

PROJECT SUMMARY

CCWS BRANT RESERVATION ROAD WATER MAIN LOOP

SENECA NATION OF INDIANS
CATTARAUGUS TERRITORY
ERIE COUNTY, NEW YORK

PUBLIC LAW 86-121

PROJECT NS-22-RQ3

August 2022



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
INDIAN HEALTH SERVICE
NASHVILLE AREA OFFICE

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REFERENCES and DESIGN STANDARDS

“Criteria for the Sanitation Facilities Construction Program”, June 1999, version 1.01, 3/13/03. Office of Environmental Health and Engineering, Division of Sanitation Facilities Construction, Indian Health Service.

http://www.dsfc.ihs.gov/Documents/Criteria_June_1999.cfm

“Sanitation Facilities Construction Policy 1115 - Criteria for Sanitation Facilities Construction”, March 1998, Nashville Area Indian Health Service.

“Recommended Standards for Water Works”, 2012 edition, Great Lakes – Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers.

“National Primary Drinking Water Regulations”, Environmental Protection Agency,

<http://water.epa.gov/drink/contaminants/index.cfm>.

“Drinking Water from Household Wells”, Environmental Protection Agency,

http://www.epa.gov/privatewells/pdfs/household_wells.pdf.

1.0 Introduction

The Seneca Nation of Indians (Nation) submitted a Project Proposal dated July 13, 2021, requesting assistance under Public Law 86-121 from the Indian Health Service (IHS) in serving homes with necessary sanitation facilities (Appendix A). This Project Summary proposes a project to serve 571 homes and 59 administrative buildings and businesses with upgraded water facilities. All of these homes are classified as *existing homes* in accordance with IHS eligibility criteria. The total cost of this project is estimated to be

This project, titled “CCWS Brant Reservation Road Water Main Loop” and designated Project NS-22-RQ3, will administer _____ in funding by the Infrastructure, Investment, and Jobs Act, 2021 (IIJA) from the IHS. An additional _____ Tribal funds will be utilized by the Nation for this project. The combined project funds are intended to be used to install 3,400 feet of 4-inch C900 PVC water main and one booster pump/PRV station between the existing water main on Brant Reservation Road and the intersection with Sulphur Springs and Cayuga Road in order to improve chlorine residual levels and improve service within the Newtown pressure zone of the water system. The Nation worked with IHS to pursue federal funding by listing the proposed project in the FY 2022 IHS Sanitation Deficiency System (SDS).

2.0 General Information

The Seneca Nation of Indians Cattaraugus Territory includes over 1,400 Indian homes as well as approximately 100 non-residential buildings such as tribal government offices or small commercial operations. The Cattaraugus Reservation is served by the Cattaraugus Community Water System (CCWS). The water system was constructed in the early 1990’s. Its primary water source is the Erie County Water Authority (ECWA) which originates from Lake Erie, and is treated by the ECWA at their Sturgeon Point Water Treatment Facility in Derby, New York. The secondary water source for the system are the Richardson Road wells near the Village of Gowanda. Together, these supplies provide more than 350,000 gpd into the system. More information about the existing water system, the needs documented, and alternatives considered can be found in the Project Engineering Report titled “Cattaraugus Brant Reservation Road Water Main Loop Project”, developed by IHS in August 2021 and attached to this document in Appendix C.

2.1 Existing Water Supply and Fluoridation

Over 99 percent of the homes on the Cattaraugus Territory receive their water supply from the Nation’s community water system. Federally and Nation funded water projects have provided over 1000 residential water service lines. The sources for the Nation’s community water system are a metered connection with the adjacent Erie County Water Authority (ECWA) and two large production community wells at Richardson Road. A water study performed in 2020-2021 indicate that the Nation’s average water usage is 352,000 GPD. A few homes still utilize individual water well systems. A complete description of the existing water system can be found in Appendix C.

The community water supply for the Cattaraugus Territory is fluoridated.

2.2 Operation and Maintenance

The Nation’s utilities department provides all operations and maintenance for the CCWS. The Nation employs certified operators to ensure compliance of water quality standards and provides for new operators to become certified.

3.0 Need for the Project

The water model estimated that the Nation has excessive water age in several locations and showed a lack of chlorine residual during testing. Both New York Standard for a surface water system and the Ten State Standards recommendations specify minimum chlorine residuals in the system need to be at or above 0.2 mg/L to ensure safe and potable water. The lack of chlorine residual within the system violates applicable code requirements or advisories established for the protection of public health (DL3). Tables from the water model (Appendix C) show chlorine residual tests demonstrating consistent lack of chlorine residual to comply with the recommended standards and high water age numbers in the Sulphur Springs area.

Table 1: Chlorine residuals measurements demonstrate insufficient concentrations.

HYD 83	0.11	0.03	0.06	0
TIME	8:16 AM	12:17 PM	5:07 PM	10:06 PM

Creating the loop with booster/PRV station will reduce excessive water age and boost chlorine residuals on Sulphur Springs Road. Tables showing existing water age can be found in the preliminary engineering report (PER, Appendix C). The water age in this area will be greatly reduced.

4.0 Proposed Project

4.1 Scope of Work

The proposed project will consist of installing 3,400 linear feet of 4-inch C900 PVC pipe and a booster pump/PRV station. The installation will serve as another interconnection between the Irving and Newtown pressure zones. A booster station will be needed to provide the flow between the pressure zones. This would also supply fresher water to the Sulphur Springs and Cayuga Road water mains, reducing water age and increasing chlorine residuals.

Water mains will be constructed of C900 D14 PVC.

4.2 Training Operation and Maintenance

This project will create a minimal amount of additional O&M requirements due to the maintenance of a new booster pump/PRV station and valves for the utility

department. O&M of the existing facilities should decrease in cost and provide less burden to the utilities department as a result of the proposed improvements. This will provide improved service to the residents and compliance with recommended standards. As the system is not changing substantially in how it is routinely operated, the O&M requirements should be well within the capacity of the utilities department.

4.3 Schedule of Homes to be Served

There are an estimated 571 existing (E1) homes that will be served by this project and an estimated 59 non-residential (E2) buildings that will be served.

*Legend:

<u>Home Type</u>	<u>Home Type</u>
E1 - Existing Homes (Like New)	H1 – HUD Housing (new)
E2 - Existing Non-Residential Units	H2 - BIA Housing (new)
E3 – Existing Non-Indian Homes	H3 - Tribal Housing (new)
	H4 – State or Remote Housing (New)
	H5 - Other Housing (New)
	H6 – HUD – BIA Housing (New)
	H7 – HUD Block Grant (CDBG)

5.0 Project Management Plan

5.1 Stakeholders

Role	Stakeholders		
	IHS	Nation	Consultant
Funding Agency	X		
Project Manager		X	
Project Engineer	X	X	X
Construction Inspection	X	X	
Procurement Agent		X	
Final Owner		X	

5.2 Procurement Plan

Tribal Procurement – Nation
 Tribal Force Account – Nation

5.3 Design Plan

Preliminary Engineering Report – IHS
 Environmental Review and Determination – Nation, IHS
 Final Design and Construction Package – IHS, Nation, Nation Consultant
 Final Review of Design – Nation, IHS
 As-built Drawings – Contractor, Nation
 Final Report – IHS

5.4 Change of Scope Control Plan

Any significant deviations from the path laid out in this Project Summary will necessitate an amendment be executed to this document. Changes in funding, responsibilities of the parties, or the procurement method will also require the execution of an amendment to the Memorandum of Agreement for this project.

5.5 Project Milestone Schedule

<i>Milestone Event</i>	<i>Target Date</i>
1. Planning Phase	
Project Summary Completed	20 August 2022
Memorandum of Agreement Executed	1 September 2022
Environmental Review Document Completed	1 February 2023
Environmental Determination Issued	28 February 2023
2. Design Phase	
Design Initiated	1 February 2023
Design Completed	1 July 2024
Procurement Package Completed	1 July 2024
Procurement Action Initiated	1 August 2024
3. Construction Phase	
Construction Started	1 December 2024
Construction Completed	31 December 2025
4. Closeout Phase	
As-Builts Completed	15 January 2026
Final Inspection Completed	15 January 2026
O&M (Homeowner) Training Completed	14 March 2026
Closeout Letter Issued	31 August 2026
Final Report Completed	31 December 2026

The expected duration of the first phase of this project, from execution of the Memorandum of Agreement to construction completion is estimated at 3 years and 3 months or 3.25 years.

6.0 Environmental Review

A review of the possible effects on the environment, as required by the National Environmental Policy Act (NEPA) and related environmental legislation, executive orders, and regulations, will be completed for this project. This project proposes to install water mains within the existing right-of-way, but may disturb previously undisturbed land, possibly requiring a Phase I environmental assessment. The project will be reviewed by both IHS and the Nation for impacts related to NEPA concerns. It is anticipated that this review will indicate that the project meets the criteria for NEPA categorical exclusions for the IHS, as submitted to the Council on Environmental Quality. Further, the requirements of related legislation, executive orders, and regulations will be met. However, if any condition contrary to the results of this review is discovered at any time during the course of this project, further

action will be taken to ensure that this project causes no significant impact on the environment.

No funds for construction activities will be released until the Environmental Review and associated determination is made.

7.0 Budget

7.1 Detailed Cost Estimate

<u>DESCRIPTION</u>	<u>QTY</u>	<u>UNIT</u>
4" C900 PVC	3400	LF
Booster/PRV Station	1	EA
Gate Valves	2	EA
Interconnection	2	EA
<hr/>		
Subtotal of project (IHS Eligible Costs)		
Total Ineligible Project Costs		
<hr/>		
TOTAL PROJECT ESTIMATE (ROUNDED UP TO NEAREST THOUSAND)		

*Note 1: Ineligible Costs are based on estimated or metered water usage for ineligible buildings and homes.

**Note 2: The Administrative Fee is based on a sliding scale of construction costs performed under tribal procurement and do not apply to force account. The estimated amount may change due to this. This will not affect the obligation to the Tribe.

***Note 3: The IHS Technical Support amount will be retained by IHS and used to provide technician related direct support for this project.

7.2 Funding Source(s)

The estimated funding for the project is shown below.

IIJA IHS Regular Funding
Nation Funding
 Total Funds Estimated for Project