

## **Project Case Study**

# WisDOT Drainage and Stormwater Design I-94 N/S at CTH G, Racine County, WI

**Providing Quality Engineering For Our Water Resources Since 2002** 

#### Client

Wisconsin Department of Transportation SE District

(SSE was a subconsultant to MTP, LLC) Contact: Roberto Gutierrez, WisDOT (414) 548-5622

#### **Project**

I-94 North/South Reconstruction at the CTH G Interchange (Racine County)

#### **Overview/Description**

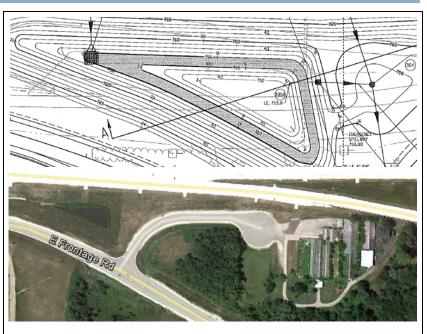
Stormwater Solutions Engineering, LLC contracted as a subconsultant to Milwaukee Transportation Partners, LLC to design stormwater detention ponds for the interchange work.

#### Concerns/Challenges

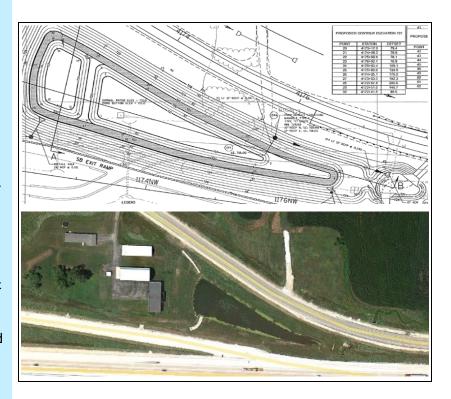
- Increase runoff quantity as a result of expanded roadway surface would could cause drainage concerns.
- Limited land space for stormwater ponds was available
- Decreased water quality as a result of the increased hard surface and increased traffic volumes.
- Proposed box culvert extension and stream restoration project by others to be accommodated

#### **Actions Addressing Challenges**

- Area within the ramp in-fields were used for wet detention ponds so that no land purchase for stormwater was necessary
- Two stormwater detention ponds were designed to collect and store increased runoff, providing water quality through settling of total suspended particles.
- Use of Wisconsin native landscaping within the pond safety shelves (along the water's edge) allows for filtering of stormwater as well as deters water fowl by providing a visual barrier to potential predators.



Aerial Photo and Design of SE Pond at Interchange



### Aerial Photo and Design of NW Pond at Interchange



#### Stormwater Solutions Engineering, LLC

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