

# BEST PRACTICES: WASTEWATER TREATMENT INSPECTIONS

RICK ESSELMENT ESSE CANADA

FRIDAY, SEPTEMBER 16, 2016

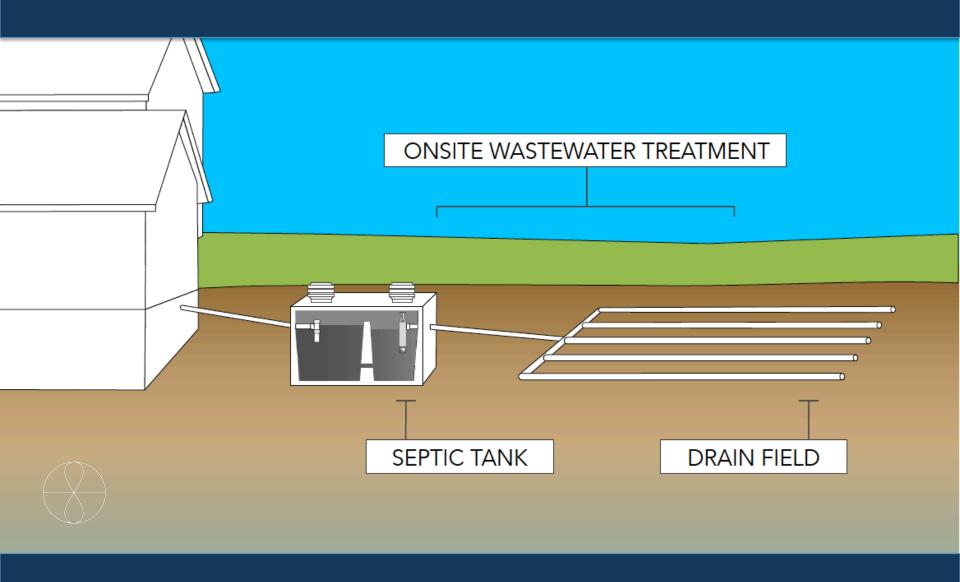
#### FRIDAY, SEPTEMBER 16, 2016



## BEST PRACTICES: WASTEWATER TREATMENT SYSTEM INSPECTIONS

- 1. What is a Wastewater Treatment System?
- 2. Green Infrastructure
- 3. Stewardship and Onsite Responsibility
- 4. Onsite Disposal vs. Onsite Wastewater Treatment
- 5. Verification of Maintenance and Operation
- 6. Mandatory and Discretionary Programs
- 7. Review of Phase 1 and Phase 2
- 8. OOWA Best Practices: Levels of Inspection
- 9. Inspector Qualifications
- 10. Questions and Answers

#### WHAT IS A WASTEWATER TREATMENT SYSTEM?



#### GREEN INFRASTRUCTURE

Onsite wastewater treatment systems are **GREEN** infrastructure!

- Small (but flexible) Footprint
- Site Specific Design
- Sustainable and low impact infrastructure
- Decentralized Systems = Decentralized Responsibility
- Reclamation Potential
- Compatibility with local ecological water systems and watersheds

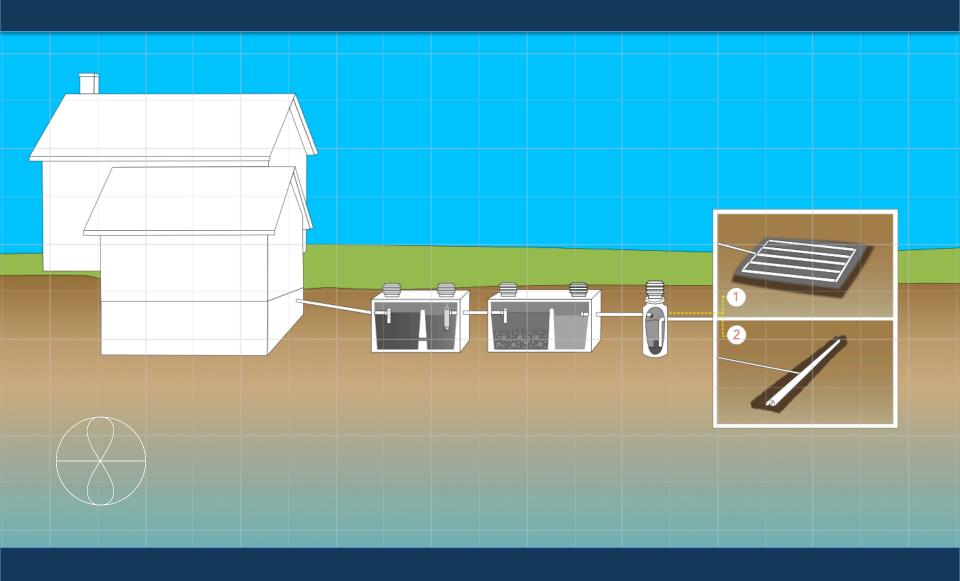
## GREEN INFRASTRUCTURE ?



## ONSITE INFRASTRUCTURE ?



## ONSITE INFRASTRUCTURE!

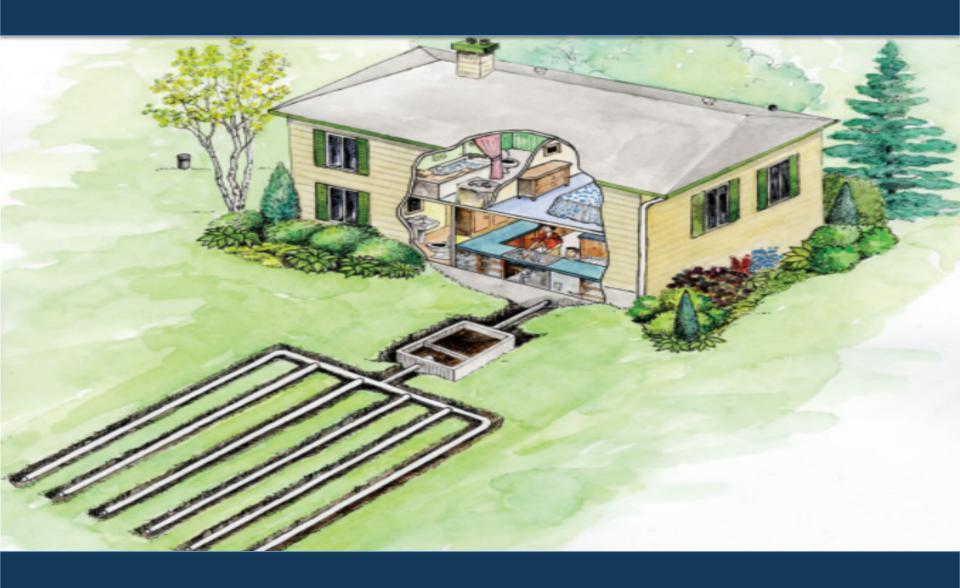


#### STEWARDSHIP AND ONSITE RESPONSIBILITY

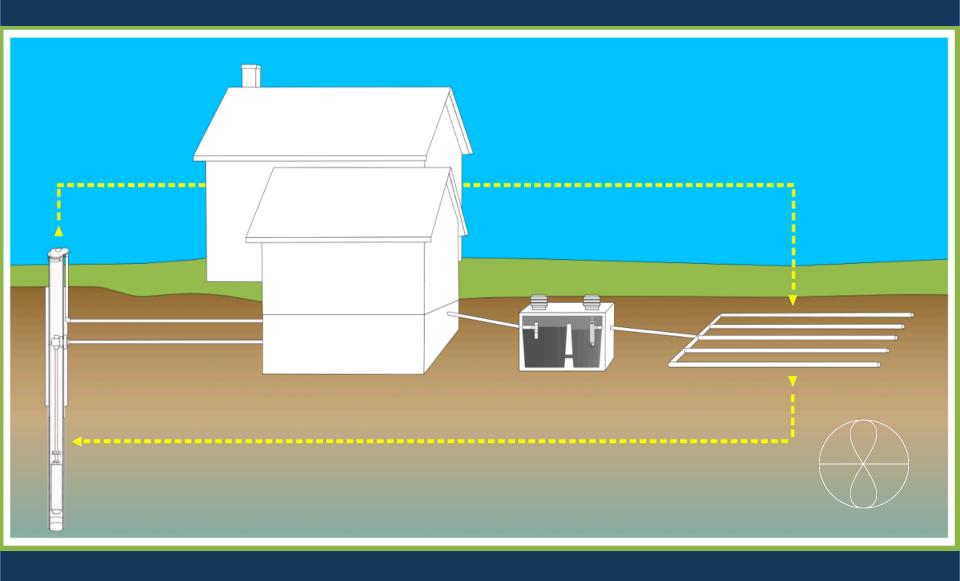
Stewardship and Onsite Responsibility go Hand-in-Hand

- Collective Impact
- Awareness
- Education
- Individual Responsibility

## ONSITE <u>SEWAGE</u> DISPOSAL?!



## ONSITE WASTEWATER TREATMENT

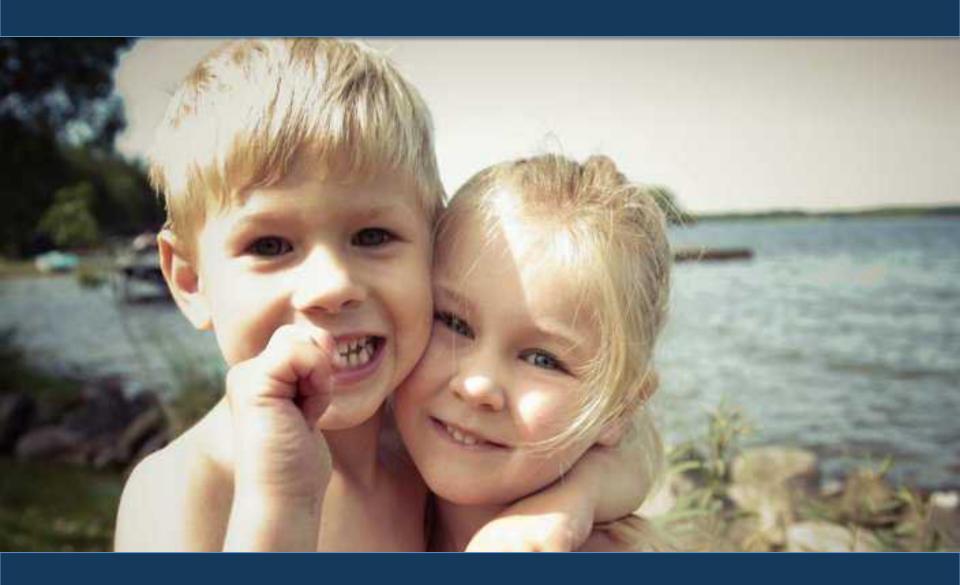


#### VERIFICATION OF MAINTENANCE AND OPERATION

Maintenance and Operation are <u>KEY</u> to protecting the environment, public health, and our investments

- Extends the Functional Lifespan of the System
- Generates Awareness and Understanding
- Protects the Value of your System = Protects your Property's Value
- Is the Right Thing to Do

## REMEMBER YOUR WHY



#### IN THE PROVINCE OF ONTARIO...

**On-Site Sewage System Maintenance Inspections** 

March 2011

Building and Development Branch Ministry of Municipal Affairs and Housing

#### MANDATORY AND DISCRETIONARY PROGRAMS

- What is the Intent?
- What are they really about?
- What are we trying to determine?
- Why do they matter?

#### REVIEW OF PHASE 1 & PHASE 2

#### The purpose of the Phase I Maintenance Inspections is to:

- a) Obtain the most recent information on the system, as well as the size of the building and the number of fixtures and bedrooms that it is servicing;
- b) Locate the sewage system's components;
- c) Identify any obvious or outward signs of malfunction or failure; and
- d) Identify systems that are at risk of malfunction or failure.

#### REVIEW OF PHASE 1 & PHASE 2

## Phase II Follow-up Maintenance Inspections:

It may be appropriate to undertake more intensive follow-up maintenance inspections where:

- a) The Phase I maintenance inspection has identified that the septic system is at risk of future malfunction or failure, or
- b) The Phase I inspection detected a malfunction or failure, but did not reveal the reason (e.g., location or nature) of malfunction or failure.

Inspection Categories	
Inspection Level	General Description
Level 1	Research + Visual + Access Septic Tank + Load Test + Dye Test
Level 2	Research + Visual + Access Septic Tank Research + Visual + Access Septic Tank + Load Test + Dye Test + Sewer Camera
Level 3	Research + Visual + Access Septic Tank + Load Test + Dye Test + Sewer Camera + Soil Inspection + Excavate Cross Section





















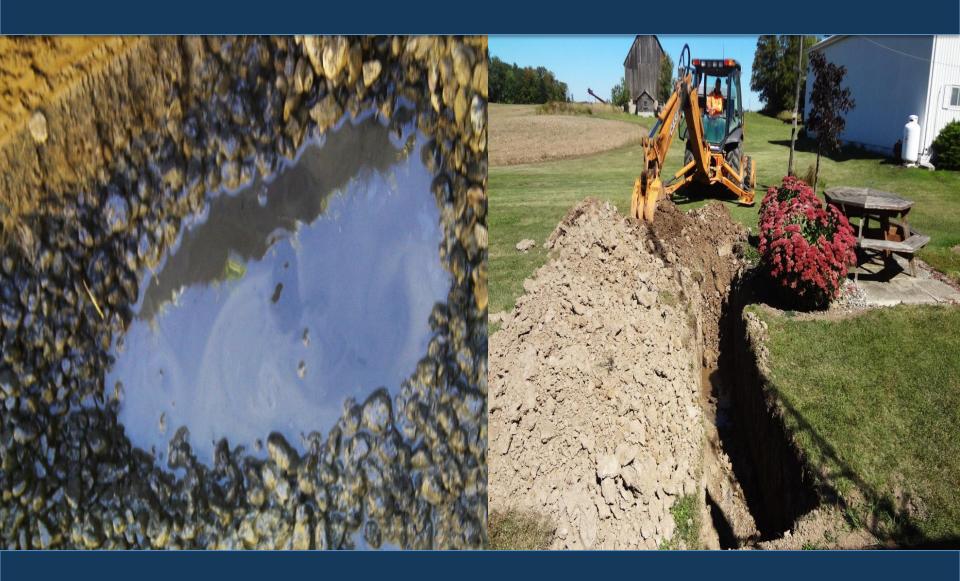














## QUESTIONS?



## Thank You!

