

Providing Quality Engineering For Our Water Resources Since 2002

#### Client

Held Farm, Hartford, Wisconsin  
Contact: Don Thoma, Accurate Surveying  
(262) 677-2190

#### Project

Held Farm Building Expansion Stormwater  
Management Plan



**Working Dairy Farm**

#### Overview/Description

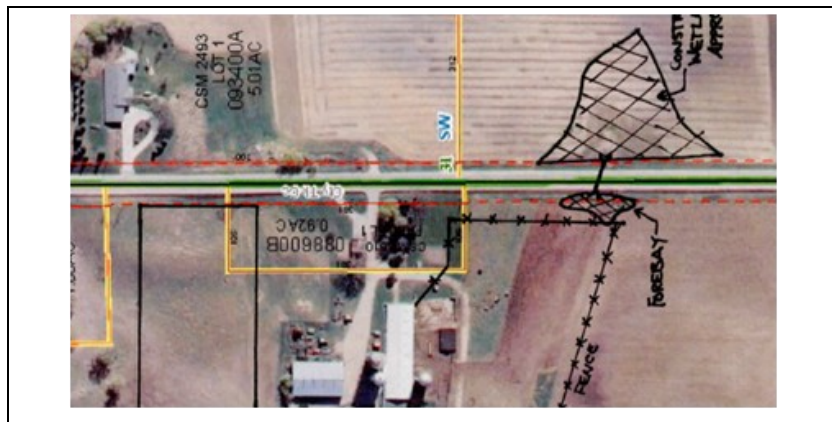
The Held family desired to add 60,000 s.f. of new barn buildings plus 35,000 s.f. of pavement to the working dairy farm requiring stormwater runoff management.

#### Concerns/Challenges

- Runoff generated from site crosses through an active pasture area, crosses the County Highway and then drains offsite. Runoff makes contact with pollutants in current runoff pattern.
- Increased building and pavement size creates an increase in stormwater runoff and decrease in water quality.
- Stormwater management plan required by Washington County required control of flows and water quality from the site.

#### Actions Addressing Challenges

- Plan included the addition of manure storage pits and covered feed areas removing much of the manure pollutants from runoff
- SSE prepared the stormwater management plan which includes an evaluation of the existing and proposed site flows and water quality.
- A constructed wetland was designed to allow for the settling and filtration of pollutants, and habitat improvement.
- Use of Wisconsin native landscaping within the constructed wetland allows for improved water quality, habitat and survival of the plants.



**Working Drawings**



**Constructed Wetland - Post Construction**

