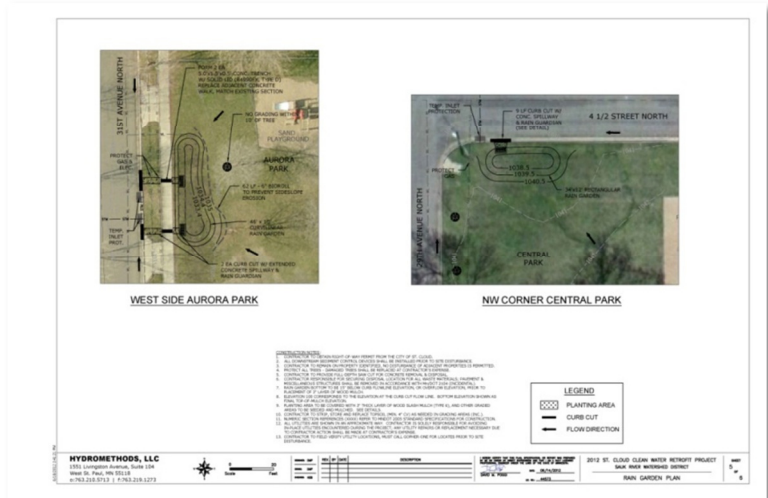


PROJECT: St. Cloud Clean Water Retrofit Project (City of St. Cloud, 2012)
CLIENT: Sauk River Watershed District

CHALLENGE: The stretch of the Sauk River through the City of St. Cloud is on the State's Impaired Waters 303(d) list for Turbidity impairment. In an effort to get an early start on addressing the future TMDL Plan load allocations for the river, the City and Watershed District are continually looking for ways to reduce non-point source pollution entering the river. The availability of grant money from the BWSR's Clean Water Fund enabled the District to implement treatment retrofits throughout the identified watershed area.

SOLUTION: Hydromethods was selected to assess the watershed for viable locations to retrofit infiltration and bioretention treatment. Work began with the recruitment of landowners interested in adding rain gardens to their properties, as well as the evaluation of City parks for retrofit infiltration potential. Hydromethods reviewed the sites for treatment opportunities and performed borings to characterize the soil and estimate hydraulic conductivity.



After meeting with residents and business owners, Hydromethods developed construction plans and specifications for multiple rain gardens throughout the city. The gardens were formed and planted at several locations, with most including fabricated pretreatment devices to increase rain garden lifespan and reduce ongoing maintenance costs. The expected pollutant and volume reductions associated with the new BMPs were estimated using the WinSLAMM pollutant modeling software, with results reported to the City for their records.