

AURORA TRIBUTARY WATERSHED INVESTIGATION—PHASE I CHERRY HILLS / TURNSTONE SUBDIVISIONS FLOODING

Client: City of Aurora—Aurora, Illinois

Client Contact: Dan Feltman, P.E., CFM
Engineering Department

Project Manager: John Whitt, P.E.

Project Engineer: John Whitt, P.E.

Project Description:

Assisted the City of Aurora with an investigation to reduce the potential for flooding at various locations in the Cherry Hills and Turnstone Subdivision, along with portions of Orchard Road (a principal arterial roadway).

The study was authorized following an April 2013 rainstorm event which caused local flooding and the closure of Orchard Road for several days.

Services included: the review of development engineering plans and record drawings; conducting engineering field surveys to collect various topographic data; updating previously prepared H&H models of the largely residential-characteristic watershed (HEC-RAS and TR-20) to reflect present -day conditions; overview evaluation of an existing stormwater pump station; and the development/evaluation of proposed alternative solutions to reduce flooding by the selective addition of improvements in storage and/or increased conveyance to the existing infrastructure system.

Improvement alternatives explored included: modifying the vertical alignment of select subdivision streets to improve overflow conveyance; reconstructing/elevating a portion of Orchard Road to reduce flooding; storm sewer additions; storm sewer diversion; the expansion of stormwater management facilities; and the retrofit of certain control structures to maximize the use of available stormwater storage potential.

Project Status:

The final report addendum was presented to staff in April 2014 with recommendations. Further action is pending.

