Notice of Environmental Review Determination

The City of Dover, New Hampshire has applied for a Clean Water State Revolving Fund (CWSRF) loan through the State of New Hampshire Department of Environmental Services in accordance with provisions of Chapter Env-Wq 500 rules of the department.

As the proposed project constitutes only a minor project, where all work will take place on the existing impervious area of an existing City-owned structure, it has been determined by the Department that the proposed project qualifies for a Categorical Exclusion (CE).

Questions regarding this project can be directed to Jeff Mercer, P.E. at (207) 319-1508 or at the mailing address below.

Please address any comments to the following locations:

Wright-Pierce (Attn: Jeff Mercer)
75 Washington Ave
Suite 202
Portland, ME 04101

and

Tracy Wood
NHDES
Wastewater Engineering Bureau
PO Box 95
Concord, NH 03302

The deadline for submitting comments is August 1st, 2020.
ENVIRONMENTAL REVIEW FOR CLEAN WATER SRF LOANS
Water Division/Wastewater Engineering Bureau

RSA/Rule: Env-Wq 508

I. PROJECT APPLICANT

CITY OF DOVER, NEW HAMPSHIRE

ADDRESS

271 MAST ROAD
DOVER, NH 03820

PROJECT

CATCH BASIN AND WET WELL CLEANINGS TREATMENT FACILITY

SRF PROJECT NUMBER

CS-330200-15

II. INTRODUCTION

The City of Dover, New Hampshire has applied for a Clean Water State Revolving Fund (CWSRF) loan through the State of New Hampshire Department of Environmental Services in accordance with provisions of Chapter Env-Wq 500 rules of the department. These rules prescribe procedures for the application process concerning the CWSRF of the department. This document will discuss the requirements of Part Env-Wq 508 of these rules, the environmental review.

III. BACKGROUND

The City of Dover, New Hampshire is regulated as part of the NHDES Municipal Separate Storm Sewer System General Permit (MS4) program. As part of the program, the City’s Public Works Department cleans and maintains the City’s wet wells, catch basins, sewers, and streets (i.e. street sweepings). The City’s storm water system includes around 2,800 catch basins and the sewer collection system is comprised of 20 pump stations with 93 miles of gravity sewers.

Under the MS4 program, the City is required to ensure that no catch basin is 50% full and to clean the catch basins at a minimum once every five years. Scheduled cleanings of both wet wells and sewers are recommended as part of the City’s Capacity Management Operation & Maintenance (CMOM) program. Currently, the City collects a few hundred yards per year of catch basin cleanings that are statically dewatered at the WWTF site and disposed of at a local landfill which results in unnecessary financial burden.
IV. PURPOSE AND NEED

As part of the City’s CMOM program, the 20 city-wide pump station wet wells are expected to be cleaned once per year. Prior to 2019 this was accomplished via disposal at the dredge cell; however, the dredge cell has since been closed and the WWTF is not equipped to handle the wet well cleanings effectively. Without the dredge cell for local disposal the City must pay to have wet well cleanings and catch basin cleanings hauled off. Catch basin cleanings must be managed per the City’s MS4 permit as discussed in the previous section.

To address the need for cost effective management of the City’s wet well and catch basin cleanings, the City intends to repurpose existing infrastructure at the WWTF site (Amendment Storage Building and Composting Area) to construct a centralized Catch Basin and Wet Well Cleanings Treatment Facility. The facility will allow the City to effectively manage wet well cleanings via an accessible vactor truck ramp and roll-off containers. The roll-offs will allow the City to store and drain the wet well cleanings prior to hauling off for landfill disposal. Catch basin cleanings and road sweepings will be processed by a wash drum and grit classifier. This will clean and separate the materials for potential reuse by the City or sold to local contractors.

V. ALTERNATIVES ANALYSIS

An alternatives analysis is not required as this project qualifies for a Categorical Exclusion.

VI. DETAILS of PROJECT

The project mainly consists of installing equipment to establish a three process system in order to sustainably manage the City’s catch basin and wet well cleanings, each of those is briefly described below. The project will occur under the existing Amendment Storage Structure, which consists of a large canopy supported by columns. No demolition or changes to the structure itself will occur.

Wetwell and Sewer Cleanings Area

Development of the Wetwell and Sewer Cleanings Area includes the construction of a 50-foot wide by 90-foot long paved ramp just outside the existing structure to allow two vactor trucks to discharge contents simultaneously into roll-off containers located under the existing structure canopy. The contents in the roll-off containers will drain by gravity to a series of trench drains, some of these already exist, but some new ones will be added. The trench drains will drain to the Yard Waste Pump Station via existing piping (minimal piping will be needed to connect to the existing piping), which will convey the flow to the head of the Primary Sedimentation Basins for treatment.

Catch Basin Pre-Treatment Area

The Catch Basin Pre-Treatment Area will be provided for trucks to offload their catch basin cleanings or street sweepings for storage. New concrete fill will be added to the existing truck bay to slope the floor to a new 4.5-foot tall concrete push wall such that discharged material will drain by gravity to a trench drain. The push-wall acts as a point of contact for a front-end loader or other piece of equipment to collect grit after it has drained.
Liquid from the dumped grit will pass through ports in the push wall to a trench drain area which will drain to the Yard Waste Pump Station. After the grit has been dewatered, a front-end loader can be used to remove the grit from the bay for disposal or further processing at the Catch Basin Cleanings System.

**Catch Basin Cleanings System**

The primary aspect of the project consists of installing equipment intended to receive heavily grit laden material. The system will be comprised of a grit acceptance tank, wash drum, coarse material conveyor, grit pump, and grit washer. The system receives contents from the vactor truck in an 18’ x 6’ steel acceptance tank. The tank includes a horizontal screw which feeds the content to a wash drum which rinses the debris using plant water. The wash drum acts to remove large, coarse material (rocks) via a coarse material conveyor. Fine grit drains to an adjacent grit sump with a grit pump which conveys the grit slurry to a grit washer. The grit washer further cleans the fine grit and discharges it to a roll-off container. This allows the City to reuse the grit and limits the quantity which must be disposed of at an offsite landfill.

Only temporary disturbances are expected, primarily due to restoration of the existing pavement. Total temporary disturbance is approximately 45,000 square feet. No trees will be pruned or removed; no culverts will be installed; and no buildings are being removed.

The total project cost for the proposed project is estimated to be $3,500,000.00.

**VII. ENVIRONMENTAL CONCERNS AND MITIGATION**

The environmental concerns of the project are minimal. No adverse environmental impacts are anticipated from the project. The primary impacts are short-term impacts which will affect the area only during the period of construction. The following categories of impacts will illustrate the potential negative and positive effects anticipated from the project:

**Air:** Air impacts will be limited to some dust created during the construction portion of the project. Dust will be prevented and controlled through the use of water or dust retardant chemicals. No long-term air impacts are anticipated; mitigation measures will be employed if needed.

**Noise:** The noise from construction activities should be limited in duration. Noise impacts, if encountered, will be minimized by scheduling work to reduce effects in the area. No long-term noise impacts are anticipated.

**Surface Water, Groundwater, Wetlands, and Shoreland:** There should be no significant groundwater impacts from the project. No wetland impacts are anticipated. NPDES Construction General Permits may be required. Erosion will be minimized by using proper erosion control methods such as hay bales, silt fences and rapid re-seeding of affected areas. Best management practices will be employed in this effort. All appropriate permits shall be obtained from local, state and federal agencies as necessary.

christina.buckman@des.nh.gov or phone (603) 271-0734  
PO Box 95, Concord, NH 03302-0095  
www.des.nh.gov
Floodplain: The proposed project is located outside of the 100-year flood plain (elevation 8’).

Designated River: The proposed project does not occur within a Designated River corridor.

Plants & Wildlife: A National Heritage Bureau DataCheck has been completed for this project. The findings of the report indicate that there will be no significant impacts to area plants and/or wildlife.

Recreation and Historic: The Division of Historical Resources has reviewed this project. The results indicate there will be no impacts to recreational or historic areas.

Social and Economic: The social and economic impacts from the project are expected to be favorable. The financial impact on the ratepayer may be reduced for this project through the use of the State Revolving Loan Fund as opposed to other funding sources.

Whereas this project constitutes a minor project where all work will take place on the existing impervious area of an existing City structure, a Categorical Exclusion (CE) is proposed.

VIII. INTERGOVERNMENTAL REVIEW

Results from the Intergovernmental Review, coordinated by the New Hampshire Office of Strategic Initiatives, were received on May 23, 2019. The results summary indicates concurrence with the proposed project.

IX. PUBLIC REVIEW

The Town voted to authorize funding in the amount of $3,500,000.00 for the Catch Basin and Wet Well Cleanings Treatment Facility project on December 12, 2019.

A public notice will be published by the NH Department of Environmental Services and a ten-day public comment period will be held in accordance with the CWSRF rules.