ENVIRONMENTAL REVIEW
CHECKLIST AND TEMPLATE
FOR CLEAN WATER SRF LOANS
Water Division/Wastewater Engineering Bureau

RSA/Rule: Env-Wq 508

I. PROJECT APPLICANT

City of Laconia
Department of Public Works

ADDRESS
27 Bisson Avenue
Laconia, NH 03246

PROJECT
Northern Lakeport Area Sewer Project

PROJECT NUMBER
CS-334201-07

II. INTRODUCTION

The City of Laconia, New Hampshire has applied for a Clean Water State Revolving Fund (CWSRF) loan and an American Rescue Plan Act (ARPA) grant 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 Lakeport Area, a neighborhood within the City of Laconia, is located on a peninsula surrounded by Paugus Bay to the northeast, which is the drinking water supply of Laconia, and to the southwest by Opechee Bay. Both of which are tributary to Lake Winnipesaukee.

The primary objective of the Northern Lakeport Area Project is to replace the undersized mainline sewer and address high infiltration and inflow (I/I) within the existing vitrified clay pipe (VCP). The area consists of approximately 6,176 linear feet of VCP sewer, of which approximately 4,450 linear feet is undersized when compared to industry standards for a mainline sewer. This project will address the undersized sewers by increasing the pipe size and addressing the I/I by replacing the existing VCP sewers with new poly-vinyl chloride (PVC) or plastic pipe. The sewer system currently encompasses 75 sewer connections.
IV. PURPOSE AND NEED

The City of Laconia identified the existing sewer in the Northern Lakeport project area to have extraneous I/I issues and the pipe diameter as below industry standards for a mainline sewer. Typically, mainline sewers are no smaller than 8-inch diameter, whereas the sewers in the project area are 6-inch diameter. Further, the existing VCPs are brittle and have shorter lengths resulting in more joints. The combination of cracks in the brittle pipe and additional joints allows for the extraneous I/I to enter the sewer system. This project will improve the sewer system operation and reliability.

V. ALTERNATIVES ANALYSIS

A popular alternative to manage the I/I issue is to install curried-in-place pipe (CIPP) liner, which is a trenchless technology. However, because the pipes are also undersized, the only option is to dig and replace the sewer with the appropriate pipe material and diameter.

The location of the sewer will be within the same general alignment of the existing sewer. The existing sewer is positioned around the other utilities in the street, so there are limited alternatives for locating the sewer elsewhere.

VI. DETAILS of PROJECT

The proposed project will replace approximately 6,176 linear feet of the existing sewer lines, which includes 4,450 linear feet of undersized sewer, on portions of Belvidere St, North St, Sheridan St, School St, Fairmont St, and Gold St. The undersized mainline sewers will be brought to industry standard size and extraneous infiltration and inflow (I/I) will be reduced. The new sewer mains will be designed to accommodate the current and projected wastewater flows in the area and reduce the risk of operational issues to the collection system adjacent to the Paugus and Opechee Bays. The existing VCPs will be replaced with new polyvinyl chloride (PVC) or plastic pipes that will reduce I/I and provide a long-term solution. Further, the majority of the sewers will be replaced in kind with some alignment adjustments to accommodate water main horizontal spacing requirements and other utility challenges. The existing sewers will be removed as the new sewer is installed or flow filled in cases where the existing abandoned sewer is outside the excavation trench.

All the work is located on paved city-owned streets, including adjacent side streets throughout the area, in previously excavated locations. At all locations where dig work will disturb the existing roadway, the paved surface will be restored to pre-existing conditions. A total of 5,600 square yards (50,400 square feet) will be disturbed. There are no planned tree removal or culvert installations under this project. Equipment will be staged at either 210 Messner St, or Elm St/Doris Ray Ct. Both lots are gravel and dirt. No vegetation will be disturbed or removed at either site.

The total project construction cost is estimated to be $2,633,615. NHDES has offered the City of Laconia $2,160,827 in CWSRF loan funding and, through ARPA, $747,600 in grant funding for this project.
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. All the project work is located on paved streets throughout the project in previously excavated locations. The following categories of impacts will illustrate the potential negative and positive effects anticipated from the project:

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

The applicable procedures in Env-A 1800 will be followed for any activity that involves the demolition or renovation of existing infrastructure, which must include an inspection for asbestos-containing material (ACM). Activities that are potentially subject to this rule involve the removal or disturbance of ACM during renovation and demolition of existing structures, including heating, ventilation, and air conditioning (HVAC) systems; piping or ductwork; siding, insulation, and utility infrastructure, including but not limited to transite pipe, electrical line, water line, sewer line, or storage tanks. If the project includes the disturbance of any those items, there may be additional notification requirements and required procedures for the removal, packaging, and disposal of any ACM, that are required by Env-A 1800.

**Noise:** The noise from construction activities will be limited in duration. Night work may be necessary for installation at busy traffic locations, the contractor will be required to apply for a noise permit with the City. 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 minimal groundwater management needed on the project. Boring logs reveal that there will be very little groundwater impacts, and there are no wetlands located within the bounds of impacted area.

The contractor will be required to obtain a NPDES Construction Dewatering Permit and Stormwater Permit for Construction Activities. In addition, if there will be any dewatering that has the potential to result in a contaminated discharge to a surface water, the Remediation General Permit (RGP) may also be required. This project will need to meet the antidegradation requirements of all applicable permits. A Shoreland Permit by Notification (PBN) will also be required. The project site location is within existing city streets and typical sediment control of catch basins will be required.

**Floodplain:** No floodplain impacts are anticipated as the project is located within existing City streets.
**Designated River:** As confirmed by utilizing the ArcGIS map provided by NHDES titled “NH Designated River Corridor Web Map”, this project does not fall within a Designated River corridor and thus does not require Local Advisory Committee (LAC) notification. No designated river impacts are anticipated on this project.

**Plants & Wildlife:** A Natural Heritage Bureau (NHB) Data Check was conducted (NHB22-1064) for the main project area, and the results were “No Known Records”, meaning negative impacts on area plants or wildlife are anticipated from this project. No tree removal or trimming will occur.

The USFWS Section 7 Consultation has identified the potential for Monarch Butterfly and Northern Long-eared Bat within the project proximity. Consultation with USFWS regarding the Northern Long-eared Bat was initiated in regard to the proposed project. The project is consistent with the activities analyzed in the January 5, 2016, Programmatic Biological Opinion of Final 4(d) Rule for the Northern Long-eared Bat and Activities Excepted from Take Prohibitions. Voluntary conservation measures for the monarch butterfly can be found through the [Monarch Joint Venture at Who Are You? | The Monarch Joint Venture](https://www.mJV.org).

Several migratory bird species including the Bald Eagle, Black-billed Cuckoo, Bobolink, Canada Warbler, Cape May Warbler, Evening Grosbeak, Prairie Warbler and Wood Thrush may occur within proximity to the project area. Please consider scheduling earth moving or tree clearing activities to occur outside the window of when these species may be present to the greatest extent possible to avoid impacts to migratory birds.

**Recreation and Historic:** The proposed project is located on paved streets, in previously excavated locations so no impacts to recreational or historic areas are anticipated. The New Hampshire Division of Historical Resources (DHR) have reviewed the project (RPR 13670). DHR recommends a finding of No Historic Properties Affected for this project. Should the scope of the project change additional review by DHR will be required. An additional DHR request was submitted for the two potential staging areas. It is not anticipated that any historical properties will be impacted. Results will be added to the environmental review before it is executed.

**Social and Economic:** The social impacts from the project are expected to be favorable due to the improved operation and reliability of the sanitary sewer system. Economic impact is also favorable by mitigating costly future sewer repairs. The financial impact on the ratepayers may be reduced for this project using the CWSRF as opposed to other high rate borrowing sources.

Whereas this project constitutes only a minor project where all work will take place in the existing Town streets or rights-of-way, a Categorical Exclusion (CE) is proposed.

VIII. INTERGOVERNMENTAL REVIEW

Results from the Intergovernmental Review, coordinated by the New Hampshire Department of Energy were received on June 6, 2022. The results summary indicates presumed concurrence with the proposed project.
IX. PUBLIC REVIEW

The City Council voted to authorize funding in the amount of $2,500,000 for the Northern Lakeport Area Sewer Improvement project on March 28, 2022.

A public notice will be published by the NH Department of Environmental Services and a ten-day public comment period (if determined to be a Categorical Exclusion) will be held in accordance with the CWSRF rules.
Laconia Lakeport Area Design
July, 2022

1 inch = 100 feet

- Staging Area
- Northern Lakeport Street Area
- Roads

Irving Street
Wallace Court
Bisson Avenue
Messer Street

1 inch = 100 feet

July, 2022