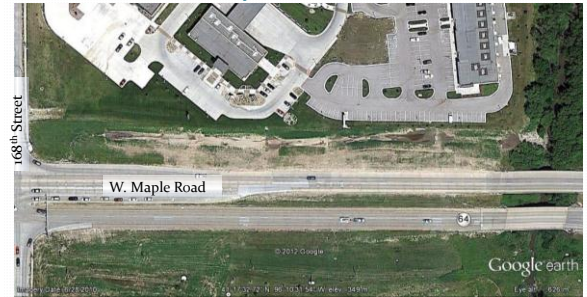


Case Study

168th & West Maple Road Bioswale, Omaha, NE

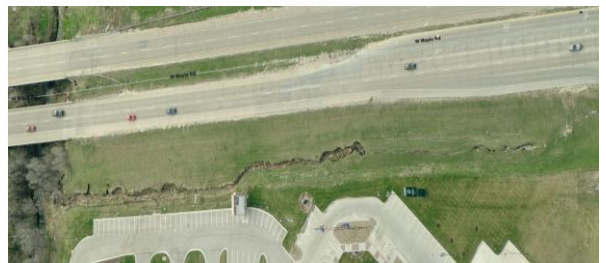
Location Map



Pre-Project (2008)



Aerial View – Pre Project



Plan Elements

- Drop Structure
- Grade control
- Sand filter/Amended soil
- Soil Reinforcing Material



Grade Control Locations



Construction Begins April 19, 2010



April 23, 2010, The Beginning...



Construction continues 0.91" Rain

- April 29, 2010



- April 30, 2010



Underdrain Configuration May 3, 2010



Amended Soil May 5, 2010



Compost on Side Slopes May 6, 2010





May 19, 2010



May 20, 2010 (0.55" rain)



May 27, 2010

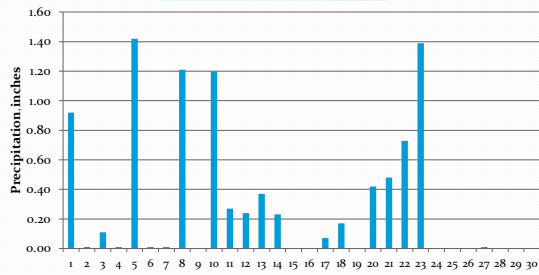


May 27, 2010
Finishing the upstream reach



Then June Happened...

June, 2010 Precipitation





Observations

- Take system off line if at all possible during construction.
- Details for should be very clear in plans
- Conditioning soil on slopes not recommended
- Sand filters and amended soils recommended for off-line conveyance systems only.

