City of Shawnee, Kansas: Justice Center Urban Stormwater Management Project

Project description: The project implemented green infrastructure/nonpoint source pollution control practices within the Justice Center campus, including rain gardens, bioswales, vegetated swales, dry and wet extended detention basins, bioretention, basins, and native vegetation areas. The system of practices implemented at the site serve to attenuate and treat stormwater runoff by reducing velocities and promoting infiltration. Six rain gardens around the Extended Wet Dentition Pond have been decommissioned because of their lack of impact and required maintenance needed from the Police Department.

Project location: Johnson Drive & Renner Road, City of

Shawnee, KS

Project sponsor: City of Shawnee, Kansas

Project partners: Listed below in "Project funding."

Project funding: Funded with ARRA (American Recovery &

Reinvestment Act) funds through the EPA (U.S. Environmental Protection Agency) and administered through the Kansas Department of Health and Environment (KDHE) and the Kansas Water Pollution Control Revolving Fund (KWPCRF). KWPCRF ARRA Loan Amount: \$465,000

Construction completed: November 2011

Key green infrastructure components:

- Extended dry detention basin (1)
- Extended wet detention basin (1)
- Bioretention basin (2)
- Rain garden (3)
- Bioswale (2)
- Native vegetation swale (2)
- Native vegetation

Environmental benefits:

Provides filtration of surface runoff entering the basin

Justice Center campus in Shawnee

- Infiltrates and reduces flow velocities while providing pretreatment for stormwater runoff
- Detains stormwater and allows pollutants to settle out,
 - allowing uptake, particularly nutrients
- Project signage promotes education and awareness







