



STATE OF NORTH CAROLINA

Invitation for Bid #: 54-ML-PR29302

Mast Arm Poles

Date Issued: December 15, 2025

Bid Opening Date: December 29, 2025

At 2:00 PM EST

Direct all inquiries concerning this IFB to:

Michael Lingenfelter

Procurement Specialist II

Email: mwlingenfelter@ncdot.gov

Phone: 919-707-2642



STATE OF NORTH CAROLINA

Invitation for Bid

54-ML-PR29302

For internal State agency processing, including tabulation of bids, provide your company's eVP (Electronic Vendor Portal) Number. Pursuant to G.S. 132-1.10(b) this identification number shall not be released to the public. **This page will be removed and shredded, or otherwise kept confidential**, before the procurement file is made available for public inspection.

**This page shall be filled out and returned with your bid.
Failure to do so shall be sufficient cause to reject your bid.**

Vendor Name

Vendor eVP #

Note: For a contract to be awarded to you, your company (you) must be a North Carolina registered Vendor in good standing. You must enter the Vendor number assigned through eVP (Electronic Vendor Portal). If you do not have a Vendor number, register at <https://evp.nc.gov/SignIn>

Electronic responses ONLY will be accepted for this solicitation.

STATE OF NORTH CAROLINA
Department of Transportation

Refer <u>ALL</u> Inquiries regarding this IFB to: Michael Lingenfelter mwlingenfelter@ncdot.gov 919-707-2642	Invitation for Bids # 54-ML-PR29302
	Bids will be publicly opened: December 29, 2025, at 2pm ET
Using Agency: NCDOT	Commodity No. and Description: 391221 Electrical transmission and distribution equipment
Requisition No.: PR29302, PR29302, & PR29646	

EXECUTION

In compliance with this Invitation for Bids (IFB), and subject to all the conditions herein, the undersigned Vendor offers and agrees to furnish and deliver any or all items upon which prices are bid, at the prices set opposite each item within the time specified herein.

By executing this bid, the undersigned Vendor understands that false certification is a Class I felony and certifies that:

- this bid is submitted competitively and without collusion (G.S. 143-54),
- that none of its officers, directors, or owners of an unincorporated business entity has been convicted of any violations of Chapter 78A of the General Statutes, the Securities Act of 1933, or the Securities Exchange Act of 1934 (G.S. 143-59.2), and
- it is not an ineligible Vendor as set forth in G.S. 143-59.1.

Furthermore, by executing this bid, the undersigned certifies to the best of Vendor’s knowledge and belief, that:

- it and its principals are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any Federal or State department or agency.

As required by G.S. 143-48.5, the undersigned Vendor certifies that it, and each of its sub-Contractors for any Contract awarded as a result of this IFB, complies with the requirements of Article 2 of Chapter 64 of the NC General Statutes, including the requirement for each employer with more than 25 employees in North Carolina to verify the work authorization of its employees through the federal E-Verify system.

As required by Executive Order 24 (2017), the undersigned Vendor certifies will comply with all Federal and State requirements concerning fair employment and that it does not and will not discriminate, harass, or retaliate against any employee in connection with performance of any Contract arising from this solicitation.

G.S. 133-32 and Executive Order 24 (2009) prohibit the offer to, or acceptance by, any State Employee associated with the preparing plans, specifications, estimates for public Contract; or awarding or administering public Contracts; or inspecting or supervising delivery of the public Contract of any gift from anyone with a Contract with the State, or from any person seeking to do business with the State. By execution of this bid response to the IFB, the undersigned certifies, for Vendor’s entire organization and its employees or agents, that Vendor are not aware that any such gift has been offered, accepted, or promised by any employees or agents of Vendor’s organization.

By executing this bid, Vendor certifies that it has read and agreed to the **INSTRUCTION TO VENDORS** and the **NORTH CAROLINA GENERAL TERMS AND CONDITIONS incorporated herein**. These documents can be accessed from the ATTACHMENTS page within this document.

Failure to execute/sign bid prior to submittal shall render bid invalid and it WILL BE REJECTED. Late bids cannot be accepted.

COMPLETE/FORMAL NAME OF VENDOR:		
STREET ADDRESS:	P.O. BOX:	ZIP:
CITY & STATE & ZIP:	TELEPHONE NUMBER:	TOLL FREE TEL. NO:
PRINCIPAL PLACE OF BUSINESS ADDRESS IF DIFFERENT FROM ABOVE (SEE INSTRUCTIONS TO VENDORS ITEM #21):		
PRINT NAME & TITLE OF PERSON SIGNING ON BEHALF OF VENDOR:		
VENDOR’S AUTHORIZED SIGNATURE:	DATE:	E-MAIL:

Bid Number: 54-ML-PR29093

Vendor: _____

VALIDITY PERIOD

Offer shall be valid for at least ninety (90) days from date of bid opening, unless otherwise stated here: _____ days, or if extended by mutual agreement of the parties. Any withdrawal of this offer shall be made in writing, effective upon receipt by the agency issuing this IFB.

BID ACCEPTANCE

If your bid is accepted, all provisions of this IFB, along with the written results of any negotiations, shall constitute the written agreement between the parties ("Contract"). The NORTH CAROLINA GENERAL TERMS AND CONDITIONS are incorporated herein and shall apply. Depending upon the Goods or Services being offered, other terms and conditions may apply, as mutually agreed.

FOR STATE USE ONLY: Offer accepted and Contract awarded this ____ day of _____, 20____, as indicated

on the attached certification, by _____

(Authorized Representative of the Department of Transportation)

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1.0 PURPOSE AND BACKGROUND

The purpose of this Invitation for Bid (IFB) is to obtain pricing and award a contract to a qualified vendor to providing Mast Arm Poles as herein specified to the North Carolina Department of Transportation (NCDOT) Traffic Services Unit Division 3.

NCDOT in conjunction with the Traffic Services Unit is involved in managing traffic and travel information for the State. They provide real-time updates on accidents, congestion, traffic cameras, work zones, and other road conditions.

The intent of this solicitation is to award an Agency Specific Contract (ASC) - one-time purchase.

Bids shall be submitted in accordance with the terms and conditions of this IFB and any addenda issues hereto.

2.0 GENERAL INFORMATION

2.1 INVITATION FOR BID DOCUMENT

The IFB is comprised of the base IFB document, any attachments, and any addenda released before Contract award, which are incorporated herein by reference.

2.2 E-PROCUREMENT FEE

ATTENTION: The E-Procurement fee may apply to this solicitation. See paragraph entitled ELECTRONIC PROCUREMENT of the North Carolina General Terms and Conditions.

General information on the E-Procurement Services can be found at: <http://eprourement.nc.gov/>.

2.3 NOTICE TO VENDORS REGARDING IFB TERMS AND CONDITIONS

It shall be the Vendor's responsibility to read the Instructions to Vendors, the North Carolina General Terms and Conditions, all relevant exhibits and attachments, and any other components made a part of this IFB and comply with all requirements and specifications herein. Vendors also are responsible for obtaining and complying with all Addenda and other changes that may be issued in connection with this IFB.

If Vendors have questions, issues, or exceptions regarding any component within this IFB, those must be submitted as questions in accordance with the instructions in the BID QUESTIONS Section. If the State determines that any changes will be made as a result of the questions asked, then such decisions will be communicated in the form of an IFB addendum. The State may also elect to leave open the possibility for later negotiation of specific provisions of the Contract that have been addressed during the question-and-answer period, prior to contract award.

Other than through this process or negotiation under 01 NCAC 05B.0503, the State rejects and will not be required to evaluate or consider any additional or modified terms and conditions submitted with Vendor's bid. This applies to any language appearing in or attached to the document as part of the Vendor's bid that purports to vary any terms and conditions or Vendors' instructions herein or to render the bid non-binding or subject to further negotiation. Vendor's bid shall constitute a firm offer that shall be held open for the period required herein ("Validity Period" above).

The State may exercise its discretion to consider Vendor proposed modifications. By execution and delivery of this IFB response, the Vendor agrees that any additional or modified terms and conditions, whether submitted purposely or inadvertently, shall have no force or effect, and will be disregarded unless expressly agreed upon through negotiations and incorporated by way of a Best and Final Offer (BAFO). Noncompliance with, or any attempt to alter or delete, this paragraph shall constitute sufficient grounds to reject Vendor's bid as non-responsive.

2.4 IFB SCHEDULE

The table below shows the *intended* schedule for this IFB. The State will make every effort to adhere to this schedule.

Event	Responsibility	Date and Time
Issue IFB	State	December 15, 2025
Submit Written Questions	Vendor	December 17, by 11:00 AM EST
Submit Bids	Vendor	December 29, 2025, by 2:00 PM EST
<p>Public bid opening for this solicitation will be conducted via conference call. Vendors may use the links below or use the call-in number to join the bid opening December 29, 2025, at 2:00 PM EST.</p> <p style="text-align: center;">Microsoft Teams Need help?</p> <p style="text-align: center;">Join the meeting now</p> <p style="text-align: center;">Meeting ID: 270 219 593 924 56</p> <p style="text-align: center;">Passcode: nJ6e8e2t</p> <hr/> <p style="text-align: center;">Dial in by phone</p> <p style="text-align: center;">+1 984-204-1487,,314255758# United States, Raleigh</p> <p style="text-align: center;">Find a local number</p> <p style="text-align: center;">Phone conference ID: 314 255 758#</p> <p style="text-align: center;">Join on a video conferencing device</p> <p style="text-align: center;">Tenant key: ncgov@m.webex.com</p> <p style="text-align: center;">Video ID: 118 252 961 9</p> <p style="text-align: center;">More info</p> <p style="text-align: center;">For organizers: Meeting options Reset dial-in PIN</p>		

2.5 BID QUESTIONS

Upon review of the IFB documents, Vendors may have questions to clarify or interpret the IFB in order to submit the best bid possible. To accommodate the Bid Questions process, Vendors shall submit any such questions by the “Submit Written Questions” date and time provided in the IFB SCHEDULE Section above, unless modified by Addendum.

Written questions shall be e-mailed to mwlingenfelter@ncdot.gov by the date and time specified above. Vendors will enter “IFB # 54-ML-PR29302 Questions” as the subject for the email. Question submittals will include a reference to the applicable IFB section and be submitted in the format shown below:

Reference	Vendor Question
IFB Section, Page Number	Vendor question ...?

Questions received prior to the submission deadline date, the State’s response, and any additional terms deemed necessary by the State will be posted in the form of an addendum to *the electronic Vendor Portal (eVP)*, <https://evp.nc.gov>, and shall become an Addendum to this IFB. No information, instruction or advice provided orally or informally by any State personnel, whether made in response to a question or otherwise in connection with this IFB, shall be considered authoritative or binding. Vendors shall rely *only* on written material contained in an Addendum to this IFB.

2.6 BID SUBMITTAL

IMPORTANT NOTE: This is an absolute requirement. Vendor shall bear the risk of late submission due to unintended or unanticipated delay. It is the Vendor's sole responsibility to ensure its bid has been received as described in this IFB by the specified time and date of opening. The date and time of receipt will be marked on each bid when received. Any bid or portion thereof received after the bid submission deadline will be rejected.

eVP

All proposal responses shall be submitted electronically via the electronic Vendor Portal (eVP). Additional information can be found at the eVP updates for Vendors link: <https://eprocurement.nc.gov/news-events/evp-updates-vendors>.

Failure to submit a bid in strict accordance with these instructions shall constitute sufficient cause to reject a Vendor's bid(s). Vendors are strongly encouraged to allow sufficient time to upload bids.

Critical updated information may be included in Addenda to this IFB. It is important that all Vendors responding on this IFB periodically check the State's eVP website for any Addenda that may be issued prior to the bid opening date. All Vendors shall be deemed to have read and understood all information in this IFB and all Addenda thereto.

2.7 BID CONTENTS

Vendors shall populate all attachments of this IFB that require the Vendor to provide information and include an authorized signature where requested. Failure to provide all required items, or Vendor's submission of incomplete items, may result in the State rejecting Vendor's bid, in the State's sole discretion

Vendor IFB responses shall include the following items and attachments, which shall be arranged in the following order:

- a) Completed and signed version of EXECUTION PAGES, along with the body of the IFB.
- b) Signed receipt pages of any addenda released in conjunction with this IFB, if required to be returned.
- c) Completed version of ATTACHMENT A: PRICING
- d) Completed version of ATTACHMENT D: HUB SUPPLEMENTAL VENDOR INFORMATION
- e) Completed version of ATTACHMENT F: LOCATION OF WORKERS UTILIZED BY VENDOR
- f) Completed and signed version of ATTACHMENT G: CERTIFICATION OF FINANCIAL CONDITION
- g) Completed and signed version of ATTACHMENT H: VENDOR REQUEST FOR EO50 PRICE-MATCHING, if applicable

2.8 ALTERNATE BIDS

Unless provided otherwise in this IFB, Vendor may submit alternate bids for comparable Goods, various methods or levels of Service(s), or that propose different options. Alternate bids must specifically identify the IFB requirements and advantage(s) addressed by the alternate bid. Any alternate bid, in addition to the marking described above, must be clearly marked with the legend: "Alternate Bid # for 54-ML-PR29302". Each bid must be for a specific set of Goods and Services and must include specific pricing. If a Vendor chooses to respond with various offerings, each must be offered with a separate price and be contained in a separate bid. Each bid must be complete and independent of other bids offered.

2.9 DEFINITIONS, ACRONYMS, AND ABBREVIATIONS

Relevant definitions for this IFB are provided in 01 NCAC 05A .0112 and in the Instructions to Vendors referenced below which are incorporated herein by this reference.

3.0 METHOD OF AWARD AND BID EVALUATION PROCESS

3.1 METHOD OF AWARD

North Carolina G.S. 143-52 provides a general list of criteria the State shall use to award contracts, as supplemented by the additional criteria herein. The Goods or Services being procured shall dictate the application and order of criteria; however, all award decisions shall be in the State’s best interest.

All responsive bids will be reviewed, and award(s) will be based on the responsive bid(s) offering the lowest price that meets the specifications to include any required verifications set out herein, such as but not limited to past performance, references, and financial documents.

While the intent of this IFB is to award a Contract(s) to a single Vendor for all line items, the State reserves the right to make separate awards to different Vendors for one or more line items, to not award one or more line items or to cancel this IFB in its entirety without awarding a Contract, if it is considered to be most advantageous to the State to do so.

If a Vendor selected for award is determined by the State to be a non-resident of North Carolina, all responsive bids will be reviewed to determine if any of them were submitted by a North Carolina resident Vendor who requested an opportunity to match the price of the winning bid, pursuant to Executive Order #50 and G.S. 143-59 (for more information, please refer to ATTACHMENT H: VENDOR REQUEST FOR EXECUTIVE ORDER #50 PRICE MATCHING. If such bid(s) are identified, the State will then determine whether any such bid falls within the price-match range, and, if so, make a Contract award in accordance with the process that implements G.S. 143-59 and Executive Order #50.

The State reserves the right to waive any minor informality or technicality in bids received.

3.2 CONFIDENTIALITY AND PROHIBITED COMMUNICATIONS DURING EVALUATION

While this IFB is under evaluation, the responding Vendor, including any subcontractors and suppliers, is prohibited from engaging in conversations intended to influence the outcome of the evaluation. See Paragraph 29 of the Instructions To Vendors entitled COMMUNICATIONS BY VENDORS.

Each Vendor submitting a bid to this IFB, including its employees, agents, subcontractors, suppliers, subsidiaries and affiliates, is prohibited from having any communications with any person inside or outside the using agency; issuing agency; other government agency office or body (including the procurement lead named above, any department secretary, agency head, members of the General Assembly and Governor’s office); or private entity, if the communication refers to the content of Vendor’s bid or qualifications, the content of another Vendor’s proposal, another Vendor’s qualifications or ability to perform a resulting contract, and/or the transmittal of any other communication of information that could be reasonably considered to have the effect of directly or indirectly influencing the evaluation of proposals, the award of a contract, or both.

Any Vendor not in compliance with this provision shall be disqualified from evaluation and award. A Vendor’s proposal may be disqualified if its subcontractor and/or supplier engage in any of the foregoing communications during the time that the procurement is active (*i.e.*, the issuance date of the procurement until the date of contract award or cancellation of the procurement). Only those discussions, communications or transmittals of information authorized or initiated by the issuing agency for this IFB, or inquiries directed to the procurement lead named in this IFB regarding requirements of the IFB (prior to proposal submission) or the status of the award (after submission) are excepted from this provision.

3.3 BID EVALUATION PROCESS

Only responsive submissions will be evaluated.

The State will conduct an evaluation of responsive Bids, as follows:

Bids will be received according to the method stated in the Bid Submittal section above.

All bids must be received by the issuing agency not later than the date and time specified in the IFB SCHEDULE Section above, unless modified by Addendum. Vendors are cautioned that this is a request for offers, not an offer or request to contract, and the State reserves the unqualified right to reject any and all offers at any time if such rejection is deemed to be in the best interest of the State.

At the date and time provided in the IFB SCHEDULE Section above, unless modified by Addendum, the bids from each responding Vendor will be opened publicly and all offers (except those that were previously withdrawn, or voided bids) will be tabulated. The tabulation shall be made public at the time it is created. When negotiations after receipt of bids are authorized pursuant to G.S. 143-49 and 01 NCAC 05B.0503, only the names of offerors and the Goods and Services offered shall be tabulated at the time of opening. If negotiation is anticipated, cost and price shall become available for public inspection at the time of the award. Interested parties are cautioned that these costs and their components are subject to further evaluation for completeness and correctness and therefore may not be an exact indicator of a Vendor's pricing position.

At their option, the evaluators may request oral presentations or discussions with any or all Vendors for clarification or to amplify the materials presented in any part of the bid. Vendors are cautioned, however, that the evaluators are not required to request presentations or other clarification—and often do not. Therefore, all bids should be complete and reflect the most favorable terms available from the Vendor. Prices bid cannot be altered or modified as part of a clarification.

Bids will generally be evaluated, based on completeness, content, cost and responsibility of the Vendor to supply the requested Goods and Services. Specific evaluation criteria are listed in Section 3.1 METHOD OF AWARD.

Upon completion of the evaluation process, the State will make Award(s) based on the evaluation and post the award(s) to the State's eVP website under the IFB number for this solicitation. Award of a Contract to one Vendor does not mean that the other bids lacked merit, but that, all factors considered, the selected bid was deemed most advantageous and represented the best value to the State.

The State reserves the right to negotiate with one or more Vendors, or to reject all original offers and negotiate with one or more sources of supply that may be capable of satisfying the requirement, and in either case to require Vendor to submit a Best and Final Offer (BAFO) based on discussions and negotiations with the State.

3.4 PERFORMANCE OUTSIDE THE UNITED STATES

Vendor shall complete ATTACHMENT F: LOCATION OF WORKERS UTILIZED BY VENDOR. In addition to any other evaluation criteria identified in this IFB, the State may also consider, for purposes of evaluating proposed or actual contract performance outside of the United States, how that performance may affect the following factors to ensure that any award will be in the best interest of the State:

- a) Total cost to the State
- b) Level of quality provided by the Vendor
- c) Process and performance capability across multiple jurisdictions
- d) Protection of the State's information and intellectual property
- e) Availability of pertinent skills
- f) Ability to understand the State's business requirements and internal operational culture
- g) Particular risk factors such as the security of the State's information technology
- h) Relations with citizens and employees
- i) Contract enforcement jurisdictional issues

3.5 INTERPRETATION OF TERMS AND PHRASES

This IFB serves two functions: (1) to advise potential Vendors of the parameters of the solution being sought by the State; and (2) to provide (together with other specified documents) the terms of the Contract resulting from this procurement. The use of phrases such as "shall," "must," and "requirements" are intended to create enforceable contract conditions. In determining whether bids should be evaluated or rejected, the State will take into consideration the degree to which Vendors have proposed or failed to propose solutions that will satisfy the State's needs as described in the IFB. Except as specifically stated in the IFB,

no one requirement shall automatically disqualify a Vendor from consideration. However, failure to comply with any single requirement may result in the State exercising its discretion to reject a bid in its entirety.

4.0 REQUIREMENTS

This Section lists the requirements related to this IFB. By submitting a bid, the Vendor agrees to meet all stated requirements in this Section, as well as any other specifications, requirements, and terms and conditions stated in this IFB. If a Vendor is unclear about a requirement or specification or believes a change in a requirement would allow for the State to receive a better bid, the Vendor is encouraged to submit these items in the form of a question during the question-and-answer period in accordance with the Bid Questions Section above.

4.1 PRICING

Bid price shall constitute the total cost to the State for delivery fully assembled and ready for use, including all applicable charges for shipping, delivery, handling, administrative and other similar fees. Complete ATTACHMENT A: PRICING FORM and include in Vendor’s response.

INVOICES MAY NOT BE PAID UNTIL AN INSPECTION HAS OCCURRED AND THE GOODS OR SERVICES ACCEPTED.

4.1.1 Import Tariff Temporary Surcharge

Pricing shall be exclusive of any tariff pending or temporary tariff surcharge. Vendor may request a temporary tariff surcharge in ATTACHMENT A: PRICING FORM as a charge separate from the contract price. Any temporary tariff surcharge(s) associated with purchases shall be provided by way of a percentage tariff surcharge. All tariff surcharges proposed are intended to be temporary and based on current tariff implications specific to related commodities with evidence of submitted documentation of affected MSRP products. Vendor understands that the agency may request additional justification. Any temporary tariff surcharge percentage will be negotiated and mutually agreed upon. The state is not obligated to accept any proposed import tariff surcharge. Proposed tariff surcharges may be used as a factor for evaluation and award.

4.2 PRODUCT IDENTIFICATION

SUITABILITY FOR INTENDED USE

Vendors are requested to offer only items directly complying with the specifications herein or comparable items which will provide the equivalent capabilities, features and diversity called for herein. The State reserves the right to evaluate all bids for suitability for the required use and to award the one best meeting requirements and considered to be in the State’s best interest.

4.3 TRANSPORTATION AND IDENTIFICATION

The Vendor shall deliver Free-On-Board (FOB) Destination to any requested location within the State of North Carolina with all transportation costs and fees included in the total bid price.

When an order is placed using a purchase order, the purchase order number shall be shown on all packages and shipping manifests to ensure proper identification and payment of invoices. If an order is placed without using a purchase order, such as via phone, the Buyer’s name shall be shown on all packages. A complete packing list shall accompany each shipment. Vendors shall not ship any products until they have received an order.

4.4 DELIVERY

The Vendor shall deliver Free-On-Board (FOB) Destination to the following location(s):

**NCDOT Division of Highways
5504 Barbados Blvd
Castle Hayne, NC 28429**

***48 HOUR DELIVERY NOTICE REQUIRED**, contact Ross Kimbro at 910-385-5102*

*****Delivery shall be Monday through Thursday 7:00am-5:30pm*****

Vendor should complete delivery within **two hundred and fifty (250)** consecutive calendar days after receipt of NCDOT approved shop/submittal drawings.

For completion by Vendor: Delivery will be made from _____ (city, state) within _____ consecutive calendar days after receipt of NCDOT approved shop/submittal drawings. Promptness of delivery may be used as a factor in the award criteria.

**** THREE (3) PURCHASE ORDERS WILL BE ISSUED WITH FROM THIS IFB****

4.5 WARRANTY

Manufacturer’s standard warranty shall apply. Vendors shall provide a copy of the manufacturer’s standard warranty within five (5) consecutive calendar days after request from the agency.

4.6 HUB PARTICIPATION

Pursuant to North Carolina General Statute G.S. 143-48, it is State policy to encourage and promote the use of small, minority, physically handicapped, and women contractors in purchasing Goods and Services. As such, this IFB will serve to identify those Vendors that are minority owned or have a strategic plan to support the State’s Historically Underutilized Business program by meeting or exceeding the goal of 10% utilization of diverse firms as 1st or 2nd tier subcontractors. Vendor shall complete ATTACHMENT D: HUB SUPPLEMENTAL VENDOR INFORMATION.

4.7 VENDOR’S REPRESENTATIONS

If the bid results in an award, Vendor agrees that it will not enter any agreement with a third party that may abridge any rights of the State under the Contract. If any Services, deliverables, functions, or responsibilities not specifically described in this solicitation are required for Vendor’s proper performance, provision and delivery of the Service and deliverables under a resulting Contract, or are an inherent part of or necessary sub-task included within such service, they will be deemed to be implied by and included within the scope of the contract to the same extent and in the same manner as if specifically described in the Contract. Unless otherwise expressly provided herein, Vendor will furnish all of its own necessary management, supervision, labor, facilities, furniture, computer and telecommunications equipment, software, supplies and materials necessary for the Vendor to provide and deliver the Services and/or other Deliverables.

4.8 FINANCIAL STABILITY

As a condition of contract award, the Vendor must certify that it has the financial capacity to perform and to continue to perform its obligations under the Contract; that Vendor has no constructive or actual knowledge of an actual or potential legal proceeding being brought against Vendor that could materially adversely affect performance of this Contract; and that entering into this Contract is not prohibited by any contract, or order by any court of competent jurisdiction

Each Vendor shall certify it is financially stable by completing the ATTACHMENT G: CERTIFICATION OF FINANCIAL CONDITION. The State is requiring this certification to minimize potential performance issues from contracting with a Vendor that is financially unstable. This Certification shall be deemed continuing, and from the date of the Certification to the expiration of the Contract, the Vendor shall notify the State within thirty (30) days of any occurrence or condition that materially alters the truth of any statement made in this Certification.

4.9 AGENCY INSURANCE REQUIREMENTS MODIFICATION

A. Default Insurance Coverage from the General Terms and Conditions applicable to this Solicitation:

- Contract value in excess of the Small Purchase threshold, but up to \$1,000,000.00

4.10 SUSTAINIBILITY EFFORTS

According to G.S. 143-58.2, it is the policy of this State to encourage and promote the purchase of products with recycled content and to purchase items that are reusable, refillable, repairable, more durable, and less toxic to the extent that the purchase or use is practicable and cost effective.

4.11 APPROVED RESOURCE

The Producer/Supplier from which products will be furnished must be listed on the NCDOT Materials and Test Approved Producer/Supplier list under either Structural Steel or Steel Mill.

NCDOT APL: <https://apps.ncdot.gov/vendor/approvedproducts/Producer.aspx>

For completion by Vendor: Structural Steel or Steel Mill Producer/Supplier Utilized _____

5.0 PRODUCT SPECIFICATIONS

5.1 SCOPE OF WORK

Vendor shall Provide copies of detailed shop drawings for each type of structure as summarized below. Ensure shop drawings include material specifications for each component. Ensure shop drawings identify welds by type and size on the detail drawing only, not in table format. Fabrication shall not be released until shop drawings have been approved by NCDOT. Ensure shop drawings contain an itemized list of materials for all structural components and associated connecting hardware.

5.2 SPECIFICATIONS

The specific items and any specifications that the Purchasing Agency is seeking are listed below. All material covered by this bid shall conform with the requirements specified in Section 15.1 of the current (24.2) version of the ITSS Signals and Intelligent Transportation Systems Project Special Provisions <https://connect.ncdot.gov/resources/safety/Pages/TSMO-Design-Resources.aspx>.

Item #	Specifications
	PR29302 - 3rd Street at Orange St.
1	METAL POLE NO. 1 (Double Arm Pole) with Arm - A at 52' and Arm - B at 40' including foundation design w/ all related hardware. SEE EXHIBITS A and C (originals available upon request)
2	METAL POLE NO. 2 (Double Arm Pole) with Arm - A at 55' and Arm - B at 35' including foundation design w/ all related hardware. SEE EXHIBITS B and C (originals available upon request)
	PR29303 – S. 3rd Street at Ann St.
3	METAL POLE NO. 3 (Double Arm Pole) with Arm - A at 35' and Arm - B at 45' including foundation design w/ all related hardware. SEE EXHIBITS D and F (originals available upon request)
4	METAL POLE NO. 4 (Double Arm Pole) with Arm - A at 45' and Arm - B at 38' including foundation design w/ all related hardware. SEE EXHIBITS E and F (originals available upon request)
	PR29646 – US74 at Enterprise Dr./Wood Treatment Rd.
5	METAL POLE NO. 1 (Single Arm Pole) with Arm at 70' including foundation design w/ all related hardware. SEE EXHIBITS G and H (originals available upon request)

6	METAL POLE NO. 2 (Single Arm Pole) with Arm at 75' including foundation design w/ all related hardware. SEE EXHIBITS I and J (originals available upon request)
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5.3 CERTIFICATION AND SAFETY LABELS

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 re-examination listing or identification marking of the appropriate safety standard organization; such as the American Society of Mechanical Engineers for pressure vessels; the Underwriters 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.

5.4 DEVIATIONS

The nature of all deviations from the Specifications listed herein shall be clearly described by the Vendor. Otherwise, it will be considered that items offered by the Vendor are in strict compliance with the Specifications provided herein, and the successful Vendor shall be required to supply conforming goods. Deviations shall be explained in detail on an attached sheet. However, no implication is made or intended by the State that any deviation will be acceptable. Do not list objections to the North Carolina General Terms and Conditions in this section.

6.0 CONTRACT ADMINISTRATION

All Contract Administration requirements are conditioned on an award resulting from this solicitation. This information is provided for the Vendor’s planning purposes

6.1 CONTRACT MANAGER

The Vendor shall be required to designate and make available to the State a contract manager. The contract manager shall be the State’s point of contact for Contract related issues and issues concerning performance, progress review, scheduling, and service.

Contract Manager Point of Contact	
Name:	
Office Phone #:	
Mobile Phone #:	
Email:	

6.2 CONTINUOUS IMPROVEMENT

The State encourages the Vendor to identify opportunities to reduce the total cost the State. A continuous improvement effort consisting of various ideas to enhance business efficiencies as performance progresses.

6.3 ACCEPTANCE OF WORK

Performance of the work and delivery of Goods shall be conducted and completed at least in accordance with the Contract requirements and recognized and customarily accepted industry practices. Performance shall be considered complete when the Services or Goods are approved as acceptable by the Contract Manager.

The State shall have the obligation to notify Vendor, in writing ten (10) calendar days following completion of such work or delivery of a deliverable described in the Contract that it is not acceptable. The notice shall specify in reasonable detail the reason(s) it is unacceptable. Acceptance by the State shall not be unreasonably withheld; but may be conditioned or delayed as required for reasonable review, evaluation, installation, or testing, as applicable to the work or deliverable. Final acceptance is expressly conditioned upon completion of all applicable assessment procedures. Should the work or deliverables fail to meet any specifications, acceptance criteria or otherwise fail to conform to the Contract, the State may exercise any and all rights hereunder, including, for Goods deliverables, such rights provided by the Uniform Commercial Code, as adopted in North Carolina.

6.4 INVOICES

Vendor shall invoice the Procurement Entity. The standard format for invoicing shall be Single Invoices meaning that the Vendor shall provide the Procurement Entity with an invoice for each order. Invoices shall include detailed line-item information to allow Procurement Entity to verify pricing at point of receipt matches the correct price from the original date of order. At a minimum, the following fields shall be included on all invoices:

Vendor's Billing Address, Customer Account Number, NC Contract Number, Order Date, Buyer's Order Number, Manufacturer Part Numbers, Vendor Part Numbers, Item Descriptions, Price, Quantity, and Unit of Measure.

**Remit Invoices to:
NCDOT Division of Highways
5504 Barbados Blvd
Castle Hayne, NC 28429**

INVOICES MAY NOT BE PAID UNTIL AN INSPECTION HAS OCCURRED AND THE GOODS ACCEPTED.

6.5 DISPUTE RESOLUTION

During the performance of the Contract, the Parties agree that it is in their mutual interest to resolve disputes informally. Any claims by the Vendor shall be submitted in writing to the State's Contract Manager for resolution. Any claims by the State shall be submitted in writing to the Vendor's Project Manager for resolution. The Parties shall agree to negotiate in good faith and use all reasonable efforts to resolve such dispute(s).

During the time the Parties are attempting to resolve any dispute, each shall proceed diligently to perform their respective duties and responsibilities under this Contract. The Parties will agree on a reasonable amount of time to resolve a dispute. If a dispute cannot be resolved between the Parties within the agreed upon period, either Party may elect to exercise any other remedies available under the Contract, or at law. This provision, when agreed in the Contract, shall not constitute an agreement by either party to mediate or arbitrate any dispute.

6.6 PRODUCT RECALL

Vendor expressly assumes full responsibility for prompt notification to the Buyer listed on the face of this IFB of any product recall in accordance with the applicable state or federal regulations. The Vendor shall support the State, as necessary, to promptly replace any such products, at no cost to the State.

6.7 CONTRACT CHANGES

Contract changes, if any, over the life of the Contract shall be implemented by contract amendments agreed to in writing by the State and Vendor. Amendments to the contract can only be made through the contract administrator.

****IMPORTANT NOTICE****

RETURN THE REQUIRED ATTACHMENTS WITH YOUR RESPONSE
FOLLOW THE LINKS TO ACCESS EACH ATTACHMENT

*****Remainder of this page left blank intentionally*****

7.0 ATTACHMENTS

ATTACHMENT A: PRICING

Complete and return the Pricing associated with this IFB, which can be found in the table below:

FURNISH AND DELIVER:

Item #	QTY	UOM	DESCRIPTION	UNIT PRICE	EXTENDED PRICE
			<i>PR29302 - 3rd Street at Orange St.</i>		
1	1	EA	METAL POLE NO. 1 (Double Arm Pole) <u>Arm - A at 52'</u> <u>Arm - B at 40'</u> Including foundation design and all related hardware	\$ _____	\$ _____
2	1	EA	METAL POLE NO. 2 (Double Arm Pole) <u>Arm - A at 55'</u> <u>Arm - B at 35'</u> Including foundation design and all related hardware	\$ _____	\$ _____
			<i>PR29303 – S. 3rd Street at Ann St.</i>		
3	1	EA	METAL POLE NO. 3 (Double Arm Pole) <u>Arm - A at 35'</u> <u>Arm - B at 45'</u> Including foundation design and all related hardware	\$ _____	\$ _____
4	1	EA	METAL POLE NO. 4 (Double Arm Pole) <u>Arm - A at 45'</u> <u>Arm - B at 38'</u> Including foundation design and all related hardware	\$ _____	\$ _____
			<i>PR29646 – US74 at Enterprise Dr./Wood Treatment Rd.</i>		
5	1	EA	METAL POLE NO. 1 (Single Arm Pole) <u>Arm at 70'</u> including foundation design w/ all related hardware.	\$ _____	\$ _____
6	1	EA	METAL POLE NO. 2 (Single Arm Pole) <u>Arm at 75'</u> including foundation design w/ all related hardware.	\$ _____	\$ _____

Total Extended Price: _____

ATTACHMENT B: INSTRUCTIONS TO VENDORS

The Instructions to Vendors, which are incorporated herein by this reference, may be found here:

<https://www.doa.nc.gov/pandc/north-carolina-instructions-vendors-1-2025>

ATTACHMENT C: NORTH CAROLINA GENERAL TERMS & CONDITIONS

The North Carolina General Terms and Conditions, which are incorporated herein by this reference, may be found here:

<https://www.doa.nc.gov/north-carolina-general-terms-and-conditions-5-2025>

ATTACHMENT D: HUB SUPPLEMENTAL VENDOR INFORMATION

Complete and return the Historically Underutilized Businesses (HUB) Vendor Information form, which can be found at the following link:

<https://www.doa.nc.gov/pandc/onlineforms/pc-hub-supplemental-vendor-information-92021-pdf/open>

(THIS ATTACHMENT MUST BE COMPLETED AND RETURNED)

ATTACHMENT E: RESERVED

ATTACHMENT F: LOCATION OF WORKERS UTILIZED BY VENDOR

Complete and return the Location of Workers Utilized by Vendor, which can be found at the following link:

<https://www.doa.nc.gov/pandc/onlineforms/pc-worker-location-92021-pdf/open>

(THIS ATTACHMENT MUST BE COMPLETED AND RETURNED)

ATTACHMENT G: CERTIFICATION OF FINANCIAL CONDITION

Complete, sign, and return the Certification of Financial Condition, which can be found at the following link:

<https://www.doa.nc.gov/pandc/onlineforms/pc-certification-financial-condition-92021-pdf/open>

(THIS ATTACHMENT MUST BE COMPLETED AND RETURNED)

ATTACHMENT H: VENDOR REQUEST FOR EO50 PRICE-MATCHING

Complete, sign, and return the Vendor Request for EO50 Price-Matching, which can be found at the following link:

<https://www.doa.nc.gov/pandc/onlineforms/pc-eo-50-vendor-price-matching-opportunity-92021-pdf/open>

(THIS ATTACHMENT TO BE COMPLETED AND RETURNED ONLY WHEN VENDOR IS ELIGIBLE)

***** Failure to Return the Required Attachments May Eliminate
Your Response from Further Consideration *****

EXHIBIT A - 3rd Street at Orange St. Pole #1

METAL POLE NO. 1

PROJECT REFERENCE NO. RL-1010

SHEET NO. 510.1.4

LOADING SYMBOL	DESCRIPTION	AREA	SIZE	WEIGHT
	RIGID MOUNTED SIGNAL HEAD 12-5 SECTION WITH BACKPLATE	16.3 SF	42.0" x 56.0" L	103 LBS
	RIGID MOUNTED SIGNAL HEAD 12-3 SECTION WITH BACKPLATE	9.3 SF	25.5" x 42.5" L	60 LBS
	SIGN RIGID MOUNTED	7.5 SF	30.0" x 36.0" L	14 LBS
	STREET NAME SIGN RIGID MOUNTED	36.0 SF	24.0" x 96.0" L	36 LBS

NOTES

DESIGN REFERENCE MATERIAL

- Design the traffic signal structure and foundation in accordance with:
 - The 2016 Edition of the Manual on Uniform Traffic Control Devices (MUTCD) for Signal, Luminaires, and Traffic Signals, including all of the latest interim revisions.
 - The 2024 MUTCD "Standard Specifications for Roads and Structures." The latest addenda to the specifications can be found in the traffic signal project special provisions.
 - The 2024 NCDOT Roadway Standard Drawings.
 - The 2024 NCDOT Roadway Standard Specifications.
 - The NCDOT "Road Pole Standards" located at the following MUTCD website: <https://connect.ncdot.gov/resourcesafety/Pages/115-Design-Resources.aspx>

DESIGN REQUIREMENTS

- Design the traffic signal structure using the loading conditions shown in the elevation views. These are anticipated worst case "design loads" and may not represent the actual loads that will be applied at the time of the installation. The contractor should refer to the traffic signal plans for the actual loads that will be applied at the time of the installation.
- Design all signal supports using force ratios that do not exceed 0.5.
- Consider design for mast arm deflection should provide an appearance of a low horizontal mast arm. The free end of the mast arm does not deflect below horizontal when fully loaded.
- A clamp-type bolted mast arm-to-pole connection may be used instead of the welded ring stiffened box connection shown as long as the connection meets all of the design requirements. This requires staggering the connections. Use elevation data for each arm to determine the mast arm-to-pole connection height.
- Design base plate with 8 anchor bolt holes. Provide 2 inch x 60 inch anchor bolts.
- The mast arm attachment height (H1) shown is based on the following design assumptions:
 - Mast arm slope and deflection are not considered in determining the arm attachment height as they are assumed to offset each other.
 - Signal heads are rigidly mounted and vertically centered on the mast arm.
 - The mast arm is assumed to be rigidly connected to the pole.
 - The top of the pole base plate is 0.75 feet above the ground elevation.
 - Refer to the Elevation Data Chart for the elevation differences between the proposed foundation ground level and the high point of the roadway.
- The pole manufacturer will determine the total height (H2) of each pole using the greater of:
 - Mast arm attachment height (H1) plus 2 feet, or
 - H1 plus 1/2 of the total height of the mast arm attachment assembly plus 1 foot.
- If pole location adjustments are required, the contractor must gain approval from the Engineer as this may affect the mast arm lengths and arm attachment heights. The contractor may contact the Signal Design Section Senior Structural Engineer for assistance.
- The contractor is responsible for verifying that the mast arm length shown will allow proper positioning of the signal heads over the roadway.
- The contractor is responsible for providing soil penetration testing data (SPT) to the pole manufacturer so site specific foundations can be designed.

SPECIAL NOTE

The contractor is responsible for verifying that the mast arm attachment height (H1) will provide the "Design Height" clearance from the roadway before submitting final shop drawings for approval. Verify elevation data below which was obtained by field survey or from available project survey data.

Elevation Data for Mast Arm Attachment (H1)

Elevation Differences for:	Arm 'A'	Arm 'B'
Baseline reference point at Foundation & ground level	0.0 ft.	0.0 ft.
Elevation difference of high point on roadway surface	+1.4 ft.	-0.6 ft.
Height of roadway for face of curb	N/A	N/A

POLE RADIAL ORIENTATION

8 BOLT BASE PLATE DETAIL
See Note 6

Design Loading for METAL POLE NO. 1, MAST ARM A

Elevation View @ 270°

Design Loading for METAL POLE NO. 1, MAST ARM B

Elevation View @ 0°

BASE PLATE TEMPLATE & ANCHOR BOLT LOCK PLATE DETAIL
For 8 Bolt Base Plate

EXHIBIT B - 3rd Street at Orange St. Pole #2

METAL POLE NO. 2

PROJECT REFERENCE NO. 54-ML-PR29093
SHEET NO. 510.1.3

LOADING SYMBOL	DESCRIPTION	AREA	SIZE	WEIGHT
1	RIGID MOUNTED SIGNAL HEAD 12-5 SECTION WITH BACKPLATE	16.3 SF.	42.0" x 56.0"	103 LBS.
2	RIGID MOUNTED SIGNAL HEAD 12-5 SECTION WITH BACKPLATE	9.3 SF.	25.5" x 36.0"	60 LBS.
3	STATION RIGID MOUNTED	7.5 SF.	30.0" x 36.0"	14 LBS.
4	STREET NAME SIGN RIGID MOUNTED	16.0 SF.	24.0" x 96.0"	36 LBS.

NOTES

- Design the traffic signal structure and foundation in accordance with the 1st Edition 2015 AASHTO LRFD "Standard Specifications for Structural Supports for Highway Signs, Markings, Signals, and Traffic Devices" (SS-10) and the 2004 NCDOT "Standard Specifications for Materials and Methods of Construction for Highway Signs, Markings, Signals, and Traffic Devices".
- The 2024 NCDOT Roadway Standard Drawings.
- The traffic signal project plans and special provisions.
- The NCDOT "Metal Pole Standards" located at the following NCDOT website: <http://connect.ncdot.gov/resourcesafety/Programs/Signs/standards.aspx>

DESIGN REFERENCE MATERIAL

- Design the traffic signal structure using the loading conditions shown in the elevation view. These are generic loading conditions and the contractor must determine the actual loading conditions for the project. The contractor shall provide the actual loading conditions to the traffic signal plans for the actual loads that will be applied at the time of the installation.
- Design all signal supports using force ratios that do not exceed 0.5.
- The center design for the mast arm deflection should provide an appearance of a low pitched arch where the top of the free end of the mast arm does not deflect below the design height.
- A clamp-type bolted mast arm-to-pole connection may be used instead of the welded ring stiffened box connection shown as long as the connection meets all of the design requirements. This requires staggering the connections. Use elevation data for each arm to determine appropriate arm connection points.
- Design base plate with 8 anchor bolts provide 2 inch x 60 inch anchor bolts.
- Mast arm slope and deflection are not considered in determining the arm attachment height as they are assumed to offset each other.
- The roadway clearance height for design is as shown in the elevation view.
- Refer to the Elevation Data Chart for the alignment differences between the proposed foundation ground level and the high point of the roadway.
- The pole manufacturer will determine the total height (H_T) of each pole using the greater of the following:
 - Mast arm attachment height (H_A) plus 3 feet, or
 - Mast arm height plus the total height of the arm attachment assembly plus 1 foot.
- If pole location adjustments are required, the contractor must gain approval from the Engineer as this may affect the mast arm lengths and arm attachment heights. The contractor may contact the Signal Design Section Senior Structural Engineer for assistance at (919) 814-5000. For verifying that the mast arm length shown will allow proper positioning of the signal heads over the roadway.
- The contractor is responsible for providing soil penetration testing data (SPT) to the pole manufacturer so site specific foundations can be designed.

DESIGN REQUIREMENTS

All metal poles and arms should be black in color as specified in the project special provisions.

NCDOT Wind Zone 1 (150 mph)

US 17 Bus. (Third St.)
Orange Street
Blissville
Waynesville, NC 27586

PROJECT NO. 54-ML-PR29093
SHEET NO. 510.1.3

DATE: 03-27-25

SPECIAL NOTE

The contractor is responsible for verifying the elevation data for the roadway (H_T) will provide the Design Height" clearance from the roadway before submitting final shop drawings for approval. Verify elevation data below which was obtained by field measurement or from available project survey data.

Elevation Data for Mast Arm Attachment (H_T)

Elevation Differences for:	Arm 'A'	Arm 'B'
Baseline reference point at Foundation & ground level	0.0 ft.	0.0 ft.
Elevation difference of High point of roadway surface	0.0 ft.	0.4 ft.
Elevation difference of Edge of roadway or face of curb	N/A	N/A

POLE RADIAL ORIENTATION

8 BOLT BASE PLATE DETAIL

See Note 6

BASE PLATE TEMPLATE & ANCHOR BOLT LOCK PLATE DETAIL

For 8 Bolt Base Plate

Design Loading for METAL POLE NO. 2, MAST ARM A

Elevation View @ 270°

Base line reference elev. = 0.0'

Design Loading for METAL POLE NO. 2, MAST ARM B

Elevation View @ 0°

Base line reference elev. = 0.0'

EXHIBIT C - 3rd Street at Orange St. Intersection

PROJECT REFERENCE NO.
HL-0110

SHEET NO.
S19.1.0

**US 421 Bus. (Third St.)
at
Orange Street
(Wilmington Signal System)**

NOTES

- Refer to "Roadway Standard Drawings MCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Enable Backup Protect for phases 2 and 6 to allow the controller to clear from phase 6 to phase 1 or 5 by controlling the signal on all 4 signal heads.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- The cabinet should be designed to include an Auxiliary Output file for future use.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- The Division(City) Traffic Engineer will determine the hours of operation for this intersection.
- This intersection features a GPS preemption system.
- Install detectors using multi-zone microwave detection. Instructions to achieve the desired detection.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Signal System Data Controller Asset #1217
- Install GPS emergency preemption system per manufacturer's instructions to achieve the preemption needed as shown in the existing layout.
- All new cabinets, mounting hardware and pedestals shall be black.

OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

LOOP	INDUCTIVE	NEW LOOP	DETECTOR	DETAILED	DETAILED	DETAILED	DETAILED	DETAILED
NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
1A	0	0	Y	Y	Y	Y	Y	Y
4A	0	0	Y	Y	Y	Y	Y	Y
5A	0	0	Y	Y	Y	Y	Y	Y
8A	0	0	Y	Y	Y	Y	Y	Y

Multizone Microwave Detection
 *Refer to manufacturer's instructions for desired frequency of operation.
 *Delay may be adjusted as needed for desired frequency of protected left turn service during alternate flashing.

MICROWAVE DETECTION

FUNCTION	PHASE	PHASE	PHASE	PHASE
PHASE	PHASE	PHASE	PHASE	PHASE
PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5
PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5

OASIS 2070 EV PREEMPT

FUNCTION	PHASE	PHASE	PHASE	PHASE
PHASE	PHASE	PHASE	PHASE	PHASE
PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5
PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5

SIGNAL FACE I.D.
All Heads L.E.D.

OASIS 2070 TIMING CHART

FEATURE	PHASE	PHASE	PHASE	PHASE	PHASE
PHASE	PHASE	PHASE	PHASE	PHASE	PHASE
PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6
PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6

PROPOSED STOP LINE AND POLE LOCATION DIAGRAM
NOT TO SCALE

LEGEND

EXISTING

- Traffic Signal Head
- Modified Signal Head
- Sign
- Pedestrian Signal Head with Push Button & Sign
- Type II Signal Pedestal
- Signal Pole with Guy
- Signal Pole with Sidewalk Guy
- Multizone Microwave Detection
- Inductive Loop Detector
- Control Cabinet
- Junction Box
- 2-in Underground Conduit
- Directional Drilling
- Right of Way
- Directional Arrow
- Turning Traffic Yield to Pedestrians
- Turning Traffic Yield to Pedestrians (R10-158)
- Street Name Sign

PROPOSED

- Traffic Signal Head
- Modified Signal Head
- Sign
- Pedestrian Signal Head with Push Button & Sign
- Type II Signal Pedestal
- Signal Pole with Guy
- Signal Pole with Sidewalk Guy
- Multizone Microwave Detection
- Inductive Loop Detector
- Control Cabinet
- Junction Box
- 2-in Underground Conduit
- Directional Drilling
- Right of Way
- Directional Arrow
- Turning Traffic Yield to Pedestrians
- Turning Traffic Yield to Pedestrians (R10-158)
- Street Name Sign

EXHIBIT E - S. 3rd Street at Ann St Pole# 4

PROJECT REFERENCE NO. 54-ML-PR29093
SHEET NO. 11.1

METAL POLE NO. 4

PROJECT # : 230902
DAVENPORT
DAVENPORT UTILITIES
1000 WEST 10TH AVENUE
WALSLEY, WYOMING 82401
781.341.1000

DOCUMENT NOT FOR CONSTRUCTION
QUANTITIES COMPLETE

SEAL
Professional Engineer
No. 10000
Exp. 12/31/2025
9/11/2025
S.T.C. NUMBER NO. 031222

LOADING SYMBOL	DESCRIPTION	AREA	SIZE	WEIGHT
	RIGID MOUNTED SIGNAL HEAD 12"x3" SECTION WITH BACKPLATE	9.3 SF.	25.5"x 52.5"x	60 LBS
	PEDESTRIAN SIGNAL HEAD WITH MOUNTING ARMATURE	22 SF.	18.5"x 17.0"x	21 LBS
	STREET NAME SIGN RIGID MOUNTED	16.0 SF.	24.0"x 96.0"x	36 LBS
	SEVEN REFLECTOR MOUNTED	5.0 SF.	30.0"x 24.0"x	11 LBS

NOTES

DESIGN REFERENCE MATERIAL

- Design the traffic signal structure and foundation in accordance with:
 - The 1st Edition 2015 MASH10 LRFD Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, including all of the latest interim revisions.
 - The 2024 NCDOT Standard Specifications for Roads and Structures. The latest addenda to the 2024 NCDOT Standard Specifications for Roads and Structures.
 - The 2024 NCDOT Roadway Standard Drawings.
 - The traffic signal project plans and special provisions.
 - The NCDOT "Metal Pole Standards" located at the following NCDOT website: <https://connect.ncdot.gov/resources/safety/Pages/115-Design-Resources.aspx>

DESIGN REQUIREMENTS

- The traffic signal structure using the loading conditions shown in the elevation views. These are anticipated worst case "design loads" and may not represent the actual loads that will be applied at the time of the installation. The contractor should refer to the design plans and drawings for the specific design loads to be applied at the time of the installation.
- Design all signal supports using force ratings that do not exceed 0.4 times the rated capacity.
- The center design for the mast arm deflection should provide an appearance of a low pitched arch where the tip of the arm and the end of the mast arm does not deflect below horizontal when fully loaded.
- A clamp-type bolted mast arm-to-pole connection may be used instead of the welded ring connection. This requires staggering the connections. Use elevation data for each arm to determine appropriate arm connection points.
- Design base plate with 8 anchor bolt holes. Provide 2 inch x 60 inch anchor bolts.
- The mast arm attachment height (H1) shown is based on the following design assumptions:
 - Mast arm side and deflection are not considered in determining the arm attachment height.
 - Signal heads are rigidly mounted and vertically centered on the mast arm.
 - The roadway clearance height for design is as shown in the elevation views.
 - The top of the pole base plate is 0.75 feet above the ground elevation.
- Refer to the Elevation Data Chart for the elevation differences between the proposed pole location and the existing ground surface.
- The pole manufacturer will determine the total height (H2) of each pole using the greater of the following:
 - Mast arm attachment height (H1) plus 2 feet, or
 - H1 plus 1/2 of the total height of the mast arm attachment assembly plus 1 foot.
- If pole location adjustments are required, the contractor must gain approval from the project engineer. The contractor must contact the Signal Design Section Senior Structural Engineer for assistance at (919) 814-5000.
- The contractor is responsible for verifying that the mast arm length shown will allow proper positioning of the signal heads over the roadway.
- The contractor is responsible for providing soil penetration testing data (SPT) to the pole manufacturer so site specific foundations can be designed.

SPECIAL NOTE
The contractor is responsible for verifying that the mast arm attachment height (H1) will provide the "Design height" clearance from the roadway before submitting final design data. The contractor shall obtain elevation data below which was obtained by field measurement or from available project survey data.

Elevation Differences for:	Arm 'A'	Arm 'B'
Baseline reference point at Foundation & ground level	0.0 ft.	0.0 ft.
High Point of roadway surface	-1.1 ft.	-1.0 ft.
Elevation difference at Edge of roadway or face of curb	N/A	N/A

POLE RADIAL ORIENTATION

8 BOLT BASE PLATE DETAIL
See Note 6

BASE PLATE TEMPLATE & ANCHOR BOLT LOCK PLATE DETAIL
For 8 Bolt Base Plate

Design Loading for METAL POLE NO. 4, MAST ARM A

Elevation View @ 270°

Design Loading for METAL POLE NO. 4, MAST ARM B

Elevation View @ 0°

EXHIBIT G - US74 at Enterprise Drive Pole# 1

METAL POLE NO. 1

PROJECT REFERENCE NO. 45-0039

SHEET NO. 59 OF 113

QUANTITY	DESCRIPTION	AREA	SIZE	WEIGHT
1	RIGID MOUNTED SIGNAL HEAD 12'-4 SECTION WITH BACKPLATE	16.5 S.F.	25.5" W	74 LBS
1	RIGID MOUNTED SIGNAL HEAD 12'-3 SECTION WITH BACKPLATE	9.3 S.F.	25.5" W	60 LBS
1	STREET NAME SIGN RIGID MOUNTED	36.0 S.F.	24.0" W	36 LBS

NOTES

DESIGN REFERENCE MATERIAL

- Design the traffic signal structure and foundation in accordance with the following:
 - 2018 NC DOT Standard Specifications for Roadways and Structures
 - 2024 NC DOT Standard Specifications for Traffic Signs, including all the latest errata revisions. The specifications can be found in the Traffic Signal Project special provisions.
 - The 2024 NC DOT Roadway Standard Drawings.
 - The traffic signal project plans and special provisions.
 - The NC DOT Material Standards located at the following NC DOT website: <https://connect.ncdot.gov/resources/Program/TSMP/Design-Resources.aspx>

DESIGN REQUIREMENTS

- Design the traffic signal structure using the loading conditions shown in the elevation view. These are anticipated worst case design loads and may not represent the actual loads that will be applied to the structure. The design loads are based on the traffic signal supports using force ratios that do not exceed 0.3.
- The center design for the mast arm deflection should provide an appearance of a low pitched arch where the tip or the free end of the mast arm does not deflect below horizontal when fully loaded.
- Weld-to-pole connection may be used instead of the welded ring stiffened box connection shown as long as the connection meets all of the design requirements.
- Design base plate with 8 anchor bolt holes. Provide 2 inch x 60 inch anchor bolts.
- The mast arm attachment height (H) shown is based on the following design assumptions:
 - The mast arm slope and deflection are not considered in determining the arm attachment height.
 - Signal heads are rigidly mounted and vertically centered on the mast arm.
 - The roadway clearance height for design is as shown in the elevation views.
 - The top of the pole base plate is 0.75 feet above the ground elevation.
- Refer to the Elevation Data Chart for the elevation differences between the proposed foundation ground level and the high point of the roadway.
- The contractor will determine the total height (H) of each pole using the greater of the following:
 - Mast arm attachment height (H) plus 2 feet, or
 - H plus 1/2 of the total height of the mast arm attachment assembly plus 1 foot.
- If pole location adjustments are required, the contractor must gain approval from the Engineer as this may affect the mast arm lengths and arm attachment heights. The contractor may contact the Signal Design Section Senior Structural Engineer for assistance at 819.814.5000.
- The contractor is responsible for verifying that the mast arm length shown will allow proper positioning of the signal heads over the roadway.
- The contractor is responsible for providing soil penetration testing data (SPT) to the pole manufacturer so site specific foundations can be designed.

SPECIAL NOTE

The contractor is responsible for verifying that the design height (H) will provide the Design Height clearance from the roadway before submitting final shop drawings for approval. Verify elevation data below which was obtained by field measurement or from available project survey data.

Elevation Data for Mast Arm Attachment (H1)

Elevation Differences for:	Pole 1
Baseline reference point at Foundation & ground level	0.0 ft.
Elevation difference at High point of roadway surface	+3.1 ft.
Elevation difference at Edge of roadway or face of curb	+1.4 ft.

POLE RADIAL ORIENTATION

8 BOLT BASE PLATE DETAIL
See Note 6

Design Loading for METAL POLE NO. 1

Elevation View

BASE PLATE TEMPLATE & ANCHOR BOLT LOCK PLATE DETAIL
For 8 Bolt Base Plate

EXHIBIT I - US74 at Wood Treatment Rd. Pole# 2

Design Loading for METAL POLE NO. 2

Elevation View

SPECIAL NOTE
The contractor is responsible for verifying that the mast arm attachment height (H) will provide the design height clearance for the proposed mast arm. Submitting final shop drawings for approval. Verify elevation data below which was obtained by field measurement or from available project survey data.

Elevation Data for Mast Arm Attachment (H)	
Baseline reference point at	Pole 2
ξ Foundation to ground level	0.0 ft.
ξ High point of roadway surface	+1.7 ft.
ξ Edge of roadway or face of curb	N/A

DESIGN REFERENCE MATERIAL

- Design the traffic signal structure and foundation in accordance with:
 - The 1st Edition 2015 ASHTO LRFD Standard Specifications for Structural Supports for Highway Bridges, Inlets, and Culverts.
 - The 2004 NCDOT Standard Specifications for Road and Structures. The latest addenda to the specifications can be found in the traffic signal project special provisions.
 - The 2004 NCDOT Roadway Standard Drawings.
- The traffic signal project plans and special provisions.
- The NCDOT "Mastpole Standards" located at the following NCDOT website: <http://connect.ncdot.gov/resources/roadway/Pages/1506-Design-Header-standards.aspx>

NOTES

- Design the traffic signal structure using the loading conditions shown in the elevation view. The design shall include the weight of the mast arm and the weight of the traffic signal heads. The design shall also include the weight of the traffic signal supports using force ratios that do not exceed 0.3.
- The design for the mast arm deflection should provide an appearance of a low horizontal mast arm. The design for the mast arm does not deflect below horizontal when fully loaded.
- A clamp-type bolted mast arm-to-pole connection may be used instead of the welded ring stiffened box connection shown as long as the connection meets all of the design requirements.
- The mast arm shall be attached to the pole with 2 inch x 60 inch anchor bolts.
- The mast arm attachment height (H) shown is based on the following design assumptions:
 - Mast arm slope and deflection are not considered in determining the arm attachment height as they are assumed to offset each other.
 - Signalheads are rigidly mounted and vertically centered on the mast arm.
 - The mast arm is supported by a single vertical member.
 - The top of the pole base plate is 0.75 feet above the ground elevation.
- Refer to the Elevation Data Chart for the elevation differences between the proposed foundation ground level and the high point of the roadway.
- The pole manufacturer shall determine the total height (H2) of each pole using the greater of:
 - Mast arm attachment height (H1) plus 2 feet; or
 - H1 plus 1/2 of the total height of the mast arm attachment assembly plus 1 foot.
- If pole location adjustments are required, the contractor must gain approval from the Engineer as this may affect the mast arm lengths and arm attachment heights. The contractor shall submit the Signal Design Section Senior Structural Engineer for approval at 1689-844-5000.
- The contractor is responsible for verifying that the mast arm length shown will allow proper positioning of the signalheads over the roadway.
- The contractor is responsible for providing soil penetration testing data (SPT) to the pole manufacturer so site specific foundations can be designed.

POLE RADIAL ORIENTATION

8 BOLT BASE PLATE DETAIL
See Note 6

DESIGN REQUIREMENTS

- Design the traffic signal structure using the loading conditions shown in the elevation view. The design shall include the weight of the mast arm and the weight of the traffic signal heads. The design shall also include the weight of the traffic signal supports using force ratios that do not exceed 0.3.
- The design for the mast arm deflection should provide an appearance of a low horizontal mast arm. The design for the mast arm does not deflect below horizontal when fully loaded.
- A clamp-type bolted mast arm-to-pole connection may be used instead of the welded ring stiffened box connection shown as long as the connection meets all of the design requirements.
- The mast arm shall be attached to the pole with 2 inch x 60 inch anchor bolts.
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 - Mast arm slope and deflection are not considered in determining the arm attachment height as they are assumed to offset each other.
 - Signalheads are rigidly mounted and vertically centered on the mast arm.
 - The mast arm is supported by a single vertical member.
 - The top of the pole base plate is 0.75 feet above the ground elevation.
- Refer to the Elevation Data Chart for the elevation differences between the proposed foundation ground level and the high point of the roadway.
- The pole manufacturer shall determine the total height (H2) of each pole using the greater of:
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WINDHAM, VT 05591
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#231902

MCDOT Wind Load (150 mph)

US 74-76 (Andrew Jackson Hwy)
at
SR 1494
(Wood Treatment Rd NE)

PROJECT NO. 1689-844-5000
CONTRACT NO. 1689-844-5000
DESIGNED BY: B. ENGEL
CHECKED BY: J. BOLLINGER
DATE: 11/1/2025

SCALE: 0 = 1/4" = 1'-0"

DATE: 11/1/2025
DRAWN BY: J. BOLLINGER
SCALE: AS SHOWN
SHEET NO. 01-200

