

PROJECT SCOPE OF WORK

PROJECT TITLE:	Electrical Configurations - Ellicottville Sewer Treatment Facility
LOCATION:	6124 Rt 219 South - Ellicottville, NY 14731
EVL ENG POC:	Niles C. Pierson, PE - Town and Village Engineer - 716-699-9005

Location: Ellicottville Sewer Treatment Plant - 6124 Rt 219 S, Ellicottville, NY 14731

I. Existing Utilities: The Contractor shall field verify the location and availability of existing utilities.

II. Site Investigation: Investigate the site to ascertain the general and local conditions that can affect the work or its cost. **A site visit is scheduled for Thursday, January 3rd at 0800. Contact ELLICOTTVILLE ENGINEERING POC above to arrange site access.**

III. Continuity of Facilities Operation: Schedule work to minimize interference with normal operations.

IV. Notification of Start and Completion of Work: The Contractor shall notify the Ellicottville Engineering Department **(3) days** prior to start of work.

V. Recycling and Disposal of Refuse: Refuse, excess or waste materials resulting from construction operations shall become the property of the Contractor and shall be recycled and/or disposed of as specified in the Scope of Work. All disposals shall be done in accordance with federal, state, and local laws and regulations.

VI. Safety: During the execution of this contract, the Contractor shall conform to the rules and regulations as set forth by OSHA Safety and Health Standards, 29 CFR Part 1926 - Safety and Health Regulations for Construction.

VII. Contractor Identification: Contractor and subcontractor personnel shall, at all times, wear company identification.

VIII. Permits, Licenses, and Insurance: The Contractor shall obtain all appointments, licenses, permits, and insurance required for performance of work and for complying with all applicable Federal, State, and local laws and regulations. Evidence of such permits and licenses shall be provided to the Town and Village Engineer upon request.

VIII: SCOPE OF WORK:

Relevant Codes and Standards:

NFPA 70; National Electrical Code
ANSI/UL Standards for Molded Case Circuit Breakers
ANSI/UL Standards for Safety Switches
ANSI/UL Standard for Rigid PVC Conduit & Galvanized Rigid Conduit
IBC; International Building Code

The Ellicottville Engineering Department is planning on installing (4) sludge activating mechanical aerators in Lagoon #1 and Lagoon #2 at the Ellicottville Sewer Plant in the summer of 2019. Prior to the mechanical aerator installation, (4) electrical services need to be installed and run out to the proposed mechanical aerator locations in addition to the installation (4) manufacturer supplied motor control boxes that will be used to control the aerators once installed. This scope of work pertains to the **installation of the electrical services and the installation of the manufacturer supplied motor control boxes only. The following scope of work will be required:**

1). Install (4), new, 15A 3 phase molded case circuit breakers in the existing main switchboard within the Sewer Treatment Plant garage. The new circuit breakers shall match the construction characteristics of the existing circuit breakers within the switchboard. The existing switchboard has the following characteristics and is shown in Enclosure #1:

- Square D Type 2 QED Switchboard
- 3 Phase, 4 wire, 800 A, 480/277Y configuration

Each circuit breaker shall control one of the motor control boxes to be installed adjacent to the two lagoons.

2). Run (4) branch circuits from the main switchboard out to the proposed motor control box locations shown in Enclosure #1.

- The circuit conductors shall be type THHN/THWN copper conductors sized in accordance with NEC standards and the attached manufacturer specification in Enclosure #2.

- The conduit shall be schedule 40 PVC below ground and galvanized rigid metallic conduit above ground and shall be sized in accordance with NEC standards.

3). Install the (4) manufacturer supplied motor control boxes on Unistrut stanchions anchored in concrete footings.

- Install one NEMA 4X, non-fusible, single-throw disconnect switch prior to the motor control box connection for each of the (4) proposed circuits.

4). Re-grade, seed, and backfill the site to its original condition following construction.

A pre-bid site visit is scheduled for Thursday, January 3rd at 0800 EST at the Sewer Treatment Facility

BIDS ARE DUE BY Friday, January 11th at 4PM EST emailed to:
Niles.C.Pierson@evlengineering.com

- The contract completion date is 01MARCH2019
- Failure to make the completion deadline will result in a 1% penalty of the contract bid per day
- Prevailing Wages apply to this Scope of Work

The following statement must be subscribed by the bidder and affirmed by such bidder as true, under the penalties of perjury.

Pursuant to Section 103-d of the General Municipal Law.

NON-COLLUSIVE BIDDING CERTIFICATION

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid, each party thereto certifies as to its own organization, under penalty of perjury, that to the best of knowledge and belief:

The prices in this bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor;

Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any competitor, and

No attempt has been made or will be made by the bidder to induce any other person, partnership, or corporation to submit or not to submit a bid for the purpose of restricting competition.

(For use of individual bidder)

IN WITNESS WHEREOF, I, _____, doing business under the style and name of _____ at _____ have hereunto subscribed my name under the penalties of perjury at _____ on this _____ day of _____, 20_____.

d/b/a _____

(For use of partnership bidder)

IN WITNESS WHEREOF, this non-collusive bidding certification has been subscribed, under the penalties of perjury, at _____ on this _____ day of _____, 20_____, by _____, one of the partners or co-partners of the partnership composed of _____ and _____ doing business under the style, partnership, and firm name of _____ at _____.

Partnership Name

By _____

Co-Partner

(For use of corporate bidder)

RESOLVED, that _____ (name of corporation) be authorized to sign and submit the bid or proposal of this corporation for the following project and to include in such bid or proposal the certificate as to non-collusion required by Section 103-d of the General Municipal Law as the act and deed of such corporation, and for any inaccuracies or misstatements in such certificate, this corporate bidder shall be liable, under the penalties of perjury.

The foregoing is a true and correct copy of the Resolution adopted by Corporation at a meeting of its board of directors held on the _____ day of _____, 20_____.

Dated at _____ on this _____ day of _____, 20_____.

(SEAL OF THE CORPORATION)

•

Secretary

•

Name of Bidder

By _____

•

“Iran Divestment Act of 2012”

“Iranian Energy Sector Divestment”

Pursuant to State Finance Law '165-a, the Commissioner of General Services is required to develop a list of persons it determines engage in investment activities in Iran, which is defined as provision of goods, services or credit of \$20,000,000 or more, relating to the energy sector.

General Municipal Law '103-g(4) states as follows:

Every bid or proposal hereafter made to a political subdivision of the state or any public department, agency or official thereof where competitive bidding is required by statute, rule, regulation or local law, for work or service performed or to be performed or goods sold or to be sold, shall contain the following statement subscribed by the bidder and affirmed by such bidder as true under penalties of perjury.

The below signed bidder affirms the following as true under penalties of perjury:

- a. “By submission of this bid, the bidder identified herein and each person signing on behalf of the bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and behalf that this bidder is not on the list created pursuant to paragraph (b) of subdivision 3 of Section 165-a of the state finance law.”

Corporate or Company Name

By:

Signature

Title

Sworn to before me this

_____ day of _____, 20 _____

Notary Public

Bid Summary

NOTE: BIDS shall include applicable permits, and all other applicable taxes and fees, and certificate of insurance.

Respectfully submitted:

Name of the Contractor	Street Address
Signature	City, State, and Zip
Title	Date
License number (if applicable)	

SEAL - (if BID is by a Corporation)

Total Bid Cost: _____
(Written)

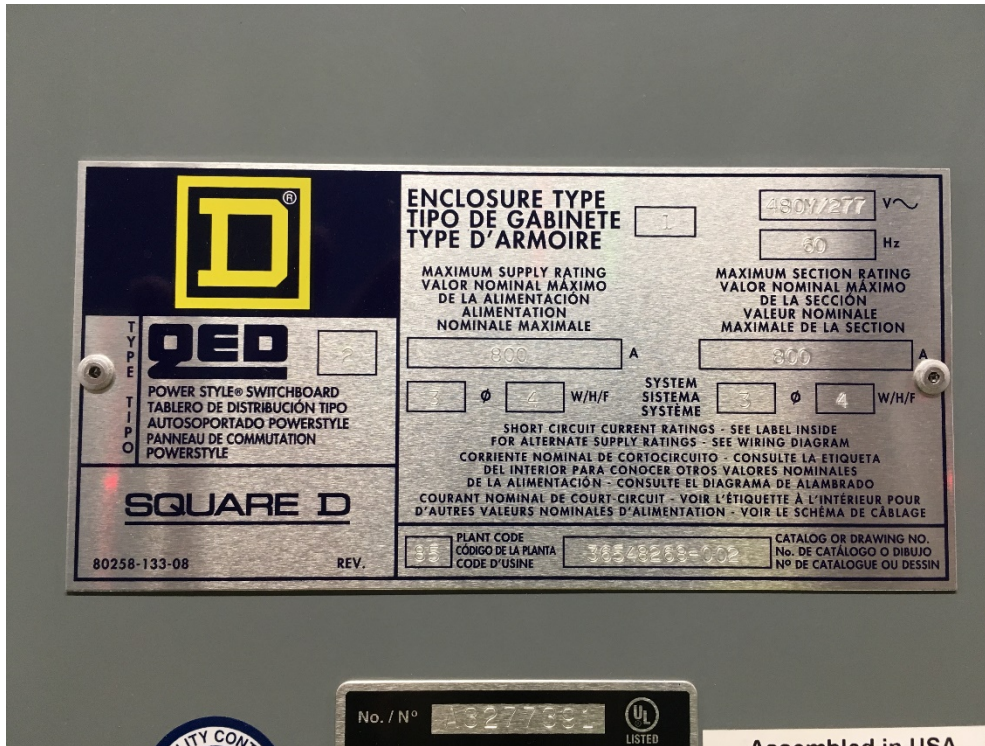
Total Bid Cost: \$ _____
(Numbers)



Sewer Treatment Plant Garage



Existing Switchboard



Data Plate on Main Switchboard

Lagoon Master, with de-ice option w/o heat trace, (2) 2hp blowers & (1) 1.5hp blower.

The de-icing option adds a third blower to the aerator. This blower is 1.5hp and will only be operated in the colder months when ice formation is possible. Since it is only operated some of the time, it must be controlled separately with its own contactor/control circuit and cable running between the motor control box and the aerator. The customer still has the option to control the (2) main blowers individually or as a pair.

For individual control of the main blowers see Dwg. #300R1002. Each aerator will require (2) contactor/control circuits for 2hp blowers, (1) contactor/control circuit for 1.5hp blower, and (2) 2hp cables and (1) 1.5hp cable running between the motor control box and the aerator. Size the contactors, overloads, and cables per Table 3

Table 3

Voltage/Phase/Hz	Blower FLA Main Blower FLA (Size contactors, overloads, & cables to this value for each of the main blowers)	De-icing Blower FLA (Size contactors, overloads, & cables to this value for the de-icing blower)
230V 1 Phase 60Hz	12.0A (Dwg# 300C1001)	7.3A (Dwg# 300C1001)
230V 3 Phase 60Hz	6.3A (Dwg# 300C1002)	5.0A (Dwg# 300C1002)
460V 3 Phase 60Hz	2.9A (Dwg# 300C1002)	2.3A (Dwg# 300C1002)
575V 3 Phase 60Hz	2.4A (Dwg# 300C1008)	1.8A (Dwg# 300C1008)
230V 3 Phase 50Hz	6.1A (Dwg# 300C1002)	4.5A (Dwg# 300C1002)
400V 3 Phase 50Hz	3.5A (Dwg# 300C1002)	2.6A (Dwg# 300C1002)

For simultaneous control of the main blowers see Dwg. #300R1005. Each aerator will require (1) contactor/control circuit for the main blowers, (1) contactor/control circuit for 1.5hp blower, and (1) cable for the main blowers and (1) 1.5hp cable running between the motor control box and the aerator. Size the contactors, overloads, and cables per Table 4.

Table 4

Voltage/Phase/Hz	Main Blower Combined FLA (Size contactors, overloads, & cables to this value for each of the main blowers)	De-icing Blower FLA (Size contactors, overloads, & cables to this value for the de-icing blower)
230V 1 Phase 60Hz	24.0A (Dwg# 300C1001)	7.3A (Dwg# 300C1001)
230V 3 Phase 60Hz	12.6A (Dwg# 300C1002)	5.0A (Dwg# 300C1002)
460V 3 Phase 60Hz	5.8A (Dwg# 300C1002)	2.3A (Dwg# 300C1002)
575V 3 Phase 60Hz	4.8A (Dwg# 300C1008)	1.8A (Dwg# 300C1008)
230V 3 Phase 50Hz	12.2A (Dwg# 300C1002)	4.5A (Dwg# 300C1002)
400V 3 Phase 50Hz	7.0A (Dwg# 300C1002)	2.6A (Dwg# 300C1002)

