

# LSRCA Administrative Office

## Low Impact Development Retrofit Project

### Part 2 – Research and Development Opportunities

LSRCA Board of Directors

May 27, 2016

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**Lake Simcoe Region**  
conservation authority

# LSRCA AO LID Retrofit Project Updates

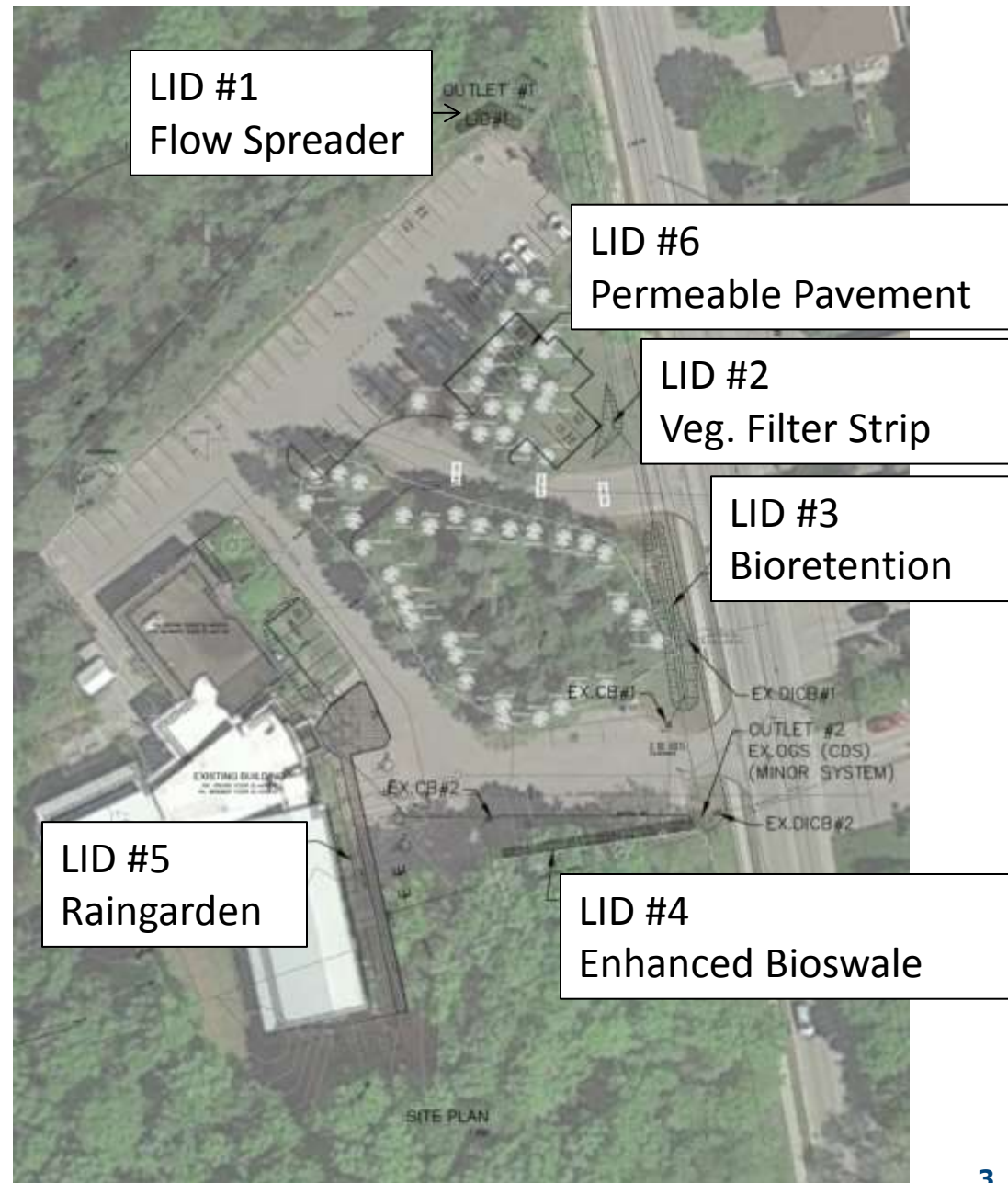
## Part 2 Agenda – R&D Opportunities

- ▶ Revisiting Site Plan
- ▶ Promotional, Education, and Technical Contribution
- ▶ Research and Development
  - ▶ Monitoring
  - ▶ Modelling
- ▶ Next Steps



# Revisiting Site Plan

Existing Staff Parking Spaces (including 6 Smart Commute spaces)	57
Existing Visitor Parking Spaces	5
Barrier Free Parking Spaces	4
Electric Parking Spaces	2
Proposed Parking Spaces	19
Parking Spaces Lost Due to Improved Emergency Access	-5
<b>Total Parking Spaces</b>	<b>82</b>



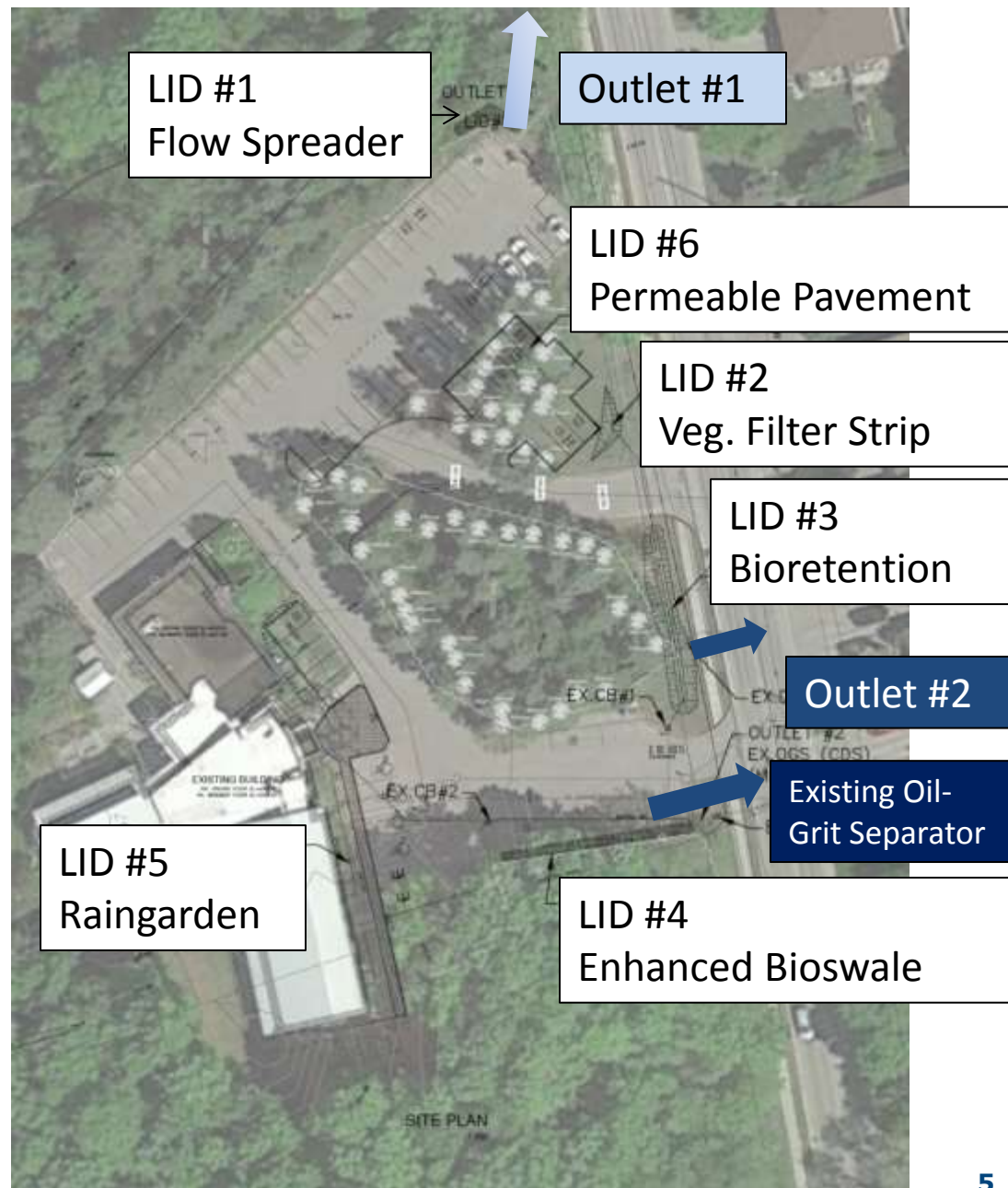
# LSRCA AO LID Retrofit Project Updates

## Why ? - Promotion, Education and Technical Contribution

- ▶ Contribute to R&D relating to LID performance (stand-alone and treatment train).
- ▶ Educate Industry Practitioners and Public on benefits and lessons learned from LIDs
  - ▶ Including LED screen at front entrance of AO highlighting project and real-time monitoring.
- ▶ Monitoring will be funded through an established agreement with the MOECC.
- ▶ Support the promotion, and continued development of the LID Treatment Train Tool for Ontario.

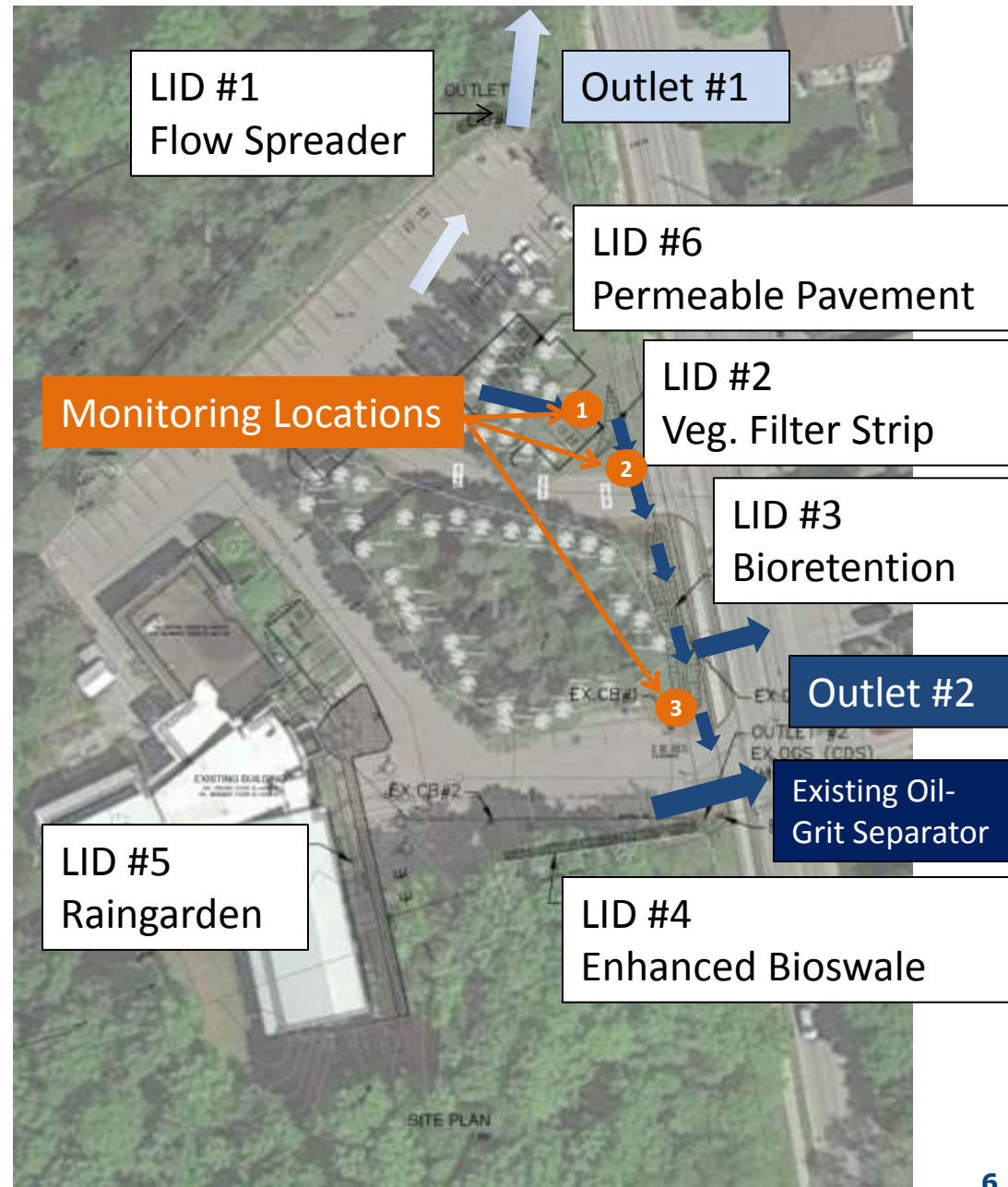
# Research & Development (R&D) Opportunities

- ▶ Six (6) different LID measures have been identified to be considered for implementation.
- ▶ Treatment Train approach to stormwater management for quality and retention control.



# R&D: Monitoring

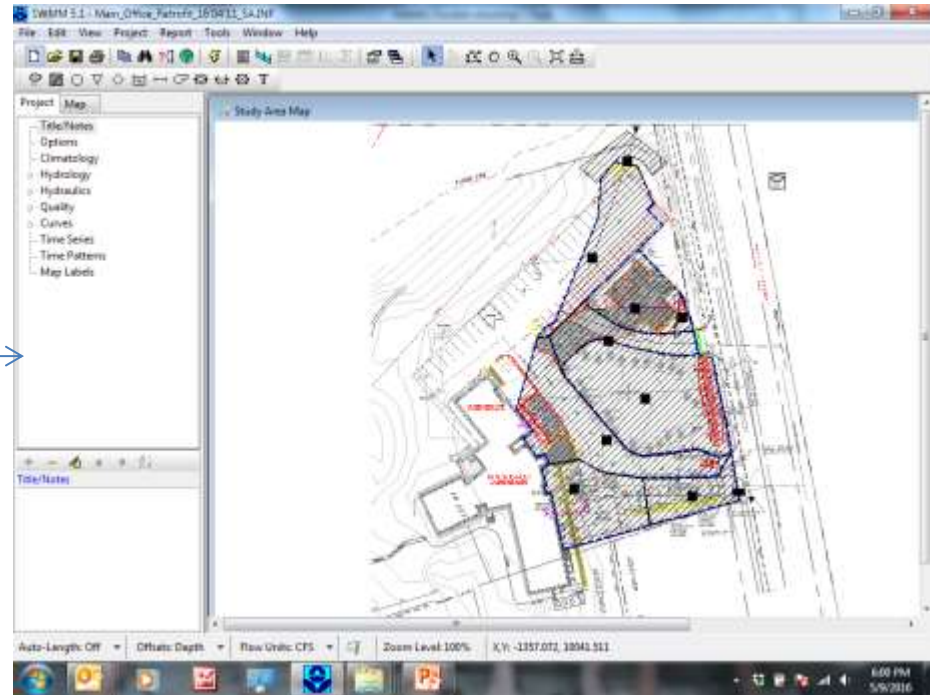
- ▶ Monitoring locations will be established in strategic locations throughout the LID treatment train for the following performance evaluations:
  - ▶ Stormwater volume reduction (Infiltration and retention);
  - ▶ Soil media subsurface retention, moisture profile, and pollutant absorption; and
  - ▶ Continuous, long-term functionality.



# R&D: Modelling

- ▶ Test, calibrate, and validate stormwater volume reduction results from the LID Treatment Train Tool for Ontario.
- ▶ Promote, educate and improve LID modelling techniques.

EPA-SWMM  
model  
developed  
for LSRCA  
Admin Office



Screen Shot  
of Beta Vs. of  
LID TT Tool



# LSRCA AO LID Retrofit Project Updates

## Next Steps in 2016

- ▶ Board of Directors' approval of recommended tender package.
- ▶ June – October (Implementation).
- ▶ October onwards:
  - ▶ Monitoring and Modelling R&D;
  - ▶ Various promotional, educational and technical insight to support LID permitting, design, and implementation.



# Questions, Comments ?

# Thank – you...



Lake Simcoe Region  
conservation authority



GTA Conservation  
Authorities  
(CVC, TRCA)

*Rain Scaping*



Industry  
Associations



MOECC



Technical Working  
Groups /  
Committees

Municipalities

