



# StormTrap®

MODULAR CONCRETE  
STORMWATER MANAGEMENT



**Project name**

Richard Ivey School of Business  
- University of Western Ontario

**Location**

London, Ontario

**Product Used**

3,048 mm DoubleTrap

**Total Water Stored**

500 m<sup>3</sup>

**Number of Pieces**

50

## Case Study

### Stormwater Detention System

Client required over 500 m<sup>3</sup> of stormwater detention for the University of Western Ontario project. The DoubleTrap system was installed in an area to accommodate heavy construction traffic for a possible future expansion project near the Richard Ivey School of Business.

StormTrap was selected because there was no pressure drop for water flow into the system.



# Richard Ivey School of Business - University of Western Ontario



**Project name**

Haist Street Renovations

**Location**

Pelham, Ontario

**Product Used**

1,524 mm DoubleTrap

**Total Water Stored**

1,024 m<sup>3</sup>

**Number of Pieces**

184

## Case Study

### Stormwater Detention System under roadway

The DoubleTrap system was installed as part of the Haist Street project, in the Town of Pelham, to prevent stormwater from overloading downstream pipes. The system is 400 meters long and holds 1,024 m<sup>3</sup> of storage volume. StormTrap was installed in the middle of the street with over 3 meters of cover, at a 5% slope.





# Haist Street Renovations - Pelham, Ontario



**Project name**

Pan Am Aquatic Centre

**Location**

Toronto, Ontario

**Product Used**

DoubleTrap

**Total Water Stored**

1,742 m<sup>3</sup>

**Number of Pieces**

176

## Case Study

### Stormwater Detention Wet Pond

StormTrap was chosen to design an underground stormwater wet pond for the Pan Am Aquatic Centre. The Centre was used for Toronto's Pan Am Games held in 2015. The system was designed as a full-scale underground wet pond with stormwater detention, a forebay for grit removal, a baffle wall for oil/floatable trash removal, and a permanent pool of water under the entire detention area for extended fine particle collection.



# Pan Am Aquatic Centre – Toronto, Ontario





**Project name**

South Unionville Square

**Location**

Markham, Ontario

**Product Used**

3,048 mm DoubleTrap

**Total Water Stored**

3,300 m<sup>3</sup>

**Number of Pieces**

294

## Case Study

### Full-Scale Underground Stormwater Detention Wet Pond

The City of Markham needed to reclaim land being utilized by a stormwater pond for a public park at South Unionville Square, a large mixed use development in Markham, without losing the benefits of the stormwater detention wet pond.

StormTrap designed a full-scale underground stormwater detention wet pond under the park, complete with a forebay and a permanent pool of water under the complete stormwater detention area.





# South Unionville Square - Markham, Ontario



**Project name**

Pure Metal Galvanizing

**Location**

Brantford, Ontario

**Product Used**

3,048 mm DoubleTrap

**Total Water Stored**

295 m<sup>3</sup>

**Number of Pieces**

32

## Case Study

### Contaminated stormwater holding tank

A 295m<sup>3</sup> StormTrap system was installed to hold stormwater runoff from a contaminated site. The runoff contains over 2,000 ppm of zinc, which exceeds the local stormwater regulations. The runoff is stored in the StormTrap system and then pumped into a treatment station that removes the high concentration of zinc.



# Pure Metal Galvanizing – Brantford, Ontario







# Case Study

## Rainwater Harvesting

A rainwater harvesting system was installed at the Liberty at Mill Creek project in Allentown, PA. The project involved the development of two 1.1 million ft<sup>2</sup> warehouses in Allentown, PA. StormTrap was designed to reduce the stormwater runoff leaving the site by collecting and utilizing it for irrigation in lawn/meadow area of the development.

### Project name

Liberty at Mill Creek

### Location

Allentown, PA

### Product Used

3,455mm DoubleTrap

### Total Water Stored

2,229m<sup>3</sup>

### Number of Pieces

1182





# Liberty at Mill Creek – Allentown, PA



**Project name**

US Bank Stadium West Plaza

**Location**

Minneapolis, MN

**Product Used**

1,372 mm SingleTrap

**Total Water Stored**

502 m<sup>3</sup>

**Number of Pieces**

39

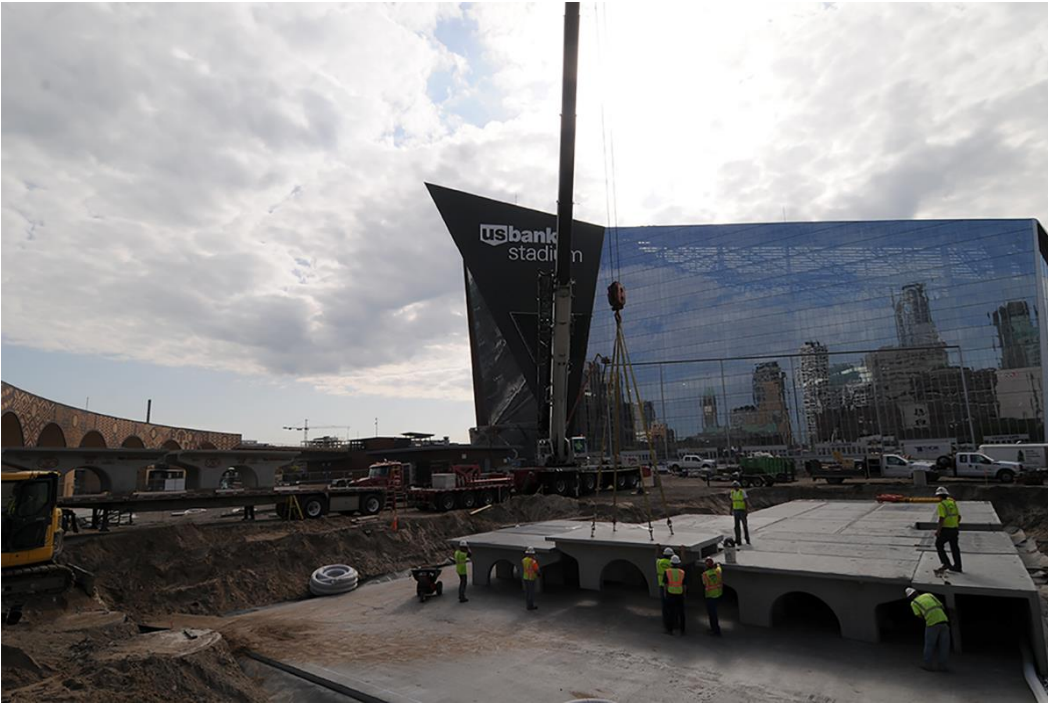
## Case Study

### Stormwater Treatment - Sandfilter

StormTrap designed a stormwater sandfilter for the new US Bank Stadium, a multi-purpose stadium and home to the NFL's Minnesota Vikings. The system is located under the Stadium's front plaza and is designed to treat stormwater runoff before it connects to the city's storm system. During a rain event the runoff will collect in the system and filter through 24" of sand removing pollutants. The system meets the City of Minneapolis required removal efficiency of 70% TSS.



# US Bank Stadium West Plaza - Minneapolis, Minnesota







### Project name

Water Quality & Sedimentation –  
College of DuPage - Glenn Ellyn,  
IL

### Specifications

Water quality flow: 2.0cfs

Settling surface area: 60.0 ft<sup>2</sup>

Design particle size: 110 microns

## Case Study

### Stormwater Treatment - Sedimentation

A water quality structure was installed at the College of DuPage to keep sediment from reaching an infiltration basin. It was designed to have a permanent pool of water to act as a cushion to prevent scour of previously settled particles. The engineer also specified an energy-dissipation baffle at each inlet with a weir wall in between to further prevent backwash of sediment.





# Case Study

## Stormwater Biofiltration

Stormwater runoff flows over the parking lot and down into the low prairie bioswale at the Greenbrier Medical Center, in Illinois. The runoff enters the StormTrap system through catch basins located under the bioswale that are tied into the StormTrap system.

### Project name

Greenbrier Medical Office  
Building – IL

### Product Used

SingleTrap

### Total Water Stored

484 m<sup>3</sup>

### Number of Pieces

95



**Project name**

Walgreens – Northbrook, IL

**Product Used**

3,048mm DoubleTrap

**Total Water Stored**

731 m<sup>3</sup>

**Number of Pieces**

70

## Case Study

### Stormwater Treatment - Oil & Water Separation

Eliminates oil, grease and other hydrocarbons.



# Installation

Patented design minimizes each units weight allowing for quick installations.





# Installation

Can be installed in all types of inclement weather





# Installation

Concrete Trucks, Excavator and Standard Vehicles



# Installation

System Sealant

Joint Tape



Joint Wrap



# Installation

System Sealant

Joint Tape



Joint Wrap





# Installation

## Watertight System





# Maintenance

Total accessible void space for easy maintenance

Manual inspection is recommended annually

Sediment removal with vacuum truck



# Maintenance

Access openings

Ladder rungs

Inlet and outlet pipe openings

