PRE-APPLICATION FOR THE
CLEAN WATER STATE REVOLVING FUND
FFY 2018 LOAN FUNDS
Water Division
Wastewater Engineering Bureau

RSA/Rule: RSA 486:14

Applicant: **CITY OF BERLIN**

Project Name: **Sanitary Sewer Inflow/Infiltration Reduction Project: Building Demolition**

Location: **BERLIN, NH – MUNICIPAL SEWERS**

Proposed Project Description: **The City of Berlin owns 17 abandoned buildings that are believed to have roof drains and/or foundation drains that are connected directly to the sanitary sewer system. The City has been able to demolish a few similar buildings using local funds; however, the City does not have the funds to complete the demolition and site restoration process. The direct inflow runoff rate from City-wide flat roofs has been estimated to range between 800 to 12,000 gpm, depending on the intensity and frequency of the storm event. This does not include the impact of foundation drains. This project envisions funding the demolition of the City-owned, abandoned properties to remove this direct inflow/infiltration source that contributes to the City's CSO. Once demolished, the land is not typically redeveloped, but is turned into green space for the benefit of the City and recharge of ground water.**

Waterbody Effected:

Name: **ANDROSCOGGIN RIVER**

Assessment Unit ID: NH **IMP** (letters) **400010606-03** (numbers)

(see http://www2.des.state.nh.us/WaterShed_SWQA/SWQA_Map.aspx
for a map tool to determine Assessment Unit ID and a water quality report card to determine impairment status).

Impaired? **X** Yes ____ No

If yes, will the project address the impairment? **X** Yes ____ No

Please check only one project category:

_____ Wastewater
_____ Stormwater/Nonpoint Source
__**X**__ Wastewater with Stormwater/Nonpoint Source component(s)

ESTIMATED TIMELINE AND COST INFORMATION

	Start Date	Completion Date	Cost
1. Authority to Borrow Funds			
2. Design Engineering*			
3. Construction	**September 2018**	**October 2019**	**$475,000**
4. 5% Construction Contingency			**$25,000**
5. Construction Engineering*			
6. Other Costs (Please Specify):			

Total Estimated Costs			**$500,000**

Notes: * CWSRF funding for engineering services requires the use of the Qualifications Based Selection process described in Env-Wq 509.

RATIONALE FOR COST ESTIMATES

Are the cost estimates for the project supported by a document (e.g., facility plan, preliminary design report, etc.) that is signed by an engineer? If **no**, please reference the document and identify the engineer:

If **no**, describe the rationale for the cost estimates (attach additional information if necessary): **Refer to the attached spreadsheet with cost estimates of the various projects that have been completed to date as well as known properties remaining to be demolished**

TYPE OF PROJECT

Asset Management

X Check here if the project includes asset management for wastewater assets

☐ Check here if the project includes asset management for stormwater assets

Percentage or dollar value of **Total Estimated Costs** (page 1) directly related to asset management: 100%

Planning Evaluations

☐ Check here if the project includes a planning evaluation or evaluations

Percentage or dollar value of **Total Estimated Costs** (page 1) directly related to planning evaluation(s): _____

Septage Receiving Facilities

☐ Check here if the project includes construction of a new or upgraded septage receiving facility

Percentage or dollar value of **Total Estimated Costs** (page 1) directly related to the septage receiving facility: _____

Brown Grease Receiving Facilities

☐ Check here if the project includes construction of a new or upgraded brown grease receiving facility

Percentage or dollar value of **Total Estimated Costs** (page 1) directly related to the brown grease receiving facility: _____

Comprehensive Energy Audit Measure Implementation:

☐ Check here if the project includes the implementation of comprehensive energy audit measure(s)

Percentage or dollar value of **Total Estimated Costs** (page 1) directly related to the implementation of comprehensive energy audit measures: _____

Has a comprehensive energy audit been conducted at the facility? Yes ____ No __**X**__ Planned____;

If "Yes" or "Planned," when? _____.

Please indicate specific measure(s) to be implemented from the energy audit report:

_____

_____

PROJECT NEED

Provide a description of the need for the project and how the project will protect public health, water quality, or the environment:

The City currently operates a licensed CSO at the Watson Street Pump Station. The City is under EPA Administrative Order No. 011-044 to prepare and submit a Long-Term Control Plan (LTCP). A draft plan has been submitted and the City is awaiting comments from the EPA. The work identified in this pre-application was identified in the Draft LTCP, as the City continues to be proactive in removing extraneous sources of I/I within the sanitary sewer system. The project will also reduce the potential for the discharge of untreated wastewater during wet weather events from the City's one licensed CSO to the Androscoggin River.

PROJECT DATA

1. *All Projects:*

Water Quality & Public Health: Project would address (check all that apply):

Federal/State administrative order/consent decree _**X**_

Surface water quality impairment _**X**_

Chronic NPDES compliance issue(s) ___

Surface water quality in unimpaired waters ___

NPDES MS4 Compliance Issue(s) ___

Recommendation in:

_____ NH State Nonpoint Source Plan
_____ Watershed-based plan that meets Clean Water Act Section 319 guidelines
_____ 2010 Piscataqua Region Comprehensive Conservation and Management Plan
_____ Chronic flooding that causes a water quality problem

2. *Traditional Wastewater Projects: (Stormwater/Nonpoint Source go to Section 3)*

Population Served by Wastewater Treatment Facility

Population Receiving Collection:	Resident Population			Non-Resident Population*		
	Present	Projected	Projected Year	Present	Projected	Projected Year
At this facility	10,051	10,225	2017			
From system that discharges to this facility (if any)						

***The portion of the population that does not live within the service area, but utilizes the system infrastructure. Non-resident population includes transient, seasonal, and commuter workers and tourists.

Green Project Reserve

Percentage or dollar value of the **Total Estimated Costs** (page 1) allocated to the following and the relevant section number from 2012 CWSRF Green Project Reserve guidance:
http://des.nh.gov/organization/divisions/water/wweb/documents/gpr-guidance.pdf
Section Number _____

Water Efficiency _____ Energy Efficiency _**100%**_____

Green Infrastructure_____ Environmentally Innovative_____

Sustainability (complete all that apply):

Average monthly facility flow as a percentage of design capacity: __**68**___%

List the pollutant(s) and loading(s), as percentage of design capacity, that exceed, on an average monthly basis, 80% design loading capacity: _____**None**_____

Will the project reduce flow or loadings, or increase design capacity of the WWTF?

Yes_**X**__ No___ How?_**By reducing I/I, influent flows to the treatment plant will be reduced.**___

Will the project implement a climate change adaptation or mitigation?

Climate change adaptation or mitigation measures means a project that implements a climate change adaptation or mitigation strategy as outline by USEPA's *Adaptive Response Framework for Drinking Water and Wastewater Utilities* at http://water.epa.gov/infrastructure/watersecurity/climate/upload/epa817f12009.pdf. For a list of adaptation measures, see page 17 of USEPA's *Adaptation Strategies Guide for Water Utilities* at http://water.epa.gov/infrastructure/watersecurity/climate/upload/epa817k13001.pdf. Mitigation measures will be related to energy efficiency improvements as approved by NHDES.

Yes___ No_**X**__ How?:_____

_____

Will the project address excessive infiltration and inflow? Yes_**X**_ No____

Will the project provide for reuse or recycling of:

stormwater_____,

wastewater_____, or

treatment products_____.

3. Stormwater and Nonpoint Source Projects: (attach additional narrative if more space is needed)

Protection of Water Quality

If the project addresses an MS4 compliance issue, describe the permit requirement being met:

_____
_____
_____
_____
_____

If the project addresses chronic flooding, describe the water quality problem caused by flooding:

_____
_____
_____
_____
_____

If the project implements a plan recommendation in the NH Nonpoint Source Management Plan, a watershed-based plan, or the 2010 Piscataqua Region Comprehensive Conservation and Management Plan, cite the specific plan recommendation being implemented, including the page number and document referenced:

_____

_____

_____

Green Infrastructure Project would address (check all that apply):

_____ Disconnection of impervious cover from a stormwater drainage system

If checked, estimate # of square feet of impervious cover disconnected: _____

_____ Protection or restoration of natural hydrology, floodplains, and wetlands

If checked, describe how the project protects or restores natural hydrology, floodplains, or wetlands:

_____

_____

_____ Improved stream connectivity with respect to aquatic life

If checked, describe the barriers to be removed and estimate the # of miles of stream to be reconnected:

_____

_____

_____ Smart Growth as defined in RSA 9-B:3

If checked, describe how the proposed project addresses water quality goals through smart growth:

_____

_____

APPLICANT INFORMATION

Name: **James A. Wheeler** Signature*: _____

Title: **City Manager** Date: _____

Email: **jwheeler@berlinnh.gov** Phone No.: **603-752-7532**

*Must be signed by applicant to be included in Clean Watershed Needs Survey

(see **RATIONALE FOR COST ESTIMATES,** Page 2**)**.

Return by June 15, 2018 to:

Daniel.Fenno@des.nh.gov AND Kathleen.Bourret@des.nh.gov

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