates updated flow projections, hydraulic modelling, and sustainability principles to ensure reliable, efficient, and environmentally responsible wastewater servicing across Halton Region. Key considerations that informed the preferred strategy include:

Treatment Plant Expansion Strategy

To accommodate projected growth to 2051, the Preferred Strategy includes phased expansions and flow diversion for several wastewater treatment facilities:

- Mid-Halton Wastewater Treatment Plant (WWTP): Expansion to 350 ML/d in staged phases to service continued growth from Milton, south Georgetown, and flow diversions from other areas.
- Burlington Skyway WWTP: Expansion to 170 ML/d to support intensification in Burlington.
- Oakville Southwest WWTP: Expansion to 60 ML/d to meet projected growth needs, accounting for partial diversion of flows from the Bronte GO Major Transit Station Area (MTSA) to Mid-Halton WWTP.
- Flow Diversion from Georgetown WWTP: Continued implementation of the Eight Line trunk sewer to divert flows from Georgetown South and Southwest to the Mid-Halton WWTP, maintaining Georgetown WWTP current capacity.

Focus Area Servicing Solutions

In addition to treatment plant expansions, the Preferred Strategy includes targeted solutions in areas with identified capacity constraints or strategic growth priorities:

- Burlington East Trunk Sewer: Implementation of a combined gravity and pumped solution to address deficiencies and enable growth in east Burlington. This strategy involves decommissioning four local pumping stations and consolidating flows to an expanded Elizabeth Gardens Wastewater Pumping Station (WWPS).
- Milton Greenfield Growth: Construction of the new Lower Base Line WWPS to service both east and west Milton growth areas. This solution supports coordinated upgrades, including expansion of the Drumquin WWPS and decommissioning of the Tremaine WWPS through construction of a new west trunk sewer.
- Main Street WWPS and Silver Creek Trunk Overflow: Construction of a new trunk sewer and WWPS on Main Street South in Georgetown to relieve peak wet weather conditions and support long-term system performance.

- Bronte GO MTSA: New WWPS for a flow diversion strategy to the Mid-Halton WWTP, to address downstream conveyance constraints and provide long-term servicing for intensification.
- Maple Avenue and Drury Lane Trunk Sewers: Capacity upgrades to address existing surcharging and support future growth in proximity to the Burlington GO MTSA.
- Skyway Inlet Sewer: Construction of a new inlet sewer to the Skyway WWTP to relieve capacity constraints at the plant inlet and reduce surcharging risks in the surrounding trunk system.

Other Key Initiatives

The Preferred Strategy also includes broader system-wide improvements and policy coordination to support implementation:

- Downtown Milton: Further investigation of system constraints and feasibility of an equalization tank at the Fulton WWPS to manage peak flows.
- Pumping Station Upgrades: Targeted upgrades or diversion strategies for constrained WWPS locations (e.g., Elizabeth Gardens, Ninth Line, Roseland, Bromley Park, Midblock Arterial) to address both current and projected capacity limitations.
- Infrastructure Coordination: Integration with the Region's Enhanced Growth Monitoring framework to ensure the strategy remains adaptive to local municipal growth priorities.
- Climate Resiliency and Energy Efficiency: Application of design principles that improve operational flexibility, reduce emissions, and support long-term climate adaptation objectives.

5.2 Capital Program for the Preferred Servicing Strategy

A detailed capital program has been developed to support the implementation of the Preferred Wastewater Servicing Strategy and to outline the infrastructure investments required to service existing and future growth to 2051.

The capital program map for the Preferred Wastewater Servicing Strategy is shown in **Figure 4**. It illustrates the general locations and extents of the projects that make up the preferred strategy, which will be further refined through further study and/or detailed design.

The IMP was developed following Approach 1 of the MCEA process and acknowledges that it does not fulfill the necessary requirements for Schedule B and C projects. These projects will require further detailed assessments through separate studies to meet the applicable MCEA requirements.

Integrated Master Plan

Water, Wastewater and Transportation

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Proposed Capital Projects

- New / Upgrade
- Decommission
- Real-Time-Control (RTC)

Proposed Projects (In-Service Years)

- Allocation Program
- 2028-2031
- 2032-2036
- 2037-2041
- 2042-2046
- 2047-2051

Existing Infrastructure

- Wastewater Treatment Plant (WWTP)
- Wastewater Pumping Station (WWPS)
- Biosolids Management Centre (BM)
- Equalization Tank (EQ)
- Forcemains
- Trunk Wastewater Mains
- Wastewater Mains
- Municipal Boundary

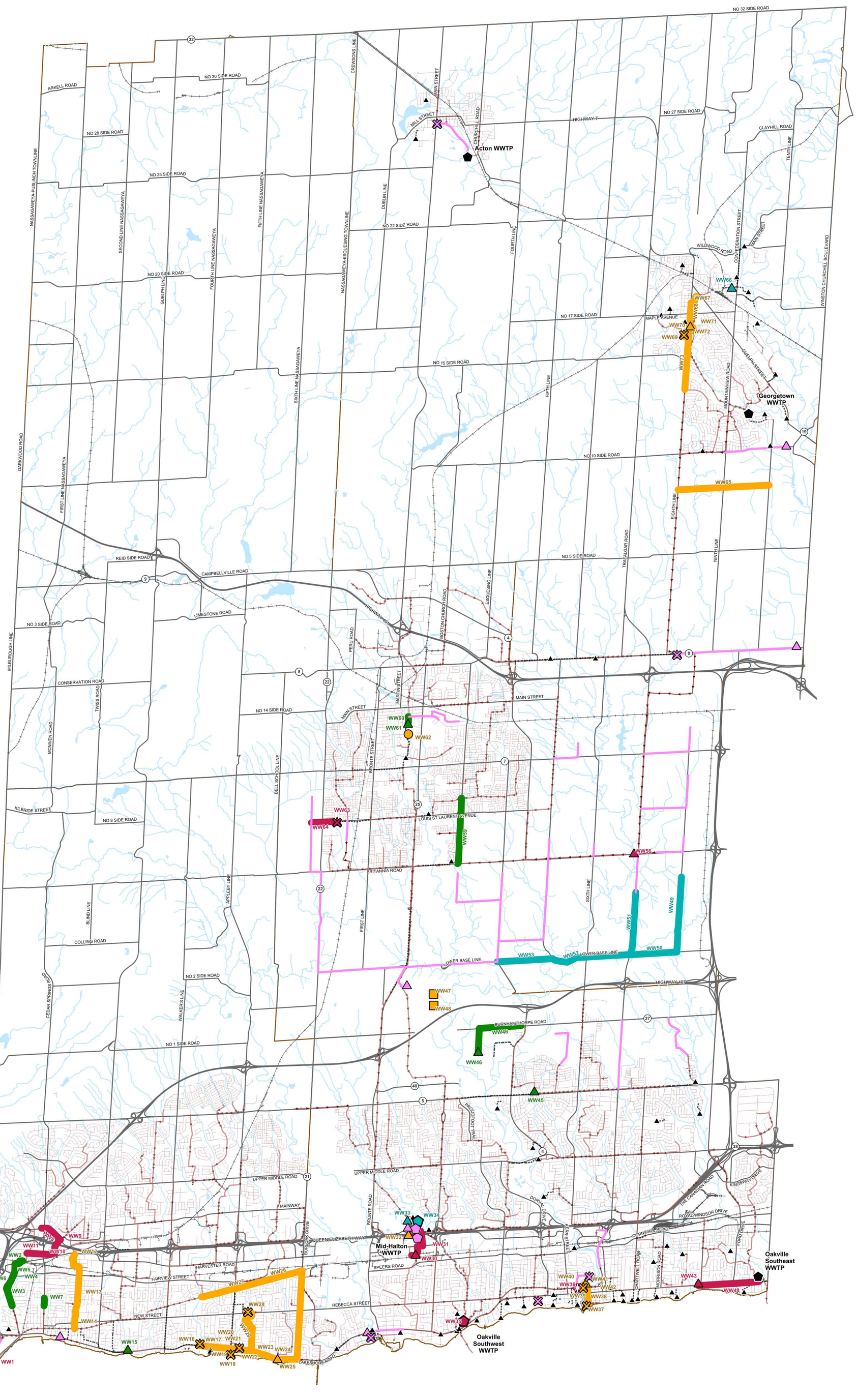

Figure 4 - Capital Program for the Preferred Wastewater Servicing Strategy

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6.0 Preferred Transportation Strategy

6.0 Preferred Transportation Strategy

6.1 Preferred Strategy

The existing transportation system serving Halton Region consists of a multi-modal network of roads and walking and cycling infrastructure. All elements of the system are interconnected through rural and urban areas and play a role in the provision of healthy and safe communities, supporting active lifestyles and providing multi-modal transportation options for all users, including the movement of goods and farm-related vehicles. Within the transportation network, Halton Region is responsible for planning, construction, operating and maintaining a network of Major Arterial roads, which are key connectors to the provincial highway system and are designed to support safe, reliable, and efficient movement of people and goods.

Key opportunities and considerations were identified for accommodating future growth and travel demand to 2051, including:

- provision of safe and convenient facilities for all users, including pedestrians and cyclists;
- maximize corridor space and be more dynamic to adapt to changing travel demand and local growth priorities;
- balanced consideration of all travel modes;
- enhanced overall regional connectivity; and,
- support the movement of goods and farm equipment.

The majority of the Region's network is either at six lanes or is planned to be widened in the near term which limits the opportunity for further widening and focuses strategies on opportunities that optimize corridors to support multi-model travel and support a balanced and resilient transportation network that focuses on moving people.

Based on network modelling, we know that travel demand will be approaching or at road capacity within most of the Region's urban areas by 2051. As such, prioritizing transit-related infrastructure that is supported by active transportation, provides the greatest potential for moving people across the Region. This allows us to respond to changes in future demand and Local Municipality growth priorities to 2051 and to improve integration of Provincial, Regional and Local transportation systems.

The development of the preferred transportation strategy has therefore been undertaken building on the existing/planned transportation networks and founded on infrastructure that supports Transit Priority Corridors, incorporates Active Transportation opportunities and are closely coordinated with activities and plans ongoing in both Local and adjacent Municipalities, the Ministry of Transportation and Metrolinx.

The preferred transportation strategy includes a transportation system that will be resilient and adaptable to support local growth priorities and increasing travel demand through:

- localized corridor widening and improvements;
- flexibility and adaptability to support the evolution of the Transit Priority Corridors;
- prioritizing and updating walking and cycling facilities, including at intersections; and,

- supporting strategies and technologies (for example, real-time data collection to support adapting the strategies).

The preferred multi-modal network strategy features a connected Transit Priority Corridor Network, an updated active transportation network, localized improvements on key corridors and select road widenings which will serve as the cornerstone of a flexible, multi-modal transportation network to adapt to local growth priorities and serve future travel demand in Halton Region beyond 2031. Key elements within the preferred strategy include:

Regional Road Network Widenings

The Region's 2011 Transportation Master Plan projected network needs to 2031, including 6-lane cross sections for most Regional Roads and new corridors within the urban area. To support growth beyond 2031, a limited number of additional road widenings have been identified as illustrated in **Figure 5**:

- Neyagawa Boulevard (Regional Road 4) – Widening from 4 to 6 lanes from Dundas Street to Highway 407 (47 m right-of-way)
- Trafalgar Road (Regional Road 3) – Widening from 4 to 6 lanes from Steeles Avenue to 10 Side Road (47 m right-of-way)
- Ninth Line (Regional Road 13) – Widening from 4 to 6 lanes from Steeles Avenue to 10 Side Road (47 m right-of-way)

These improvements are required for the Regional road network to remain responsive to future travel demand, including supporting Transit Priority Corridor network. Timing for these three road widenings is shown on **Figure 6**.

Localized Corridor Improvements

Localized improvements, such as signal optimization, signage improvements, addition of turning lanes and/or a localized widening, have been identified on select corridors where a full widening is not required, including:

- Regional Road 25 from 5 Side Road to north of 25 Side Road;
- 10 Side Road (Regional Road 10) between Trafalgar Road and Winston Churchill Boulevard;
- Guelph Line (Regional Road 1) between Campbellville Road and Highway 401;
- William Halton Parkway (Regional Road 40) between Regional Road 25 and Ninth Line;
- Upper Middle Road (Regional Road 38) between Regional Road 25 and Ninth Line/Ford Drive; and,
- Ford Drive (Regional Road 13) between Upper Middle Road and Highway 403.

The timing of the localized improvements is identified on **Figure 7** and will be confirmed through the monitoring of travel demand and intersection operations. The exact type of improvement to be implemented will be based on future monitoring and study findings.

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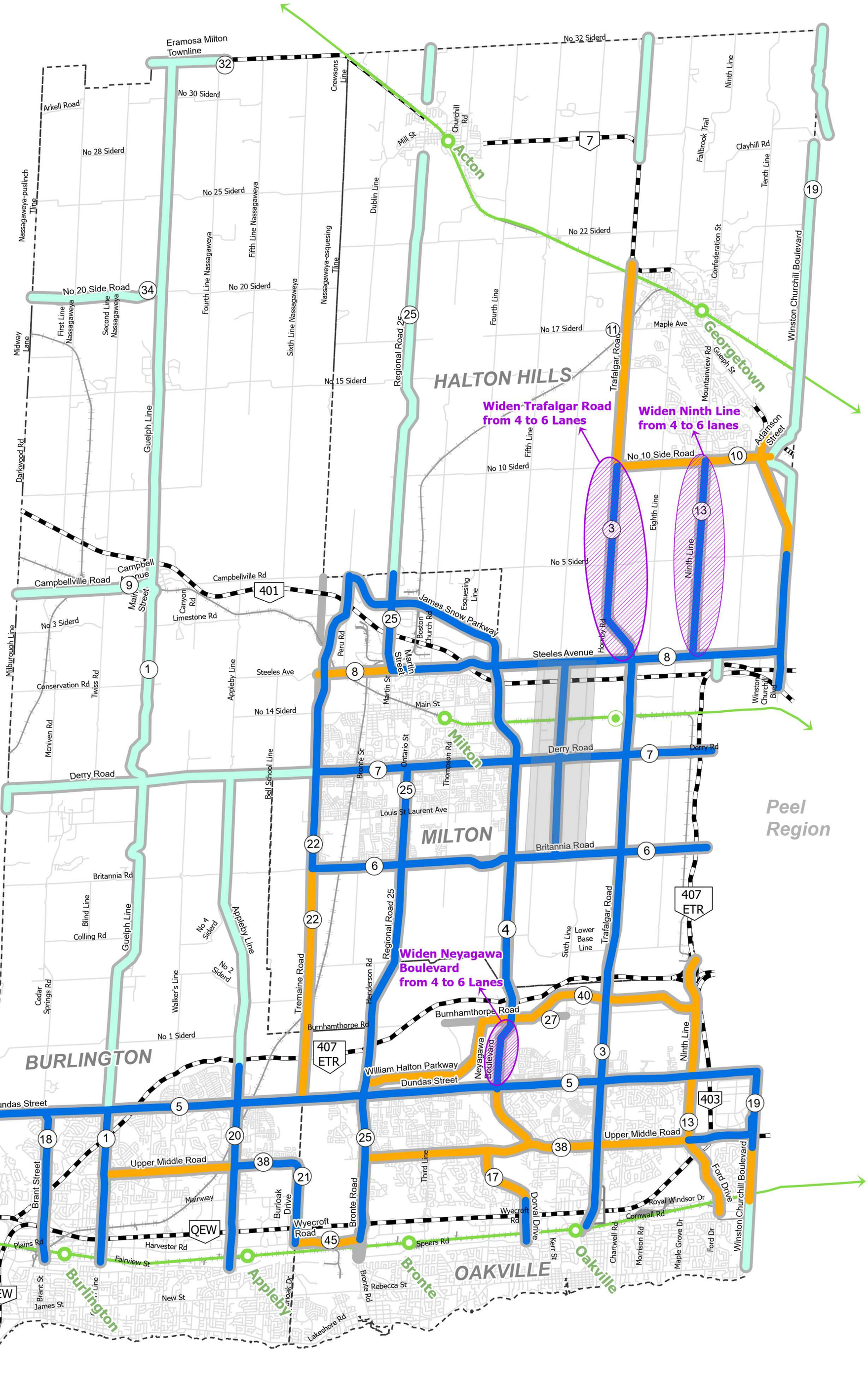

Legend

Road Network

- 2 Lanes
- 4 Lanes
- 6 Lanes

Key Features

- Regional Road Corridors
- New North Regional Road Corridor, subject to ongoing MCEA study
- Local Municipal Boundaries
- Local Roads
- Provincial Highways
- CP & CN Railways
- GO Railway
- GO Stations
- Future GO Station

Figure 5 – 2051 Preferred Strategy Network – Lane Configuration

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Integrated Master Plan

Water, Wastewater and Transportation

Last updated: October 24, 2025

Regional Road Improvements

- Previously Planned Road Widenings / New Roads

Timing of Regional Road Improvements identified through the Integrated Master Plan to 2051

- 2032-2036
- 2037-2041
- 2042-2046
- 2047-2051

Key Features

- Regional Roads
- New North Regional Road Cooridor, subject to ongoing MCEA Study
- Local Municipal Boundaries
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- GO Stations
- Future GO Station

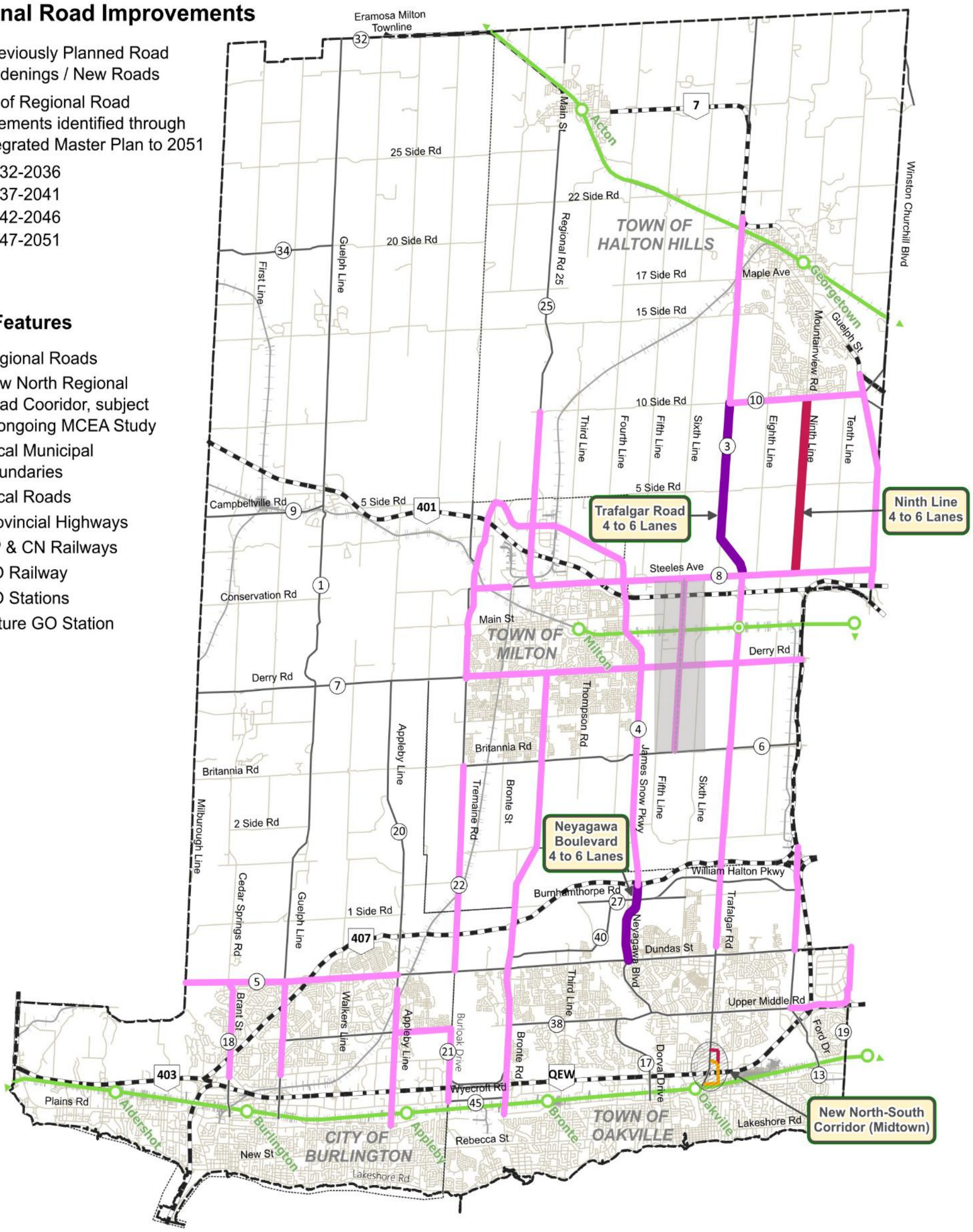

Figure 6 – Phasing of Regional Road Improvements

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Localized Improvements

Timing of Localized Corridor Improvements identified through the Integrated Master Plan to 2051

- 2032-2036
- 2037-2041
- 2042-2046
- 2047-2051

Key Features

- Regional Roads
- New North Regional Road Cooridor, subject to ongoing MCEA Study
- Local Municipal Boundaries
- Local Roads
- Provincial Highways
- CP & CN Railways
- GO Railway
- GO Stations
- Future GO Station

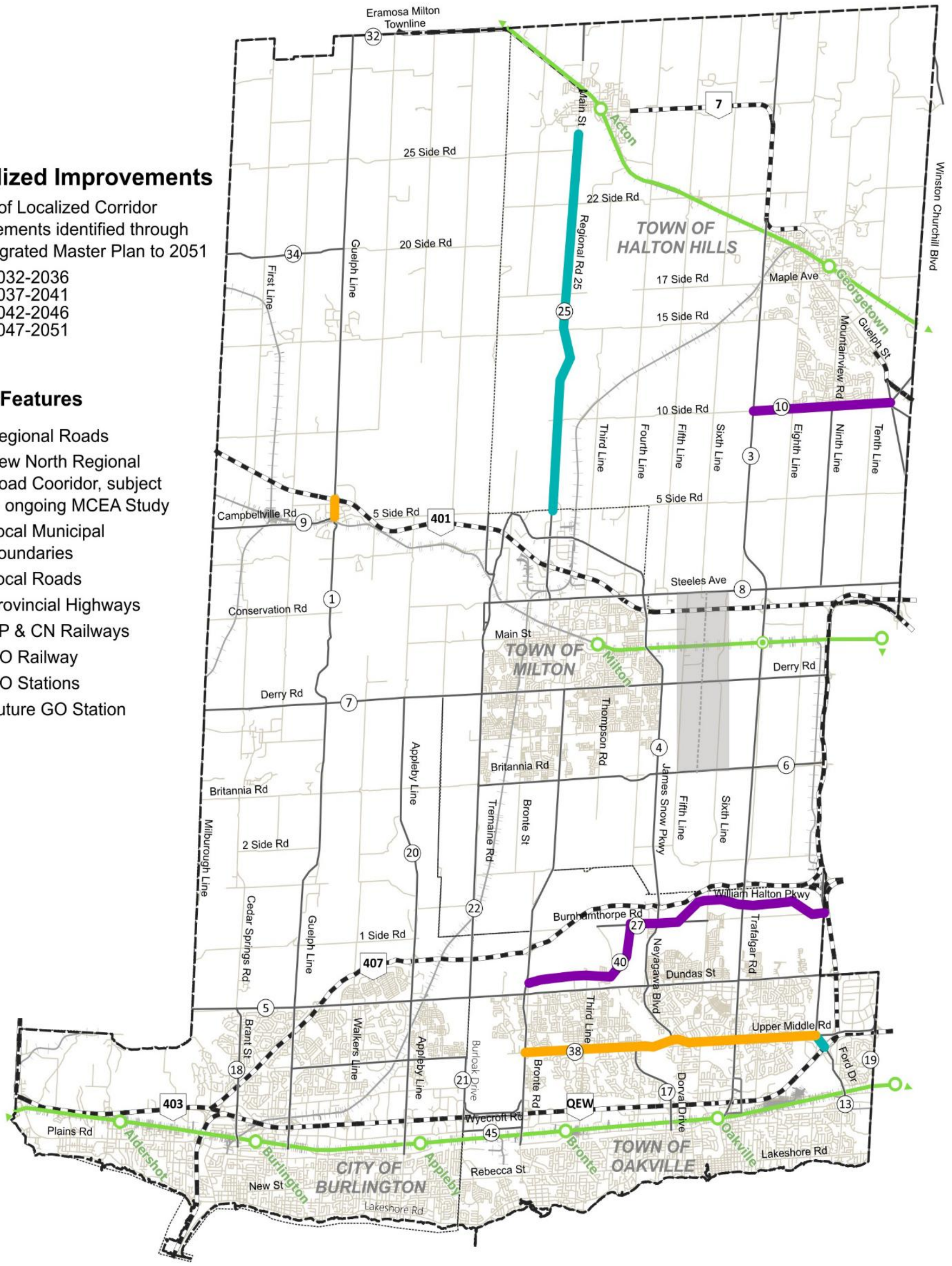

Figure 7 – Future Localized Improvements Along Halton Regional Road Corridors

Transit Priority Corridor Improvements

To support future travel demand, a Transit Priority Corridor Network was developed. Corridors are configured through infrastructure or operational improvements to improve travel speed and reliability for transit using the corridor. The Transit Priority Corridor Network has been developed to be flexible to adapt to local growth priorities. Improvements will evolve and scale appropriately over time by building flexibility into the network to allow priority and infrastructure treatments to be upgraded as ridership increases, ensuring that enhancements reflect where demand is highest. Key elements of the Transit Priority Corridor Network include **Bus in Mixed Traffic with Priority at Intersections, High Occupancy Vehicle (HOV) Lane with Priority at Intersections** and **Bus Rapid Transit**, which are described in further detail in **Figure 8**.

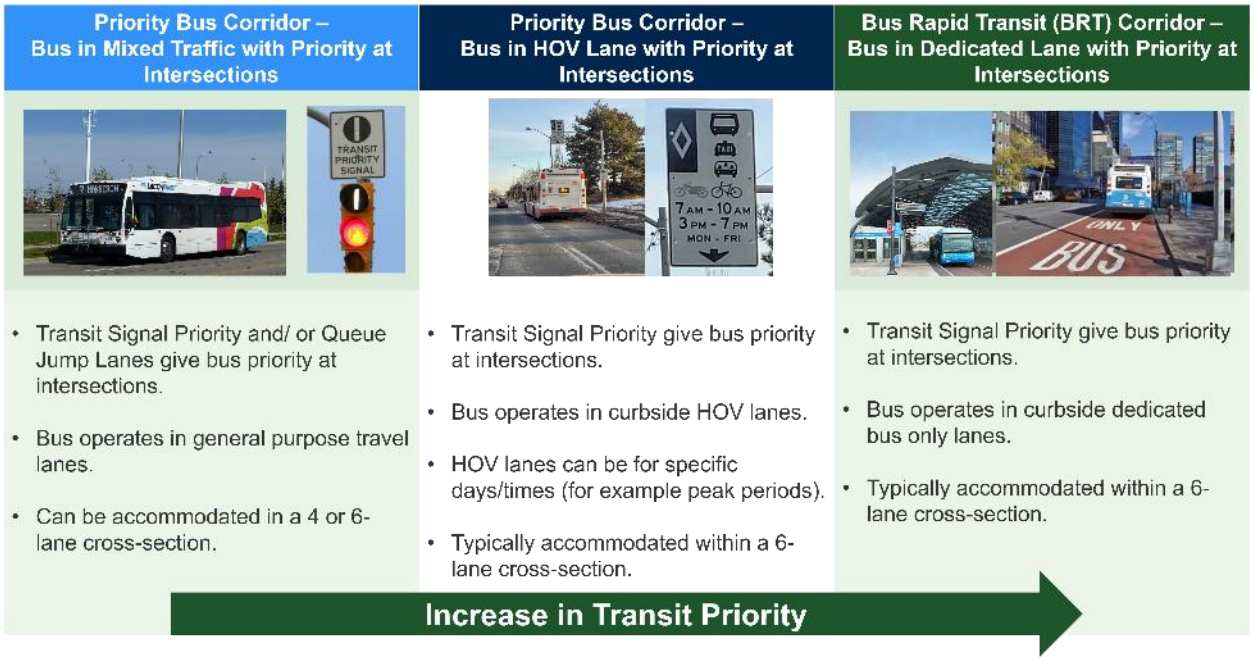

Figure 8 – Elements of 2051 Transit Priority Corridor

As illustrated on **Figure 9**, the 2051 Transit Priority Corridor Network was developed to establish strategic north-south and east-west spines, accommodating future travel demand and enhancing connectivity, including:

- North-South Core Bus Rapid Transit (BRT) Network – Regional Road 25, and Trafalgar Road (south through Midtown Oakville on the North-South Corridor).
- East-West Core Bus Rapid Transit (BRT) Network – Dundas Street and Derry Road.
- High Occupancy Vehicle lanes - multiple corridors including Brant Street, Appleby Line, James Snow Parkway, Britannia Road and Steeles Avenue.
- Additional transit priority infrastructure: Transit Signal Priority, Queue Jump lanes.

The potential phasing of the Transit Priority Corridors is shown on **Figure 9**, **Figure 10**, **Figure 11** and **Figure 12**. However, it should be noted that the implementation of the ultimate 2051 Transit Priority Corridor will be phased and will evolve based on demand and local priorities. It is recognized that the

timing and transition of the Transit Priority Corridors will require close coordination between the Region and the Local Municipalities.

The following drivers are key considerations that will help to determine the timing for the evolution of the Transit Priority Infrastructure:

- **Travel Demand:** Providing sufficient capacity through the Transit Priority Corridors to accommodate the future travel demand.
- **Transit Ridership:** Ensuring that infrastructure is in place for transit priority improvements to evolve based on demand and local priorities.
- **Connected Transit Network:** Serving travel demand to support future growth and connections to key destinations.

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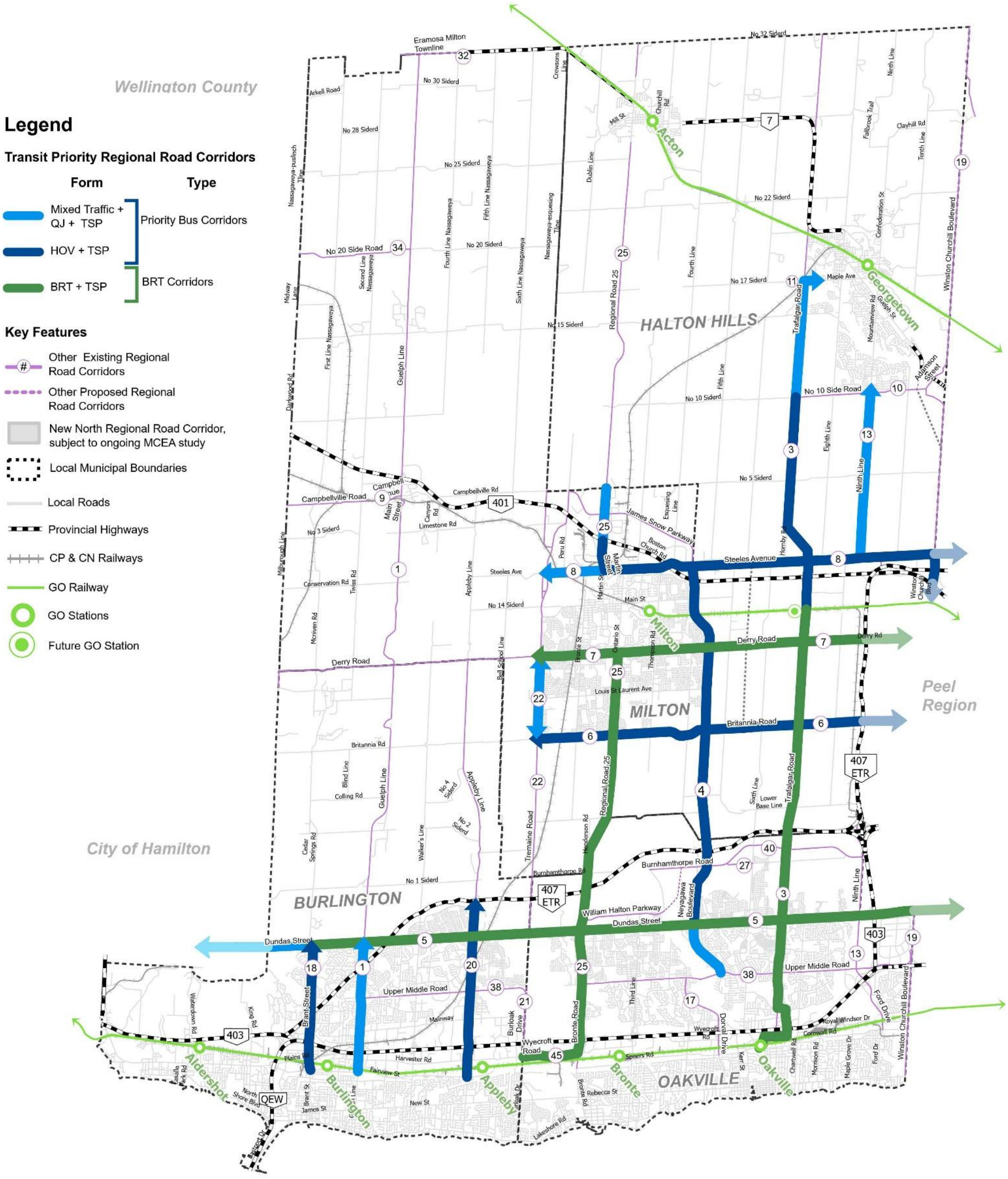

Figure 9 – 2051 Preferred Transit Priority Corridor Infrastructure Network

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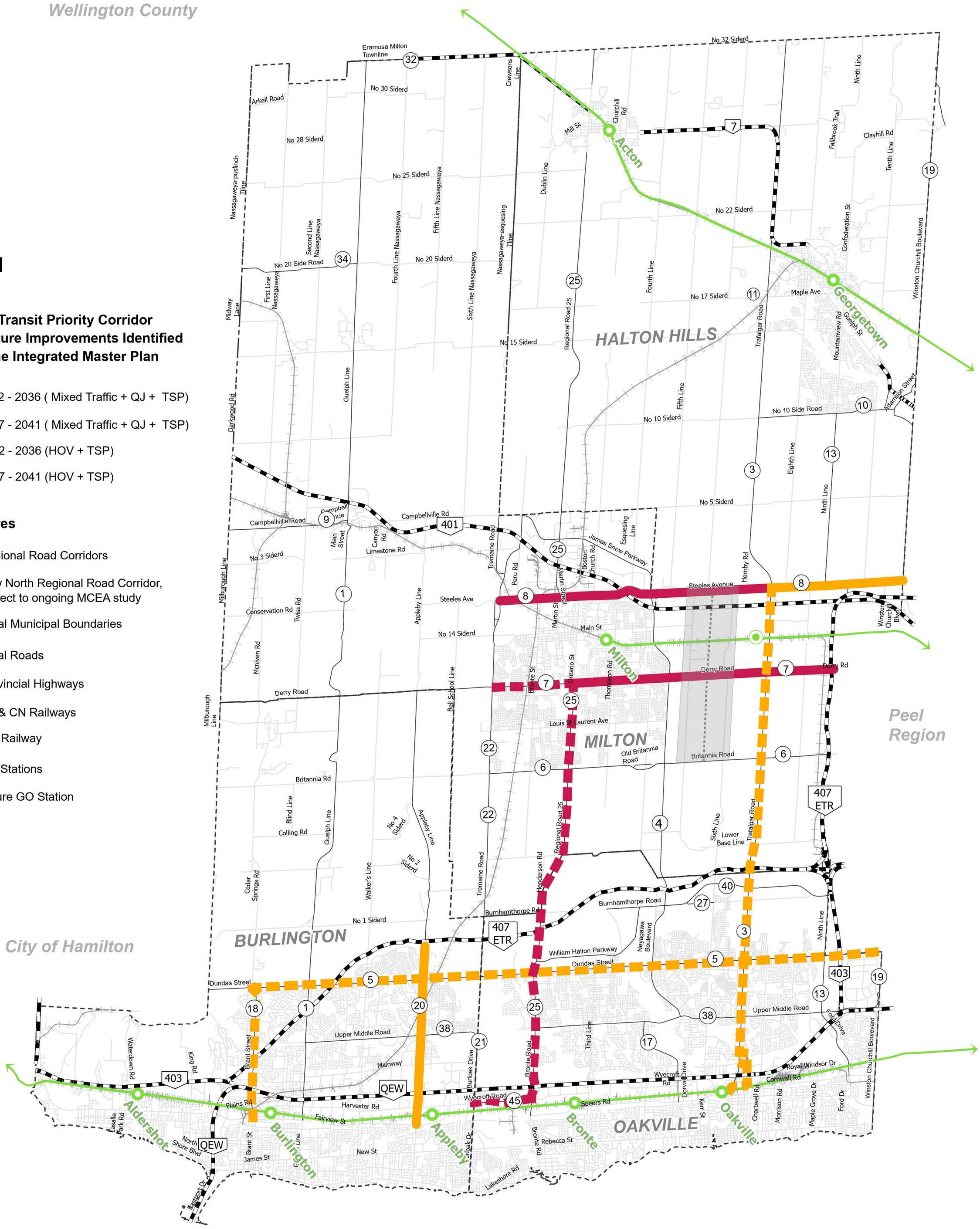

Legend

Timing of Transit Priority Corridor Infrastructure Improvements Identified through the Integrated Master Plan

- 🟧 2032 - 2036 (Mixed Traffic + QJ + TSP)
- 🟥 2037 - 2041 (Mixed Traffic + QJ + TSP)
- ▬ ▬ 2032 - 2036 (HOV + TSP)
- ▬ ▬ 2037 - 2041 (HOV + TSP)

Key Features

- —#— Regional Road Corridors
- ▨ New North Regional Road Corridor, subject to ongoing MCEA study
- ⬚ Local Municipal Boundaries
- — Local Roads
- ▬ Provincial Highways
- ┼┼┼ CP & CN Railways
- — GO Railway
- ○ GO Stations
- ● Future GO Station

Figure 10 – 2031+ Phasing of Transit Priority Corridors

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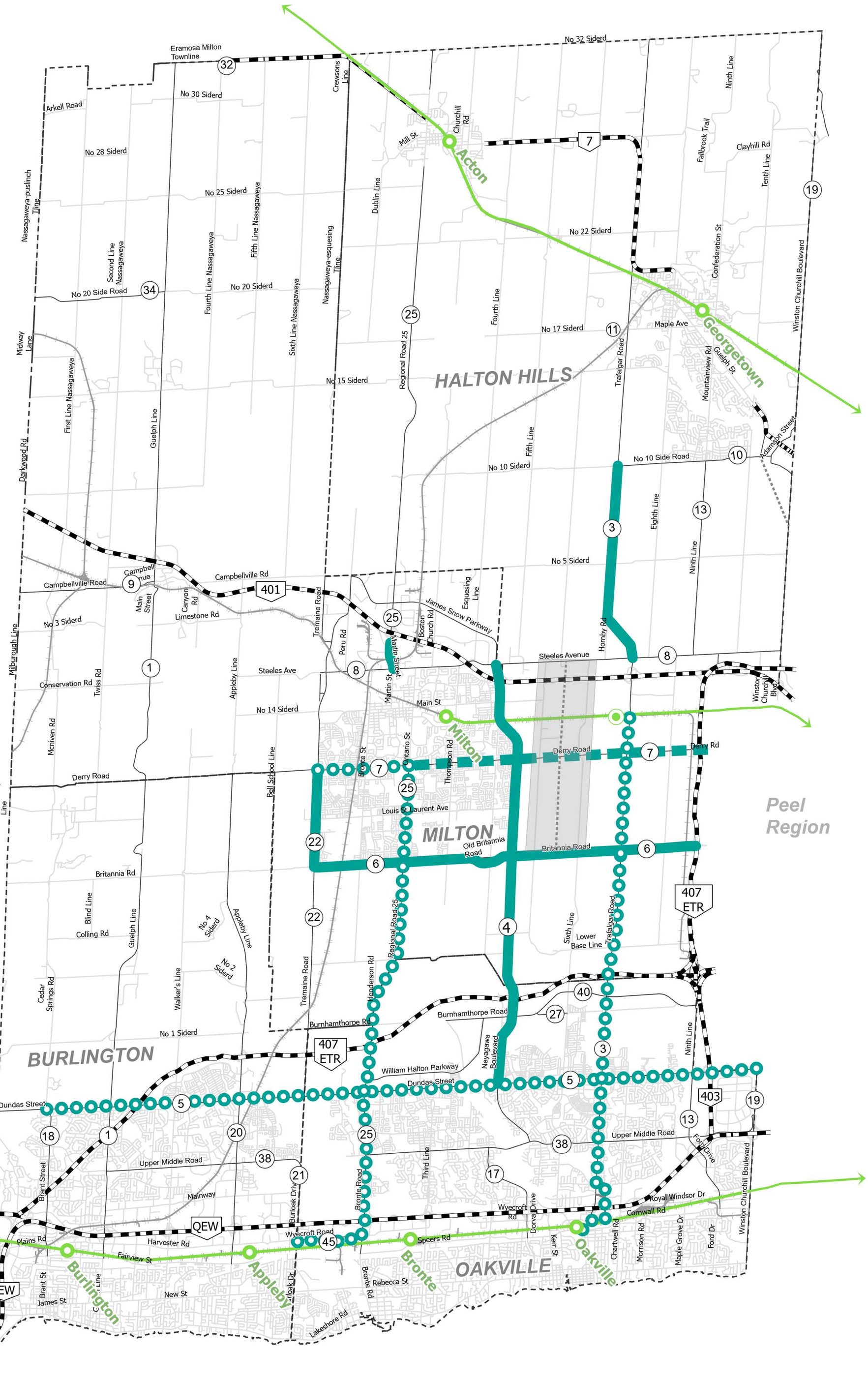

Figure 11 – 2042 to 2046 Phasing of Transit Priority Corridors

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Legend

Timing of Transit Priority Corridor Infrastructure Improvements Identified through the Integrated Master Plan

- ▬ 2047 - 2051 (Mixed Traffic + QJ + TSP)
- ▪ ▪ ▪ 2047 - 2051 (HOV + TSP)
- ○○○○ 2047 - 2051 (BRT + TSP)

Key Features

- —#— Regional Road Corridors
- ▨ New North Regional Road Corridor, subject to ongoing MCEA study
- ⬚ Local Municipal Boundaries
- — Local Roads
- ▬ Provincial Highways
- ┼┼┼ CP & CN Railways
- — GO Railway
- ○ GO Stations
- ● Future GO Station

Figure 12 – 2047 to 2051 Phasing of Transit Priority Corridors

Active Transportation Network

Active transportation plays an important role in the provision of healthy and connected communities and supporting active lifestyles through walking and cycling. The updated active transportation network for Regional road corridors was developed to provide a clear and convenient environment for pedestrians and cyclists, in consideration of corridor conditions and updated guidelines. Through the implementation of Halton's Active Transportation Network, recommended facilities will undergo further refinement through the lifecycle of a capital project, with adjustments to be made based on the location context and most recent guidelines and standards.

Halton Region's 2051 Active Transportation Network will include sidewalks, multi-use paths, cycle tracks, separated bike lanes and paved shoulders, which are described in **Figure 13**. The 2051 Cycling and Walking Networks are shown on **Figure 14** and **Figure 15**.

Sidewalks	Multi-Use Paths	Cycle Tracks	Separated Bike Lanes	Paved Shoulders
 *Upper Middle Road, Oakville*	 *Dundas Street, Oakville*	 *Trafalgar Road, Oakville*	 *Plains Road, Burlington*	 *Guelph Line, Burlington*
• In-boulevard paved / concrete path for pedestrians, separated from the roadway by a curb/buffer.	• In-boulevard two-way shared use facilities, separated from roadway by a curb/buffer.	• In-boulevard cycling facility separated from the roadway by a curb/buffer. • Can be one-way or two-way.	• Road portion designated for exclusive bicycle use, with physical separation from motor vehicles.	• Road portion outside the traffic lanes for cyclists, pedestrians, and stopped motor vehicles. • Buffer, where feasible.

Figure 13 – Elements of 2051 Active Transportation Network

Through the implementation of the Active Transportation Network, consideration of how facilities interact at the intersection level is critical. This will be accomplished through the implementation of protected intersections that create space for pedestrians, cyclists, and motorists. Key considerations for protected intersections include reducing motor vehicle speeds, separating high-risk conflicts, minimizing crossing distances, maximizing visibility, using clear and consistent design language, and the minimization of delay for all users. Improvements to active transportation, including at intersections will be refined throughout the capital project lifecycle, with elements to be tailored to the specific location context, feasibility, and current guidelines and standards.

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Legend

2051 Walking Network

- Multi-use Paths
- Sidewalks
- Paved Shoulders**

Key Features

- Regional Roads
- New North Regional Road Cooridor, subject to ongoing MCEA Study
- Local Municipal Boundaries
- Local Roads
- Provincial Highway Crossings***
- Provincial Highways
- CP & CN Railways
- GO Railway
- GO Stations
- Future GO Station

** All paved shoulders should be buffered, where practical and feasible.

*** Crossings at Provincial Highways are subject to further review and consultation with MTO.

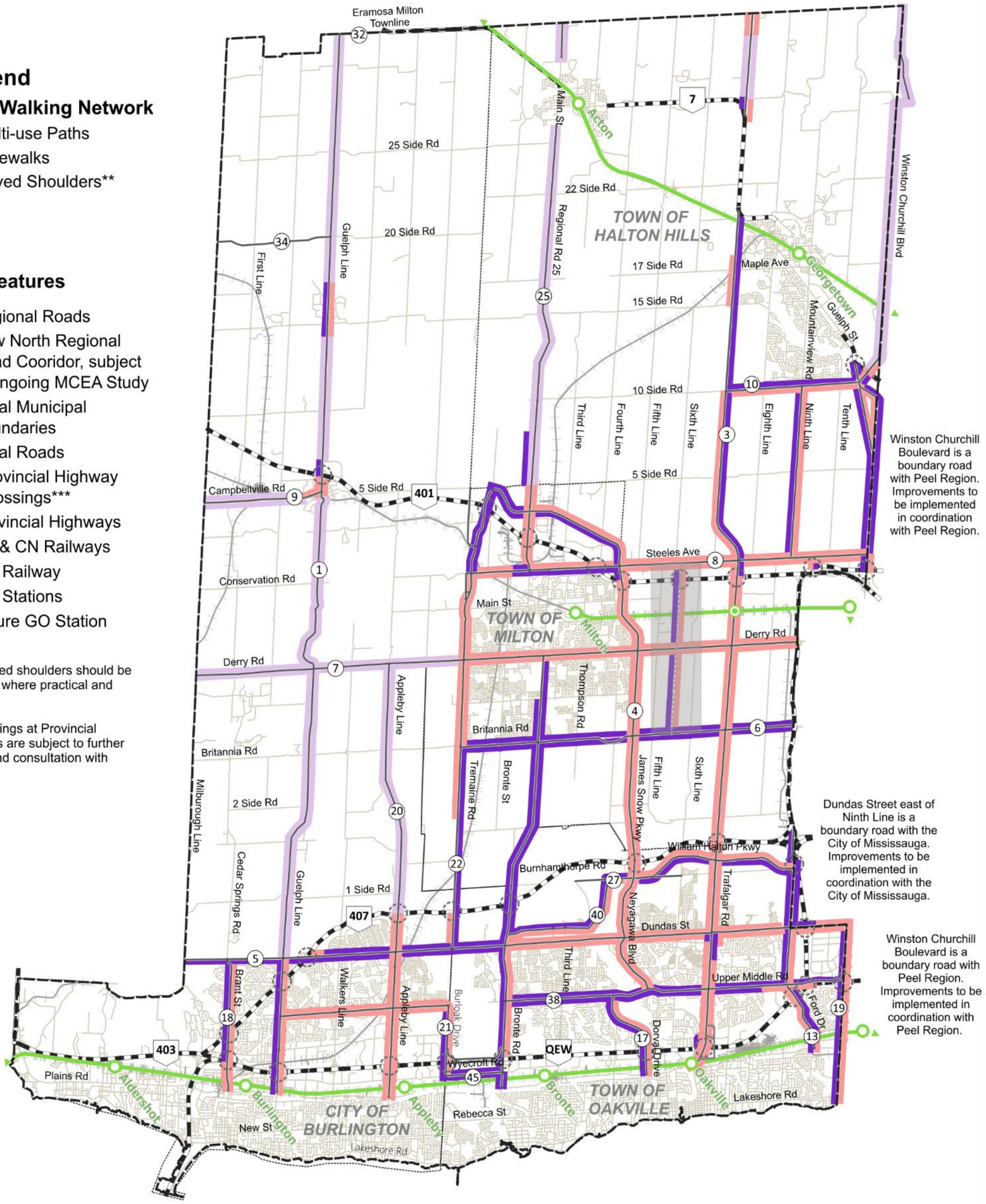

Figure 14 – 2051 Regional Walking Network

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Legend

2051 Cycling Network

- Two-way Cycle Tracks
- One-way Cycle Tracks
- Multi-use Paths
- Separated Bike Lanes*
- Paved Shoulders**

Key Features

- Regional Roads
- New North Regional Road Corridor, subject to ongoing MCEA Study
- Local Municipal Boundaries
- Local Roads
- Provincial Highway Crossings***
- Provincial Highways
- CP & CN Railways
- GO Railway
- GO Stations
- Future GO Station

* The feasibility of separation, including location, subject to further review.

** All paved shoulders should be buffered, where practical and feasible.

*** Crossings at Provincial Highways are subject to further review and consultation with MTO.

Figure 15 – 2051 Regional Cycling Network

0 2 4 KM

6.2 Capital Program for the Preferred Strategy

While each of the transportation networks have been presented within this plan as individual components, the planning of each network was connected and simultaneously considered and refined through an extensive consultation and engagement process. Together, the road, active transportation and Transit Priority Corridor networks will serve as the cornerstone of a flexible, multi-modal transportation network to adapt to local growth priorities and serve future travel demand in Halton Region.

A detailed capital program has been developed to support the implementation and integration of the Preferred Transportation Strategy and to outline the infrastructure investments required to support existing and future growth to 2051.

The IMP was developed following Approach 1 of the MCEA process and acknowledges that it does not fulfill the necessary requirements for Schedule B and C projects. Future environmental assessment and associated technical investigation through separate studies will be carried out to meet the applicable MCEA requirements prior to detailed design and construction.

7.0 Implementation – From Plan to Action

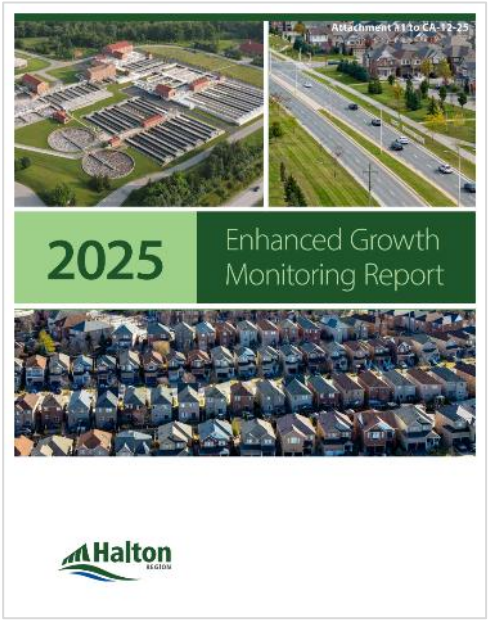
7.1 Enhanced Growth Monitoring Process

7.0 Implementation – From Plan to Action

The IMP is designed to support the delivery of safe, reliable, and efficient water, wastewater, and transportation systems that meet the Region's needs beyond 2031, while remaining responsive to local growth priorities. The IMP will serve as a technical foundation for subsequent studies that support the development of the Financial Plan for the implementation of the program, for example, the Development Charges Background Studies and Roads Rationalization exercise that support a new Development Charge Bylaw. The implementation of the Enhanced Growth Monitoring process, in collaboration with the local Municipalities, provides a platform for assessing the impact of contemplated changes on infrastructure and supports effective and coordinated infrastructure delivery that aligns Regional infrastructure planning with local growth strategies.

The cost of the program to support growth from 2032 to 2051 is approximately $2,325 for water, $1,761 for wastewater and $909 millions for transportation. Timing of infrastructure will continue to be monitored and reviewed in support local growth priorities.

7.1 Enhanced Growth Monitoring Process



A key component of implementation is the Enhanced Growth Monitoring process, which provides a structured process to regularly assess growth trends, development activity, and available servicing capacity. The 2025 Enhanced Growth Monitoring Report marked the launch of this framework, establishing an annual reporting process to evaluate the uptake of allocation program units, track water and wastewater system capacity, and inform the redistribution of servicing capacity where needed.

The Enhanced Growth Monitoring Framework complements the IMP by ensuring that infrastructure phasing and investment decisions remain aligned with local municipal growth strategies. As an annual process, it provides the Region with the flexibility to adapt to changing conditions, proactively manage servicing dependencies, and maintain coordination between Regional infrastructure delivery and local development priorities. Together, the IMP and the Enhanced Growth Monitoring process provide a comprehensive approach that integrates long-range planning with ongoing monitoring to support sustainable, resilient, and coordinated growth across Halton to 2051 and beyond.