



INVITATION FOR BID

PWC2425055 – REBID TWO (2) PREFABRICATED CONCRETE RELAY CONTROL HOUSES FOR CLIFFDALE AND YADKIN SUBSTATIONS

Date of Issue: February 19, 2025
Date of Opening: March 6, 2025, 2:00 P.M.

Direct all inquiries concerning this IFB to:

Carla Wint
Procurement Advisor
procurement@faypwc.com

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**ADVERTISEMENT FOR BID
FAYETTEVILLE PUBLIC WORKS COMMISSION
REBID TWO (2) PREFABRICATED CONCRETE RELAY CONTROL HOUSES FOR
CLIFFDALE AND YADKIN SUBSTATIONS**

**Cumberland County
North Carolina**

Bids are solicited and will be received at Fayetteville Public Works Commission, Administration Building, Conference Room 107, 955 Old Wilmington Road, Fayetteville, NC 28301, until **2:00 p.m., EST Thursday, March 6, 2025**, for the **REBID TWO (2) PREFABRICATED CONCRETE RELAY CONTROL HOUSES FOR CLIFFDALE AND YADKIN SUBSTATIONS**.

The Commission is requesting firm quotations for two (2) prefabricated concrete relay control houses, as specified in this document, to support the operation of the Cliffdale and Yadkin Substations. These buildings will serve as relay control houses for the substations upon completion.

Enclosed are the Instructions to Bidders, Detailed Specifications/Drawings, and Bid Pricing Form. Bidders must submit the completed Bid Pricing Form, Attachment B, Attachment C, MWDBE Affidavit A or B, MWDBE Affidavit E, and any required addendum acknowledgments. Submissions must be made using the provided forms or exact copies thereof, as specified in the bid documents.

Questions regarding this bid must be submitted in writing to the attention of **Carla Wint**, at procurement@faypwc.com no later than **5:00 p.m., EST Tuesday, February 25, 2025**, in order to be considered for a response.

Mailed bids must be addressed to **Carla Wint**, Procurement Advisor, Fayetteville Public Works Commission, 955 Old Wilmington Road, Fayetteville, North Carolina 28301. The outside of the envelope must be marked **IFB: PWC2425055 REBID TWO (2) PREFABRICATED CONCRETE RELAY CONTROL HOUSES FOR CLIFFDALE AND YADKIN SUBSTATIONS** and shall indicate the name, and address of the bidder. Late bids will not be considered.

Fayetteville Public Works Commission reserves the right to reject any or all bids for any reason determined by PWC to be in its best interest, or to award the bid to the lowest responsible bidder or bidders, taking into consideration quality, performance, and the time specified in the bids for the performance of the contract.

FAYETTEVILLE PUBLIC WORKS COMMISSION
Nikole Bohannon
Procurement Manager

INSTRUCTIONS TO BIDDERS
FAYETTEVILLE PUBLIC WORKS COMMISSION
REBID TWO (2) PREFABRICATED CONCRETE RELAY CONTROL HOUSES FOR
CLIFFDALE AND YADKIN SUBSTATIONS

PURPOSE AND BACKGROUND

The two (2) control houses will replace the existing older metal buildings with new prefabricated concrete structures. The Commission is requesting firm quotations for two (2) concrete relay control houses, as specified in this document, to support the operation of the Cliffdale and Yadkin Substations. As part of this project, the relay panels within these buildings will also be updated. Once completed, these buildings will serve as relay control houses for the substations.

OBJECTIVE OF THE REQUEST

It is the intent of this bid invitation to obtain pricing for **TWO (2) PREFABRICATED CONCRETE RELAY CONTROL HOUSES FOR CLIFFDALE AND YADKIN SUBSTATIONS** within the detailed specifications section of this Invitation for Bid (IFB). You are requested to submit your bid on the enclosed Bid Pricing Form.

IFB SCHEDULE

The following table shows the schedule of events to prepare your organization's response. The key deadlines and targeted dates for this process are as follows:

| Action | Responsibility | Date/Time |
|--------------------------------|----------------|--------------------------------------|
| Submit Written Questions | Bidders | Tuesday, February 25, 2025, 2:00 pm |
| Provide Response to Questions | PWC | Thursday, February 27, 2025, 4:00 pm |
| Submit IFB | Bidders | Thursday, March 6, 2025, 2:00 pm |
| Target Commission Date | PWC | Wednesday, March 26, 2025 |
| Target Council Date | PWC | Monday, April 7, 2025 |
| Award /Sale of Goods Agreement | PWC | Tuesday, April 15, 2025 |
| Preferred Delivery | Awarded Bidder | December 2025 |

QUESTIONS

Written questions shall be e-mailed to procurement@faypwc.com by the date and time specified in the IFB schedule. Bidders will enter "IFB **PWC2425055** – Questions" as the subject of the email.

Questions received prior to the submission deadline date, the Procurement Advisor's response, and any additional information deemed necessary by PWC will be posted in the form of an addendum to the PWC website and shall become an Addendum to this IFB. No information, instruction, or advice provided orally or informally by any PWC personnel, whether made in response to a question or otherwise concerning this IFB, shall be considered authoritative or binding. Firms shall rely only on written material contained in an Addendum to this IFB.

Inquiries should be submitted no later than the date and time noted in the IFB schedule. Questions answered verbally will be followed up by written addenda as deemed necessary; oral interpretations shall have no effect.

MINORITY, WOMEN, AND DISADVANTAGED BUSINESS ENTERPRISE (MWDBE) PROGRAM / SMALL LOCAL SUPPLIER (SLS) PROGRAM

PWC is committed to promoting the utilization of Minority, Women, and Disadvantaged Businesses in PWC's geographical statistical area (GSA) by providing equal opportunity for participating in all aspects of PWC's contracting and procurement programs. The GSA consists of NCDOT division areas 3-8, and 10. PWC is also committed to promoting the utilization of small, local businesses in the Fayetteville Metropolitan Statistical Area (MSA) by increasing opportunities for those businesses to participate in PWC procurements. The MSA consists of Cumberland County, Hoke County, and Harnett County.

Bidders must report their efforts to engage MWDBEs, Historically Underutilized Businesses (HUBs), and Small Local Suppliers for each project, regardless of specific project requirements.

Bidders shall submit the MWDBE Affidavits A or B, & E provided within Attachment F with their bid submittal. The Affidavits shall be signed and notarized.

In accordance with PWC's MWDBE Program, the goal shall be to award four percent (4%) of the total contract dollars to MBE firms and four percent (4%) to WBE firms. A complete copy of PWC's MWDBE Program is available for inspection at PWC Procurement Department.

Bidders are encouraged to document good faith efforts and subcontractor utilization in the **MWDBE Affidavits C or D** at the time of bid submission, though it is not mandatory. If these efforts are not included, PWC's Program staff will contact the lowest responsive bidder to request documentation, which must be provided within **24 hours** or by the next business day.

The following is a list of the efforts that should be made by the prime service provider to encourage MWDBE participation. In order to receive credit for having made "good faith efforts", the prime service provider should document all actions taken to include the following:

- 1) Attending pre-bid meetings scheduled by the department;
- 2) Identifying selected specific items of the project which could be executed by a MWDBE;
- 3) Soliciting MWDBE service provider participation in a reasonable time before the proposals are due through advertisements in circulation media, trade publications, and minority-focused media;
- 4) Contacting local firms, firms owned by minorities or women, and associations or business development centers which disseminate information to local businesses and businesses owned by minorities or women in a timely manner to allow sufficient time for MWDBEs to respond;
- 5) Following up on initial solicitations of interest by contacting the MWDBE to determine whether the MWDBE was interested in performing specific items of the project;
- 6) Attempting to enter into joint venture or partnership arrangements with MWDBEs and provide

interested MWDBEs with information about the requirements for the project;

- 7) Providing assistance to MWDBEs in the review of proposals and work to be done by sub-service providers;
- 8) Using available directories of certified MWDBEs and other available resources;
- 9) Ensuring that the proposer negotiated in good faith with the MWDBE and did not unjustifiably reject as unsatisfactory quotes prepared by any Minority, Women, or Disadvantaged Business Enterprise;
- 10) Making every effort to obtain Minority, Women, or Disadvantaged Business Enterprise participation that could reasonably be expected to produce a level of participation sufficient to meet the goals of PWC; and
- 11) Providing interested minority, women, and disadvantaged businesses with information relative to project requirements

VENDOR REGISTRATION VIA ISUPPLIER

- 1) All vendors interested in doing business with PWC must register as a vendor through the iSupplier Portal using the link below. The iSupplier self-service portal enables vendors to have real-time access to information regarding purchase orders, invoices, and payments through a secure environment. Attach a copy of your W9 to your online registration.

<https://www.faypwc.com/isupplier-doing-business-with-pwc/>

SUBMISSION INSTRUCTIONS

- 1) Bids should be complete and carefully worded and should convey all the information requested in the IFB. Bids should be prepared simply and economically, providing a straightforward, concise description of the bidder's capabilities to satisfy the requirements of the IFB. Emphasis should be on completeness and clarity of content. If the bid includes any comment over and above the specific information requested in the IFB, the bidder should include this information as a separate appendix to its bid. Bids that include clarifications or modifications to any of the IFB's contractual requirements, or a bidder's standard terms and conditions, may be deemed non-responsive and not considered for award at PWC's discretion.
- 2) Unsolicited bid samples or descriptive literature will not be examined or tested, will not be used to determine responsiveness, and will not be deemed to vary any of the provisions of the IFB. Failure to comply with these requirements shall constitute sufficient cause to reject a bid without further consideration. PWC reserves the right to accept or reject any bid and to annul the bidding process and reject all bids at any time prior to award of a Sale of Goods Agreement, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders the reasons for PWC's action.
- 3) Bids may be withdrawn by the bidder only in writing and if receipt of such withdrawal is acknowledged by PWC prior to the time for the bid submittal deadline identified in the Advertisement for Bidders (or such later date included in an Addendum). Written withdrawal

requests shall be submitted on the bidder's letterhead and signed by an official of the bidder duly authorized to make such request. Any withdrawal request made after the bid submittal deadline shall be allowed only if the price bid was based upon a mistake that constituted a substantial error, provided the bid was submitted in good faith, and then only pursuant to the terms of N.C.G.S. § 143-129.1.

- 4) Bids must be submitted in an envelope clearly marked with **"IFB: PWC2425055 REBID TWO (2) PREFABRICATED CONCRETE RELAY CONTROL HOUSES FOR CLIFFDALE AND YADKIN SUBSTATIONS"** along with the bidder's name and address. **Even if this envelope is placed inside a courier's envelope, the courier envelope itself must also be properly marked to ensure the bid can be identified without opening it.** This is critical for proper sorting and handling, as multiple bids are received daily for different Procurement Advisors. Any bid received without proper labeling on the courier envelope will be returned to the sender and will not be considered for award. All bids must be delivered to the Fayetteville Public Works Commission, Administration Building, Procurement Department, at 955 Old Wilmington Road, Fayetteville, NC 28301, by the specified deadline. Late bids will not be considered.
- 5) Bids will be examined promptly after the due date and an award will be made at the earliest possible date. Bids must be held firm for PWC for a period of sixty (60) days after the bid due date. A purchase order will be issued to the awarded bidder.
- 6) Bidders shall submit bids only on the Bid Pricing Forms provided herein, or exact copies thereof **(See Attachment B – Bid Pricing Form)**. Failure to provide full and complete Bid Pricing Forms using the form provided herein will result in a bid being deemed non-responsive.
- 7) All bids must be signed by an authorized official of the bidder. Bids may be rejected for any omission, alteration of form, additions not called for, conditional bid, or any irregularities of any kind.
- 8) Do not submit alternate bids unless specifically called for on the Bid Pricing Forms.

QUANTITIES AND PRICING

- 1) All bidders are advised to include all costs incurred by the bidder in delivering the **TWO (2) PREFABRICATED CONCRETE RELAY CONTROL HOUSES FOR CLIFFDALE AND YADKIN SUBSTATIONS** to the PWC Warehouse, at 1097 Public Works Drive, Fayetteville, NC 28301 in their bid submittal. The invoice submitted for payment shall not reflect any other costs (fuel surcharge, toll, etc.). PWC is not tax-exempt.

EVALUATION AND AWARD

- 1) An award of a contract is subject to the approval by the Board of Commissioners of PWC and the Fayetteville, North Carolina City Council.
- 2) PWC reserves the right to inspect, at a reasonable time, the equipment, item, plant, or other facilities of a prospective Bidder prior to award, and during the Sale of Goods Agreement term, as PWC deems necessary to determine that such equipment, item, plant, or other facilities conform with the specifications/requirements and are adequate and suitable for the proper and effective performance of the Sale of Goods Agreement.

- 3) PWC reserves the right to request additional information from bidders to aid in the evaluation process. This information may include but is not limited to, financial statements, a reference list of contracts of similar size, etc.
- 4) PWC reserves the right to make a single award for all items or may award separate contracts to multiple bidders for various items to the lowest responsive, responsible bidder or bidders, taking into consideration product quality, performance to PWC, and conformity with the specifications in these bid documents. PWC may also consider, among other things, the Bidder's past performance conduct on other contracts, and other information as PWC deems necessary to assist in the evaluation of any bid.
- 5) The Sale of Goods Agreement will be awarded for a period of one (1) year to begin on or about April 15, 2025.
- 6) The successful bidder shall not assign, transfer, or convey any part of the agreement, including rights or obligations, to a third party without obtaining prior written approval from PWC. This includes the assignment of payments that may become due under the agreement. Any unauthorized assignment may result in disqualification or termination of the agreement. Approved assignments do not relieve the successful bidder of their responsibilities under the terms of the agreement unless explicitly stated in writing by PWC.
- 7) The successful bidder must promptly notify PWC in writing of any legal actions, investigations, or issues arising during the agreement period that may impact their ability to perform their obligations under the agreement. Failure to provide timely notification may result in termination of the agreement. As outlined in Attachment C: Certification of Primary Participant Regarding Debarment, Suspension, and Other Responsibility Matters, the successful bidder must also certify that no such legal impediments exist at the time of bid submission. If circumstances change after submission or during the agreement period, the bidder is required to immediately inform PWC, providing full details of the situation.

DELIVERY AND PAYMENT

- 1) Delivery to be made F.O.B. Public Works Commission **1097 Public Works Drive, Fayetteville NC, 28301.**
- 2) Deliveries shall be made between the hours of **9:00 a.m. and 3:00 p.m., Monday through Friday**, within the time frame specified on the Bid Pricing Form.
- 3) Payment for equipment, material, supplies, etc. purchased pursuant to this bid shall be made by Public Works Commission approximately thirty days after the same has been delivered, inspected, approved and the invoice received in the PWC Accounts Payable Office, P.O. Box 1089, Fayetteville, North Carolina 28302.

**FAYETTEVILLE PUBLIC WORKS COMMISSION
PWC2425055 – REBID TWO (2) PREFABRICATED CONCRETE RELAY CONTROL
HOUSES FOR CLIFFDALE AND YADKIN SUBSTATIONS**

ATTACHMENT A: TECHNICAL SPECIFICATIONS

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**FAYETTEVILLE PUBLIC WORKS COMMISSION
PWC2425055 – REBID TWO (2) PREFABRICATED CONCRETE RELAY CONTROL
HOUSES FOR CLIFFDALE AND YADKIN SUBSTATIONS**

TECHNICAL SPECIFICATIONS

1.0 Standards

All equipment and materials covered by these Specifications and all tests applied thereto shall, unless otherwise stated herein, be in accordance with the applicable provisions of the latest editions of the Standards of the AISC, AISI, AWS, ASTM, ACI, ANSI, AEIC, BOCA, IBC, IEEE, MBMA, NEMA, NESC, NFPA, OSHA and SSPC.

Where the term "Standards" is used in the Specifications, it shall be understood to refer to the above Standards.

2.0 Drawings and Instruction Books

The Bidder shall provide adequate documentation to fully describe the equipment being furnished. Each set of Approval and Final Drawings and documentation shall include, but not be limited to, the following information.

- a. List of Material which shall include a complete description of all items furnished including quantity, catalog numbers, ratings, and manufacturer.
- b. Structural, electrical, and mechanical drawings for the concrete control house.
- c. Heating, ventilation, and air-conditioning calculations shall be submitted for approval with structural drawings.
- d. Structural calculations for control house lifting lug design shall be submitted with approval drawings.
- e. The building manufacturer shall furnish complete Drawings showing anchor bolt settings, sidewall, underwall and roof framing, transverse cross-sections, covering and flashing details, and accessory installation details.
- f. The control house shall be designed for earthquake zone one (1). Structural drawings shall note earthquake certification and bear the seal of a professional engineer.

All Drawings shall have marked on each sheet the label, as appropriate:

Dimensional information shown on all Drawings shall be stated in feet and inches.

2.1 Drawings Furnished with Specifications

Standard Booth & Associates, LLC Substation Design Drawings have been prepared for the Commission's substation. A list of drawings is located in the Appendices.

2.2 Drawings Furnished by Manufacturer

2.2.1 Approval Drawings

Before proceeding with fabrication, All Drawings and documentation shall be submitted directly to the Public Works Commission; Attention: Mr. Joel Valley, 955 Old Wilmington Road; Fayetteville, NC 28301 (joel.valley@faypwc.com) to demonstrate that all parts conform to the requirements and intent of these Specifications. Each set of Drawings shall include those Drawings as outlined in Section 5.0.

For drawing approval, the manufacturer shall submit two (2) sets each of the Drawings.

Approval of Drawings shall not be held to relieve the manufacturer of obligations to meet all requirements in the Specifications, of responsibility for correctness of the Drawings, or of responsibility to meet original shipping promise on the basis of the Commission being allowed two (2) weeks for approval.

Receipt of Approval Drawings by the manufacturer constitutes authorization for manufacture only, based upon the corrections found thereon.

The Owner may require a second submittal of Shop Drawings if, in the opinion of the Owner, such is required due to the extent of changes required on the first submittal. If an extension of time is required due to a protracted drawing approval process, the price will remain as quoted for the quoted delivery.

2.2.2 Final Drawings

Contingent upon Approval Drawing review and product manufacture, the Bidder shall issue final documentation as follows:

- a. One (1) complete set of all Drawings, revised to "as-built" status.
- b. One (1) complete set of all Drawings, revised to "as-built" status, released on two (2) separate CD-ROMs, compatible with AutoCAD 2018 thru 2026.
- c. The specified number of copies of applicable bound instruction books, including one (1) print each of all Drawings representing physical and electrical details as furnished per paragraph 5.0 plus one (1) copy each of renewal parts catalog.
- d. **Two (2) copies of bound instruction books and drawings shall be furnished for each control house.**
- e. Two (2) copies of certified test reports corresponding to functional performance measurements after final assembly shall be furnished for each control house.
- f. All Drawings are to be certified correct and supplied within a reasonable length of time prior to shipment of the equipment.

3.0 Shipping

- 3.1 Equipment shall be shipped upright to the substation site in an open-top truck so as to facilitate crane unloading by the Bidder.
- 3.2 The method of packing and loading shall be such as to protect all parts from dampness, corrosion, breakage, or vibration damage that might reasonably be encountered in transportation and handling.
- 3.3 Release for shipment is to be granted by either the Commission or the Engineer based upon the manufacturer's compliance with the following:
 - 3.3.1 Approval of factory inspection as called out in General Conditions, Section 8.0.
 - 3.3.2 Furnishing of the required number of copies of the Final Drawings, test reports, and instruction books as called for in the Specifications.
 - 3.3.3 Coordination of manufacture and delivery with the Commission's construction schedule as may be noted in the Specifications.
 - 3.3.4 Thirty (30) days notification of tentative shipping schedule and two (2) working days notification prior to all deliveries.
- 3.4 Shipments will be received only between the hours of 8:30 a.m. and 3:00 p.m. Monday through Thursday. See appendices for substation vicinity maps for location of delivery.

Control House (Cliffdale Substation 15 and 25) #1 Ship To: 601 Castle Rising Rd, Fayetteville, NC 28314

Control House (Yadkin Road 15 and 25) #2 Ship To: 4205 Legend Ave, Fayetteville, NC 28303
- 3.5 See Appendices for substation vicinity maps for location of delivery.

4.0 Building Construction

- 4.1 Design
 - 4.1.1 Design and construction shall conform to the latest applicable standards as issued by the following agencies:
 - a. American Concrete Institute (ACI 318-89)
 - b. American Institute of Steel Construction (AISC)
 - c. American Welding Society (AWS – USA)
 - d. National Electric Manufacturers Association (NEMA)
 - e. National Electric Code (NEC) (NFPA #70)
 - f. Uniform Building Code (UBC)
 - g. American Standards Institute/American Society of Civil Engineers (ANSI/ASCE 7-88/ANSI 58.1)
 - h. American Society for Testing and Materials (ASTM)
 - 4.1.2 The building shall be preassembled concrete. The building must withstand .30-06 caliber rifle fire at 15 feet distance per UL 752 Level 4 standard. The building needs to meet or exceed NERC CIP14--003 guidelines.

The building shall be designed for the explicit use of housing electronic equipment, measuring devices, and other related components, within a controlled atmosphere required for the proper operating conditions for the equipment.

The building shall be sealed to resist dust infiltration and be watertight.

- 4.1.3 Building components shall be designed to withstand external loading as prescribed by the applicable codes in Section 5.1.1. All drawings shall bear the seal of a currently licensed Professional Engineer.
- 4.1.4 Floor and base shall be designed to withstand all dead and live loads as applicable, or a minimum of 250 lbs. /ft², with a 1300-pound concentrated load in a 2.5 square foot area.
- 4.1.5 Walls shall be designed to withstand an additional 450 lbs per linear foot (225 ft-lbs moment per linear foot) resulting from equipment mounted on interior, in addition to the external loadings above. Interior walls, supporting panels, and structural, shall be designed so that interior loads of 400 pounds per linear foot of wall length may be attacked to the wall without compromising the 125 MPH design wind loads
- 4.1.6 The ceiling/roof shall be capable of withstanding a single continuous load of no less than 85 lbs. per linear foot located at mid span of the ceiling panels and running the entire building length.

Roof live loads shall be applied to the horizontal roof projection and shall be 30 pounds per square foot (30 psf). The roof shall be designed to accommodate a static vertical load of 50 lbs. for each cable tray support rod as shown on the Cable Tray Plan. The design wind pressure shall be ninety pounds per square foot (90 psf) (150 MPH) winds applied to the primary framing and to wall components per ASCE 7-88.
- 4.1.7 If transportation restrictions allow, the structure shall be constructed in one piece. Should transportation restrictions dictate multi-piece construction, shipping splits shall be structurally reinforced to minimize distortion during handling and transportation.
- 4.1.8 The entire structure (or each shipping piece for multi-piece structures) shall be designed for lifting from lugs located along the base perimeter members at fifteen foot (15'-0") approximate intervals. Base and floor system shall be designed to withstand all loads while supported at lift points only. All lifting lugs shall be removable or be cast in flush to exterior walls.
- 4.1.9 The optimum operating temperature of the equipment to be installed shall be assumed to be 78°F. The heating and cooling requirements for the shelter shall be based upon the outside ambient temperature and minimal equipment operating heat output. Heating, ventilation, and air-conditioning calculations shall be submitted for approval with structure drawings.
- 4.1.10 The Bidder shall also be responsible for the installation of the cable tray system. Suspension rods shall be one-half inch (1/2") diameter stainless steel rod, continuously threaded, and shall be securely attached to roof structure to achieve the spacings and elevations required as indicated on

the Drawings. The bottom elevation of all suspension rods shall be a minimum of seven feet eight inches (7'-8") above finished floor.

- 4.1.11 The manufacturer shall provide NEMA four-hole pads at corners for grounding the building to the substation ground grid. All electrical equipment, panels, and cable tray shall be bonded to these pads with a bare stranded 4/0 AWG copper conductor. This 4/0 AWG grounding conductor shall be routed as detailed on the Control House Plan.

4.2 Materials and Construction

- 4.2.1 The entire structure shall remain indoors, totally protected from weather, from fabrication through the complete preparation. All preparation shall be performed indoors, in a temperature and humidity-controlled environment.

4.2.2 Concrete Designed Building Specification

- a. Compressive strength shall be 4000 PSI at 28 days.
- b. Mix design shall be 95-98 lb./cu. ft. structural lightweight concrete using expanded shale or expanded clay aggregate. Mix shall be homogeneous. Seeding of aggregates for exposed aggregate finish is not allowed.
- c. Cement used in concrete shall be standard Portland Cement conforming to the requirements of the "Standard Specifications for Portland Cement" ASTM Designation C150.
- d. Concrete aggregates shall conform to "Specifications for Concrete Aggregates" ASTM Designation C33 or "Specifications for Lightweight Aggregates for Structural Concrete" ASTM Designation C330.
- e. Water shall be free from injurious quantities of oil, alkali, vegetable matter and salt. Non-potable water shall not be used in mixing concrete.
- f. Reinforcement bars shall be deformed steel bars conforming to the requirements of the "Specifications for Deformed and Plain Billet-Steel Bars for Concrete Reinforcement" ASTM Designation A615.
- g. Welded smooth wire fabric shall be steel wire fabric conforming to the requirements of the "Specifications for Welded Steel Wire Fabric for Concrete Reinforcement" ASTM Designation A185.
- h. Air-entraining admixtures shall conform to "Specifications for Air-entraining Admixtures for Concrete" ASTM Designation C260.
- i. Water reducing admixtures, retarding admixtures, accelerating admixtures, and water reducing and accelerating admixtures shall conform to "Specifications for Chemical Admixtures for Concrete" ASTM Designation C494.
- j. Fly ash or other pozzolans used as admixtures shall conform to "Specifications for Fly Ash and Raw or Calcined Natural Pozzolans for Use in Portland Cement Concrete" ASTM Designation C618.

- 4.2.3 Floor section shall be six (6) to eight (8) inches waffled structural precast concrete section. Ribs shall be a maximum of two feet (2'-0") o.c. transverse and four feet (4'-0") o.c. longitudinal. All surfaces shall be

smooth. Floor will be designed to support dead load of five equipment cabinets, mounted mid-floor, with a minimum footprint of 28" x 32" each, with a weight of 800 lbs. each.

- 4.2.4 The interior floor surface in the main equipment room shall be covered with 1/8" x 12" x 12" square vinyl floor covering, bonded with a waterproof contact adhesive. Floor to wall intersection shall be finished with 4" vinyl baseboard.

The interior floor surface in the battery room shall be bare concrete or 1/4" steel primed with high solids epoxy primer and finished with high solids polyurethane enamel with anti-skid additive. Floor-to-wall intersection shall be finished with 4" vinyl baseboard.

- 4.2.5 Wall section shall be four inches (4") solid concrete, cast in one piece to minimize joints, with an exterior exposed aggregate finish.

All joints shall be sealed with a compressible, resilient sealant. There shall be no exposed roof-to-wall or wall-to-floor joints.

- 4.2.6 Roof section shall be concrete with 1/4" per foot drainage slope in one direction. Roof section shall provide two inch (2"-0) overhang on all sides. The roof will be sloping 1/4" per foot in two (2) directions; it shall be a cap and fit over the walls, leaving no exposed roof to wall joint. Roof shall be designed to withstand external loading as prescribed by the applicable codes in Section 5.1.1.

- 4.2.7 Exterior surfaces of walls and roof shall be sealed with two (2) coats of Thoroglaize H Sealer, or acceptable equal, in strict conformance with manufacturer's instructions.

- 4.2.8 Wall and ceiling insulation and finish shall be foam board insulation covered with 3/4" thick board, surfaced with fiberglass reinforced plastic. Insulation value in the ceiling shall be R-19. Insulation value in the walls shall be R-13. Plastic joint or corner trim shall be installed at all panel joints.

- 4.2.9 Interior walls for partitioning of battery room area shall extend to full height of ceiling contour. Partition wall shall include necessary insulation to achieve a minimum thermal rating of R-13. Finish of both surfaces of partition wall shall be same as that specified for interior of main walls. Material for interior wall erection may be either wood or metal studs. Partitions shall be capable of supporting 450 lbs per linear feet (225 feet lbs. moment per linear feet, resulting from equipment mounting)

- 4.2.10 All utilities shall be UL listed and recognized devices. Wiring of all utilities shall be performed using THW, copper wire run in exposed EMT. All utilities shall be functionally tested prior to completion.

- 4.2.11 HVAC is required, calculations shall be submitted with approval drawings showing required sizing for ventilation, heating and/or air conditioning loads, indicating ambient intrusion and internal equipment heat losses used as design parameters.

- 4.2.12 Lifting lugs shall be located along building base frame exterior and shall be removable or cast in flush with outside surface of the wall. Structural calculations for lifting lug design shall be submitted with approval drawings.

- 4.2.13 Cutouts for cable tray entrance shall be covered with 12 gauge galvanized steel cover plates with rubber gaskets as located on drawings.
- 4.2.14 Should transportation restrictions require shipping splits, each open area shall be sealed with 2" thick wooden framing and plywood cover. Seams in plywood shall be liberally caulked at the exterior.
- 4.2.15 All permanent structural primary and secondary members shall consist of materials which do not support combustion. Use of wood or other materials which support combustion shall not be allowed.

4.2.16 Insulated Metal Swing Doors

- a. All exterior doors shall be Ballistic-rated Level 3 UL-752 made of cold rolled steel, A60 material. All exterior doors shall be three feet by eight feet by one and three-fourths inches (3' x 8' x 1 3/4") minimum 16 gauge galvanized steel, insulated, primed, painted brown and installed flush with door check, door stop, weather-stripping, mortise lockset, and stainless steel ball bearing hinges. All exterior doors, single- and double-leaf, shall swing outward with a minimum of 105 degrees.
- b. Door frames shall be 11 gauge (0.125 inch) galvanized steel and shall be equipped with an extruded aluminum doorstop having a continuous weather-strip insert which provides a positive weather seal.
- c. The threshold shall be extruded aluminum and shall provide a positive weather seal.
- d. Double-leaf doors shall be installed with the left-hand door equipped with interior head and foot latching bolts and accompanying zee astragal on door edge to affect this door leaf inactive under normal conditions.
- e. Each door shall be provided with a standard-duty hydraulic door closer with aluminum lacquer finish.
- f. Doors shall have stop to hold door open.
- g. Door locks shall be equipped with anti-pick coverplates.
- h. Door leaves and frames shall be bonderized galvanized steel and painted with one (1) coat of oven-dried rust-inhibitive primer.
- i. Door frames and leaves shall be factory finished with an enamel paint to match other exterior trim.
- j. Locks on all doors shall be keyed alike. The Commission will provide a master key. Lock brand to be "Lockwood" for use with Channel "L1 keyway". Twelve (12) keys will be supplied to the Commission.
- k. Each door shall have a door sensor indicating the door is in the closed position. The sensors shall be mounted and conduit shall be run back to the cable tray. Wiring shall be terminated in the Door Alarm Junction Box as indicated on Drawings.
- l. The double door shall have an awning. The awning shall have adequate width covering the door and light and extending minimum 3

feet from the wall. The awning can be made with aluminum, metal or fiberglass.

4.2.17 Climate Control and Ventilation

The Bidder shall furnish and install the following items for climate control of the building.

- a. Wall-mount HVAC heat pumps units shall be installed in accordance with the enclosed Drawings. The units shall be rated for use at 240-volts ac, with a minimal heating/cooling capacity required to maintain an internal temperature of 65 degrees F. in the summer and 78 degrees F. in the winter.
- b. Bidder shall state the EER rating, manufacturer, BTU/H for heating/cooling and model number of the unit to be furnished in the Bidder's Proposal.
- c. A direct-driven wall-mount exhaust fan shall be mounted in the battery rooms as indicated on the enclosed Drawings. The fan shall be rated for use at 120-volts ac, having a minimum air flow capacity of six hundred and fifty (650)-cubic feet per minute. The fan shall be furnished hydrogen sensor-controlled, complete with an automatic wall shutter for weather tight installation.
- d. One additional wall louver 24" x 24" shall be located as shown on the Drawings. The louvers shall be motor-operated, and electrically operated by the exhaust fan hydrogen sensor to open when the exhaust fan is running. Louver shall operate on 120 Volts AC. Louver shall have a rain proof outer enclosure.
- e. The Bidder will supply a floor-mounted 1500 watt, 120/240 volt ac strip heater for the battery room, complete with an external wall-mounted thermostat. Unit will be supplied with heavy-duty mounting frame and stainless steel protective grill over heater elements. Thermostat range shall include "On" at 55 degrees F and "Off" at 85 degrees F. The thermostat is to be mounted no closer than 36 inches from end of unit.
- f. The Bidder will supply a small wall mounted window Air Conditioning unit for the battery room on GFCI 120-volt plug.
- g. Safety equipment and accessories in each control house shall include one (1) battery safety kit, including a self-contained eye-wash station model Honeywell Fendall Pure Flow 1000 with proper signage identifying eyewash station. All equipment shall be mounted per the drawings.
- h. In the battery room a Window type HVAC unit shall be installed in accordance with the enclosed Drawings. This will be (1) nominal 18,000 Btu/hr window type air conditioner with heater. A fiberglass weather hood will be used to protect Window unit from elements. The units shall be rated for use at 240-volts ac, with a minimal heating/cooling capacity of 18,000 Btu/hr. cooling and 12,000 Btu heating capabilities.

5.0 Electrical Materials, Equipment, and Installations

- 5.1 All construction shall be performed in a workmanlike manner and shall conform to the substation Drawings. The installations shall comply with the applicable rules of the latest editions of the National Electrical Code, and Interim Amendments, the National Electrical Safety Code, and the Uniform Building Code. Defective materials and equipment or materials and equipment damaged in the course of installation or test shall be replaced or repaired in a manner meeting the approval of the Commission and Engineer. Described herein is one (1) Termination Cabinet as listed below complete terminal blocks for installation in a substation control house.
- 5.2 All equipment shall be properly and securely mounted and connected. Proper clearances shall be maintained. All bus and lead connections shall be electrically sound.
- 5.3 The Bidder will install all AC (AC Panel Nos. 1, 2 & 3) and DC (DC Panel Nos. 1 & 2) panelboards and all conduit runs to electrical devices, complete with appropriate wiring and cables. The Bidder shall terminate all conduits with appropriate bushings, weatherheads or elbows into equipment enclosures, and shall install wiring in the conduits as specified leaving enough slack cable inside for terminations. The Bidder will be responsible for termination and hook-up of all wiring internal to the control house, plus be responsible for any discrepancies encountered during check-out and station energization.
- 5.4 The manufacturer will provide NEMA 4-hole ground pads as shown at corners to connect the building to the ground grid. All electrical equipment, panels, and cable tray shall be bonded to these pads with at least a 2/0 AWG copper conductor.
- 5.5 Conduit
 - 5.5.1 The Bidder shall exercise necessary precautions to prevent the accumulation of any foreign materials in the conduits during execution of the work. Conduits in which water or other foreign materials have been permitted to accumulate shall be cleaned thoroughly or the conduit run replaced where such accumulation cannot be removed by methods approved by the Engineer.
 - 5.5.2 Surface mounted EMT conduit will be utilized for the wiring connections to all electrical devices provided by the Bidder.
 - 5.5.3 Two-inch (2") EMT conduits shall be installed from the top of all AC and DC panels to the cable tray above for future power cabling. The maximum number of two-inch (2") EMT conduits that will fit in the panels shall be installed.
 - 5.5.4 Four (4) two-inch (2") EMT conduits shall be installed through the battery room partition wall for wiring of the battery system.
- 5.6 Building Power Wiring and Control Cables

Building power wiring (furnished by the Bidder) and building control cables (furnished by the Bidder) for interconnection shall be sized and installed as shown on the Drawings as listed in the Appendices. Conductors and insulation shall conform to the Underwriters' Laboratories, Inc. Standards and the wiring systems shall in general be based on conductors with code grade insulation for wet locations. All conductors shall be marked in accordance with the National

Electrical Code, showing conductor size, insulation type, and voltage rating at prescribed intervals.

5.6.1 Building interior service and house wiring (furnished by the Bidder) for devices, lighting, and outlets shall be 600-volt, Type THW, copper, and shall be solid in sizes #12 AWG through #10, and shall be stranded in sizes #8 AWG and larger.

5.6.2 Installation and Termination

Bidder shall install all wiring where both ends of the wiring are terminated inside the building.

All control cables shall be clearly and permanently marked at each termination of the jacket in accordance with the cable numbers shown on the "Conduit and Cable Schedule" (see Appendices). Each conductor shall be clearly and permanently marked at each termination using Brady or equal pressure sensitive wire markers. Conductor markings shall be in accordance with the "Interconnection Diagrams" as indicated in the Appendices. The cable jacket shall remain on the cable to a point within one (1) foot of where the first conductor is to be terminated. At the termination of the jacket, the cable shall be securely sealed using plastic electrical tape.

All control wiring shall be continuous from terminal point to terminal point.

No splices will be permitted. Terminations shall be made using insulated ring tongue compression connectors, AMP PIDG. All control wiring shall be neatly dressed and tied using plastic ty-wraps, in each device. Terminations, wire markers, and ty-wraps shall be furnished by the Bidder.

5.6.3 Substation relay panel wiring (furnished by the Bidder) for connecting relay panels to ac and dc panels along with the termination cabinet shall be 4 conductor, #10 AWG, Color Table E-1, Anixter 2MR-1004-1 and 12 conductor, #10 AWG, Color Table E-2, Anixter 2MR-1012 or equal.

5.6.4 Substation relay panel communication cables (provided by Owner) shall be labeled and installed by Bidder.

5.7 Lighting

Lighting for the control building shall include the furnishing and installation of three (3) systems: (1) a primary 120/240-volt ac system of primary LED lights; (2) an emergency system of self-contained, battery-operated spot flood/exit sign fixture(s); and (3) exterior floods with motion detection operation.

5.7.1 Primary lighting shall be installed as per the Drawings using LED fixture 120 volt.

5.7.2 Emergency lighting shall utilize Energi-Lite Catalog Number 12LSM110-2, fixtures with steel guard with two (2) 9-watt, 12-volt DC high-intensity tungsten bulbs.

- 5.7.3 Lighting for battery room shall be 120 Vac LED, 100-watt equivalent with vapor proof globe.
- 5.7.4 Emergency light and exit sign (single-sided) over all (both) doors. Unit to be 120 Vac input with charger and battery for emergency operation.
- 5.7.5 Exterior lighting shall consist of three (3) 300-watt equivalent LED floods with motion detector as shown on the drawings. All exterior floods shall utilize one switch for all on/off and normal motion operation.

5.8 Electrical Distribution Panels and Wiring

The Bidder shall provide and install two (2) complete wiring systems for all facilities associated with the building structure: (1) the primary system will operate at 120/240 volts AC, single-phase, and (2) the emergency systems will operate at 48 VDC.

- 5.8.1 The primary wiring system will include circuits to all 120/240-volt ac devices and shall include interior distribution panels as the origin for all circuits. The Bidder shall mount the distribution panels and all outgoing branch circuits terminated within the building as indicated on the Drawings.
- 5.8.2 The ac distribution panels (AC Panel No. 1, No. 2 and No. 3) shall be single-phase, three-wire, 120/240 volts, provided with main breaker and frame and the number of poles and single and double pole bolt-in branch circuit breakers indicated on the Drawings. Branch circuit breakers shall be sized and positioned in the panel as indicated on the Drawings. Breakers shall be quick-make and quick-break with position handle indicator on automatic trip and arc quench and shall conform to the requirements of Federal Specifications W-C-375A; cabinet shall be constructed of zinc-coated sheet steel and shall conform to the Underwriters' Laboratories, Inc., Standard for Cabinets and Boxes. A directory holder with clear plastic cover and metal frame shall be mounted on the inside of the doors. Panelboard shall be rated at 22,000-amperes interrupting capacity and shall be **Cutler-Hammer Type Pow-R-Line 1, with Type FDC main breaker and Type QBHW branch circuit breakers**. All outside receptacle circuits shall be equipped with ground fault interrupter (GFI) type breakers. The Bidder shall be responsible for the complete installation of the distribution panel including grounding to the system ground bus. The ac power panels shall be installed in a completely enclosed, wall-mounted sheet steel cabinet with necessary interconnecting bus and conduit. All fastenings between structural members shall be bolted, not welded. Knockouts shall be provided in the top and bottom for incoming services and branch circuits.

After fabrication, enclosure shall be rust-proofed and finished with baked-on enamel, light gray in color, ANSI 61.
- 5.8.3 The Bidder will be responsible for the installation of the DC power panel mounted inside the control house (DC Panel No. 1 and No. 2).
- 5.8.4 DC Panel No. 1 and No. 2 are required for installation in the control house to provide protection for the various DC circuits to the equipment. The DC power panel shall be rated 250 volts DC, with a main breaker and frame and shall be provided with the number of double-pole, bolt-in branch circuit

breakers indicated on the Drawings. Branch circuit breakers shall be sized and positioned in the panel as indicated on the Drawings.

Circuit breakers shall conform to Federal Specifications W-C-375a.

The enclosure shall be constructed of Code-gauge galvanized steel with knockouts conforming to the requirements of the Underwriters' Laboratories, Inc., Standard for Cabinets and Boxes.

Trim and door shall have suitable primer coat and a finish coat of light gray color, ANSI 61. Panelboard cabinet shall be provided with not less than four-inch wiring gutters at the sides, top and bottom. Trim shall be fitted with hinged door having combination lock and latch. A directory holder with clear plastic or glass plate and metal frame shall be mounted on the inside of each door. A neatly typed directory properly identifying each circuit shall be mounted in the frame.

The panelboard shall be rated 250 Vdc at 10,000-amperes interrupting capacity and shall be **Cutler-Hammer Type Pow-R-Line 3a with Type FDB main breaker and Type EHD branch circuit breakers or equivalent.**

5.8.5 All interior wiring shall be installed in electrical metallic tubing (EMT) as specified on the Drawings or installed in cable tray and shall utilize exposed surface-mounted construction, including conduit, receptacle boxes, junction boxes, and lighting fixtures. Conduit runs shall not be allowed behind walls or under the floor.

5.8.6 All disconnects and transfer switches shall be provided and installed by the Bidder. All conduit and wire shall also be provided and installed by the Bidder.

5.9 Transfer Switches

5.9.1 The Bidder shall furnish one manual transfer, and one automatic switch rated for indoor use, both 240 Vac, 200 A.

5.9.2 The Bidder shall furnish a DC transfer switch rated 125 Vdc; 200 A.

5.10 Battery System

The Bidder shall procure and install the battery charger and battery rack. The batteries themselves will be purchased by Others.

Battery Rack (Only) two step two tier Enersys SL2115

Battery Charger (Only) The Bidder shall also be responsible for furnishing one (1) battery charger. This consists of a Hindle 48V 40A charger (P/N: AT048040F240SXSGXXXXAPS) with optional DNP/Modbus communication board (P/N: EJ5037-03)

5.11 Cable Tray System

A cable tray system shall be installed by the Bidder for the control house. The cable tray shall be twenty-four inches (24") wide and four-inches (4") high, with a

four-inch (3.5") minimum loading depth and shall be of the ladder type construction, manufactured of extruded structural grade aluminum. Tray shall conform to NEMA 12C Classification, (maximum of eight feet (8') support span length and 100 pounds per foot maximum loading). Ladder type construction shall utilize nine-inch (9") rung spacing. Bends shall use twelve-inch (12") radius vertical and twelve-inch (12") radius horizontal ninety degree (90°) bends. The cable tray system shall be as manufactured by Chalfant, System 2A or approved equal. Bidder to provide twelve (12) snap-on ladder rung dropouts, Chalfant Model 9AW198, or approved equal for 24" wide tray. Drop-outs to be used where needed to facilitate cable entry/exits.

- 6.11.1 The owner will drop ship the battery chargers, relay panels and termination cabinet to Bidder. These panels are to be fully installed and wired by the Bidder.

6.0 Permits and Clean-up

6.1 Permits, Fees, Etc.

The Bidder shall be responsible for obtaining and paying for all permits, licenses, certificates, inspections, etc., required, both permanent and temporary.

6.2 Cleaning Up

The Bidder shall be individually responsible for cleaning smears, labels, spots, and discoloration from each piece of equipment. All building materials shall be left clean and in new condition.

7.0 Site Work

Since the control building will be installed onto an existing pad, there will be very minimal site to no preparation required for delivery.

8.0 Warranties

The Bidder shall furnish written warranties on the concrete building itself, including color finishes and individual manufacturer's warranties on each piece of heating, lighting, electrical, or plumbing equipment furnished and installed.

9.0 Bidder/Commission Responsibilities

The following is a summary of materials and work tasks pertaining to this building, itemized by the party who is solely responsible for the completion of each item (i.e., the Bidder or the other party).

9.1 Bidder Responsibilities

The Bidder shall furnish material for and completely install the following items in accordance with the Specifications:

- a. Two (2) complete concrete buildings of stated size and dimension including: structural framing, wind bracing (if necessary), exterior wall and roof panels, insulation with moisture barriers, insulated metal doors, and all necessary fasteners, trim, glazing, flashing, sealants, paints, hardware, and electrical panels.
- b. Wall-mounted HVAC units.

- c. Interior walls and partitions.
- d. All necessary permits, fees, inspections, etc., for proper construction.
- e. Clean-up and touch-up of any discolored or damaged material.
- f. Building manufacturing Drawings and equipment bill of material.
- g. Battery room, exhaust fan, louvered vent and hydrogen sensor for battery rooms.
- h. Electrical wiring for outlets, switches, door switches, ventilation, HVAC unit, light fixtures, AC and DC panelboards, wiring bus duct, all manual transfer switches, relay panels, termination cabinet and battery charger.
- i. Cable tray systems.
- j. One (1) metal desk and two (2) metal chairs.

9.2 Other Party Responsibilities

Other parties shall be responsible for furnishing materials and/or the complete installation of the following work tasks (in accordance with the Specifications):

- a. Site preparation.
- b. Grounding of building steel to the ground grid. The building manufacturer will provide NEMA four-hole pads at the corners as shown for this purpose.
- c. Pulling all control cables from the yard equipment into the building and terminating the control cable wiring on the other side of the termination cabinet.
- d. Batteries and protective relaying panels as shown on Control House Plans.
- e. Master key for "US Lock" brand locks. US LOCK MORTISE CYLINDER 1" ADAMS RITE CAM. PWC will provide a key for setting tumblers in the cylinder to match PWC standard US Lock key.

10.0 Prefabricated Relay Control House Drawings

The work shall conform to the following Drawings, all of which form a part of these Specifications. The Contractor is responsible for contacting the Owner - PWC if any drawings not indicated to be furnished at a later date are missing from their bid package. If the Bidder does not contact the PWC regarding any drawings, their bid will be considered based on all Drawings and Specifications, as issued for bids.

RELAY CONTROL HOUSE REFERENCE DRAWINGS

| Sheet No. | Title |
|-----------|--|
| CH1 of 2 | Control House Plan & Sections |
| CH2 of 2 | Control House Details |
| E14 | Termination Cabinet |
| E20 | AC-1, AC-2 Panels, Interconnection Diagram |
| E21 | DC Breaker Panel, Interconnection Diagram |

ATTACHMENT B: BID PRICING FORM

Bidder Information:

Name of Company

Address

Phone Number

Email Address

NAICS

**Is the company an N.C.
Certified HUB or DBE
Printed Name**

Title

Signature

Date

Bidders shall submit bids only on the Bid Pricing Forms provided herein, or exact copies thereof. Each bidder must sign the Bid Pricing Form and provide the manufacturer's name, lead time, and item number for each line item. Failure to provide a full and complete Bid Pricing Form, including the required signature, manufacturer's name, lead time, and item number, will result in the bid being deemed non-responsive, as PWC will not have the necessary information to properly evaluate the bids.

Company Name:: _____

| Item # | QTY. | UOM | DESCRIPTION | UNIT PRICE | EXTENDED PRICE |
|--------|------|-------|--|------------|----------------|
| 1 | 2 | E.A. | Two Prefabricated Concrete Relay Control Houses Manufacturer: _____ Part Number: _____ | \$ | |
| 2 | 1 | E. A. | North Carolina Sales Tax | | |

TOTAL BID PRICE: \$ _____

ATTACHMENT C: CERTIFICATION OF PRIMARY PARTICIPANT REGARDING DEBARMENT, SUSPENSION AND OTHER RESPONSIBILITY MATTERS

The Primary Participant, _____ (major third party contractor), certifies to the best of its knowledge and belief, that it and its principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
2. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (2) of this certification; and
4. Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

(If the primary participant is unable to certify to any of the statements in this certification, the participant shall attach an explanation to this certification.)

THE PRIMARY PARTICIPANT _____ CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION AND UNDERSTANDS THAT THE PROVISIONS OF 31 U.S.C. SECTIONS 3801 ET. SEQ. ARE APPLICABLE THERETO.

Signature

Title

Printed Name

Date

PWC At a Glance



Customers



- In operation since 1905 (117 years)
- Provide Electric, Water and Wastewater Services
- Total Customers: 119,788
- Number of Services: 284,395
 - Electric: 82,376
 - Water: 90,548
 - Wastewater: 90,226
- Customers with 2+ services: 75%
- Annual Customer Turnover: 20-25%

Customer Service



- Annual Customer Contacts: 444,622
- Average Monthly Calls: 30,468
- Annual Bills Generated: 1.4 Million
- Customer Incentive Programs: 13
- Annual Water Leak Notifications: 22,476 (19.4 million gal)

Employees



- Number of Employees: 622
- Average Tenure of Employees: 10.33 years
- Average Age: 44.77
- Annual Turnover: 9.6%*
- Annual Hours Worked: 1.3 Million

*non retirement

Facilities



- Butler-Warner Generation Plant (268 MW)
- PO Hoffer Water Treatment Facility (39.5 MGD)
- Glenville Lake Water Treatment Facility (18.0 MGD)
- Cross Creek Water Reclamation Facility (25 MGD)
- Rockfish Creek Water Reclamation Facility (21 MGD)
- Electric Service Area: 147 Sq. Miles
- Water Service Area: 115 Sq. Miles
- Wastewater Service Area: 108 Sq. Miles

Electric Operations



- Purchase Wholesale Power from Duke Energy
- Only NC municipal system to own/operate a generation plant (Dispatched for use by Duke Energy)
- Generation Capacity: 268 MW
- Annual MWH Sold: 1.9 Million
- System Peak: 499 MW (Feb. 9, 2015)
- Reliability Rate: 99.97%
- Electric Distribution Substations: 32
- Distribution Lines: 1,351 miles
- Transmission Lines: 123 miles
- Streetlights/Area Lights: 37,580

Water/Wastewater Operations



- Population Served: 225,000
- Drinking Water Treated: 10.6 Billion Gallons/Year
- 100% Compliant for all EPA Drinking Water Standards
- Daily Water Treatment Capacity: 57.5 MG/Day
- Daily Wastewater Treatment Capacity: 46 MG/Day
- Water/Wastewater Infrastructure: 2,772 miles
- Hydrants: 8,423
- Sanitary Sewer Lift Stations: 78
- Manholes: 32,855

Financial



- Annual Operating Budget: \$397.5 Million
- Total Assets: \$1.5 Billion
- Bond Rating: Aa2 (Moody's), AA (Standard & Poor) AA (Fitch)
- Annual Local Purchases: \$9.4 Million
- Operations & Maintenance Expenses per Customer: \$505 (\$557 National Median)
- Annual Cash Contributions to City of Fayetteville in Lieu of Taxes: \$12.4 Million
- Annual Streetlight Services: \$3.9 Million
- Annual Annexation Construction Costs: \$5.9 Million
- Total Annual Contributions to City of Fayetteville: \$24.1 Million

ATTACHMENT E

SALE OF GOODS AGREEMENT

This Sale of Goods Agreement ("Agreement") is made by and between the City of Fayetteville (the "City"), by and through the Fayetteville Public Works Commission ("PWC"), a North Carolina public authority, and [insert seller's full legal name] ("Seller"), a [identify the legal entity and State in which formation was accomplished] (each of PWC and Seller is a "Party" and both are collectively the "Parties") as of the date of execution last written below (the "Effective Date"). In consideration of the mutual covenants and agreements contained herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, The Parties agree as follows:

1. Sale of Goods. Seller shall sell to PWC and PWC shall purchase from Seller the following [Identify the goods specifically] (the "Goods"). PWC may issue a purchase order for the Goods that specifies any additional applicable terms and conditions set forth for the purchase (a "Purchase Order"), but such Purchase Order is subject to the terms of this Agreement. In the event of a conflict between the provisions of this Agreement and the provisions of any Contract Documents, attachment, exhibit or Purchase Order made pursuant to this Agreement, the terms of this Agreement shall govern.

2. Contract Documents. "Contract Documents" means, collectively, the following documents that were either made available to Seller by PWC during the bid solicitation process (including Drawings) or executed by the Parties, or both, which are all incorporated by reference herein:

- a. This Agreement
- b. Notice to Prospective Bidders
- c. Definitions
- d. Instructions to Bidders
- e. General Conditions
- f. Materialman's Proposal
- g. Bid Bond
- h. Technical Specifications
- i. Purchase Order(s)
- j. Addenda

3. Delivery of Goods. Seller shall deliver the Goods [EITHER: "on or before _____" OR "as specified in the Contract Documents or an applicable Purchase Order issued by PWC" OR "as otherwise agreed in writing by the Parties"] (the "Delivery Date"). Timely delivery of the Goods is of the essence. If Seller fails to deliver the Goods on or before the Delivery Date, PWC may, without any liability to Seller, terminate this Agreement immediately by providing written notice to Seller. Unless otherwise specified in an applicable Purchase Order or the Contract Documents, excluding this Agreement, all Goods shall be delivered to PWC's Warehouse at 955 Old Wilmington Road, Fayetteville, North Carolina 28301 (the "Delivery Point") during PWC's normal business hours. Delivery shall be made FOB Delivery Point.

4. Title and Risk of Loss. Title of the Goods passes to PWC upon delivery of the Goods to the Delivery Point. Seller bears all risk of loss or damage to the Goods until delivery of the Goods to the Delivery Point.

5. Packaging. Seller shall properly pack, mark, and ship the Goods as instructed by PWC and otherwise in accordance with applicable law and industry standards and shall provide PWC with all shipment documentation showing the quantity of pieces in shipment, the number of cartons or containers in shipment, Seller's name, the airway bill or bill of lading number, and the state of origin.

6. Inspection and Rejection of Nonconforming Goods. PWC has the right to inspect the Goods on or after the Delivery Date. PWC, at its sole option, may inspect all or a sample of the Goods, and may reject all or any portion of the Goods if it determines the Goods are nonconforming or defective. If PWC rejects any portion of the Goods, PWC has the right, effective upon written notice to Seller, to: (a) terminate this Agreement in its entirety and require Seller to remove the Goods in a commercially reasonable time period or pay the full cost and expense to have the rejected Goods returned to Seller; or (b) reject the Goods and require replacement of the rejected Goods at Seller's sole expense. If PWC requires replacement of the Goods, Seller shall, at its sole expense and in the lesser of ninety (90) days or the number of days between any applicable Purchase Order of PWC and the Delivery Date, replace the nonconforming Goods and pay for all related expenses, including, but not limited to, transportation charges for the return of the defective goods and the delivery of replacement Goods. Any inspection or other action by PWC under this Section shall not reduce or otherwise affect Seller's obligations under this Agreement, including Seller's warranties, and PWC shall have the right to conduct further inspections after Seller has carried out its remedial actions.

7. Price. PWC shall purchase the Goods from Seller in the total amount of \$_____ ("Price"). The Price includes all packaging, transportation costs to the Delivery Location, insurance, fees, and applicable taxes, including, but not limited to, all sales, use, or excise taxes. No increase in the Price is effective, whether due to increased material, labor, transportation costs or otherwise, without the prior written consent of PWC.

8. Billing and Payment. Seller shall invoice PWC within thirty (30) days after the completion of the delivery of the Goods. PWC shall pay the undisputed portion of the invoice within forty-five (45) calendar days after PWC's receipt of the invoice. All payments from PWC to Seller shall be transferred electronically to Seller's designated financial institution, and Seller shall, prior to delivery of its invoice to PWC, supply the name of Seller's financial institution, routing number, and account number on the form available from PWC and provide to PWC a completed and signed IRS Form W-9. Seller has the right to impose a late payment charge of one percent (1%) per month for amounts unpaid by PWC by the date due.

Provider shall comply with all of the following requirements so that PWC may recover the full amount of sales and use tax under North Carolina law permitted under the law:

- a. Furnish PWC documentary evidence showing the material used, sales tax paid, and County paid (County of sale). The documentary evidence shall include Provider's certified statement showing total purchases of materials from each separate vendor and total sales taxes charged to PWC and paid by Provider. The documentary evidence shall also include Provider's certified statement as to the amount paid by PWC for sales tax on the Goods. A certified form is required even if no sales tax was paid for the pay request period. Materials used from Provider's warehouse stock shall be shown in a

- certified statement at warehouse stock prices and amount of County of Use Tax charged to PWC and paid by Provider;
- b. Provider shall furnish to PWC invoices or copies of invoices for all materials purchased for said work within pay request period, and such invoices shall state the amount of North Carolina Sales Tax, if any, paid for the Goods. Provider shall also furnish to PWC invoices identifying the amount paid for the sales and use tax on Services that are subject to such taxation under North Carolina law; and
 - c. Provider shall not include any tax paid on supplies, tools, and equipment that Provider uses to perform its obligations under this Agreement.

9. Warranties. Seller warrants to PWC that for a period of twenty-four (24) months from the Delivery Date, all Goods will: (a) be free from any defects in workmanship, material and design; (b) conform to applicable specifications, drawings, designs, samples and other requirements set forth in the Contract Documents or as specified by PWC and agreed to by Seller; (c) be fit for their intended purpose and operate as intended; (d) be free and clear of all liens, security interests, or other encumbrances; and (e) not infringe or misappropriate any third party's patent or other intellectual property rights. These warranties survive any delivery, inspection, acceptance or payment of or for the Goods by PWC. These warranties are cumulative and in addition to any other warranty provided by law or equity. Any applicable statute of limitations runs from the date of PWC's discovery of the noncompliance of the Goods with the foregoing warranties. If PWC gives Seller notice of noncompliance with this Section 9, Seller shall, at its own cost and expense, within thirty (30) days replace or repair the defective or nonconforming Goods and pay for all related expenses, including, but not limited to, transportation charges for the return of the defective or nonconforming goods to Seller and the delivery of repaired or replacement Goods to PWC.

10. Termination. Notwithstanding any other or additional remedies that may be provided under this Agreement, PWC may terminate this Agreement with immediate effect upon written notice to the Seller, either before or after the acceptance of the Goods, if: (a) Seller repudiates, or threatens to repudiate, any of its obligations under this Agreement; (b) Seller is in breach of, or threatens to breach, any representation, warranty, or covenant of Seller under this Agreement and either the breach cannot be cured or, if the breach can be cured, it is not cured by Seller within a commercially reasonable period of time under the circumstances, in no case exceeding seven (7) days following Seller's receipt of Notice of such breach; (c) Seller fails to, or threatens to fail to, timely deliver Goods conforming to the requirements of, and otherwise in accordance with, the terms and conditions of this Agreement; or (d) Seller becomes insolvent, files a petition for bankruptcy, or commences or has commenced against it proceedings relating to bankruptcy, receivership, reorganization, or assignment for the benefit of creditors. PWC shall be obligated to pay Seller only for work performed and reasonable expenses incurred until delivery of the notice of termination.

11. Insurance. During the term of this Agreement and for a period of three (3) years after the date of this Agreement, Seller shall, at its own expense, maintain and carry insurance in full force and effect that includes, but is not limited to, commercial general liability (including product liability) with limits no less than \$1,000,000 for each occurrence and \$3,000,000 in the aggregate and umbrella liability in a sum no less than \$5,000,000, which insurance shall be placed with insurance companies authorized to do business in the State of North Carolina and rated A minus VII or better by the current edition of Best's Key Rating Guide or otherwise approved in writing by PWC. Prior to delivering any Goods, Seller shall deliver to PWC

certificates of insurance confirming each such coverage, and Seller shall direct its insurers to provide annually to PWC certificates confirming each such coverage during the coverage period. PWC shall be named as an additional insured in the insurance policy. Seller shall not reduce or allow the required insurance coverages to lapse without PWC's prior written approval. All policies for insurance must be endorsed to contain a provision giving PWC a thirty (30) calendar day prior written notice by certified mail of any cancellation of that policy or material reduction in coverage. Should a notice of cancellation be issued for non-payment of premiums or any part thereof, or should Seller fail to provide and maintain certificates as set forth herein, PWC shall have the right, but not the obligation, to pay such premium to the insurance company or to obtain such coverage and to deduct such payment from any sums that may be due or become due to Seller, or to seek reimbursement for said payments from Seller. Any such sums paid by PWC shall be due and payable immediately by Seller upon notice from PWC. The insurance provisions of this Agreement shall not be construed as a limitation on Seller's responsibilities and liabilities pursuant to the terms and conditions of this Agreement.

12. Indemnification. Seller shall indemnify, defend, and hold harmless PWC and its Commissioners, officers, employees, agents, and representatives (collectively, "Indemnitees") from and against all claims, actions, liabilities, damages, losses, costs, and expenses (including, without limitation, injury to or death of any persons and damage to property, economic and consequential damages and attorneys' fees) asserted by one or more third parties against one or more of the Indemnitees arising out of negligent or willful acts, violations of law, infringement of any patent, trademark, trade secret, copyright, or other intellectual property right of a third party, or omissions or breach of the obligations set forth in this Agreement by Seller or any of its employees, agents, representatives, and subcontractors. Seller's obligation to indemnify, defend, and hold harmless the Indemnitees shall survive the termination of this Agreement and shall include the duty to pay for the reasonable attorney's fees and costs associated with defending the Indemnitee(s) by the legal counsel of each Indemnitee's choice.

13. Notices. Any notice which either Party is required or desires to give the other shall be deemed sufficiently given if, in writing, it is delivered personally, or sent by certified U.S. mail, return-receipt requested, postage prepaid, to the addresses listed hereinbelow, or such other address as either Party shall give to the other Party by written notice in accordance herewith. Any notice given herein by personal delivery shall be deemed delivered when received. Any properly addressed notice given herein by certified mail shall be deemed delivered on the third Business Day after the same is deposited in an official United States Post Office, postage prepaid, or if sooner upon the date when the return receipt therefor is signed, or refusal to accept the mailing by the addressee is noted thereon by the postal authorities.

To PWC:
Fayetteville Public Works Commission
Attn: Timothy Bryant, CEO/General Manager
PO Box 1089
Fayetteville, NC 28302

To Seller:
[INSERT MAILING ADDRESS]

14. Compliance. Seller hereby acknowledges that "E-Verify" is the federal E-Verify program operated by the US Department of Homeland Security and other federal agencies which is used to verify the work authorization of newly hired employees pursuant to federal law

and in accordance with Article 2, Chapter 64 of the North Carolina General Statutes. Seller further acknowledges that all employers, as defined by Article 2, Chapter 64 of the North Carolina General Statutes, must use E-Verify and after hiring an employee to work in the United States, shall verify the work authorization of the employee through E-Verify in accordance with NCGS §64-26(a). Seller hereby pledges, attests, and warrants through execution of this Agreement that Seller complies with the requirements of Article 2, Chapter 64 of the North Carolina General Statutes and further pledges, attests, and warrants that all subcontractors currently employed by or subsequently hired by Seller to provide services for PWC shall comply with all E-Verify requirements. Failure to comply with the above requirements shall be considered a breach of this Agreement. Seller hereby further acknowledges that the execution and delivery of this Agreement constitutes Seller's certification to PWC and to the North Carolina State Treasurer that, as of the Effective Date, Seller is not listed on (a) the Final Divestment List created and maintained by the North Carolina Department of State Treasurer pursuant to the Iran Divestment Act of 2015, Chapter 147, Article 6E of the General Statutes of North Carolina (the "Iran Divestment Act"); or (b) the list of companies that the North Carolina State Treasurer determines to be engaged in a boycott of Israel in accordance with Article 6G of Chapter 147 of the General Statutes of North Carolina. Seller represents and warrants to Commission that Seller, and all persons and entities owning (directly or indirectly) an ownership interest in it: (i) are not, and will not become, a person or entity with whom a party is restricted from doing business with under regulations of the Office of Foreign Asset Control ("OFAC") of the Department of the Treasury (including, but not limited to, those named on OFAC's Specially Designated and Blocked Persons list) or under any statute, executive order (including, but not limited to, the September 24, 2001, Executive Order 13224 Blocking Property and Prohibiting Transactions with Persons Who Commit, Threaten to Commit, or Support Terrorism), or other governmental action; and (ii) are not knowingly engaged in, and will not knowingly engage in, any dealings or transactions or be otherwise associated with such persons or entities described in clause (i) above. Seller also shall at all times during the term of this Agreement comply with Executive Order 11246, including but not limited to the Equal Opportunity Clause requirements set forth in 41 C.F.R. § 60-1.4. Seller shall abide by the requirements of 41 CFR 60-300.5(a) and 60-741.5(a) prohibiting discrimination against qualified individuals on the basis of protected veteran status or disability and requiring affirmative action by covered prime contractors and subcontractors to employ and advance in employment qualified protected veterans and individuals with disabilities.

15. Cumulative Remedies. All rights and remedies provided in this Agreement are cumulative and not exclusive, and the exercise by either Party of any right or remedy does not preclude the exercise of any other rights or remedies that may now or subsequently be available at law or in equity.

16. Miscellaneous Provisions. Seller is and shall remain an independent contractor. Nothing contained in this Agreement shall be deemed or construed to create the relationship of principal and agent or of partnership or of joint venture or of any association whatsoever between the Parties. No breach or non-performance of any term of this Agreement shall be deemed to be waived by either Party unless said breach or non-performance is waived in writing and signed by the Parties. No waiver of any breach or non-performance under this Agreement shall be deemed to constitute a waiver of any subsequent breach or non-performance, and for any such breach or non-performance each Party shall be entitled to such remedies as provided by law. No consent or waiver by a Party shall be effective unless it is in writing and then only to the extent specifically stated. The invalidity, illegality, or un-enforceability of any portion or provision of this Agreement shall in no way affect the validity, legality, and/or enforceability of

any other portion or provision of this Agreement. Any invalid, illegal, or unenforceable provision of this Agreement shall be deemed severed from this Agreement, and the balance of the Agreement shall be construed and enforced the same as if the Agreement had not contained any portion or provision which was invalid, illegal, or unenforceable; provided, however, severability shall not prevent this entire Agreement from being void in the event any portion or provision of this Agreement that is of the essence of this Agreement shall be void. This is the entire agreement of the Parties on the subject matter hereof, and all prior negotiations, representations, proposals, letters, agreements, understandings, or other communications between the Parties, whether written or oral, are hereby merged into the Agreement and superseded by this Agreement. This Agreement shall not be modified unless such modifications are evidenced in writing, signed by both Parties. Nothing herein shall be construed to give any right or benefits hereunder to anyone other than the Parties. This Agreement shall be governed by the laws of the State of North Carolina without the application of the laws of any other state. The exclusive venue for all mediations and litigation and any other legal proceedings regarding this Agreement shall be the State and Federal Courts serving Cumberland County, North Carolina, and Seller consents to personal jurisdiction in such courts. Seller irrevocably waives, to the fullest extent permitted by law, any objection that it may now or hereafter have to the laying of the venue of any such suit, action or proceeding in any such court serving Cumberland County or that any such suit, action or proceeding brought in any such court serving Cumberland County has been brought in an inconvenient forum. This Agreement may be executed in counterparts with the same effect as if the signatures to each counterpart were upon a single instrument, and all such counterparts together shall be deemed an original of this Agreement. For purposes of this Agreement, a facsimile copy or scanned copy or photocopy of a party's signature shall be sufficient to bind such party. This Agreement shall be subject to execution by electronic means in accordance with Article 40 of Chapter 66 of the North Carolina General Statutes. The titles of the paragraphs throughout this Agreement are for convenience only and the words contained therein shall in no way be held to explain, modify, amplify, or aid in the interpretation, construction, or meaning of the provisions of this instrument.

17. Assignment. Seller shall not assign, transfer, or convey any part of the Agreement, including rights or obligations, to a third party without obtaining the prior written approval of PWC in its discretion. The prohibition on assignment includes an assignment of payments that may become due under the Agreement. Any unauthorized assignment shall be deemed to be a material breach of this Agreement. An approved assignment shall not relieve Seller of its responsibilities under the terms hereof unless explicitly stated in writing by PWC.

18. Conflicts. Except with PWC's knowledge and prior written consent, Seller shall not engage in any activity or accept any employment, interest or contribution that would reasonably appear to compromise Seller's professional judgment with respect to the Goods. Seller shall disclose to PWC any business or personal relationship with any Commissioner, officer, director, manager, or supervisor of PWC.

IN WITNESS WHEREOF, the Parties have executed this Agreement by their duly authorized representatives as of the Effective Date.

Fayetteville Public Works Commission

[INSERT SELLER'S FULL LEGAL NAME]

By: _____
Timothy Bryant, CEO/General Manager

By: _____
_____, _____

(Printed Name)

(Title)

Date: _____

Date: _____

This instrument has been preaudited in the manner required by the Local Government Budget and Fiscal Control Act (N.C. Gen. Stat. § 159-1 et seq.).

By: _____
Rhonda Haskins, Chief Financial Officer

Approved as to form:

Legal Dept.

SAMPLE

ATTACHMENT F

FAYETTEVILLE PUBLIC WORKS COMMISSION'S MWDBE COMPLIANCE PROVISIONS

APPLICATION:

The requirements of Fayetteville Public Works Commission (PWC) Minority, Women, and Disadvantaged Business Enterprise (MWDBE) Program for participation specific contracts are hereby made part of the Contract Documents. Copies of the Program may be obtained from:

Fayetteville Public Works Commission
Economic Inclusion Programs
P.O. Box 1089
Fayetteville, North Carolina 28302
Phone (910) 223-4016 Fax (910) 483-1429
E-mail: EIProgram@faypwc.com

NCDOT DBE Directory: www.ebs.nc.gov/VendorDirectory

HUB Directory: <https://ncadmin.nc.gov/businesses/hub>

MWDBE Compliance Requirements:

1. The Bidder shall provide, with their Bid Form, at the time bids are due, the documents set forth below, properly executed. Returning executed copies indicates and establishes that the Bidder understands and agrees to any incorporated MWDBE contract provisions.
2. All Bidders must provide with their Bid Form, at the time bids are due, a properly completed and executed copy of **either:**
 - Affidavit A – Listing of Good-Faith Efforts **OR**
 - *Affidavit B – Intent to Self-Perform with Own Workforce.

*Affidavit B should **only** be used if the Contractor will perform **ALL Elements** of the Work on this project with their own forces **AND** will complete **ALL Elements** of this project **WITHOUT** the use of subcontractors, material suppliers, or providers of professional services.
3. Upon being identified as the apparent lowest responsive, responsible Bidder, a Bidder shall, within twenty-four (24) hours of PWC's notification provide a properly completed and executed copy of **either:**
 - Affidavit C – Percentage of MWDBE Participation **OR**
 - Affidavit D – Good-Faith Efforts.
4. All Bidders must provide with their Bid Form, at the time bids are due, a properly completed and executed copy of Affidavit E- Identification of MWDBE/Local Participation Form

All written statements, certifications, or intentions made by the Bidder shall become a part of the agreement between the Contractor and Fayetteville Public Works Commission for performance of this contract.

SUBCONTRACTOR PAYMENT REQUIREMENTS:

North Carolina General Statutes 143-134.1 (N.C.G.S.) states that the percentage of retainage on payments made by the prime contractor to the subcontractor shall not exceed the percentage of retainage on payments made by the Fayetteville Public Works Commission to the prime contractor. Failure to comply with this provision shall be considered a breach of the contract, and the contract may be terminated in accordance with the termination provisions of the contract.

The Contractor shall provide an itemized statement of payments to each MWDBE subcontractor before final payment is processed.

The Contractor shall provide an itemized statement of payments to each NON-MWDBE subcontractor before final payment is processed.

Contractor

Signature

Printed Name

Title

Date

Affidavit A: Listing of the Good Faith Efforts

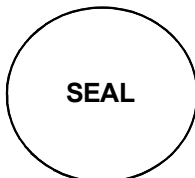
Affidavit of _____
(Name of Bidder)

I have made a good faith effort to comply under the following areas checked:

| Points | | |
|--|----|--|
| Total Available GFE Points: 155 | | Minimum Number GFE Points <i>Required</i>: 50 |
| | 10 | Contacting minority businesses that reasonably could have been expected to submit a quote and that were known to the contractor or available on State or local government-maintained lists at least 10 days before the bid or proposal date and notifying them of the nature and scope of the work to be performed. |
| | 10 | Making the construction plans, specifications and requirements available for review by prospective minority businesses or providing these documents to them at least 10 days before the bid or proposals are due. |
| | 15 | Breaking down or combining elements of work into economically feasible units to facilitate minority participation. |
| | 10 | Working with minority trade, community, or contractor organizations identified by the Office for Historically Underutilized Businesses and included in the bid documents that provide assistance in recruitment of minority businesses. |
| | 10 | Attending any pre-bid meetings scheduled by the public owner. |
| | 20 | Providing assistance in getting required bonding or insurance or providing alternatives to bonding or insurance for subcontractors. |
| | 15 | Negotiating in good faith with interested minority businesses and not rejecting them as unqualified without sound reasons based on their capabilities. Any rejection of a minority business based on lack of qualification should have the reasons documented in writing. |
| | 25 | Providing assistance to an otherwise qualified minority business in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letters of credit, including waiving credit that is ordinarily required. Assisting minority businesses in obtaining the same unit pricing with the bidder's suppliers in order to help minority businesses in establishing credit. |
| | 20 | Negotiating joint venture and partnership arrangements with minority businesses in order to increase opportunities for minority business participation on a public construction or repair project when possible. |
| | 20 | Providing quick pay agreements and policies to enable minority contractors and suppliers to meet cash-flow demands. |
| Total GFE Points (Claimed by Bidder): | | Total GFE Points (Assessed by PWC): |

In accordance with NCGS 143-128.2(d) the undersigned will enter into a formal agreement with the firms listed in the Identification of Small Disadvantaged Business Participation schedule conditional upon execution of a contract with the Owner. Failure to abide by any applicable statutory provision may constitute a breach of the contract. The undersigned hereby certifies that he or she has read the terms of the MWDBE business commitment and is authorized to bind the Bidder to the commitment herein set forth.

Date: _____ Name of Authorized Officer: _____



State of _____, County of _____

Subscribed and sworn to before me this _____ day of 20____

Notary Public _____

My commission expires _____

Affidavit B: Intent to Perform Contract with Own Workforce

Affidavit of _____
(Name of Bidder)

I hereby certify that it is our intent to perform 100% of the work required for contract:

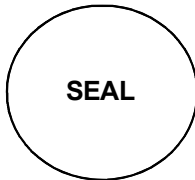
(Name of Project)

In making this certification, the Bidder states that the Bidder does not customarily subcontract elements of this type project, and normally performs and has the capability to perform and will perform **all elements of the work** on this project with his/her own current workforces; and will complete all elements of this project **without** the use of subcontractors, material suppliers, or providers of professional services.

The Bidder agrees to provide any additional information or documentation requested by the Owner in support of the above statement.

The undersigned hereby certifies that he or she has read this certification and is authorized to bind the Bidder to the commitments herein contained.

Date: _____ Name of Authorized Officer: _____



State of _____, County of _____

Subscribed and sworn to before me this _____ day of 20____

Notary Public _____

My commission expires _____

Affidavit C: Percentage of MWDBE Participation

Affidavit of _____
(Name of Bidder)

I hereby certify that on contract: _____
(Name of Project)

\$ _____
(Dollar Amount of Total Bid)

I will expend a minimum of _____% of the total dollar amount of the contract with Minority, Women, and Disadvantaged Business Enterprises (MWDBE). MWDBEs will be employed as subcontractors, vendors, or providers of professional services. Such work will be subcontracted to the following firms listed below.

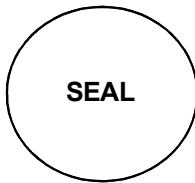
| <u>Name, Address, & Phone No.</u> | <u>EIN</u> | <u>*MWDBE Category</u> | <u>NAICS</u> | <u>Dollar Value</u> | <u>% of Contract</u> |
|---|------------|----------------------------|--------------|---------------------|--------------------------|
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*MWDBE categories: Black-African Americans (B), Hispanic-Americans (H), Asian- Americans (A), Native-Americans (I), Women (F), Socially/Economically Disadvantaged (D)

Pursuant to NCGS 143-128.2(d), the undersigned will enter into a formal agreement with MWDBEs for work listed in this schedule conditional upon execution of a contract with the Owner. Failure to fulfill this commitment may constitute a breach of the contract.

The undersigned hereby certifies that he or she has read the terms of this commitment and is authorized to bind the Bidder to the commitment herein set forth.

Date: _____ Name of Authorized Officer: _____



State of _____, County of _____

Subscribed and sworn to before me this _____ day of 20____

Notary Public _____

My commission expires _____

Affidavit D: Good Faith Efforts

If Owner determines using reasonable discretion that Affidavit C is insufficient, Bidder agrees to provide the following information regarding any good-faith efforts.

| <u>Name, Address, & Phone</u> <u>No.</u> | <u>EIN</u> | <u>*MWDBE</u> <u>Category</u> | <u>NAICS</u> | <u>Dollar Value</u> |
|---|------------|----------------------------------|--------------|---------------------|
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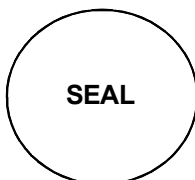
*MWDBE categories: Black-African Americans (B), Hispanic-Americans (H), Asian- Americans (A), Native-Americans (I), Women (F), Socially/Economically Disadvantaged (D)

Bidder may be requested to provide documentation of the Bidder's good-faith efforts. Examples of documentation may include the following:

- Copies of solicitations for quotes to MWDBEs. Each solicitation may include a specific description of the work to be subcontracted, location where bid documents can be reviewed, representative of the Prime Bidder to contact, and location, date and time when quotes must be received.
- Copies of quotes or responses received from each firm responding to the solicitation.
- A telephone log of follow-up calls to each firm sent a solicitation.
- For subcontracts where a MWDBE is not considered the lowest responsible sub- bidder, copies of quotes received from all firms submitting quotes for that particular subcontract.
- Documentation of any contacts or correspondence to MWDBE, community or contractor organizations in an attempt to meet the goal.
- Copy of pre-bid roster.
- Letter documenting efforts to provide assistance in obtaining required bonding or insurance for MWDBEs.
- Letter detailing reasons for rejection of a MWDBE due to lack of qualification.
- Letter documenting proposed assistance offered to MWDBEs in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letter of credit, including waiving credit that is ordinarily required.

Failure to provide the documentation as listed in these provisions may result in rejection of the bid and award to the next lowest responsible and responsive Bidder.

Date: _____ Name of Authorized Officer: _____



State of _____, County of _____

Subscribed and sworn to before me this _____ day of 20____
Notary Public _____

My commission expires _____

Affidavit E: Identification of MWDBE/Local Participation

(Name of Bidder)

I hereby certify that on contract: _____

(Name of Project)

We will use the following Minority, Women, and Disadvantaged Business Enterprises (MWDBE), and Local (Cumberland, Hoke, Harnett County) as construction subcontractors, vendors, suppliers, or providers of professional services.

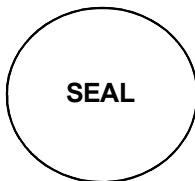
| <u>Name, Address, & Phone</u> <u>No.</u> | <u>EIN</u> | <u>*MWDBE Category /</u> <u>**Local</u> | <u>NAICS</u> | <u>Dollar Value</u> |
|---|------------|--|--------------|---------------------|
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*MWDBE categories: Black-African Americans (B), Hispanic-Americans (H), Asian- Americans (A), Native-Americans (I), Women (F), Socially/Economically Disadvantaged (D)

**Local: Fayetteville Metropolitan Statistical Area (MSA) comprising of Cumberland County, Hoke County, and Harnett County. PWC is requesting this information for reporting purposes only, and use of local entities will not be considered for compliance with the requirements of the MWDBE Program.

The total value of MWDBE/local business contracting will be \$ _____

Date: _____ Name of Authorized Officer: _____



State of _____, County of _____

Subscribed and sworn to before me this _____ day of 20____

Notary Public _____

My commission expires _____

**FAYETTEVILLE PUBLIC WORKS COMMISSION
MWDBE ADD / CHANGE FORM**

If a MWDBE subcontractor fails to complete work under the subcontract for any reason, the recipient must require the prime contractor to employ the good faith efforts set forth in the MWDBE Program if soliciting a replacement or additional subcontractor.

For MWDBE Change Request, please provide all information below:

Prime Contractor: _____

Subcontracted Work: _____

Previous Subcontractor: _____

Reason this for change request:

New Subcontractor: _____

EIN: _____

MWDBE Category: _____

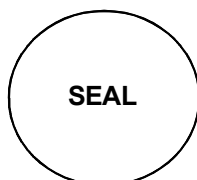
To Add MWDBE Subcontractor/Subcontracted work:

If this is a new trade being subcontracted or a subcontractor that was not documented in the original Project Bid Information submittal, then good faith efforts to solicit a MWDBE must be documented, as the original MWDBE instructions indicate. Please provide all good faith efforts below showing all the MWDBE firms contacted to perform this work along with any additional good faith efforts or evidence that there are not reasonably available firms in the work area. PWC's MWDBE Program requires that good faith efforts are to be carried out to the fullest extent practicable. If solicitations were not carried out due to being impracticable, please attach this explanation to this form.

| Name, Address, & Contact Information | EIN | MBE or WBE and Certifying agency | How was this firm contacted (email, letter, or Phone) and what was the result of the solicitation? * |
|--------------------------------------|-----|----------------------------------|--|
| | | | |
| | | | |
| | | | |

*Must submit copies of emails or letters. If phone calls were made this sheet can serve as documentation of calls

Date: _____ Name of Authorized Officer: _____



State of _____, County of _____

Subscribed and sworn to before me this _____ day of 20____

Notary Public _____

My commission expires _____

Last Revised September 24, 2024

SMALL LOCAL SUPPLIER / MWDBE SUBCONTRACTOR
DISCLOSURE FORM

Contractor: _____
Address & Phone: _____
Project: _____
Name: _____
Pay Application # _____

Please complete the below form by providing the necessary information for the payments made to each subcontractor, vendor, or supplier for the work associated with the identified pay application. This form must be fully completed and attached to each pay application.

| Firm Name, Address, and Contact Information | Payment Amount | Type of Work/Commodity (Include NAICS Code) |
|---|----------------|---|
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Signature

Printed Name

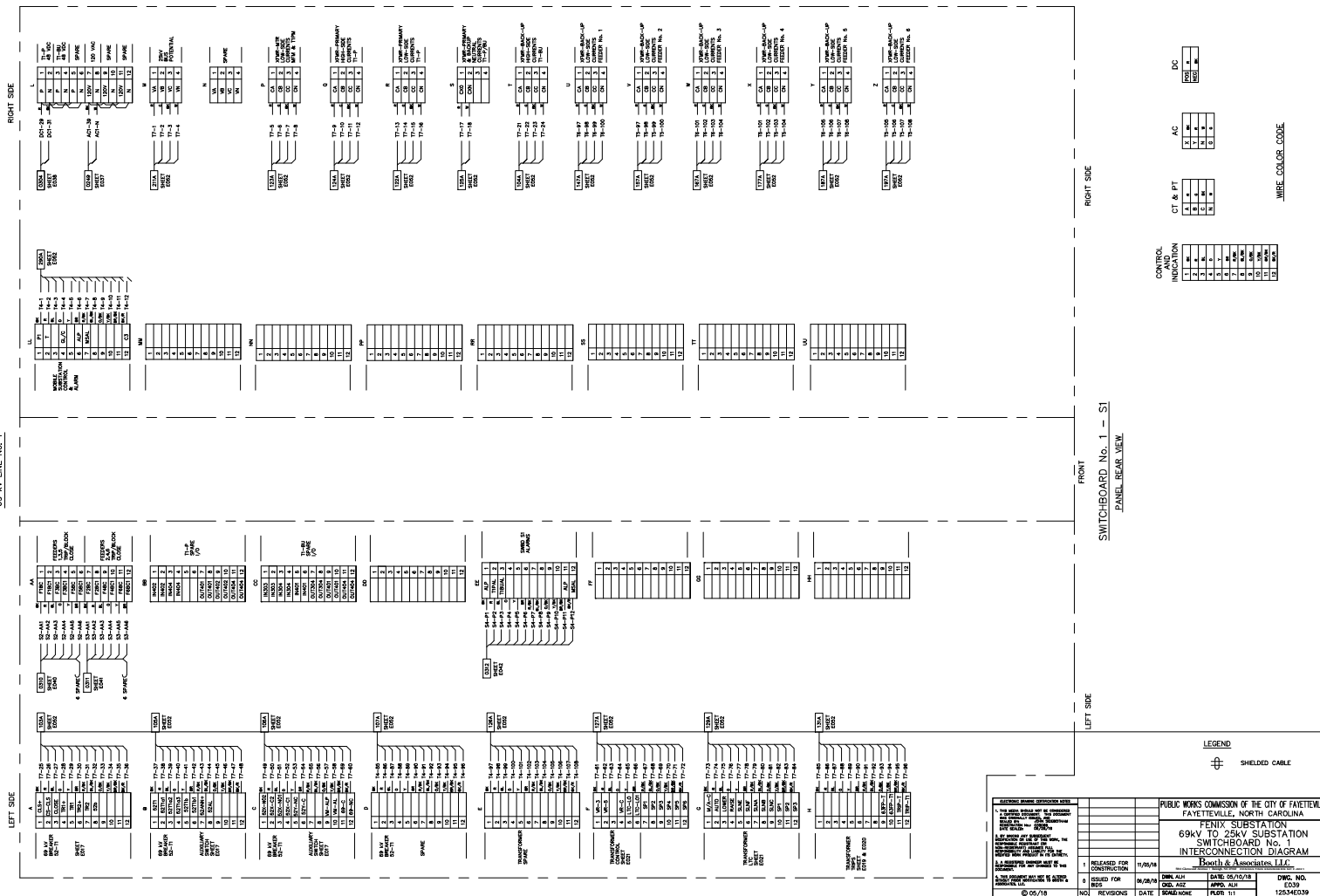
Title

Date

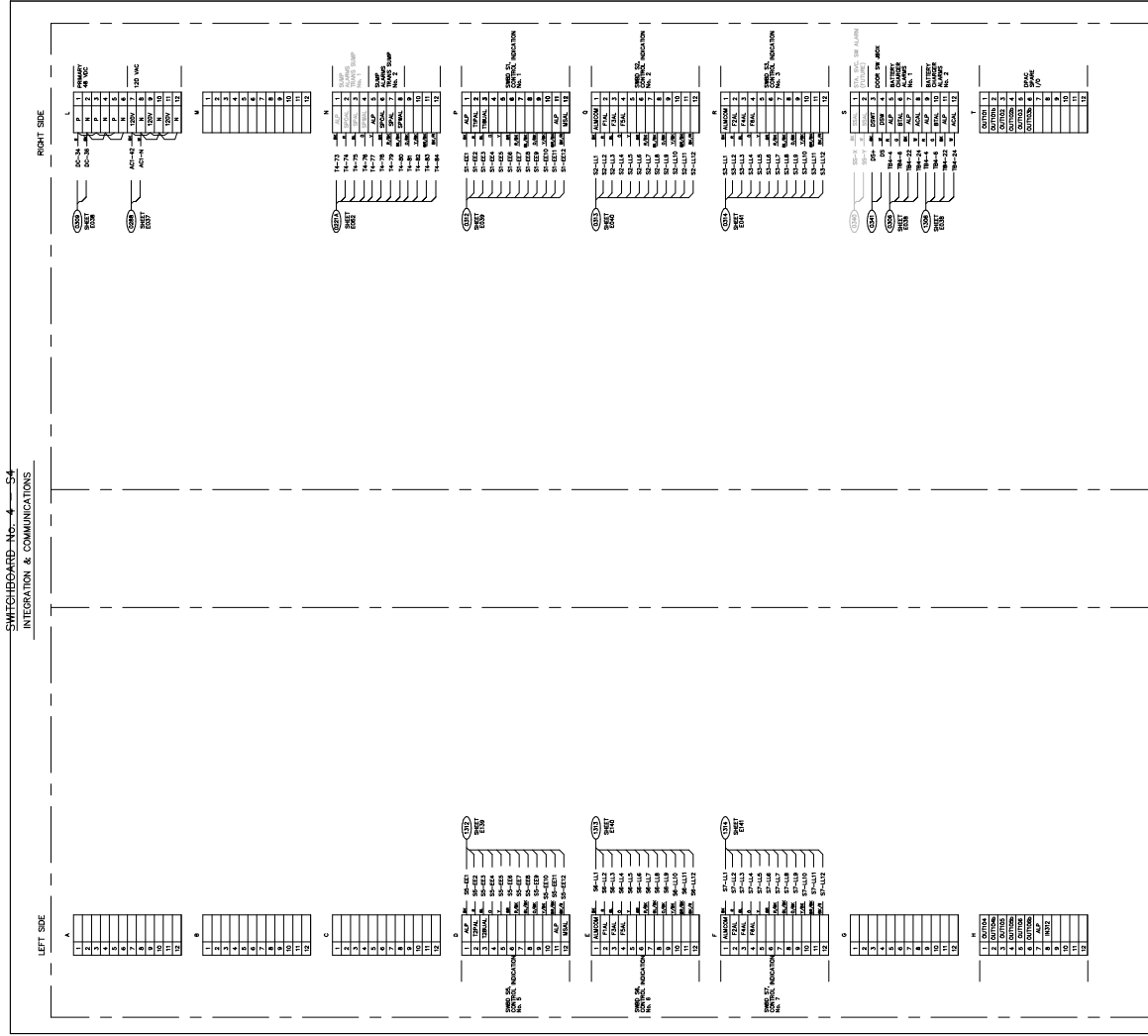
ATTACHMENT H: BID SUBMITTAL CHECKLIST

To ensure your bid is considered for evaluation and potential award, the following forms and required information must be submitted in full. Each item on this checklist must be completed and provided with your bid response. Failure to submit any required documentation or information may result in disqualification. Please carefully review the checklist to confirm all required materials are included before submitting your bid.

- ☐ 1. Properly Marked Sealed Bid (Submission Instructions paragraph 4)
- ☐ 2. Descriptive Literature (Attachment A)
- ☐ 3. Deviations, if applicable (Attachment A)
- ☐ 4. Attachment B Company Information (completed and signed)
- ☐ 5. Attachment B Manufacturer Information (provided)
- ☐ 6. Attachment B Part Number Information (provided)
- ☐ 7. Attachment B Unit Price Information (provided)
- ☐ 8. Attachment C (completed and signed) or Explanation (provided)
- ☐ 9. MWDBE Affidavit A or Affidavit B (completed and notarized)
- ☐ 10. MWDBE Affidavit E (completed and notarized)
- ☐ 11. Addendum 1, if applicable (acknowledged and signed)
- ☐ 12. Addendum 2, if applicable (acknowledged and signed)
- ☐ 13. Addendum 3, if applicable (acknowledged and signed)
- ☐ 14. Addendum 4, if applicable (acknowledged and signed)







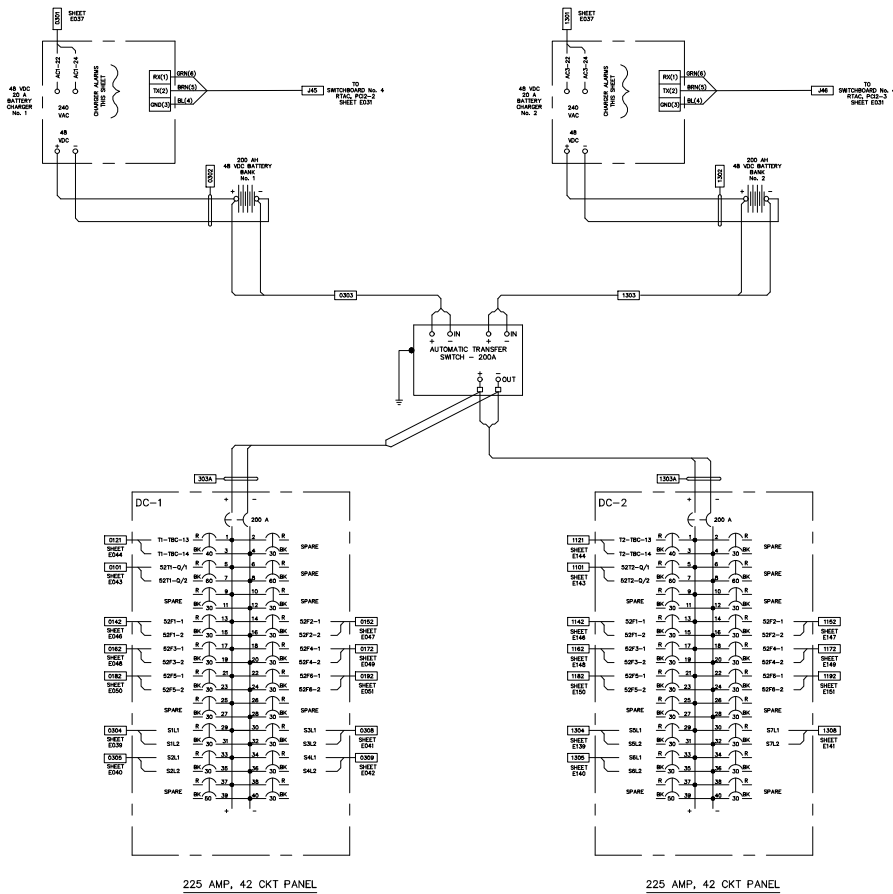
RIGHT SIDE

FRONT

LEFT SIDE

SWITCHBOARD No. 4 - S4
PANEL REAR VIEW

| REVISIONS | | | | LEGEND | | | | PUBLIC WORKS COMMISSION OF THE CITY OF FAYETTEVILLE FAYETTEVILLE, NORTH CAROLINA FENIX SUBSTATION 69kV TO 25kV SUBSTATION SWITCHBOARD No. 4 INTERCONNECTION DIAGRAM Booth & Associates, LLC DATE: 05/15/18 DWS. NO. 12534E042 | | | |
|-----------|---------------------------|----------|--|--------|------------------------|---|---|---|---|---|---|
| 1 | RELEASED FOR CONSTRUCTION | 1/10/18 | | 1 | CONTROL AND INDICATION | 1 | 1 | 2 | 2 | 3 | 3 |
| 2 | ISSUED FOR BID | 04/26/18 | | 2 | CT & PT | 1 | 1 | 2 | 2 | 3 | 3 |
| 3 | | | | 3 | AC | 1 | 1 | 2 | 2 | 3 | 3 |
| 4 | | | | 4 | DC | 1 | 1 | 2 | 2 | 3 | 3 |
| 5 | | | | 5 | WIRE COLOR CODE | 1 | 1 | 2 | 2 | 3 | 3 |



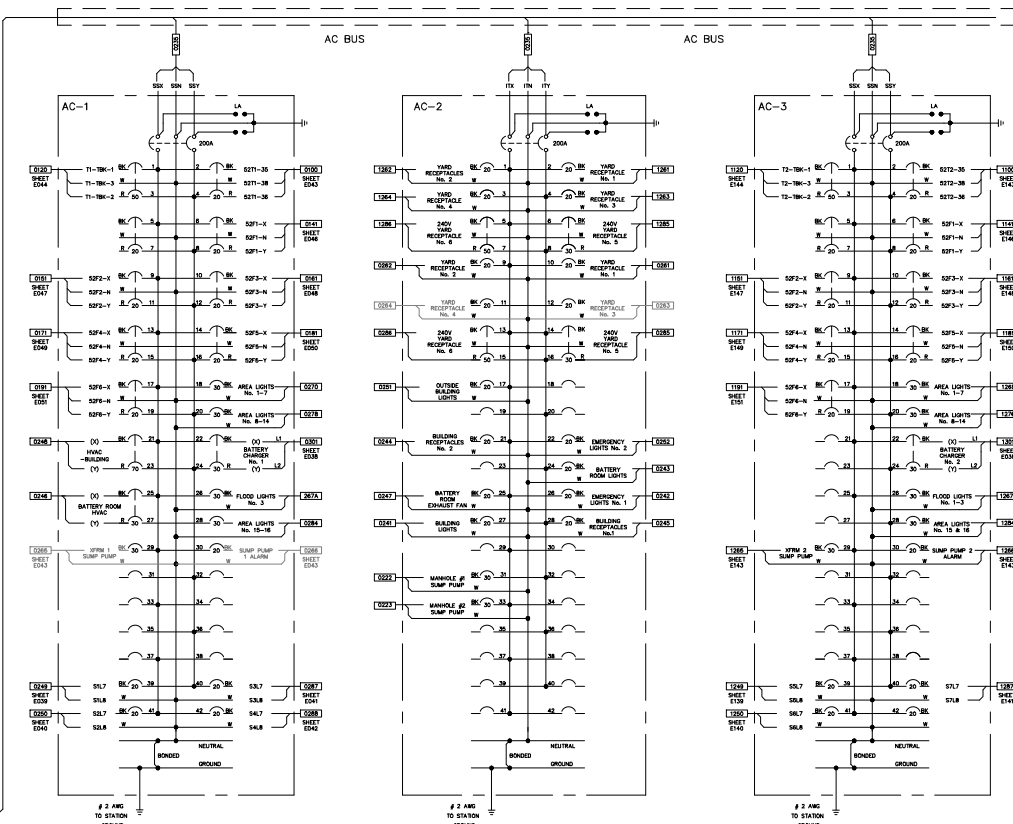
NOTES:

- ALL METALLIC JUNCTION BOXES, RACEWAYS, CABLE TRAYS, PANELS AND ENCLOSURES SHALL BE BONDED TO THE SUBSTATION GROUND.
- ALL DC BRANCH FEEDERS SHALL OBSERVE THE FOLLOWING COLOR CODE:
POSITIVE (+) - RED NEGATIVE (-) - BLACK

DEVICE CODES

| | |
|------|-------------------|
| DC-1 | DC PANEL No. 1 |
| DC-2 | DC PANEL No. 2 |
| TX | TRANSFORMER No. 1 |
| SS-1 | BREAKER No. 1 |

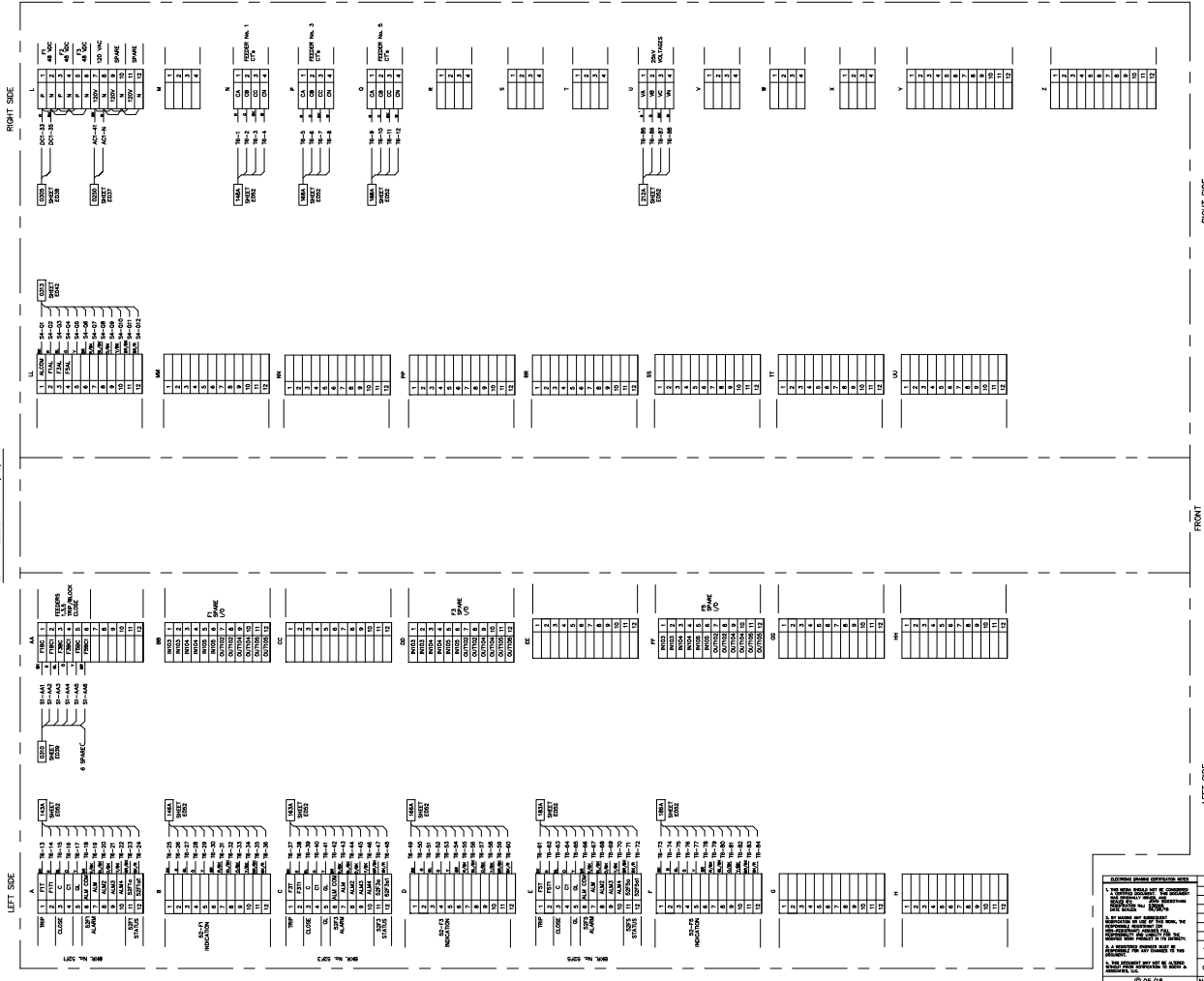
| ELECTRICAL INTERCONNECTION DIAGRAM | | | | PUBLIC WORKS COMMISSION OF THE CITY OF FAYETTEVILLE | | | |
|---|--|--|--|---|--|--|--|
| 1. THIS DRAWING IS THE PROPERTY OF BOOTH & ASSOCIATES, L.L.C. AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF BOOTH & ASSOCIATES, L.L.C. | | | | FAYETTEVILLE, NORTH CAROLINA | | | |
| 2. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2017 NATIONAL ELECTRICAL CODE, THE 2017 NORTH CAROLINA ELECTRICAL CODE, AND THE 2017 FAYETTEVILLE ELECTRICAL CODE, AS AMENDED. | | | | FENIX SUBSTATION | | | |
| 3. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2017 NATIONAL ELECTRICAL CODE, THE 2017 NORTH CAROLINA ELECTRICAL CODE, AND THE 2017 FAYETTEVILLE ELECTRICAL CODE, AS AMENDED. | | | | 69kV TO 25kV SUBSTATION | | | |
| 4. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2017 NATIONAL ELECTRICAL CODE, THE 2017 NORTH CAROLINA ELECTRICAL CODE, AND THE 2017 FAYETTEVILLE ELECTRICAL CODE, AS AMENDED. | | | | DC BREAKER PANEL | | | |
| 5. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2017 NATIONAL ELECTRICAL CODE, THE 2017 NORTH CAROLINA ELECTRICAL CODE, AND THE 2017 FAYETTEVILLE ELECTRICAL CODE, AS AMENDED. | | | | INTERCONNECTION DIAGRAM | | | |
| 6. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2017 NATIONAL ELECTRICAL CODE, THE 2017 NORTH CAROLINA ELECTRICAL CODE, AND THE 2017 FAYETTEVILLE ELECTRICAL CODE, AS AMENDED. | | | | Booth & Associates, L.L.C. | | | |
| 7. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2017 NATIONAL ELECTRICAL CODE, THE 2017 NORTH CAROLINA ELECTRICAL CODE, AND THE 2017 FAYETTEVILLE ELECTRICAL CODE, AS AMENDED. | | | | DATE: 05/15/18 | | | |
| 8. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2017 NATIONAL ELECTRICAL CODE, THE 2017 NORTH CAROLINA ELECTRICAL CODE, AND THE 2017 FAYETTEVILLE ELECTRICAL CODE, AS AMENDED. | | | | DWG. NO. E030 | | | |
| 9. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2017 NATIONAL ELECTRICAL CODE, THE 2017 NORTH CAROLINA ELECTRICAL CODE, AND THE 2017 FAYETTEVILLE ELECTRICAL CODE, AS AMENDED. | | | | PLG: JES | | | |
| 10. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2017 NATIONAL ELECTRICAL CODE, THE 2017 NORTH CAROLINA ELECTRICAL CODE, AND THE 2017 FAYETTEVILLE ELECTRICAL CODE, AS AMENDED. | | | | SCALE: NONE | | | |
| 11. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2017 NATIONAL ELECTRICAL CODE, THE 2017 NORTH CAROLINA ELECTRICAL CODE, AND THE 2017 FAYETTEVILLE ELECTRICAL CODE, AS AMENDED. | | | | 123456789 | | | |



| | |
|------|--------------------------------|
| AC-X | AC SERVICE BREAKER PANEL No. x |
| SX | SWITCHBOARD No. x |
| TX | TRANSFORMER No. x |
| 52-X | BREAKER No. x |

12534E037 (ID 68608).DWG

SWITCHBOARD No. 2 - S2
25 KV FEEDERS No. 1, 3, 5



SWITCHBOARD No. 2 - S2
PANEL BEAR VIEW

CONTROL INDICATION

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|

CT & PT

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| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|

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| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|

DC

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| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|

WIRE COLOR CODE

LEGEND

SHIELDED CABLE

REVISIONS

| NO. | REVISIONS | DATE | BY | CHKD. | DATE |
|-----|-------------------------|----------|----|-------|------|
| 1 | ISSUED FOR CONSTRUCTION | 11/05/18 | | | |
| 2 | ISSUED FOR CONSTRUCTION | 11/05/18 | | | |

123456789101112131415161718192021222324252627282930313233343536373839404142434445464748495051525354555657585960616263646566676869707172737475767778798081828384858687888990919293949596979899100

| Code | Year | City | Country | Year | City | Country |
|------|--------|------|---------|------|------|---------|
| 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 |
| 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
| 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
| 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
| 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 |
| 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 |
| 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 |
| 2042 | 2043 | 2044 | 2045 | 2046 | 2047 | 2048 |
| 2049 | 2050 | 2051 | 2052 | 2053 | 2054 | 2055 |
| 2056 | 2057 | 2058 | 2059 | 2060 | 2061 | 2062 |
| 2063 | 2064 | 2065 | 2066 | 2067 | 2068 | 2069 |
| 2070 | 2071 | 2072 | 2073 | 2074 | 2075 | 2076 |
| 2077 | 2078 | 2079 | 2080 | 2081 | 2082 | 2083 |
| 2084 | 2085 | 2086 | 2087 | 2088 | 2089 | 2090 |
| 2091 | 2092 | 2093 | 2094 | 2095 | 2096 | 2097 |
| 2098 | 2099 | 2100 | 2101 | 2102 | 2103 | 2104 |
| 2105 | 2106 | 2107 | 2108 | 2109 | 2110 | 2111 |
| 2112 | 2113 | 2114 | 2115 | 2116 | 2117 | 2118 |
| 2119 | 2120 | 2121 | 2122 | 2123 | 2124 | 2125 |
| 2126 | 2127 | 2128 | 2129 | 2130 | 2131 | 2132 |
| 2133 | 2134 | 2135 | 2136 | 2137 | 2138 | 2139 |
| 2140 | 2141 | 2142 | 2143 | 2144 | 2145 | 2146 |
| 2147 | 2148 | 2149 | 2150 | 2151 | 2152 | 2153 |
| 2154 | 2155 | 2156 | 2157 | 2158 | 2159 | 2160 |
| 2161 | 2162 | 2163 | 2164 | 2165 | 2166 | 2167 |
| 2168 | 2169 | 2170 | 2171 | 2172 | 2173 | 2174 |
| 2175 | 2176 | 2177 | 2178 | 2179 | 2180 | 2181 |
| 2182 | 2183 | 2184 | 2185 | 2186 | 2187 | 2188 |
| 2189 | 2190 | 2191 | 2192 | 2193 | 2194 | 2195 |
| 2196 | 2197 | 2198 | 2199 | 2200 | 2201 | 2202 |
| 2203 | 2204 | 2205 | 2206 | 2207 | 2208 | 2209 |
| 2210 | 2211 | 2212 | 2213 | 2214 | 2215 | 2216 |
| 2217 | 2218 | 2219 | 2220 | 2221 | 2222 | 2223 |
| 2224 | 2225 | 2226 | 2227 | 2228 | 2229 | 2230 |
| 2231 | 2232 | 2233 | 2234 | 2235 | 2236 | 2237 |
| 2238 | 2239 | 2240 | 2241 | 2242 | 2243 | 2244 |
| 2245 | 2246 | 2247 | 2248 | 2249 | 2250 | 2251 |
| 2252 | 2253 | 2254 | 2255 | 2256 | 2257 | 2258 |
| 2259 | 2260 | 2261 | 2262 | 2263 | 2264 | 2265 |
| 2266 | 2267 | 2268 | 2269 | 2270 | 2271 | 2272 |
| 2273 | 2274 | 2275 | 2276 | 2277 | 2278 | 2279 |
| 2280 | 2281 | 2282 | 2283 | 2284 | 2285 | 2286 |
| 2287 | 2288 | 2289 | 2290 | 2291 | 2292 | 2293 |
| 2294 | 2295 | 2296 | 2297 | 2298 | 2299 | 2300 |
| 2301 | 2302 | 2303 | 2304 | 2305 | 2306 | 2307 |
| 2308 | 2309 | 2310 | 2311 | 2312 | 2313 | 2314 |
| 2315 | 2316 | 2317 | 2318 | 2319 | 2320 | 2321 |
| 2322 | 2323 | 2324 | 2325 | 2326 | 2327 | 2328 |
| 2329 | 2330 | 2331 | 2332 | 2333 | 2334 | 2335 |
| 2336 | 2337 | 2338 | 2339 | 2340 | 2341 | 2342 |
| 2343 | 2344 | 2345 | 2346 | 2347 | 2348 | 2349 |
| 2350 | 2351</ | | | | | |

[illegible]

GROUND

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|--|---|--|---|
| <p>ELECTRIC SERVICE INFORMATION</p> <p>A. ALL WORKS SHALL BE IN ACCORDANCE WITH THE CITY OF FAYETTEVILLE, NORTH CAROLINA, ELECTRICAL CODE, 2008 EDITION, WITH ALL AMENDMENTS.</p> <p>B. ALL WORKS SHALL BE IN ACCORDANCE WITH THE CITY OF FAYETTEVILLE, NORTH CAROLINA, ELECTRICAL CODE, 2008 EDITION, WITH ALL AMENDMENTS.</p> <p>C. ALL WORKS SHALL BE IN ACCORDANCE WITH THE CITY OF FAYETTEVILLE, NORTH CAROLINA, ELECTRICAL CODE, 2008 EDITION, WITH ALL AMENDMENTS.</p> <p>D. ALL WORKS SHALL BE IN ACCORDANCE WITH THE CITY OF FAYETTEVILLE, NORTH CAROLINA, ELECTRICAL CODE, 2008 EDITION, WITH ALL AMENDMENTS.</p> | | | <p>PUBLIC WORKS COMMISSION OF THE CITY OF FAYETTEVILLE FAYETTEVILLE, NORTH CAROLINA</p> |
| <p>A. ALL WORKS SHALL BE IN ACCORDANCE WITH THE CITY OF FAYETTEVILLE, NORTH CAROLINA, ELECTRICAL CODE, 2008 EDITION, WITH ALL AMENDMENTS.</p> <p>B. ALL WORKS SHALL BE IN ACCORDANCE WITH THE CITY OF FAYETTEVILLE, NORTH CAROLINA, ELECTRICAL CODE, 2008 EDITION, WITH ALL AMENDMENTS.</p> <p>C. ALL WORKS SHALL BE IN ACCORDANCE WITH THE CITY OF FAYETTEVILLE, NORTH CAROLINA, ELECTRICAL CODE, 2008 EDITION, WITH ALL AMENDMENTS.</p> <p>D. ALL WORKS SHALL BE IN ACCORDANCE WITH THE CITY OF FAYETTEVILLE, NORTH CAROLINA, ELECTRICAL CODE, 2008 EDITION, WITH ALL AMENDMENTS.</p> | | | <p>FENIX SUBSTATION 6KVX TO 25KV SUBSTATION TERMINATION CABINET WIRING INTERCONNECTION DIAGRAM</p> |
| <p>A. ALL WORKS SHALL BE IN ACCORDANCE WITH THE CITY OF FAYETTEVILLE, NORTH CAROLINA, ELECTRICAL CODE, 2008 EDITION, WITH ALL AMENDMENTS.</p> <p>B. ALL WORKS SHALL BE IN ACCORDANCE WITH THE CITY OF FAYETTEVILLE, NORTH CAROLINA, ELECTRICAL CODE, 2008 EDITION, WITH ALL AMENDMENTS.</p> <p>C. ALL WORKS SHALL BE IN ACCORDANCE WITH THE CITY OF FAYETTEVILLE, NORTH CAROLINA, ELECTRICAL CODE, 2008 EDITION, WITH ALL AMENDMENTS.</p> <p>D. ALL WORKS SHALL BE IN ACCORDANCE WITH THE CITY OF FAYETTEVILLE, NORTH CAROLINA, ELECTRICAL CODE, 2008 EDITION, WITH ALL AMENDMENTS.</p> | | <p>1.1 RELEASED FOR CONSTRUCTION</p> <p>11/05/18</p> | <p>Roath & Associates, LLC</p> |
| <p>A. ALL WORKS SHALL BE IN ACCORDANCE WITH THE CITY OF FAYETTEVILLE, NORTH CAROLINA, ELECTRICAL CODE, 2008 EDITION, WITH ALL AMENDMENTS.</p> <p>B. ALL WORKS SHALL BE IN ACCORDANCE WITH THE CITY OF FAYETTEVILLE, NORTH CAROLINA, ELECTRICAL CODE, 2008 EDITION, WITH ALL AMENDMENTS.</p> <p>C. ALL WORKS SHALL BE IN ACCORDANCE WITH THE CITY OF FAYETTEVILLE, NORTH CAROLINA, ELECTRICAL CODE, 2008 EDITION, WITH ALL AMENDMENTS.</p> <p>D. ALL WORKS SHALL BE IN ACCORDANCE WITH THE CITY OF FAYETTEVILLE, NORTH CAROLINA, ELECTRICAL CODE, 2008 EDITION, WITH ALL AMENDMENTS.</p> | <p>2.1 ISSUED FOR BIDS</p> <p>06/29/18</p> | <p>DWG. DATE DATE SCALE NO. NO. NO. NO.</p> | <p>DWG. NO. E002 1046502 PLR: 51</p> |
| <p>© 05/18</p> | <p>NOI REVISIONS</p> | <p>12545002</p> | <p>12545002</p> |



FAYETTEVILLE PUBLIC WORKS COMMISSION

PROCUREMENT DEPARTMENT

<https://www.faypwc.com/bids/>

Bid Addendum

PWC Number: PWC2425055

Bid Title: Two (2) Prefabricated Concrete Relay Control Houses for Cliffdale and Yadkin Substations

Bid Opening Date and Time: February 13, 2025, 2:00 pm

Addendum Number: 1

Addendum Date: February 4, 2025

Procurement Advisor: Carla Wint
procurement@faypwc.com

-
1. Return one properly executed copy of this addendum with bid response or prior to the Bid Opening Date/Time listed above.
 2. Following are questions received about the solicitation and the SME's answers to the questions.
 - Q1.** Would the prices for the relay panels only be accepted or would the relay panels be broken out separately from the control houses?
 - A1.** The relay panels are owner provided. The relay panels will be shipped to the Control House manufacturer from the relay panel manufacturer.
 - Q2.** The drawings reference Black and Decker substation. Can you please confirm if these are the ones we are to use for the new opportunities, Cliffdale and Yadkin? Or will there be drawings which are specific to Cliffdale and Yadkin?
 - A2.** The future drawings will come with Yadkin and Cliffdale on the drawings. However, the Black and Decker is identical to the both the Cliffdale and Yadkin Substations.
 - Q3.** Please also confirm if Fayetteville will plan to send to the potential bidder the relay panels and termination cabinet to be integrated at the factory. If so, please confirm how many of each will be supplied. On Black and Decker, it was four (4) and one (1) termination cabinet.
 - A3.** Yes, the relay panels will be shipped to the Control House manufacturer from the relay panel manufacturer. The panel count will be eight (8) per control house for total of 16 panels between the two control houses and one (1) termination cabinet per control house.
 - Q4.** Is there a replacement part number for the obsolete battery rack number?
 - A4.** Yes, the replacement part number is: Exponential Power model E-SGL2-12a2-step 2-tier rack that 47.24 inches long.

Failure to acknowledge receipt of this addendum may result in rejection of the response.

Check ONE of the following options:

- ☐ Bid has not been mailed. Any changes resulting from this addendum are included in our bid response.
- ☐ Bid has been mailed. No changes resulted from this addendum.
- ☐ Bid has been mailed. Changes resulting from this addendum are as follows:

Execute Addendum:

Offeror: _____

Authorized Signature: _____

Name and Titled (Typed): _____

Date: _____