



State Revolving Fund Loan Programs Drinking Water, Wastewater, Nonpoint Source

PRELIMINARY DECISION OF CATEGORICAL EXCLUSION

TO ALL INTERESTED CITIZENS, ORGANIZATIONS AND GOVERNMENT AGENCIES:

CITY OF FORT WAYNE

WASTEWATER TREATMENT PLANT DIGESTER AND AERATION IMPROVEMENTS PROJECT

PRELIMINARY ENGINEERING REPORT SRF # WW 14 31 02 07 – Project 4

Date: October 6, 2014

Pursuant to IC 4-4-11, the State Revolving Fund (SRF) Loan Program has determined that the project described here and in the city's Preliminary Engineering Report received by the SRF on July 31, 2014 will have no substantial negative environmental impact. Therefore, the SRF is issuing a preliminary decision of Categorical Exclusion from the requirements of substantive environmental review.

How were environmental issues considered?

The National Environmental Policy Act requires agencies disbursing Federal funds to include environmental factors in the decision making process. A summary of the project is attached for your review. The SRF's preliminary review has found that the proposed project does not require the preparation of either an Environmental Assessment or an Environmental Impact Statement.

Why is additional environmental review not required?

Our environmental review has concluded that significant environmental impacts will not result from the proposed action.

How do I submit comments?

Comments can be submitted to:

April Douglas,
Senior Environmental Manager
SRF Programs
317-234-7294; adouglas@ifa.in.gov

CATEGORICAL EXCLUSION

I. PROJECT IDENTIFICATION

Project Name and Address: **Wastewater Treatment Plant
Digester and Aeration Improvements Project
Preliminary Engineering Report**
City of Fort Wayne
200 East Berry Street, Suite 270
Fort Wayne, IN 46802

SRF Project Number: WW 14 31 02 07 – Project 4

Authorized Representative: Mr. Kumar Menon,
Director of Public Works

II. PROJECT LOCATION

Fort Wayne is located in Allen County. The Wastewater Treatment Plant (WWTP) digester and aeration improvements project area is located on the Fort Wayne East USGS 7.5' topographic quadrangle in Adams Township, T30N, R13E and section 6.

III. PROJECT NEED AND PURPOSE

A. Digesters 3 & 4 Modifications

The purpose for the digester improvements is to address the need for better stability and efficiency in sludge processing based on changes being made in the secondary treatment process to increase capacity. This project is a continuation of an overall digester complex improvements project. These improvements are needed to allow the wastewater treatment plant to effectively manage solids productions at the proposed future peak capacity of 85 million gallons per day (MGD) and proposed firm capacity of 74 MGD identified in the Long Term Control Plan (LTCP) as Control Measure No. 2.

Three alternatives were evaluated for the Digester Improvement project, including the “No Action” alternative.

The “No Action” alternative was rejected since the need to handle greater quantities of sludge based on changes in the secondary treatment process could not be achieved.

The “Optimal Operation of Existing Facilities” alternative was rejected since the WWTP is already operating effectively with continual observation and maintenance. The need to handle projected increases in sludge production with the changes to the secondary treatment process could not be achieved.

The “WWTP Upgrade/Expansion” alternative includes upgrading Digesters 3 and 4 by the addition of new covers, mixers, gas handling equipment, sludge pumping equipment, heat exchangers and boilers and ancillary items. Piping changes will also be required for Digesters 3, 4, and 6 necessitating that all three be taken out of service to be cleaned, see Figure 1. The proposed changes will allow for increases in sludge processing, better gas production and the ability to meet the LTCP control measures. **This is the selected alternative.**

B. Effluent Dissolved Oxygen (DO) Improvements

The purpose for the effluent DO improvements project is to allow for compliance with the effluent DO limits in the city’s National Pollutant Discharge Elimination System (NPDES) permit.

Three alternatives were evaluated for the Effluent DO Improvement project, including the “No Action” alternative.

The “No Action” alternative was rejected since the existing WWTP facilities are not capable of achieving the effluent DO limit in the city’s NPDES permit.

The “Optimal Operation of Existing Facilities” alternative was rejected since the WWTP is already being operated effectively with continual observation and maintenance and, as such, is not capable of achieving the effluent DO limit in the city’s NPDES permit

The “WWTP Upgrade/Expansion” alternative includes various modifications to improve effluent aeration. The selected improvements include: retrofitting the chlorine contact tank with new mechanical aeration equipment; upgrading of the electrical power and controls; and other required plant modifications, see Figure 2. This alternative will allow for the compliance with the city’s NPDES permit limits for effluent DO. **This is the selected alternative.**

IV. ESTIMATED PROJECT COSTS, AFFORDABILITY AND FUNDING

A. Selected Plan Cost Summary

<u>Construction Components</u>	<u>Costs</u>
<u>Digesters 3 & 4 Modifications</u>	
Mobilization	\$ 86,250
Demolition	161,000
Covers, Mixers, Recirculation Pumps	1,978,000
Piping, Valves and Instrumentation	1,380,000
Heat Exchanger/Boilers Expansion	1,725,000
Flare and Pressure Relief Valve	402,500
Waste Activated Sludge/High StrengthWaste Impr.	230,000
Miscellaneous Work	672,750
Contingency	<u>663,550</u>
Subtotal	\$7,299,050

Effluent DO Improvements

Mobilization	\$ 50,850
Site Work	9,162
Chlorine Tank Improvements	331,492
Blowers	406,224
Blower Building	322,401
Electrical/Instrumentation and Controls	656,507
HVAC Improvements	260,369
Contingency	<u>203,700</u>
Subtotal	\$2,240,705
Total Estimated Construction Costs	\$ 9,539,755

Non- Construction Costs

Planning and Design	\$ 1,442,000
Construction Management/Inspection	824,000
Financial and Legal	<u>329,697</u>
Total Non-Construction Costs	\$2,595,697

Total Estimated Project Costs \$12,135,452

B. Fort Wayne will borrow approximately \$12,135,452 from the State Revolving Fund Loan Program with a 20-year term at an annual fixed interest rate to be determined at loan closing. Monthly user rates and charges may need to be analyzed to determine if adjustments are required for loan repayment.

V. ENVIRONMENTAL IMPACTS OF THE FEASIBLE ALTERNATIVES

The project will occur in a previously disturbed area and will not affect endangered species or their habitat, streams, wetlands, or the 100-year floodplain.

Construction and operation of the project will not alter, demolish or remove historic properties (see Exhibits 3 and 4). If any visual or audible impacts to historic properties occur, they will be temporary and will not alter the characteristics that qualify such properties for inclusion in or eligibility for the National Register of Historic Places. The SRF's finding pursuant to Section 106 of the Historic Preservation Act is: "no historic properties affected."

VI. PUBLIC PARTICIPATION

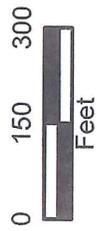
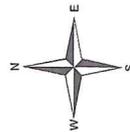
A properly noticed public hearing was held on August 13, 2014, at 10:00 a.m. at the Council Chambers, Room, Room 035, Citizens Square, Fort Wayne to discuss the Preliminary Engineering Report. No verbal comments were received at the public hearing, and no written comments were received during the 5-day comment period following the hearing.



DIGESTER IMPROVEMENTS



FIGURE 1



August 1, 2014



EFFLUENT DO IMPROVEMENTS



Sector 30 (003-214-30009/30048)

Digester 314

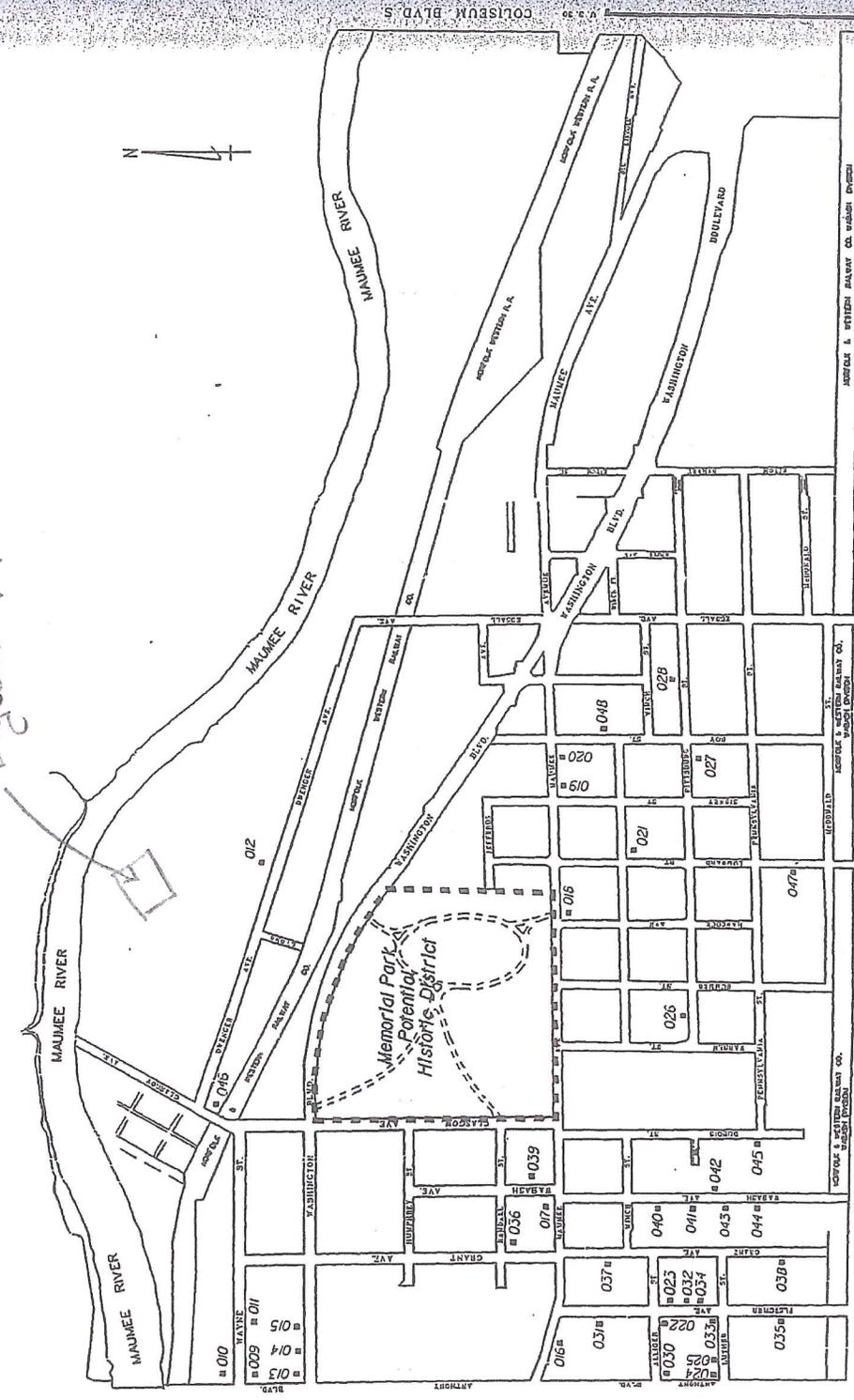


Figure 3: from the Allen County Interim Report Historic Sites and Structures Inventory

Sector 22 (003-214-22001/22002)

- | No. Rtg. | Description |
|----------|---|
| 001 O | House, 2910 Lake Ave.; Colonial Revival/Craftsman, c.1924, outbuildings; Architecture |
| 002 N | Catholic Cemetery, 3500 Lake Ave.; Radial plan cemetery, 1873-present; Egyptian Revival Mausoleum, 1918 (Charles Weatherlogg, architect); Tudor Revival office, c.1940; Sculpture, other features; Architecture, Art, Ethnic heritage, Exploration/settlement, Indian, Landscape architecture |

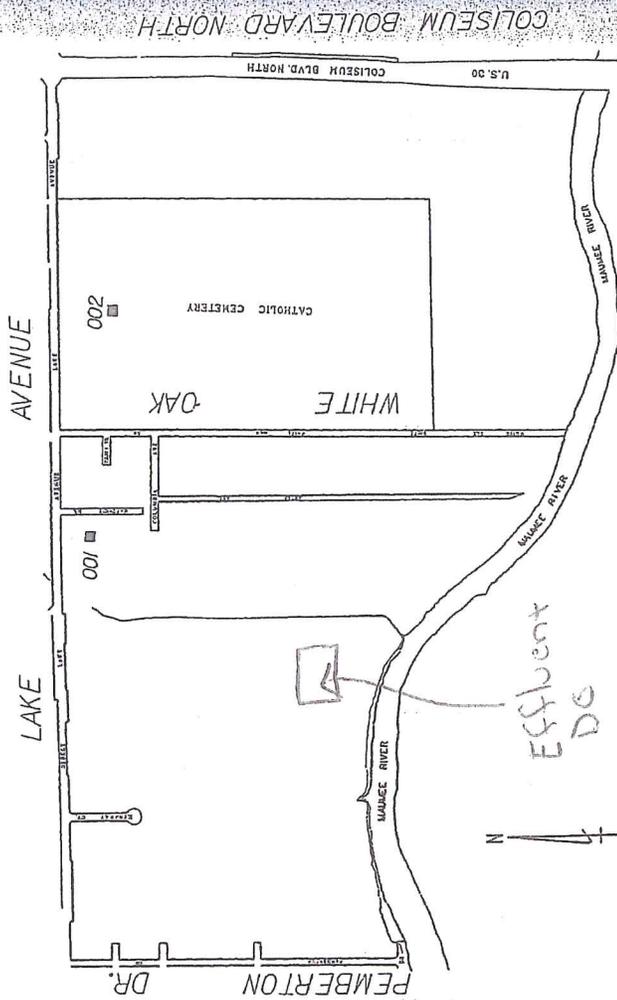
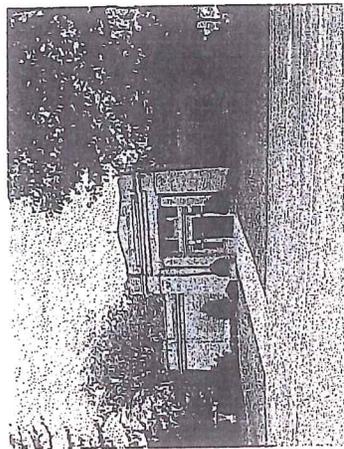


Figure 4: from the Allen County Interim Report Historic Sites and Structures Inventory