Legal Notice

The Village of Versailles is seeking a qualified firm to provide professional consulting services for a preliminary design engineering study for improvements and expansion of the existing **wastewater treatment plant**. The proposed project consists of the preliminary design engineering study of the existing wastewater treatment plant to serve the Village.

The Village of Versailles is accepting Statements of Qualifications from consulting firms to determine their interest and capabilities in performing the prescribed work. The Statement of Qualification shall be a document of no more than ten (10) double sided pages or twenty (20) single sided pages between covers. Any Statement of Qualification with excess pages will not be considered. It is the intention of the Village to review Statements submitted based on established evaluation criteria. Emphasis should be placed upon providing information concerning your level of staff availability, your experience with other projects and your approach to completing the proposed project. The firm must be familiar with the design of wastewater treatment facilities. Firms with experience in rural areas will be given special consideration by the Village.

- A brief discussion of your understanding of the project and a scope of work outlining key issues and your approach to the project.
- A brief discussion of similar projects completed within the last ten (10) years.
- A list of key members of the project team, a brief presentation of their qualifications, related experience and the work tasks for which each of these individuals is responsible.
- The location of the office where the majority of the work will be performed.
- A schedule listing employee-billing rates by classification, overhead multiplier for your firm and expected fixed fee or profit multiplier.
- A list of anticipated sub-consultants to be used and the work they will perform, if any.
- A brief discussion of your firm's experience utilizing the above-mentioned funding sources.
- Public meetings will be required on the project. Describe your experience with public meetings.

All Statement of Qualification requirements must be met or be capable of being met by the responding firm or the submittal will be disqualified as being non-responsive. Statements of qualifications will be accepted until February 14, 2025, at 4:00 pm local time at the Village of Versailles, 177 North Center Street, Versailles, OH at which time the evaluation process will begin. Please submit Statement of Qualification by **U.S. mail** or **hand delivery only**.

Copies of the scope of project may be obtained by visiting the Village of Versailles website at www.versaillesoh.com, or request via email to kylefrancis@versaillesoh.com. Questions or requests for additional information may be submitted in writing to Village Administrator Kyle Francis via email at kylefrancis@versaillesoh.com.

The Village of Versailles administration reserves the right to accept or reject any or all submissions of Statements of Qualifications

Kyle R. Francis

Village Administrator - Village of Versailles, Ohio

The Village of Versailles owns and operates a wastewater treatment facility located at 300 Grand Avenue on the western edge of town. The Village's first wastewater treatment plant was constructed on this site in 1939. Since that time, the plant has been modified and expanded, as recently as 2010, to meet new regulatory initiatives and to provide for local growth. The facility currently serves a population of approximately 2,700 residents, local commercial establishments and several industries.

The wastewater treatment facility joins a separate sanitary system, comprised of a network of approximately 12 miles of gravity sewers ranging in size from 8-inch through 15-inch diameter. The Village also maintains five lift stations scattered throughout the Village that collect and deliver the wastewater to local trunk sewers.

A single 15-inch diameter trunk sewer that is aligned along Grand Avenue, flowing westward, carries all wastewater by gravity to the Main Pump Station. The Main Pump Station transports the wastewater to the treatment plant where it is properly reclaimed, meeting stringent environmental requirements, before being discharged to Swamp Creek.

The treatment plant is currently designed to treat an average daily flow of 750,000 gallons per day. This design flow rate will enable the Village to sustain growth and development for the next 20 years.

Wastewater treatment is accomplished in distinct stages beginning with fine screening to remove materials like wood, paper, plastics, metals and rock fragments which are not amenable to treatment. These materials are removed and land-filled. The screened wastewater next flows by gravity to an aerated tank, referred to as an *"oxidation ditch"* where biological treatment is accomplished. This process is effective in removing organic, nitrogen and phosphorus containing wastes using microscopic bacteria. Following biological treatment, the wastewater flows into large circular tanks, called *"clarifiers"* where quiescent conditions exist to allow the solid materials present in the wastewater to settle to the bottom, leaving a very clear liquid. This clear liquid, also referred to as *"clarified effluent"* is then routed to an open channel where it is disinfected with ultraviolet light to kill harmful bacteria prior to being released to Swamp Creek.

As shown below the clarified plant effluent is very clean and resembles tap water.

Visual comparison of treated and untreated wastewater

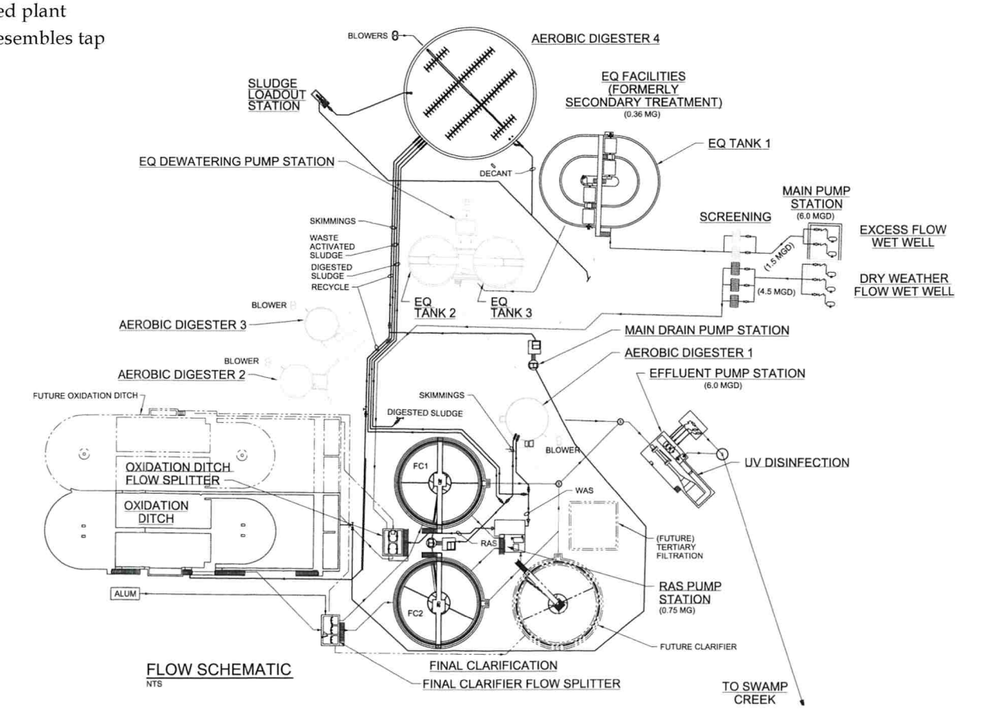
The solids that are captured during the treatment process are pumped to a large tank, called a "digester" where the solids undergo additional aeration to stabilize the solids before they are land-applied on local agricultural fields and re-used as a soil amendment.

The total cost of the project is $8,800,000. Funding for the project is being provided by a $4,473,000 American Recovery and Reinvestment Act stimulus grant, a $1,000,000 zero percent interest loan through the Ohio Public Works Commission, and the balance of $3,327,00 with a 1% interest loan through the Ohio Water Pollution Control Loan Fund.

The Village is proud of its investment in reliable wastewater collection and treatment services for its citizens and the role it plays as an environmental steward in the protection of local water resources within the Stillwater River Basin.


Oxidation Ditch


Final Clarifer



Design Data

DESIGN FLOWS

Design Average	0.75 mgd
Minimum Day	0.18 mgd
Peak Day	3.40 mgd
Peak Hour	6.00 mgd

DESIGN LOADS

CBOD5	224 mg/L (1,400 lb/day)
TSS	200 mg/L (1,250 lb/day)
TKN	30 mg/L (190 lb/day)
TP	8 mg/L (50 lb/day)

NPDES PERMIT LIMITS

$CBOD_5$	
7-day Avg	19 mg/L
30-day Avg	12 mg/L
TSS	
7-day Avg	21 mg/L
30-day Avg	14 mg/L
NH4-N (SUMMER)	
7-day Avg	1.6 mg/L
30-day Avg	1.1 mg/L
NH4-N (WINTER)	
7-day Avg	6.4 mg/L
30-day Avg	4.2 mg/L
TOTAL PHOSPHORUS	
7-day Avg	1.5 mg/L
30-day Avg	1.0 mg/L

INFLUENT PUMPING

DRY FLOW WET WELL	
Type	Submersible
Quantity	3 Pumps
Drive	Variable Frequency
Motor	460 Volts/3 Phase/40 HP
Capacity	
Each	1,575 gpm each
Total (Firm)	3,150 gpm (4.5 mgd)
EXCESS FLOW WET WELL	
Type	Submersible
Drive	Variable Frequency
Motor	460 Volts/3 Phase/15 HP
Capacity	
Each	1,050 gpm each
Total (Firm)	1,050 gpm (1.5 mgd)

INFLUENT SCREENS

Type	Static Fine Screens
Quanity	5 Screens
Capacity	3 @ 1.5 mgd
	2 @ 0.75 mgd
Screen Field	3 @ 1.5 millimeter
	2 @ 0.5 millimeter

EQUALIZATION FACILITIES

Total Volume	0.36 MG
EQ Dewatering Pumps	
Capacity	243 gpm each
Drive	Constant Speed
Motor	240 Volts/3 Ph/60 Hz/5 HP

SECONDARY TREATMENT

Type	Oxidation Ditch
Quantity	1 unit
Volume	
Anaerobic Zones	47,000 gal
Anoxic Zone	105,000 gal
Aerobic Zone	507,000 gal
Total Volume	659,000 gal
Detention Time	20.8 hrs @ Design Average
Design MLSS	4000 mg/L
Aerators	Surface Type
Quantity	2
Drive	Variable Frequency
Motor	460 Volts/3 Phase/40 HP
Anaerobic Mixers	
Quantity	2
Drive	Constant Speed
Motor	460 Volts/ 3 Ph/60 Hz//2.3 HP
Anoxic Mixers	
Quantity	1
Drive	Constant Speed
Motor	460 Volts/ 3 Ph/60 Hz//3.8 HP

CHEMICAL (ALUM) FEED

Dosage	3.6 gal/lb TP @ 48% Alum
Feed Rate	180 gal/day @ Design Avg

FINAL CLARIFICATION

Type	Circular
Quantity	2
Diameter	55 ft
SWD	15 ft
Weir Length	162 ft
Weir Loading	13,889 gpd/ft @ Peak Hour
Hydraulic Capacity	2.376 mgd each @ 1,000 gpd/sf
Solids Loading Capacity	29.1 lb/day/sf @ Peak Day
Collector Drive	Constant Speed
Motor	460 Volts/ 3 Ph/60 Hz/0.75 HP

RETURN SLUDGE PUMPING

Type	Submersible
Quantity	2 Pumps
Capacity	520 gpm each
Drive	Constant Speed
Motor	460 Volts/ 3 Ph/60 Hz/15 HP

SKIMMINGS PUMPING

Type	Submersible
Quantity	2
Capacity	300 gpm each
Drive	Constant Speed
Motor	460 Volts/ 3 Ph/60 Hz/7.5 HP

ULTRAVIOLET DISINFECTION

Type	Open Channel
Capacity	6.0 mgd
Design UVT	55%
Channels	1
UV Modules	8
Lamps	Low Pressure Mercury
Lamp Units	64 lamps
Electrical Load	16 KW (maximum)
Disinfection Limits (geometric mean)	
30 Day	1000 F. Coli/100 mL
7 Day	2000 F. Coli/100 mL

EFFLUENT PUMPING

Type	Submersible
Quantity	3 Pumps
Capacity	
Each	3.0 mgd
Total (Firm)	6.0 mgd
Drive	Constant Speed
Motor	460 Volts/ 3 Ph/60 Hz/40 HP

SOLIDS PRODUCTION

Excess Activated	
Design Average	1500 lb/day
Peak Month	2000 lb/day

AEROBIC DIGESTION

Type	Circular, In-Ground
Quantity	4 Tanks
Digester	**1**
Diameter	26 ft
SWD	12.9 ft
Volume	59,050 gal
Blower	Positive Displacement
Capacity	220 cfm @ 7.5 psig
Drive	Constant Speed
Motor	15 HP
Digester	**2**
Diameter	19 ft
SWD	22 ft
Volume	48,400 gal
Blower	Positive Displacement
Capacity	220 cfm @ 7.5 psig
Drive	Constant Speed
Motor	15 HP
Digester	**3**
Diameter	20 ft
SWD	21 ft
Volume	51,700 gal
Blower	Positive Displacement
Capacity	220 cfm @ 7.5 psig
Drive	Constant Speed
Motor	15 HP
Digester	**4**
Diameter	80 ft
SWD	17 ft
Volume	640,000 gal
Blowers	Positive Displacement
Capacity	3 @ 1,300 cfm @ 8 psig
Drive	Variable Frequency
Motor	100 HP
Total Volume	799,150 gal

SLUDGE LOADOUT PUMPING

Type	Submersible
Quantity	1 Pump
Capacity	450 gpm
Drive	Constant Speed
Motor	460 Volts/3Ph/60 Hz/15 HP

MAIN DRAIN PUMPING

Type	Submersible
Quantity	2 pumps
Capacity	500 gpd each
Drive	Constant Speed
Motor	460 Volts/3Ph/60 Hz/7.5 HP