City of Carbon

DWSRF GREEN PROJECT RESERVE BUSINESS CASE EVALUATION

STATE FISCAL YEAR 2014 INTENDED USE PLAN

PROJECT NUMBER 62548

COMMITMENT DATE: November 21, 2013

DATE OF LOAN CLOSING: March 27, 2014

GREEN ESTIMATE AT CLOSING: $708,415

Subsidy awarded for Green components, (if any) $105,647
December 18, 2012

Ms. Sylvia Gosnell
City of Carbon
P.O. Box 414
Carbon, TX 76435-0414

Re: SFY 2013 Drinking Water State Revolving Fund Project 62548
Green Project Eligibility

Dear Ms. Gosnell:

The Texas Water Development Board (TWDB) received Green Project Information
Worksheets from the City of Carbon (City) for project #9570 in response to an invitation letter
dated September 4, 2012. The letter states that should funding be available, the City is eligible
for loan forgiveness in an amount up to 15% of the green component cost (also referred to as
the Green Project Reserve) if it can demonstrate that the project has green costs greater than or
equal to 30% of the total project cost.

For SFY 2013, the TWDB has a goal to allocate 10% of the capitalization grant toward
green component costs. Therefore, the TWDB gives first preference for invitations to entities
that have a documented percentage of green component cost of at least 30% of the total project
cost. At this time, the TWDB anticipates there will be sufficient interest from higher ranked
applications to satisfy the federal Green Project Reserve requirement. Therefore, the TWDB
will discontinue reviewing your submitted Green Project Worksheet(s) until further notice. In
the event any Green subsidy becomes available, the available subsidy will be offered to eligible
applicants in priority order. The TWDB will keep your green project reserve worksheets on file
should this occur. Please continue working with the TWDB on your financial assistance
application.

If you have any questions regarding this letter, please feel free to contact Marvin Chaney,
Program Specialist, by phone at 512-463-8750 or by email at marvin.chaney@twdb.texas.gov.

The TWDB appreciates the City of Carbon interest in the DWSRF.

Sincerely,

Stacy L. Barna
Director of Program Development
Project Finance Division

SB:rf
The Federal Appropriation Law for the current fiscal year Clean Water and Drinking Water State Revolving Fund programs contains the Green Project Reserve (GPR) requirement. The following Green Project Information Worksheets have been developed to assist TWDB Staff in verifying eligibility of potential GPR projects.

TWDB-0163
Revised 12/2/2010
PART I – GREEN PROJECT INFORMATION SUMMARY

Check all that apply and complete applicable worksheets:

Categorically Eligible

☐ Green Infrastructure $ __________________________
☐ Water Efficiency $ __________________________
☐ Energy Efficiency $ __________________________
☐ Environmentally Innovative $ __________________________

Business Case Eligible

☐ Green infrastructure $ __________________________
☐ Water Efficiency $ 687,650.00 __________________________
☐ Energy Efficiency $ __________________________
☐ Environmentally Innovative $ __________________________

Total Requested Green Amount $687,650.00 __________________________

Total Requested Funding Amount $809,000.00 __________________________

Type of Funding Requested:

☐ PAD (Planning, Acquisition, Design)
☐ C (Construction)

Completed by:

Name: Greg Wescott __________________________
Title: E.I.T. __________________________
Signature: __________________________
Date: __________________________

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PART III - BUSINESS CASE ELIGIBLE

Complete this worksheet for projects being considered for the Green Project Reserve (GPR) as business case eligible. Business case eligible projects or project components are described in the following sections of the EPA GPR guidance (TWDB-0161):

- Green Infrastructure  Part B, Section 1.4
- Water Efficiency      Part B, Section 2.4 and 2.5
- Energy Efficiency     Part B, Section 3.4 and 3.5
- Environmentally Innovative Part B, Section 4.4 and 4.5

Information provided on this worksheet should be of sufficient detail and should clearly demonstrate that the proposed improvements are consistent with EPA and TWDB GPR guidance for business case eligible projects. Refer to Information on Completing Worksheets for additional information.

Section 1 – General Project Information

Applicant:  City of Carbon  PIF #:  9570

Project Name:  Water System Improvements

Contact Name:  Greg Wescott

Contact Phone and e-mail:  (817) 594-9880

Total Project Cost:  $809,000.00  Green Amount:  $687,650.00
                   (Business Case Eligible)

Brief Overall Project Description:
This project consists of the replacement of approximately 43,000 linear feet of 6-inch water line.
Section 2 – Green Infrastructure
Certain green infrastructure improvements may be considered business case eligible for the GPR. Refer to EPA and TWDB GPR guidance for a complete list and description of business case eligible GPR Projects. Provide reference to the applicable sections of the EPA GPR guidance (TWDB-0161) that demonstrate GPR eligibility. Provide a detailed description of the proposed green infrastructure improvements of sufficient detail that clearly demonstrates that the proposed improvements are consistent with EPA GPR guidance (TWDB-0161).

Guidance Reference:
TWDB-0161, Part B, Section 2.5-2

Detailed Description (attach additional pages if necessary):
This project consists of replacing the City’s main 6-inch water to reduce water loss and prevent water main breaks as described in TWDB-0161, Part B, Section 2.5-2.

Green amount associated with green infrastructure (business case eligible): $687,650.00
(Attach a detailed cost estimate if necessary)

TWDB-0163
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Section 3 - Water Efficiency
Certain water efficiency improvements may be considered business case eligible for the GPR. Refer to EPA and TWDB GPR guidance for a complete list and description of business case eligible GPR Projects. For all water efficiency business case eligible projects Section 3.1 must be completed. A common water efficiency project that may be considered business case eligible is water line replacements to address water loss. For this type of project complete Section 3.2 of the worksheet. For any other water efficiency improvement being considered for business case eligibility, complete Section 3.3.

Section 3.1 - System and Water Loss Information
Section 3.1 is required for all water efficiency business case eligible projects. Attach a copy of most recent Water Audit, if available. Otherwise, complete and attach Water Audit Worksheet or provide water audit data in a similar format. Additional information on water loss and water audits as well as a copy of the Water Audit Worksheet is available at:
http://www.twdb.state.tx.us/assistance/conservation/Municipal/Water_Audit/wald.asp

Reference and attach water loss audit and/or any other completed planning or engineering studies:

☐ 2011 Water Loss Audit

Section 3.2 - Water Line Replacement

Proposed pipe to be replaced:

<table>
<thead>
<tr>
<th>Length (LF)</th>
<th>Existing Pipe</th>
<th>Proposed Pipe</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Material</td>
<td>Age (yr)</td>
</tr>
<tr>
<td>43,000</td>
<td>PVC</td>
<td>40+</td>
</tr>
</tbody>
</table>

Percent of distribution lines being replaced: 50%

Number of breaks/leaks/repairs recorded in past 24 months for areas being replaced: 40

Estimated water loss from pipe being replaced (provide calculations on following page): 4,800,000

Estimated annual water savings (provide calculations on following page): 4,800,000

Estimated annual cost savings (provide calculations on following page): $21,640.00

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Provide detailed description of the propose improvements and provide supporting calculations. Description should include a description of the methodology used to select pipes for replacement (attach additional pages if necessary):

The project involves replacing the City's main water line located along State Highway 4. These lines are responsible for approximately 75% of the line breaks addressed by the City over the last 24 months. This was ascertained through interviews with City utility staff, who are responsible for repairing these breaks.

Total Water Loss in 2011=6,427,570

Loss Attributable to lines to be replaced = 4,800,000 Gallons

Estimated Cost Due to Water Loss:
- Wholesale water Cost = $3.10 per 1,000 Gallons = $14,880.00
- Disinfection & Testing = $0.20 per 1,000 Gallons = $960.00

Estimated Cost Due to Repairs: Overtime = 20 repairs at 3 hours = $1,800.00
- Materials = $200 per Event (20) = $4,000.00

TOTAL ESTIMATED COST DUE TO IDENTIFIED LINES = $21,640.00 PER YEAR

Green amount associated with water line replacement: $687,650.00
(Attach detailed cost estimate if necessary)