December 10th, 2024

City of Kawartha Lakes

Transportation Master Plan Update



Council Presentation

Project Overview

Background

Kawartha Lakes is a single-tier municipality in central Ontario, located north-east of the Greater Toronto and Hamilton Area. According to Statistics Canada, 2021 Census of Population, the land area of Kawartha Lakes is **3,033.66 square kilometres** and the population density was reported to be **26.1 people per square kilometers**

Kawartha Lakes is primarily rural with a total population of about **80,000 +5.1%** growth in population from approximately **75,423 people in 2016 to 79,247 people in 2021.** Based on the City's Growth Management Strategy, population forecasted to reach **130,000 people and 40,600 jobs by 2051.**

Major provincial highways **7/7A, 115, and 35** owned by the Ministry of Transportation (MTO) run through the City.

Kawartha Lakes is a primary **tourist and recreational destination** with activities for all seasons

Vision Statement

"To foster thriving and growing communities by creating an inclusive, sustainable, and barrier-free multi-modal transportation network. The TMP aims to enhance mobility and accessibility for all residents and visitors while preserving the natural environment. This approach will establish an integrated transportation system that meets the needs of a growing population and promotes a connected multi-modal network through the year 2051."

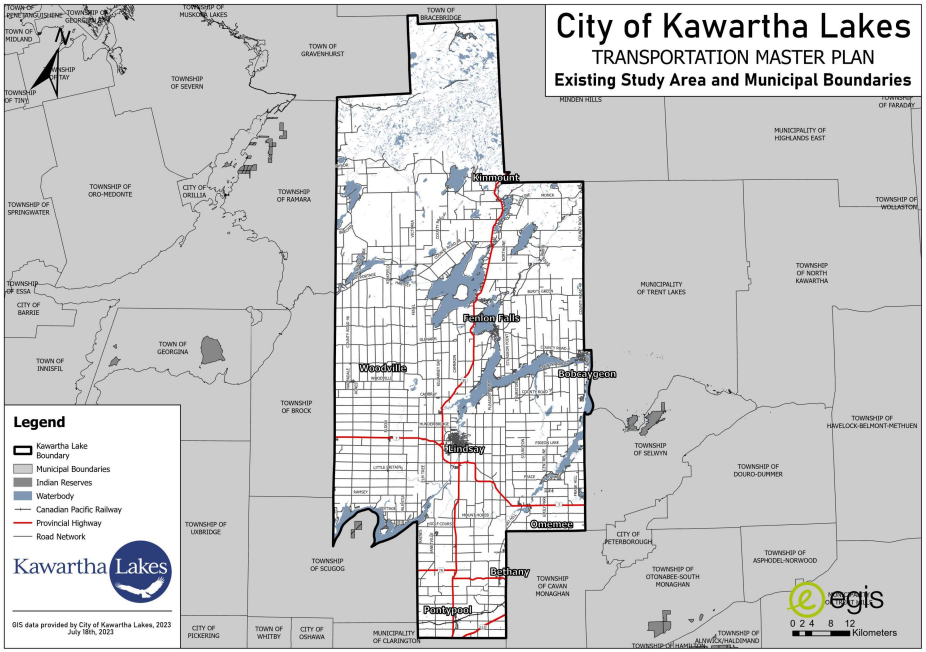
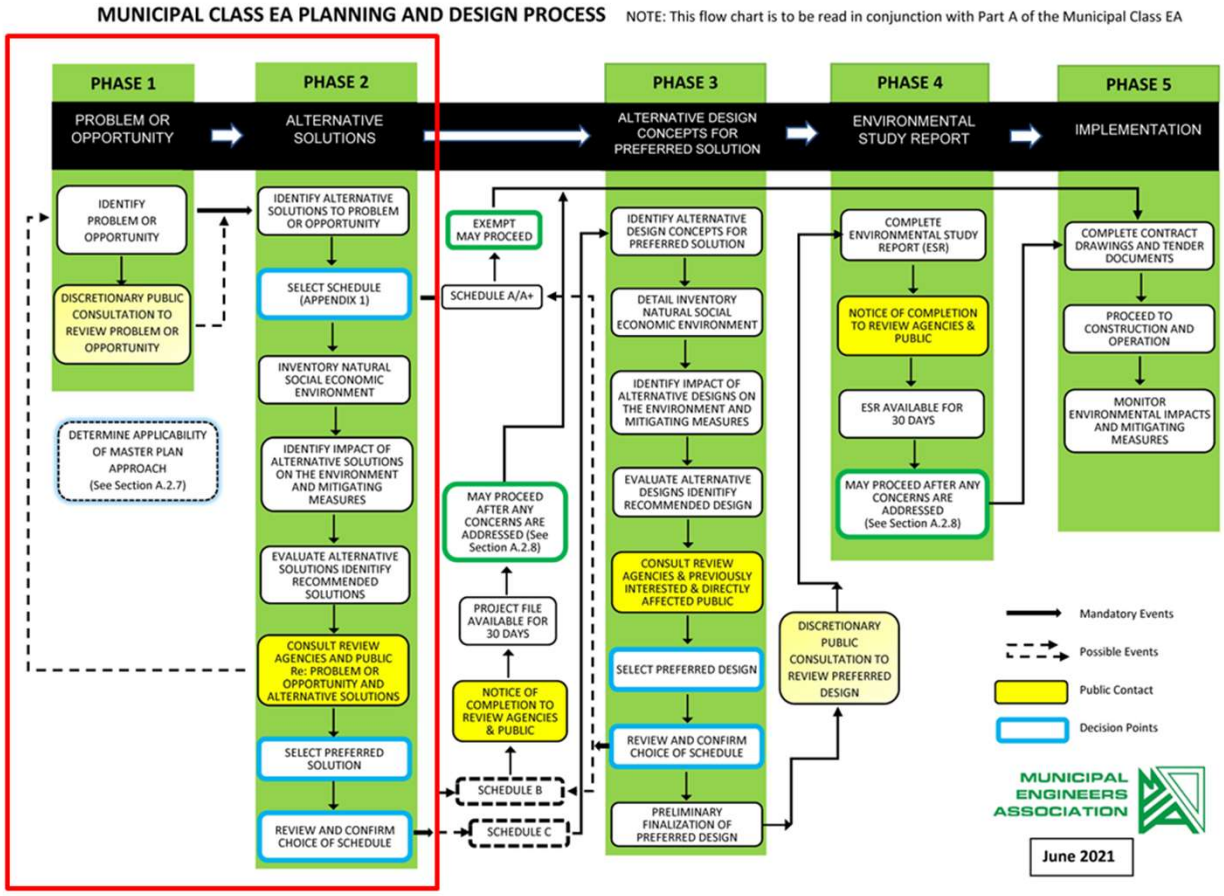


Image source: flaticon.com

Municipal Class Environmental Assessment Master Planning Process

Municipal Class Environmental Assessment Master Planning Process

This TMP update will follow the “Class EA for Municipal Road Projects,” covering Phases 1 and 2 of the Municipal Class Environmental Assessment Process, including a Public Information Centre and evaluation of alternatives. In this way, the comprehensive TMP will satisfy Phases 1 and 2 of the EA process and facilitate streamlining and implementation of recommended capital works.



*Completed as part of the TMP Process

Study Process

Transportation Master Plan Study Process

Existing Conditions Assessment

- Project Initiation
- Information Gathering and Background Review
- Existing Conditions Analysis and Identify System Issues and Opportunities
- Road Safety Assessment and Collision Experience
- Public & Stakeholder Engagement 1

Identification of Alternative & Solutions

- Transportation Modelling and Network Assessment
- Parking Strategy Updates
- Policies and Design Standards Updates
- Incorporating Other Studies (GMS, ATMP)
- Draft Transportation Master plan
- Public and Stakeholder Engagement 2

Documentation & Finalization

- Finalize Transportation Assessment
- Final Transportation Master Plan
- Council Presentation

TMP Horizon Years

2028 – Short Term
2038 – Medium Term
2051 – Long Term

Image source: flaticon.com

Level of Service for Intersection Analysis

LOS	Signalized Intersection	Unsignalized Intersection
A	≤ 10 sec	≤ 10 Sec
B	10-20 sec	10-15 sec
C	20-35 sec	15-25 sec
D	35-55 sec	25-35 sec
E	55-80 sec	35-50 sec
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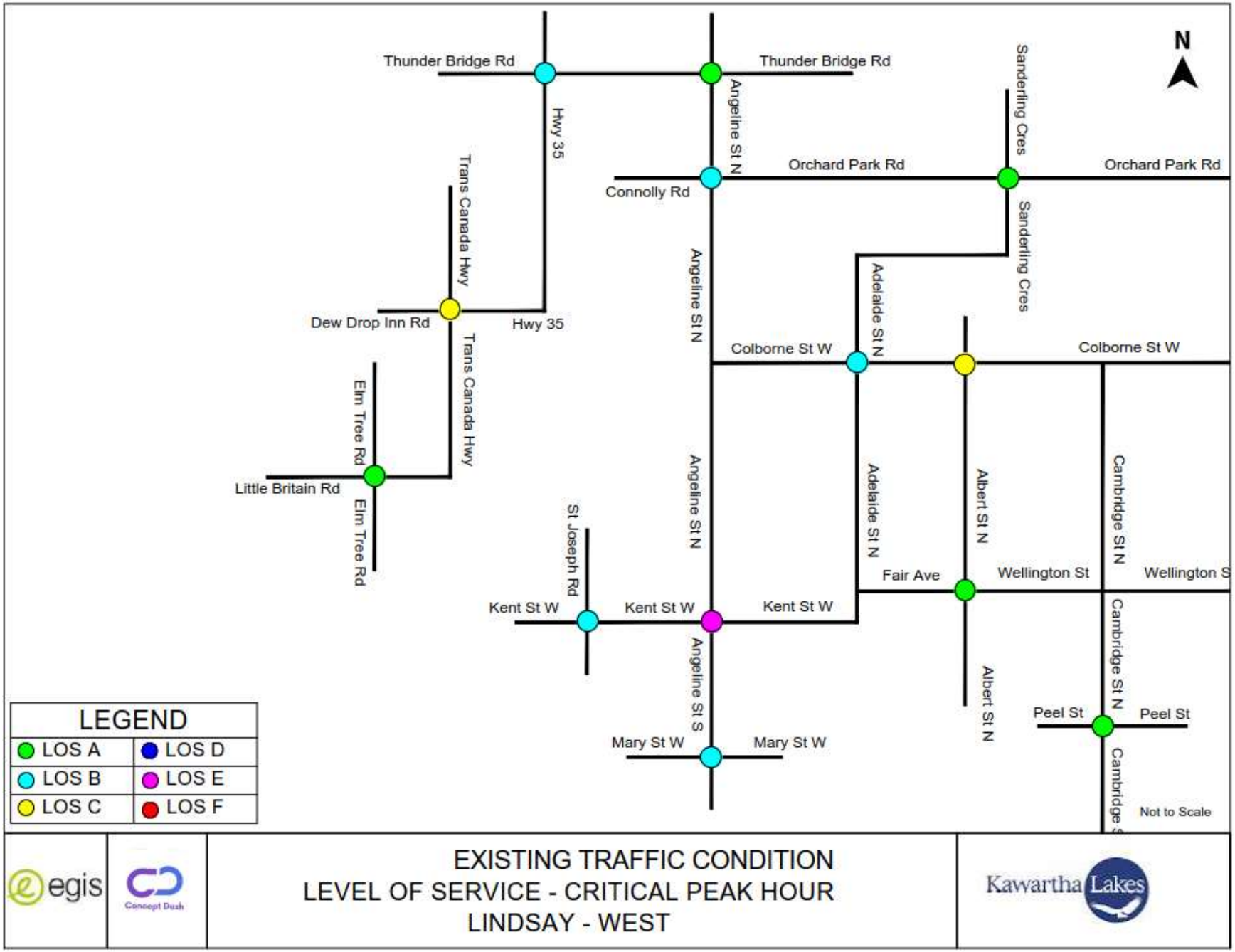
LOS	DESCRIPTION
A	Free-flow operations where vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.
B	Reasonably free flow conditions where the ability to maneuver within the traffic stream is only slightly restricted.
C	Traffic speeds at or near the free-flow speed with noticeable restricted freedom to maneuver within the traffic stream
D	Declining speeds due to increasing flows with seriously limited freedom to maneuver within the traffic stream.
E	Operations at or near capacity which are highly volatile because there are virtually no usable gaps within the traffic stream; unstable with no ability to dissipate even the most minor disruption.
F	Unstable flow with queues forming behind bottlenecks. Breakdowns occur for a number of reasons.



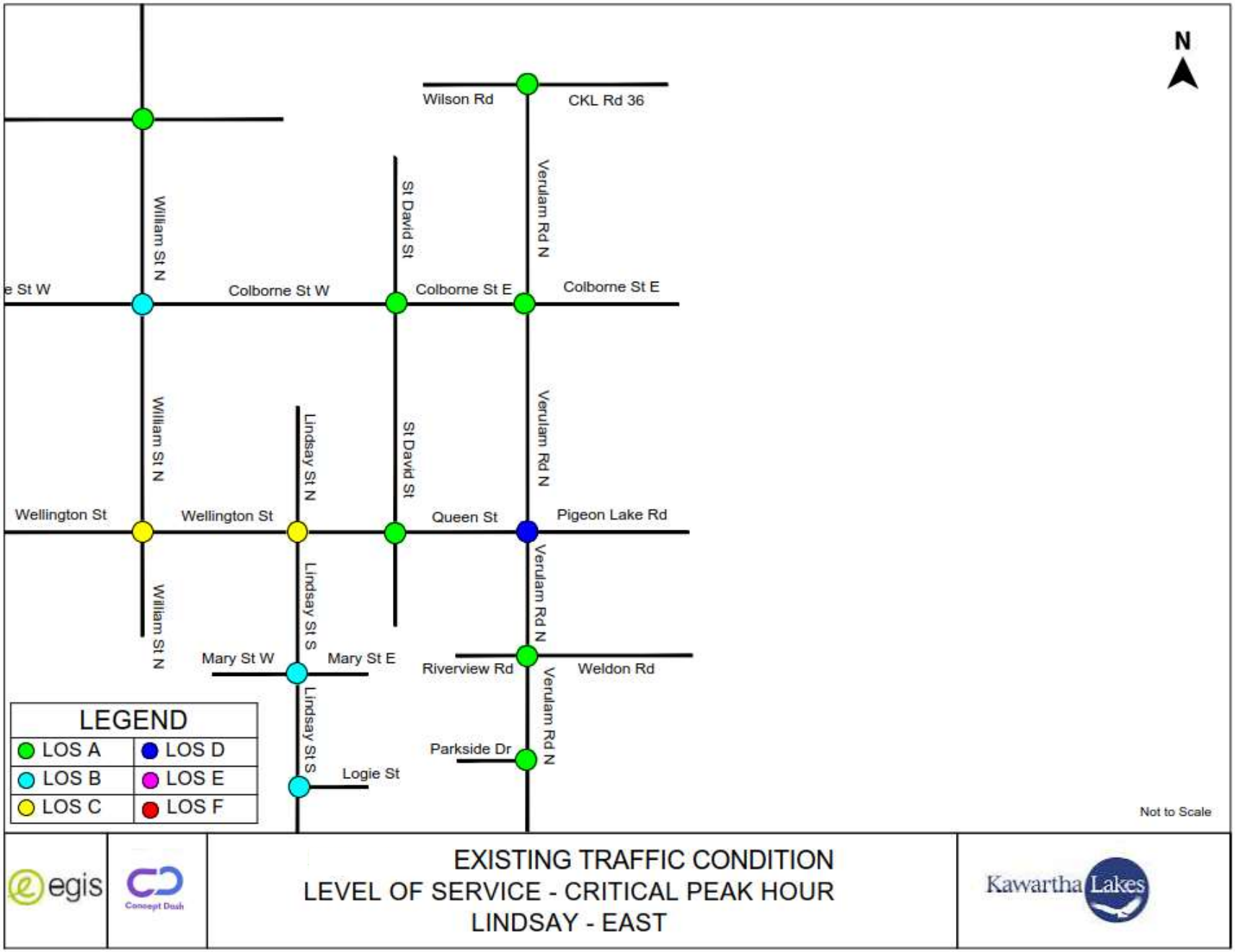
egis Kawartha Lakes

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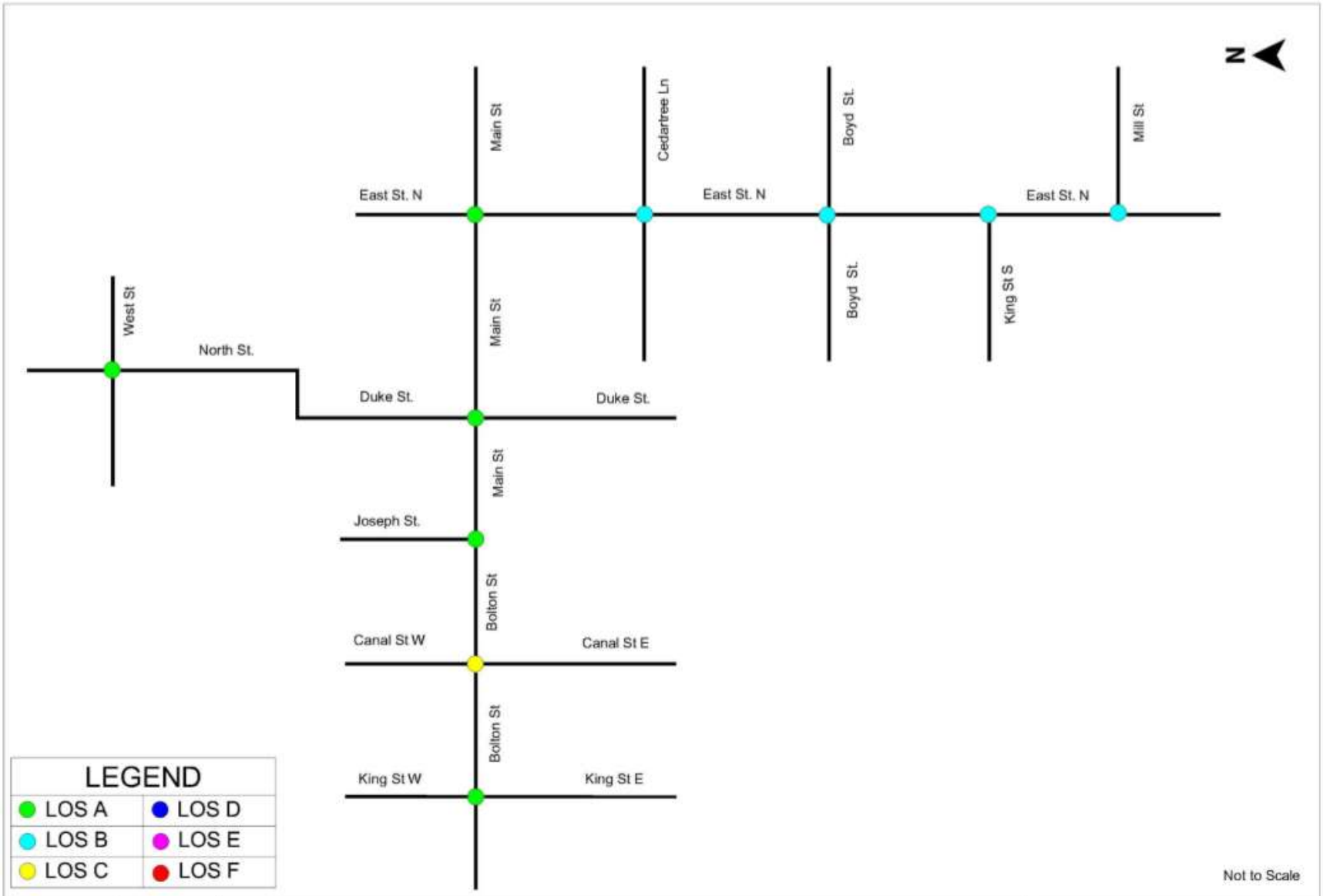
Level of Service Findings for Existing Conditions



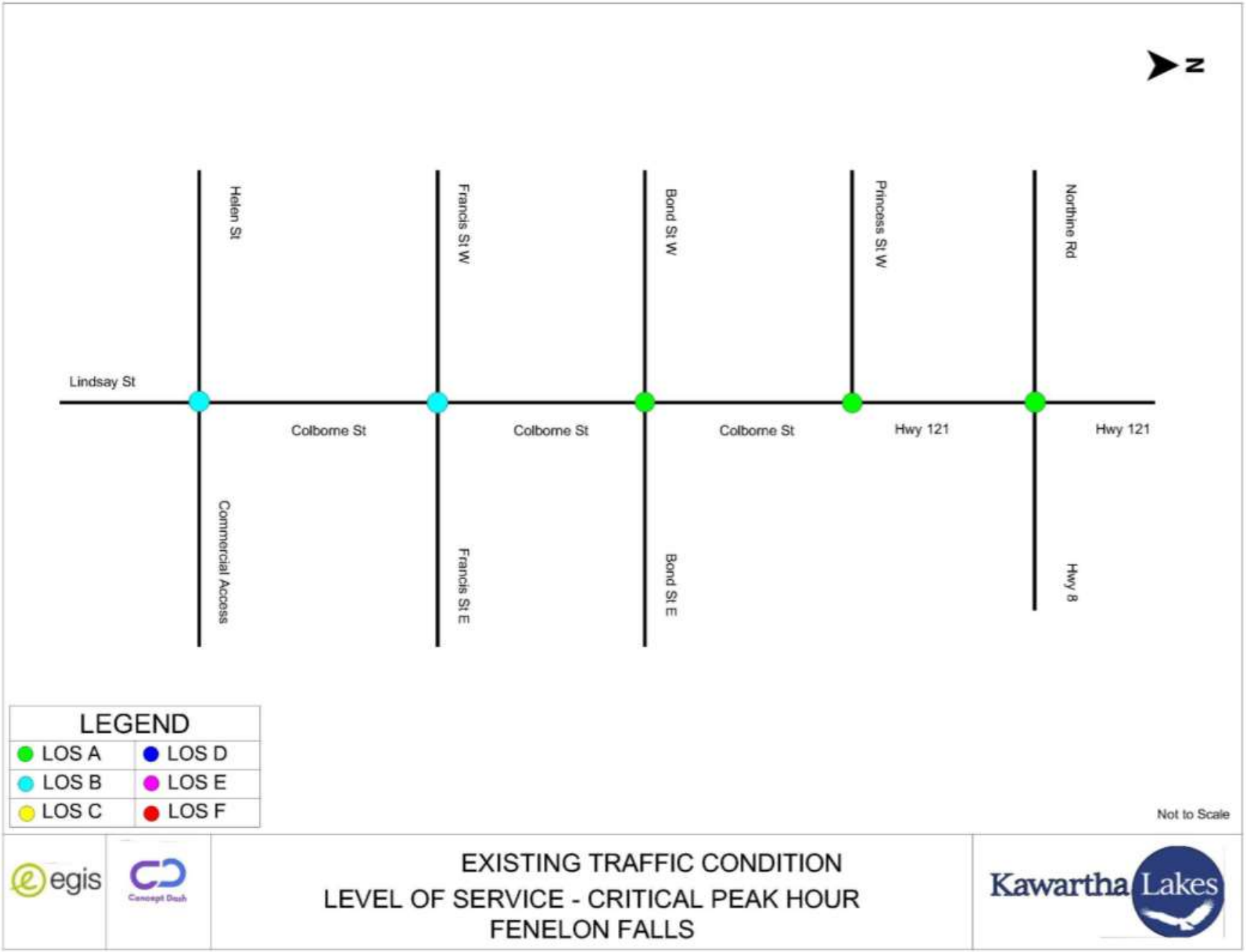
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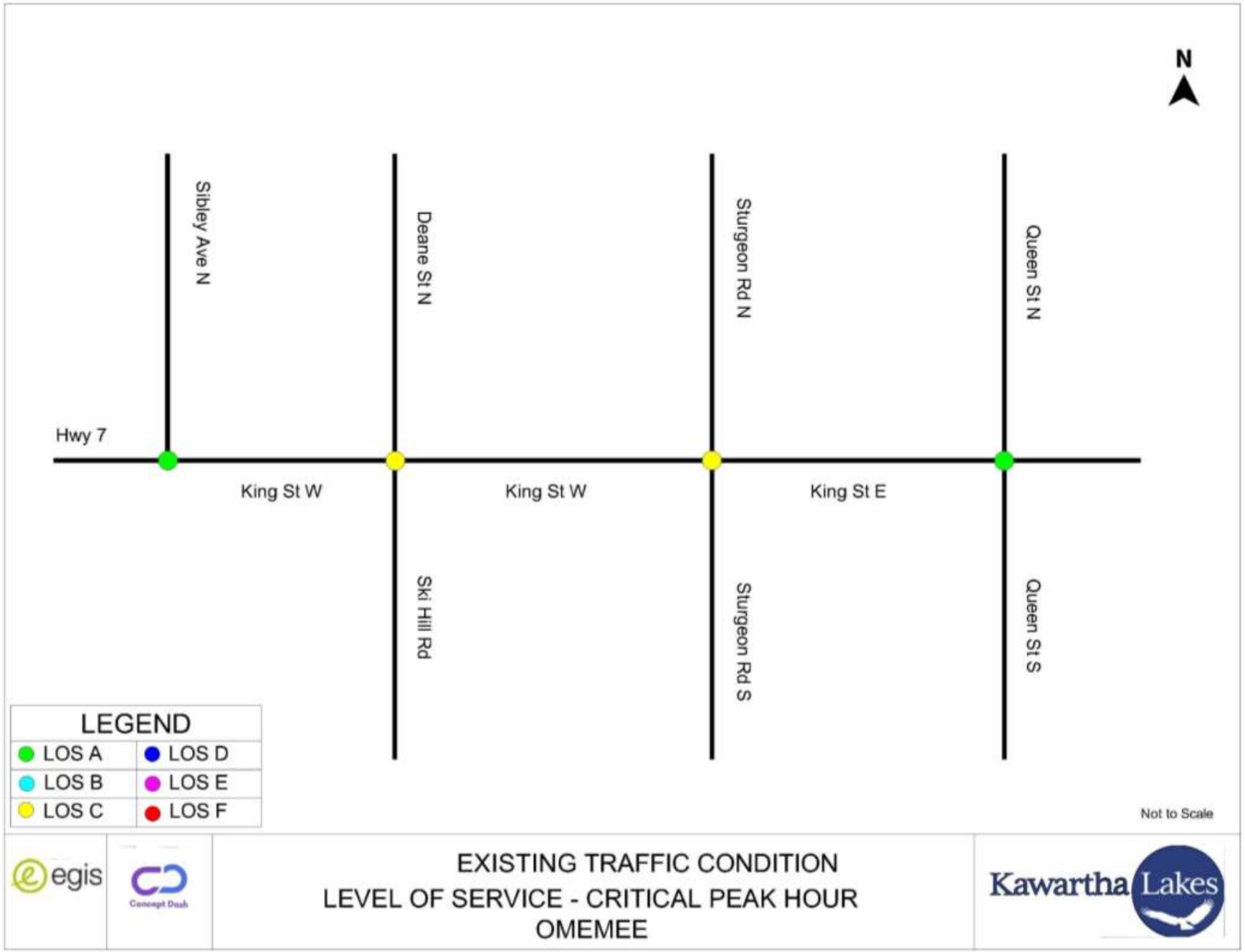
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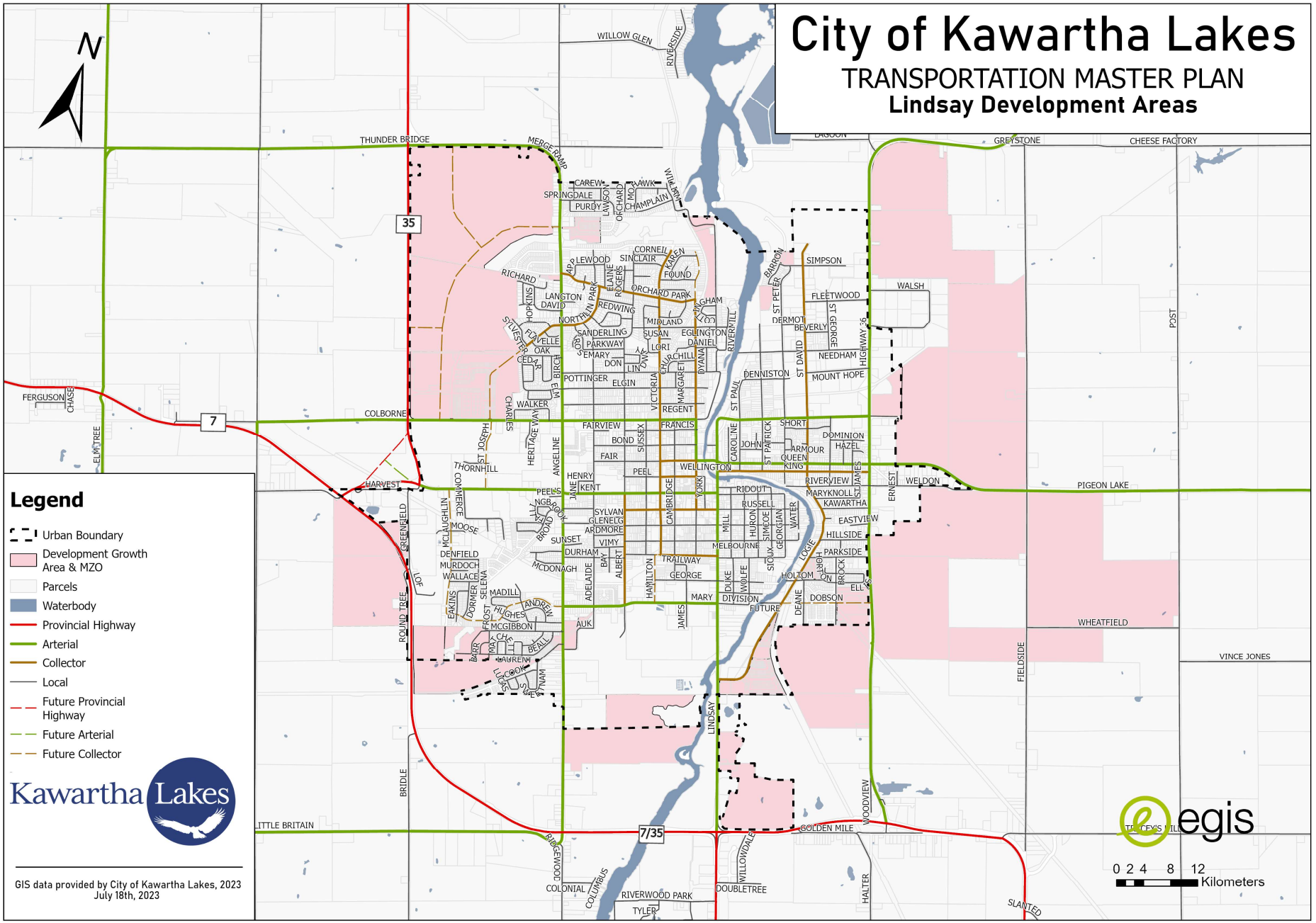
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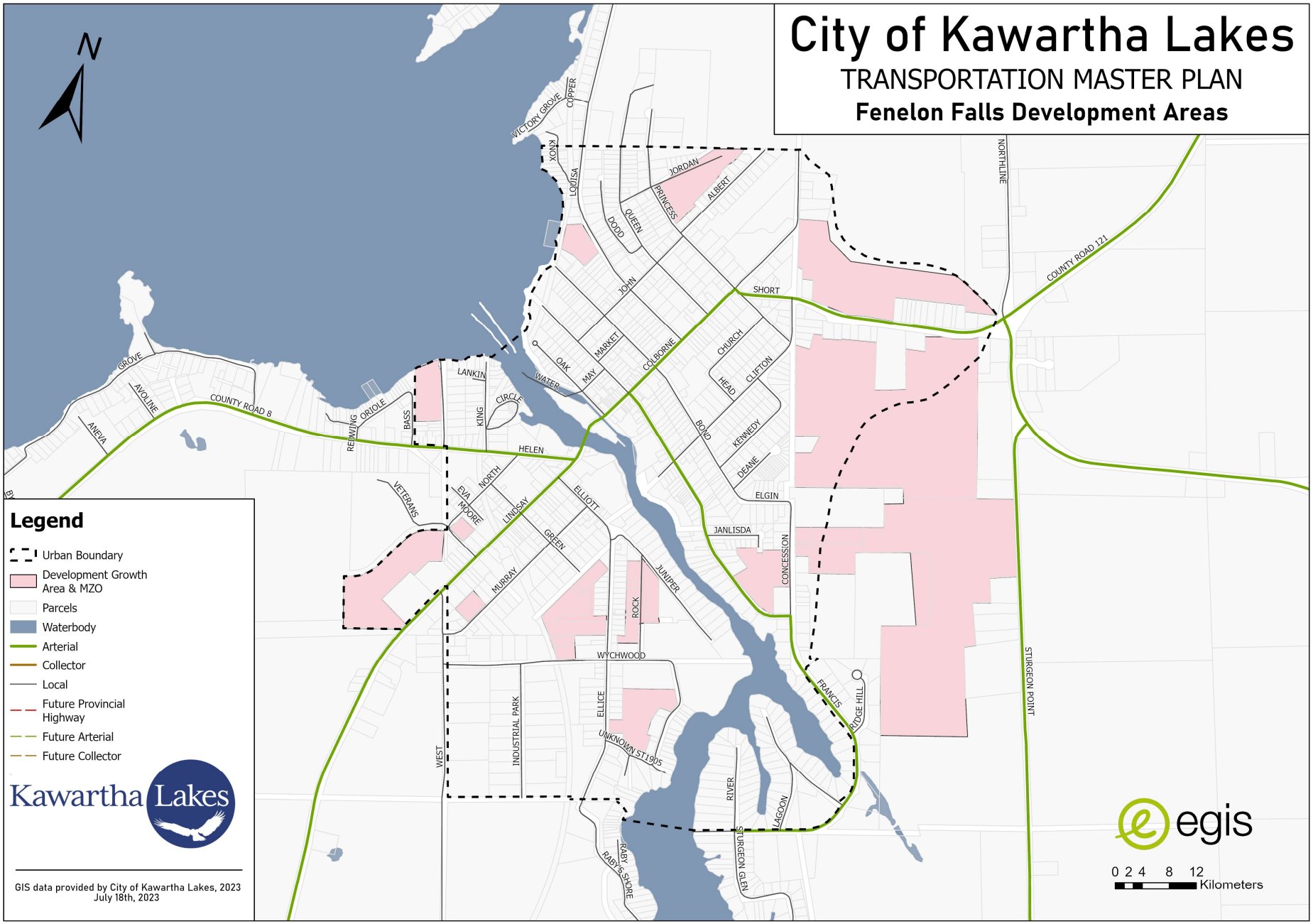
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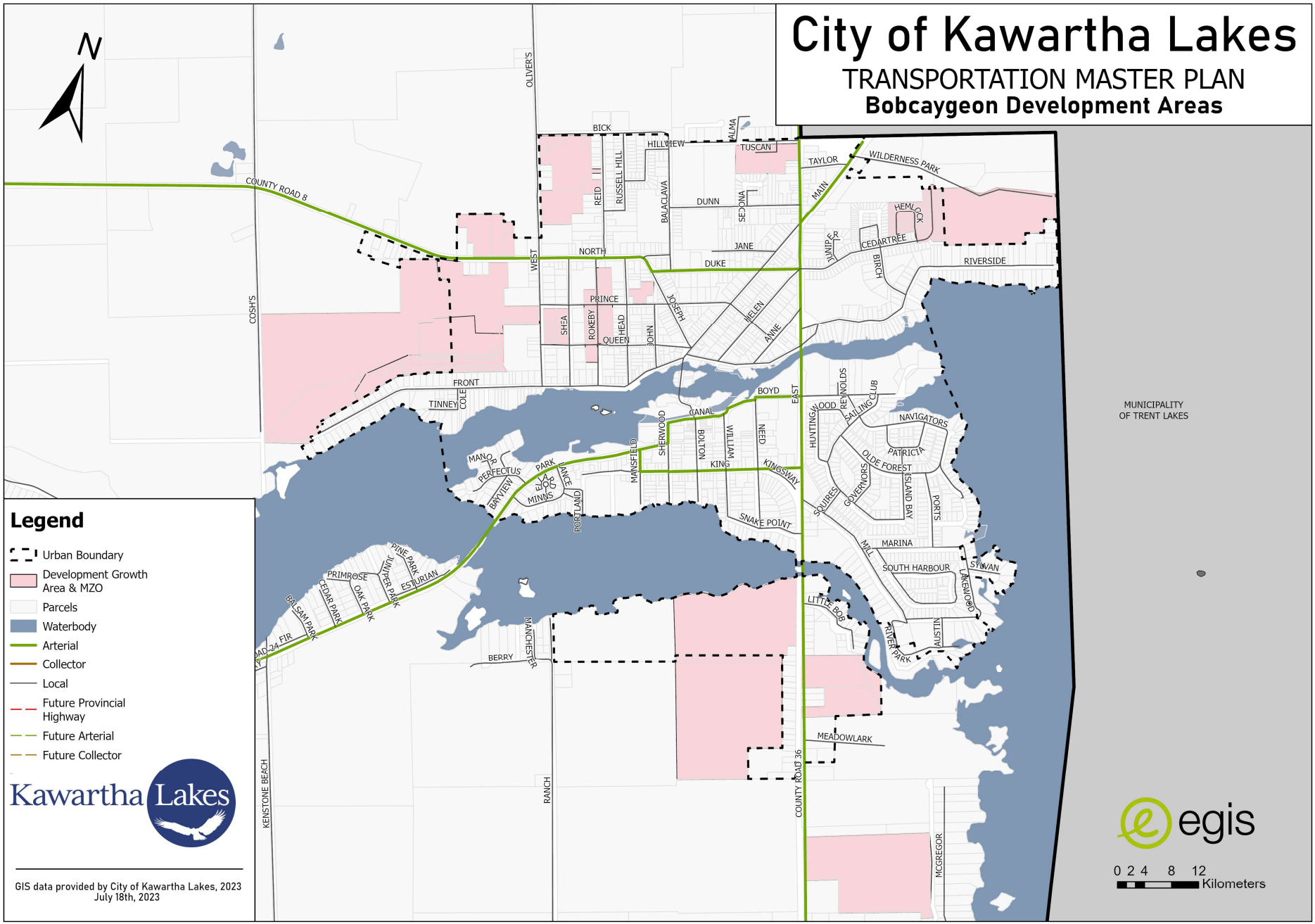
Growth Areas/Future Development/MZO



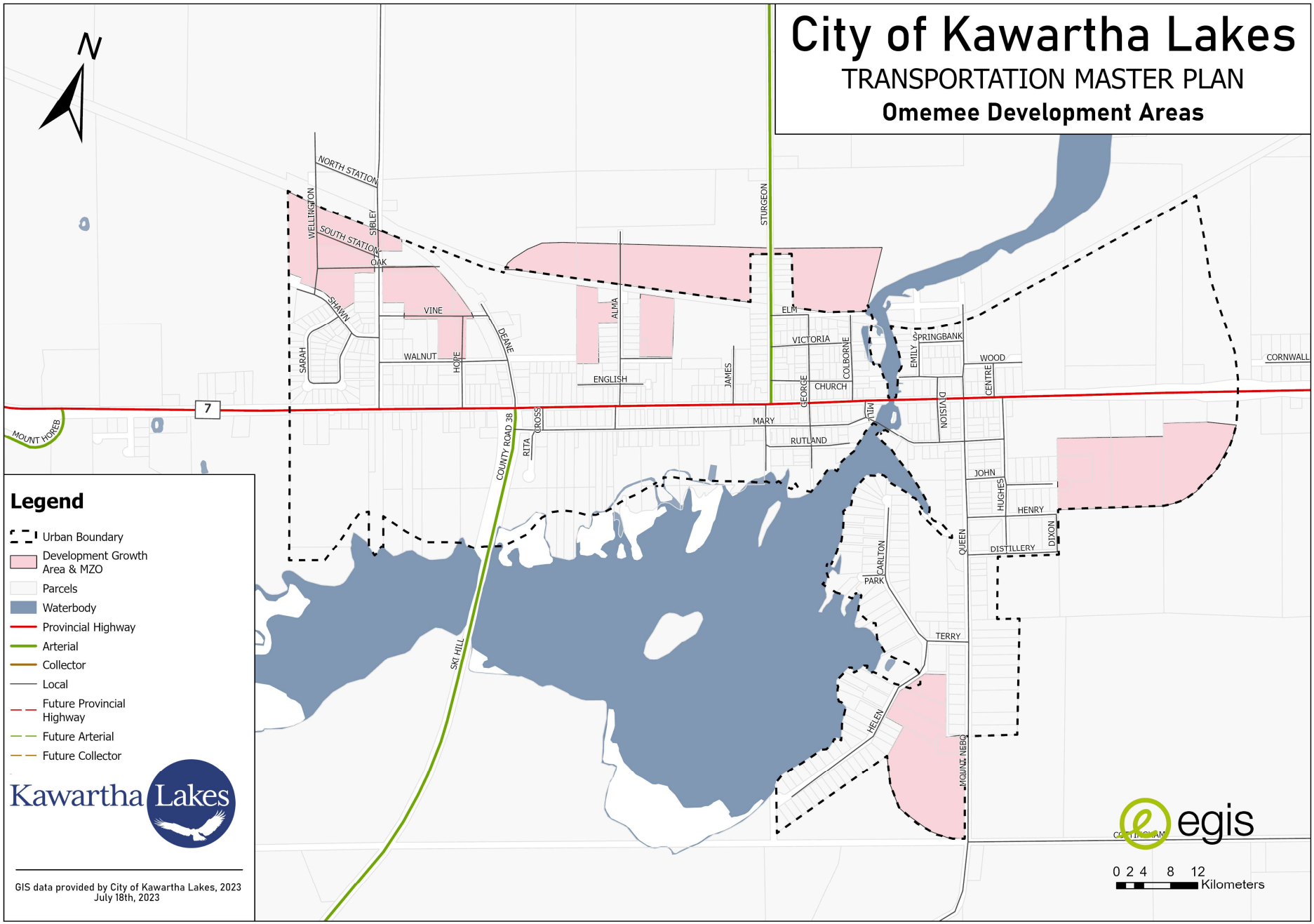
Growth Areas/Future Development/MZO



Growth Areas/Future Development/MZO Lands



Growth Areas/Future Development/MZO Lands



Level of Service Findings for 2051

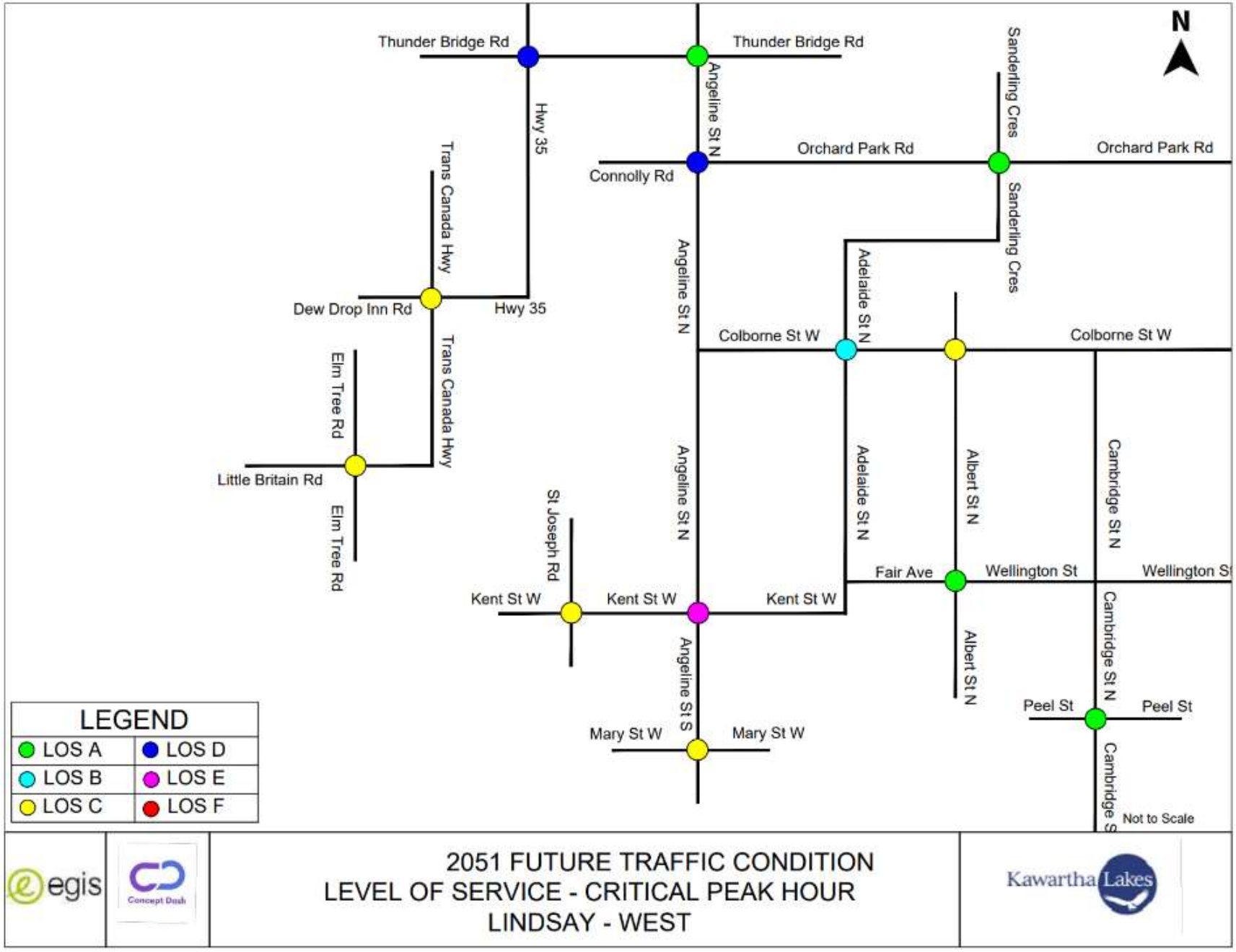
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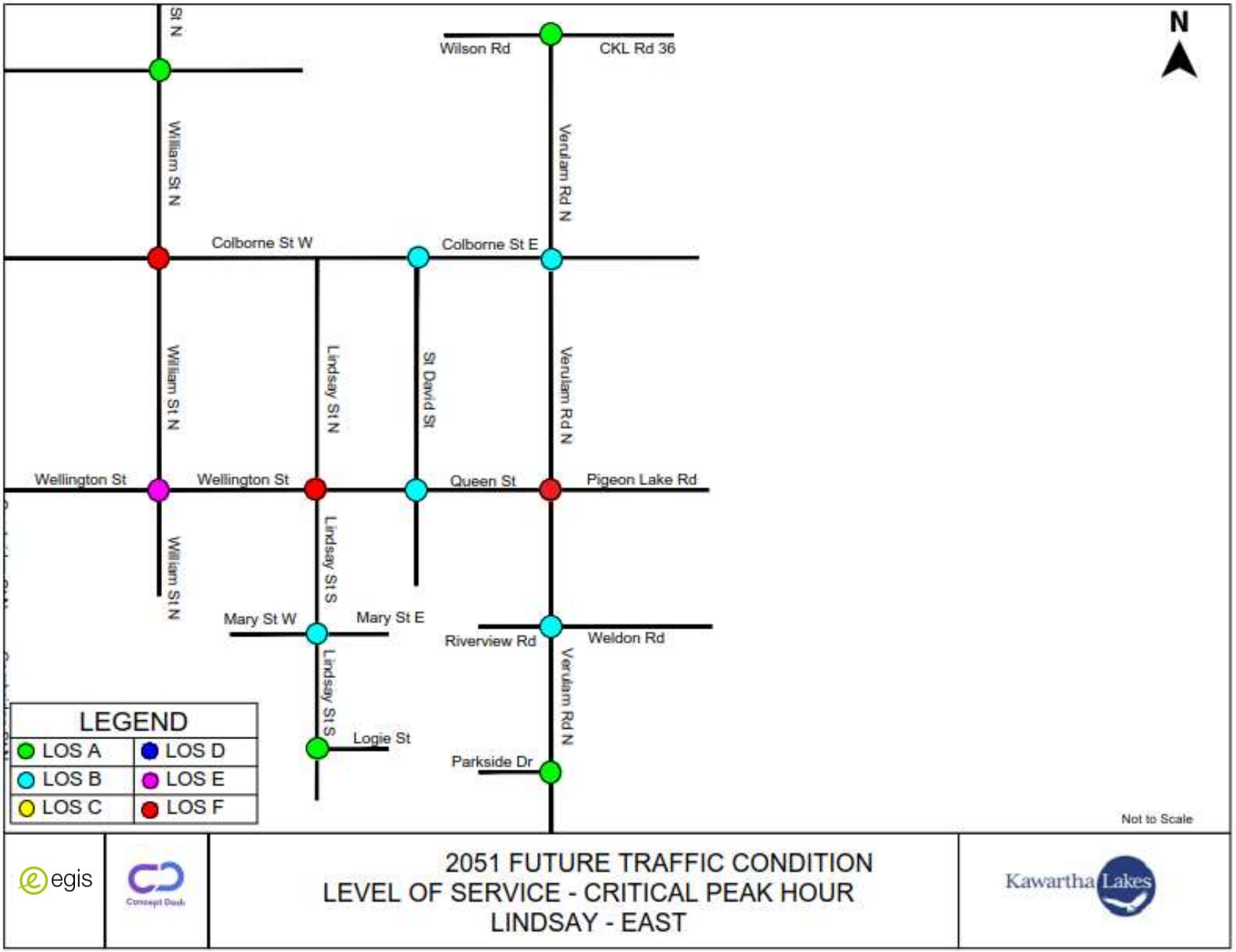


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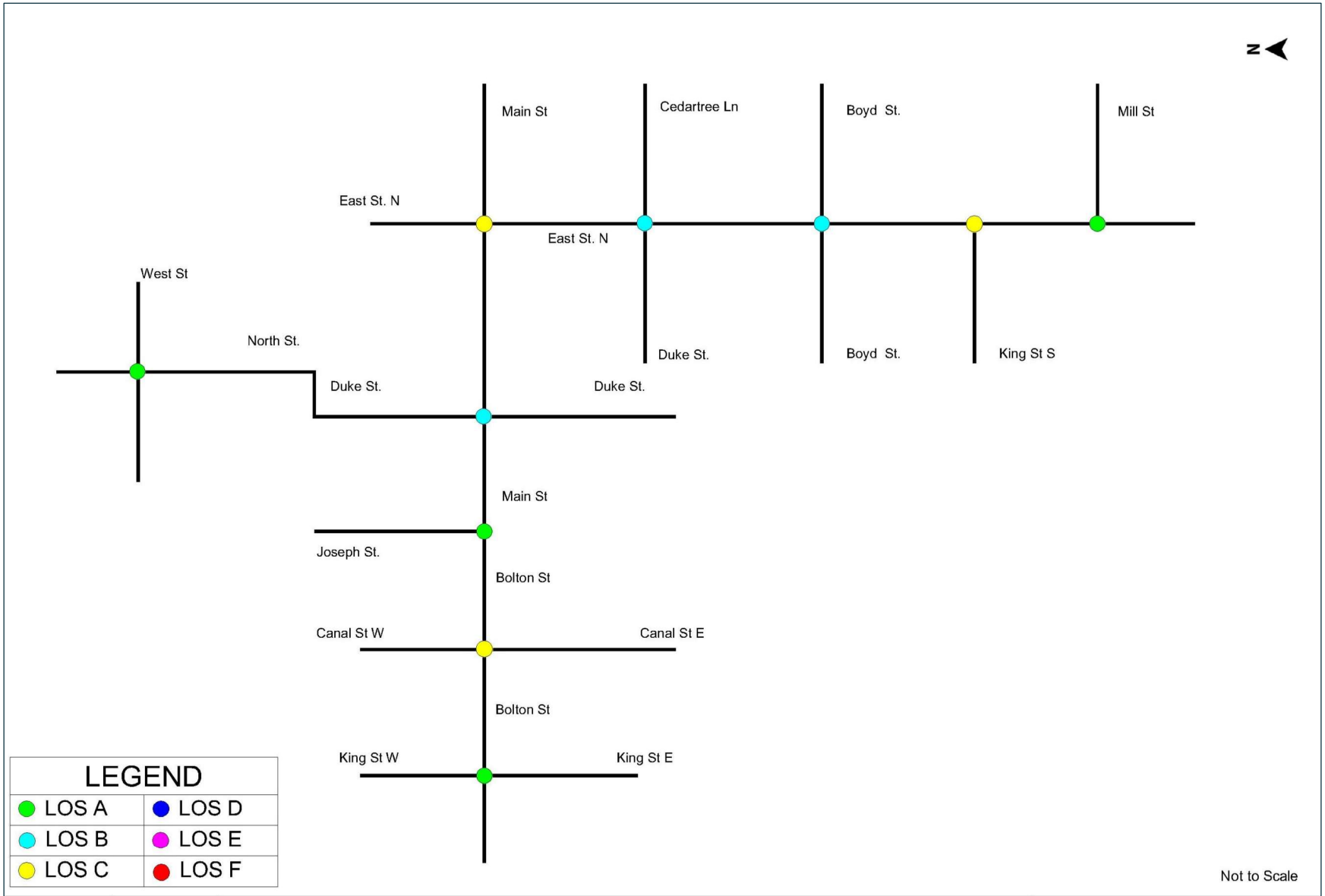
Level of Service Findings for 2051



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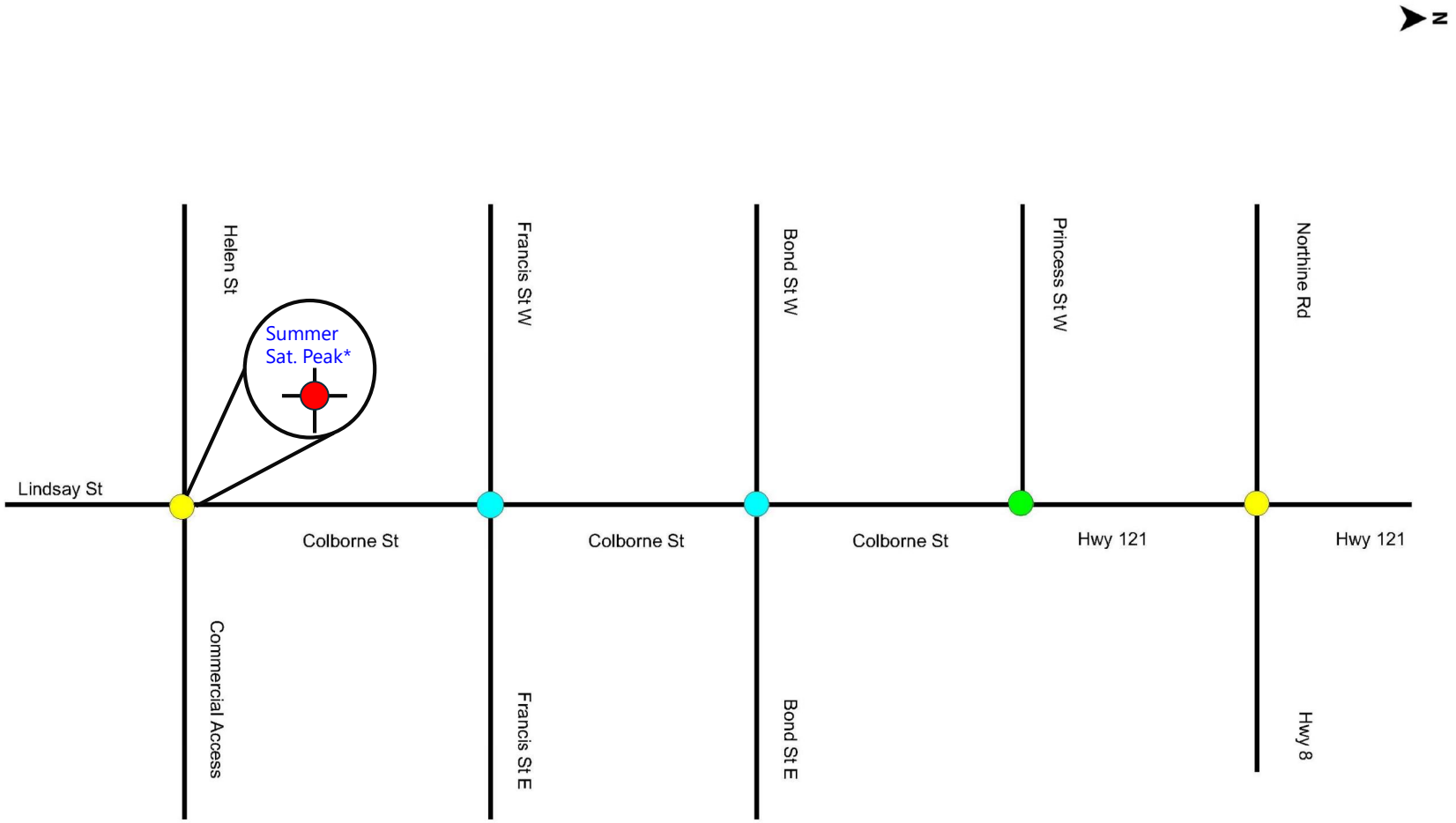


Level of Service Findings for 2051



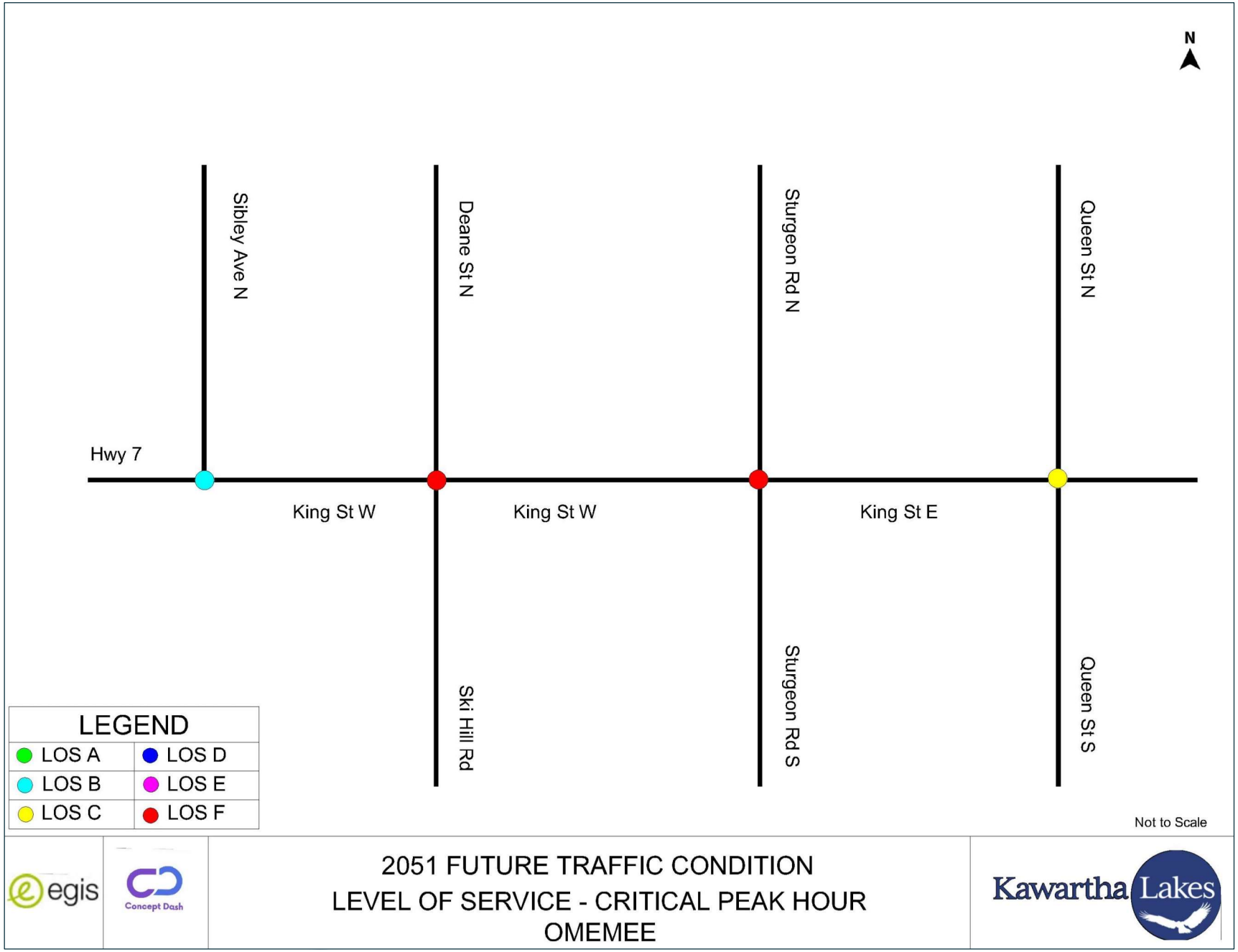
2051 FUTURE TRAFFIC CONDITIONS
LEVEL OF SERVICE - CRITICAL PEAK HOUR
BOBCAYGEON

Level of Service Findings for 2051



2051 FUTURE TRAFFIC CONDITION
LEVEL OF SERVICE - CRITICAL PEAK HOUR
FENELON FALLS

Level of Service Findings for 2051



Vision Zero Strategies to Improve Transportation

Vision Zero Policy

The ultimate goal of Vision Zero is to eliminate deaths or serious injuries on roads. Vision Zero is part of Canada's Road Safety Strategy 2025 and the Ministry of Transportation of Ontario Vision. Vision Zero aims to ensure that all individuals can travel safely, fostering a culture of responsibility and encouraging active transportation. The policies identified below tie into the Vision Zero framework by addressing different aspects of road safety. These policies collectively support Vision Zero by improving infrastructure, traffic management, and road safety.

By integrating these policies, Vision Zero seeks to create a safer, more efficient transportation system. Each policy targets specific areas of risk and provides tailored solutions to mitigate those risks, making it easier for communities to move safely, whether by foot, bike, or car. Through continuous evaluation and collaboration, Vision Zero strives to achieve its ultimate goal: zero fatalities and serious injuries on our roads.





Key Policies:

1. **The Goods Movement Policy** focuses on optimizing the movement of goods by identifying key corridors, assessing infrastructure needs, and promoting multimodal solutions.
2. **The All-Way Stop Warrant Policy** aims to enhance intersection safety by determining the appropriateness of all-way stop controls based on established criteria.
3. **Reduced speed limit** signs should be considered where lower limits are warranted based on surrounding land use and local context. The policy aims to enhance roadway safety by establishing appropriate speed limits that reflect these factors.
4. **Traffic calming** refers to design strategies aimed at reducing vehicle speeds and enhancing safety for pedestrians and cyclists, contributing to vibrant and safe communities.

Alternative Solutions

Alternative strategies were reviewed, and the **Multi-Modal Network Strategy** was identified as the preferred alternative

1. Transportation

a. Moves people and goods efficiently and safely
b. Provides efficient connections within the City's settlement areas
c. Improves connections to/from surrounding municipalities
d. Enhances Active transportation facilities
e. Provides a diversity of travel choices, including walking, cycling, and transit through the design of complete streets
f. Providing multiple transportation modes can alleviate traffic congestion by encouraging shifts away from single-occupancy vehicle use.
g. A multi-modal approach often emphasizes safety features, reducing conflicts between different types of road users and enhancing overall safety

2. Policy

a. Supports provincial policies and supports City of Kawartha Lakes Planning policies
b. Supports the City's Strategic and Official Plan

3. Economic Feasibility

a. Minimizes capital costs and minimizes maintenance and operating costs

4. Environmental

a. Minimizes impacts to the natural environment
b. Network encourages low-emission transportation modes

5. Socio-Economic Environmental

a. Supports existing and future population areas
b. Provides opportunities for planned growth
c. Reduced Carbon Footprint by promoting active transportation and public transit

Alternative 1: Do Nothing
Maintain the current City's transportation network and policy/programming. This alternative would not include further development of roads under the jurisdiction of the City but all City improvements would proceed as planned.

Alternative 2: Status Quo
The City would continue infrastructure development and expansion at its current pace with new or refined policies/programming. New infrastructure development would continue to be based on recommendations within previous TMP and have incremental enhancements in response to local development.

Alternative 3: Road Network Strategy
The City would focus investment on local traffic operation improvements, ensuring to close gaps in the road network, and improve safety through traffic calming measures, and identifying haul routes. Roads would prioritize active transportation facilities such as sidewalks and multi-use pathways. No additional policies/programming would be provided for sustainable travel modes.

Alternative 4: Multi-Modal Network Strategy (PREFERED ALTERNATIVE)
Focus is placed on strategic road network capacity improvements, promoting and enhancing the active transportation network, transit opportunities, and Transportation Demand Management (TDM) strategies. Takes a multi-modal approach, which includes a balance of traditional road network improvements and sustainable modes through policy and investment.



Image source: flaticon.com

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Network Improvements Summary - Lindsay

Intersection Improvements

- Completed
- Ongoing
- Update
- Area of Interest
- MTO Improvements

Corridor Improvements

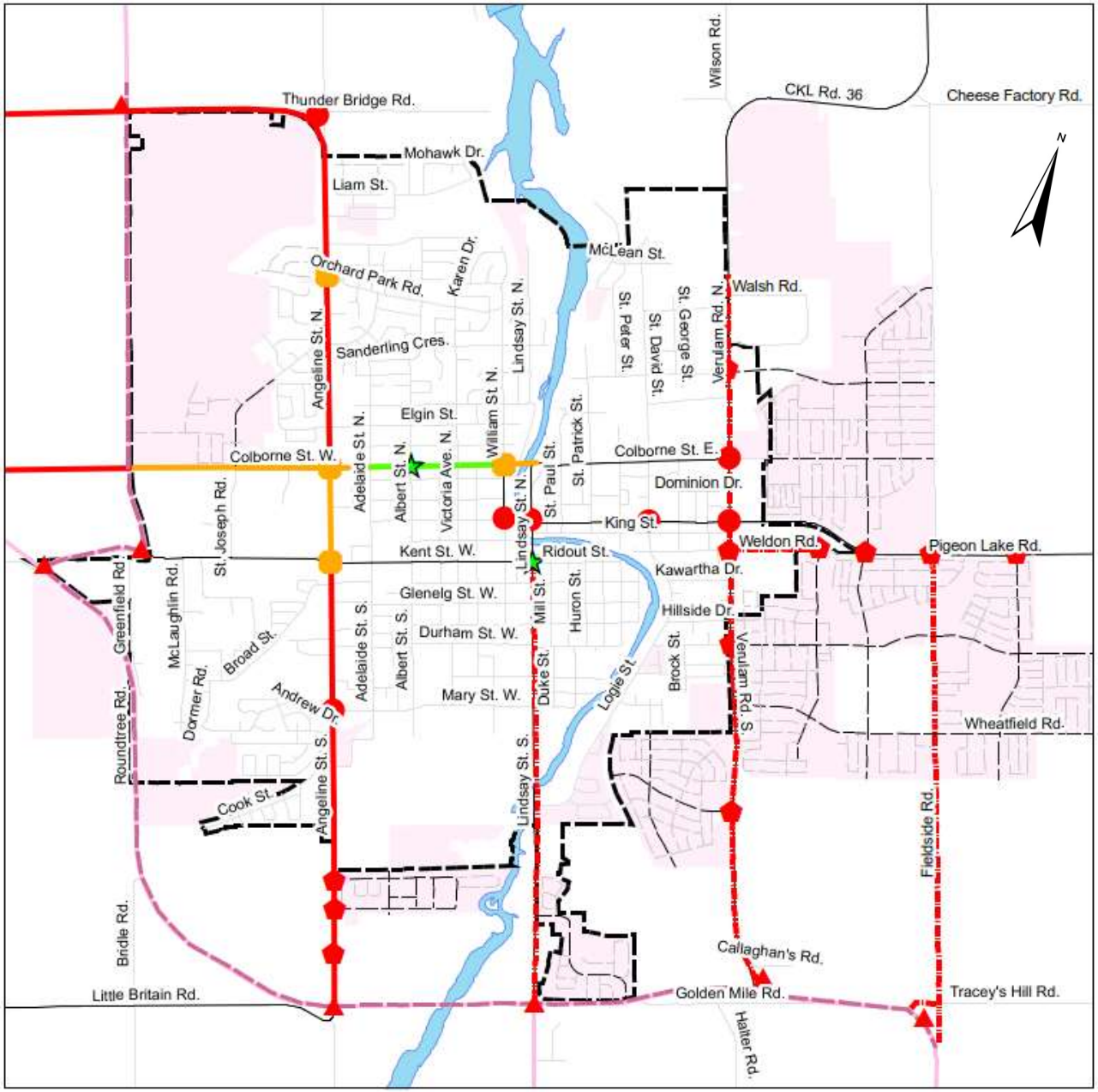
- Completed
- Ongoing
- Update
- Area of Interest
- MTO Improvements
- Urban_Boundary
- Developmment, Growth Area ,or MZO Lands

Future Roads

- Arterial/Collector
- Local

Existing Roads

- Provincial Highway
- Arterial Roads
- Local/Collector



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Network Improvements Summary - Bobcaygeon

Intersection Improvements

- Completed
- Ongoing
- Update
- Area of Interest
- MTO Improvements

Corridor Improvements

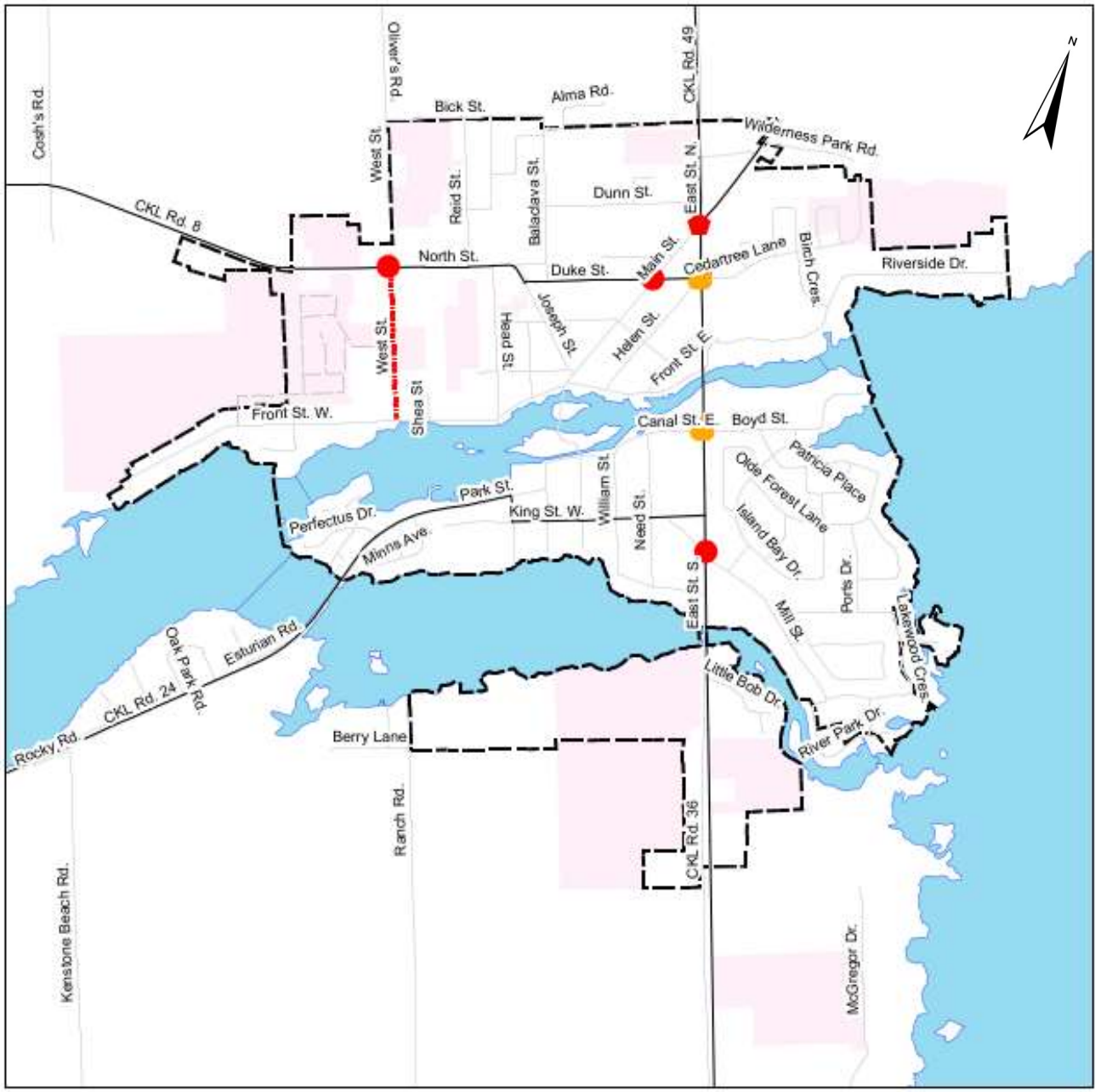
- Completed
- Ongoing
- Update
- Area of Interest
- MTO Improvements
- Urban_Boundary
- Development, Growth Area ,or MZO Lands

Future Roads

- Arterial/Collector
- Local

Existing Roads

- Provincial Highway
- Arterial Roads
- Local/Collector



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Network Improvements Summary – Fenelon Falls

Intersection Improvements

- Completed
- Ongoing
- Update
- Area of Interest
- MTO Improvements

Corridor Improvements

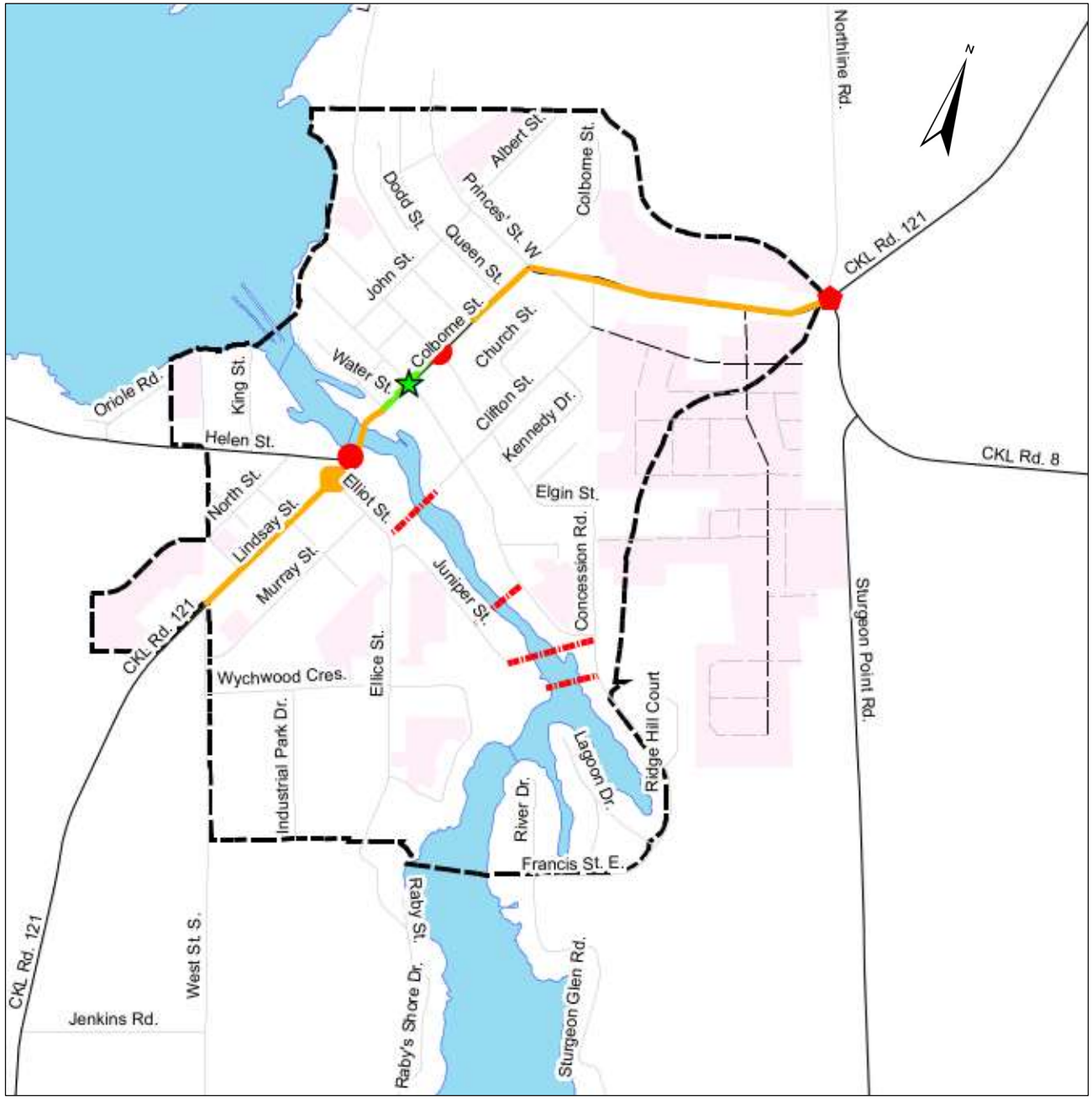
- Completed
- Ongoing
- Update
- Area of Interest
- MTO Improvements
- Urban_Boundary
- Developmment, Growth Area ,or MZO Lands

Future Roads

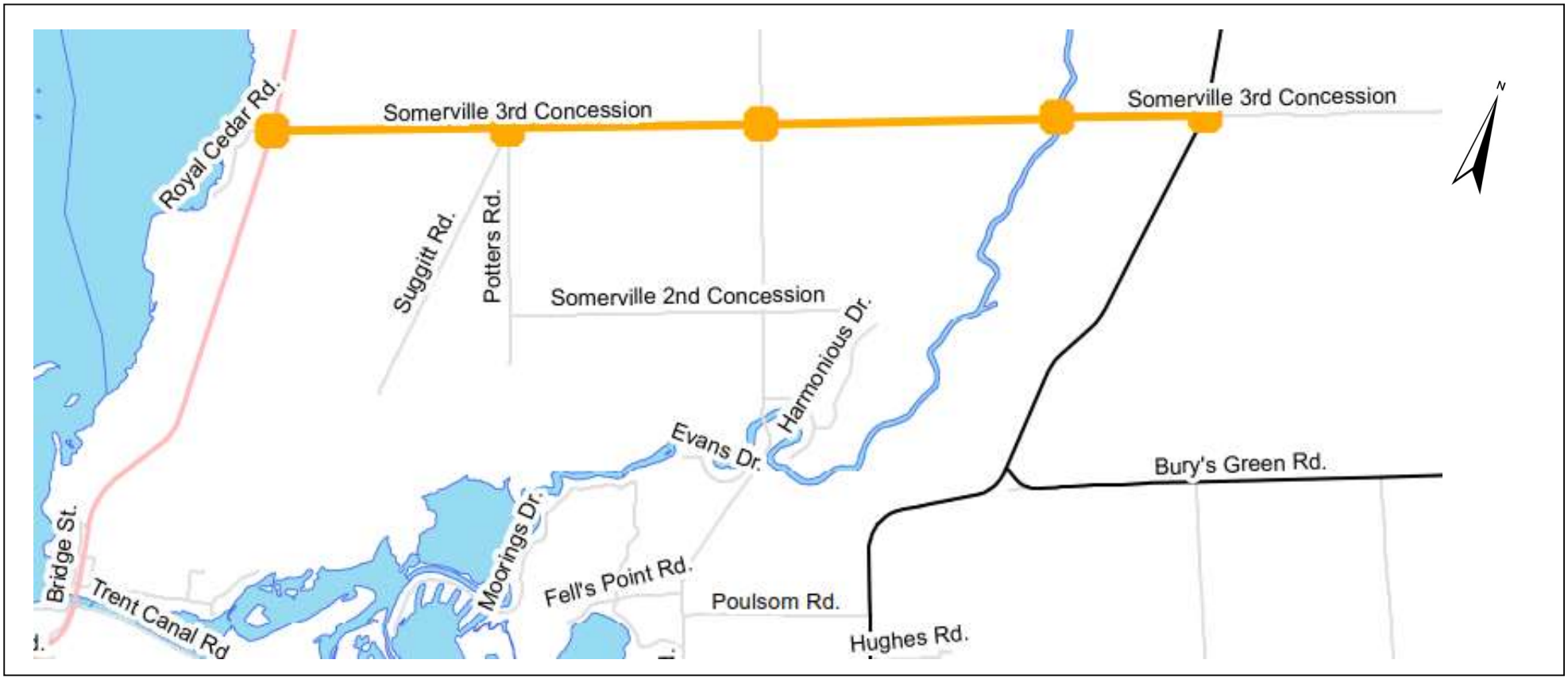
- Arterial/Collector
- Local

Existing Roads

- Provincial Highway
- Arterial Roads
- Local/Collector



Network Improvements Summary – Fenelon Falls



Corridor Improvements
- Completed
- Ongoing
- Update
- Area of Interest
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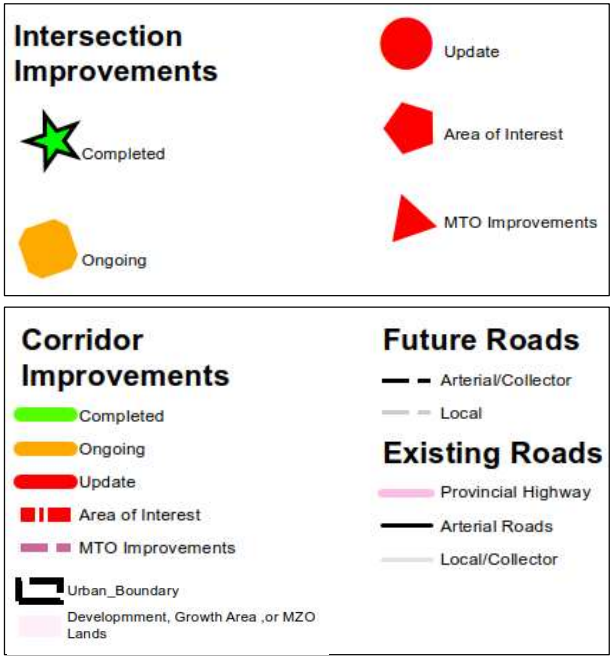
Future Roads
- Arterial/Collector
- Local

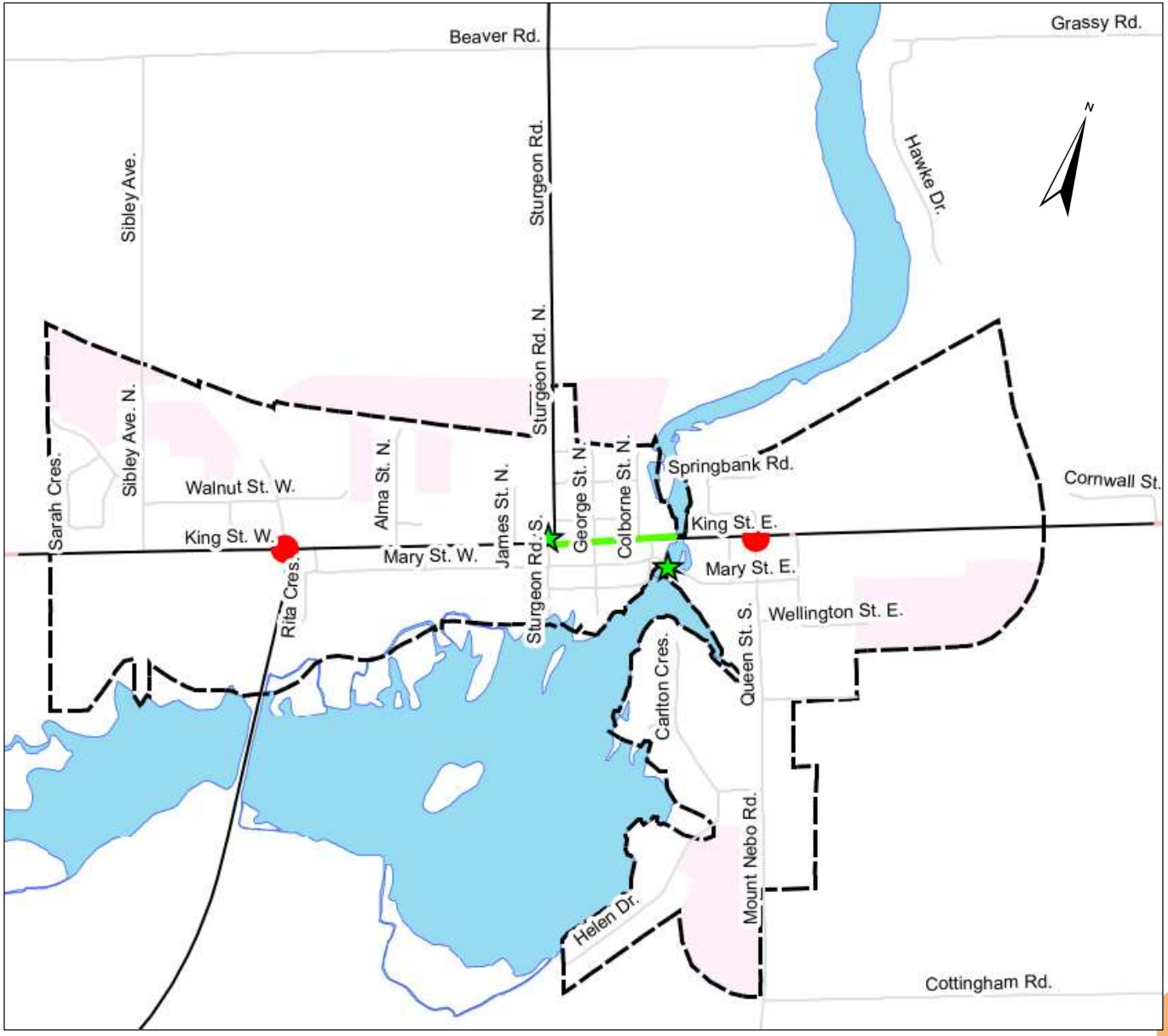
Existing Roads
- Provincial Highway
- Arterial Roads
- Local/Collector

Intersection Improvements
- Completed
- Ongoing
- Update
- Area of Interest
- MTO Improvements

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Network Improvements Summary - Omemee

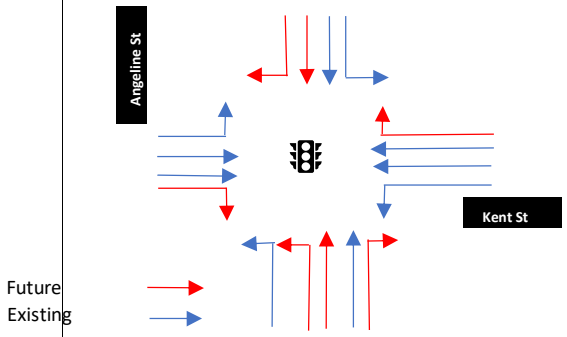




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Implementation Plan and Cost*

**Sample of future Improvements*

Implementation Plan			
	Improvement Areas	**New Recommendations**	**Estimated Capital Costs**
Short Term Improvements			
Lindsay	Angeline Street at Kent Street		$1,848,700.00
Bobcaygeon	East Street at Cedartree Lane/Duke Street/Helen St	Intersection Upgrade - Implementation of Signalization proposed by 2025	$700,000.00
	East Street and Boyd Street/ Canal Street	Intersection Upgrade - Implementation of Signalization proposed by 2025	$500,000.00
Fenelon Falls	Fenelon River Crossing	**By-pass:** Option has been brought forward. EA assessment for crossing has been endorsed by council with study assessment to commence in 2025.	$1,400,000

Note: Full detail of all horizon improvements to be provided in TMP



Implementation Plan and Cost*

**Sample of future Improvements*

Implementation Plan			
	Improvement Areas	**New Recommendations**	**Estimated Capital Costs**
Lindsay	Colborne Street and William Street	Recommend addition of WBL & NBL turn lane. (City planned to add signal and new bridge construction by 2025).	$16.8 Million (On-going)
	Scugog River Crossing	No additional improvements proposed.	
Long Term Improvements			
Lindsay	Colborne Street from Highway 35 to Albert Street	No additional changes. Colborne Study Underway	*On-going*
	Wellington Street at William Street N	Recommend addition of WBR	$265,000.00
Fenelon Falls	Fenelon River Crossing	**In-Town Crossing:** Crossing recommended for implementation for medium to long term period.	$15-20 million [1]
Bobcaygeon	Duke St and East Street Intersection	Implementation of dedicated EBR beyond 2051	$265,000.00
	East St N and Main St	All-way stop operating at an acceptable LOS for long term conditions. Recommend detail intersection study to identify geometric intersection improvements*	$20,000
Omemee	King Street/Highway 7 at Queen Street	Signalization recommended beyond 2051.	$500,000.00
	King St & Sturgeon Rd	Recommend increase to PM cycle length to improve intersection operation	$3,500

[1] As identified in presentation for second crossing EA (Cost to be revised post covid)

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Network Recommendations

Road Network

- Implement a complete streets approach that ensures all users—pedestrians, cyclists, public transit, and vehicles—can navigate safely and comfortably. This includes the addition of sidewalks, bike lanes, and safe crossings in key areas.
- Conduct regular road safety audits and assessments to identify high-risk locations and implement targeted interventions based on data-driven analysis.
- Utilize data from traffic collisions and community feedback to inform the planning and design of transportation infrastructure, ensuring alignment with best practices for road safety.



Active Transportation Network

- Develop and expand dedicated cycling paths and pedestrian walkways to promote walking and biking, connecting neighborhoods and community facilities, and enhancing overall mobility.
- First and last mile considerations (i.e. connections to transit)



Transit Network

- Implementation of Frequent Transit Network Corridors (15-min or better service) to support connections to Transit Priority Corridors and neighboring transit services
- Expanding on-demand and local routes to accommodate a greater service area/population
- Enhancing service for key growth areas
- Implementation of rideshare initiatives
- Partnerships with other transit agencies such as Metrolink



Image source: flaticon.com



Next Steps

1. Finalise Project File Report

- To Council with a final report for endorsement in 2025 – Q1

2. Notice of Completion

- Stakeholders to be notified that TMP process has been completed

3. 30 – Day Project File Review

- Opportunity for stakeholders to review the project file and ask questions

4. Implementation

- Move forward with implementation for short term recommendations.
- Additional studies to be implemented to be identified