



Green Innovation Grant Program (GIGP) No. 216

CWSRF Project No. C8-6459-01-70

Town of Williamson

Project Name: Wastewater Treatment & Collection System Green Improvements

DEC Region: 8 County: Wayne

Type of Financing: American Recovery and Reinvestment Act (ARRA) Green Innovation Grant Program

Estimated Total Project Cost: \$738,659.00

Recommended GIGP Award Amount: \$664,793.00

Local Share: \$73,866.00

Other Funding Sources: \$0.00

Project Category: Clean Water SRF. Energy Efficiency.

Project Description:

This project integrates a variety of improvements to the Town of Williamson wastewater treatment plant to achieve greater energy efficiency, create renewable energy and manage stormwater with green infrastructure. The improvements include rainwater harvesting, a green roof, solar units, energy efficient lighting, an effluent powered heat pump, and pipeline leak detection equipment.

Project Summary:

The applicant will make various improvements that meet the GIGP criteria. Green Infrastructure projects include a rainwater harvesting system and installation of a green roof. Energy efficient improvements, which result in a reduction of energy use, include installation of energy efficient lighting which will reduce energy use for lighting by 40 - 60%; solar units which will provide almost 20% of the facility's current electric needs; and effluent-powered heat pumps which will utilize excess heat from the plant's effluent to meet approximately 50% of the facility's heating needs with clean energy. The pipeline inspection equipment will be used to identify leaks and will result in water conservation.

This project is categorically eligible for GIGP financing in three categories per the United States Environmental Protection Agency's (EPA's) "Guidance for Award of Recovery Act Funding to State Revolving Funds" (pages 42 - 44) dated March 2, 2009:

1. Energy Efficiency. Categorically eligible projects use "improved technologies and practices to reduce the energy consumption of water quality projects ...or produce clean energy used by a treatment works." This project follows the example in IV. a. "Energy efficient retrofits and upgrades to pumps and treatment processes," IV. b. "Leak detection equipment for treatment works," and IV. c. "Producing clean power for section 212 treatment works on site (wind, solar, hydroelectric, geothermal, biogas powered combined heat and power)."
2. Water Efficiency. Categorically eligible projects use "improved technologies and practices to deliver equal or better services with less water." Through the reuse of rainwater for equipment cleaning and irrigation, this project meets the EPA criteria, in particular examples: V.b. "Implementation of water harvesting and reuse programs or projects", V.e. "Reclamation, recycling and reuse of existing rainwater", and V.f. "Collection system leak detection equipment".
3. Green Wet Weather Infrastructure. Categorically eligible projects "manage and treat stormwater and [...] maintain and restore natural hydrology by infiltrating, evapotranspiring, and capturing and using stormwater" and include "the preservation and restoration of natural landscape features, such as forests, floodplains and

wetlands, coupled with policies such as infill and redevelopment that reduce overall imperviousness in a watershed. On the local scale green infrastructure consists of site and neighborhood specific practices such as bioretention, trees, green roofs, porous pavements, and cisterns." Rainwater harvesting is included in example V.b. "Implementation of water harvesting and reuse programs or projects".

This project includes a green roof which is example V.c. "Implementation of wet weather management systems for parking areas which include: the incremental cost of porous pavement, bioretention, trees, green roofs, and other practices that mimic natural hydrology and reduce effective imperviousness..."

EPA guidance issued on June 22, 2009, the "Green Project Reserve Business Case Principles and Questions and Answers" (pages 8-9; questions C 3 and 4) states that "the entire cost for the green [stormwater] roof is eligible including structural changes necessary to support the additional weight of the green roof."

4. Environmental Innovation. Categorically eligible projects "manage water resources in a more sustainable way, including projects that achieve pollution prevention...and projects that foster adaptation of water protection programs and practices to climate change." Example III. g. of the EPA Guidance includes "projects that facilitate adaptation of clean water programs and practices to climate change" (pp. 45-46). The use of an effluent powered heat pump reduces reliance of a Section 212 facility on fossil fuels and mitigates climate change impacts of that facility.

This project is located in Orleans County which is designated as an economically distressed area.

Funding Summary:

The applicant will provide the 10% match.

SEQR Findings:

The Corporation has determined that the proposed GIGP grant will finance a project which will constitute is a "Type II" action under SEQRA, pursuant to 6 NYCRR Section 617.5(c)(1): "maintenance or repair involving no substantial changes"; and, Section 617.5(c)(7): "construction or expansion of a primary or accessory/appurtenant, no residential structure or facility...involving less than 4,000 square feet..."

Construction Schedule:

<u>Description</u>	<u>Construction Start</u>	<u>Construction Completion</u>
Town of Williamson Wastewater Treatment & Collection System Green Improvements	December 29, 2009	December 30, 2010