

Reducing the Costs of I&I Using Trenchless Approaches

PRESENTED BY: **CENTRE FOR ADVANCEMENT OF TRENCHLESS TECHNOLOGIES (CATT)**



Wednesday Sept 12, 2018 **OVERVIEW**

8:00AM - 4:00PM

BREAKFAST, LUNCH AND REFRESHMENTS INCLUDED

MISSISSAUGA GRAND
35 Brunel Road, Mississauga

ALSO AVAILABLE VIA LIVE WEBCAST!

Inflow and Infiltration (I&I) refers to rain and groundwater that enters the sanitary sewer as extraneous flows. A certain amount of I&I is unavoidable but when I&I exceeds design allowances, sewer capacity is consumed and may result in overflows, risks to health, damage to the environment and increased conveyance costs. These issues are becoming more important to municipalities who are struggling to manage their limited infrastructure budgets. This workshop provides attendees with information regarding common I&I contributors, how to locate them and how to reduce their impact using trenchless methods of assessment.

Tentative Schedule*

7:30 – 8:00 am | REGISTRATION & BREAKFAST

8:00 – 8:15 am | **INTRODUCTION - WHAT IS I&I AND WHY DO WE CARE?**,
Sonya Semanuik, OCWA

8:15 – 8:45 am | **STORM WATER INFLOW (SWI): IDENTIFYING AND DETECTING THE SOURCE**, *Lisa Pike, Robichaud*

8:45 – 9:15 am | **DETECTING I&I THROUGH RAIN GAUGE AND FLOW MONITORING**, *Michelle Ward, AMG Environmental*

9:15 – 9:45 am | **WET WEATHER MANAGEMENT PROGRAMS: HOW MUCH IS IT COSTING ME? FINANCIAL IMPLICATIONS OF I&I**, *David Watt, GM BluePlan*

9:45 – 10:00 am | NETWORKING AND COFFEE BREAK

10:00 – 10:30 am | **I&I FROM A GROUNDWATER/SOILS PERSPECTIVE**
Barbara Robinson, Norton Engineering

10:30 – 11:00 am | **STANDARDIZING I&I INSPECTIONS IN SEWERS AND MANHOLES**, *Tanya Stephens, TDS Consulting*

11:00 – 11:30 am | **QUANTIFYING IDENTIFIED I&I WITH IN-PIPE INSPECTIONS**, *Gord Henrich, PITA*

11:30 am – 12:30 pm | LUNCH

12:30 – 1:00 pm | **MONITORING I&I IN REAL TIME**, *Matthew Nicolak, SmartCover*

1:00 – 1:30 pm | **HOW TO DEVELOP EFFECTIVE BYLAWS TO REDUCE INFLOW** *Barbara Robinson, Norton Engineering*

1:30 – 1:45 pm | NETWORKING AND COFFEE BREAK

1:45 – 2:15 pm | **LONG TERM COSTS OF I&I AND IMPACT ON TREATMENT PLANT COSTS**, *Hamed Fardi, University of Waterloo*

2:15 – 3:00 pm | **PUTTING IT ALL TOGETHER - I&I REDUCTION PROGRAMS**
Barbara Robinson, Norton Engineering

3:00 – 3:30 pm | **CASE STUDY 1**

3:30 – 4:00 pm | **CASE STUDY 2**

Who Should Attend?

Consulting Engineers, Municipal Employees, Contractors, Field Technicians, and anyone who wants to keep abreast of Emerging Industry Trends.

Included

- Course Material
- Breakfast, Lunch, and Refreshment during Networking Breaks
- 0.7 CEUs

* Subject to modifications

UNIVERSITY OF
WATERLOO

Registration Form

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Wednesday September 12, Mississauga Grand

UPCOMING CATT EVENTS

GEOTECHNICAL INVESTIGATIONS AND
CONSIDERATIONS FOR SUCCESSFUL
TRENCHLESS PROJECTS (GOLD SEAL)
SEPT-20

UNDERGROUND UTILITY LOCATION AND SUE
(SUBSURFACE UTILITY ENGINEERING) (GOLD
SEAL)
OCT-25

MANHOLE ASSESSMENT AND
REHABILITATION (GOLD SEAL)
NOV-8

EARLY BIRD REGISTRATION

REGULAR REGISTRATION

ON-SITE REGISTRATION

LIVE WEBCAST

THE CENTRE FOR ADVANCEMENT OF TRENCHLESS TECHNOLOGIES

(CATT) was established in 1994 to help municipalities address their buried infrastructure challenges using new and less disruptive trenchless construction methods and infrastructure asset management practices.

Since 1994 CATT has been recognized as an international leader in buried infrastructure construction, condition assessment, renovation and asset management.

For more information on CATT and member benefits visit www.catt.ca.

NAME: _____

TITLE: _____

COMPANY: _____

ADDRESS: _____

CITY: _____

PROV: _____

POSTAL CODE: _____

PHONE: _____

EMAIL: _____

RECEIVED BY: **August 3**

\$375/CATT MEMBER

\$550/NON-MEMBER

RECEIVED BY: **September 6**

\$475/CATT MEMBER

\$650/NON-MEMBER

RECEIVED AFTER: **September 7**

\$575/CATT MEMBER

\$750/NON-MEMBER

Tax (HST 13%) \$ _____ Total \$ _____

I would like to attend via LIVE WEBCAST

METHOD OF PAYMENT - PLEASE PICK ONE

INVOICE COMPANY

CREDIT CARD (MasterCard, VISA, American Express)

CARD #:

EXP: /

NAME ON CARD:

CVC:

CHEQUE (Payable to "University of Waterloo, Attn: Centre for Advancement of Trenchless Technologies")

COMPLETED REGISTRATION FORMS CAN BE FAXED TO (519) 746 6556 OR MAILED to Alice Seviara:

MAIL: CENTRE FOR ADVANCEMENT OF TRENCHLESS TECHNOLOGIES
Department of Civil and Environmental Engineering
University of Waterloo, Waterloo, ON N2L 3G1
ph 519 888 4770 f 519 746 6556 email:alice.seviara@uwaterloo.ca

Note: To prevent fraud never send credit card information via email.

Refund Policy: please visit www.catt.ca for details on CATT's refund policy.

PLATINUM MEMBERS



GOLD MEMBERS

