CITY OF WILSON WILSON, NORTH CAROLINA

SPECIFICATIONS AND BID DOCUMENTS FOR STRUCTURES AND EQUIPMENT FOR THE WILSON 480V OPERATION CENTER FEED

ISSUED FOR BIDS

CITY OF WILSON WILSON, NORTH CAROLINA

SPECIFICATIONS AND BID DOCUMENTS FOR STRUCTURES AND EQUIPMENT FOR THE WILSON 480V OPERATION CENTER FEED

ISSUED FOR BIDS



Booth & Associates, LLC Consulting Engineers 5811 Glenwood Avenue, Suite 109 Raleigh, North Carolina 27612 Firm License No. F-0221

© February 2021

CITY OF WILSON WILSON, NORTH CAROLINA

SPECIFICATIONS AND BID DOCUMENTS FOR STRUCTURES AND EQUIPMENT FOR THE WILSON 480V OPERATION CENTER FEED

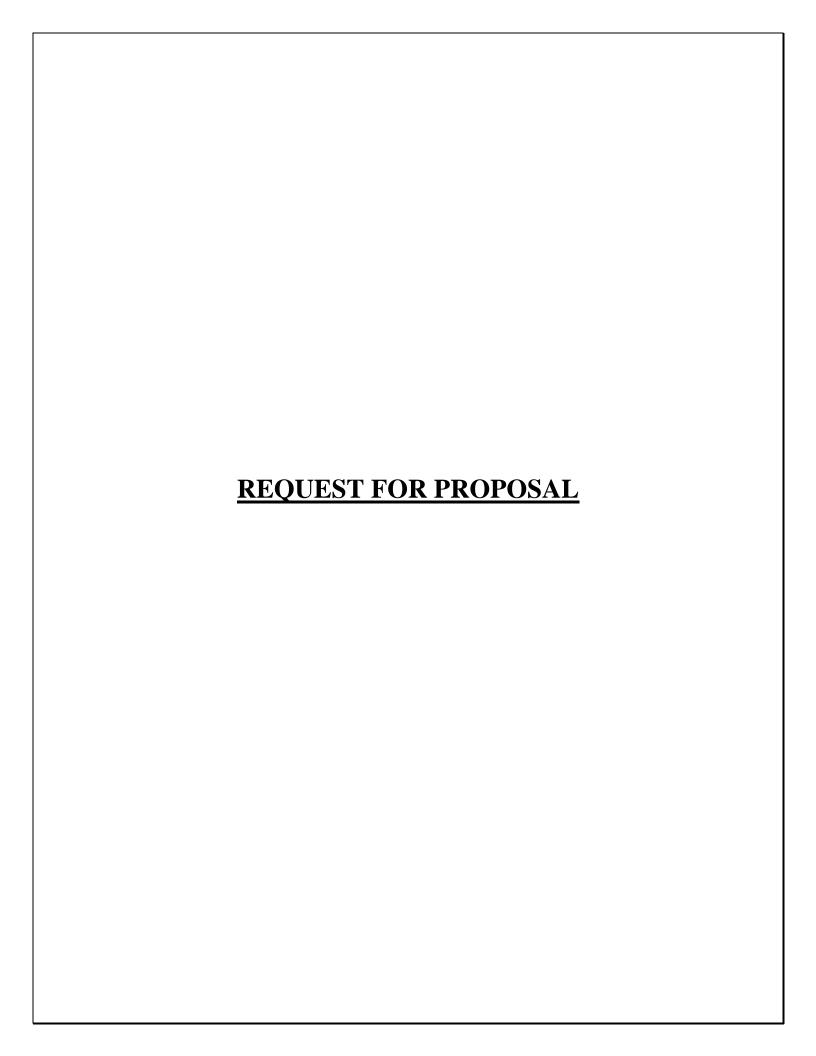
TABLE OF CONTENTS

	JEST FOR PROPOSAL	
Notice	to Prospective Bidders	N-1
	tions	
Instruc	tions to Bidders	IB-1
	al Conditions	
City of	F Wilson, NC – Terms & Conditions	T&C-1
	I OF PROPOSAL	
	and Conditions	
Bid Sc	hedules	P-4
Affida	vit of Bidder	P-5
	of Exceptions	
Bid Bo	ond	P-7
Adden	da / Clarifications / Bulletins	P-8
TECH	INICAL SPECIFICATIONS	
1.0	Scope	S-1
2.0	General Conditions	S-1
3.0	Special Conditions	S-2
4.0	Standards	S-2
5.0	Drawings	S-3
6.0	Shop Drawings	S-3
7.0	Material and Equipment Not Included	S-3
8.0	Structural Steel	S-3
9.0	Lightning Protection Structures	S-3
10.0	Miscellaneous Structures / Hardware	
11.0	Insulators	
12.0	Bus and Leads	
13.0	Bus Supports	S-3
14.0	Connectors	
15.0	Group-Operated Switches	
16.0	Surge Arresters	
17.0	Single-Pole Disconnect Switches	
18.0	Hookstick and Container	
19.0	Instrument Transformers	
20.0	Distribution Transformers	
21.0	List of Materials – Structures and Equipment	

APPENDICES

1. Material List for Wilson 480V Operation Center Feed





NOTICE TO PROSPECTIVE BIDDERS

Sealed Proposals will be received by the City of Wilson's Consulting Engineers, Booth & Associates, LLC, in their office until 3:00 PM, local time, Tuesday, March 9, 2021, for the furnishing and delivery of all materials and equipment (except materials and equipment specified to be furnished by the City) complete and conforming to the Specifications, as set forth in the Bid Schedules. Any Proposal received subsequent to that time will be promptly returned to the Bidder unopened.

The Specifications and proposal forms may be obtained from the City's Engineer, Booth & Associates, LLC, 5811 Glenwood Avenue, Suite 109, Raleigh, North Carolina 27612, Attention: John B. Sidebotham, PE. Additional copies may be obtained for a non-refundable charge of Fifty Dollars (\$50.00) or may be examined at the offices of the City of Wilson.

Proposals and all supporting instruments must be submitted on and in the format of the forms furnished in the Form of Proposal of these bid documents and must be delivered in a sealed envelope addressed to the City's Engineer, Booth & Associates, LLC. Proposals must be filled in with indelible ink. No alteration or interlineations will be permitted unless made before submission and initialed and dated.

Bidders are to mail or deliver their proposals as follows: Booth & Associates, LLC, 5811 Glenwood Avenue, Raleigh, North Carolina 27612, Attention: John B. Sidebotham, PE. The name and address of the Bidder, its license number (if a license is required by the State), and the following description must appear on the envelope in with the Proposal is submitted:

"BID FOR STRUCTURES AND EQUIPMENT FOR THE WILSON 480V OPERATION CENTER FEED NOT TO BE OPENED UNTIL 3:00 PM, LOCAL TIME, TUESDAY, MARCH 9, 2021"

Each Proposal shall be accompanied by cash, cashier's check, or certified check drawn on a bank insured with the Federal Deposit Insurance Corporation or the Savings Association Insurance Fund, payable to the City of Wilson, North Carolina, in an amount not less than five percent (5%) of the total bid as a guarantee that a Contract, if awarded, will be accepted. In lieu thereof, a Bid Bond, which confirms to the provisions of G.S. 143-129 as amended by Chapter 1104 of the Public Laws of 1951, may be submitted by the Bidder.

The City reserves the rights to (1) waive minor irregularities or minor errors in any Proposal if it appears to the City that such irregularities or errors were made through inadvertence. Any such irregularities or errors so waived must be corrected on the Proposal prior to its acceptance by the City; (2) reject any or all Proposals and to hold any or all Proposals for a period of sixty (60) days from the date of opening thereof; (3) accept the bid, in its opinion, that represents the best value for the City, regardless of whether such bid is the lowest price; and (4) award Contracts to Bidder(s) for any Schedule(s) individually or collectively from the Bid Schedules.

CITY OF WILSON WILSON, NORTH CAROLINA				
By:	Daniel Gillen	Date:	February 15, 2021	
-	Project Manager		•	



DEFINITIONS

Whenever the following terms or pronoun in place of them are used in these "Instructions to Bidders", "Form of Proposal", "Technical Specifications", "Purchase Order", bond, etc., the intent and meaning shall be interpreted as follows:

Owner City of Wilson

Wilson, North Carolina

Project Manager Daniel Gillen; or his authorized assistant

Consulting Engineer Booth & Associates, LLC

Observer An authorized representative of the Owner assigned to make any or

all necessary observations of work performed and equipment and/or

apparatus furnished by the Bidder

Bidder Any individual, firm, or corporation submitting a Proposal for the

work contemplated, acting directly or through a duly authorized representative; or party of the second part of the Purchase Order,

acting directly or through a duly authorized representative

Subcontractor An individual, firm, or corporation who contracts with the Bidder to

perform part of the latter's Purchase Order

Surety The body, corporate or individual, approved by the Owner, which is

bound with and for the Bidder who is primarily liable and which engages to be responsible for his acceptable performance of the work

for which he has contracted

Form of Proposal, Proposal The approved, prepared form on which the Bidder is to submit or has

submitted his Proposal for the work contemplated

Bid Security To all bids there shall be attached cash, cashier's check, or certified

check from the Bidder upon a bank or trust company insured by the Federal Deposit Insurance Corporation or the Savings Associates

Insurance Fund, or in lieu thereof, a Bid Bond

Plans, Drawings All Drawings or reproductions of Drawings pertaining to the

construction under the Purchase Order

Technical SpecificationsThe directions, provisions, and requirements contained herein

pertaining to the method and manner of performing the work or to the quantities and qualities of materials to be furnished under the

Purchase Order

Purchase Order The agreement covering the furnishing of equipment and/or

apparatus and the performance of the work. The Purchase Order shall include the "Instructions to Bidders", "General Conditions", "Form of Proposal", "Plans", "Technical Specifications", and

Acknowledgments

Performance BondThe approved form of security to be approved by the Owner (**Not Required**)

The approved form of security to be approved by the Owner furnished by the Bidder and his Surety as a guarantee of good faith

furnished by the Bidder and his Surety as a guarantee of good faith on the part of the Bidder to accept the work in accordance with the

terms of the Specifications and Purchase Order

Payment BondThe approved form of security to be approved by the Owner (**Not Required**)

The approved form of security to be approved by the Owner furnished by the Bidder and his Surety as a guarantee for payment of

all Subcontractors on the part of the Bidder in acceptance of the work in accordance with the terms of the Specifications and Purchase

Order

Work The performance of the project covered by the Specifications or the

furnishing of labor, machinery, equipment, tools, or any other article

or item being purchased by the Owner

Emergency A temporary unforeseen occurrence or combination of circumstances

which endangers life and property and calls for immediate action or

remedy

Work at Site of Project Work to be performed, including work normally done on the location

of the project

Bid Documents Include all sections of the Request for Bids, Form of Proposal,

Technical Specifications and Appendices, Addendum/Clarifications/

Bulletins, and Drawings

The subheadings in these Specifications are intended for convenience or reference only and shall not be considered as having any bearing on the interpretations thereof.



INSTRUCTIONS TO BIDDERS

1.0 Bidder Qualification

- 1.1 Bids will be accepted only from Bidders deemed by the Owner or the Engineer to be qualified to provide the materials, equipment, and services described by these Specifications. The experience of Bidders in providing the same or similar materials, equipment, and services will be a major factor in determining qualification. The Bidder shall include information to establish qualifications.
- 1.2 Prospective Bidders who wish to submit a bid, but are not presently qualified, may receive consideration by submitting a completed Bidder's Qualification Form, which requires product line and user list, to the Engineer at least ten (10) days prior to the specified bid opening date and time. The Bidder's Qualification Form may be obtained from the Engineer.

2.0 Proposals

- 2.1 To warrant consideration, Proposals must comply with these instructions.
- 2.2 Bids not received on Booth & Associates, LLC Form of Proposal contained herein will be considered unresponsive. The forms shall be filled out complete; any omissions may cause the entire Proposal to be rejected.
- 2.3 Proposals must be made on the Form of Proposal provided herein and must not be altered, erased, or interlined in any manner. The Bidder shall fill in the Form of Proposal as detailed in the Terms and Conditions. The Bidder may retain one (1) copy, but the original, fully executed, must be inserted in or attached to the Bid Documents. Also, one (1) additional copy of all executed forms and supporting information shall be supplied.
- 2.4 The Bidder shall furnish certain information, as required by the Bid Documents regarding the equipment on which he is bidding. Two (2) copies of the information, together with the manufacturer's literature setting forth the guarantees and describing the equipment on which he is bidding shall be included as part of the Proposal. If one manufacturer is bidding through two or more agents or representatives, descriptive literature, guarantees, etc., may be submitted in duplicate in one sealed envelope, which will be considered and treated as though it contained a sealed bid. This envelope shall contain a list of the names of Bidders to whom the information applies. Each sealed Bid Proposal without this information shall state the name of the manufacturer who is furnishing the information. Additional sets of the Specifications may be obtained upon a payment of Fifty Dollars (\$50) non-refundable deposit by approved Bidders.
- 2.5 Bids may be modified by the Bidder's removal of his original and the submittal of a completely revised bid package in full compliance with the Bid Documents if received prior to the time of opening bids and if included in the public reading of such bids. No oral or telephonic Proposals will be considered.
- 2.6 Proposals shall include a Form of Exceptions utilizing forms provided which shall itemize each and every exception from the Bid Documents. The Form of Exceptions shall state the section, subsection, and paragraph designations from the part of the Specifications to which exception is taken and explain in detail the nature of the exception. A copy of this Form of Exceptions is included in the Form of Proposal. Exceptions will not necessarily eliminate a Bidder from consideration, even if bids without exceptions are received from others. The treatment of exceptions will be based entirely on the overall best interests of the Owner. Certain exceptions, e.g., failure to provide rigging and unloading at the site, or failure to properly provide field assembly supervision on testing may result in the entire Bid Proposal being rejected.
- 2.7 Should the Bidder find discrepancies in the documents or fail to understand their meaning, he shall immediately notify the Engineer, who will send written instructions to all Bidders. Neither the Owner nor the Engineer will be responsible for any oral instructions.



- 2.8 The Bidder shall be the manufacturer of the equipment, or the Bidder shall submit with the Form of Proposal a notarized statement that the Bidder is authorized by the manufacturer to tender the Proposal as submitted and that the manufacturer will guarantee the suitability and adequacy of the equipment proposed, and will be bound by the Specifications, as though the manufacturer had submitted the Proposal.
- 2.9 In the event that the Bidder proposes any change or deviation from the Engineer's Plans and Specifications, such Proposal changes or deviations must be submitted at the time bids are opened. The Owner reserves the right to reject any such proposed changes or deviations. All exceptions must be stated on the Form of Exceptions. Failure to submit a Form of Exceptions will imply strict adherence to the Plans and Specifications.
- 2.10 No Bid Proposal may be withdrawn after the scheduled closing time for the receipt of bids for a period of ninety (90) days pending the purchase order by the successful Bidder. Should the successful Bidder default and not accept a purchase order, then the purchase order may be offered to the next lowest responsible Bidder whose Proposal is evaluated as acceptable
- 2.11 Prior to submission of the Proposal, the Bidder shall make and shall be deemed to have made a careful examination of the Plans and Specifications on file with the Owner and with the Engineer and all other matters that may affect the cost and the time of completion of the work.
- 2.12 The Purchase Order, when accepted, shall be deemed to include the Specifications for the equipment, and the Bidder shall not claim any modification thereof resulting from any representative or promise made at any time by an officer, agent, or employee of the Owner or by any other person.
- 2.13 The Owner reserves the right to accept any schedule, combination of schedules, or any portion of a schedule.

3.0 Bid Security

- 3.1 Each Proposal shall be accompanied by a cash deposit, cashier's check, or certified check drawn on a bank or trust company insured by the Federal Deposit Insurance Corporation or Savings Association Insurance Fund, or a Bid Bond in an amount not less than five percent (5%) of the Proposal. The Owner will retain said deposit as liquidated damages in the event of failure of the Successful Bidder to execute the Purchase Order within ten (10) days after the award.
- 3.2 Bid Bond shall be conditioned that the Surety will, upon demand, forthwith make payment to the Obligee upon said Bond if the Bidder fails to accept a purchase order in accordance with the Bid Bond, and that upon failure to forthwith make payment, the Surety shall pay to the Obligee an amount equal to double the amount of said Bond.
- 3.3 Only one (1) Bid Bond is required, the amount of which shall be based on the total amount of the bid. The value for the Bid Bond shall be based on the Bid Schedule of maximum total amount.

4.0 Performance Bond/Payment Bond

A Performance Bond/Payment Bond is not required for this project.

5.0 **Bulletins and Addenda**

Any bulletins or addenda to the Specifications issued during the time of bidding are to be considered covered in the Proposal, and in accepting a purchase order, they will become a part thereof. Receipt of addenda shall be acknowledged by the Bidder on the Form of Proposal.

6.0 Shipment and Delivery

6.1 Quoted prices for materials and equipment shall include shipment F.O.B. point of delivery to the site via open-top truck or open trailer. Owner will be responsible for unloading and installing the structures and equipment. <u>Trusses and box columns shall be assembled before shipment to ensure correctness and shall be shipped assembled.</u>



6.2 The location of the site is: City of Wilson

1800 Herring Avenue E Wilson, NC 27893-6727

- 6.3 A Delivery Schedule is provided as part of the Proposal on which the Bidder shall indicate the delivery schedule for his materials and equipment. Strict adherence to the acceptance of delivery schedule is expected. Special attention should be given to the stipulations for delivery outlined in the General Conditions. Furthermore, the Bidder shall match his scheduled deliveries to the schedule preferred by the Owner if noted in the Form of Proposal section.
- 6.4 Advance shipment of anchor bolts is required. Upon approval of anchor bolts, anchor bolts shall be shipped exclusive of the facility deliveries per the Delivery Schedule provided in the Bid Schedule.
- 6.5 Coordinated shipment shall be made to reduce storage by the Owner and to facilitate the accumulation of component parts. A maximum of four (4) shipments will be permitted for delivery of the entire lot of structures and equipment. One (1) shipment of anchor bolts will be permitted and will not count toward the four (4) shipments. Small partial shipments at scattered times will not be acceptable.
- 6.6 In the event that delays occur, the Bidder shall be responsible for all shipping demurrage unless such delays are caused solely by the Owner.
- 6.7 All components shall be distinctly marked or identified and shall be completely assembled before shipment insofar as is practical. Each bidder shall so state in his Proposal the manner in which trusses and columns will be shipped. Unless otherwise stated as a part of the Bidder's Proposal, all trusses and box columns are to be shipped completely assembled. Box columns and/or box trusses **over 4'-0"** x **4'-0"** may be shipped two sides assembled/two sides knocked down.
- Release for shipment is to be granted by the Owner or the Engineer based upon the manufacturer's compliance with the following:
 - 6.8.1 Furnishing of the requisite number of copies of the Final Drawings as called for in the Specifications.
 - 6.8.2 Coordination of manufacturing and delivery with Owner's construction schedule as may be noted in these Specifications.
 - 6.8.3 Thirty (30) days notification of tentative shipping schedule and forty-eight (48) hours notification prior to all deliveries.
- 6.9 Delivery of all items of equipment shall be made at such time as to permit unloading between the hours of 9:00 a.m. and 4:00 p.m., Monday through Thursday, holidays excluded. The Owner will furnish escort to the site. Ultimate delivery shall be at the discretion of the Owner.

7.0 Award of Purchase Order

- 7.1 The issue of a purchase order will be made to the lowest acceptable Bidder as soon as practical, provided that in the selection of materials and equipment a purchase order may be awarded to a responsible Bidder other than the lowest in the interest of standardization, or ultimate economy if the advantage of such standardization or ultimate economy is clearly evident. The Owner reserves the right to reject any and all bids.
- 7.2 The Owner reserves the right to waive minor irregularities or minor errors in any Proposal if it appears to the Owner that such irregularities or errors were made through inadvertence. The Owner must correct any such irregularities or errors so waived on the Proposal prior to its acceptance.
- 7.3 In estimating the lowest cost to the Owner as one of the factors in deciding the Award of the purchase order, the Owner will consider, in addition to the prices quoted in the Proposal, the following:



- a. Equipment delivery (days)
- b. Adherence to the Plans and Technical Specifications
- c. Evaluation of equipment suitability to the system as noted and submitted by the Bidder
- d. The Bidder's intended method of shipment of the materials and equipment
- e. Firm prices
- f. Weight of structural steel

8.0 Approval Drawings

Receipt of "Approval Drawings" by the Bidder constitutes authorization for manufacture predicated upon the Drawings and corrections found thereon. After the return of Approval Drawings, release for shipment is to be granted by either the Owner or its Engineer, based upon the Manufacturer's compliance with the following:

- 8.1 Furnishing of the requested number of copies of the Final Drawings as called for in the Specifications.
- 8.2 Thirty (30) days notification of tentative shipping schedule and forty-eight (48) hours notification prior to delivery.
- 8.3 Coordination of manufacturing and delivery with the Owner's construction schedule.

9.0 Payment

Upon the shipment of any materials hereunder, the Materialman shall submit to the Owner's Engineer a detailed invoice in triplicate of the materials shipped, indicating per-unit prices for each item of material. The Owner will make payment to the Materialman on invoices for up to ninety percent (90%) of cost of delivered material. Not less than ten-percent (10%) will be withheld from the total of invoices submitted for payment. This ten percent (10%) will be paid after delivery of all materials and equipment is complete and it is demonstrated that the materials meet the Specifications. The Owner reserves the right to hold this ten-percent (10%) retainage for a period of up to ninety (90) days, without penalty to verify completeness of delivery, and erectability of the structures.



GENERAL CONDITIONS

1.0 Drawings and Specifications

The Drawings and Specifications are complementary, one to the other. That which is shown on the Drawings or called for in the Specifications shall be as binding as if it were both called for and shown. The intention of the Drawings and Specifications is to include all labor, materials, transportation, equipment, and any and all other things necessary to do a complete job, which may include manufactured items and field service assistance. In case of discrepancy or disagreement in the Purchase Order, the order of precedence shall be: Purchase Order, Specifications, Drawings.

2.0 Clarifications and Detail Drawings

In such cases where the nature of the work requires clarification by the Engineer, such clarification shall be furnished by the Engineer with reasonable promptness by means of written instructions or Detail Drawings or both. Clarifications and Drawings shall be consistent with the intent of Bidding Documents, and shall become a part thereof.

3.0 Copies of Drawings and Specifications

The Engineer will furnish free of charge to the Bidder one (1) copy of the Drawings and Specifications. Additional sets of these Specifications may be obtained upon request and a non-refundable deposit of Fifty Dollars (\$50.00) by approved Bidders.

4.0 Ownership of Drawings and Specifications

All Drawings and Specifications are instruments of service and remain the property of the Engineer whose name appears thereon. The use of these instruments on work other than these Bid Documents without permission is prohibited. All copies of Drawings and Specifications other than final copies shall be returned to the Engineer upon request after completion of the work.

5.0 Royalties, Licenses, and Patents

It is the intention of the Bidding Documents that the work covered herein will not constitute in any way an infringement on patents. The Bidder shall protect and save harmless the Owner against suit on account of alleged or actual infringement. The Bidder shall pay all royalties and/or license fees required on account of patented articles or processes, whether or not the patent rights are evidenced hereinafter.

6.0 <u>Uncorrected Faulty Work</u>

The Bidder shall be notified of faulty or damaged work and shall have the option to respond in a reasonable period of time. Should the correction of faulty or damaged work be considered inadvisable or inexpedient by the Owner or the Engineer, the Owner shall be reimbursed by the Bidder for the same by a deduction in the Purchase Order prices arrived at by a fair estimate of the probable cost of correction, approved by the Engineer.

7.0 Liquidated Damages

The Bidder shall commence manufacture upon issuance of a Purchase Order from the Owner, and shall fully complete delivery as per the Delivery Schedule in the Form of Proposal. For each day in excess of the proposed dates, the Bidder shall be the Owner the sum of five hundred dollars (\$500.00) as liquidated damages (and not as a penalty), reasonably estimated in advance to cover the losses to be incurred by the Owner by reason of failure of said Bidder to complete delivery within the time specified, such time being in the essence of this Purchase Order and material consideration thereof.

8.0 Delays and Extension of Time

8.1 The time to be allowed for delivery is stated in the Form of Proposal. The Bidder, upon notice of award of the Purchase Order, shall prepare a delivery schedule based on the allowed time and submit such schedule to the Engineer for approval.



- 8.2 If Bidder is delayed at any time in the progress of the work by any act of negligence by the Owner or the Engineer, by any separate Bidder employed by the Owner, or by changes ordered in the work, then the time of completion shall be extended for such reasonable time as the Engineer may decide.
- 8.3 No extension of time for completion will be made for ordinary delays and accidents. Extensions may be granted for delays ordered by the Engineer if the request has been made in writing within forty-eight (48) hours after the order to cease work has been given.

9.0 Assignments

The Bidder shall not assign any portion of this Purchase Order nor subcontract in its entirety except as fully explained in the Form of Proposal and accepted by the Owner. No funds or sums of money due or to become due to the Bidder under this Purchase Order may be assigned.

10.0 Guarantee

The Bidder shall guarantee his materials and workmanship against defect due to faulty materials, faulty workmanship, or negligence for a period of one (1) full year from date of energization and/or eighteen (18) months from date of delivery, whichever applies. He shall make good such defective materials or workmanship and any damages resulting therefrom without cost to the Owner. Each class of equipment shall carry a full one (1) year warranty against defects from the date of energization.

11.0 Change In Drawings and/or Specifications

The Owner, or the Engineer on behalf of the Owner, may make changes to Drawings and/or Specifications after award of the Purchase Order or while fabrication is in progress. The compensation for such changes shall be agreed upon in writing between the Bidder and the Owner prior to commencement of work involving the change. No payment shall be made to the Bidder for correcting work not in compliance with Specifications.

12.0 Insurance

The Bidder shall maintain Workmen's Compensation Insurance and Liability Insurance appropriate for the level of exposure involved in the Purchase Order. The Bidder shall furnish certification of the appropriate insurance

13.0 Equal Employment Opportunity

During the performance of this work, the Bidder agrees as follows:

- 13.1 The Bidder will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, political affiliation or belief, age, or physical handicap. The Bidder will take affirmative action to insure that applicants are employed and that employees are treated during employment without regard to race, color, religion, sex, national origin, political affiliation or belief, age, or physical handicap. Such action shall include but not be limited to the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation and selection for training, including apprenticeship. The Bidder agrees to post in conspicuous places available to employees and applicants for employment notices setting forth the provisions of the nondiscrimination clause.
- 13.2 The Bidder, in all solicitations or advertisements for employees placed by or on behalf of the Bidder, will state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, political affiliation or belief, age, or physical handicap.
- 13.3 The Bidder will send to each labor union or representative of workers with which he has a collective bargaining agreement or other Purchase Order or understanding, a notice advising the labor union or workers' representative of the Bidder's commitments under the Equal Employment Opportunity Section of this Specification and shall post copies of the notice in conspicuous places available to employees and applicants for employment.



- 13.4 In the event of the Bidder's noncompliance with the nondiscrimination clauses of this Specification or with any of such rules, regulations, or orders, the Purchase Order may be canceled, terminated, or suspended in whole or in part and the Bidder may be declared ineligible for further Owner contracts.
- 13.5 The Bidder will include the provisions of this section in every Subcontract or Purchase Order unless exempted by rules, regulations, or orders of the Owner, so that such provisions will be binding upon each Subcontractor.

14.0 <u>Indemnification</u>

The Bidder shall hold harmless and indemnify the Owner, its agents, and employees from any and all claims, suits, and proceedings for infringement of any patent or patents covering materials and equipment purchased hereunder. The Bidder shall defend any suit or proceeding brought against Owner, its agents, or employees based upon a claim that the materials and equipment, or any part thereof, constitute an infringement of any patent; or if the Bidder shall fail to defend such suit or proceeding, Owner may do so and the Bidder shall make reimbursement for the expense of such litigation. If the materials and equipment, or any part thereof, are held to constitute infringement and the use thereof is enjoined, the Bidder shall, at its own expense, either procure for Owner the right to continue to use the materials and equipment, or such part thereof, with non-infringing materials and equipment.

TERMS AND CONDITIONS – CITY OF WILSON, NORTH CAROLINA

1.0 Default and Performance Bond

In case of default by the contractor, the City of Wilson may procure the articles or services from other sources and hold the contractor responsible for any excess cost occasioned thereby. The City of Wilson reserves the right to require performance bond or other acceptable alternative guarantees from successful bidder without expense to the City of Wilson.

2.0 Governmental Restrictions

In the event any Governmental restrictions are imposed which necessitate alteration of the material, quality, workmanship or performance of the items prior to delivery, it shall be the responsibility of the contractor to notify, in writing, the issuing purchasing office at once, indicating the specific regulation, which required such alterations. The City of Wilson reserves the right to accept any such alterations, including any price adjustments occasioned thereby, or to cancel the contract.

3.0 Availability of Funds

Any and all payments to the contractor are dependent upon and subject to the availability of funds to the City for the purpose set forth in this agreement.

4.0 Taxes

Any applicable taxes shall be invoiced as a separate item. The City is not exempt from local or North Carolina sales tax.

5.0 Situs

The place of this contract, its situs and forum, shall be North Carolina, where all matters, whether sounding in contract or tort, relating to its validity, construction, interpretation and enforcement shall be determined.

6.0 Governing Laws

This contract is made under and shall be governed and construed in accordance with the laws of the State of North Carolina.

7.0 Inspection at Contractor's Site

The City of Wilson reserves the right to inspect, at a reasonable time, the equipment/item, plant or other facilities of a prospective contractor prior to contract award, and during the contract term as necessary for the City of Wilson's determination 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 contract.

8.0 Payment Terms

Payment terms are Net 30 after receipt of correct invoice or acceptance of goods, whichever is later.

9.0 Affirmative Action

The contractor will take affirmative action in complying with all Federal and State requirements concerning fair employment and employment of the handicapped and concerning the treatment of all employees without regard to discrimination by reason of race, color, religion, sex, national origin or physical handicap.



10.0 Condition and Packaging

Unless otherwise provided by special terms and conditions or specifications, it is understood and agreed that any item offered or shipped has not been sold or used for any purpose and shall be in first class condition. All containers/packaging shall be suitable for handling, storage or shipment.

11.0 Standards

All manufactured items and/or fabricated assemblies subject to operation under pressure, operation by connection to an electric source, or operation involving a connection to a manufactured, natural, or LP gas source shall be constructed and approved in a manner acceptable to the appropriate state inspector which customarily requires the label or reexamination listing or identification marking of the appropriate safety standard organization; such as the American Society of Mechanical Engineers for pressure vessels; the Underwriter's Laboratories and / or National Electrical Manufacturers' Association for electrically operated assemblies; or the American Gas Association for gas operated assemblies, where such approvals of listings have been established for the type of device offered and furnished. Further, all items furnished shall meet all requirements of the Occupational Safety and Health Act (OSHA), and state and federal requirements relating to clean air and water pollution.

12.0 Patent

The contractor shall hold and save the City of Wilson, its officers, agents and employees, harmless from liability of any kind, including costs and expenses, on account of any copyrighted material, patented or unpatented invention, articles, device or appliance manufactured or used in the performance of this contract, including use by the government.

13.0 Advertising

Contractor agrees not to use the existence of this contract, the name of the City of Wilson as part of any commercial advertisement.

14.0 Access To Persons And Records

An independent auditor shall have access to persons and records as a result of all contracts or grants entered into by the City of Wilson in accordance with General Statute 147-64.7.

15.0 Assignment

No assignment of the contractor's obligations or the contractor's right to receive payment hereunder shall be permitted. However, upon written request approved by the issuing purchasing authority and solely as a convenience to the contractor, the City of Wilson may:

- a. Forward the contractor's payment check directly to any person or entity designated by the contractor, and
- b. Include any person or entity designated by contractor as a joint payee on the contractor's payment check

In no event shall such approval and action obligate the City of Wilson to anyone other than the contractor and the contractor shall remain responsible for fulfillment of all contract obligations.

16.0 Insurance Coverage

During the term of the contract, the contractor at its sole cost and expense shall provide commercial insurance of such type and with such terms and limits as may be reasonably associated with the contract. As a minimum, the contractor shall provide and maintain the following coverage and limits:



- a. Worker's Compensation. The contractor shall provide and maintain Worker's Compensation Insurance, as required by the laws of North Carolina, as well as employer's liability coverage with minimum limits of \$150,000.00, covering all of contractor's employees who are engaged in any work under the contract. If any work is sublet, the contractor shall require the subcontractor to provide the same coverage for any for any of his employees engaged in any work under the contract.
- b. <u>Commercial General Liability</u>. General Liability Coverage on a Comprehensive Broad Form on an occurrence basis in the minimum amount of \$500,000.00 Combined Single Limit. (Defense cost shall be in excess of the limit of the liability.)
- c. <u>Automobile</u>. Automobile Liability Insurance, to include liability coverage, covering all owned, hired, and non-owned vehicles, used in connection with the contract. The minimum combined single limit shall be \$150,000.00 uninsured/under insured motorist; and \$1,000.00 medical payment.

17.0 Requirements

Providing and maintaining adequate insurance coverage is a material obligation of the contractor and is of the essence of this contract. All such insurance shall meet all laws of the State of North Carolina. Such insurance coverage shall be obtained from companies that are authorized to provide such coverage and that are authorized by the Commissioner of Insurance to do business in North Carolina. The contractor shall at all times comply with terms of such insurance policies, and all requirements of the insurer under any such insurance policies, except as they may conflict with existing North Carolina laws or this contract. The limits of coverage under each insurance policy maintained by the contractor shall not be interpreted as limiting the contractor's liability and obligations under the contract.

18.0 Cancellation (Term Contracts Only)

All contract obligations shall prevail for at least 180 days after the effective date of the contract. After that period, in addition to the provisions of the paragraph entitled Price Adjustments, for the protection of both parties, this contract may be canceled in whole or in part by either party giving 30 days prior notice in writing to the other party. Such notice of cancellation, as required herein, shall be transmitted via U.S. MAIL, Certified, and Return Receipt Requested. The 30 days' notice for cancellation shall begin on the day the return receipt is signed and dated.

19.0 Quantities (Term Contract Only)

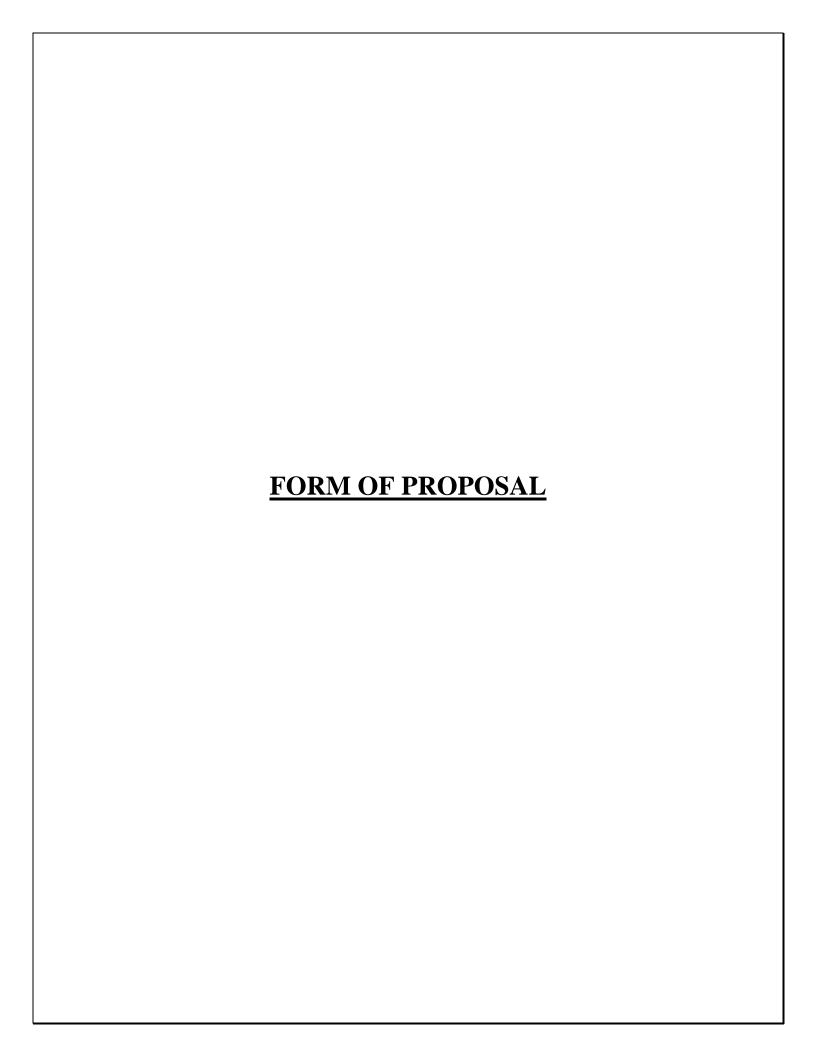
The award of a term contract neither implies nor guarantees any minimum or maximum purchases thereunder.

20.0 Price Adjustments (Term Contract Only)

Any price changes, downward or upward, which might be permitted during the contract period, must be general, either by reason of market change or on the part of the contractor to other customers.

- a. <u>Notification</u>. Must be given to the Purchasing Department, in writing, concerning any proposed price adjustments. Such notification shall be accompanied by copy of manufacturer's official notice or other acceptable evidence that the change is general in nature.
- b. <u>Decreases</u>. The City of Wilson shall receive full proportionate benefit immediately at any time during the contract period.
- c. <u>Increases</u>. All prices shall be firm against increase for 180 days from the effective date of the contract. After this period, a request for increase may be submitted with the City of Wilson reserving the right to reject the increase or cancel the contract. Such action by the City of Wilson shall occur not later than 15 days after the receipt by the City of Wilson of a properly documented request for price increase. Any increases accepted shall become effective not later than 30 days after the expiration of the original 15 days reserved to evaluate the request for increase.
- d. <u>Invoices</u>. It is understood and agreed that orders will be shipped at the established contract prices in effect on dates orders are placed. Invoicing at variance with this provision will subject the contract to cancellation. Applicable North Carolina sales tax shall be invoiced as a separate item.





CITY OF WILSON WILSON, NORTH CAROLINA

SPECIFICATIONS AND BID DOCUMENTS FOR STRUCTURES AND EQUIPMENT FOR THE WILSON 480V OPERATION CENTER FEED

FORM OF PROPOSAL

(Provide one original and one copy)

Respectfully submitted this _	day of	, 2021
-------------------------------	--------	--------

OWNER:	BIDDER:
City of Wilson 1800 Herring Avenue E	NAME TITLE
Wilson, NC 27893-6727	STREET ADDRESS
Contact: Mr. Daniel Gillen Phone: 252-296-3308	CITY/STATE/ZIP
Email: dgillen@wilsonnc.org	PHONE:
	FAX:
	E-MAIL:
	SIGNATURE
SUPPLIER OF PROPOSED EQUIPMENT	
MANUFACTURER	
STREET ADDRESS	
CITY / STATE / ZIP	

TERMS AND CONDITIONS

- 1. The undersigned (hereinafter called the "Bidder") hereby proposes to sell and deliver to the Owner upon the terms and conditions herein stated, the materials, equipment, and services (hereinafter called the "Material") specified in the Bid Schedule(s) attached hereto, and by this reference made a part hereof, for the Materials for the Owner, and:
 - a. These bid documents that include *Notice to Prospective Bidders*, *Instructions to Bidders*, *General Conditions*, and *Technical Specifications* for the structures and equipment.
 - b. Manufacturer's specifications, both as set forth herein and in Manufacturer's literature (two [2] sets) attached hereto, or furnished separately as provided for in the *Instructions to Bidders*;
 - c. Legal negotiations, with low bidder only, after bids are opened, for budgetary compliance.
- 2. The prices as quoted herein:
 - a. Are firm unless otherwise stated,
 - b. Are FOB to the location(s), as outlined in the Instructions to Bidders,
 - c. Do include the cost of delivery to the site at the Bidder's Risk, assuming unloading by Others, and
 - d. Have state sales tax shown as a separate item, if applicable.
- 3. The Material prices set forth herein do not include any sums which are or may be payable by the Bidder on account of State Sales Tax upon the sale, purchase or use of the material. If any such tax is applicable to the sale, purchase or use of the material hereunder, the amount thereof shall be added to the purchase price and paid by the Owner after the Bidder has ascertained the actual sales tax to be included in the purchase order price.
- 4. Invoice shall list the appropriate state sales tax as a separate item
- 5. The Bidder further declares that he has examined the site of the work and informed himself fully regarding all conditions pertaining to the location where the Material is to be delivered; that he has examined the *Technical Specifications* for the work and Bid Documents relative thereto; has read all special provisions furnished prior to the opening of the bids; and that he has satisfied himself relative to the work to be performed.
- 6. The Bidder proposes and agrees if the following Bid Schedule(s) in this Proposal is accepted, to contract with the Owner, in the form of a purchase order specified, to furnish all necessary equipment and materials, except materials and equipment specified to be furnished by the Owner, complete in accordance with the Bid Documents, to the full and entire satisfaction of the Owner, with a definite understanding that no money will be allowed for extra work except as set forth in the *General Conditions*, and as filed on Change Order Forms.
- 7. The Owner may accept any schedule or portion thereof.
- 8. A *Form of Exceptions* to the *Technical Specifications*, prepared in accordance with the *Instructions to Bidders*, is attached hereto. The Bidder shall document any exceptions with deviation from the bid documents and specifications in the *Form of Proposal*. Otherwise, the complete compliance is assumed.
- 9. Proposals shall include a complete bill of materials, identifying each item by catalog number, manufacturer, ratings, characteristics, types, sizes, etc., of all materials and equipment required for a complete and coordinated City of Wilson. A simple statement that all necessary materials and equipment will be provided is not acceptable.
- 10. The Bidder warrants the accuracy of all statements contained in the Bidders Qualifications, if any shall be submitted, and agrees that the Owner shall rely upon such accuracy as a condition of the Purchase Order in the event that this Proposal is accepted.
- 11. Title to the materials shall pass to the Owner upon delivery to the location(s) specified in the *Instructions to Bidders*.
- 12. The Bidder warrants that the Materials will conform to the performance data and guarantees which are attached hereto and by this reference made a part thereof.



- 13. The Bidder warrants the accuracy of all statements contained in the Bidder's Qualifications and agrees that the Owner will rely upon such accuracy as a condition of the award of Purchase Order in the event that this Proposal is accepted.
- 14. By the submission of this bid, the Bidder certifies that:
 - a. The bid has been arrived at by the Bidder independently and has been submitted without collusion with any other Bidder of materials, supplies, or equipment of the type described in the *Notice to Prospective Bidders* or the *Technical Specifications*, and
 - b. The contents of the bid have not been communicated by the Bidder, nor, to its best knowledge and belief, by any of its employees or agents, to any person not an employee or agent of the Bidder or its Surety on any Bond furnished herewith and will not be communicated to any person prior to the official opening of the bid.
- 15. The Bidder further agrees that in case of failure on his part to accept said purchase order within ten (10) consecutive calendar days after written notice has been given of the award of the Purchase Order, the Bid Security accompanying this bid, and the monies payable thereon, shall be paid into the funds of the Owner account set aside for this project, as liquidated damages for such failure; otherwise the check or cash accompanying the *Form of Proposal* shall be returned to the Bidder.
- 16. If, in submitting this Proposal, the Bidder has made any change in the *Form of Proposal*, the Bidder understands that the Owner may evaluate the effect of such change as they see fit or they may exclude the Proposal from consideration in determining the issue of Purchase Order.



BID SCHEDULES

STRUCTURES AND EQUIPMENT FOR THE WILSON 480V OPERATION CENTER FEED

BID SCHEDULE NO. 1 - Base Bid

<u>Description</u>	Quantity	Total Cost
Furnish and Deliver Complete all equipment and materials for the installation of the Wilson 480V Operation Center Feed so represented by the Bill of Materials, Drawings and Technical		
Specifications	1	\$
Delivery Charge	1	\$
Sales Tax (if applicable)	1	\$
	BASE BID:	\$

BID SCHEDULE NO. 1 – Delivery Schedule

Instructions to Bidders, 6.0 Shipment and Delivery

The prices of the materials and equipment set forth herein shall include the cost of delivery to the site at the Bidder's risk. The time of delivery shall be as follows:

	Delivery (Days)*
Approval Drawings	
Final Drawings**	
Delivery of Material**	

- * Number of consecutive calendar days after receipt of written order from the Owner.
- ** Allow two (2) weeks for receipt and return of Approval Drawings.

BID SCHEDULE NO. 1 – Field Service Engineering (Per Day Rate)				
Per Day Rate (including expenses) for field service engineering	\$	_/Day		
Rate per one round trip (including expenses) to the site:	\$	_/Day		



AFFIDAVIT OF BIDDER

The final payment of retained amount due the Bidder on account of the Purchase Order shall not become due until the Bidder has furnished to the Owner through the Engineer an affidavit signed, sworn, and notarized to the effect that all payments for Material, services, or any other reason in connection with this Purchase Order have been satisfied and that no claims or liens exist against the Bidder in connection with this Purchase Order. In the event that the Bidder cannot obtain similar affidavits from Subcontractors to protect the Bidder and the Owner from possible liens or claims against the Subcontractor, the Bidder shall state in his affidavit that no claims or liens exist against any Subcontractor, and if any liens or claims appear afterward, the Bidder shall save the Owner harmless on account thereof.

Bidder:			
By:			
•			
Date:			



FORM OF EXCEPTIONS

Instructions to Bidders, Paragraph 2.6 and Paragraph 2.9

BIDDER:	
OWNER:	City of Wilson Wilson North Carolina
PROJECT DESCRIPTION	STRUCTURES AND EQUIPMENT FOR THE WILSON 480V OPERATION CENTER FEED
INSTRUCTIONS:	The following is a list of exceptions to the Bidding Documents and/or Technical Specifications pertaining to the furnishing of the subject materials. Bidders shall identify each exception by Specification page and paragraph number on this form. The omission of exception implies complete compliance with Plans and Specifications.
BID DOCUMENT/ SPECIFICATION PAGE NO. AND	
<u>PARAGRAPH</u>	EXCEPTION/VARIATION



В	BID BOND
KNOW ALL MEN BY THESE PRESENT, THA	T WE
as Principal, and	
	n North Carolina, are held and firmly bound unto the <u>City of</u>
Wilson of Wilson North Carolina, as Obligee, in the	the penal sum of
DOLLARS (\$_) (5% Bid Bond), lawful money of the
United States of America, for the payment of which	ich, well and truly to be made, we bind ourselves, our heirs,
executors, administrators, successors and assigns,	, jointly and severally, firmly by these present.
SIGNED, Sealed and dated this _	day of, 2021.
WHEREAS, the said Principa	al is herewith submitting a Proposal for
STRUCTURES AN	ND EQUIPMENT FOR THE
WILSON 480V OP	PERATION CENTER FEED
and the Principal desires to file this Bid Bond in documents contained herein;	lieu of making the cash deposit as required by the bidding
NOW, THEREFORE, THE CONDITION OF TH	HE ABOVE OBLIGATION is such that if the principal shall
be awarded the Purchase Order for which the bid	is submitted and shall accept the Purchase Order within ten
(10) days after the award of same to the principal, t	then this obligation shall be null and void; but if the principal
fails to so accept such Purchase Order as required by	by the bidding documents contained herein, the Surety shall,
upon demand, forthwith pay to the Obligee the am	nount set forth in the first paragraph hereof, and upon failure
	l pay the Obligee an amount equal to double the amount of
	ereof. Power of Attorney from the Surety to its Attorney-in-
Fact is attached hereto.	
	Principal
	By(SEAL)
	Corporate Surety
	By(SEAL)

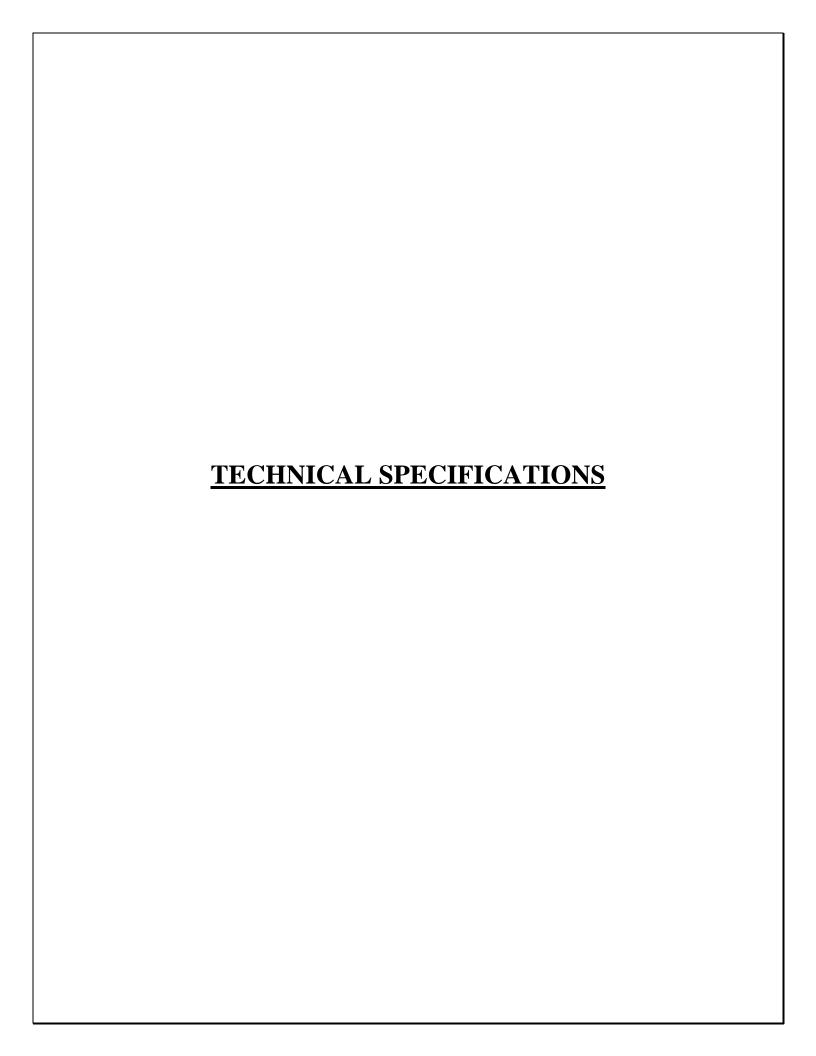


INSERT

ADDENDA / CLARIFICATIONS / BULLETINS

Instructions to Bidders, 5.0 Bulletins and Addenda





CITY OF WILSON WILSON, NORTH CAROLINA

SPECIFICATIONS AND BID DOCUMENTS FOR STRUCTURES AND EQUIPMENT FOR THE WILSON 480V OPERATION CENTER FEED

TECHNICAL SPECIFICATIONS

1.0 Scope

The City of Wilson, Wilson, North Carolina, is procuring materials for the installation of the Wilson 480V Operation Center Feed. These Technical Specifications describe the structural materials, equipment, and the associated components for the installation of this facility.

The Materialman's work shall include furnishing all equipment and materials so represented by the Bill of Materials, the accompanying Drawings, these Technical Specifications, and as set forth in the Bid Schedule. The Owner reserves the right to select any combination of alternate schedules as may be allowed. The Owner also reserves the right to reject any or all bids.

The Bill of Materials supplied with these Specifications represents the type of materials to be supplied. The Materialman has the responsibility of furnishing the quantity, all mounting hardware, and miscellaneous other materials necessary for a complete and functional facility, except for items designated to be furnished by Owner. Any discrepancies found in the attached Bill of Materials should be brought to the attention of the Engineer at least ten (10) days prior to the bid opening. Discrepancies of a significant nature will be issued to all bidders through addenda.

2.0 General Conditions

All materials and equipment shall be new, as listed in RUS Informational Publication 202-1, List of Acceptable Material.

These Specifications describe the type, size, and characteristics of the various materials and equipment required to be furnished. The Drawings indicate general arrangement, equipment location, and spacing.

Strict adherence to these general Specifications and Drawings is requested to facilitate checking and consideration of the Proposal.

Proposals shall include the following:

- 2.1 Catalog numbers, manufacturer, ratings, characteristics, types, sizes, etc., of all materials and equipment included. A simple statement that all necessary materials and equipment will be provided is not satisfactory. A List of Materials is included at the end of these Specifications for providing this information for this facility.
- 2.2 Performance data for the several items as set forth in the detailed Specifications. Structural calculations and a bill of material of structural members shall be furnished as a part of the Form of Proposal to verify quoted structural weights.
- 2.3 Proposal for the system shall include all materials and equipment required for a complete and coordinated facility. The Successful Bidder shall submit along with his quotation a complete list of materials to be furnished for the facility.
- 2.4 Prices shall include the cost of delivery to the site.
- 2.5 Coordinated shipment shall be made to reduce storage by Owner and to facilitate the accumulation of component parts. Small piecemeal shipments will not be accepted. The number of shipments shall not exceed five (5) unless approved by the Engineer. Direct-manufacturer, factory-drop shipments shall not be accepted.



- 2.6 All components shall be distinctly marked or identified and shall be completely assembled before shipment, insofar as is practical. Each Bidder shall so state in his Proposal the manner in which trusses and columns will be shipped.
- 2.7 The Materialman shall furnish specification sheets for all switches, connectors, fittings, insulators, and lightning arresters. These specification sheets shall be provided with the Approval Drawings.

3.0 **Special Conditions**

3.1 <u>Defective Materials, Equipment, and Workmanship</u>

All materials and equipment furnished hereunder shall be subject to the inspection, tests, and approval of Owner; and the Bidder shall furnish all information required concerning the nature or source of any materials and equipment and provide adequate facilities for testing and inspecting the materials and equipment at the plant of the Bidder.

The materials and equipment furnished hereunder shall become the property of Owner when delivered at the point to which shipment is to be made; provided, however, that Owner may reject any such materials and equipment as does not comply with the Specifications for materials and equipment and warranties of the Bidder and manufacturers. Recognition and subsequent rejection of any defective materials and equipment may occur either before or after incorporation of such materials and equipment into the facilities, provided such rejection is made within one (1) year of date of delivery of the materials and equipment. Upon any such rejection, the Bidder shall replace the rejected materials and equipment with materials and equipment complying with the Specifications for materials and equipment and warranties FOB open-top truck or open trailer at suitable destination as determined by Owner. Owner shall return the rejected materials FOB open-top truck or open trailer at the same destination. In the event of the failure of the Bidder to so replace rejected materials and equipment, Owner may make such replacement; and the cost and expense thereof shall be paid by and be recoverable from the Materialman.

3.2 <u>Miscellaneous</u>

The Materialman shall hold harmless and indemnify the Owner, its agents, and employees from any and all claims, suits, and proceedings for infringement of any patent or patents covering materials and equipment purchased hereunder. The Materialman shall defend any suit or proceeding brought against Owner, its agents, or employees based upon a claim that the materials and equipment, or any part thereof, constitute an infringement of any patent; or if the Materialman shall fail to defend such suit or proceeding, Owner may do so and the Materialman shall make reimbursement for the expense of such litigation. If the materials and equipment, or any part thereof, are held to constitute infringement and the use thereof is enjoined, the Materialman shall, at its own expense, either procure for Owner the right to continue to use the materials and equipment, or such part thereof, or shall replace the materials and equipment, or such part thereof, with non-infringing materials and equipment.

4.0 Standards

All equipment and materials covered by these Specifications shall be in accordance with the applicable provisions of the latest editions of the Standards of the ASTM, ANSI, NEMA, IEEE, OSHA, RUS, and latest revision of the NESC. Where a manufacturer's name and type of equipment is indicated in the Specifications, it is for clarity and the establishment of a standard and is restrictive unless use of an approved equal is specifically mentioned.

The Materialman may offer alternate pricing for equivalent items by other manufacturers. However, <u>all</u> base bids must explicitly comply with the designated materials specified herein. The Owner may elect to purchase alternates, as proposed by the Materialman. The alternate materials are subject to review and approval by the Owner's Engineer.

The basic system ratings for the system shall be as follows:



4.1 Operation Center Green Light Feed

System Low-Side Voltage - 480 volts, three-phase wye, Basic Insulation Level shall be 30 kV, 60 Hertz.

5.0 <u>Drawings - NONE</u>

6.0 **Shop Drawings**

- 6.1 Approval of Shop Drawings and Bill of Materials will be required. The Materialman shall supply all Shop Drawings and Bills of Materials to Owner's Engineer so they may ascertain that all materials and equipment being furnished by the Materialman meet the Specifications.
- 6.2 Final Drawings and final Bill of Materials shall be furnished by the Materialman for installation of the System. All final documentation shall be delivered to Owner's Engineer for distribution.
- 6.3 The Materialman should prepare and submit calculated loading reactions to Owner's Engineer at the earliest possible date following receipt of order. The Materialman shall provide such information to Owner's Engineer not later than two (2) weeks following receipt of order.
- All Drawings and documentation are to be forwarded to Booth & Associates, LLC attention John Sidebotham PE SidebothamJB@Booth-Assoc.com.

7.0 Material and Equipment Not Included

The following material and equipment items for the facility will be furnished by the Owner or others and should not be included in the Form of Proposal:

- 7.1 Reinforced concrete foundations
- 7.2 Below-grade ground grid system

8.0 <u>Structural Steel – NONE</u>

9.0 <u>Lightning Protection Structures – NONE</u>

10.0 <u>Miscellaneous Structures / Hardware</u>

10.1 Miscellaneous fastener hardware shall conform to the industry standards for the purpose for which they are to be used. Bolts, nuts and washers for structural steel shall be hot-dip galvanized. Hardware shall be of low-alloy, corrosion-resistant steel, ASTM Specification A242.

All quantities of fastener hardware shall be shipped with a **minimum of ten percent (10%) overcount** above the designated quantity necessary for assembly.

11.0 Insulators – NONE

12.0 Bus and Leads

The hardware required for the conductor shall be furnished by the Materialman and shall conform to the following specifications: ANSI C135 for bolts, ASTM A36 for steel, ASTM A47 for malleable iron and ASTM A153 for galvanizing.

13.0 Bus Supports – NONE

14.0 Connectors

Connectors shall be suitable for the purpose they are intended and shall provide a sound electrical and mechanical connection.

The Materialman is responsible for supplying the connectors and hardware for all bus and leads and as defined in Section 12.0 - Bus and Leads and are shown on the Bill of Materials. A corrosion-inhibiting compound shall be furnished in a sufficient quantity to be applied to all connections.



- 14.1 Cable terminal fittings required for the incoming lines, bus leads around switches, equipment, and between switches and rigid bus shall be aluminum bolted or compression type or bolted bronze type with the appropriate 2-hole or 4-hole NEMA spacing pad, as manufactured by Anderson, or approved equal.
- 14.2 All hardware supplied for bolted aluminum-to-copper electrical fittings shall be stainless steel 18-8 alloy.
- 14.3 All hardware supplied for bolted copper-to-copper electrical fittings shall be stainless steel 18-8 alloy.
- 14.4 All quantities of fastener hardware shall be shipped with **a minimum ten percent (10%) over count** above the designated quantity necessary for assembly.
- 14.5 Materialman to verify that all conductor terminal pads shall match and fit onto switch terminal pads with regard to pad size, NEMA rating and pad shoulder configurations.

15.0 Group -Operated Switches

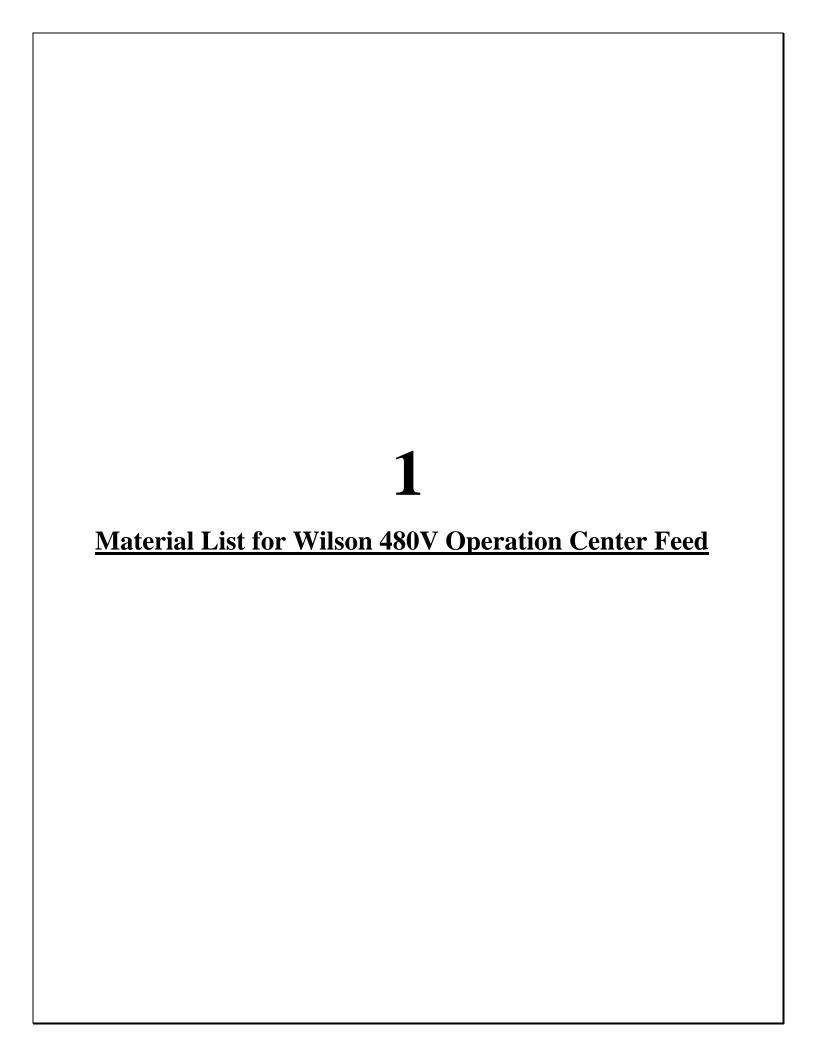
The 480 volt transfer switches shall be supplied with all of the options and features included in part numbers.

- **16.0** Surge Arresters NONE
- 17.0 Single-Pole Disconnect Switches NONE
- 18.0 Hookstick and Container NONE
- 19.0 <u>Instrument Transformers NONE</u>
- **20.0 Distribution Transformers NONE**
- 21.0 <u>List of Materials Structures and Equipment</u>

See Appendix 1 for a list of the major items required for the system. Items noted as '(N/A)' in the list are to be furnished by Owner.



APPENDICES 1. Material List for Wilson 480V Operation Center Feed



CITY OF WILSON WILSON, NORTH CAROLINA

STRUCTURES AND EQUIPMENT FOR THE 480V OPERATION CENTER FEED

MATERIAL LIST

ITEM	DECCRIPTION			CATALOG NO. //EV/PE
<u>NO.</u>	<u>DESCRIPTION</u>	QUANTITY	<u>MANUFACTURER</u>	NO./TYPE
100	Automatic Transfer Switch, Open Transition, 480Vac, Free Standing, 400A, 3 Pole, Mechanical Connections, With NEMA 3R Enclosures and a Heater	1 each	Russelectric	RTS30ATA4003AMOV3R
		1 0001		
110	Manual Transfer Switch, Open Transition, 480Vac, Free Standing, 400A, 3 Pole, Mechanical Connections, With			
	NEMA 3R Enclosures and a Heater	1 each	Russelectric	RTS30MTA4003AMOV3R
120	Main Distrubtion Panel 600A Main Breaker, Feeder Breakers to be included: 2- 400A Feeders, 2 - 200A Feeders, 2 - 100A Feeders, 4 - 60A Feeders, 4 - 30A Feeders in a NEMA 3R enclosure	1 each		
130	480V, 400A Pin and Sleeve Power Connection. Both the male and female parts shall be included. The connectors shall accept 535MCM DLO cable.	1 each		
		1 cacii		
200	Wire, 600Vac, copper, 535MCM DLO cable	300 LF		
210	535MCM 2 hole pad compresson lugs	12 each		

