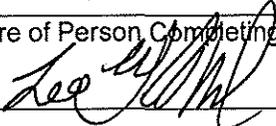


State of Wisconsin
 Department of Natural Resources
 Bureau of Community Financial Assistance - CF/2
 101 S. Webster St., P.O. Box 7921
 Madison, WI 53707-7921
 Phone No. (608) 266-7555, FAX (608) 267-0496

Environmental Improvement Fund (EIF)
 Green Project Reserve (GPR)
 Addendum to Financial Assistance Application
 Page 1 of 5 - August 2010

Applicants must complete and submit this form for each Clean Water Fund Program (CWFP) and Safe Drinking Water Loan Program (SDWLP) project for which they submit a Financial Assistance Application.

Municipality CITY OF DARLINGTON	<input checked="" type="checkbox"/> CWFP <input type="checkbox"/> SDWLP	EIF Project No. 4366-03
Does this project include any "green" elements as described below? <input checked="" type="checkbox"/> YES (If yes, complete and return page 1 and appropriate page(s) with green category information) <input type="checkbox"/> NO (If no, complete and return only page 1)		
Name and Title of Person Completing This Form (Type or Print) Lee G. Novak, P.E.	Phone No. 920-662-9641	Email Address lnovak@releecinc.com
Signature of Person Completing This Form 		Date Signed 5/30/14.

Green projects fall into four separate categories: green infrastructure, water efficiency, energy efficiency, and environmentally innovative projects. Please read the definitions below and refer to the guidance document **Green Project Reserve: Guidance for Determining Project Eligibility**, dated April 21, 2010, (available on the web at <http://dnr.wi.gov/org/caer/cfa/EL/Section/news.html>). This document explains the types of projects eligible for funding under the Green Project Reserve and details which types of projects are considered categorically eligible and which types of projects require a business case. **Applicants must submit all required business cases prior to loan closing.** DNR is required to post the business cases on the web.

When completing this form, include only those costs you intend to request from the Environmental Improvement Fund.

SUMMARY OF GREEN PROJECT RESERVE COSTS

GREEN CATEGORY	EIF-FUNDED GREEN PROJECT COSTS
Green Infrastructure	\$
Water Efficiency	\$
Energy Efficiency	\$ 1,656,752
Environmentally Innovative	\$
TOTAL	\$ 1,656,752

FOR DNR USE ONLY

Signature of GPR Specialist 	Date Review Completed 10/9/13 6/9/14 - revised \$'s (after bid)
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Energy Efficiency definition: Energy Efficiency projects include the use of improved technologies and practices to reduce the energy consumption of water quality projects, use energy in a more efficient way, and/or produce/utilize renewable energy.

This project is categorically an Energy Efficiency project x

Indicate Categorical Project number from *GPR: Guidance for Determining Project Eligibility* and estimated cost (i.e. 3.2-3 for \$175,000):

Categorical Project Number: ~~3.5-4~~ Estimated Cost: \$ ~~1,656,752~~

Categorical Project Number: _____ Estimated Cost: \$ _____

Other: _____ Estimated Cost: \$ _____

Or

This project requires a business case _____

Indicate Business Case Project number from *GPR: Guidance for Determining Project Eligibility* and estimated cost (i.e. 3.5-1 for \$23,000):

Business Case Project Number: 3.5-4 Estimated Cost: \$ 1,656,752

Business Case Project Number: _____ Estimated Cost: \$ _____

Other: _____ Estimated Cost: \$ _____

The **TOTAL** estimated cost of this Energy Efficiency project or project components \$ 1,656,752

Please provide a **detailed** description of your Energy Efficiency project or project components below. Please include any pertinent calculations of energy savings in both kilowatt hours and percentage of overall energy usage. Attach a separate sheet if necessary.

The sanitary sewer main replacement project included in this application will lessen infiltration and inflow into the sanitary sewer system. The reduced amount on I&I leads to less use of electricity by reduced pumping and treating of clear water at the wastewater treatment plant. The anticipated reduction of clear water through the wastewater system is 15% if the sanitary sewer main replacement project is completed. Based on a 10% reduction and the average 10 gpm flow, The flow to the WWTP should be reduced by 5,256,000 gallons per year. Based on .0025 kwh/gallon, present KWH at the wastewater treatment plant, the net reduction would be 13,140 kwh/year in power usage.

GREEN CALCULATIONS

We have anticipated 15% reduction in flow I/I should be achieved for the sewer replacement. This was based on the age (1940s), type (clay tile) and open/joints and pipe failures (TV data).

For green calcs, use only 10% reduction in flow, which would be 10.0 gpm = 14,400 gpd

Determine cost to treat flow:

- Present kwh/month @ WWTP is 20,300 kwh/month.
- WWTP average daily flow is 269,000 gpd.
- Calcs per month

$$\frac{20,300 \text{ KWH/Month}}{269,000 \text{ Gals/Day} \times 30 \text{ Day/Month}} = 0.0025 \text{ KWH/Gal}$$

$$(14,400 \text{ GPD} \times 365 \text{ Day/Year}) \times .0025 \text{ KWH/Gal} = 13,140 \text{ KWH/Yr reduction in power usage.}$$

5.4% reduction
(using 10% I/I
reduction)

or 8.1% reduction
if use 15% I/I
reduction