





WELCOME

City of Oshawa

Stevenson Road North Environmental Assessment From Taunton Road West to Conlin Road West

YOUR FEEDBACK IS IMPORTANT

How to stay informed and provide input to the study:



Fill out a comment form and return to the Project Team by noon on July 6, 2023



Join the study mailing list by emailing the Project Team at pbodjona@oshawa.ca to receive future study notices



Visit online at Oshawa.ca/StevensonEA

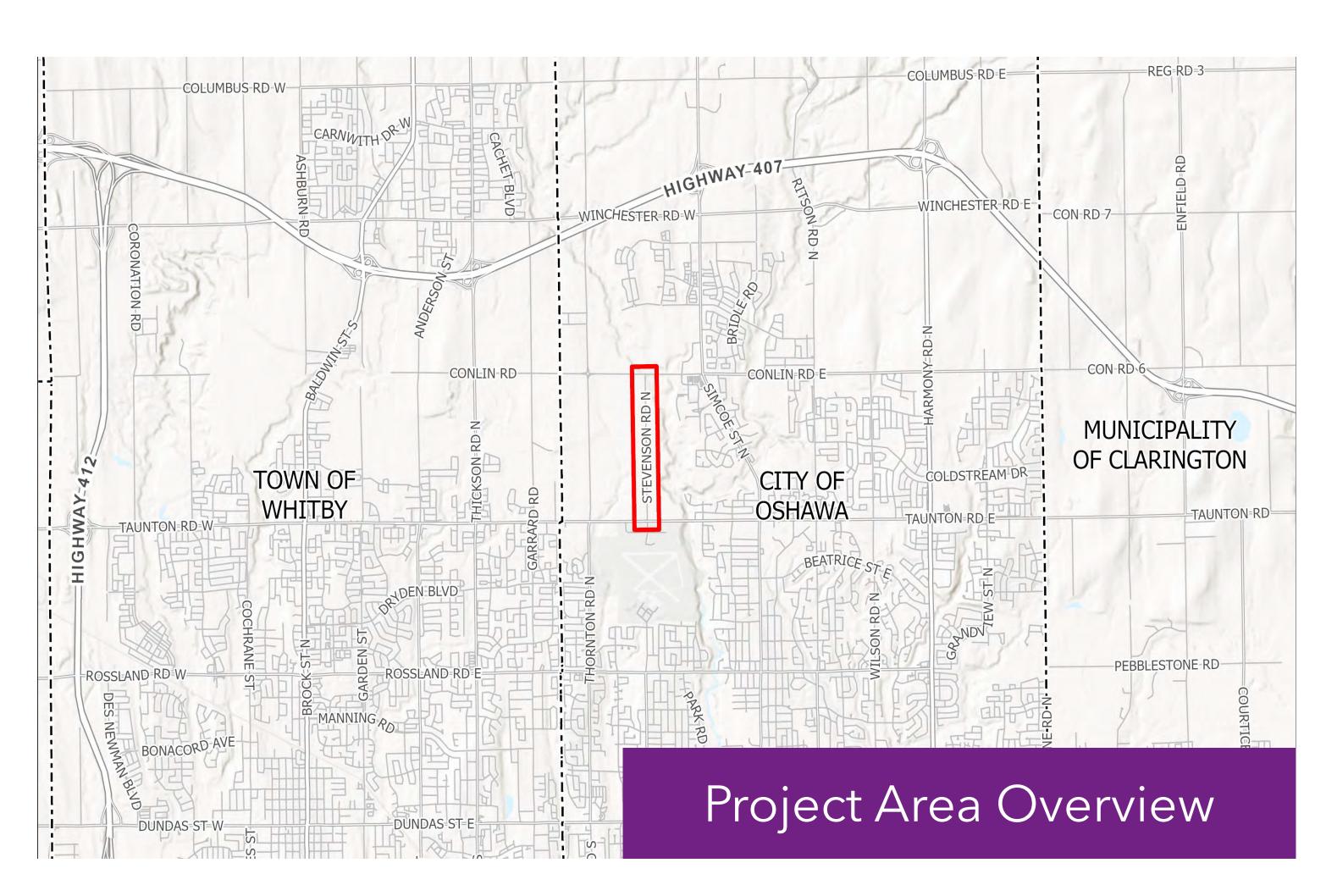


Contact the study team throughout the study to provide your feedback



PURPOSE OF THE OPEN HOUSE

The City of Oshawa is undertaking a Schedule 'C' Municipal Class Environmental Assessment Study (MCEA) for improvements to the Stevenson Road North Corridor, from Taunton Road West to Conlin Road West.

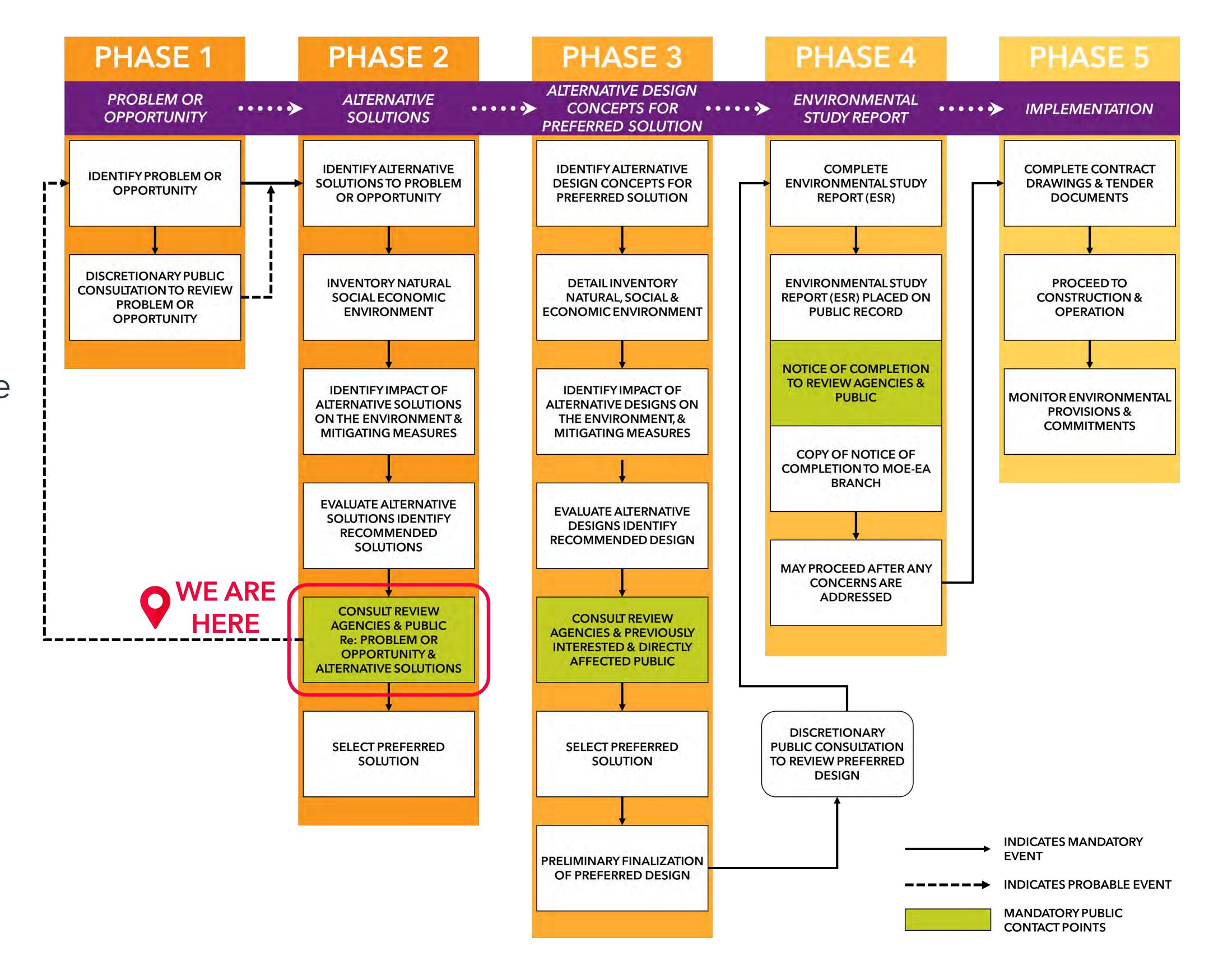




The purpose of this Open House is to provide study context and baseline conditions, present the Problem and Opportunity Statement, and to present and prompt input on the Alternative Solutions designed to address the Problem/Opportunity.

MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT PLANNING PROCESS

- Environmental Assessment (EA) is a planning and decisionmaking tool, legislated by the Ontario Environmental Assessment Act.
- EAs identify, predict and evaluate the potential environmental effects of a project before decisions are made.
- The Municipal Class EA process is broken down into phases with opportunities for public involvement throughout the process.







PLANNING & POLICY CONTEXT

- EAs support better decision-making by considering how a project's design could be optimized to minimize or outright avoid negative effects on the environment.
- The project is examined at different scales and through the lens of established municipal, regional and provincial planning contexts. For the improvements to Stevenson Road North, the following planning documents and frameworks were considered:



Provincial Planning Policy Context

- Provincial Policy Statement (2020)
- Growth Plan for the Greater Golden Horseshoe (2020)
- Connecting the GGH: A Transportation Plan for the Greater Golden Horseshoe (2022)
- Greenbelt Plan (2017)



Regional Planning Context

- Durham Region Official Plan (2023)
- Durham Transportation Master Plan (2017)
- Durham Regional Cycling Plan (2021)



Municipal Planning Context

- City of Oshawa Official Plan (2022)
- City of Oshawa Integrated Transportation Master Plan (2015)
- City of Oshawa Active Transportation Master Plan (2015)





EXISTING SITE CONDITIONS



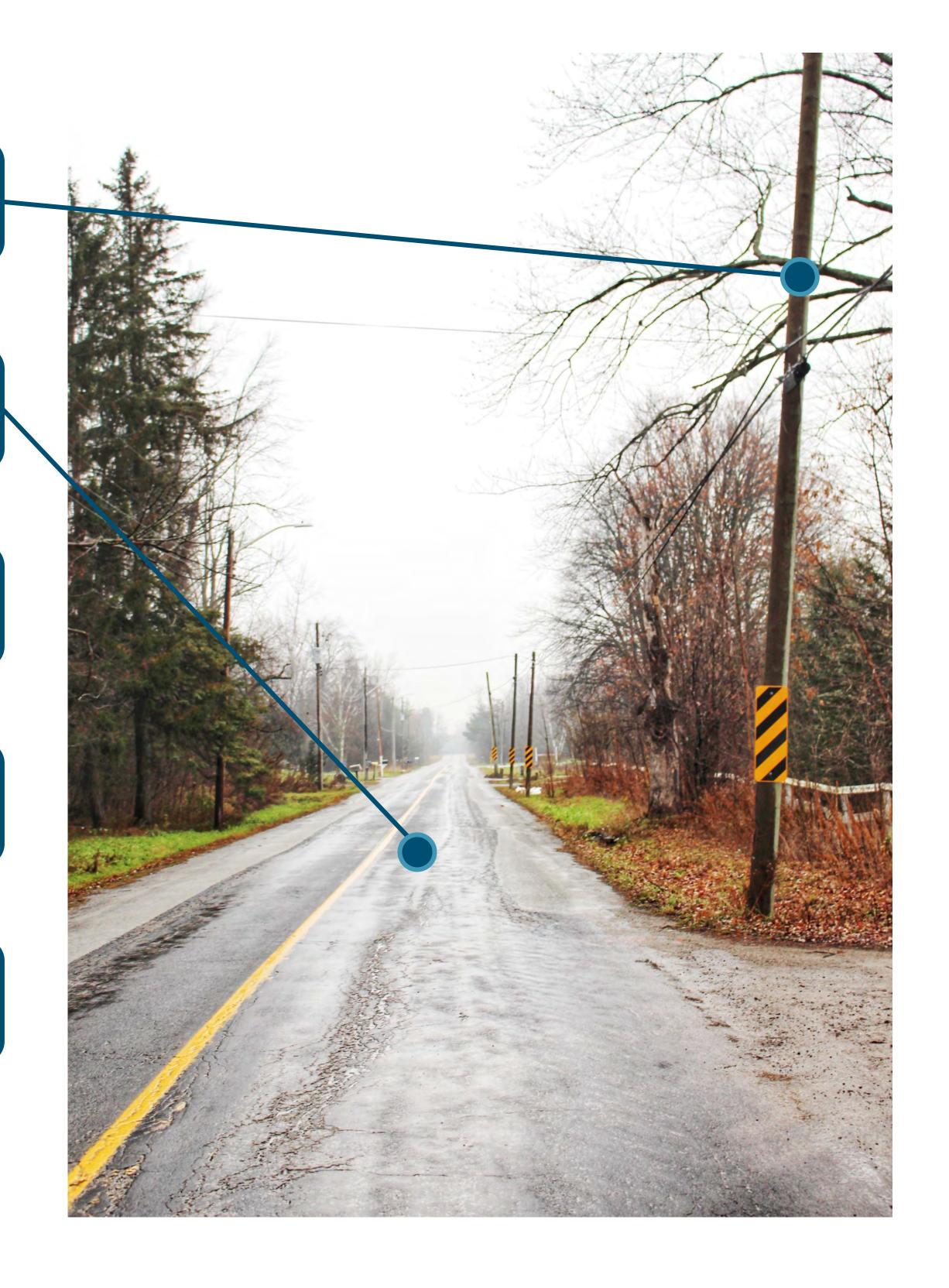
Existing: Utility Poles Close to Road Opportunity: Raised Boulevards

Existing: Cracked/Uneven Pavement Opportunity: Pavement Renewal

Existing: Roadway Sightline Issues Opportunity: Road Geometry Modifications

Existing: Unpaved Roadway Shoulders Opportunity: Sidewalks and Curbs

Existing: Drainage Ditches Opportunity: Municipal Stormwater System





EXISTING CONDITIONS - LAND USE & SOCIO-ECONOMIC

Oshawa's population in 2021 was 175,383 - a 10% increase since 2016 - and is expected to reach ~197,000 by 2031.

Oshawa Executive Airport

The Oshawa Executive Airport is located south of the study area. Per Oshawa's Official Plan, the airport shall remain operational until at least 2033.



Existing land uses along Stevenson Road North are a mix of farm, residential, industrial, commercial and vacant properties with access on Stevenson Road North.



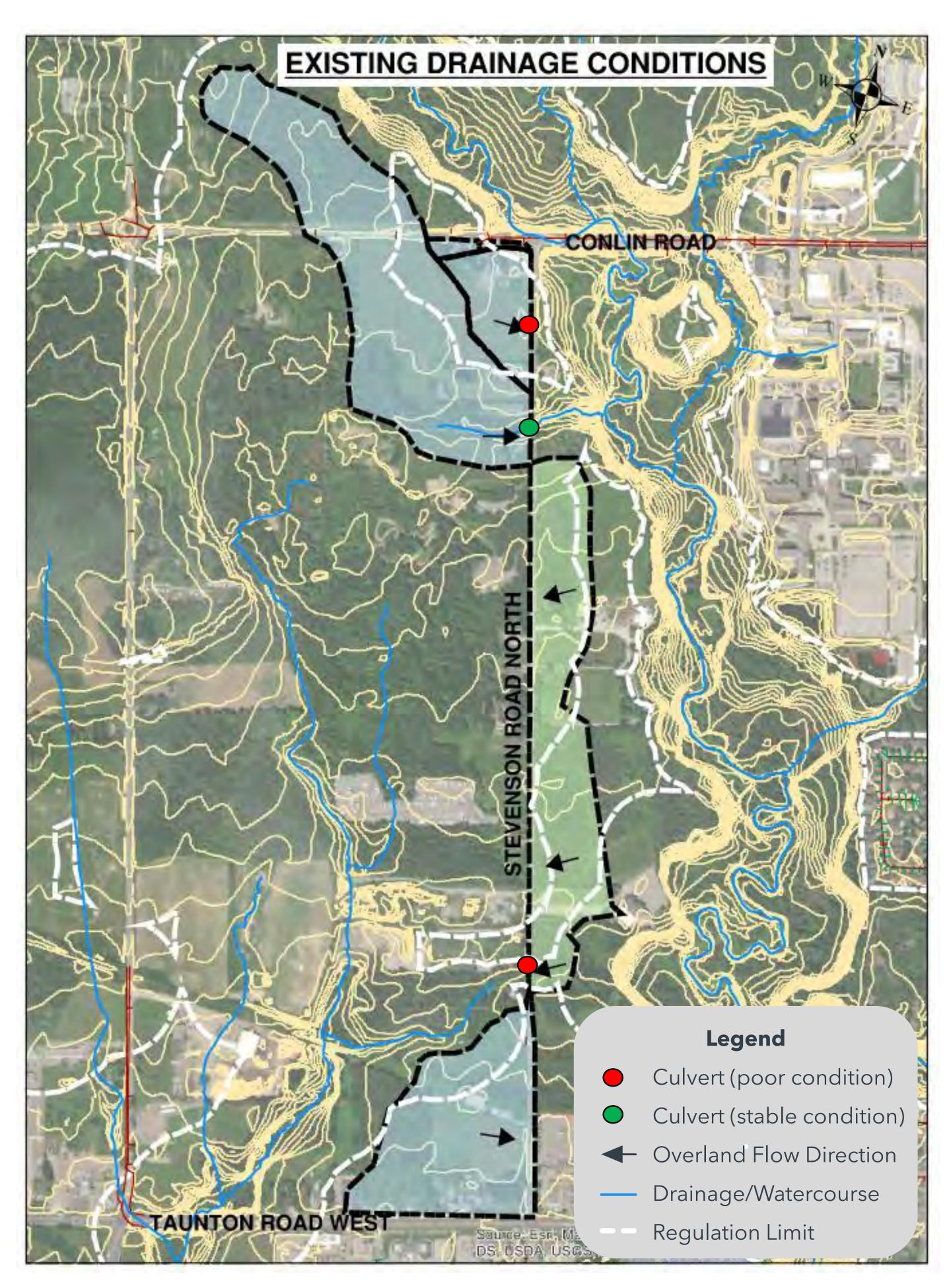
The study corridor is located within the Northwood Business Park's (NBP) policy boundary. Recent infrastructure improvements within the NBP are anticipated to increase future development.

Potential future extension of Stevenson Road North may be undertaken pending City consideration that it is appropriate to redevelop airport lands for alternative land uses.



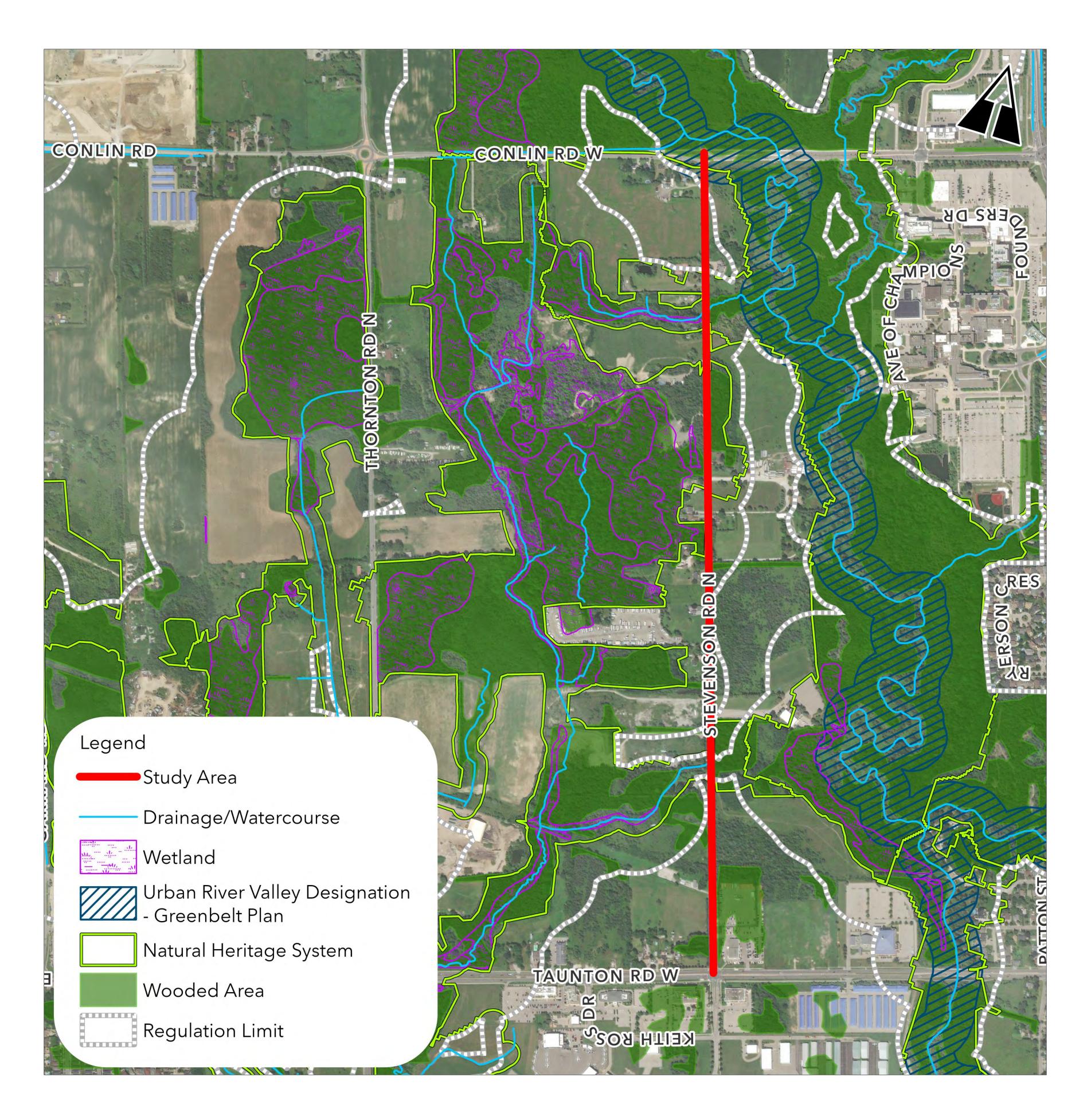
EXISTING CONDITIONS - STORMWATER

- Stevenson Road North receives external drainage from Oshawa Creek (green) and Goodman Creek (blue).
- Roadway drainage through rural ditching to three (3) centreline culverts.
 - Two (2) of three (3) centreline culverts are in poor condition.
 - North culvert is outside the regulation limit and two culverts to the south are within the regulation limit
- Drainage and stormwater management (SWM) design is following the City of Oshawa/CLOCA design criteria and will be informed by the Northwood Business Park Master SWM Plan (August 2016).
 - Recognize the flood control, water budget, water quality, and erosion control targets from the Master SWM Plan.
 - Ongoing assessment of Low Impact Development and SWM controls required to meet targets based on the road design.





EXISTING CONDITIONS - NATURAL ENVIRONMENT



- Site visits have been conducted to assess existing conditions related to aquatic and terrestrial ecosystems within the study area.
- Vegetation communities within the study area are widespread and common in Ontario.
- This project is not anticipated to negatively impact protected species or species at risk.
- The study area crosses the Greenbelt Plan 'Urban River Valley' at the intersection of Stevenson Road North and Conlin Road West.
- A portion of the Whitby-Oshawa Iroquois Beach Provincially Significant Wetland is immediately adjacent to the Stevenson Road North right-of-way.

EXISTING CONDITIONS - CULTURAL HERITAGE

Based on the results of the background research and field review, six (6) properties of potential cultural heritage value or interest were identified within the Study Area:

- 580 Taunton Road West (Residence - BHR)
- 1520 Stevenson Road North (Residence - BHR)
- 1680 Stevenson Road North (Rural Residential - CHL)



- 1725 Stevenson Road North (Rural Residential - CHL)
- 2000 Stevenson Road North (Farmscape - CHL)
- 50 Conlin Road West (University Campus - CHL)



Built Heritage Resource (BHR): a building, structure or monument that contributes to a property's cultural heritage value or interest as identified by a community, including an Indigenous community.

Cultural Heritage Landscape (CHL): a defined geographical area identified as having cultural heritage value or interest by a community, including an Indigenous community. The area may include features such as buildings, structures, spaces, views, archaeological sites or natural elements that are valued together for their interrelationship, meaning or association.





EXISTING CONDITIONS - ARCHAEOLOGY

A Stage 1 Archaeological Assessment was conducted through visual inspection from the public right-of-way to gain first-hand knowledge of the geography, topography, and current conditions to evaluate and map archaeological potential within the Study Area.

Parts of the Study Area exhibit archaeological potential and require Stage 2 archaeological assessment by test pit and pedestrian survey. Stage 2 assessment is required prior to any proposed construction activities on these lands.

Recommendations:

The remainder of the Study Area does not retain archaeological potential on account of deep and extensive land disturbance, low and wet conditions, slopes in excess of 20 degrees, or have been previously assessed. These lands do not require further archaeological assessment.

Should the proposed work extend beyond the current Study Area, further archaeological assessment should be conducted to determine the archaeological potential of the surrounding lands.





EXISTING CONDITIONS - TRANSPORTATION

Traffic Level of Service (LOS) Legend

LOS A - Smooth flow, little to no delays

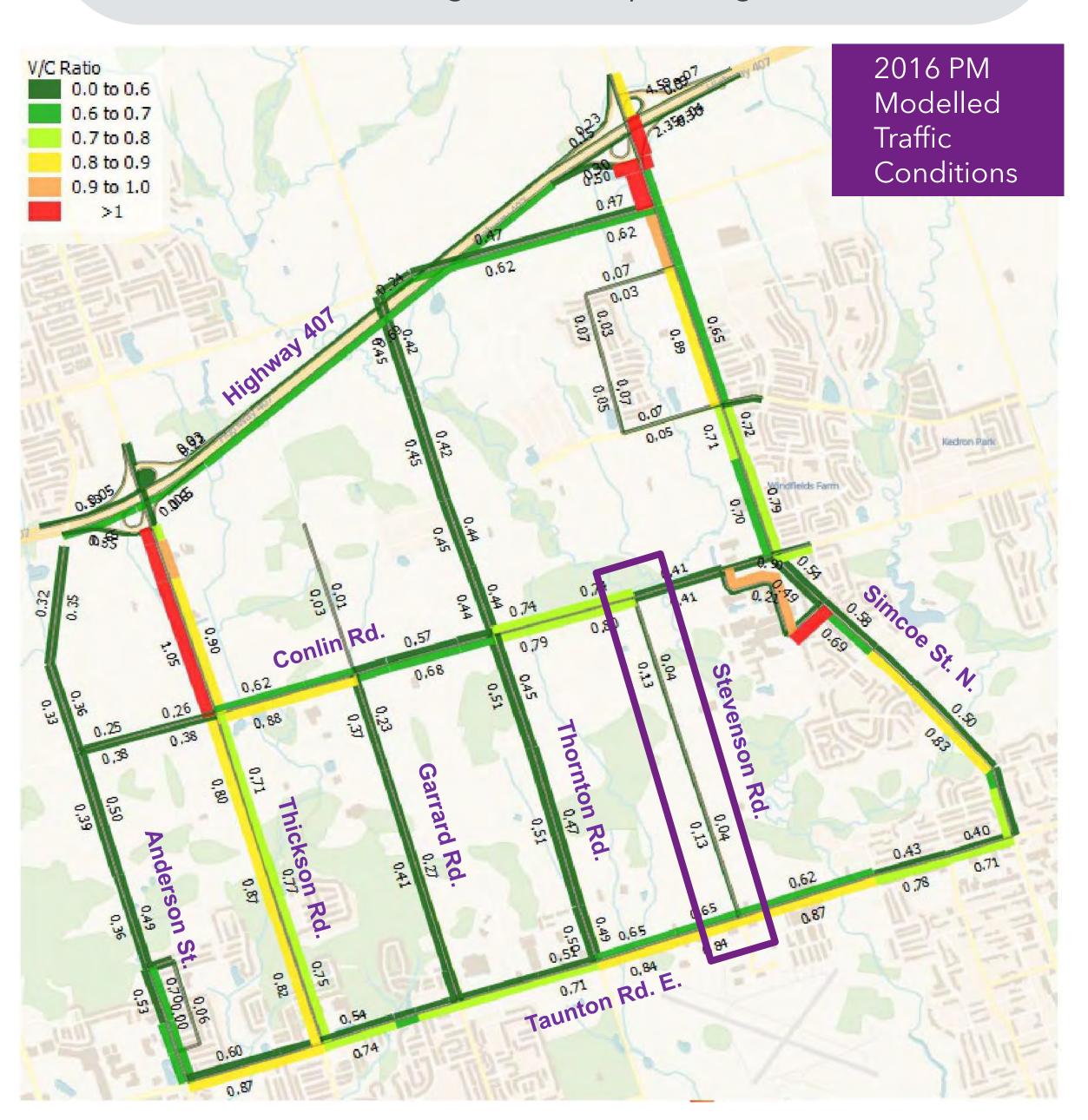
LOS B - Stable flow, little delays

LOS C - Stable flow, some delays

LOS D - Less stable flow, moderate delays

LOS E - Unstable flow, many delays

LOS F - Traffic congestion, stop-and-go conditions



Intersection	AM	PM
Taunton Road @ Thickson Road	D	D
Taunton Road @ Garrard Road	В	В
Taunton Road @ Thornton Road	В	C
Taunton Road @ Stevenson Road	A	В
Taunton Road @ Simcoe Street	D	D
Conlin Road @ Thickson Road	C	С
Conlin Road @ Thornton Road	A	A
Conlin Road @ Simcoe Street	С	C

- Most traffic on Stevenson Road is travelling to/from Ontario Tech University/Durham College, as it is the closest alternative route to Simcoe Street North via Taunton Road
- Surrounding roads are operating at acceptable levels, apart from movements coming on/off Highway 407, on roads south of Highway 407.
- Select turning movements on/off Taunton Road and Conlin Road are operating at higher-congested levels.
- 2016 AM-measured congestion levels are similar to 2016 PM, with reversed peak direction of travel.

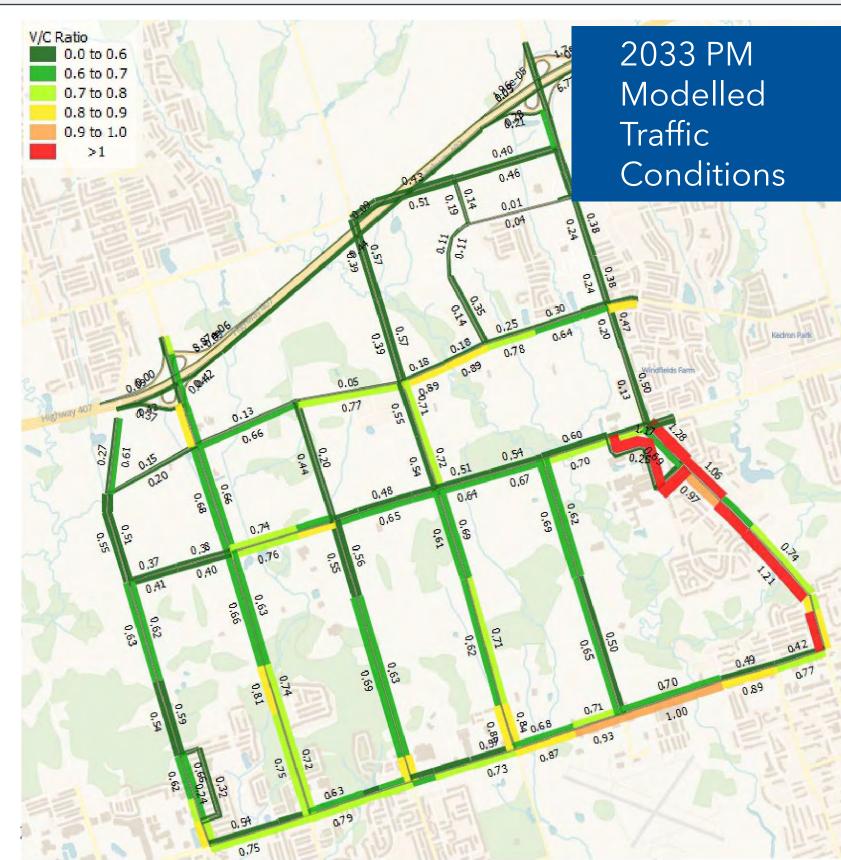


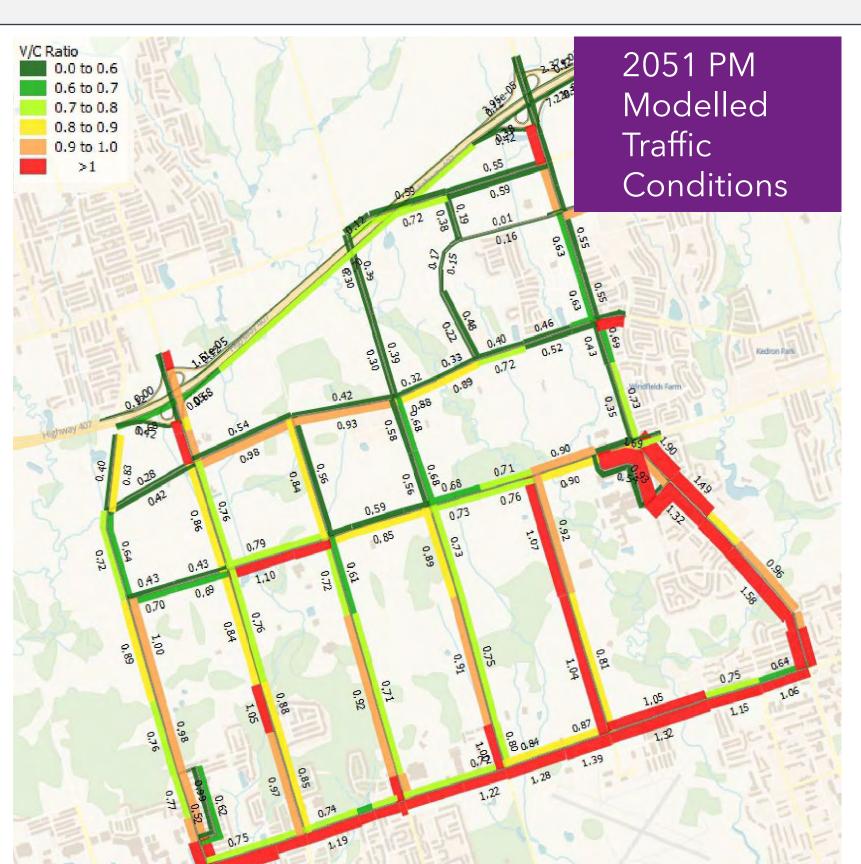
FUTURE CONDITIONS - TRANSPORTATION

	2033 Horizon Year	2051 Horizon Year
Proposed Future Network Assumptions	 Future Road Widenings (Four to Six Lane Configurations): 2026 - Thickson Rd (Taunton Rd to Hwy 407) After 2031 - Winchester Rd (Garrard Rd to Simcoe St) 2032 - Conlin Rd (Stevenson Rd to Garrard Rd) 2033 - Taunton Rd (Anderson St to Simcoe St) New Roads: 2026 - Britannia Ave Extension (Thornton Rd to Windfields Farm Dr) 2032 - Britannia Midblock Connector (Garrard Rd to Thornton Rd) 2033 - Type 'B' Midblock Arterial (Anderson St to Garrard Rd) 2033 - Windfields Connector Rd (Windfields Farm Dr to Winchester Rd) 	 Future Road Widenings (Four to Six Lane Configurations): 2035 - Thornton Road (Conlin Rd to Taunton Rd) New Roads: Before 2051 - Stevenson Rd Extension (Taunton Rd to Rossland Rd) Before 2051 - Dryden Blvd / Beatrice St Connection (Thornton Rd to Somerville St)
	 Future Roundabouts: Conlin Road and Thornton Road Conlin Road and Garrard Road Future Rapid Transit Simcoe Street (south of Conlin Road) - two Bus Rapid Transit (BRT) lanes 	 Future Land Use: By 2051 - Closure and Redevelopment of Oshawa Executive Airport
Configuration of Stevenson Rd N	Existing Two-Lane Configuration	• Existing Two-Lane Configuration (north of Taunton Road)*

*It is currently recommended that Stevenson Road North within the project area be protected to be widened to four lanes for 2051 however further analysis is required to confirm this future widening when details on the redevelopment of the Oshawa Executive Airport are finalized.

Horizon Year: a target future year for analyzing and projecting transportation systems and related land use, to anticipate and evaluate potential changes and conditions in the network.







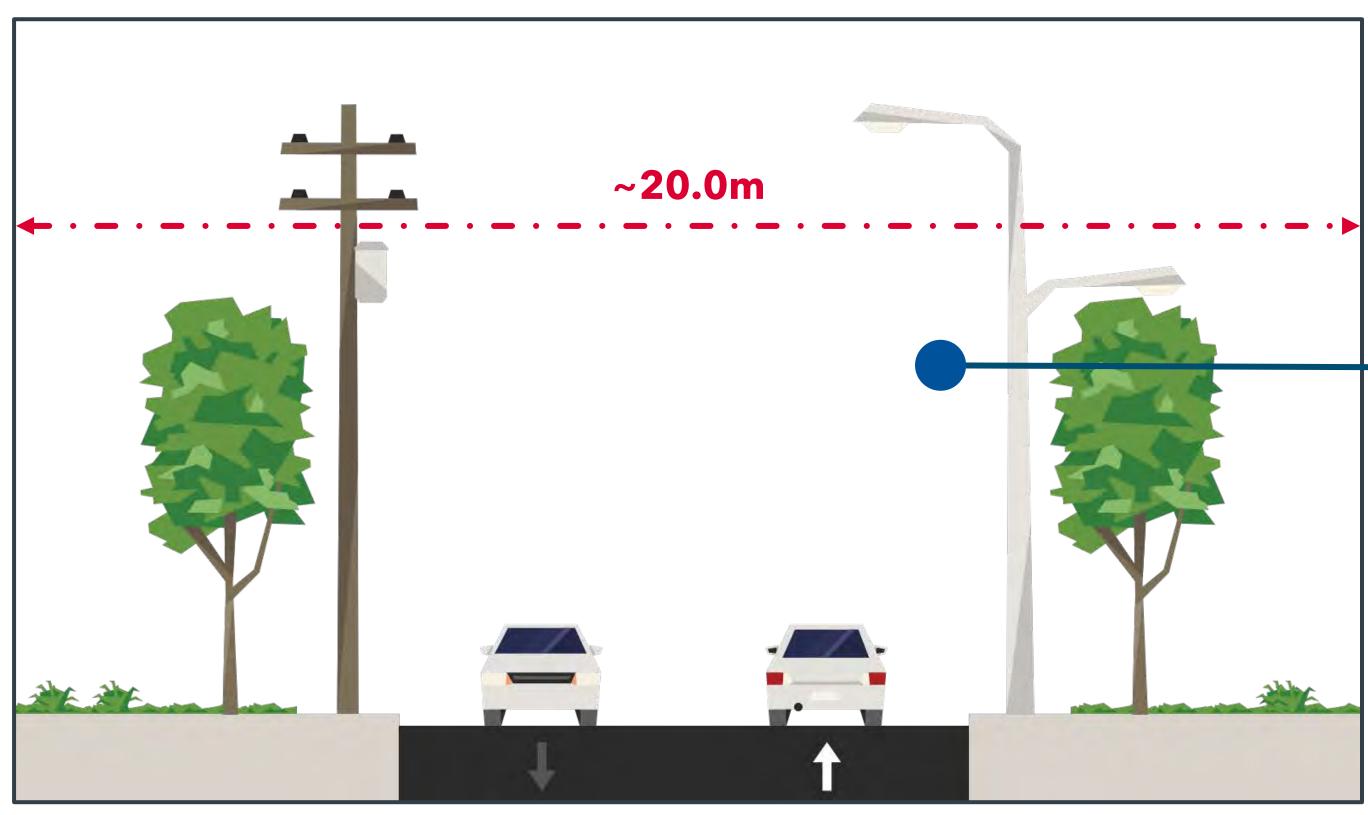


PROBLEM & OPPORTUNITY STATEMENT



- Stevenson Road North is currently a two-lane, rural north-south road, with no paved shoulders or sidewalks, and has existing roadside safety concerns related to road geometry and sightlines.
- There is an opportunity to significantly improve the overall function of Stevenson Road North by upgrading the roadway infrastructure and municipal services that contribute to the development of adjacent lands and advance economic and job creation opportunities for the City.
- The improvements to Stevenson Road North focus on measures that will improve road safety, enhance traffic capacity, and support active modes of transportation such as walking and cycling.
- Three (3) Alternative Planning Solutions have been developed and evaluated against how well they address the above Problem / Opportunity Statement.

ALTERNATIVE SOLUTIONS



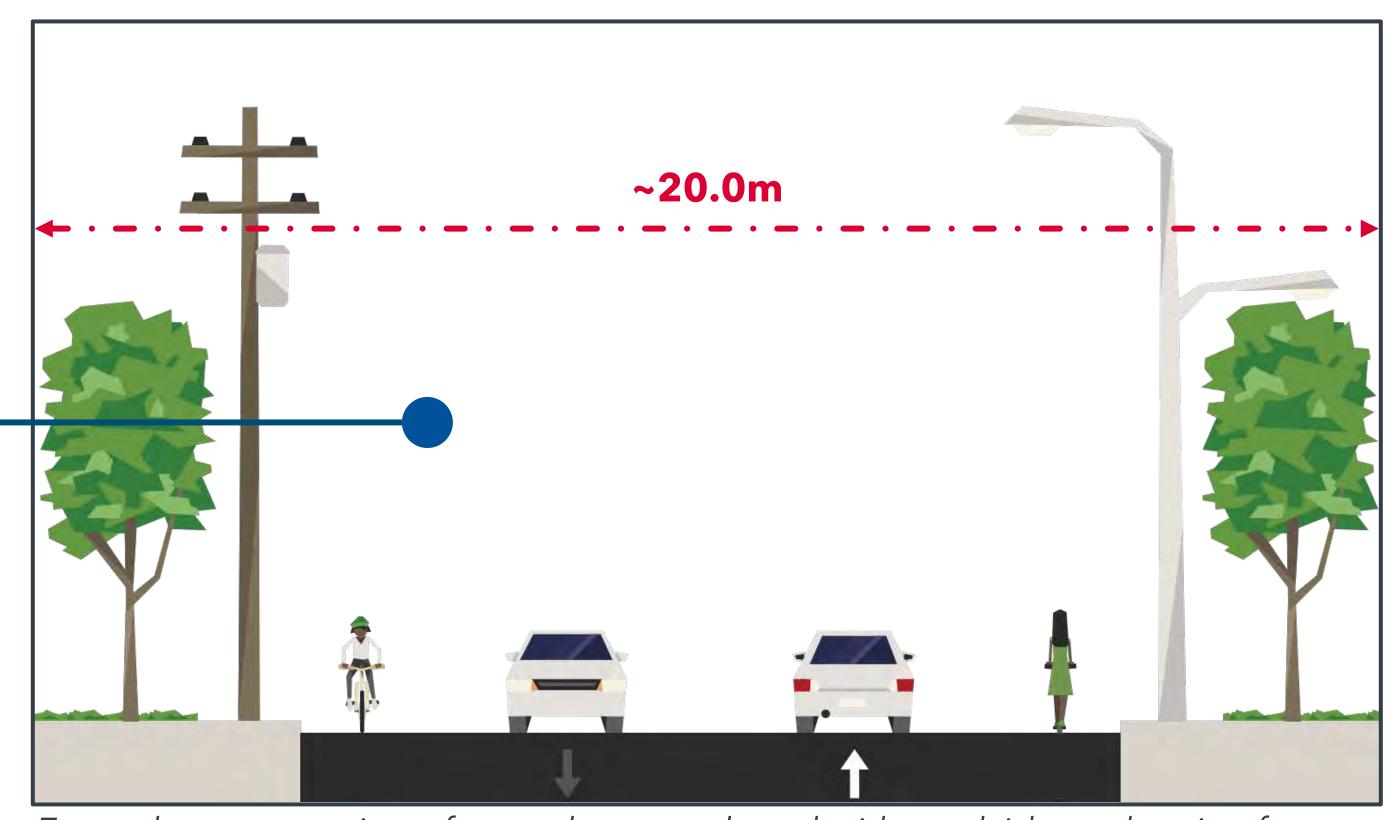
Example cross-section of a two-lane, rural road

Alternative 1: Do Nothing

- 'Base Case' for alternatives
- No improvements to existing conditions

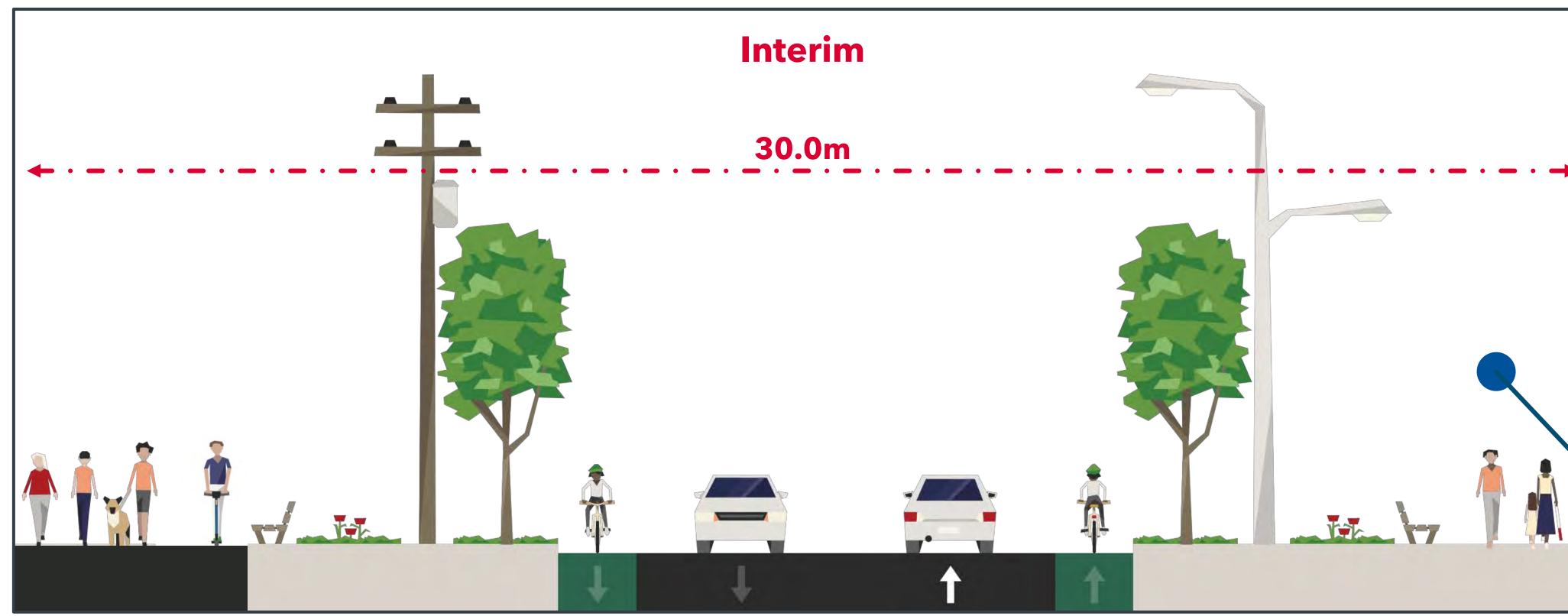
Alternative 2: Minor Operational Improvements

- Repaving and addressing road deficiencies
- Improvements to roadside safety

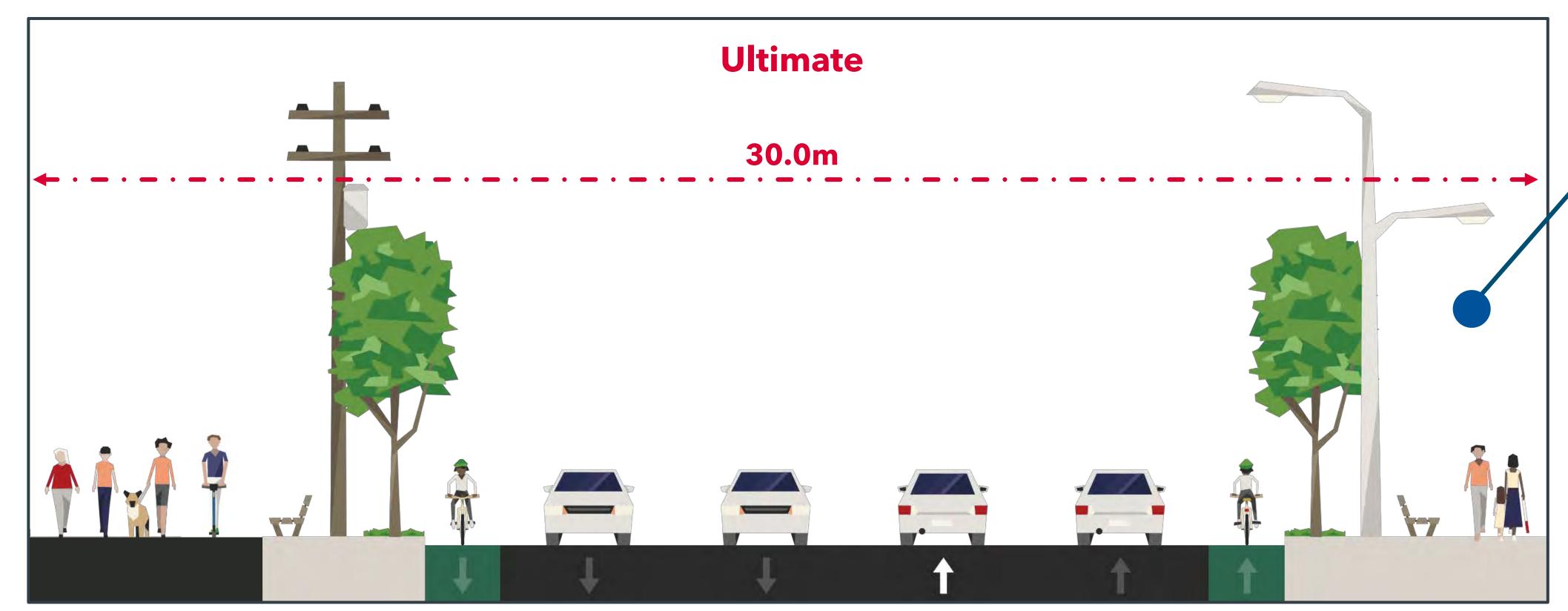


Example cross-section of a two-lane, rural road with roadside pedestrian features

ALTERNATIVE SOLUTIONS



Example cross-section of a two-lane, urban road



Example cross-section of a four-lane, urban road

Alternative 3: Reconstruct and Widen Right-of-Way (ROW)

- Urbanization and revisioning of the study area corridor
- Widened ROW and added active transportation infrastructure
- Includes upgrades from Alternative 2



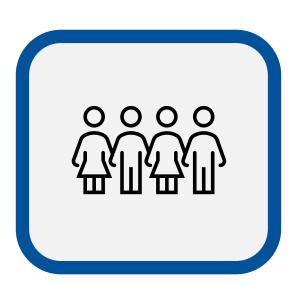


FACTORS CONSIDERED IN EVALUATING ALTERNATIVE SOLUTIONS



Natural Environment

- Terrestrial Ecosystems
- Fisheries / Aquatic
- Drainage (Surface and Groundwater)
- Climate Change



Socio-Economic & Land Use

- Official Plans & Policies
- Local Development Objectives
- Property Impacts
- Municipal Services (Sanitary, Water, Storm)



Cultural Heritage

- Archaeological Resources
- Built Heritage & Cultural Heritage Landscapes
- Indigenous Sites



Transportation

- Travel Time
- Safety
- Traffic Operations
- Active Transportation



Cost

- Property Acquisition Costs
- Construction Costs
- Operation / Maintenance Costs





EVALUATION OF ALTERNATIVE SOLUTIONS

Evaluation Criteria	Rationale / Explanation	Do Nothing (Alternative 1)	Minor Operational Improvements (Alternative 2)	Reconstruct and Widen ROW (Alternative 3)	Summary
NATURAL ENVIRO	NMENT				
Terrestrial Ecosystems	Impacts and disruption to wildlife species and habitats, trees and vegetation				Alternative 1 has no changes to existing conditions, while Options 2 and 3 impact areas containing terrestrial ecosystems. The proposed widening associated with Alternative 3 has relatively greater impacts to Terrestrial Ecosystems than Alternative 2.
Fisheries / Aquatic	Impacts to fish, fish habitat, and waterbodies Extent and quality/characteristics of aquatic area removed or impacted				Alternative 1 has no changes to existing conditions, while Alternatives 2 and 3 impact areas with potential indirect aquatic habitats. The proposed widening associated with Alternative 3 has relatively greater impacts than Alternative 2, requiring more construction activities beneath the high-water mark due to grading impacts.
	Impacts to surface and groundwater drainage				Alternative 1 has no changes to existing conditions, while Alternatives 2 and 3 may require changes to existing drainage features and overland flows. The proposed widening associated with Alternative 3 has relatively greater impacts than Alternative 2, due to larger impervious area and construction footprint.
Climate Change	Impacts to air quality and climate change				All three options have the same number of traffic lanes as existing condition. Alternative 3 include enhancements that will promote and encourage active transportation, building upon the new multi-use path systems on Thornton Road, Taunton Road West, and Conlin Road West.
Natural	Environment Summary	PREFERRED			From a natural environment perspective, Alternative 1 is preferred.

Evaluation Criteria	Rationale / Explanation	Do Nothing (Alternative 1)	Minor Operational Improvements (Alternative 2)	Reconstruct and Widen ROW (Alternative 3)	Summary
SOCIO-ECONOMI	CENVIRONMENT				
Provincial Land Use Planning	Support of provincial planning and initiatives				Alternative 1 has no changes to existing conditions, while Alternative 2 provides minor retrofits within the existing ROW. Alternative 3 introduces infrastructure that supports and is in alignment with provincial plans and initiatives (ex. Connecting the GGH: A Transportation Plan for the Greater Golden Horseshoe (2022).
Regional / Municipal Policies & Land Use Planning	Support of regional/municipal planning and initiatives				Alternative 1 has no changes to existing conditions, while Alternative 2 provides minor retrofits within the existing ROW. Alternative 3 introduces infrastructure that supports regional/municipal plans and initiatives (ex. Durham Regional Cycling Plan (2021).
Local Development Objectives	Support of local development and initiatives				Alternative 1 has no changes to existing conditions, while Alternative 2 provides minor retrofits within the existing ROW. Alternative 3 introduces infrastructure that supports local development. The study corridor is located within the Northwood Business Park's policy boundary.
Property Impacts	Impacts to private property owners				Alternative 1 does not impact property owners, while Alternatives 2 and 3 impact private properties. The proposed widening associated with Alternative 3 has relatively greater property impacts than Option 2.
Regional / Municipal Economy	Contribution to local economy				Alternative 1 does not provide additional contributions to the local economy. Alternative 2 provides marginal economic contribution, with minor retrofits within the existing ROW. Alternative 3 provides job opportunities related to building new infrastructure and promote growth of the surrounding area to existing businesses.
_	Wet utility and service connection infrastructure to support future growth				Alternatives 1 and 2 have no changes to existing conditions, while Alternative 3 includes upgrades to the roadway infrastructure and municipal services.
Socio-Econo	mic Environment Summary			PREFERRED	From a socio-economic perspective, Alternative 3 is preferred.





Evaluation Criteria	Rationale / Explanation	Do Nothing (Alternative 1)	Minor Operational Improvements (Alternative 2)	Reconstruct and Widen ROW (Alternative 3)	Summary
CULTURAL ENVIR	ONMENT				
Cultural Environment	Effort required to avoid potential impact to cultural environment				Alternatives 1 and 2 remain within the existing ROW, requiring no additional effort, while Alternative 3 will require additional effort to avoid impacts to cultural environment.
Cultural	Environment Summary	PREF	ERRED		From a cultural environment perspective, Alternatives 1 and 2 are equally preferred.
COST		,			
Property Acquisition Costs	Capital costs associated with acquiring additional property for infrastructure				Alternatives 1 and 2 remain within the existing ROW, requiring no additional properties while Alternative 3 require additional property for urbanization (i.e, roadway and municipal services upgrades).
Construction Costs	Capital costs associated with constructing infrastructure				Alternative 1 does not require construction costs for new infrastructure, while Alternatives 2 and 3 require costs to construct new infrastructure. Alternative 3 has the largest footprint and therefore higher construction costs.
Operation / Maintenance Costs	Maintenance costs associated with operating and maintaining infrastructure				All alternatives will require varied maintenance costs, however Alternatives 2 and 3 will save in maintenance costs by replacing aging infrastructure. Alternative 3 provides holistic upgrades to the corridor and in turn lowers the maintenance cost in the near future while providing value for future development.
	Cost Summary	PREFERRED			From a costing perspective, Alternative 1 is preferred.



Evaluation Criteria	Rationale / Explanation	Do Nothing (Alternative 1)	Minor Operational Improvements (Alternative 2)	Reconstruct and Widen ROW (Alternative 3)	Summary
TRANSPORTATIO	N				
Travel Time	Improvement to travel times for vehicular traffic				All alternatives maintain a two-lane road configuration and do not improve upon travel times in existing conditions.
Safety	Improvement to safety for all road users				Alternative 1 does not provide improvements to roadside safety, while Alternatives 2 and 3 would provide safety improvements to various road users. Alternative 2 presents more challenges concerning safety given it is constrained within the existing ROW. Alternative 3 with the widened ROW, will provide more opportunities for safety improvement, including physical buffer between cars and pedestrians.
Traffic Operations	Effectiveness to meet future demands for vehicular traffic				Alternatives 1 and 2 do not provide space to support future road widening beyond two lanes, while Alternative 3 provides some space for future road widening.
Accommodation of Public Transit	Effectiveness to accommodate and support future public transit				The sidewalks included in Alternative 3, as well as the greater boulevard space within the ROW, make this option more attractive for future public transit service compared to Alternatives 1 and 2.
Active Transportation (Pedestrians / Cyclists)	Effectiveness to meet future demands for non-motorist transportation modes Connectivity and/or ability to support other transportation modes				Alternatives 1 and 2 do not provide additional infrastructure to support active transportation, while Alternative 3 provides a widened ROW to accommodate pedestrians and cyclists.
Trans	sportation Summary			PREFERRED	From a transportation perspective, Alternative 3 is preferred.



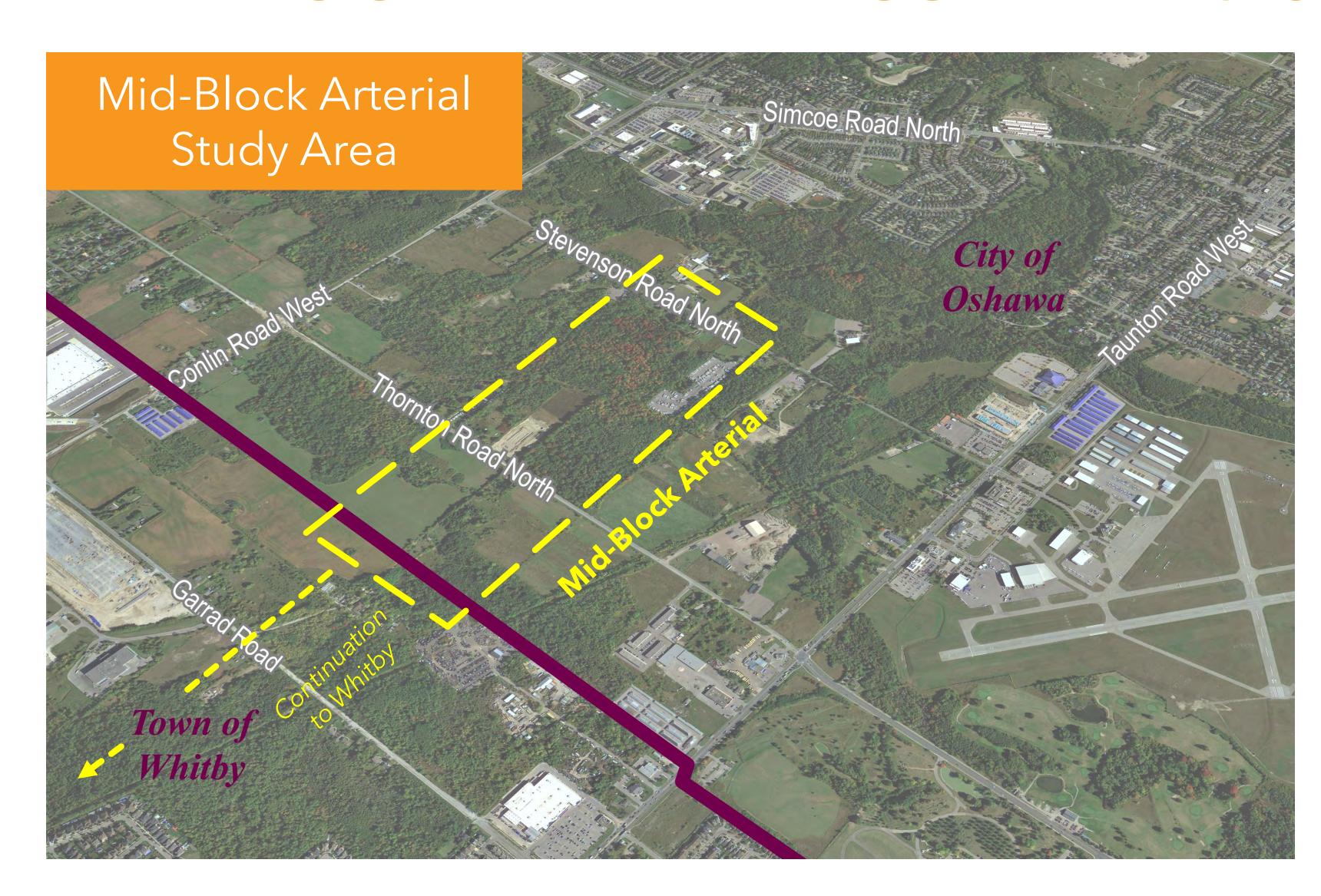


Alternative Solution	Assessment Summary	Conclusion
Alternative 1: Do Nothing	Alternative screened out as it does not address or enhance road safety, traffic, or provide for active transportation or connectivity in the Study Area. Provides no opportunity to upgrade municipal services to support further development of the Northwood Business Park.	This alternative is not recommended.
Alternative 2: Minor Operational Improvements	Similar to the above, this alternative does not provide additional enhancements or opportunities to support future growth.	This alternative is not recommended.
Alternative 3: Reconstruct and Widen ROW	This alternative is preferred as it best addresses the Problem/Opportunity Statement, improves the road conditions for all users, as well as achieve land use planning objectives.	This alternative is recommended.

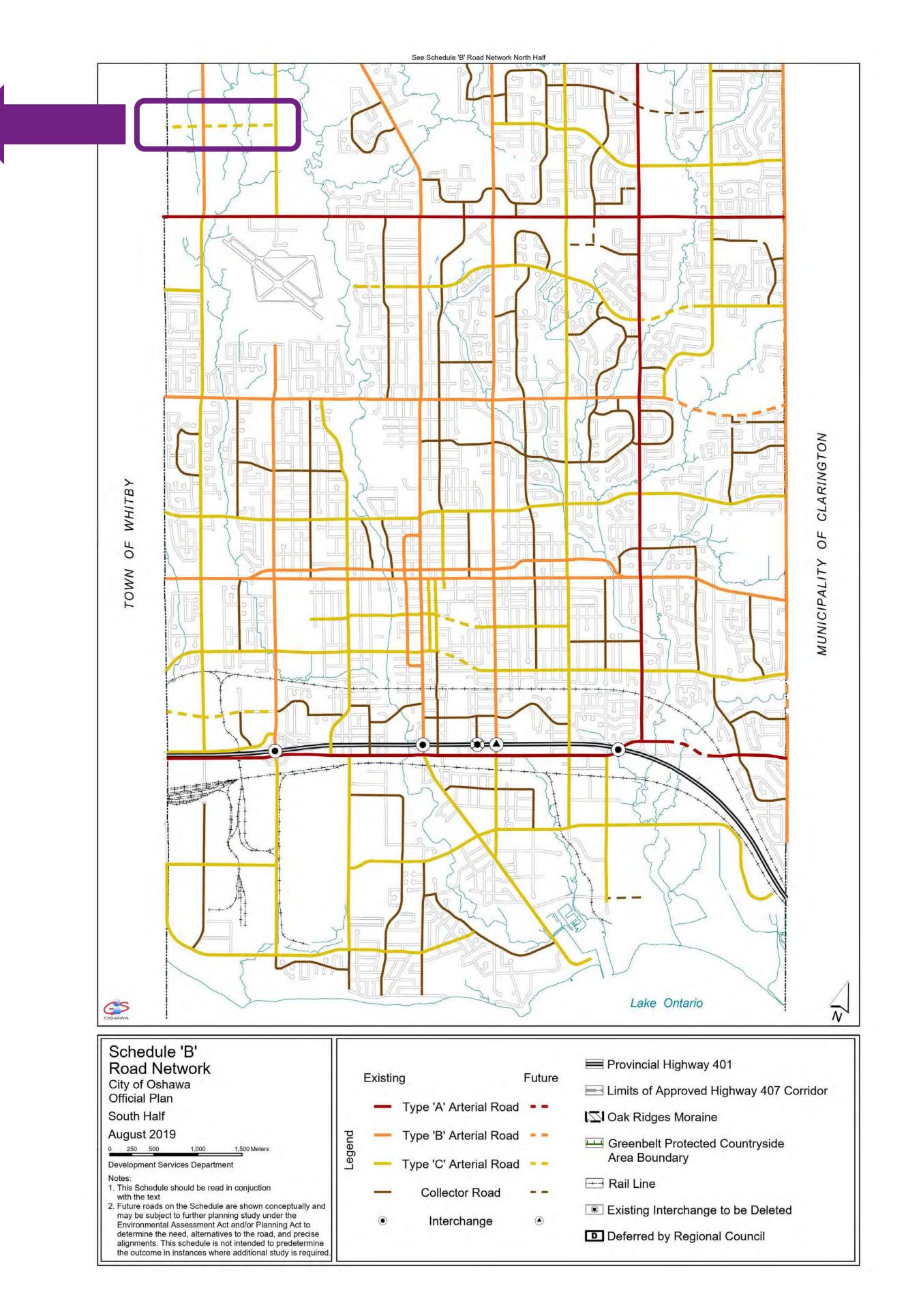
Please refer to board #16 for a cross-section visualization of recommended Alternative 3.



MID-BLOCK ARTERIAL - CONTEXT & STUDY AREA



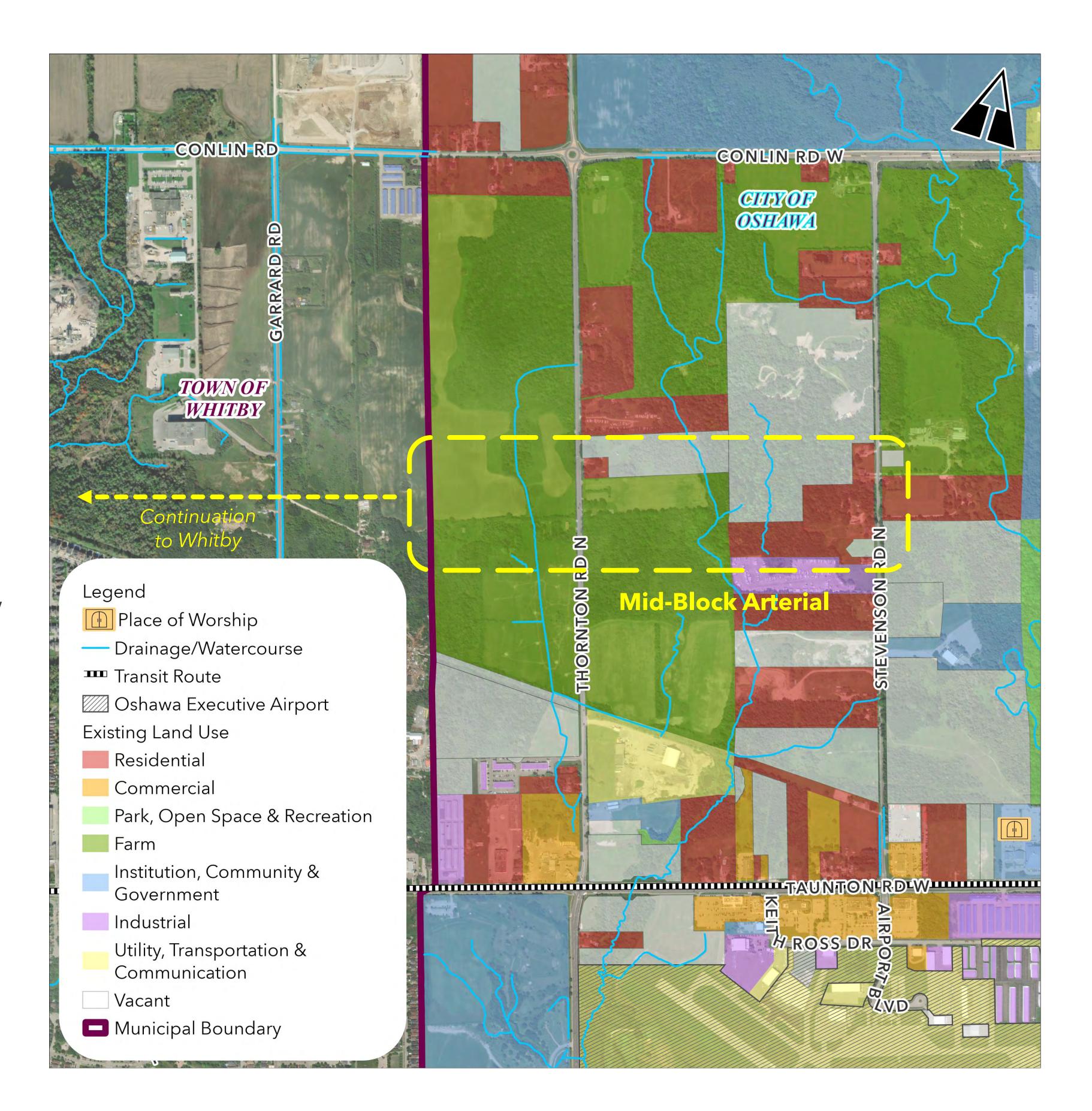
- As part of the MCEA study for Stevenson Road North, an additional assessment is being carried out for a proposed eastwest mid-block arterial road extending from Stevenson Road North to Thickson Road; past the Whitby-Oshawa border.
- The road is identified in the City of Oshawa's Official plan as a Future Type 'C' Arterial Road and has also been identified in both the Town of Whitby and Durham Region Official Plans.





MID-BLOCK ARTERIAL - LAND USE & SOCIO-ECONOMIC

- The midblock arterial is within the Northwood Business Park's (NBP) policy boundary, within a mix of existing land uses: farm, residential, vacant and open space.
- Located within the former Lake Iroquois shoreline, a physiographic region with sensitive hydrologic and ecologic values.
- The Lake Iroquois shoreline, although outside of the Greenbelt in Oshawa, is recognized in the external connection provisions of the Greenbelt Plan, 2017.
 - The Greenbelt Plan stresses the importance for municipalities to consider planning, design and construction practices that maintain or enhance the size, diversity, connectivity, and functions of key natural heritage features, key hydrologic features and key hydrologic areas of those portions of the Lake Iroquois shoreline within their approved urban boundaries.
- The proposed mid-block would not maintain but rather reduce the diversity, connectivity, and functions of features currently located within any selected ROW.
- Meeting the criteria and direction in the applicable watershed planning is often challenging, costly, and lengthy - the mid-block arterial would also reduce the amount of developable land within the NBP.

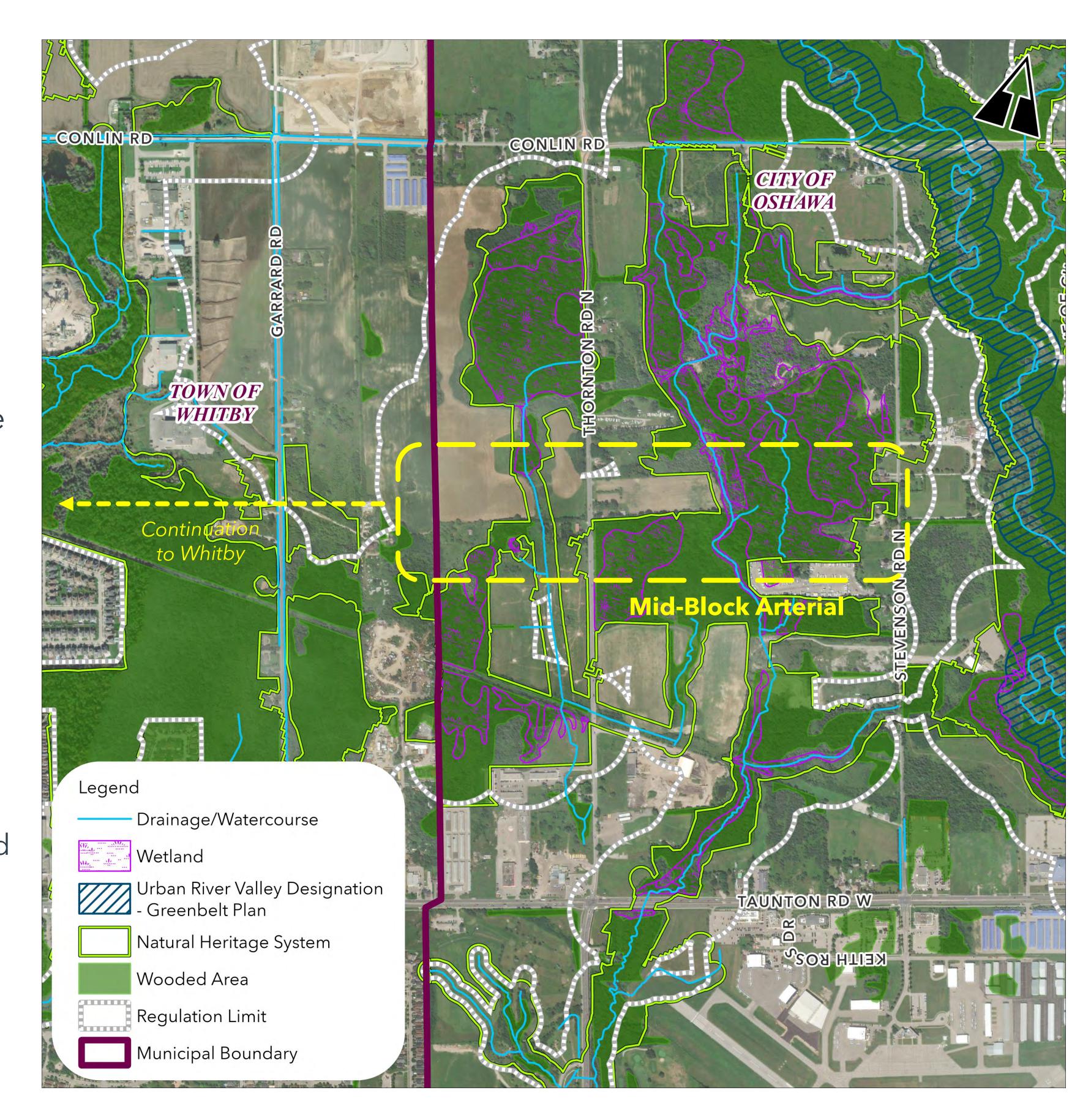






MID-BLOCK ARTERIAL - NATURAL ENVIRONMENT

- The mid-block arterial road would cross multiple watercourses within the Goodman Creek subwatershed, including Goodman Creek.
 - One or more of these features may potentially support direct fish habitat.
- Sensitivity to development is likely high; relatively large provincially significant wetland (PSW; Whitby-Oshawa Iroquois Beach Wetland Complex) constitutes a substantial portion of the lands between Stevenson Road North and the Whitby-Oshawa border
- Whitby-Oshawa Iroquois PSW is a significant wildlife habitat of Great Blue Heron. Construction of an arterial road in this vicinity would likely result in destruction of this local population.
- Much of this area is also designated as a **Key Hydrologic** Area by CLOCA (CLOCA 2020).
 - This designation means that the area between Stevenson Road North and the Whitby-Oshawa border is a Significant Groundwater Recharge Area, High Vulnerability Aquifer, and/or an Ecologically Significant Groundwater Recharge Area.
- Proposed alignment will be within sensitive environmental areas and presumably would require their destruction to facilitate the establishment of a ROW.







MID-BLOCK ARTERIAL - TRANSPORTATION

Intersection		without ck Arterial	2033 with Mid-Block Arterial	
	AM	PM	AM	PM
Taunton Road @ Thickson Road	D	E	D	E
Taunton Road @ Garrard Road	В	В	В	В
Taunton Road @ Thornton Road	В	С	В	D
Taunton Road @ Stevenson Road	A	A	A	A
Taunton Road @ Simcoe Street	E	D	E	D
Conlin Road @ Thickson Road	D	E	С	D
Conlin Road @ Thornton Road	В	A	В	A
Conlin Road @ Simcoe Street	C	С	C	С

Traffic Level of Service (LOS) Legend

LOS A - Smooth flow, little to no delays

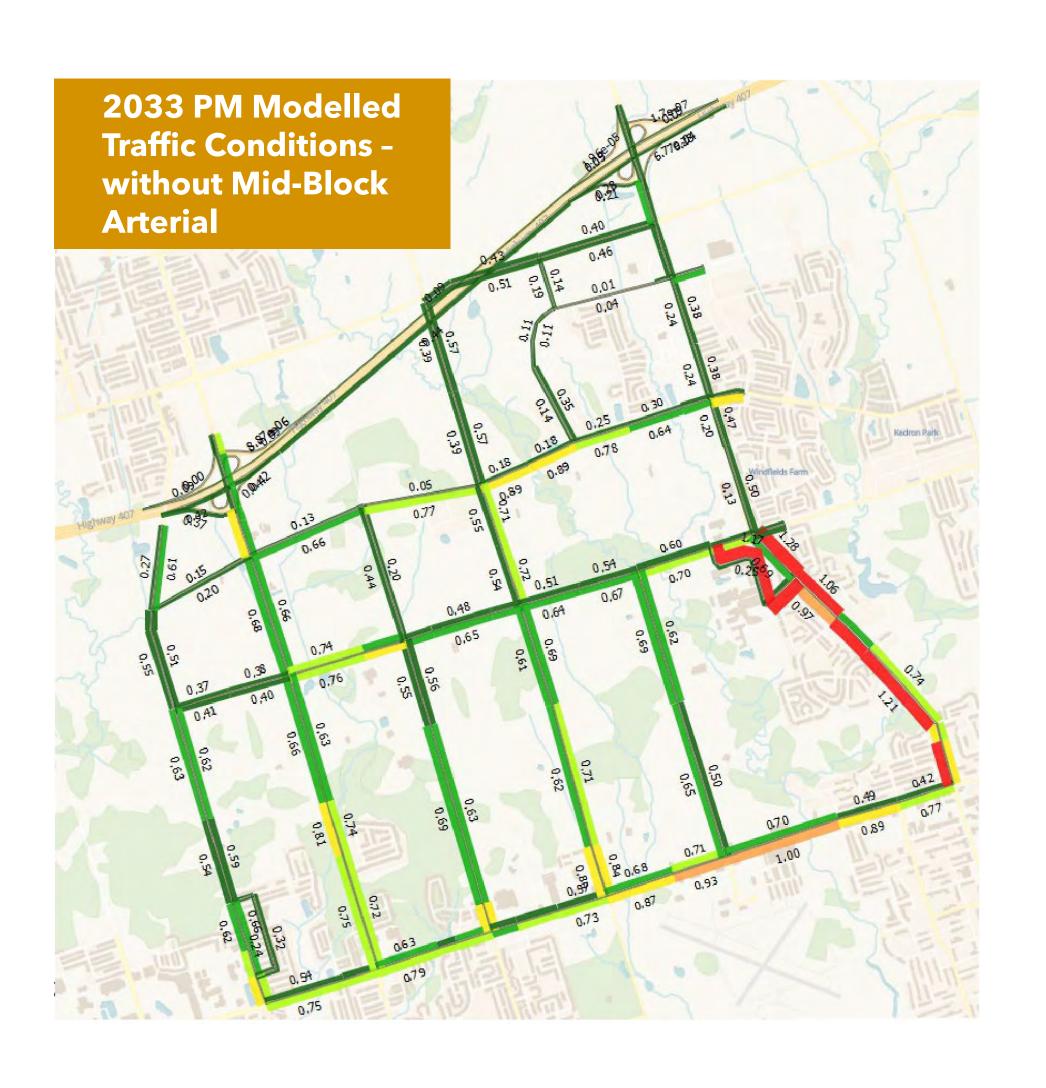
LOS B - Stable flow, little delays

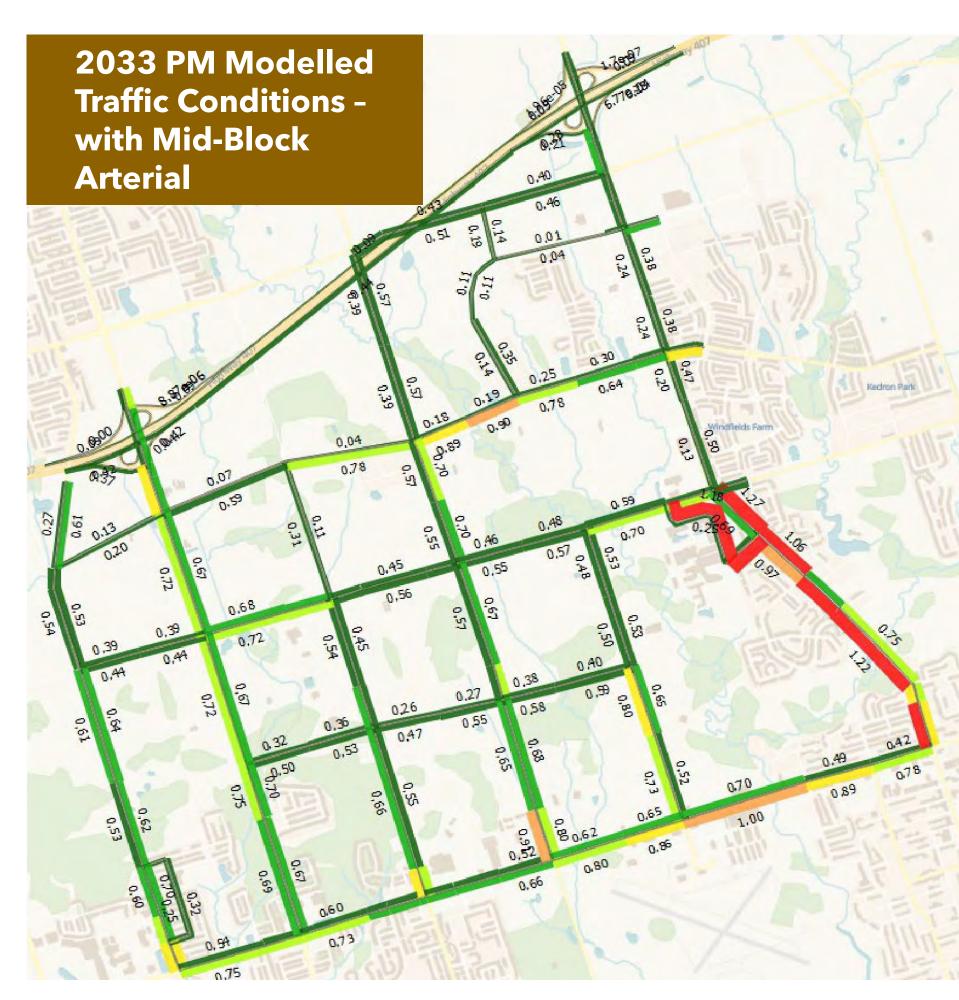
LOS C - Stable flow, some delays

Less stable flow, moderate delays

LOS E - Unstable flow, many delays

LOS F - Traffic congestion, stop-and-go conditions





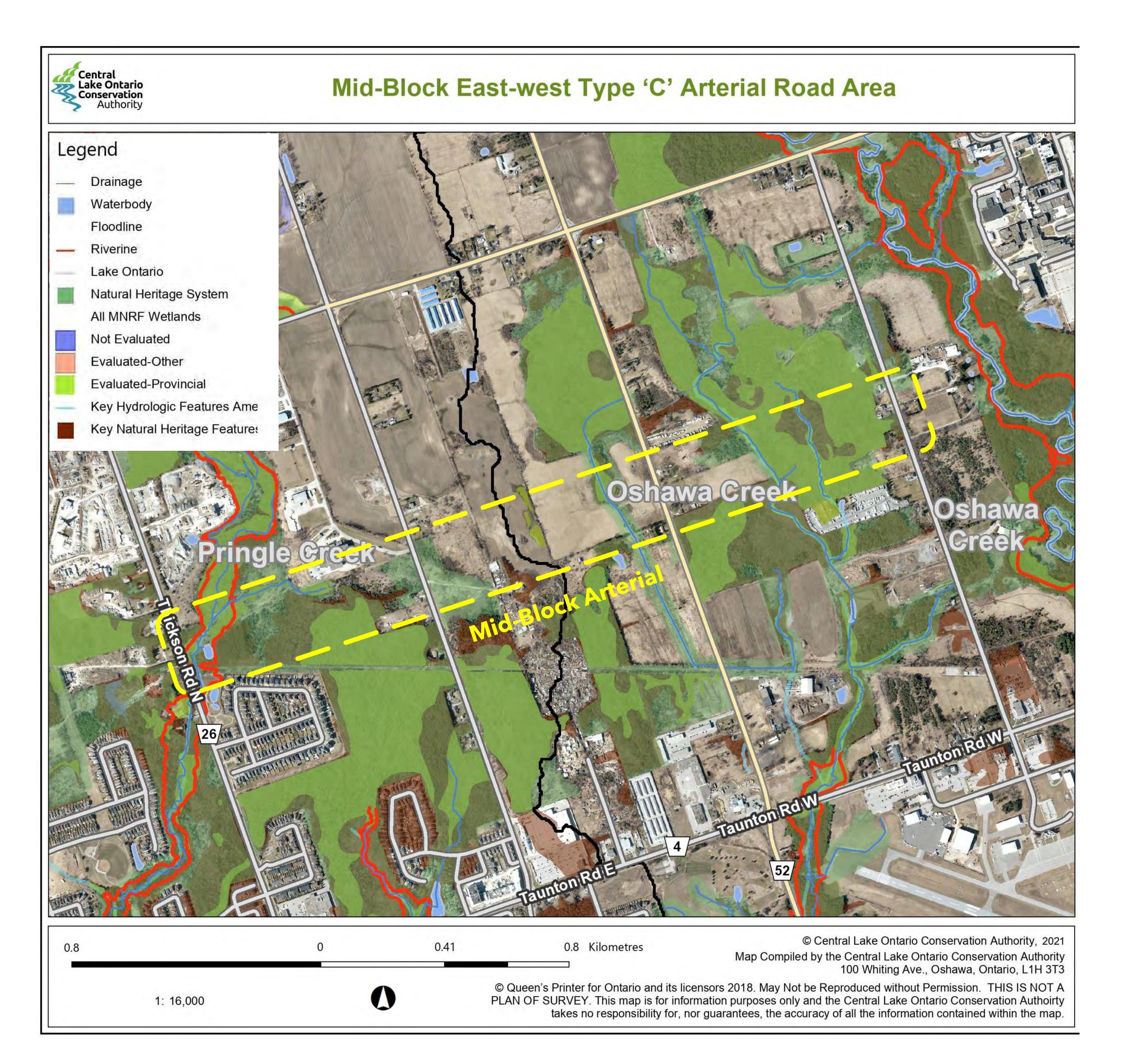
- The mid-block arterial provides some relief to the surrounding parallel roads and is generally used as an alternative route to Conlin Road and Taunton Road.
- If the mid-block arterial is removed, Conlin Road and Stevenson Road are expected to operate with acceptable LOS - Simcoe Street will experience minimal impacts with or without the mid-block arterial.
- In the 2051 horizon year, with or without the mid-block arterial, Taunton Road, Stevenson Road, and sections of Conlin Road operate beyond the typical range of acceptable LOS.





MID-BLOCK ARTERIAL - RECOMMENDATION

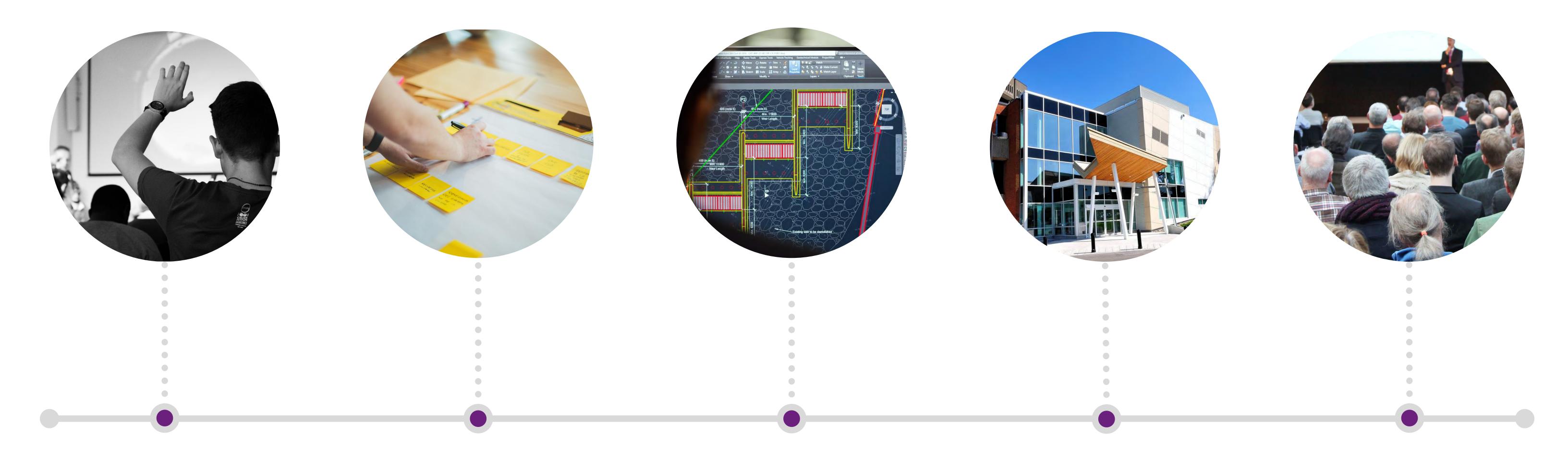
- The east-west mid-block arterial is recommended to be removed from the Durham, City of Oshawa, and Town of Whitby Official Plans due to the following:
 - Adverse environmental effects of the mid-block arterial on the surrounding areas.
 - The mid-block arterial is not aligned with the objectives of the Greenbelt Plan, watershed plans, and sound land use planning.
 - The mid-block arterial contributes negligible differences in travel times on Taunton Road and Conlin Road (only savings of 30-40 seconds in the 2033 and 2051 horizon years).





NEXT STEPS

Following this Open House, we will:



Collect all public comments and respond to questions

Confirm the Preferred Alternative Solution

Develop the design alternatives, evaluations and impact assessment of the proposed improvements

Report back to City Council on Preferred Design Host PIC #2 on the Preferred Design



PROJECT TIMING & SCHEDULE

