



Administrative Report

Office of the County Engineer

To: Warden Tom Bain and Members of County Council

From: Tom Bateman, P.Eng.
Director of Transportation Services / County Engineer

Date: **April 20, 2016**

Subject: **Essex County Road Network Designation**

Report #: **2016-R016-ENG-0420-TRB**

Purpose

The purpose of this report is to provide County Council information pertaining to the origin and current designation of the Essex County Road Network including County Connecting Links.

Background

County Council requested that Administration prepare a comprehensive report that provides information on the County Road Network that would review the origin of the existing network and the current status of roads that comprise the network as well as their classification as a County Road or County Connecting Link.

The following chart ([Figure 1.0](#)) provides details of the existing County Road Network distributed by Municipality. [Figure 2.0](#) is a map of the current network.

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Figure 1.0

Municipality	County Road Centreline Km	County Connecting Link Centreline Km	Lane Km	Percentage of Network
Amherstburg	87.80	9.32	189.08	12.70
Essex	128.40	8.86	230.50	15.49
Kingsville	133.10	5.47	232.06	15.59
Lakeshore	247.80	5.57	463.34	31.13
LaSalle	28.20	10.55	82.33	5.53
Leamington	91.70	6.71	165.22	11.10
Tecumseh	61.20	6.79	125.72	8.45
Totals	778.20	53.27	1488.25	100.00

County Connecting Links:

Included in the County Road Network are sections of roads identified as County Connecting Links. County Connecting Links have their origin within the Public Transportation and Highway Improvement Act. These sections are essentially those portions of roads within pre-amalgamation Town limits that are not part of the County Road Network but function as extensions of or connect roads in the County Road Network. These sections are owned by and are under the jurisdiction of the local municipality and the County has entered into a maintenance agreement to provide limited and focused services on behalf of the local municipality. The philosophy behind the cost sharing is that a certain amount of the traffic utilizing the Connecting Link is regional in nature and the County should therefore assume some responsibility for the maintenance of the pavement. Under the County Connecting Link agreements the County is responsible for specific and limited maintenance activities base on a 7.0m pavement wide representing two through travel lanes. [Appendix 1.0](#) includes maps of the County Connecting Links in each of the local municipalities.

Figure 2.0



Historical Establishment of the Network:

The current County Road Network has its foundations based on a Roads Needs Study conducted in the early 1970's under the direction of the County Administration, County Council, Department of Highways and the Windsor Suburban Roads Commission. The study reviewed the existing County Road and Local Road networks against criteria developed by the Department of Highways for "Desirable County Road Systems in the Province of Ontario". The following are the criteria which established the recommended network that was subsequently adopted as the County Road Network through a consolidating by-law.

Criteria for a County Road:

Rural Areas

One or more the following criteria:

- 1) Connect cities, towns, villages, police villages and hamlets, any of which have more than 150 persons in 500 acres or less, to each other and to the King's Highway System by the shortest route along existing road allowances, unless such as service is now provided by the King's Highway System.
- 2) Provide county road service to consistent attractors of heavy vehicles such as quarries, gravel pits and saw mills in continuous operation, sale barns, army and air force camps, mines, etc.
- 3) Provide county road service parallel to major barriers to free traffic movement on the local road system and, where necessary and feasible, on crossing of such barriers.
- 4) Provide county road service close to resort areas.
- 5) Provide county road service on those roads which are extensions of arterial streets in urban areas to the first intersection where the annual average daily traffic is below 400 vpd, then connect to either a county road or King's Highway by the shortest route.
- 6) Provide county road service within the cells formed by the King's Highways and the county roads laid out by the above where the cells so formed are greater than 8 miles across when the population density is less than 20 persons per square mile, 6 miles across when the population density is less than 40 persons but greater than 20 persons

per square mile and 4 miles across when the population density is greater than 40 persons per square mile.

Urban Areas

County roads should, where practicable, by the shortest route along existing streets:

1. Connect the King's Highway to
 - a) The King's Highway, and
 - b) Crossing of the Provincial boundary, and
 - c) Major commercial and industrial areas; and
2. Connect county and suburban roads to
 - a) The King's Highway, and
 - b) Crossing of the Provincial boundary, and
 - c) Major commercial and industrial areas; and
3. Where feasible provide county road service parallel to and where necessary across major barriers to free traffic movement on the local street system, and
4. Provide county road service to consistent major attractors and generators of heavy vehicles, and
5. Where possible, be spaced within the network formed by the King's Highway and its connecting links and the street selected by the above criteria at the following distances:

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Population Density Within Cell	Spacing Not Less Than	Spacing Not More Than
Below 15 persons / acre	2,500 feet	5,000 feet
15 to 50 persons / acre	2,000 feet	4,000 feet
Above 50 persons / acre	1,500 feet	3,000 feet

Existing streets selected under criteria number 5 above, should:

- a) Function predominantly for the through movement of traffic,
- b) Be reasonably direct and continuous, and
- c) Be capable of being developed to an adequate standard without undue property damage

Figure 3.0 shows the desirable County Road System as per the above noted Study completed in the early 1970's.

Figure 3.0



Network Revisions:

A series of revisions to the network occurred in the late 1970's as Provincial Highways were transferred to the County which became County Road 50 and County Road 46. Following the construction of the new Highway 3, the former Provincial Highway corridor was transferred to the County in the late 1980's and was assumed as County Road 34, another section was assumed in 2000 as County Road 33.

The next major revision to the County Road Network occurred as part of the Provincial downloading in the late 1990's. The County assumed a large number of Provincial Highways including the current County Road 22, County Road 20, County Road 33, County Road 34 and County Road 42 totaling approximately 140 centerline kilometres.

The County Road Network has remained relatively unchanged since the download of Provincial Highway's from a "route" perspective. However the amount of pavement and lane kilometers has increased significantly through the implementation the County's Capacity Expansion Program. Since 2003 the Expansion Program has added approximately 35 lane kilometers to the network.

Road Related Studies:

During the period of 1996 to 1999 the County undertook a major review of the County Road Network under the direction of a committee comprised of the Warden, Chair of the Roads Committee, two County Councillors and a representative from the Ontario Good Roads Association. The Committee utilized the "Provincial Classification of Roads Criteria" and further modified these criteria to create an "Essex County specific criteria". The existing County Road Network as well as the local road network was reviewed and a recommended network was established. The network was reviewed by the Ministry of Transportation and included transfers of County Roads to the local municipalities and some transfers of local roads to the County. A draft report was prepared but never finalized for several reasons.

As the study was being undertaken the Province commenced the process of downloading of highways to the County. These newly assumed County Roads would significantly altered the network and rendered many of the study's base assumptions invalid and no longer applicable. In addition the process of amalgamation of the local municipalities was commencing as were the discussions regarding boundary adjustments with the City of Windsor. Given these realities Council chose not to continue with the study.

Upon completion of the amalgamation process and boundary adjustments the priority for the County was to update the County Official Plan. The Official Plan was completed in 2003 and acknowledged the strong relationship between roads, their function, land use and development within the County. The new Official Plan recommended that a detailed study be undertaken to address regional transportation needs and opportunities over a long range planning horizon.

At this time the City of Windsor was at a point where it needed to update its transportation master plan termed the "Windsor Area Long Range Transportation Study" (WALTS). The City and County took this as an opportunity to partner together and undertaken a regional study. The Regional Transportation Master Plan was to be a comprehensive plan addressing major regional transportation issues, needs, opportunities, costs, public transit, walking and cycling systems and funding mechanisms. The study concluded with the finalization of the Essex-Windsor Regional Transportation Master Plan (EWRTMP) in 2005. County Council adopted this plan as the Master Transportation Plan for the County of Essex, as a resource document for the Transportation sections of the County Official Plan and as the basis for future planning of Roadway Improvement Projects for the County of Essex.

Discussion

The EWRTMP recommends a regional road system, formed by urban and rural roads that by themselves or in combination with other regional roads provide inter-regional connectivity within the regional planning area and to adjacent municipalities. This inter-regional connectivity within the Essex-Windsor area is recommended as the prime service function criteria in designated regional roads. Roads or road sections that may serve high traffic volume but do not provide inter-regional connections are not designated as regional roads. Four additional criteria were considered:

1. Provide continuous roadway service as part of an overall Regional Road system. Non-continuous "stub" roads should not be designated as Regional Roads;
2. Regional Roads should be capable of being upgraded to a reasonable standard consistent with the service being provided. Roads with right-of-ways that are restricted from upgrading by geometry or terrain should not be designated as Regional Roads;

3. In urban areas, Regional Roads should be limited to routes that provide a continuous transportation corridor service and can be upgraded, including widening. Urban arterials roads which have right-of-ways that cannot be upgraded without severe property and/or socio/environmental damage should not be considered as Regional Roads; and
4. Road that provide parallel service to Provincial Highways should not be considered Regional Roads.

The EWRTMP recommended Regional Road System is shown on [Figure 4.0](#).

Included in the 2016 Transportation Services approved budget is a project to undertake an update to the Essex Windsor Regional Transportation Master Plan (EWRTMP) adopted by County Council in 2005. It is recognized that a review of the County Road Network and its current designations will form a foundation component of the master plan update. The update is a comprehensive and collaborative process that is anticipated to be a lengthy undertaking with completion expected in 2017.

There exists an opportunity to extract the County Road Network Review from the Transportation Master Plan update and undertake the review as a stand-alone project. In this manner the core issues surrounding jurisdiction and responsibilities can be addressed more expeditiously. The Transportation Master Plan update would commence once the County Road Network Review is advanced to a point where appropriate philosophies and technical criteria have been finalized.

To advance the County Road Network Review it is Administration's suggestion that an externally facilitated "visioning" session of County Council be held to provide guidance to Administration in the development of a Terms of Reference document for the County Road Network Review.

The "visioning" session would seek to answer three fundamental questions:

- 1) What is a County Road Network and why does it exist?
- 2) What is a County Road?
- 3) What is a County Connecting Link?

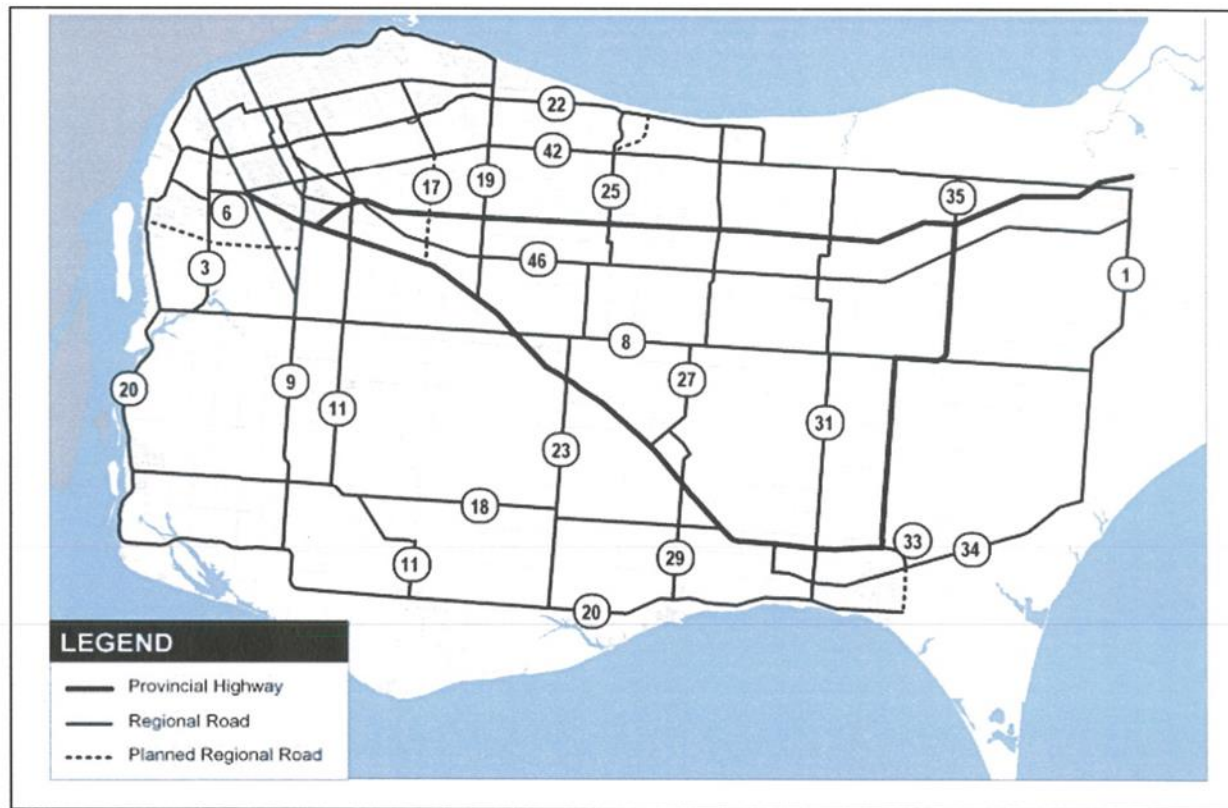
The deliverable of the "visioning" session would be a set of guidelines, parameters and criteria to be used in the development of the Terms of Reference. Administration would seek County Council's endorsement of the Terms of Reference prior to the engagement of a Consultant to undertake the review.

Figure 4.0

IBI GROUP ERROR! REFERENCE SOURCE NOT FOUND.

Essex-Windsor Regional Transportation Master Plan

Exhibit 5.7 – Recommended Regional Road System



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Recommendation

The following recommendations are provided for County Council's consideration.

- 1) It is recommended that a County Road Network Review be undertaken separately from the planned update to the 2005 Essex Windsor Regional Transportation Master Plan
- 2) It is recommended that County Council engage in an externally facilitated "visioning" session to provide guidance to County Administration in the development of the Terms of Reference for the County Road Network Review.

Respectfully Submitted

Concurred With,

Tom Bateman

Brian Gregg

Originally Signed by Tom Bateman
County Engineer

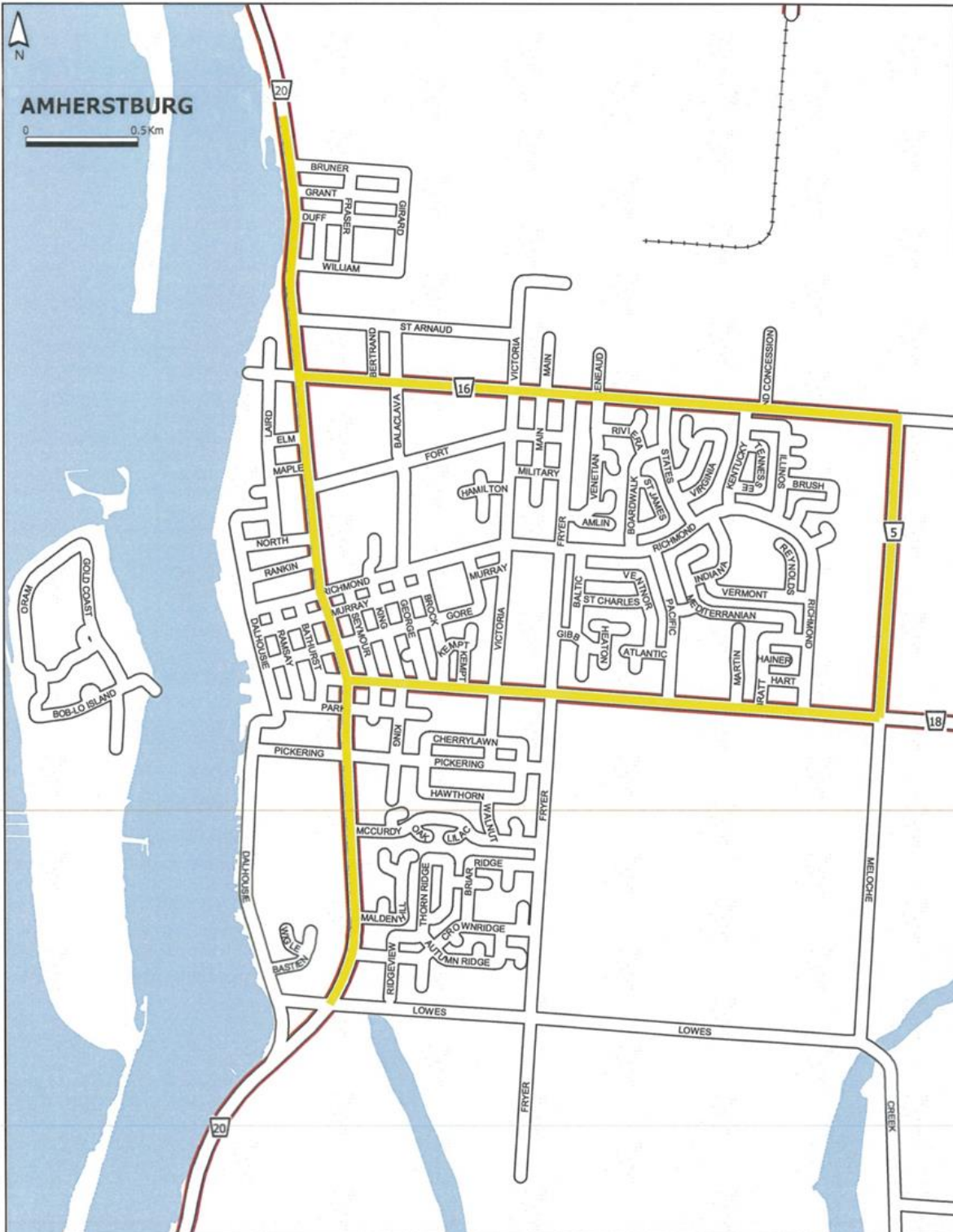
Originally Signed by Brian Gregg
Chief Administrative Officer

Appendix No.	Title of Appendix
1	County Connecting Links

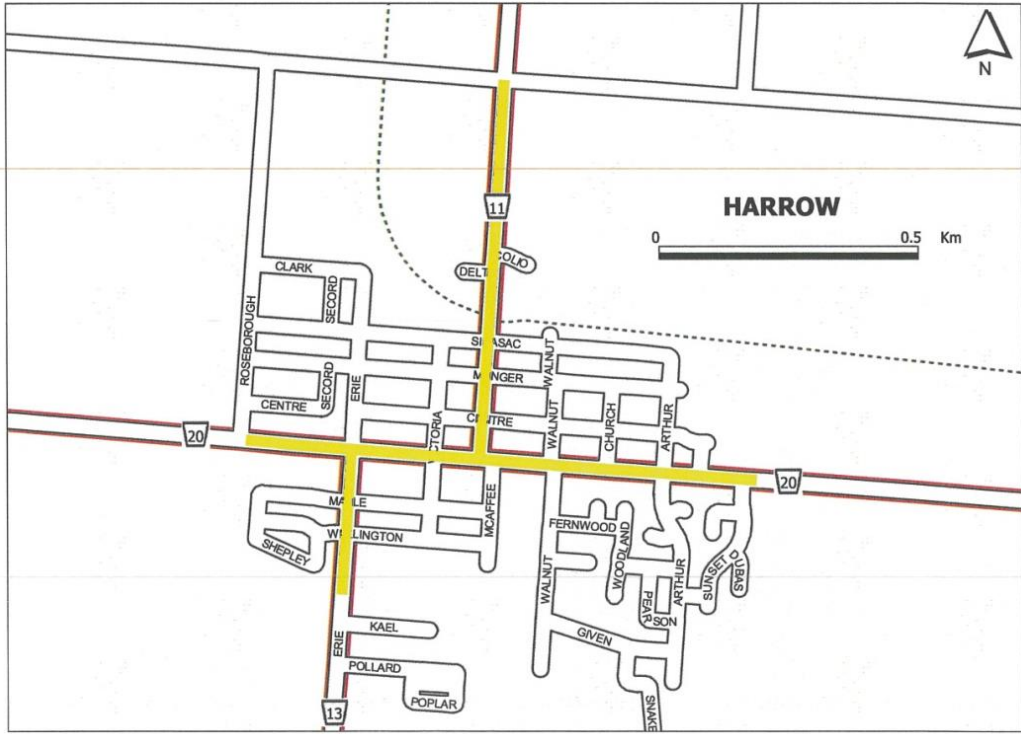
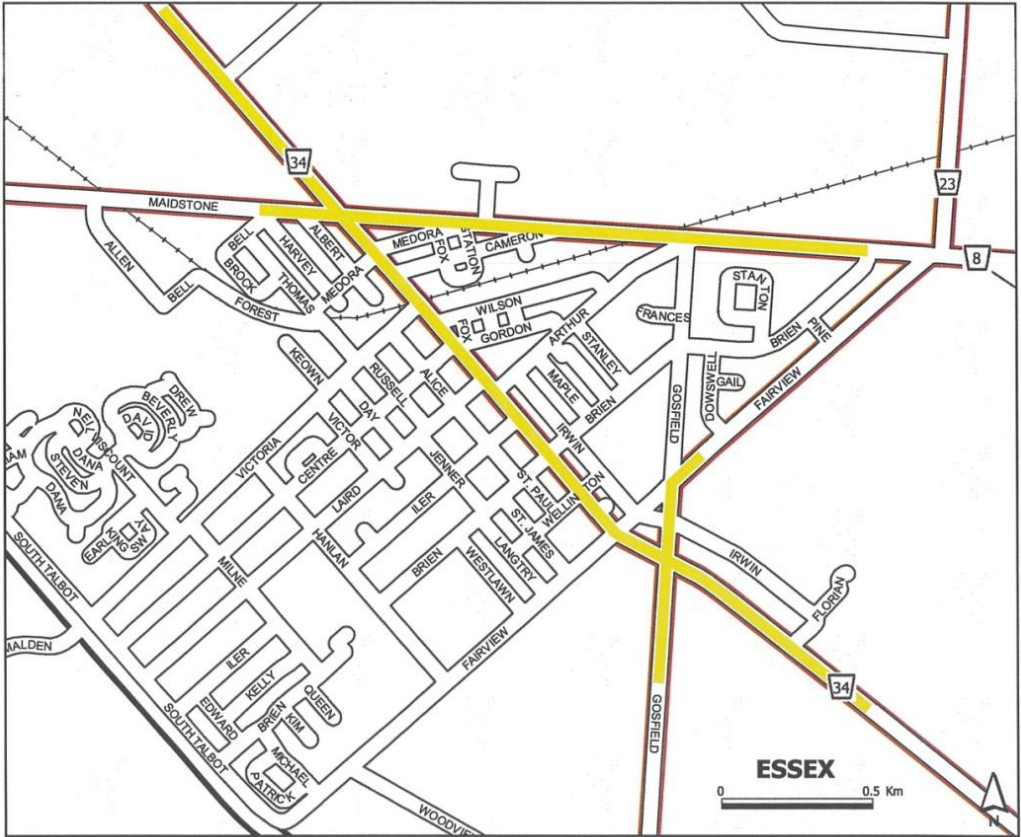
Appendix 1



Connecting Links Key Plan - Amherstburg, ON



Connecting Links Key Plan - Essex, ON





Connecting Links Key Plan - Town of Lakeshore, ON

