



BRUCE COUNTY HIGHWAYS DEPARTMENT

MUNICIPAL CLASS

ENVIRONMENTAL ASSESSMENT

WEST ROAD



PUBLIC INFORMATION SESSION



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1. INTRODUCTION

1.1. Background Review

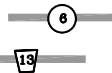
- The Bruce County Highways Department has approximately 650km of road and approximately 148 bridges under its jurisdiction (Figures 1 &2).
- West Road is a 29km road section between Oliphant and Ferndale Road (Bruce Road 9). The West Road is composed of a number of individually names road sections: Bryant Street, Huron Road, Howdenvale Road, Daddy Weir Road and West Road (Figure 3).
- The Municipal Class Environmental Assessment Study Area is the entirety of the West Road.



LEGEND

M. T. O. ROADS

BRUCE COUNTY ROADS



LEGEND

CLASS 2
CLASS 3
CLASS 4

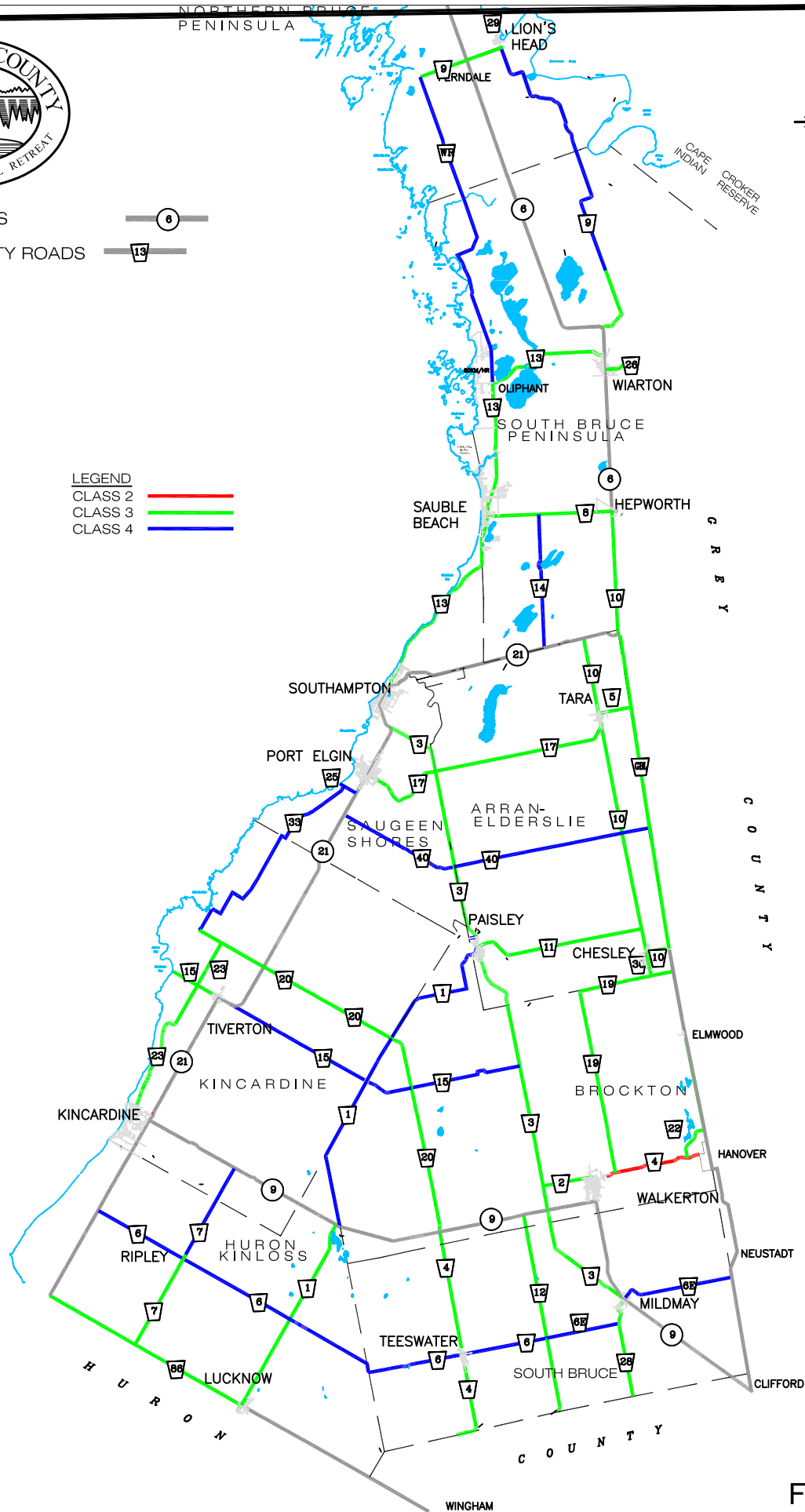


FIGURE 1

BRUCE COUNTY ROAD MAP

ROAD CLASSIFICATIONS

November 5, 2014

REV 0

SCALE 1:500 000

[illegible]

FIGURE 2

West Road



FIGURE 3



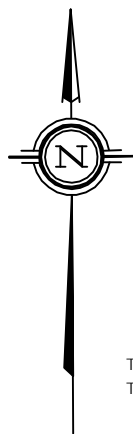
1.2. Road Designation Study

- In 2003 and 2004 the Bruce County Highways Committees wished to review the appropriate jurisdiction of municipal roads in the County.
- Review was necessitated due to significant changes to the road system within Bruce County.
 - Comprehensive study not undertaken in some time
 - Change in traffic patterns/road use
 - increase in population & commercial / industrial and tourism activity
 - road and bridge improvements
 - Impact of BNPD in 1970's and 1980's
 - MTO re-designated road system with 1997 and 1998 transfers to the County
- Result of the Road Designation Study was the transfer of certain municipal roads to the County road system.



- **County of Bruce By-Law Number 4214**
" A by-law to amend by-law 2751, to add certain municipal roads to the county road system" was passed on November 3, 2005
- Included in the by-law are the following municipal roads being transferred to the County road system:

Municipality	Municipal Road	Description of Road being Transferred to the County
Town of South Bruce Peninsula	Bryant Street, Huron Road, Howdenvale Road, and Daddy Weir Road	From Bruce Road 13 in Oliphant through Red Bay and Howdenvale, to the Municipality of Northern Bruce Peninsula boundary.
Municipality of Northern Bruce Peninsula	West Road	From the boundary of the Town of South Bruce Peninsula to Bruce Road 9.



TRANSFER TO COUNTY 
TRANSFER TO LOCAL 

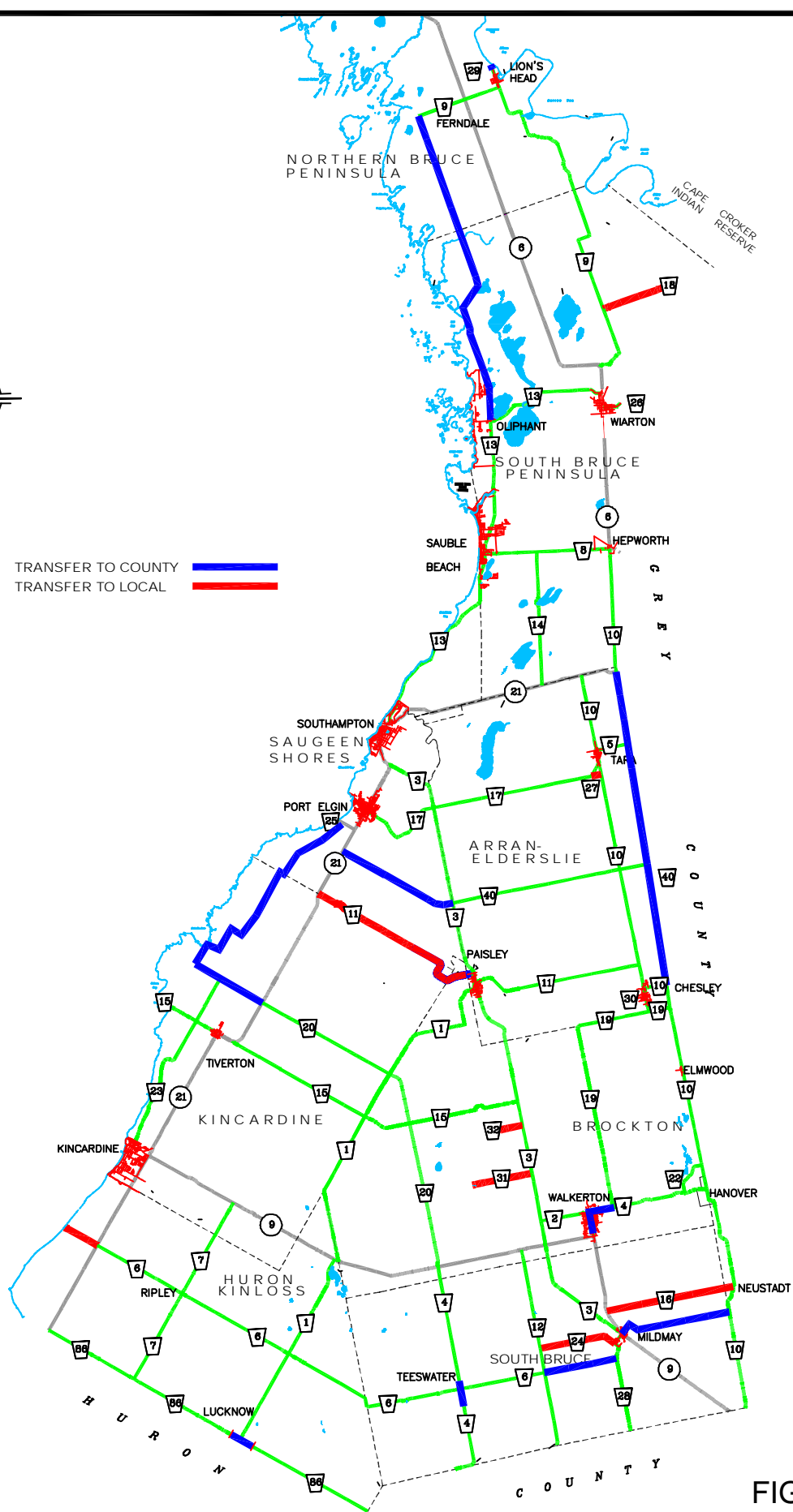


FIGURE 4

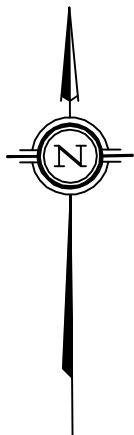
ROAD DESIGNATION STUDY

JULY 7, 2004

REV 2

PROPOSED ROAD TRANSFERS

SCALE 1:500 000



LEGEND
CLASS 2
CLASS 3
CLASS 4

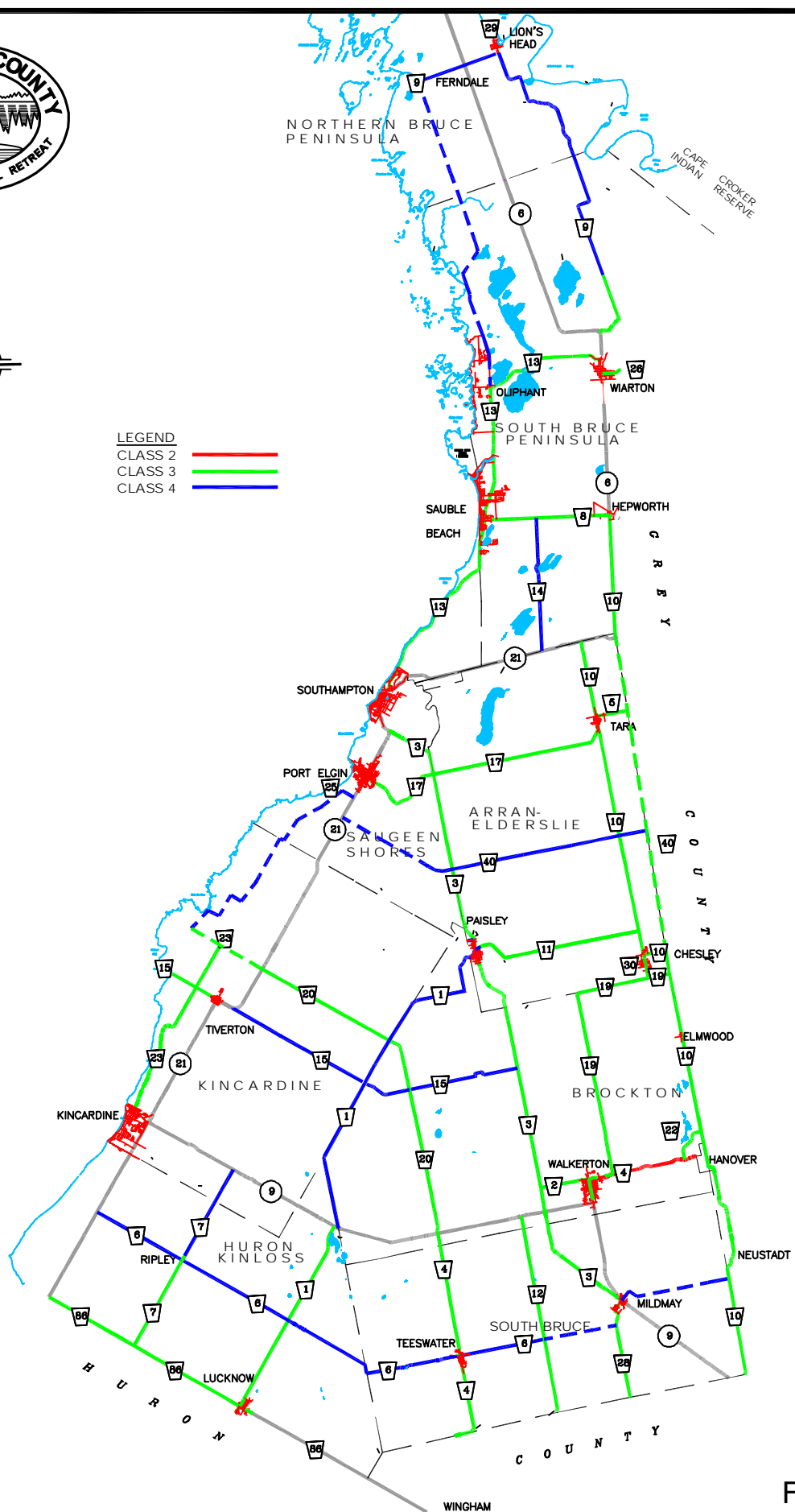


FIGURE 5

ROAD DESIGNATION STUDY

ROAD CLASSIFICATIONS AFTER TRANSFERS

JULY 7, 2004

REV 2

SCALE 1:500 000



Summary

The West Road within the study area is under the jurisdiction of the County of Bruce.



1.3. Ontario Municipal Board Decision & County Official Plan

The Ontario Municipal Board Decision issued March 1, 2012 directed the County to make the following changes to the County Official Plan:

" The Board in conclusion and on a contingent basis orders that the appeals are allowed in part and Official Plan Amendment No. 127 to the Official Plan for the County of Bruce is modified as follows:



1. Include a Transportation Schedule that is similar to the Schedule that formed part of the five- year review amendments, identifying the Rural and Urban segment of the West Road, and further;

2. A clause be added to Section 4.6.3.5 that states Notwithstanding any road widening provisions in this Official Plan no road widening shall be taken along the West Road until the completion of a Municipal Class Environmental Assessment undertaken by the County of Bruce pursuant to Part 11.1 of the Environmental Assessment Act and that any subsequent road widening shall be in accordance with the findings of this Environmental Assessment.



3 . Any proposed road improvement to the West Road as designated on Schedule 'B' Transportation, shall be subject to the requirements of the Municipal Class Environmental Assessment undertaken by the County of Bruce pursuant to Part 11.1 of the Environmental Assessment Act, including consultation with the Saugeen Ojibway Nation, and any proposed development applications that might prejudice the completion of this Municipal Class Environmental Assessment shall be considered premature by the County.

The Board will withhold its final Order pending receipt of a modified BCOPA 127, as set out in this decision in a form satisfactory to, and certified by, the Clerk of the Municipality,.

The Board so Orders"

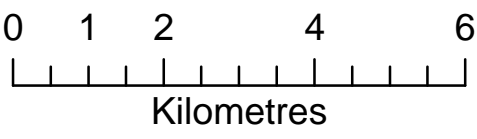
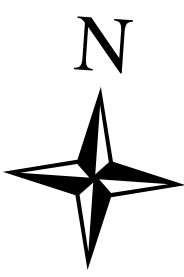


- All of the requirements of the OMB Decision have been incorporated into the County Official Plan.
- Figures 6-8

COUNTY OF BRUCE
SCHEDULE 'B' : TRANSPORTATION

(North Section)

1:100,000



Legend

- AIRPORT
- PRIMARY URBAN COMMUNITIES
- SECONDARY URBAN COMMUNITIES
- PROVINCIAL HIGHWAY
- ARTERIAL URBAN
- ARTERIAL RURAL
- COLLECTOR URBAN
- COLLECTOR RURAL
- RURAL COMMUNITIES
- LOCAL ROADS

Note:
THIS SCHEDULE MUST BE READ IN CONJUNCTION
WITH THE POLICIES OF THE OFFICIAL PLAN AND
SCHEDULES 'A', 'C' AND 'C-2'

OPA#	Adopted Date/By-Law #	Approved Date	Schedule Revised Date
116	APRIL 2, 2009 / BY-LAW #4470	JUNE 21, 2010	MAY, 2010
OMB	DECISION PL091020	MARCH 1, 2012	MARCH, 2012

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Telephone: (519) 534-2092
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DATE PRINTED: March 8, 2012

FIGURE 6

KE

HURON

Legend

-  AIRPORT
-  PRIMARY URBAN COMMUNITIES
-  SECONDARY URBAN COMMUNITIES
-  PROVINCIAL HIGHWAY
-  ARTERIAL URBAN
-  ARTERIAL RURAL
-  COLLECTOR URBAN
-  COLLECTOR RURAL
-  RURAL COMMUNITIES
-  LOCAL ROADS

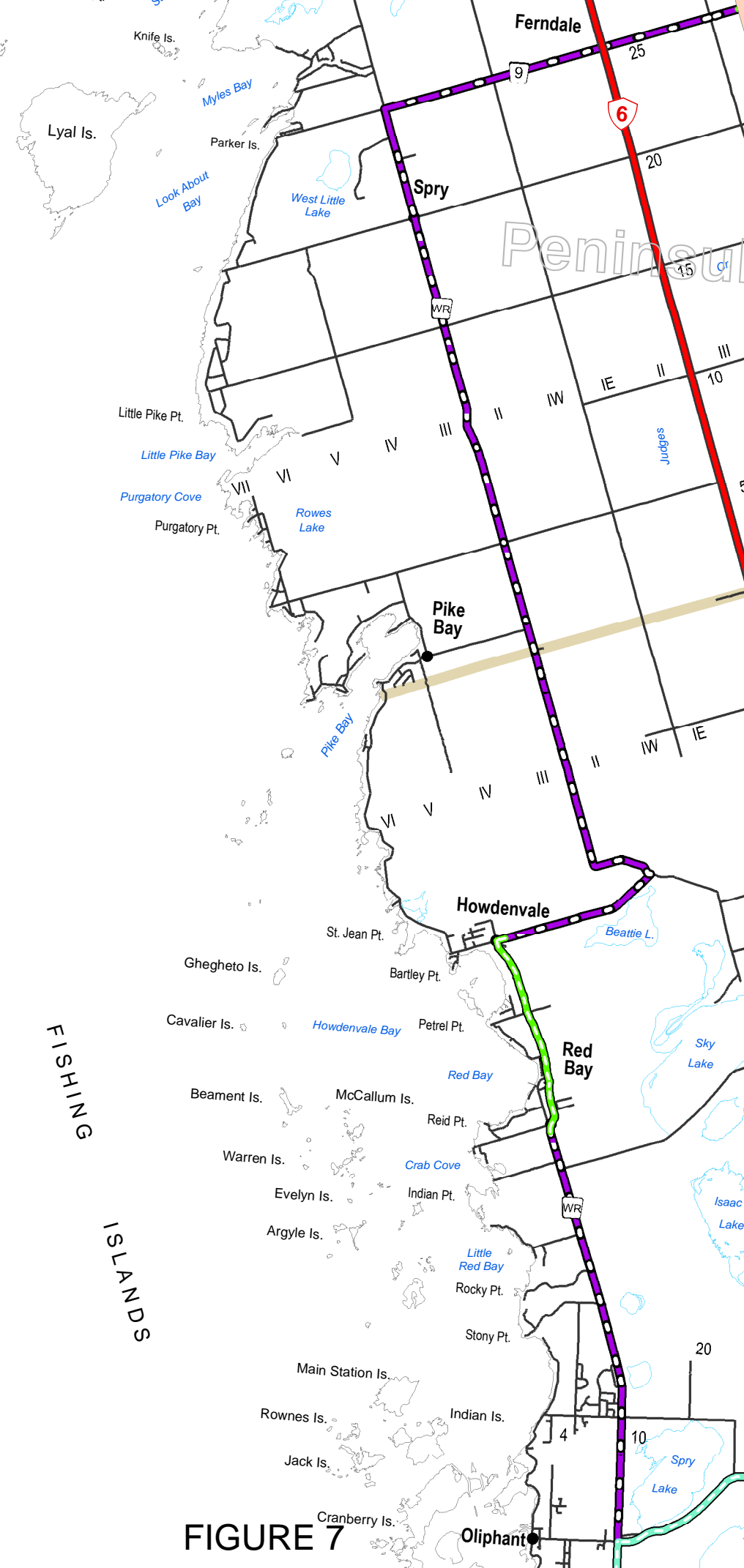


FIGURE 7

4.6 TRANSPORTATION**4.6.1 Objectives**

- i) Minimize the environmental and financial costs associated with the development of transportation systems and facilities in the County;
- ii) Encourage all jurisdictions to consult with each other in transportation upgrading and maintenance programs;
- iii) Encourage the continued existence and development of public and private airports, which serve the County;
- iv) Encourage the development of public and private harbour facilities and recreational marine facilities, including marine transportation system, to serve the public and enhance the economic diversity of the County;
- v) Maintain and enhance the carrying capacity of the existing and proposed County road system;
- vi) Encourage a railway network for the movement of goods and people within the County, and between the County and other areas;
- vii) Encourage the preservation of railway rights-of-way for possible future use as transportation, utility or recreation corridors; and,
- viii) Recognize, promote and encourage recreational transportation routes including canoe routes, cross-country ski, snowmobile, hiking and bicycle trails.

4.6.2 General Policies

- .1 County Council supports the planning, design and operation of a fully integrated County transportation network composed of Provincial highways, County roads, local roads, scenic roads, railways, recreational trails, airports and harbours.
- .2 The transportation network is designed to facilitate the movement of people and goods within and through the County.
- .3 The transportation network depicted on Schedule 'B' anticipates the future needs of the County, as well as future alterations to Provincial and County transportation systems to maintain an adequate transportation network. It is the policy of County Council to encourage the Ministry of Transportation to construct a 4-lane highway to serve the long term needs of Bruce County, or alternately to provide traffic passing areas on Provincial Highways. Such highways will help strengthen the economy of the County including the tourism, agricultural, industrial, mineral resource and other sectors
- .4 The Roads transportation network is classified on the basis of road function as indicated on Schedule 'B'. Where additional land is required for widenings, realignments, extensions and intersection improvements, such land shall be obtained, wherever possible, in the course of approving plans of subdivision or the granting of severances and minor variances, site plan agreements or through development agreements. Where the construction of new or improvements/alterations to existing transportation components are undertaken, any surplus lands which do not meet the minimum lot requirements of the local Municipal zoning by-laws shall be amalgamated where possible with adjoining lands.
- .5 Roads within the Planning Area shall be classified according to Section 4.6.3 [Roads].
- .6 An Official Plan Amendment to Schedule 'B' of this Plan is required when major re-routing of roads are made to the Provincial highways and County road system indicated on Schedule B.

4.6.3 Roads**4.6.3.1 Arterial Roads**

- .1 The policies of this section shall apply to all County roads as identified as Arterial roads on Schedule

'B' of this plan.

- .2 County Council wishes to maintain and upgrade the Arterial Highway system to ensure improved regional access to major markets and urban centres, within and outside of the County.
- .3 County Council in consultation with the local municipalities shall encourage the construction of by-passes around Primary and Secondary Urban Areas, where traffic volumes and congestion warrant.

4.6.3.2 Collector Roads

- .1 The policies of this section shall apply to all roads identified as Collector Roads or Proposed Collector Roads on Schedule 'B' of this Plan.
- .2 The County shall ensure a continued program of improvements to the County Collector Road network, or Primary Urban Communities, Secondary Urban Communities, Rural Recreational Area, the BNPD / BEC and other major destination points.

4.6.3.3 Local Roads

- .1 County Council encourages local municipalities to provide local roads, which are consistent with and accessible by the road network of the adjacent municipality, the County and the Province.
- .2 New development on existing private roads may be considered by the local municipality provided that such development occurs on lots which existed on the date of adoption of this Plan and which could legally be conveyed on that date, provided that all other policies of this Plan are met and subject to appropriate zoning. No new private roads shall be permitted.
- .3 Private roads are those roads not maintained by a municipality, located either on a municipal or private right-of-way providing access to a cluster of residential uses.
- .4 This policy shall not be interpreted so as to prohibit development of Plans of Condominium using private roadways of a standard suitable to the municipalities.

4.6.3.4 Provincial Highways

- .1 There are three provincial highways serving the County of Bruce (Highway 6, Highway 9 and Highway 21) which are under the jurisdiction and control of the Ministry of Transportation (MTO). Development that falls within the MTO's permit control areas as defined under the Public Transportation and Highway Improvement Act is subject to all the safety and geometric requirements of the MTO.
- .2 New entrances or the upgrading of entrances, location of buildings, signs and encroachments within the MTO's permit control area of a provincial highway shall be subject to the approval of the MTO. MTO requirements may conflict with this Official Plan and therefore in such a situation, the highway standard would apply.
- .3 For major development proposals for large traffic generators located within the permit control area of a provincial highway, MTO will require an application to prepare a transportation impact assessment in accordance with its "General Guidelines for the preparation of Traffic Impact Studies". The main purpose of a traffic impact study is to demonstrate how the transportation impacts of a proposed development or redevelopment can be mitigated and addressed in a manner that is consistent with the objectives of MTO. The traffic impact study also serves as the basis for the identification and evaluation of transportation related improvements or measures to be included as a condition of access approval, including funding for the development or redevelopment.
- .4 All applicants proposing changes to an existing development, or the construction of a new development or land use change that requires a minor variance, severance, official plan amendment or zoning by-law amendment within the MTO's permit control areas are advised to consult with the

MTO prior to making formal submission of their application under the Planning Act, as access to development is strictly controlled.

- .5 The County and the MTO shall work together co-operatively with respect to the planning of land development and associated access connections within MTO's permit control areas adjacent to all provincial highways and intersections within the County, in order to protect, for future safety, operation and capacity of both the provincial highway network and the County's transportation corridors for the movement of people and goods.

4.6.3.5 County Roads

- .1 The County has by-laws to regulate the construction or alteration of any entrances; for structural setbacks for the installation of signs on or adjacent to County Roads; and for drainage onto County rights-of-way. Any proposed development must conform to these by-laws.
- .2 A County road shall have a minimum right-of-way width of 30 metres for those road sections shown as 'rural' on Schedule 'B' Transportation. All other County Roads shall have a minimum right-of-way width of 20 metres for those road sections shown as 'urban' on Schedule 'B' Transportation.
- .3 Where rights-of-way widths are less than the minimum, or where additional widening are needed for daylight triangles, road cuts and fills, or turning lanes, the County shall require that sufficient road widening be provided through the development approval process in accordance with the provisions of the Planning Act. Where there has been no application through the development approval process, the County shall acquire or expropriate the necessary lands for such widenings.
- .4 Notwithstanding any road widening provisions in this Official Plan no road widening shall be taken along the West Road until the completion of a Municipal Class Environmental Assessment undertaken by the County of Bruce pursuant to Part II.1 of the Environmental Assessment Act and that any subsequent road widening shall be in accordance with the findings of this Environmental Assessment.
- .5 Any proposed road improvements to the West Road as designated on Schedule 'B' Transportation shall be subject to the requirements of the Municipal Class Environmental Assessment undertaken by the County of Bruce pursuant to Part II.1 of the Environmental Assessment Act including consultation with the Saugeen Ojibway Nation, and any proposed development applications that might prejudice the completion of this Municipal Class Environmental Assessment shall be considered premature by the County.

4.6.3.6 Scenic Roads

It is the policy of County Council to develop a County network of scenic roads, either through the county road system or jointly with local municipalities.

4.6.4 Railway

County Council supports the re-introduction of rail service to the Bruce Nuclear Power Development/Bruce Energy Centre area in order to facilitate and provide for the development of a world class agricultural and energy development complex, by:

- i) Encouraging upper levels of Government to recognize the importance of rail service to the Bruce Nuclear Power Development/Bruce Energy Centre area; and
- ii) Encouraging the retention of railway rights-of-way as single ownership lands.

4.6.5 Recreational Trails

- .1 If railway rights-of-way are not required for transportation purposes then the County Council will encourage their conversion to other public uses, which may include multi-use recreational trails and

4.6.3.2 Collector Roads

- .1** The policies of this section shall apply to all roads identified as Collector Roads or Proposed Collector Roads on Schedule 'B' of this Plan.
- .2** The County shall ensure a continued program of improvements to the County Collector Road network, or Primary Urban Communities, Secondary Urban Communities, Rural Recreational Area, the BNPD / BEC and other major destination points.

4.6.3.5 County Roads

- .1 The County has by-laws to regulate the construction or alteration of any entrances; for structural setbacks for the installation of signs on or adjacent to County Roads; and for drainage onto County rights-of-way. Any proposed development must conform to these by-laws.
- .2 A County road shall have a minimum right-of-way width of 30 metres for those road sections shown as 'rural' on Schedule 'B' Transportation. All other County Roads shall have a minimum right-of-way width of 20 metres for those road sections shown as 'urban' on Schedule 'B' Transportation.
- .3 Where rights-of-way widths are less than the minimum, or where additional widening are needed for daylight triangles, road cuts and fills, or turning lanes, the County shall require that sufficient road widening be provided through the development approval process in accordance with the provisions of the Planning Act. Where there has been no application through the development approval process, the County shall acquire or expropriate the necessary lands for such widenings.
- .4 Notwithstanding any road widening provisions in this Official Plan no road widening shall be taken along the West Road until the completion of a Municipal Class Environmental Assessment undertaken by the County of Bruce pursuant to Part II.1 of the Environmental Assessment Act and that any subsequent road widening shall be in accordance with the findings of this Environmental Assessment.
- .5 Any proposed road improvements to the West Road as designated on Schedule 'B' Transportation shall be subject to the requirements of the Municipal Class Environmental Assessment undertaken by the County of Bruce pursuant to Part II.1 of the Environmental Assessment Act including consultation with the Saugeen Ojibway Nation, and any proposed development applications that might prejudice the completion of this Municipal Class Environmental Assessment shall be considered premature by the County.



Summary

- The West Road is designated as a Rural or Urban Collector Road under the County Official Plan.

"4.6.3.2 Collector Roads

.2 the County shall ensure a continued program of road improvements to the County Collector Road network, or Primary Urban Communities, Secondary Urban Communities, Rural Recreational Area, the BNPD / BEC and other major destination points. "

- Purpose of EA is to determine extent of **'road improvements'**



- Schedule 'B' Transportation - clear that minimum right-of-way width of 30 metres for 'rural' designated areas and minimum right of way width of 20 metres for those road sections designated as 'urban' unless road alignment.
- OMB decision clearly indicates that:
*"4.6.3.5 County Roads
.4 Notwithstanding any road widening provisions in this Official Plan no road widening shall be taken along the West Road until the completion of a Municipal Class Environmental Assessment undertaken by the County of Bruce pursuant to Part II.1 of the Environmental Assessment Act and that any subsequent road widening shall be in accordance with the findings of this Environmental Assessment."*



1.4. Minimum Maintenance Standards

- In November 2002, Ontario Regulation 239/02 came into effect, known as Minimum Maintenance Standards (MMS).
- MMS include activities such as:
 - Patrolling
 - Snow accumulation
 - Ice formation on roadways and icy roadways
 - Potholes
 - Shoulder drop-offs
 - Cracks
 - Debris
 - Signs



- MMS provide criteria to classify roads based on average traffic volumes and the posted speed limit.
- Classifications range from one to six, with Class One Roads having higher average traffic volumes and higher posted speed limits.
- West Road is classified as a Class 3 and Class 4 Road.

Summary

The West Road is classified as a Class 3 & Class 4 Road based on the MMS and maintenance activities are undertaken in accordance with these Standards.



2. MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT AND MASTER PLANNING PROCESS

- Planning of municipal infrastructure projects/activities is subject to the Environmental Assessment Act, R.S.O 1990, and requires the proponent to complete an Environmental Assessment.
- Municipal Class EA process was developed by the Municipal Engineers Association (MEA), in consultation with the Ministry of the Environment and Climate Change.
- Municipal Class EA solicits input & approval from regulatory agencies, municipalities and the public at the local level. This process leads to an evaluation of the alternatives in view of the significance of environmental impacts and the choice of effective mitigation measures.



2.1. Municipal Class EA Process

2.1.1. Municipal Class EA Process Phases

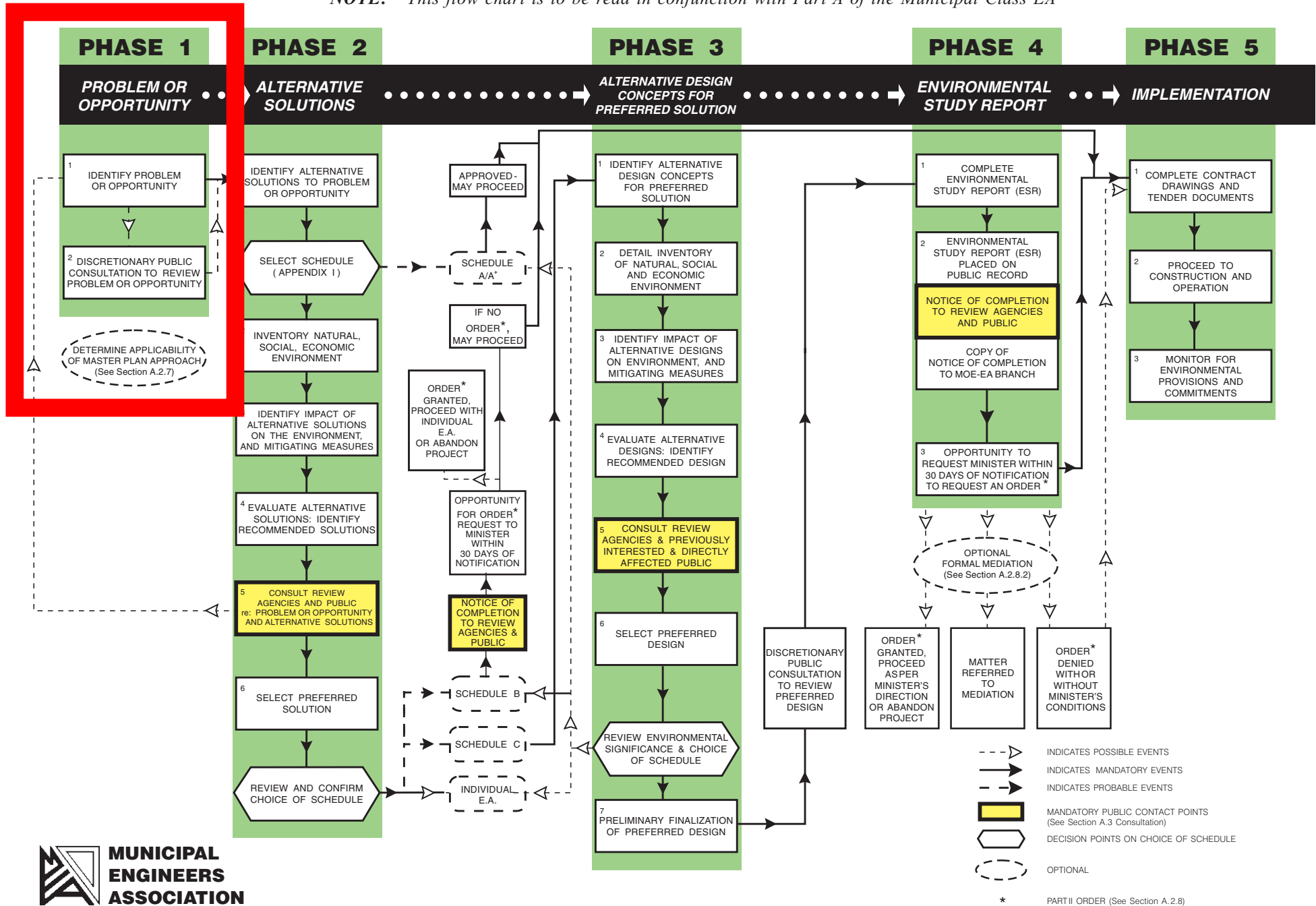
Figure 9 is a flowchart that outlines the 5 Phases of the Municipal Class EA process.

FIGURE 9

EXHIBIT A.2

MUNICIPAL CLASS EA PLANNING AND DESIGN PROCESS

NOTE: This flow chart is to be read in conjunction with Part A of the Municipal Class EA





Phase 1

- Identify the problem (deficiency) or opportunity.

Phase 2

- Identify alternative solutions to address the problem or opportunity by taking into consideration the existing environment,
- Establish the preferred solution taking into account public and review agency input, anticipated environmental effects and methods of minimizing negative effects and maximizing positive effects.



Phase 3

- Examine alternative methods of implementing the preferred solution, based upon the existing environment, public and review agency input, anticipated environmental effects and methods of minimizing negative effects & maximizing positive effects.

Phase 4

- Document, in an ESR a summary of the rationale and the planning, design and consultation process of the project as established through the above phases,
- Make documentation available for review and comment by review agencies and the public.



Phase 5

- Complete contract drawing and documents,
- Proceed to consultation and operation,
- Monitor construction for adherence to environmental provisions and commitments.



2.1.2. Municipal Class EA Schedules

- Four categories of assessment within the Municipal Class EA process
- Dependent on the complexity and potential for environmental impact.

Schedule A Projects

- Limited in scale.
- Minimal adverse environmental effects.
- No public notification or documentation required.
- Pre-approved.
- Examples: plowing and sanding, shouldering, ditch cleanouts, culvert repair/replacement.



Schedule A+ Projects

- Limited in scale.
- Minimal adverse environmental effects.
- No documentation required.
- Pre-approved but the public is advised prior to implementation.
- Examples: hot mix resurfacing, construction of new culvert.



Schedule B Projects

- Potential for environmental effects with known mitigation.
- Proponent is required to undertake a screening process, involving mandatory contact with the directly affected public and regulatory agencies, to ensure that they are aware of the Project and that their concerns are addressed.
- Require a Project File be prepared and made available for public review.
- Proponents required to completed Phase 1, 2 and 5 of the Municipal Class EA Process.
- Examples: constructing a minor expansion to a road. Generally work under \$2.4 million.



Schedule C Projects

- Potential for significant environmental effects.
- Must proceed under the full planning and documentation procedures of the Municipal Class EA document.
- Require an Environmental Study Report (ESR) be prepared and filed on the public record for review by the public and regulatory agencies.
- Proponents required to complete Phases 1 through 5 of the Municipal Class EA Process.
- Examples: significant road construction. Generally work over \$2.5 million.



2.1.3. Master Planning Process & Approach (Framework)

- The Municipal Class EA document also outlines a Master Planning Process that can be followed by municipal proponents.
- A Master Plan is a long range plan, ties together the various needs of an overall system such as a stormwater management system, bridges or a road network.
- A Master Plan is comprised of a set of separate projects that are dispersed geographically over a broad study area and are to be individually implemented over an extended period of time.
- As a minimum, Master Plans must address Phases 1 and 2 of the Municipal Class EA Process.
- There are four Master Planning "approaches"



Approach	Key Characteristics	Project Implementation
#1	<ul style="list-style-type: none">• Master Plan prepared at the conclusion of Phases 1 and 2 of the Class EA process• Completed at a broad level of assessment• Serves as basis for future investigations associated with specific Schedule B and C projects	<ul style="list-style-type: none">• Schedule B and C projects would require further Class EA investigations
#2	<ul style="list-style-type: none">• Master Plan prepared at the conclusion of Phases 1 and 2 of Class EA process• More detailed level of investigation and consultation completed, such that it satisfies requirements for Schedule B screenings• Final public notice for Master Plan serves as Notice of Completion for individual Schedule B projects	<ul style="list-style-type: none">• Schedule B projects are approved• Schedule C projects must complete Phase 3 to 4 of Class EA process
#3	<ul style="list-style-type: none">• Master Plan prepared at the conclusion of Phase 4 of Class EA process• Level of review and consultation encompasses Phase 1 to 4 of the Class EA process• Final public notice for Master Plan serves as Notice of Completion for Schedule B and C projects reviewed through the Master Plan	<ul style="list-style-type: none">• Class EA investigations are not required for projects reviewed through the Master Plan
#4	<ul style="list-style-type: none">• Integration of Master Plan with associated Planning Act approvals• Establishes need and justification in a very broad context• Best suited when planning for a significant geographical area in the long term	<ul style="list-style-type: none">• Depending on level of investigation associated with the Master Plan, Class EA investigations may be required for specific projects.



2.2. Pre - Consultation

- Saugeen Ojibway Nation (SON)
- Ministry of Environment and Climate Change (MOECC)

2.3. Schedule

Date	Committee/Council/Group	Item
August 6, 2015	Bruce County Highways Committee	Preliminary problem/opportunity statement & Notice of Commencement
August 10, 2015	Northern Bruce Peninsula Council	Review background information on West Road and EA preliminary problem/opportunity statement
August 18, 2015	South Bruce Peninsula Council	
August 26, 2015	Public Information Session - Lion's Head	
August 27, 2015	Public Information Session - Wiarton	
September 17, 2015	Bruce County Highways Committee	Consider Municipal Council and Public Information Session input



Summary

- County is the Proponent for the Municipal Class Environmental Assessment (EA).
- Project is the outcome of the EA process.
- Several approaches to the EA process.
- **Notice of Commencement** issued to initiate the start of the EA process - Figure 10
- EA approach to be taken for the West Road will be determined through the identification of the problem.
- At Phase 1 - '**Identify Problem or Opportunity**'.
- Discretionary Public Consultation to Review Problem or Opportunity.
- No alternative/preferred solutions discussions at this time.

PHASE 1

PROBLEM OR OPPORTUNITY ..

1

IDENTIFY PROBLEM
OR OPPORTUNITY



2 DISCRETIONARY PUBLIC
CONSULTATION TO REVIEW
PROBLEM OR OPPORTUNITY

DETERMINE APPLICABILITY
OF MASTER PLAN APPROACH
(See Section A.2.7)



**COUNTY OF BRUCE
MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT
WEST ROAD
TOWN OF SOUTH BRUCE PENINSULA &
MUNICIPALITY OF NORTHERN BRUCE PENINSULA**

NOTICE OF STUDY COMMENCEMENT & PUBLIC INFORMATION SESSIONS

The County of Bruce is undertaking a Municipal Class Environmental Assessment (Class EA) Study to determine the future needs for road maintenance and capital improvements on the 29 km road section between Oliphant (Bruce Road 13) and the Ferndale Road (Bruce Road 9), known as the West Road.

The study is being conducted in accordance with the requirements of the Municipal Class Environmental Assessment (Class EA) which is an approved process under the Environmental Assessment Act. The specific approach of the study, whether a Master Plan project or Schedule C project, will be determined through the Class EA process.

The Class EA will involve a thorough examination of the problem/opportunity and constraints that will direct future decisions regarding maintenance and capital improvements.

PUBLIC INFORMATION SESSIONS:

Public consultation is a key component of the EA process. The County of Bruce will be conducting discretionary public information sessions to present and receive comment on the problem/opportunity statement. The sessions have been scheduled as follows:

Date:	Wednesday August 26, 2015
Time:	6:30pm - 8:00pm
Location:	Lion's Head & District Community Centre 4 Tackabury Street, Lion's Head

Date:	Thursday August 27, 2015
Time:	6:30pm - 8:00pm
Location:	Warton & District Community Centre 526 Taylor Street, Warton

For further information on this study please contact:
County of Bruce Highways Department
Brian Knox, County Engineer
30 Park Street, P.O. Box 398, Walkerton, ON N0G 2V0
P:519-881-2400 F:519-507-3030
bknox@brucecounty.on.ca

This Notice Issued: August 11, 2015

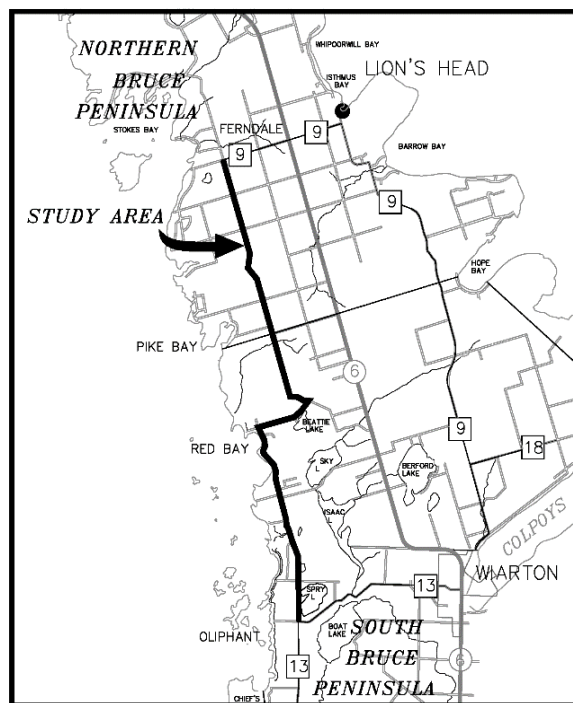


FIGURE 10



3. STUDY AREA DESCRIPTION

3.1. Overview of Study Area

A background review was carried out to obtain a general characterization of the West Road. Incorporated these activities:

- Topographic Survey to determine existing road conditions.
- Ontario Land Surveyors (OLS) to confirm existing road allowance limits.
- Geotechnical investigation/evaluation of the existing road.
- Inventory and assessment of existing drainage features.
- Cultural Heritage Study.
- Natural Heritage Evaluation Study.
- Preliminary discussions with Saugeen Ojibway Nation (SON).



Summary

The background reviews are ongoing and may require additional effort during the Environmental Assessment process.



3.2. Existing Road Observations

Based on the background review the Department has made a number of observations on road related features as follows:

- Official Plan Designation
- Current Posted Speed
- Traffic Counts
- Surface Condition
- Geometric Design Elements
- Encroachments onto Private Property
- Drainage
- Topography
- Geotechnical



3.2.1. Official Plan Designation

- The Bruce County Official Plan designates the West Road as either rural collector or urban collector.
- The Official Plan indicates the minimum right-of-way width for road sections shown as 'urban' shall be 20 meters.
- The Official Plan indicates that the minimum right-of-way width for County roads shown as 'rural' shall be 30 meters yet, does not apply to the West Road.
- A special provision of the Official Plan states that for the West Road, any road widening shall be in accordance with the findings of this Municipal Class Environmental Assessment.



3.2.2. Current Posted Speed

- The posted speed on the West Road varies between 50 km/hr and 80 km/hr.
- The posted speed is an important factor when reviewing geometric requirements.
- A summary of West Road posted speed limits is provided in the table below and Figure 11.

Posted Speed Limit Summary - West Road

From	To	2005 Nov 3 By-law 4218	2006 Mar 2 By-law 4245	2009 Nov 5 By-law 4517	2012 June 7 By-law 2012- 027	2012 Sept 6 By-law 2012- 044	2014 Feb 6 By-law 2014- 010	2014 Mar 6 By-law 2014- 14	2014 Apr 3 By-law 2014- 019	2014 Nov 6 By-law 2014- 053
Bruce Road 13	N. of Spry Lake Road	50	50	60	60	60	60	60	60	60
N. of Spry Lake Road	Hemlock Road	NP	NP	50	50	50	50	50	50	50
Hemlock Rd	S. limit of Red Bay	NP	NP	80	80	80	80	80	80	80
S. limit of Red Bay	S. limit of Howdenvale	50	50	50	50	50	50	50	50	50
S. limit of Howdenvale	N of Little Pike Bay Rd	NP	NP	60	60	60	60	60	60	60
N of Little Pike Bay Rd	Bruce Road 9	NP	NP	80	80	80	80	80	80	80

NP = not posted

West Road

Posted Speed Limits



FIGURE 11

3.2.3. Traffic Counts

Traffic counts completed during the summer months are summarized in the table below and in Figure 12.

Year	Bruce Road 13 and Spry Lake Road	Spry Lake Road and Red Bay Road	Red Bay Road to Howdenvale Road	Howdenvale Road / Huron Road to Daddy Weir Road	Daddy Weir /Howdenvale Road to Little Pike Bay Road	Little Pike Bay Road to Bruce Road 9
2006	1922	1177	614	217	308	603
2009	1233	849	501	213	270	499
2012	1960	1234	1071	179	318	444
2015	2299	1427	765	235	137	540

West Road

Daily Traffic Volumes



FIGURE 12



3.2.4. Surface Condition

- Generally:
 - south portion of the road between Oliphant and Howdenvale is asphalt or surface treatment,
 - center portion between Howdenvale and Little Pike Bay Road is gravel, and
 - northerly portion between Little Pike Bay Road and Bruce Road 9 is asphalt pavement.
- Existing portions with hard surfacing are aged and deteriorated.
- Gravel portion is difficult to maintain.
- The photos in Figure 13 depict the deteriorated condition of the surface.
- The photos are from Google maps 'street view' dated June & July 2013.

FIGURE 13 - West Road Photos - Google Maps - June/July 2013

















3.2.5. Geometric Design Elements

The Bruce County Highways Department assigns the following design elements to its road system:

- Past practice, based on implementing the recommendations of provincial and national standards, is for the County to assess a design speed of 10 km above the posted speed.
- Design parameters for vertical crest curves and sag curves provide for adequate visibility along the road for stopping site distance.
- Design parameters for the horizontal curvature of the road also provides for stopping site distance.



- Lane widths provide for opposing vehicle separation distances.
- Shoulder widths provide a location for stranded vehicles, emergency forces, slow-moving vehicles and for snow storage.
- Shoulder widths also provide improved sight distances for vehicles entering/leaving the road.
- Tables 1 - 3 provide a summary of the West Road preliminary assessment.
- Appendix A & B are preliminary plan and profiles of existing conditions.

TABLE 1

WEST ROAD PRELIMINARY ASSESSMENT			
SECT	SURFACE: ASPHALT	STATION RANGE	
1A		0+000	2+250
FROM	OLIPHANT WAY	TO	SPRY LAKE
COUNTY OP DESIGNATION	COLLECTOR RURAL		
CONSTRUCTION HISTORY	1975	Approx.	
POSTED SPEED (km/h)	60		
DESIGN SPEED (km/h)	70		
JULY 2015 DAILY TRAFFIC VOLUME	2400	WRA	

GEOMETRIC DESIGN ELEMENTS	EXISTING	DESIGN	
ALIGNMENT			
VERTICAL CURVES	FLAT		
CREST (K)	NA	25	
SAG (K)	NA	25	
HORIZONTAL CURVE RADII (m)	NA	190	
LOCATION ON ROW	CENTRED	CENTRED	
PLATFORM			
LANE WIDTH (m)	3.66	3.35	
SHOULDER WIDTH (m)	1.04	1.5	
TOTAL PLATFORM WIDTH	9.4	9.7	
RIGHT OF WAY (m)	20.117		
DRAINAGE			
<ul style="list-style-type: none"> road drainage overall poor lack of ditching High groundwater table 			
TOPOGRAPHY			
<ul style="list-style-type: none"> Flat, Sand Dunes, (Plainfield) Sand Dune (remnants of Lake Nipissing) 			
VEGETATION			
<ul style="list-style-type: none"> Mixed Deciduous/Coniferous 			
Geotechnical			
<ul style="list-style-type: none"> BH 1-11 			
Utilities			
<ul style="list-style-type: none"> Hydro/Telephone/CATV 			
Comments			
<ul style="list-style-type: none"> 			

TABLE 2

WEST ROAD PRELIMINARY ASSESSMENT		
SECT	SURFACE: ASPHALT	STATION RANGE
3		7+230 11+350
FROM KOWEL LANE		TO HOWDENVALE ROAD
COUNTY OP DESIGNATION		COLLECTOR URBAN
CONSTRUCTION HISTORY		Approx.
POSTED SPEED (km/h)		50
DESIGN SPEED (km/h)		60
JULY 2015 DAILY TRAFFIC VOLUME		750 WRB1

GEOMETRIC DESIGN ELEMENTS	EXISTING	DESIGN	
ALIGNMENT			
VERTICAL CURVES	FLAT		
CREST (K)	1 deficient	15	
SAG (K)	4 deficient	18	
HORIZONTAL CURVE RADII (m)	Acceptable (min 190m)	130	
LOCATION ON ROW	MEANDERS	CENTRED	
10m Encroachments	8+225 to 8+275 Lt 8+310 TO 8+450 RT 8+490 TO 8+530 LT 8+930 to 9+090	9+950 to 9+810 10+615 TO 10+800 RT 11+160 TO 11+250 LT	
PLATFORM			
LANE WIDTH (m)	3.2	3.35	
SHOULDER WIDTH (m)	1.05	1.5	
TOTAL PLATFORM WIDTH (AVG)	8.5	9.7	
RIGHT OF WAY (m)	26.5	(Varies)	
DRAINAGE			
<ul style="list-style-type: none"> Good to Poor 			
TOPOGRAPHY			
<ul style="list-style-type: none"> Dunes 			
VEGETATION			
<ul style="list-style-type: none"> Mixed Deciduous/Coniferous 			
Geotechnical			
<ul style="list-style-type: none"> BH 38-57 			
Utilities			
<ul style="list-style-type: none"> Hydro/Telephone/CATV 			
Comments			
<ul style="list-style-type: none"> 			

TABLE 3

WEST ROAD PRELIMINARY ASSESSMENT		
SECT	SURFACE: GRAVEL	STATION RANGE
4C		13+980 17+940
FROM 536 HOWDENVALE ROAD		TO LOT 4/5 CON 3 WBR
COUNTY OP DESIGNATION		COLLECTOR RURAL
CONSTRUCTION HISTORY		Approx.
POSTED SPEED (km/h)		60
DESIGN SPEED (km/h)		70
JULY 2015 DAILY TRAFFIC VOLUME		190 WRC

GEOMETRIC DESIGN ELEMENTS	EXISTING	DESIGN	
ALIGNMENT			
VERTICAL CURVES			
CREST (K)	20 deficient	25	
SAG (K)	14 deficient	25	
HORIZONTAL CURVE RADII (m)		190	
LOCATION ON ROW	MEANDERS	CENTRED	
10m Encroachments	14+310 TO 14+400 LT 14+580 TO 14+820 LT 14+580 TO 14+820 LT 15+480 TO 15+520 RT		
PLATFORM			
LANE WIDTH (m)	3	3.35	
SHOULDER WIDTH (m)		1.5	
TOTAL PLATFORM WIDTH (AVG)	6	9.7	
RIGHT OF WAY (m)		20.1	
DRAINAGE			
• FAIR			
TOPOGRAPHY			
• SAND/SHALLOW BEDROCK			
VEGETATION			
• Mixed Deciduous/Coniferous			
Geotechnical			
• BH 72-90			
Utilities			
• CLEAR			
Comments			
•			



3.2.6. Encroachments onto Private Property

- Number of locations where the road is currently on private property or the road is not centered and that road features are on private property.
- Existing right of way property line is generally straight and in a number of locations the road has horizontal curves, where the road encroaches on private property.
- Sections where the road is not centered on the road allowance.



3.2.7. Drainage

- Currently there are locations where the road lacks the drainage of the granular horizon.
- This is aggravated where there are wetlands and subsequent high groundwater table.



3.2.8. Topography

The topography of the road varies from:

- Sand dunes
- Wetlands
- Sand with shallow bedrock
- Flat Agricultural poorly drained (Ferndale Flats)



3.2.9. Geotechnical Review

- Department engaged geotechnical consultant to review the West Road.
- The geotechnical assessment concluded that the distressed surface reflected poor drainage, increased traffic loading, inadequate base/sub base and possibly poor past construction practices.



Summary

The existing road observations suggests that there are a number of road improvements that are required to support surface improvements.



3.3. Road Sections

The observations of the existing road conditions made it apparent that there were a number of distinct road sections that were similar in nature based on the following elements:

- Official Plan Designation
- Posted Speed
- Traffic Counts
- Geometric Design Elements
- Surface Condition
- Drainage
- Topography
- Geotechnical Review



Figure14 illustrates 5 distinct road sections, some of which have several subsections.

Appendix C includes tables which are the preliminary assessments of each road subsection and provide details on the road related features generalized in Section 3.2.

West Road

Physical Characteristics





4. MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT (EA) PROBLEM STATEMENT

Class EA - Phase 1

'Identify Problem or Opportunity'

Problem Statement:

To implement road improvements that:

- Overcome road encroachments onto private property,**
- Ensure road geometry elements meet an appropriate design speed,**
- Improve road structure drainage and road structure,**
- Improve the road surface.**



Therefore the County of Bruce is carrying out this study to address the foregoing in accordance with the Municipal Class EA process.

5. NEXT STEPS

Date	Committee/Council/Group	Item
August 6, 2015	Bruce County Highways Committee	Preliminary problem/opportunity statement & Notice of Commencement
August 10, 2015	Northern Bruce Peninsula Council	Review background information on West Road and EA preliminary problem/opportunity statement
August 18, 2015	South Bruce Peninsula Council	
August 26, 2015	Public Information Session - Lion's Head	
August 27, 2015	Public Information Session - Wiarton	
September 17, 2015	Bruce County Highways Committee	Consider Municipal Council and Public Information Session input