

APPENDIX B

PUBLIC CONSULTATION

MUNICIPALITY OF BLUEWATER
MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT
STORMWATER MASTER PLAN SERVICING STUDY
(COMMUNITY OF BAYFIELD)

NOTICE OF COMMENCEMENT

THE PROJECT:

The Municipality of Bluewater has initiated a Municipal Class Environmental Assessment (Class EA) process to develop a Stormwater Servicing Master Plan for the Bayfield Settlement area. The Master Plan will inventory and evaluate existing stormwater facilities within Bayfield and investigate the most cost effective and efficient manner to provide additional stormwater servicing, where required, within established and future development areas of the community.

When completed, the Master Plan will recommend a stormwater servicing strategy that could be implemented in phases within the established areas of Bayfield, as well as recommending best practices and strategies for addressing stormwater servicing within future development areas of the community.

THE ENVIRONMENTAL ASSESSMENT PROCESS:

The investigation is being planned as a Master Plan project under the Municipal Class Environmental Assessment document. Master Plan projects incorporate a screening process that involves consultation with the public, government review agencies and affected property owners. Public input and comment are therefore invited for incorporation into the project.

PUBLIC INVOLVEMENT:

The consultation program for this Class EA Master Plan process includes several opportunities for public involvement including a questionnaire and public information meeting. Details related to the public meeting will be provided at a later date. For the initial phase of the program, public input into the planning and design of this project will be received until September 20th, 2013. Additional opportunities for comment will be provided as the process proceeds. Any comments collected in conjunction with this Class EA will be maintained on file for use during the project and may be included in project documentation. With the exception of personal information, all comments will become part of the public record

For further information on this project, or to review the Class EA Master Plan process, please contact the project engineers: B.M. Ross and Associates, 62 North Street, Goderich, Ontario, N7A 2T4. Telephone (519) 524-2641, Fax (519) 524-4403. Kelly Vader, Environmental Planner; (e-mail: kvader@bmross.net).

This Notice issued August 7th, 2013
Steve McAuley, CAO
Municipality of Bluewater



MUNICIPALITY OF BLUEWATER

NOTICE OF PUBLIC INFORMATION CENTRE

MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT STORMWATER MASTER PLAN SERVICING STUDY (COMMUNITY OF BAYFIELD)

PUBLIC INFORMATION SESSION FOR RESIDENTS

The Municipality of Bluewater has initiated a Municipal Class Environmental Assessment process to develop a Stormwater Servicing Master Plan for the Bayfield settlement area. The plan will recommend a stormwater servicing strategy that could be implemented in phases within the established areas of Bayfield, as well as recommending best practises and strategies for addressing stormwater servicing within future development areas of the community. A public information session is planned to present details on the Master Plan and to receive input from interested persons. Representatives of the Municipality and the Project Engineers will be in attendance.

DATE:	February 12, 2014
LOCATION:	Bayfield Community Centre
TIME:	6:00 pm – 8:00 pm
PRESENTATION:	6:30 pm

MUNICIPALITY OF BLUEWATER

NOTICE OF PUBLIC INFORMATION CENTRE

MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT STORMWATER MASTER PLAN SERVICING STUDY (COMMUNITY OF BAYFIELD)

PUBLIC INFORMATION SESSION FOR RESIDENTS

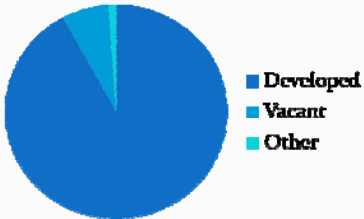
CHANGE OF MEETING LOCATION! MEETING MOVED TO STANLEY REC CENTRE

The Municipality of Bluewater has initiated a Municipal Class Environmental Assessment process to develop a Stormwater Servicing Master Plan for the Bayfield settlement area. The plan will recommend a stormwater servicing strategy that could be implemented in phases within the established areas of Bayfield, as well as recommending best practises and strategies for addressing stormwater servicing within future development areas of the community. A public information session is planned to present details on the Master Plan and to receive input from interested persons. Representatives of the Municipality and the Project Engineers will be in attendance.

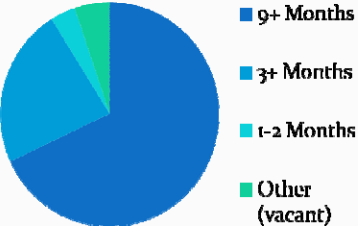
DATE:	February 12, 2014
LOCATION:	Stanley Recreation Complex, Varna
TIME:	6:00 pm – 8:00 pm
PRESENTATION:	6:30 pm

QUESTIONNAIRE RESULTS

Property Status

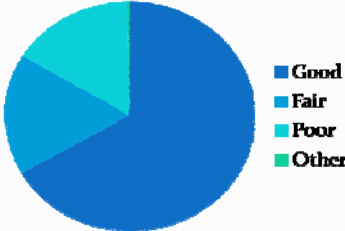


Residency

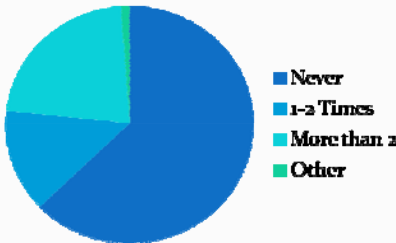


DRAINAGE RESULTS

Lot Drainage



Drainage Problems



MUNICIPALITY OF BLUEWATER


**STORMWATER DRAINAGE
MASTER PLAN**

WELCOME

**PUBLIC INFORMATION MEETING
FEBRUARY 12, 2014**



**AERIAL PHOTOGRAPHY OF
THE PROJECT STUDY AREA**



**EXISTING DRAINAGE OUTLETS
& PROBLEM AREAS**



PROPOSED PHASING PLAN



**MUNICIPAL CLASS
ENVIRONMENTAL ASSESSMENT**

SUMMARY OF MASTER PLAN PROCESS:

- LONG RANGE PLANS DESIGNED TO INTEGRATE INFRASTRUCTURE REQUIREMENTS WITH ENVIRONMENTAL ASSESSMENT PLANNING PRINCIPLES
- EXAMINES A GROUP OF RELATED PROJECTS IN ORDER TO OUTLINE A FRAMEWORK FOR PLANNING FOR SUBSEQUENT PROJECTS AND/OR DEVELOPMENTS
- INVOLVES CONSULTATION WITH THE PUBLIC, REGULATORY AGENCIES AND ADJACENT PROPERTY OWNERS

SCOPE OF THIS STUDY:

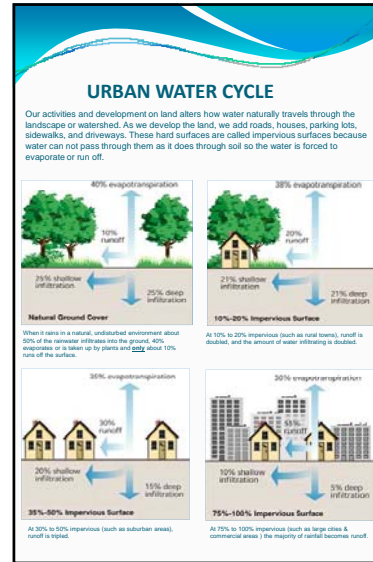
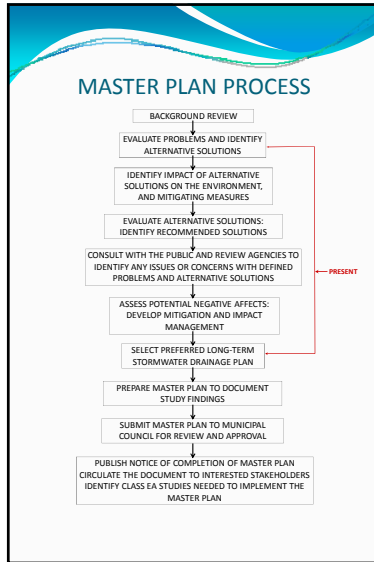
- EXAMINE EXISTING STORMWATER DRAINAGE FACILITIES IN BAYFIELD AND COMPLETE INVENTORY OF STRUCTURES
- DEVELOP RECOMMENDATIONS FOR IMPROVEMENTS WITHIN EXISTING DEVELOPED AREAS OF BAYFIELD AND FUTURE DEVELOPMENT LANDS (SOUTH AND EAST)
- IDENTIFY GENERAL AREAS OF CONCERN WHICH NEED TO BE ADDRESSED – **NOT INDIVIDUAL LOT GRADING PROBLEMS**
- CONSULT WITH BAYFIELD RESIDENTS AND REVIEW AGENCIES
- PROVIDE A PRELIMINARY DRAINAGE DESIGN FOR MAIN STREET
- PREPARE A REPORT DOCUMENTING THE MASTER PLAN PROCESS AND STUDY RECOMMENDATIONS

FEATURES OF A MASTER PLAN

- TAKES A SYSTEM WIDE APPROACH TO PLANNING WHICH RELATES INFRASTRUCTURE EITHER GEOGRAPHICALLY OR BY FUNCTION
- RECOMMENDS PROJECTS TO BE IMPLEMENTED OVER AN EXTENDED PERIOD OF TIME
- ADDRESSES AT MINIMUM THE FIRST TWO PHASES OF THE MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT PROCESS AND CAN ALSO COVER OTHER PHASES
- RECOMMENDS AN INFRASTRUCTURE MASTER PLAN WHICH CAN BE IMPLEMENTED THROUGH THE COMPLETION OF SEPARATE INDIVIDUAL PROJECTS.

PROJECT TIMELINES

- **FEBRUARY 2014** - PUBLIC INFORMATION CENTRE
- **MARCH 2014** - PRELIMINARY REPORT TO COUNCIL
- **APRIL 2014** - FINALIZE CLASS EA MASTER PLAN PROCESS
- **PHASE 1 IMPLEMENTATION** - 2015



WAYS TO CONTROL STORMWATER ON YOUR PROPERTY

An essential part of stormwater management is keeping water from leaving your property or at least slowing its flow as much as possible to protect the watershed and lake.

RAIN BARRELS



- Stormwater from your roof is diverted into a barrel connected to your downspouts and stored for later use to water your garden.
- Drastically reduce runoff by 65-70% if used and maintained properly.
- Can reduce domestic water use, lowering water bills and demands on municipal water system, especially during peak summer periods.
- Can include special features such as spigots for attaching garden hoses, filters, mosquito-proof mesh, and child and animal-proofing.

CISTENS



- Advanced rainwater collection system also referred to as rainwater harvesting.
- Traditional rain barrels are limited to 150-300 litres of water so collection and storage of rainwater is limited with typically only 3% of stormwater being captured per event.
- With a 2,000 sq. ft. home you could collect 4,500 litres of water during a one inch rain event.
- Costs depending on the size can hold between 300-5,400 litres of water.
- Cost of potable water to care for gardens can be expensive for water events.

SOAKER HOSES



- In the summer months homeowners can use 50% to 70% of their water supply outdoors for watering vegetation.
- When using sprinklers, 50% of the water can be lost to evaporation, wind drift or runoff.
- Connect low pressure soaker hoses designed specifically to work with rain barrels or cisterns.
- Soaker hoses provides "rip irrigation" to gardens which is a slow & steady supply of water directly to the soil which is more efficient than using a hand held hose or sprinkler.

WAYS TO CONTROL STORMWATER ON YOUR PROPERTY

DOWNSPOUTS



- Runoff should not be discharged immediately beside buildings or on a grade which would direct flows to buildings as this could lead to foundation damage and/or basement flooding.
- Extend and aim your roof downspouts away from foundations and paved surfaces out onto flower beds, rain gardens, level areas or onto the grass, as this will allow the rain a chance to soak naturally into the ground.
- Keep gutters clean which helps move water to the intended absorption areas.
- Take care not to direct downspouts to impervious driveways, patios or walkways as this could pose as a safety hazard due to pooled runoff and ice formation in winter months.

RAIN GARDEN



- Capture clean rainwater from your roof, driveway and sidewalks & direct it into a low maintenance perennial garden that is designed to catch stormwater and allow it to soak slowly into the ground.
- A rain garden can mimic the natural and pollution removal activities of a forest or meadow and absorb runoff more efficiently (30-40%) than a standard grass lawn.
- Locate in a wet spot, a place where water naturally flows, or a place where water can be directed.
- A good option that helps lower the impact of impervious surfaces & polluted runoff because they are low-tech and sustainable while at the same time creating habitat for birds & butterflies and beautifying your neighbourhood.

PERMEABLE (POROUS) SURFACES



- Concrete and asphalt driveways and walkways prevent rainwater and snow from soaking naturally into the ground.
- Where possible, consider using gravel, wood chips, stepping stones or interlocking brick for your walkways instead of asphalt or concrete.
- Where you need a more solid surface such as a driveway or patio, consider using a porous pavement made from interlocking cement blocks or brick pavers with spaces that allow rainwater to seep into the ground.
- Be creative by considering various combinations for walkways, patios & driveways such as interlocking paving stones and grass or mulch.
- If you must pour concrete or asphalt, keep the area as short and narrow as possible.

Municipality of Bluewater Stormwater Drainage Master Plan

Public Information Meeting
February 12th, 2014





Agenda

- Introduction
- Project Scope
- Master Plan Process
- Inventory of Existing Facilities
- Results of Questionnaire
- Stormwater Management
- Preliminary Preferred Design
- Next Steps




Project Study Area



Master Plan Study Scope

- Examine existing stormwater drainage facilities in Bayfield and complete inventory of structures
- Develop recommendations for improvements within existing developed areas of Bayfield and future development lands (South and East)
- Identify general areas of concern which need to be addressed – **Not Individual Lot Grading Problems**
- Consult with Bayfield Residents and Review Agencies
- Provide a Preliminary Drainage Design for Main Street
- Prepare a report documenting the Master Plan process and study recommendations




Master Plan Process

- Long Range Plans which Integrate Infrastructure Requirements with Environmental Assessment Planning Principles
- Examines a Group of Related Projects in order to Outline a Framework for Planning for Subsequent Projects and/or Developments
- Involves Consultation with the Public, Regulatory Agencies and Adjacent Property Owners

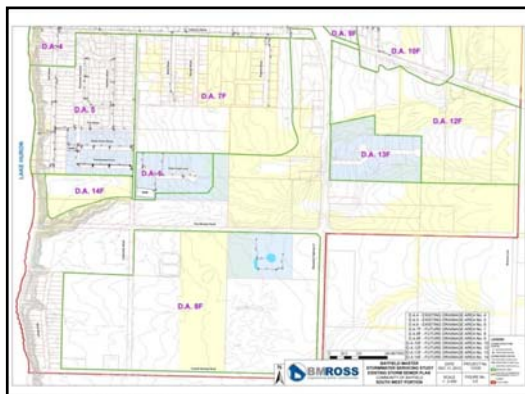
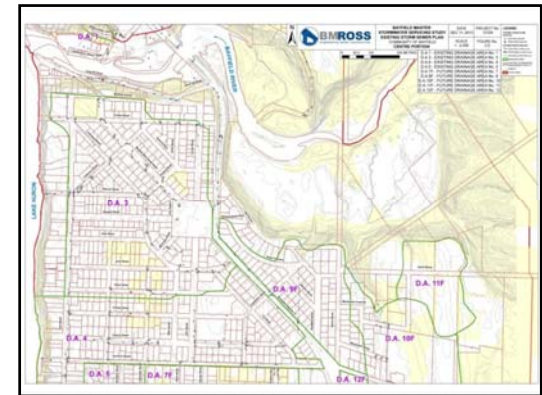
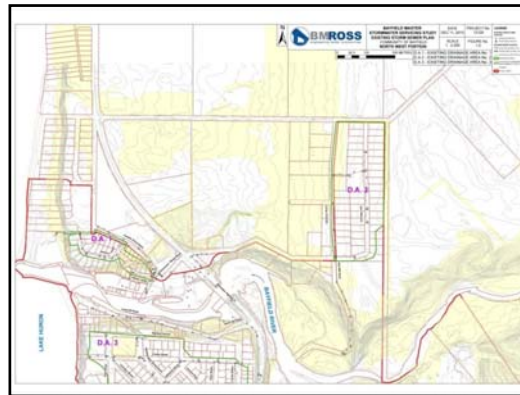


Features of a Master Plan

- Takes a System Wide Approach to Planning which relates Infrastructure either Geographically or by Function
- Recommends projects to be implemented over an extended period of time
- Addresses at minimum the First Two Phases of the Municipal Class EA and can also cover other phases
- Recommends an Infrastructure Master Plan which can be Implemented through the completion of separate individual projects



Inventory of Existing Facilities

Existing Drainage Outlets




- Delevan Outfall Structure
 - Constructed in 1987
 - Generally good condition
 - Erosion along overland flow route



Existing Drainage Outlets




- Cameron Outfall Structure
 - Constructed in 1987
 - Generally good condition
 - Wetland Feature at Outlet



Existing Drainage Outlets

- Troy Outfall Structure
 - Constructed in 1978
 - Generally good condition
 - Exposed tile above headwall

Collection System - Deficiencies

- Undersized – SIZE DOES MATTER!
- In poor general condition
- Not Located in all areas

Questionnaire Results

Property Status

- Developed
- Vacant
- Other

Residency

- 5+ Months
- 3+ Months
- 1-2 Months
- Other (vacant)

- 278 Questionnaires Returned
- Approximately 25%

Drainage Results

Lot Drainage

- Good
- Fair
- Poor
- Other

Drainage Problems

- Never
- 1-2 Times
- More than 2
- Other

Problem Areas

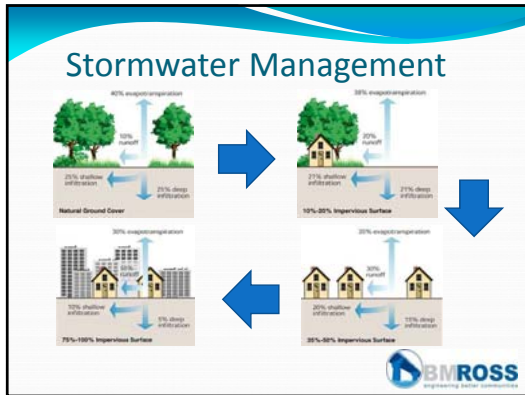
Ponding Water

- Limited Capacity
- Insufficient Outlet

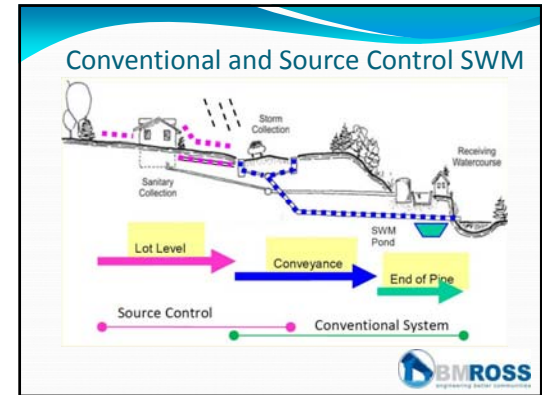
Stormwater Management

What is stormwater:

- Stormwater is rain, melted snow or any other form of precipitation that has come into contact with the ground or any other surface. This water either seeps into the ground, is absorbed by vegetation, evaporates or runs off the land into storm sewers, streams and lakes (MOE).
- Humans have interfered with the water cycle – precipitation can't reach the soil through hard surfaces such as roads and buildings. We've built storm sewers to quickly drain water away.



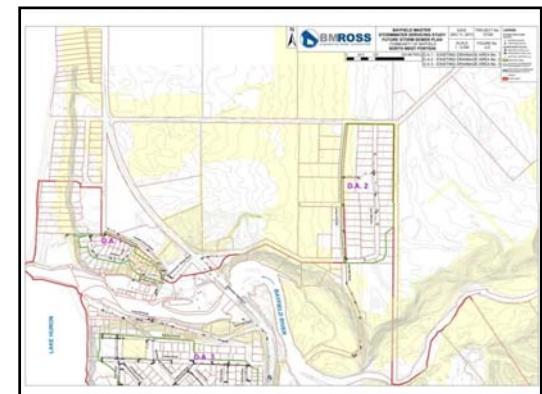
- ### Stormwater Management
- **Standards**
 - New Development vs Existing Developed Areas
 - Urban vs Rural Systems
 - **Concepts**
 - Major/Minor Flow Paths
 - Capacity
 - Quality and Quantity Control
 - On-site Controls vs End of Pipe Controls
- BMROSS
Engineering. Social. Connected.

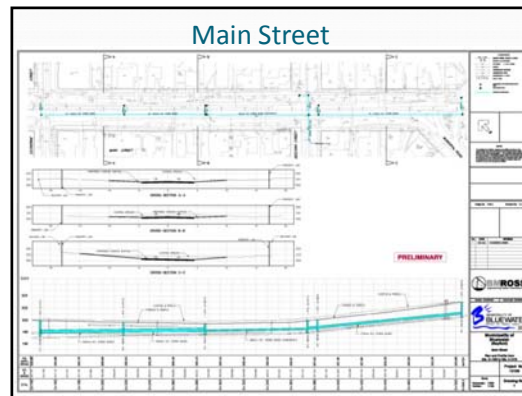
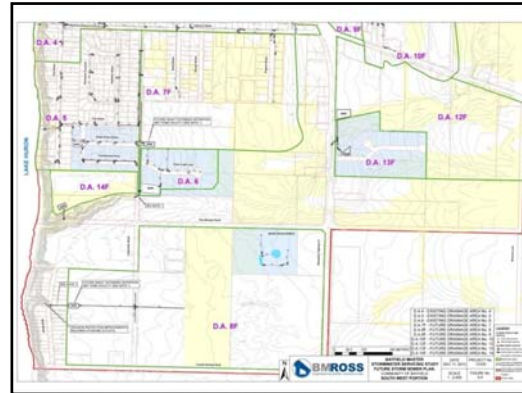
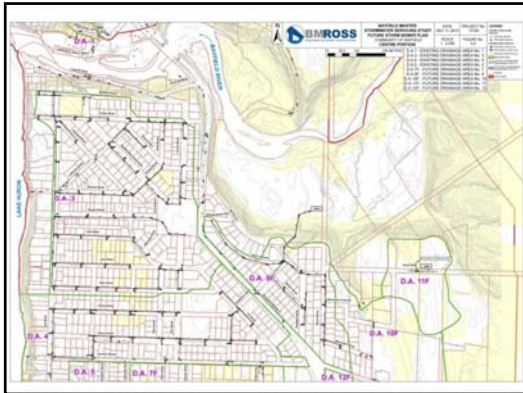


Recommendations for Bayfield

BMROSS
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- ### Preliminary Preferred Design
- **Existing Developed Areas**
 - Newer systems (north of river) do not need to be upgraded
 - Upgrade and/or Replace Existing Collection System in Older Areas of Bayfield
 - Retrofit some Facilities to Improve Quality Measures
 - Phased Approach Based on Need
 - **New Development Lands (East and South)**
 - Identify locations for Communal Facilities
 - Recommend Lot Level Controls be Incorporated
- BMROSS
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Next Steps

- Collect and Review Public Input from Meeting
- Finalize Preliminary Engineering and Cost Estimates
- Finalize Proposed Phasing Plan
- Complete Preliminary Design for Main Street
- Confirm Selection of Preliminary Preferred Alternative
- Finalize Master Plan and Publish Report – March 2014




Questions?



Please Submit Comments!

- Comment Sheets at Back of the Room
- Things to Consider:
 - What Specific Concerns do you have?
 - Is there an issue we have not addressed?
 - Is there something you don't understand fully?





MUNICIPALITY OF BLUEWATER

MUNICIPAL CLASS ENVIRONMENTAL ASSESSEMENT
STORMWATER MASTER PLAN SERVICING STUDY

PUBLIC INFORMATION CENTRE

Wednesday, February 12, 2014

COMMENTS

Name: _____

Address: _____

PLEASE HAND IN, MAIL, EMAIL, OR FAX TO:

*B. M. ROSS AND ASSOCIATES LIMITED
Engineers and Planners
62 North Street
Goderich, Ontario
N7A 2T4*

Phone: (519) 524-2641 Fax: (519) 524-4403

E-mail: kvader@bmross.net

Attention: Kelly Vader, Environmental Planner

Comments and Information collected by B.M. Ross & Associates Limited on behalf of the Municipality of Bluewater will assist in decision making pertaining to the project. Comments and opinions will be kept on file but will not be made available for public review. Under the Freedom of Information and Protection Act (1987) personal information provided to the Municipality of Bluewater will remain confidential unless prior consent is obtained.

MUNICIPALITY OF BLUEWATER
MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT
STORMWATER MASTER PLAN SERVICING STUDY
(COMMUNITY OF BAYFIELD)

NOTICE OF MASTER PLAN COMPLETION

THE PROJECT:

In the summer of 2013, the Municipality of Bluewater initiated a Municipal Class Environmental Assessment (Class EA) process to develop a Stormwater Servicing Master Plan for the Bayfield Settlement area. The Master Plan was undertaken in order to inventory and evaluate existing stormwater facilities within Bayfield and to investigate the most cost effective and efficient manner to provide additional stormwater servicing, where required, within established and future development areas of the community. The Master Plan process has now been completed. A preferred servicing strategy has been identified, which will be implemented in phases as determined by need, within established areas of Bayfield. The plan has also identified guidelines for stormwater servicing within future development areas of the community.

THE ENVIRONMENTAL ASSESSMENT PROCESS:

The Stormwater Servicing Master Plan was conducted in accordance with the requirements of the Municipal Class Environmental Assessment (Class EA) which is an approved process under the Environmental Assessment Act. Master Plan projects incorporate Phases 1 & 2 of the Class EA process and also include consultation with the general public, government review agencies and affected property owners. While the Master Plan addresses the need and justification for the proposed stormwater servicing facilities at a broad level, more detailed Class EA studies may be required prior to the construction of some components of the plan. The information below outlines the status of various works included as a component of the Master Plan, as well as their status in regards to the Class EA Master Plan process.

TYPE OF PROJECT:

- Storm drainage construction or repair within limits of existing road allowances
- Construction of new stormwater management ponds
- Construction of new stormwater drainage outlets
- Construction of stormwater management facilities in conjunction with new development proposals

STATUS:

Schedule A+ - Pre-Approved
Schedule B – Additional Class EA Review Needed
Schedule B – Additional Class EA Review Needed
Reviewed in conjunction with the Planning Act review process

The Master Plan has been completed and, by this Notice, is being placed on the public record for review. A Master Plan Report will be available for review at the Bluewater Municipal Office, 14 Mill Ave, Zurich, ON N0M 2T0, during normal business hours and on the municipal website at www.town.bluewater.on.ca. The Report will also be available at the Bayfield Public Library. Please provide written comments on the Stormwater Servicing Master Plan to the Study Engineers by **August 22, 2014**. Subject to comments received as a result of this Notice, the Master Plan will be presented to Municipal Council for approval.

For further information on this project, or to review the Master Plan process, please contact the study engineers: B.M. Ross and Associates: 62 North Street, Goderich, Ontario, N7A 2T4. Telephone: (519) 524-2641. Fax: (519) 524-4403. Attn: Kelly Vader, Environmental Planner (e-mail: kvader@bmross.net).

This Notice issued July 16th, 2014
Dave Kester, Manager of Public Works
Municipality of Bluewater

