



GRETCHEN WHITMER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY
LANSING



PHILLIP D. ROOS
DIRECTOR

April 24, 2024

TO: All Interested Citizens, Organizations, and Government Agencies

SUBJECT: FINDING OF NO SIGNIFICANT IMPACT
Village of Shepherd, Isabella County
Sanitary Force Main and Lift Station; Wastewater Lagoon Improvements
Clean Water State Revolving Fund Project Number 5957-01

The purpose of this notice is to seek public input and comment on a preliminary decision by the Michigan Department of Environment, Great Lakes, and Energy (EGLE) that an Environmental Impact Statement (EIS) is not required to implement recommendations discussed in the attached Environmental Assessment of a wastewater project planning document submitted by the applicant mentioned above.

HOW WERE ENVIRONMENTAL ISSUES CONSIDERED?

Part 53, Clean Water Assistance, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, being Sections 324.5301 to 324.5316 of the Michigan Compiled Laws Annotated, requires EGLE to evaluate all environmental implications of a proposed wastewater project. EGLE has done this by incorporating a detailed analysis of the environmental effects of the proposed alternatives in its review and approval process. A project planning document containing information on environmental impacts was prepared by the municipality and reviewed by the State. EGLE has prepared the attached Environmental Assessment and found that the proposed project does not require the preparation of an EIS.

WHY IS AN EIS NOT REQUIRED?

Our environmental review concluded that no significant environmental impacts would result from the proposed action. Any adverse impacts have either been eliminated by changes in the project planning document or will be reduced by the implementation of the mitigative measures discussed in the attached Environmental Assessment.

HOW DO I GET MORE INFORMATION?

A map depicting the location of the proposed project is attached. This information is also available on our website at Michigan.gov/CWSRF under "Additional Links." The Environmental Assessment presents additional information on the project, alternatives that were considered, impacts of the proposed action, and the basis for our decision. Further information can be obtained by calling or writing one of the contact people listed below.

HOW DO I SUBMIT COMMENTS?

Any comments supporting or disagreeing with this preliminary decision should be submitted to me at EGLE, P.O. Box 30457, Lansing, Michigan 48909-4957. We will not

take any action on this project planning document for 30 calendar days from the date of this notice in order to receive and consider any comments.

WHAT HAPPENS NEXT?

In the absence of substantive comments during this period, our preliminary decision will become final. The applicant will then be eligible to receive loan assistance from this Agency to construct the proposed project.

Any information you feel should be considered by EGLE should be brought to our attention. If you have any questions, please contact Mr. David J. Worthington, the project manager, at 517-554-1835; WorthingtonD@Michigan.gov; or you may contact me. Your interest in this process and the environment is appreciated.

Sincerely,

Dan Beauchamp

Dan Beauchamp, Section Manager
Water Infrastructure Funding and Financing Section
Finance Division
517-388-3380

Attachment

DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
Clean Water State Revolving Fund
Environmental Assessment
Village of Shepherd, Isabella County
April 2024

PROJECT IDENTIFICATION

Applicant: Village of Shepherd
Address: 208 W. Boulevard Street
Shepherd, Michigan 48883
Authorized Representative: Mr. Steve Davidson, Superintendent
Project No.: 5957-01

PROJECT OVERVIEW

The village of Shepherd (Shepherd) is in Isabella County due south of the city of Mt. Pleasant (Mt. Pleasant). A study area has been delineated that includes the Shepherd village limits as well as the wastewater sewage lagoons just outside the village limits (See Figure 1). The land use within the village is predominantly residential, with small portions of commercial, industrial, and agricultural acreage. According to the United States Census Bureau's survey, Shepherd's population was approximately 1,517 residents in 2020. The Eastern Michigan Council of Governments projects a small increase in the village's population from year 2025 to 2045.

Shepherd is seeking Clean Water State Revolving Fund (CWSRF) loan assistance to finance improvements to its wastewater treatment lagoons, sanitary lift station, and force main. The total CWSRF eligible project cost is estimated to be 3,000,000. Shepherd has been determined by the Department of Environment, Great Lakes, and Energy (EGLE) criteria to be a financially overburdened community and thus will be eligible for a reduced interest rate. Construction is scheduled to begin in Fall 2024. As a result of this project, system users could see a monthly sewer rate increase of approximately \$29 per month based on a 30-year loan term.

EXISTING FACILITIES

Shepherd owns and operates a wastewater collection system originally constructed in 1963 with minor expansions in the 1970s. A sewer separation project occurred in the 1990s. There are approximately 8.9 miles of gravity sewers constructed with polyvinyl chloride and clay pipe ranging in size from 8-inches to 24-inches in diameter, and all flows go to the main lift station located to the east of Cottage Avenue and Orchard Avenue. This lift station was built in the 1960s and pumps wastewater to the stabilization lagoon approximately 0.75 miles to the northeast. The lagoon is composed of three clay-lined cells with a capacity to treat 85 million gallons per year. Cell No.1 receives the raw wastewater, which is then transferred for polishing to Cells No.2 and No.3. Discharges are seasonally from Cell No.3 to the Salt Creek under National Pollutant Discharge Elimination System (NPDES) permit MIG580000.

PROPOSED PROJECT

A. Project Need

Immediate action is needed to replace the existing sewer force main that continues to deteriorate. It is over 60 years old and is constructed of cast iron and portions composed of corrugated metal with steel rivets. These rivets continue to fail, causing leaks that can contaminate the groundwater. The force main is a critical asset to transport wastewater flows to the lagoons and EGLE has advised that it is overdue for replacement before a catastrophic failure occurs.

Shepherd's sewage lagoons have been documented by EGLE to be in poor condition. The interior slopes are eroding, the biosolids' extreme depth is threatening to create storage and treatment problems, and the access roads are in poor condition. Biosolids have never been removed from the lagoons and this maintenance is overdue for action as indicated by EGLE's 2023 inspection. Prior to disposal, the biosolids will need to be tested for perfluorooctane sulfonic acid (PFOS) chemicals. Finally, the sewage lagoons also require isolation valves replacement due to their age.

Shepherd's main lift station is also over 60 years old and needs new submersible pumps, a slide rail system, new controls, new check and safety valves, new safety hatch door, and a new valve chamber. There are also problems with securing parts to repair or replace pumps.

Shepherd is currently undertaking a sewer inspection study to evaluate possible structural deficiencies in need of attention. The results of the study will not be available in time for any sewer rehabilitation project such as lining to be included with this proposed CWSRF loan.

B. Project Alternatives

The following alternatives were evaluated for the project.

No-action Alternative

Selecting a no-action alternative has the advantage of requiring no immediate capital investment. However, the disadvantage of no action is that the structures, equipment, and facilities will require increased maintenance, causing operational issues, and will eventually fail, resulting in the inability to meet NPDES discharge permit requirements. There might also be sewage releases to the groundwater and/or Salt Creek due to failures. For these reasons, the no action alternative is not considered further and is rejected.

Regional Alternative

A regional alternative to reroute the wastewater approximately 12 miles to the Mt. Pleasant Wastewater Treatment Plant was evaluated, meaning the village lagoons would be decommissioned and the land sold or repurposed for other uses. A booster station would be required along the force main route to convey the flow. The cost of constructing a force main to Mt. Pleasant would be about \$13,000,000, not including a capacity fee, and, although technically feasible if the Mt. Pleasant agreed to accept the flow, this alternative was rejected due to the high cost involved.

Rehabilitate and Replace Existing Facilities

This option includes rehabilitation and replacement of the facilities described under Project Need. The proposed improvement includes the placement of armor stone over the geotextile fabric to protect the slopes from erosion and to keep the liner from degrading, improving the access roads, and removing sludge (biosolids) from the lagoon cells. Biosolids removal is an operation and maintenance activity except when required for liner repair and will be ineligible for CWSRF loan participation. The sanitary lift station would get a major overhaul per the items previously described, and the force main from the lift station to the lagoons would get replaced. Total replacement of the lift station would exceed \$1,100,000, based on current estimates, compared to \$650,000-\$700,000 for rehabilitation.

C. Selected Alternative

Shepherd selected the Rehabilitate and Replace Existing Facilities alternative to address their wastewater system's needs. Biosolids removal will be funded outside the CWSRF program. Figure 2 shows the location of the lagoon cells, force main route, and lift station where the work will take place.

The total CWSRF eligible loan total is estimated to be approximately \$3,000,000 as shown in Table 1. Shepherd has been determined by EGLE criteria to be a financially overburdened community and thus will be eligible for a 2 percent interest rate which is 0.75 percent below the standard interest rate of 2.75 percent. Construction is scheduled to begin in Fall 2024. System users may see a monthly sewer rate increase of approximately \$29 per month based on a 30-year loan term.

Table 1. Estimated Project Cost (Pre-Bidding)

Description	Amount
Force Main Replacement- 4,800 LF	\$518,400
Bore US-127-300 LF	\$67,500
Directional Drill Creek-600 LF	\$108,000
Structures-4	\$80,000
Connect to PS & Lagoon	\$19,000
PS Upgrades	\$700,000
Lagoon Roadway-3,422 SYD	\$88,978
Lagoon Side Slopes-West Lagoon-4,667 SYD	\$280,000
Lagoon Side Slopes-Center Lagoon-3,267 SYD	\$196,000
Lagoon Side Slopes-East Lagoon-4,044 SYD	\$242,667
Miscellaneous Lagoon Work- Valves etc.	\$200,000
Contingencies/Engineering/Legal etc.	\$499,455
Total	\$3,000,000

ENVIRONMENTAL IMPACTS AND MITIGATION

A primary goal of the project is to maintain reliable wastewater service and compliance with the facility's NPDES discharge permit. The proposed project is not anticipated to detrimentally cause changes to the quality of nearby surface or groundwater. A minor impact on local traffic may occur for residents and businesses during the construction of the proposed improvements.

During construction, equipment will increase local noise and dust levels during operations. There will be a short-term adverse impact on air quality during the construction phase due to dust and construction equipment emissions generated during the minimal excavation operations. Technical specifications will be followed concerning noise, dust control, cleaning, and debris removal, along with local ordinances being followed. Temporary bypass pumping to manage sewage flows may be required during construction but will be minimized to the greatest extent possible.

The proposed project will have no impact on archaeological and historical/cultural resources. There is a historic Powerhouse on West Maple Street, but this is outside the zone of influence of the proposed project. The selected alternative will not negatively impact sensitive natural features, wildlife, or ecosystems. A minor permit to drill beneath the creek may be required from EGLE, as well as a Michigan Department of Transportation permit for crossing US-127. The main impact will be financial to pay for the loan debt service. There will be no dislocation of people during the construction. Minimal impact to residents is anticipated as the work will take place on existing village owned property or within the road right-of-way. Employment of some residents by the contractor(s) is a possibility for certain construction operations.

During construction, any areas of known contamination will be mitigated using a combination of preventive measures, monitoring, and remediation techniques. The specific approach will depend on the type of contamination present.

1. Preventive Measures: To minimize the risk of contamination during construction, several preventive measures can be taken. These will include:
 - Implementing construction barriers, such as containment walls or barriers, to prevent the spread of contaminants.
 - Using clean materials and equipment that have not been exposed to contaminants.
 - Employing proper waste disposal practices to prevent contaminants from entering the environment.
 - Ensuring that workers are trained in proper safety procedures and wear appropriate personal protective equipment.
2. Monitoring: Continuous monitoring of air, soil, and water quality during construction to ensure that contaminants do not spread or cause harm. Procedures would include:
 - Regular testing of soil, groundwater, and surface water samples to detect the presence of contaminants.
 - Monitoring air quality to identify any potential health risks for workers and the public.
 - Conducting regular inspections of construction sites to ensure that preventive measures are being followed and that any potential sources of contamination are identified and addressed.
3. Remediation: If contamination is detected during construction, appropriate remediation measures should be taken to mitigate the risk. This may include:
 - Excavating and removing contaminated soil and replacing it with clean material.

- Installing treatment systems, such as air strippers or carbon filters, to remove contaminants from air or water.

No indirect impact on development, land use, cultural, human, or ecological resources is anticipated.

The various infrastructure improvements will positively reduce system maintenance, reduce risk of lift station failures and/or force main/lagoon sewage spills.

PUBLIC PARTICIPATION

A formal public meeting on project alternatives and user costs was held on April 20, 2023, at the Village of Shepherd office. The public meeting was advertised on the Shepherd website. A copy of the draft project planning document was made available to the public for a 15-day period on the Shepherd website and the village office. No written comments from the public were received before, during, or after the public meeting. Questions and comments received during the meeting were addressed. After the close of the public comment period, the recommended alternative was selected for implementation by the Shepherd Village Council.

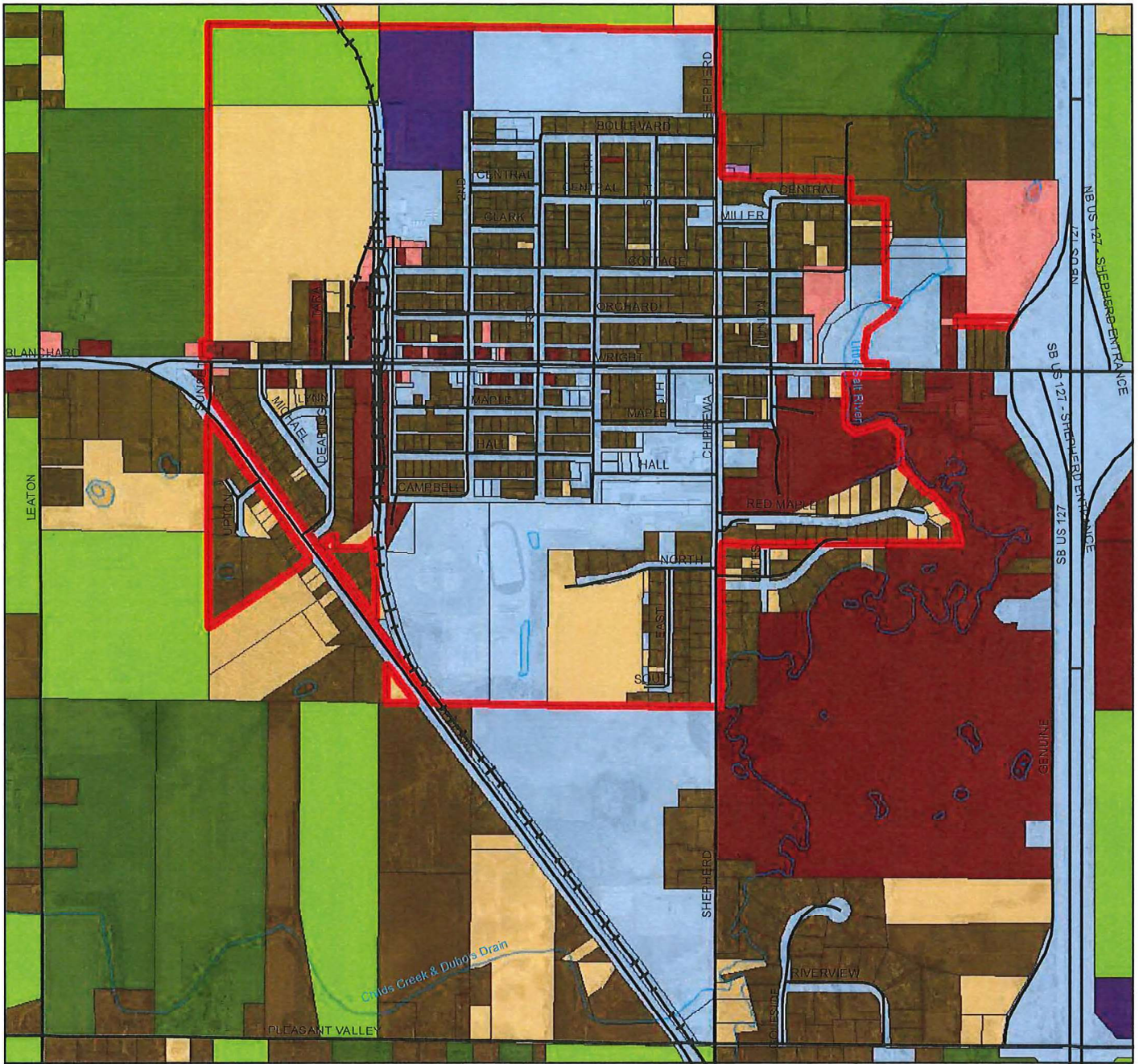
REASONS FOR CONCLUDING NO SIGNIFICANT IMPACTS

The proposed project has minimal temporary negative environmental impacts but offers substantial benefits of repairing the sanitary lift station and force main to transport wastewater safely and enabling the lagoon cells to provide adequate treatment of wastewater that will comply with the NPDES permit and prevent unauthorized discharges and discharge limit violations. These improvements should enable the wastewater collection and treatment system to function efficiently.

Questions regarding this Environmental Assessment should be directed to:

Mr. David J. Worthington, Project Manager
Water Infrastructure Funding and Financing Section
Finance Division
Michigan Department of Environment, Great Lakes, and Energy
P.O. Box 30457
Lansing, Michigan 48909-4957
Telephone: 517-554-1835
E-Mail: WorthingtonD@Michigan.gov

CWSRF PROJECT STUDYAREA



Study area boundary shown in red

VILLAGE OF SHEPHERD

COE TOWNSHIP
ISABELLA COUNTY
MICHIGAN

Legend			
	Agriculture		Commercial
	Agricultural Vacant		Commercial Vacant
	Residential		Industrial
	Residential Vacant		Industrial Vacant
			Exempt



LEGEND

- Force Main - [Red line]
- Pump Station - [Blue square]
- Access Roads - [Pink line]
- Village Limits - [Dark blue line]
- Exg Force Main - [Dashed yellow line]

PROPOSED IMPROVEMENTS MAP B-3

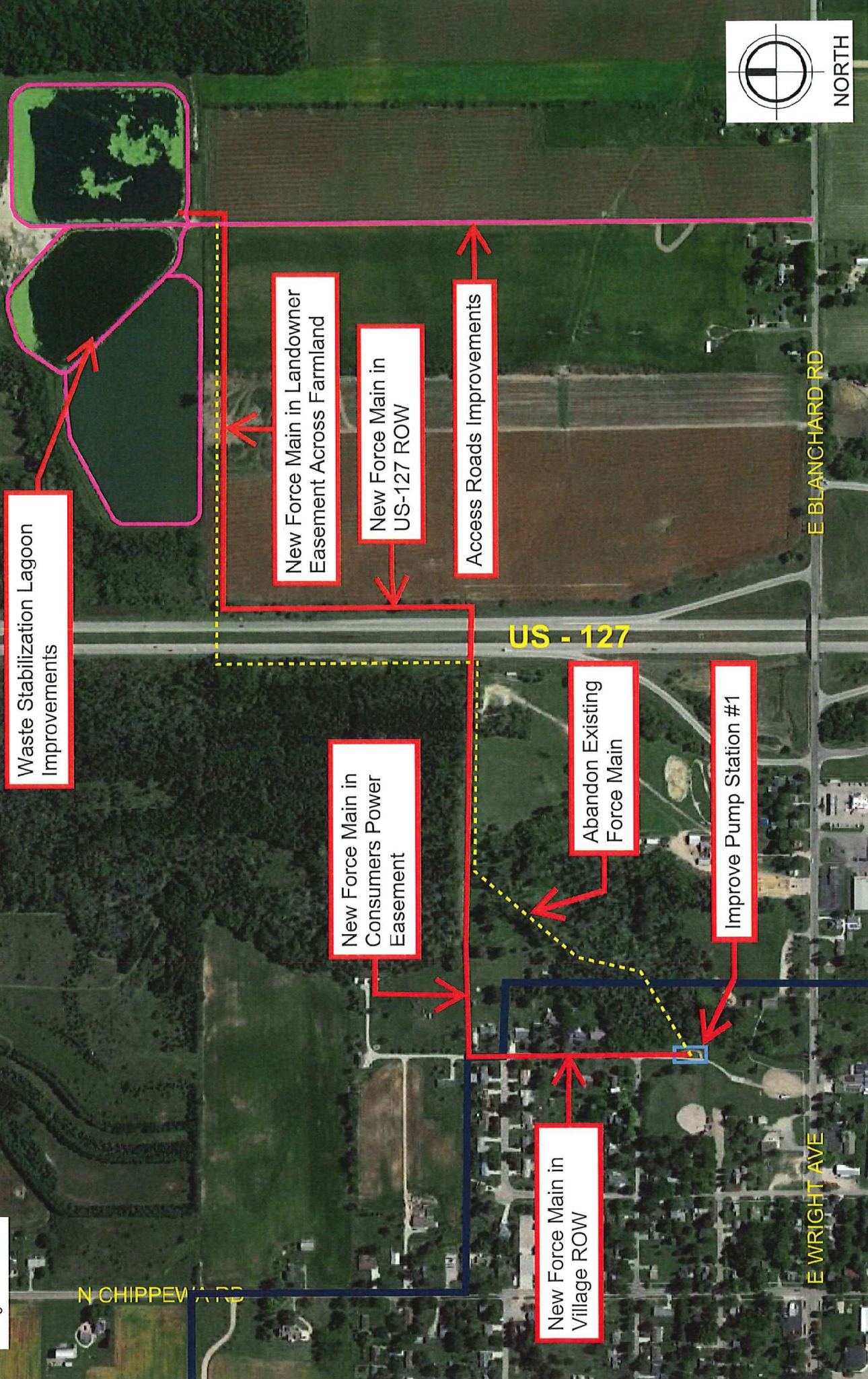


FIGURE 2