

HENDERSON WATER UTILITY

**INVITATION FOR BIDS
and TECHNICAL SPECIFICATIONS**

***Fair Street Water Booster Station
Electrical Upgrades***

HENDERSON, KENTUCKY

April 2019



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Note: Items shown with **Bold Underline** in this Table of Contents must be completed in their entirety in the bid submittal.

INVITATION FOR BID

The Henderson Water and Sewer Commission of the City of Henderson, Kentucky will receive sealed competitive bids at its office at 111 Fifth Street, Henderson, Kentucky 42420, until 1:30 p.m. (CDT), on the 24th day of April 2019, at which time the bids will be opened and considered for the purchase of the following:

FAIR STREET WATER BOOSTER STATION – ELECTRICAL UPGRADES FOR THE HENDERSON WATER UTILITY

REF# 201905 Fair Street Water Booster Station – Electrical Upgrades

Specifications and Instructions to Bidders, and copies of plan sheets for this project may be obtained from:

HWU website: <http://tinyurl.com/hwu-bids>

HWU Bobby Gish Administration Building: 111 Fifth Street, Henderson, KY 42420

The Water and Sewer Commission reserves the right to accept or reject any or all bids in whole or in part and to waive informalities and/or technicalities in the bids. Conflicts of interest, gratuities and kickbacks as defined and provided for in K.R.S. 45A.455 are absolutely prohibited.

Clarifications and Addenda will be posted on the HWU procurement web site as listed above.

SOLICITATION INSTRUCTIONS AND CONDITIONS

1. DEFINITIONS:

As used herein:

- a. The term "solicitation" includes the Invitation for Bid, Solicitation Instructions and Conditions, Bid Form and Technical Specifications, and any Clarifications or Addenda issued by the Owner.
- b. The term "offer" means "bid" or "proposal".
- c. The term "Vendor" shall mean the party responsible for furnishing submittals, equipment, accessories, controls, operation and maintenance manuals and training, startup services and warranting the equipment as required in this Request for Proposals. Prior to award of contract, a potential Vendor may be referred to by the terms "Bidder" or "Offeror".
- d. The term "Owner" shall mean the Henderson Water Utility (HWU), 111 Fifth Street, Henderson, Kentucky, 42420.
- e. The term "Engineer" refers to an individual employee of the Owner, acting as design engineer or inspector for this project or procurement.
- f. The term "Purchase Order" shall mean the document executed by the Vendor and the Owner of which each of the following form a part: the Invitation for Bids; the Vendor's Proposal; and the attached technical specifications for Fair Street Water Booster Station Electrical Upgrades Project, prepared by Henderson Water Utility.
- g. The term "Nonresident bidder" is defined by KRS 45A.494(3).
- h. The term "Resident bidder" is defined by KRS 45A.494(2).
- i. The term "Qualified bidder" means Kentucky Industries for the Blind, Incorporated; any nonprofit corporation that furthers the purposes of KRS Chapter 163; or a qualified nonprofit agency for individuals with severe disabilities as described in KRS 45A.465(3).

2. PREPARATION OF OFFERS

- a. Offerors shall examine the drawings, specifications, schedule, and all instructions. Failure to do so shall be at the offeror's risk.
- b. Offers shall set forth full, accurate, and complete information as required by the solicitation. Offers that contain an offeror's own special terms and conditions in conflict with the terms of the solicitation or state statutes and regulations may be rejected.
- c. Each offeror shall furnish the information required by the solicitation on the bid forms included herein. The offeror shall sign the solicitation in ink and type or print in ink his name, firm, address, telephone number, and date. Erasures or other changes shall be initialed in ink by the person signing the offer. Approved electronic format may also be accepted.
- d. Any explanation or statement which the offeror wishes to make concerning the bid shall be written separately and independently of the proposal or bid, attached to the bid form, and placed in the envelope with the bid. Any such statement or explanation must refer to the bid submitted and shall also be signed by the offeror.
- e. Unit price for each unit offered shall be shown and such price shall include packing and delivery to HWU unless otherwise specified within the Bid Form, and shall include startup and training services where specified in the Technical Specifications. Fuel Surcharges and any other miscellaneous charges should be included in the unit price. A total shall be entered in

the amount column of the schedule for each item offered. In case of discrepancy between a unit price and extended price, the unit price shall govern.

- f. Cash discounts shall not be considered in making the award of the contract.
- g. Trade discounts shall be deducted by the vendor in calculating the unit price quoted, unless otherwise stated.
- h. Offers for supplies or services other than those specified shall not be considered unless authorized by the solicitation.
- i. Proposal shall include guaranteed time schedules for submission of shop drawings after award of the Purchase Order, and for shipment of equipment after receipt of approved shop drawings. The award of the Purchase Order will be based on the quoted price and an acceptable shop drawing and equipment delivery schedule.
- j. Time, if stated as a number of days, shall include Saturdays, Sundays, and Holidays. One day is 24 hours; one week is 7 days; one month is 28 days.

3. OFFEROR CLARIFICATION – REQUEST AND RESPONSE

Any explanation desired by an offeror regarding the meaning or interpretation of the solicitation drawings, specifications, etc., **shall be requested in writing to the HWU Purchasing Manager, not less than five (5) calendar days prior to the bid opening date.** Oral explanations or instructions given before the award of the contract shall not be binding. Any information given to a prospective vendor concerning a solicitation shall be furnished to all prospective vendors as an amendment or clarification of the solicitation, if such information is necessary to vendors in submitting offers on the solicitation, or if the lack of such information would be prejudicial to uninformed vendors.

4. ACKNOWLEDGEMENT OF ADDENDA TO SOLICITATIONS

Receipt of an addendum to a solicitation shall be acknowledged by the offeror. Acknowledgement shall be received prior to the hour and date specified for receipt of offers, or shall be shown in the appropriate place on the Bid Form. Verbal acknowledgement shall not be accepted. Failure to acknowledge addenda may cause the bid to be considered non-responsive.

5. PROTEST PROCEDURES

a. Protests prior to bid opening

Any protests, prior to bid opening must be submitted in writing and received by HWU at least ten (10) calendar days prior to bid opening. This ten (10) calendar day deadline may be waived by the HWU Purchasing Manager for good cause shown. The HWU Purchasing Manager will issue a response to the protest no later than five (5) calendar days after receipt of the protest. The response shall be in writing and set forth the reasons for the response. Upon receipt of a protest, the HWU Purchasing Manager will immediately determine if the bid opening should be postponed. If the bid opening is postponed, HWU will notify all prospective bidders who have been furnished a copy of the specifications that a request for review has been received and that the bid opening is postponed. Upon issuance of its response to the protest, HWU will issue an appropriate addendum rescheduling the bid opening.

b. Protests after bid opening

Protests after bid opening will be considered only as to issues which were not apparent before bid opening. After bid opening no protests of specifications will be considered. Any protest after bid opening, including a protest of contract award, must be submitted in writing and received by HWU within five (5) calendar days of the action being protested. No other form of protest will be considered. After the time for protest of contract award has expired, these protest procedures will be considered to be inapplicable, and any disputes will be resolved by HWU under contract provisions or other remedies, if available.

Protests submitted to HWU shall:

- (a) Include the name and address of the protestor.
- (b) Identify clearly the procurement under which the protest is being submitted.
- (c) Identify the action being protested and provide sufficient detailed documentation to support the protest action.
- (d) Indicate the action, ruling or relief desired from HWU.

The HWU Purchasing Manager will review the protest and render his or her decision in writing within five (5) calendar days of receipt of the protest, setting forth reasons for his or her decision. HWU is responsible, in accordance with good administrative practice and sound business judgment, for the settlement of all contractual and administrative issues arising out of the procurement, including protests, contract defaults, disputes or breaches. The decision of the HWU Purchasing Manager as to protests shall be final and conclusive, unless, within five (5) calendar days of the date a decision was rendered by the HWU Purchasing Manager, a written appeal of the same is submitted by the bidder to the City of Henderson Water and Sewer Commissioners. Any appeal to the Commissioners shall include:

- (a) A statement of the grounds for review and any supporting documentation.
- (b) A copy of the protest filed with HWU and a copy of the HWU Purchasing Manager's decision.

If the appeal is submitted prior to award of a contract, HWU will not award until the matter is resolved. If the contract has been awarded prior to the appeal, the contractor shall proceed diligently with the performance of the contract.

6. SUBMISSION OF OFFERS

- a. Offers and modifications thereof shall be enclosed in sealed envelopes and addressed to the office specified in the solicitation. The offeror shall show the opening hour and date specified in the solicitation, the solicitation number, and the name and address of the offeror on the face of the envelope(s).
- b. Telegraphic or facsimile offers shall not be considered unless authorized by the solicitation; however, offers may be modified by telegraphic or facsimile notice, if such notice is received prior to the hour and date specified for receipt. Telegraphic or facsimile modifications shall not mention unit prices or total price; but shall only refer to percentage change or numerical change (i.e., "*reduce unit price of item 1 by \$1.00*").
- c. Samples of items, if required, shall be submitted within the time specified, and not unless otherwise specified, at no expense to HWU. If not destroyed by testing, samples shall be

returned at the offeror's request and expense, unless otherwise specified by the solicitation. Unless a request for their return is made within thirty (30) days of award of contract, all samples shall become property of HWU.

7. MODIFICATION OR WITHDRAWAL OF OFFERS

Offers may be modified or withdrawn by written notice received prior to the exact hour and date specified for receipt of offers. An offer may also be withdrawn in person by an offeror or his authorized representative, if his identity is made known and he signs a receipt for the offer, but only if the withdrawal is made prior to the exact hour and date set for receipt of offers.

8. LATE OFFERS AND MODIFICATIONS

Offers and modifications of offers received at the office designated in the solicitation after the exact hour and date specified for receipt shall not be considered for an award of contract, UNLESS:

- a. No bids are received other than the late bid; and
- b. The needs of HWU are determined to preclude the re-solicitation of bids.

9. MULTIPLE AND ALTERNATE BIDS

Bidders shall submit one response only to the solicitation and shall not propose more than one price, model, and brand for each bid item. Multiple or alternate bids offering more than one bid price in total (or by line-item) shall be cause for rejection unless specifically called for in special provisions provided elsewhere in the solicitation.

10. AWARD OF CONTRACT

- a. It is the intent of HWU to award this contract to the vendor or vendors offering the lowest evaluated bid price for products which meet the specifications set forth in this document. Any and all anticipated costs for HWU to implement the project will be taken into consideration.
- b. HWU reserves the right to reject any offers and to waive informalities and minor irregularities in offers received. The award of this contract will be contingent upon funds being appropriated for this purchase.
- c. The bidder, if awarded an order or contract, agrees to protect, defend, and save harmless the Henderson Water and Sewer Commission and the Henderson Water Utility against any demand for the use of any patented materials, process, article, or device, that may enter into the manufacture, construction, or form a part of the work covered by either order or contract and he further agrees to indemnify and save harmless the Henderson Water and Sewer Commission and the Henderson Water Utility from suits or actions of every nature and description brought against it, for on account of any injuries or damages received or sustained by any party or parties, by or form any of the acts of the contractor, his servants, or agents.
- d. The awarded contract shall agree to offer the prices and the terms and conditions offered herein to any municipality, county or state government; public utility; non-profit hospital; educational institute; special governmental agency; and non-profit corporation performing governmental functions in Western Kentucky area who wish to participate in a cooperative purchase program with Henderson Water Utility. Other agencies will be responsible for entering into separate agreements with the Contract and for all payments thereunder.
- e. The bidder agrees to hold the proposed pricing for up to 90 days after bid proposal is opened, or for such time as specified on the Bid Form, if different.

- f. A written award mailed (or otherwise furnished) to the successful offeror within the time for acceptance specified in the offer shall be deemed to result in a contract without further actions by either party.

11. METHOD OF AWARD: BEST VALUE - RANKING APPROACH

The Owner intends to award a Contract to the Contractor whose bid, conforming to the BID FORM, is the most advantageous on the basis of "best value" for all products, services, and requirements contained herein. An evaluation committee or a designated individual will evaluate the information provided by the Contractor in response to the established measurable criteria contained herein.

Measurable Criteria: Price 100 Points
TOTAL POINTS 100 Points

Each Contractor is responsible for submitting all relevant, factual and correct information with their Bid to enable the evaluator(s) to afford each Contractor the maximum score based on the available data submitted by the Contractor. The Contractor shall explicitly adhere to the BID FORM which contains adequate space for the Contractor's pricing.

Bid Price (100 Points)

The bidder with the lowest Bid Price receives the maximum score. The bidder with the next lowest Price receives points by dividing the lowest Price by the next lowest Price and multiplying that percentage by the available points. For Example, 100 points is allocated to the lowest Price criteria for this procurement, Bidder "A" bids \$3.00 as the lowest bidder and receives the maximum 100 points ($\$3.00 / \$3.00 = 1.00 \times 100 = 100$). Assume Bidder "B" is next lowest bidder at \$4.00, then "B" receives 75 points ($\$3.00 / \$4.00 = .75 \times 100 = 75$).

Best Value scoring is subject to Reciprocal preference for Kentucky resident bidders and Preferences for a Qualified Bidder or the Department of Corrections, Division of Prison Industries (KAR 200 5:410).

The Contractor is required to submit a complete copy of the "Required Affidavit for Bidders, Offerors, and Contractors Claiming Resident Bidder Status" attached to the BID FORM.

12. KENTUCKY / INDIANA SALES AND USE TAXES

Sales of tangible personal property or services to HWU are not subject to state sales or use taxes. Henderson Water Utility's Kentucky/Indiana sales tax exemption number will be provided to the successful bidder(s).

13. COMPLIANCE WITH FEDERAL, STATE, AND LOCAL LAWS

Any contracts or orders placed as a result of the offer shall be governed by the laws of the Commonwealth of Kentucky. The rights and obligations of the parties thereto shall be determined in accordance with these laws. Any offer conditioned upon governance by the laws of a state other than Kentucky shall not be considered.

Conflicts of interest, gratuities and kickbacks as defined and provided for in KRS 45A.455 are absolutely prohibited. Bidder acknowledges and certifies by submission of his bid that all the provisions of KRS 45A.455 are complied with fully.

A City of Henderson business license is required for all vendors servicing accounts within the City of Henderson.

A Henderson County business license is required for all vendors servicing accounts at HWU locations outside the City of Henderson but in Henderson County. Information regarding the business license can be obtained by calling the business license office at 270-831-1200. Vendors will be allowed ten (10) days after award of bid to submit a copy of their current business license(s) to the Purchasing Manager.

14. CONFLICTS OF INTEREST – Gratuities and kickbacks – Use of confidential information (KRS 45A.455)

- a. It shall be a breach of ethical standards for any employee with procurement authority to participate directly in any proceeding or application; request for ruling or other determination; claim or controversy; or other particular matter pertaining to any contract, or subcontract, and any solicitation or proposal therefore, in which to his knowledge:
 - i. He, or any member of his immediate family has a financial interest therein; or
 - ii. A business or organization in which he or any member of his immediate family has a financial interest as an officer, director, trustee, partner, or employee, is a party; or
 - iii. Any other person, business, or organization with whom he or any member of his immediate family is negotiating or has an arrangement concerning prospective employment is a party. Direct or indirect participation shall include but not be limited to involvement through decision, approval, disapproval, recommendation, preparation of any part of a purchase request, influencing the content of any specification or purchase standard, rendering of advice, investigation, auditing or in any other advisory capacity.
- b. It shall be a breach of ethical standards for any person to offer, give, or agree to give any employee or former employee, or for any employee or former employee to solicit, demand, accept, or agree to accept from another person, a gratuity or an offer of employment, in connection with any decision, approval, disapproval, recommendation, preparation of any part of a purchase request, influencing the content of any specification or purchase standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling or other determination, claim or controversy, or other particular matter, pertaining to any contract or subcontract and any solicitation or proposal therefore.
- c. It is a breach of ethical standards for any payment, gratuity, or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier subcontractor or any person associated therewith, as an inducement for the award of a subcontract or order.
- d. The prohibition against conflicts of interest and gratuities and kickbacks shall be conspicuously set forth in every local public agency written contract and solicitation therefore.
- e. It shall be a breach of ethical standards for any public employee or former employee knowingly to use confidential information for his actual or anticipated personal gain, or the actual or anticipated personal gain of any other person.

15. CONTRACT MODIFICATIONS

During the period of the contract, no modification shall be permitted in any of its conditions and specifications unless the contractor receives written approval from the Purchasing Manager. If the contractor finds at any time that existing conditions make modification in requirements necessary, he shall promptly report such matter to the Purchasing Manager for consideration and decision. All contract modifications shall be subject to the provisions of 200 KAR 5:311.

16. ADDITIONAL CHARGES/FEEES

The bid price of the product is the complete product price. There will be no fuel surcharges, delivery fees, handling fees, container return fees, or any other fees/charges associated with the purchase, installation or delivery of products.

17. WARRANTY – CORRECTIVE WORK

The Contractor shall guarantee all work performed under this contract for a period of one (1) year after the date of Substantial Completion. This provision covers any work performed by the Contractor that is found to be defective, the repair of any damages to the site and adjacent areas that the contractor used during construction. Where defective work has been corrected or removed and replaced, the correction period with respect to that work will be extended for an additional period of one year after correction has been satisfactorily completed.

18. SELLER'S INVOICES

Invoices shall be prepared and transmitted via fax or USPS to HWU at the provided address. Invoices shall contain, at a minimum, the following information: Purchase Order number, Bill of Lading number, delivery location, and an appropriate weight ticket, where applicable.

HWU is a municipality and invoices are processed for payment not less than once per month. Terms are net 30 after receipt of invoice.

19. PRECEDENCE OF PROVISIONS

In the event of an inconsistency between provisions of the solicitation, the inconsistency shall be resolved by giving precedence in the following order: (a) Addenda, if issued; (b) Solicitation Instructions and Conditions; (c) General Conditions; (d) other provisions of the contract, whether incorporated by reference or otherwise; and, e) the Technical Specifications.

20. NONDISCRIMINATION

Civil Rights Act of 1964: In accordance with the provisions of Title VI of the Civil Rights Act of 1964 and the regulations of the Federal Department of Transportation (49 CFR, part 21) issued pursuant to such Act, all bidders are hereby notified that HWU will affirmatively insure that the contract entered into pursuant to this advertisement will be awarded to the responsible bidder with the lowest evaluated bid without discrimination on the grounds of race, color, national origin, disability, gender, or age.

Americans with Disabilities Act: In accordance with the provisions of The Americans with Disabilities Act of 1990 (ADA) which specifically prohibits discrimination against persons with disabilities, all bidders are hereby notified that the contract entered into pursuant to this advertisement shall include a clause that specifically requires compliance with the ADA and prohibits discrimination against persons with disabilities. The ADA further requires that all new construction, reconstruction, and

alterations to existing pedestrian facilities be constructed in accordance with Federal accessibility standards.

21. INSURANCE

Contractors, including all Subcontractors, furnishing labor, and/or equipment under this requirement shall carry the following insurance in addition to all insurance required by law. Valid certificates of insurance shall be furnished to the Owner prior to the Contractor causing any work to begin.

A. Workman’s Compensation	Statutory
B. Broad Form Comprehensive General Liability including coverage for Bodily Injury, Personal Injury, Products, Completed Operations, and Broad Form Property Damage, (No deductible clauses are acceptable for these coverages), and Independent Contractors (Subcontractors)	Bodily Injury: \$1,000,000 each occurrence \$2,000,000 aggregate Property Damage: \$1,000,000 each occurrence
C. Comprehensive Automobile Liability, including Hired Car and Employer’s Non-Ownership Liability Coverage.	\$1,000,000 Combined Single Limit
D. Endorsement naming as additional insured “The Henderson Water and Sewer Commission, its elected and appointed officials, employees, agents, boards, consultants, assigns, volunteers and successors in interest.”	
E. Endorsement that Contractor’s insurance coverage shall be primary insurance as respects HWU. Any insurance or self-insurance maintained by HWU shall be separate from Contractor’s insurance and shall not contribute with it.	
F. Certificates of insurance, issued by companies authorized to do business in the state of Kentucky, satisfactory in form to the HWU and signed by the Bidder’s insurer shall be supplied by Bidder to HWU evidencing that the above insurance is in force and that not less than thirty (30) calendar days written notice will be given to the HWU prior to any cancellation or restrictive modification of the policies. Bidder shall replace any cancelled policy within the thirty (30) day notice period so that there is no lapse in coverage at any time during the period covered by this contract.	

The insurance shall:

- a) Include the interests of the Owner, Contractor, Subcontractor, Engineer, Engineer’s consultants and any other individuals, and the officers, directors, partners, employees, agents and other consultants and subcontractors of any of them each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured.
- b) Be written on a Builder’s Risk “all-risk” or open peril or special causes of loss policy form that shall at least include insurance for physical loss and damage to the work, temporary buildings, falsework, and materials and equipment in transit and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage, and such other perils or causes of loss.
- c) Remain in effect for the duration of the contract and warranty period.

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BID FORM

PROJECT IDENTIFICATION: Fair Street Water Booster Station – Electrical Upgrades
Henderson Water Utility
Ref# - 2019 - 05

THIS BID SUBMITTED TO: Henderson Water Utility
111 Fifth Street
Henderson, KY 42420

CONTACT INFORMATION: All questions regarding this bid solicitation should be directed to the Purchasing Manager as per item #3 in the Solicitation Instructions and Conditions.

DATE REFERENCES: Last day for bid clarifications: 22 april 2019
Bid Closing: 24 April 2019, 1:30 p.m.
HWU Board Meeting (award): 20 May 2019

1. The undersigned BIDDER proposes and agrees, if this Bid is accepted, to furnish equipment as specified or indicated in the Bid Documents and Technical Specifications for the Bid Price(s) and in accordance with the other terms and conditions of the Bid Documents and Technical Specifications.
2. BIDDER accepts all of the terms and conditions of the Advertisement or Invitation to Bid and the Bid Documents and Specifications. This bid will remain subject to acceptance for ninety days after the day of bid closing.
3. In submitting this Bid, BIDDER represents, as more fully set forth in the Agreement that:
 - a. BIDDER has examined copies of all the Bidding Documents and of the following addenda (receipt of all which is hereby acknowledged):

DATE	NUMBER

- b. BIDDER has familiarized itself with the nature and extent of the Bid Documents and Technical Specifications, and all conditions, laws and regulations that in any manner may affect cost, or furnishing the equipment required.
 - c. This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; BIDDER has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; BIDDER has not solicited or induced any person, firm or corporation to refrain from bidding; and BIDDER has not sought by collusion to obtain for itself any advantage over any other Bidder or over the PURCHASER.

Bidder acknowledges and certifies by submission of his bid that all the provisions and statutes of KRS 45a.465 are complied with fully.

- d. Specify a unit price in figures for each bid item for which a quantity is given and show the products of the respective unit prices and quantities written in figures in the space provided for that purpose. Round the products by dropping all digits past the cent. Write in ink or type all figures. In case of discrepancy between a unit price and extended price, the unit price shall govern.

Bid Form
Electrical Upgrades
Pricing to be held for 60 days after submittal is opened

ITEM No. 1: Electrical Upgrades

Includes full scope of work as described in the Technical Specifications attached, including Mobilization and Demobilization of personnel and subcontractors to site, general conditions, traffic control, Bid Bond, Performance and Payment Bond, etc.; new 200 Amp service, 3-phase meter and riser on existing 35' wood pole; panels and cabinets as specified; conduit and wire; two (2) 240 volt, 3-phase combination disconnect/motor starters; install SCADA panel furnished by HWU; concrete pad and Unistrut for panel mounts; conduit and wire from panels to existing motors in Cantex station; terminate SCADA, power and controls to pump starters; testing and startup; including all other work as specified in the attached Technical Specifications; warranty as specified; complete in place and ready for use.

TOTAL BASE BID PRICE

TOTAL BID PRICE _____

_____ Dollars (\$_____).
(Use words) (figures)

Bidders – please attach a “post-it” note or other tag to this page, in your completed bid.

Shop Drawing / Equipment Delivery Schedule:

Number of days from Award of Purchase Order to shop drawings: _____ days

Number of days from shop drawing approval to substantial completion: _____ days

Exceptions Taken to this Proposal: List any and all exceptions. (If none, check here).

SIGNATURE PAGE

Non-Collusive Bid Statement: The undersigned bidder, having fully informed himself regarding the accuracy of the statements made herein, certifies that: (1) The bid has been arrived at by the bidder independently and has been submitted without collusion with and without any agreement, understanding, or planned common course of action with any other vendor of materials, supplies, equipment, or services described in the bid, designed to limit independent bidding or competition, and (2) The contents of the bid have not been communicated by the bidder or its employees or agents to any person not any employee or agent of the bidder or its surety on any bond furnished with the bid, and will not be communicate by any such person prior to the official opening of the bid.

Signature of Authorized Official

Name and Title (printed)

Legal Name of Business

Address

Address

Telephone Number

Date

Affix seal below if bid is by corporation.

This seal was herewith affixed in the presence of:

Signature _____ Title _____

**REQUIRED AFFIDAVIT FOR BIDDERS, OFFERORS AND CONTRACTORS
CLAIMING QUALIFIED BIDDER STATUS**

FOR BIDS AND CONTRACTS IN GENERAL:

I. The bidder or offeror swears and affirms under penalty of perjury that the entity bidding, and all subcontractors therein, meets the requirements to be considered a “qualified bidder” in accordance with 200 KAR 5:410(3); and will continue to comply with such requirements for the duration of any contract awarded. Please identify below the particular “qualified bidder” status claimed by the bidding entity.

_____ A nonprofit corporation that furthers the purposes of KRS Chapter 163

_____ Per KRS 45A.465 (3), a “Qualified nonprofit agency for individuals with severe disabilities” means an organization that:

- (a) Is organized and operated in the interest of individuals with severe disabilities; and
- (b) Complies with any applicable occupational health and safety law of the United States and the Commonwealth; and
- (c) In the manufacture or provision of products or services listed or purchased under KRS 45A.470, during the fiscal year employs individuals with severe disabilities for not less than seventy-five percent (75%) of the man hours of direct labor required for the manufacture or provision of the products or services; and
- (d) Is registered and in good standing as a nonprofit organization with the Secretary of State.

The BIDDING AGENCY reserves the right to request documentation supporting a bidder’s claim of qualified bidder status. Failure to provide such documentation upon request may result in disqualification of the bidder or contract termination.

Signature

Printed Name

Title

Date

Company Name

Address

Subscribed and sworn to before me by _____ this ____ day of _____, 2019.

Notary Public

My Commission Expires

[Seal of Notary}

Check this box if **not** claiming Qualified Bidder Status

**REQUIRED AFFIDAVIT FOR BIDDERS, OFFERORS AND CONTRACTORS
CLAIMING RESIDENT BIDDER STATUS**

FOR BIDS AND CONTRACTS IN GENERAL:

The bidder or offeror hereby swears and affirms under penalty of perjury that, in accordance with KRS 45A.494(2), the entity bidding is an individual, partnership, association, corporation, or other business entity that, on the date the contract is first advertised or announced as available for bidding:

1. Is authorized to transact business in the Commonwealth;
2. Has for one year prior to and through the date of advertisement
 - a. Filed Kentucky corporate income taxes;
 - b. Made payments to the Kentucky unemployment insurance fund established in KRS 341.49; and
 - c. Maintained a Kentucky workers' compensation policy in effect.

The BIDDING AGENCY reserves the right to request documentation supporting a bidder's claim of resident bidder status. Failure to provide such documentation upon request shall result in disqualification of the bidder or contract termination.

Signature

Printed Name

Title

Date

Company Name

Address

Subscribed and sworn to before me by _____ this ____ day of _____, 2019.

Notary Public

My Commission Expires

[Seal of Notary}

Check this box if **not** claiming Resident Bidder Status

**Statement Required Pursuant to KRS 45A.395
NON-COLLUSIVE AFFIDAVIT OF PRIME BIDDER**

State of _____)

County of _____)

_____, being first duly sworn, deposes and says that:

1. He or she is the owner, partner, officer, representative, or agent of _____, the Bidder that he or she has submitted the attached bid;
2. He or she is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;
3. Such Bid is genuine and is not a collusive or sham Bid;
4. Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly, with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached bid has been submitted or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm or person to fix the price or prices in the attached bid or of any other bidder, or to fix any overhead, profit or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the Henderson Water Utility, the City of Henderson or any person interested in the proposed Contract: and
5. The price or prices quoted in the attached bid are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

Signed

Title

Subscribed and sworn to before me this _____ day of _____, 2019.

_____ My commission expires _____
Title

**TECHNICAL SPECIFICATIONS
FOR THE FAIR STREET BOOSTER STATION
ELECTRICAL UPGRADES PROJECT**

A. GENERAL

1. SCOPE OF WORK

These general specifications shall govern the installation of a new electrical service and controls for Fair Street Booster Station. The construction methods employed shall be in accordance with current codes, practices and specifications of the Owner.

The Owner will procure and install a new, concrete cover manhole for the existing Fair Street Booster Station, which will be in the middle of a proposed street. The cover will include traffic-rated aluminum hatch covers. The Owner will demolish the existing control building and install the new concrete manhole and covers, prior to the connection of electrical panels to the existing station, under this contract. The Contractor shall coordinate his work with that of the Owner to minimize the down-time of the Booster Station, i.e., the service, panels, etc., should be in place prior to the time the Owner begins to demolish the existing building. As demolition proceeds, the Owner and Contractor will coordinate the work to install conduit from the panels into the station.

Each bid item should include any delivery fees, handling fees, fuel surcharges, or any other fees/charges associated with the purchase, delivery and installation of the product.

If the total construction contract amount (bid) awarded is an amount more than twenty-five thousand dollars (\$ 25,000), a Performance bond and a Payment bond shall be furnished. Performance and Payment bonds shall be in an amount equal to one hundred percent (100%) of the contract price.

Bid security (bid bond) in an amount equal to five percent (5%) of the amount of the bid shall be furnished for all bids. If the successful low bidder fails or refuses to execute the contract and bonds required within ten (10) days after notice of acceptance of his bid, he shall forfeit to the Owner as liquidated damages the bid security submitted with his bid.

If the work is not completed within the time specified by the Contractor, liquidated damages in the amount of \$ 1,000 per week shall be deducted from the compensation due the contractor.

The Contractor is responsible for obtaining local and state permits for electrical work, if required.

2. SUBMITTALS (Shop Drawings)

The Vendor shall submit to the Engineer a minimum of three copies of information describing and depicting the details of the equipment, controls, materials and/or services to be provided, hereinafter referred to as "shop drawings." After approval, the Engineer will distribute the shop drawings as follows: two sets to Owner's central files, and one set to the Vendor. If the Vendor requires more copies, specify that at the time of submittal; the Engineer will review up to five sets of each shop drawing submittal.

Shop drawings shall be submitted no later than 30 days after the purchase order date.

Rejection of the same shop drawings on three separate occasions shall constitute grounds for total rejection of the proposed vendor as being unable or unwilling to meet the requirements of this request for proposals.

Shop drawings for the equipment and materials described in this Request for Proposals must show, as a minimum, the following information:

- a. Manufacturer's cut sheets or other detailed product information.
- b. Detailed dimensional drawings of each valve and fitting.
- c. Detailed description of materials of construction and applicable standards.

3. MATERIAL TO BE OBTAINED FROM THE CONTRACTOR

The Bidder shall provide all items named in this Request for Proposals or so noted on the Purchase Order and such incidental items as may be required for the safe and proper installation and operation of the materials and equipment furnished for the purpose(s) intended.

Unless otherwise specified, all materials shall be the best of their respective kinds and shall be in all cases fully equal to approved samples. The Engineer shall have the right to require the use of such specifically designated material, article, or process. The Engineer, where practical, may require submission of actual samples of materials or products.

The Vendor shall provide all gaskets, bolts, and other miscellaneous items required to install the material described in this Request for Proposals.

Equipment or materials offered contrary to the provisions of this Paragraph will be subject to rejection.

4. TRANSPORT AND DELIVERY

Transport and handle all materials using equipment and methods that prevent damage to surfaces and coatings. Repair minor damage to exterior and interior coatings as the Engineer directs before pipe installation. Significant damage due to improper procedures for packing and handling of pipe and other materials will be reason for rejection.

5. MATERIALS OR EQUIPMENT TO BE FURNISHED ("OR EQUAL" CLAUSES)

Where the specifications state "equal to" followed by a brand name or model, a standard of quality is being set. The naming of a brand or model is a matter of convenience to avoid writing a volume. Other brands or equipment under this category may be submitted. The Engineer will consider other products on the basis of materials of construction, weight, function, size (it must fit the space provided), service history and electrical and mechanical characteristics.

Where the specifications state one or more model numbers and manufacturers followed by the words "or approved equal" the meaning is that the product(s) specified is acceptable and that while there may be other products that are acceptable the only way to be assured is to submit the desired substitution during the BID PROCESS and receive an affirmative answer. The Engineer will consider the factors previously described in making the determination.

Unless otherwise specified, all materials shall be the best of their respective kinds and shall be in all cases fully equal to approved samples. The Engineer shall have the right to require the use of such

specifically designated material, article, or process. The Engineer, where practical, may require submission of actual samples of materials or products.

6. SAFETY

All work shall be carried out in accordance with all applicable rules and regulations of the Kentucky Labor Cabinet, Division of Occupational Safety and Health, and HWU Safety Policies.

7. PRODUCT DELIVERY, STORAGE AND HANDLING

Care shall be exercised in transporting and handling to avoid damage to pipe and fittings, and all appurtenances. Materials shall be stored in an enclosure or under protective coverings if required by the engineer to prevent damage. Materials shall not be stored directly on the ground. The inside of pipes and fittings shall be kept free of dirt and debris.

Contractor shall be responsible for all materials furnished and shall replace at his own expense all materials found defective in handling after delivery. Contractor shall report to HWU immediately upon finding defects in any material supplied by HWU. Contractor shall furnish all materials and labor required for replacement of installed materials discovered defective or damaged.

HWU reserves the right to reject any materials that do not comply with these standards.

8. NOTIFICATION & ACCESS

The Contractor shall give the Owner or Owner's representative a minimum of 48-hour notice before starting construction. Where a public roadway must be closed, notify all safety agencies and the general public in accordance with local and state regulations. Where a private driveway must be closed, provide the resident a minimum 48-hours' notice. Maintain continuous access to residential private driveways to the maximum extent possible. Maintain access for public safety vehicles (police, fire, ambulance) to all properties in the project area.

9. INSPECTION

The Owner's Engineer shall make periodic observations during construction to provide final certification that the improvements were installed in conformance with HWU standards and the approved construction drawings. In addition to observation by the Engineer, a final inspection will be made prior to putting the facilities in service. Final inspection will be made prior to acceptance of any facilities and only after all construction is complete. The Contractor shall provide labor and materials as required to complete the punch list developed during final inspection. Access to the construction site and construction records shall be provided to inspectors at all times.

B. MATERIALS & INSTALLATION

Fair Street Booster Station currently consists of a Cantex style dry pit that houses two 30 horsepower pumps. Under this contract, the controls for the station will be now be housed on a new remote pad, located approximately 35 feet from the motor/pump pit. Site power furnished to booster station shall be 3 phase, 60 hertz, maintained within industry standards. Voltage tolerance shall be plus or minus 10 percent. Phase-to-phase unbalance shall not exceed 1% average voltage as set forth in NEMA Standard MG-1. Control voltage shall not exceed 132 volts.

The contractor will be responsible for sizing panels and enclosures required for this installation, and for their mounting on Unistrut with the associated concrete pad.

1. COMPLIANCE STANDARDS

All electrical material and equipment provided by the Contractor shall be new and free of defects. All work performed under these specifications shall be carried out by skilled workers regularly engaged in the performance of such duties. The entire electrical installation shall not be less than that required by the latest edition of the electrical code locally enforced in the Project area. The Contractor shall obtain all permits required by local ordinances, and after completion of the Work, shall give the Engineer a certificate of final inspection and approval from the local electrical inspector. Any expenses connected with such inspection and certificate shall be borne by the Contractor.

Electrical material and equipment shall be designed and constructed in accordance with the latest requirements of applicable standards such as NEMA, ANSI, IEEE, and where listings are available for such items shall be approved by the Underwriters Laboratories, Inc. Equipment, components, material, etc., rated by other standards and agencies, including but not limited to IEC, VDE, and DIN, will not be considered equal to NEMA, ANSI, IEEE, and UL. Electrical items shall be standard catalogued products of manufacturers regularly engaged in the manufacture of such products, unless otherwise noted. Acceptable manufacturers for Motor Control Centers are: Cutler-Hammer, Square-D, Siemens and General Electric.

All devices, equipment, and materials not definitely specified or noted that are required for complete installations shall be manufactured for the purpose intended and shall be installed in conformance with good accepted practice for the conditions encountered. All hardware such as straps, supports, bolts and nuts shall be of rust or corrosion-resistant material unless otherwise noted.

The Contractor, at his expense, shall provide power and all necessary temporary wiring as required to perform his work.

2. ELECTRICAL SERVICE

An electrical service meter shall be installed on a new 35-foot service pole to be set by Henderson Municipal Power and Light (HMPL). A 200-amp, 3 phase, meter and riser shall be installed. Contractor shall coordinate this installation with HMPL. The service and disconnect shall be housed in a NEMA3 weatherproof enclosure with a locking hasp on the outside door. A main fusible type, NEMA 4, multiple pole disconnect switch shall be mounted on the service pole. The disconnect switch shall be capable of being locked in either position. The service shall be sized to allow all pumps to run simultaneously and continuously. The service shall be grounded via a rigid conduit encased wire attached to a 5/8-inch x 10 feet long copper ground rod.

On the side of the main electrical service panel, furnish an all-weather 600-volt, 200 AMP rated four prong twist lock male receptacle, wired into the center feed of the main power transfer switch supplying the station. Owner to verify location.

A new 2-inch diameter conduit shall be installed from the electrical service meter to the location of the new panels. A 200-amp, 240-volt, 3 phase panelboard shall be installed at the new control location. The location of the panelboard shall be coordinated with Owner. Wiring shall be pulled in from electrical service meter to the panelboard and terminated.

Two new 240-volt, 3-phase, size 3 combo disconnect / motor starters shall be installed on the new concrete pad (see Panel Mounting, below) for control of pumps. Two 1.5-inch conduits shall be installed underground from the panel location to the pump motors in the Cantex station. Wiring shall be installed to both starters from the pump motors and terminated.

Three 1-inch conduits shall be installed underground from control panel location to the Cantex station. One conduit will be used for SCADA control wiring. One conduit will be used for lights and receptacles. One conduit will be a spare. Appropriate wiring shall be pulled and terminated. SCADA power and controls shall be terminated to pump starters.

A SCADA control panel furnished by HWU shall also be installed. The location of the SCADA panel shall be coordinated with Owner.

3. ELECTRICAL DETAILS

a. Panel Enclosure:

- i. Electrical control equipment shall be mounted within a NEMA 4X Stainless Steel control enclosure. Door shall be hinged and sealed with a neoprene gasket and equipped with captive closing hardware. Control components shall be mounted on a removable steel back panel secured to enclosure with collar studs.
- ii. All control devices and instruments shall be mounted using threaded fasteners and shall be clearly labeled to indicate function.
- iii. H-O-A switches, elapsed time meters, and run lights shall all be inaccessible from the outside of the panel enclosure.

b. Branch Components:

i. Circuit Breakers and Operating Mechanisms:

1. A properly sized heavy-duty circuit breaker, with RMS interrupting rating of 14,000 amperes at 460 volts, shall be furnished for each pump motor.
 2. An operating mechanism installed on each motor circuit breaker shall penetrate the control panel door. A padlock-able operator handle shall be secured on the exterior surface. Interlocks must prevent opening the door until circuit breakers are in "OFF" position.
- ii. Overload relays to be block-type mounted to each motor starter, having trip indication with trip free operation. Pressing the overload-reset lever shall not actuate the control contact until after the overload spindle has reset. Resetting the overload reset lever will cause a snap-action control contact to reset, thus re-establishing a control circuit. Overload relays to be manual reset only.

- iii. An overload-reset push button, mounted through the control panel door, shall permit resetting the overload relays without opening the control panel door.
- c. Control Circuit:
 - i. A normal duty thermal-magnetic circuit breaker shall protect all control circuits by interrupting control power.
 - ii. Pump mode selector switches shall permit manual start or stop of each pump individually, or permit automatic operation under control of SCADA. Manual operation shall override all shutdown systems, except the motor overload relays. Selector switches to be heavy duty, oil-tight design with contacts rated NEMA A300 minimum.
 - iii. A duplex ground fault receptacle providing 115 VAC, 60 Hz, single-phase current, will be mounted on the side of the control enclosure. Receptacle circuit shall be protected by a 15-ampere thermal-magnetic circuit breaker.
- d. UL Label Requirement: Booster station controls shall conform to third party safety certification. The panel shall bear a serialized UL label listed for “Enclosed Industrial Control Panels”. The enclosure and all components mounted on the sub-panel or control cover shall conform to UL descriptions and procedures.
- e. Auxiliary Power Transformer: The booster station shall be equipped with a 3 KVA step-down transformer to supply 115 VAC, single phase for the control and SCADA equipment. The primary and secondary side of the transformer to be protected by a thermal magnetic circuit breaker, sized to meet the power requirements of the transformer.
- f. Wiring:
 - i. The booster station shall be completely wired.
 - ii. All wiring & workmanship shall comply with applicable standards and specification of the National Electrical Code (NEC).
 - iii. All user serviceable wiring shall be type MTW or THW, 600 volts, color coded as follows:

1. Line and Load Circuits, AC or DC power	Black
2. AC Control Circuit Less Than Line Voltage	Red
3. DC Control Circuit	Blue
4. Interlock Control Circuit From External Source	Yellow
5. Equipment Grounding Conductor	Green
6. Current Carrying Ground	White
7. Hot With Circuit Breaker Open	Orange
 - iv. Control circuit wiring inside the panel, with exception of internal wiring of individual components, shall be 16-gauge minimum, type MTW or THW, 600 volts. Power wiring to be 14-gauge minimum. Motor branch wiring shall be 10-gauge minimum.
 - v. Wires must be clearly numbered at each end in conformance with applicable standards. All wire connectors in the control panel shall be ring tongue with nylon insulated shanks. All wires on the sub-plate shall be bundled and tied. All wires

- extending from components mounted on door shall terminate at a terminal block mounted on the back panel. All wiring outside the panel shall be routed through conduit.
- vi. Control wires connected to door mounted components must be tied and bundled in accordance with good commercial practice. Bundles shall be made flexible at the hinged side of the enclosure. Adequate length and flex shall allow the door to swing full open without undue stress or abrasion. Bundles shall be held on each side of hinge by mechanical fastening devices.
- g. Conduit:
- i. Installed conduit shall conform to the following requirements:
 - 1. All conduit and fittings to be UL listed.
 - 2. Liquid tight flexible metal conduit to be constructed of smooth, flexible, galvanized steel core with smooth abrasion resistant, liquid tight polyvinyl chloride cover.
 - 3. Conduit to be supported in accordance with articles 346, 347 and 350 of the National Electrical Code.
 - 4. Conduit shall be sized according to the National Electrical Code.
 - ii. All conduit shall be clean and free from dents, scars, or other deformities. Connections shall be made up watertight, and bushings shall be provided where smooth hubs are not encountered. Changes in directions shall be made with symmetrical bends or conduit boxes. Field-made bends shall be made with an approved conduit bending apparatus. Conduit runs shall be installed parallel or perpendicular to structural members. Conduit hangers and supports shall be provided at intervals recommended by the manufacturer and the National Electrical Code.
 - iii. Underground conduit runs shall be installed at least 1'-6" below finished grade unless other depths are indicated. Plain earth used for backfill shall be free from objectionable material such as rocks, glass, metal, wood, etc., and shall be tamped to surrounding earth density.
 - iv. All conduits shall be installed with smooth bends. Splices in junction boxes below grade shall not be acceptable. Conduits shall be cleaned of all dirt, debris and moisture before wire and/or cable is pulled. Suitable mounting frames required for controllers, disconnects, etc., shall be provided.
- h. Grounding:
- i. All electrical equipment inside the control building shall be grounded to the control panel back plate. All paint must be removed from the grounding-mounting surface before making final connection.
 - ii. The contractor shall provide an earth driven ground connection to the booster station control building at the main grounding lug in accordance with the National Electrical Code (NEC).
- i. Lightning and Surge Protection:

Lightning protector units shall be provided for power circuit protection at the main service connection point and elsewhere as noted on the Plans. Lightning protectors shall be Surge Suppression Inc., or approved equal, for three and single-phase circuits, respectively.

j. Testing and Equipment Servicing

Entire installation shall be free from improper grounds and short and open circuits. Make tests on conductors as required before energizing circuits. Make tests to ensure that the entire system is in proper operating condition and that adjustments and apparatus setting of circuit breakers, fuses, control equipment and apparatus have been made. Correct defects discovered during tests.

Equipment shall be turned over to the Owner in fully operational condition. Instruct Owner on proper usage, care and maintenance of entire electrical system including all special systems or apparatus.

4. TESTING AND STARTUP

- a. Prior to applying electrical power to any motors or control equipment, check all wiring for tight connection. Manually operate circuit breakers and switches to ensure operation without binding. Open all circuit breakers and disconnects before connecting utility power. Verify line voltage, phase sequence and ground before actual start-up.
- b. Prior to acceptance by owner, an operational test of all pumps, drives and control systems shall be conducted to determine if the installed equipment meets the purpose and intent of the specifications. Tests shall demonstrate that all equipment is electrically, mechanically, structurally, and otherwise acceptable; it is safe and in optimum working condition, and conforms to the specified operating characteristics. Observe and record operation of pumps, suction and discharge gauge readings, ampere draw, & pump controls. Check calibration of all instrumentation equipment, test manual control devices and automatic control systems (SCADA). Be alert to any undue noise, vibration or other operational problems.

5. PANEL MOUNTING

The control panels shall be positioned per drawings for general location. All field adjustments shall be approved by the Engineer. Control panels shall be installed on a four (4) inch thick minimum concrete pad extending a minimum of 8 inches past each end/side of control panel post and in front and rear of control panel. Provide $\frac{3}{4}$ inch chamfer on all exposed edges of concrete.

Control panel mounting shall be on Unistrut, sized to provide adequate clearance around all panels, disconnects and other items. The bottom of the control panel(s) shall be set to a minimum of 42" from top of slab. Isolate dissimilar metals with rubber gaskets.

6. OTHER ITEMS OF WORK

6.1 SEEDING AND MULCHING

Unless otherwise specified by the Engineer, all graded areas shall be left smooth and sown with a mixture of grasses at a rate of not less than 100 pounds per acre. Seed mixture shall be as shown below. When final grading has been completed, the area to be seeded shall be fertilized with number 12-12-12 fertilizer at a rate of 1000 lbs. per acre. After the fertilizer has been distributed, the Contractor shall disc or harrow the ground to thoroughly work the fertilizer into the soil. The seed shall then be broadcast either by hand or by approved sowing equipment. After the seed has been distributed, the contractor shall then lightly cover the seed by use of a drag or other approved device. All seed shall be certified. The seeded area shall then be mulched with clean, weed-free straw to a depth of approximately 2 inches. Any necessary reseeding or repairing shall be performed by the contractor prior to final acceptance.

Seed mixture for permanent seeding shall consist of the following:

- a. 30% Kentucky 31 Tall Fescue (*Festuca arundinacea*)
- b. 20% Creeping Red Fescue (*Festuca rubra*)
- c. 35% Hard Fescue (*Festuca longifolia*)
- d. 10% Ryegrass, Perennial (*Lolium perenne*)
- e. 5% White Dutch Clover (*Trifolium repens*)

6.2 EROSION CONTROL

Contractor shall control water pollution through use of best management practices that limit eroded sediment leaving the site and shall coordinate these measures with the construction schedule to ensure effective and continuous erosion control throughout the construction and post construction periods.

Contractor shall be responsible for submitting a Notice of Intent to the Kentucky Division of Water, if more than 1 acre in total area is disturbed on this project.

Before any disturbance is made, perform an initial site inspection with the Engineer, record what areas are to be disturbed, submit an erosion and sediment control plan showing what BMPs will be used, design BMPs according to good engineering practices, and install the designated BMPs. Before opening or affecting any new areas, repeat this process and ensure all BMPs are installed before starting work.

Erosion control measures shall include the following:

- i. Soil stabilization shall be initiated within fourteen (14) days of clearing or inactivity in construction.
- ii. If seeding or another vegetative erosion control method is used, adequate temporary erosion control shall be provided until permanent cover is established.
- iii. Techniques shall be employed to prevent the blowing of dust or sediment from the site.

Construction site access requirements shall include:

- i. Approved temporary access entrance(s) provided at all sites.
- ii. Other measures necessary to ensure that sediment is not tracked onto public streets by construction vehicles or washed into storm drains.

Other requirements include:

- i. Trash control.
- ii. Contained washout facility for concrete trucks.

6.3 EXISTING UTILITIES

Special precautions shall be taken by the Contractor to avoid damage to existing overhead and underground utilities owned and operated by the City or by public or private utility companies.

Where existing utilities or appurtenant structures, whether underground or aboveground are encountered, they shall not be displaced or disturbed unless necessary, and in such cases shall be replaced in as good or better condition than found as quickly as possible.

The Contractor shall bear the entire responsibility for locating, avoiding or repairing damage to said existing utilities. No work shall be performed prior to contacting Kentucky 811 and existing underground utilities being located and marked. Contractor is responsible for contacting utilities that do not subscribe to Kentucky 811.

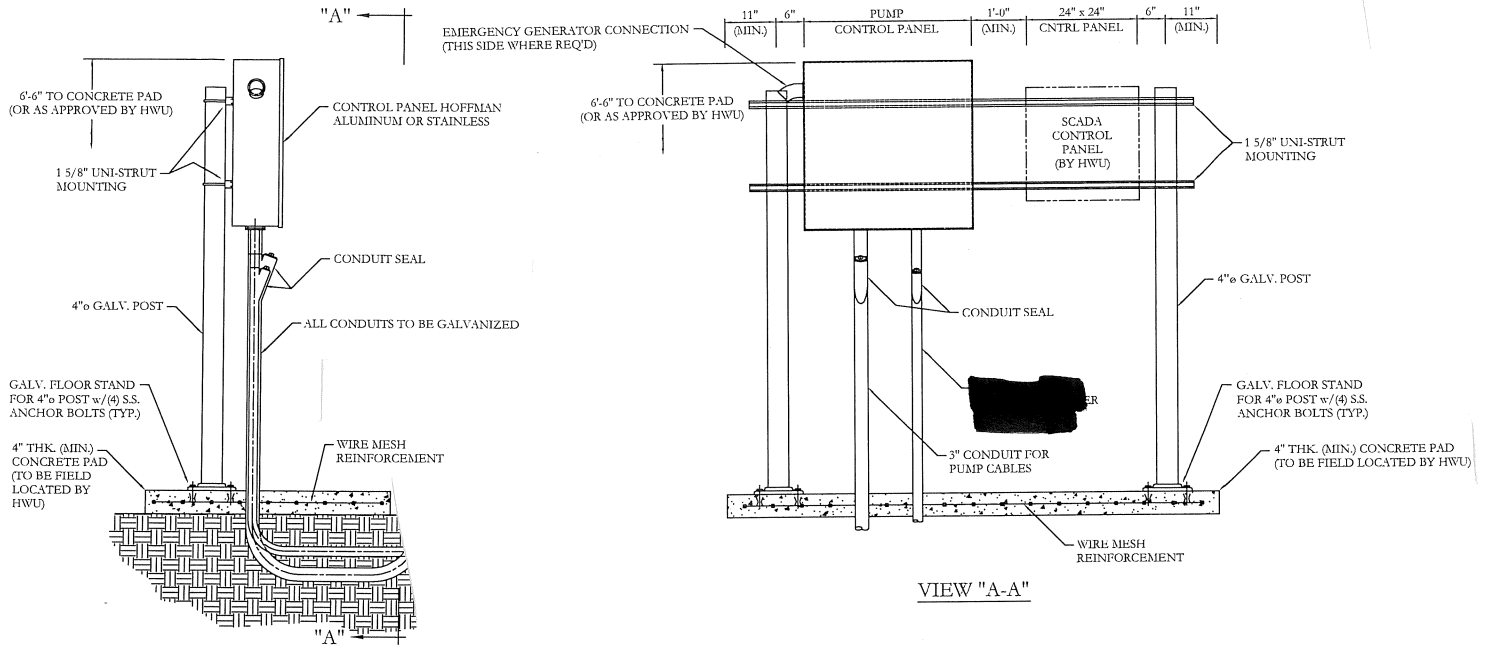
7. FINAL COMPLETION

Final Completion shall be defined as the point when all of the following requirements have been fulfilled:

- A. All submittals and documentations have been submitted, reviewed and approved.
- B. Operations and Maintenance Manuals have been submitted on all equipment items.
- C. The complete system has successfully passed all testing requirements.
- D. All fees, permits and reports have been satisfactorily completed.
- E. All Owner's staff personnel training programs have been completed.
- F. Beneficial use by the Owner has occurred.

8. CLEAN-UP

After final operation tests, the area shall be cleared of all trash and debris and left in final operating condition. Final grading of the site and restoration of surfaces with grass shall be in strict accordance with the applicable plans.



Detail of Panel Installation and Mounting (example)