

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

ROY COOPER GOVERNOR J.R. "JOEY" HOPKINS Secretary

August 5, 2024

Addendum No. 1

RE: **DD00464** Halifax County

To Whom It May Concern:

Reference is made to the above-mentioned project. The following additions/changes/deletions have been made:

- *I.* AVI equipment is not required for this contract. The AVI installation has been removed from the plans. Please replace plan sheets 17 and 18 with the attached pages. Due to this change some quantities have been revised.
- 2. Integration with 3rd party bypass programs is required. Section 2.1.C of the Special Provision has been revised.
- **3.** Additional language for the required System Warranty has been added to the Special Provision as section 20, System Warranty. An item has also been added to the proposal item sheet. Please replace the Proposal Item Sheets in the proposal with the attached sheets to cover the above changes.

A complete revised ITS Special Provision has been added to the bidding and letting site. Please replace the entire SP in the proposal with this revised SP dated 8-2-24.

This sheet and attachments shall be made a part of the plans and bid documents and shall be submitted with the bid. Bids submitted without the addenda and attachments will be considered non-responsive.

If there are any questions, please contact me at (252) 640-6433.

Sincerely,

—Docusigned by: Vickie P. Sardner

Vickie P. Gardner 08/05/2024 Division Four Contract Engineer

Attachments Mailing Address: NC DEPARTMENT OF TRANSPORTATION DIVISION FOUR OFFICE POST OFFICE BOX 3165 WILSON, NC 27895

Telephone: (252) 640-6400 Fax: (252) 234-6174 Customer Service: 1-877-368-4968

Location: 509 WARD BOULEVARD WILSON, NC 27895

Website: www.ncdot.gov





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C. Required System Operations

Provide a fully operational Automated Commercial Vehicle Processing System and Credential Screening System. Credential screening will be based on hierarchy requirements as shown below:

- a) 1st Tier Priority: Weigh in Motion, Tire Anomaly System
- b) 2nd Tier Priority: Existing 3rd Party Programs (Pre-Pass, Drivewyze); Data provided by these programs will be their approved NCSHP screening data and vehicle file ID information.
- c) 3rd Tier Priority: Automated License Plate Reader

Integration with the existing 3rd party programs is required. The Contractor must request in writing from the existing 3rd party programs their desire to integrate in the new WIM system operations within 30 days after Letting. The Contractor must include in this request receipt of an acknowledgment signature from the 3rd party program that any cost associated with integrating their program shall be the responsibility of those respective 3rd party programs.

The required operations of this system are based on processing criteria established for the WIM, ATMS, ALPR & Overview Camera information, while the vehicles are traveling on the mainline of the Interstate. The CMS will direct the commercial vehicles in compliance based on the Tier Priorities listed above to bypass the weigh station, thus ensuring greater efficiencies for both the commercial vehicles and the weigh station.

Vehicles not meeting the established Tier Priority criteria, or selected for a random pull-in, will be notified by the CMS to enter the weigh station for further processing. The Automated Commercial Vehicle Processing System and Credential Screening System will be responsible for making the sort decision.

Data obtained from the ALPR identification system will be used as a 3rd tier data source.

The TSG Data Collection sites are required to meet FHWA 13 for vehicle data collection. The data collection system shall be fully compatible with NCDOT's existing Traffic Data Management System (TDMS) developed by MS2. The bin definitions for both vehicle class and speed must be identical for all lanes at the Advance Locations.

D. Processing of Commercial Vehicles

The following scenario describes how commercial vehicles will be processed:

1) All trucks approaching the weigh station will be directed into the right lane of I-95 by means of static signing located prior to the Advance Locations.

As a truck passes the Advance Location, the equipment in the right-most lane will collect vehicle WIM data consisting of axle weight and spacing, gross vehicle weight, vehicle speed, classification, vehicle length, and ATMS data. The TSG Data Collection Sites will not screen commercial vehicles for reporting to the weigh station.

Additionally, an ALPR camera/system will take a photo of the vehicle's license plate for character recognition for comparison to the database records along with an overview CCTV camera that captures images of each truck as they travel past the location. Images of the vehicles are transmitted to the Scale House Server and become part of the Vehicle ID Record that will be comprised of the WIM data, ATMS data, and ALPR. All Vehicle ID data/records will be sent to the Scale House Server for processing.

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of the instructors. The Department will review and request modifications of that material as appropriate. Allow 20 days for review of each submittal.

Conduct all courses on weekdays at times to be specified by the Department. The Department will furnish the training facility.

Provide training material generated for each course including manuals and other handouts for each attendee that serves not only as subject guidance, but as quick reference material for future use. The course must utilize, to the greatest extent possible, the documentation described in these Project Special Provisions. Use the training courses to familiarize the students with all documentation that has been provided as part of this project. Deliver all course material, in reproducible form, to the Department immediately following course completion.

Video record each training session and deliver the DVD to the Department at the conclusion of the training.

19.2. MEASUREMENT AND PAYMENT

Training will be measured and paid for at the contract lump sum price for work detailed in this section. No measurement will be made for instructors, material, and other items required for the training as these will be considered incidental.

Payment will be made under:

Pay Item	Pay Unit
Training	Lump Sum

20. SYSTEM WARRANTY

20.1. DESCRIPTION

A. General

Unconditionally guarantee the performance of all systems and subsystems for a period of two (2) years from the successful completion of the 30-day observation period.

Provide the necessary labor, parts, materials, tools, test equipment and facilities required to address any warranty issues related to the system after it is installed.

The warranty coverage may be renewable on an annual basis for an additional four (4) years by mutual consent of both parties. Develop the cost for the renewable option through mutual agreement of both parties.

B. Scope of Warranty

Ensure the components of all systems are in good working condition and take appropriate action to remedy performance issues. Good working condition is defined under this project as equipment meeting the system specifications for acceptance, accuracy, and tolerances as defined in these Project Special Provisions.

Provide scheduled diagnosis and repair service and/or respond to repair malfunctioning equipment as outlined below:

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- Complete scheduled preventative maintenance, diagnostic testing, and repairs (if needed) at six (6) month intervals. Preventative maintenance shall be completed in accordance with the equipment manufacturer's recommendations and standard practices. Provide routine checks on all major systems, system components and ancillary equipment and take any corrective action to ensure proper long-term operation.
- Check installation of grout and sealant for loops and sensors. Repair or replace as required.
- Perform visual inspection of detector housings and repair or replace as required.

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- Clean the interior and exterior of the System electronics, power supplies, controllers and communications equipment in the equipment cabinet. Repair or replace as required.
- Check condition of all System cables and connectors, terminal strips, and back-up batteries. Repair or replace as required.
- Perform visual inspection of the equipment cabinet. Repair as required.
- Test and visually inspect equipment cabinet ventilation fan and filter, thermostat, light and fused switch. Repair or replace as required.
- Test and verify control and sequence of operation of interface components.
- Provide one (1) session of a System operations course one (1) month prior to the end of the warranty period. The sessions should be a minimum of 5 hours in length. Include in the refresher course a hands-on demonstration of system functionality. The Department will provide facilities for the refresher course.
- Provide emergency repair services, on an as needed basis. The response time for emergency repair service shall be as follows:
 - 1. 24 hours to acknowledge request
 - 2. 48 hours to respond to request
 - 3. 7 business days to repair any roadside equipment located in the equipment cabinet including any auxiliary support equipment located in either the equipment cabinet or in the Scale House and return System functionality. This excludes sensors located in the actual roadway as these items will require scheduling for lane closures and obtaining the proper equipment to replace the failed sensor. The repaired System shall function to the specifications defined in these Project Special Provisions for acceptance, accuracy, and tolerances. Document all activities performed under the warranty agreement, both preventative and emergency maintenance, in an electronic database that facilitates sorting the records by time period and/or device type.
- Submit for approval by the Department a maintenance and repair database proposal that tracks, at a minimum, the following events and information:
 - 1. Date and time of scheduled preventative maintenance
 - 2. All preventative maintenance activities completed.
 - 3. All parts repaired or replaced during preventative maintenance.
 - 4. Technician completing preventative maintenance work.
 - 5. Repair history for all systems and subsystems.
 - 6. Date and time of emergency maintenance request.
 - 7. Date and time of technician on site to respond to emergency maintenance request.
 - 8. Description of defective equipment or malfunctioning operations during emergency maintenance requests.
 - 9. Technician responding to emergency maintenance request.

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10. Corrective actions taken during emergency maintenance request.

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- 11. Date and time that operations restored after emergency maintenance request.
- 12. Model and serial number of any equipment repaired and replaced during emergency maintenance request.

Provide both electronic and hardcopy records of the updated database within ten (10) days of each maintenance activity.

Document all itemized material, equipment, and labor costs incurred to maintain the System during the warranty period. The cost records shall differentiate between preventative and emergency maintenance costs. Provide these records to the Department on a semi-annual basis within fifteen (15) days after the end of the six-month period. These records are for informational purposes only and will not be used as a basis of payments to the Contractors. Ensure that these cost records are complete and accurate. The Department may perform an audit to verify the accuracy of the cost records.

Provide software upgrades for all new software revisions completed during the warranty period at no additional cost to the Department. Identify a cutover procedure for all software upgrades, which ensures that there is no interruption of service or failure of any operation as a result of upgrading the software. Also develop a contingency plan to re-install older versions of software, by the Contractors (at no additional cost to the Department), if any operation fails or any system degradation is encountered as a result of a software upgrade.

C. Warranty Evaluation

Two (2) months prior to the end of the warranty period, the Department will inspect the system thoroughly for potential system defects with the contractor present. This inspection will be done by the Department's personnel or representative. Assist the Department's personnel or representative during this inspection. Two (2) weeks prior to the inspection, provide a summary report of all preventative and emergency maintenance records. This report shall document and certify that all components have been maintained fully in accordance with the Project Special Provisions and manufacturer recommendations and that all manufacturer warranties that extend beyond the Contractor's warranty have been in no way compromised.

Following the inspection, the Department will determine if there are any unresolved defects with equipment hardware or software. The Department will provide a punch list to the Contractors for the replacement or repair of defective components or repairs to system software. Replace or repair equipment and software identified in the punch list within thirty days of receipt of the punch list. Also replace any components whose manufacturer warranty has been voided or compromised by any action/inaction on the part of the Contractors. Document all repairs or replacements completed, providing the documentation to the Department within two (2) months of receipt of the punch list.

D. Correction of Work

Re-execute any work that fails to conform to the requirements of the Contract and that appears during the process of the work. Remedy any defects due to faulty materials or workmanship which appear within the warranty period. The provisions of this article apply to work done by subcontractors as well as direct employees of the Contractors.

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E. Traffic Control

Traffic control for all maintenance activities requiring lane closures will be provided by NCDOT in accordance with NCDOT standards.

20.2. MATERIALS

All replacement materials and equipment provided under the warranty shall meet or exceed the requirements as defined in the Plans and the Project Special Provisions. If during the warranty period a part or component of a system or subsystem is no longer available to the Contractors, obtain equipment which ensures that the systems and subsystems meet or exceed the specifications and functionality as defined in these Project Special Provisions.

Provide all labor, tools, test equipment and other equipment necessary in the maintenance, repair and replacement of all components furnished under this contract during the warranty period.

20.3. CONSTRUCTION METHODS

In replacing equipment under the maintenance agreement, meet or exceed the construction requirements for each component as defined in the Plans and Project Special Provisions.

20.4. MEASUREMENT AND PAYMENT

System Warranty will be measured and paid for at the contract lump sum price for System Warranty. The System Warranty is not part of the Contract Time.

No measurement will be made for providing labor, parts, materials, shipping, vehicles, tools, test equipment, documentation and facilities as these will be considered incidental to furnishing the System Warranty.

Payment will be made under:

Pay Item

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System Warranty	L	ump	Sum

Pay Unit

ITEMIZED PROPOSAL FOR CONTRACT NO. DD00464

Aug 05, 2024 10:56 AM

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
			ROADWAY ITEMS			
0001	0000100000-N	800	MOBILIZATION	Lump Sum	L.S.	
0002	303000000-E	862	STEEL BEAM GUARDRAIL	1,110 LF		
0003	3210000000-N	862	GUARDRAIL END UNITS, TYPE CAT-1	4 EA		
0004	3287000000-N	862	GUARDRAIL END UNITS, TYPE TL-3	4 EA		
0005	4025000000-E	901	CONTRACTOR FURNISHED, TYPE *** SIGN (B)	168 SF		
0006	4054000000-E	902	PLAIN CONCRETE SIGN FOUNDATIONS	2 CY		
0007	406000000-E	903	SUPPORTS, BREAKAWAY STEEL BEAM	1,270 LB		
0008	4066000000-E	903	SUPPORTS, SIMPLE STEEL BEAM	683 LB		
0009	4110000000-N	904	SIGN ERECTION, TYPE *** (GROUND MOUNTED) (B)	4 EA		
0010	4155000000-N	907	DISPOSAL OF SIGN SYSTEM, U- CHANNEL	4 EA		
0011	4400000000-E	1110	WORK ZONE SIGNS (STATIONARY)	110 SF		
0012	4424000000-N	SP	WORK ZONE PRESENCE LIGHTING	28 EA		
0013	4434000000-N	1140	SEQUENTIAL FLASHING WARNING LIGHTS	24 EA		
0014	4510000000-N	1190	LAW ENFORCEMENT	288 HR		
0015	460000000-N	SP	GENERIC TRAFFIC CONTROL ITEM CONNECTED LANE CLOSURE SYSTEM	2 EA		
0016	4600000000-N	SP	GENERIC TRAFFIC CONTROL ITEM RAMP/LOOP CLOSURES	 4 EA		

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Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0017	460000000-N	SP	GENERIC TRAFFIC CONTROL ITEM RAMP/LOOP TRAFFIC CONTROL	8 EA		
0018	4600000000-N	SP	GENERIC TRAFFIC CONTROL ITEM SHOULDER CLOSURE	24 EA		
0019	460000000-N	SP	GENERIC TRAFFIC CONTROL ITEM SINGLE LANE CLOSURE	18 EA		
0020	4695000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (8", 90 MILS)	540 LF		
0021	5255000000-N	1413	PORTABLE LIGHTING	Lump Sum	L.S.	
0022	706000000-E	1705	SIGNAL CABLE	1,670 LF		
0023	7072000000-E	1705	VEHICLE SIGNAL HEAD (**", ** SECTION) (12", 2 SECTION)	4 EA		
0024	7279000000-E	1715	TRACER WIRE	4,710 LF		
0025	7300000000-E	1715	UNPAVED TRENCHING (*********) (1, 2")	3,600 LF		
0026	7300000000-E	1715	UNPAVED TRENCHING (*********) (2, 2")	3,680 LF		
0027	7300000000-E	1715	UNPAVED TRENCHING (*********) (3, 2")	140 LF		
0028	7300000000-E	1715	UNPAVED TRENCHING (*********) (4, 2")	470 LF		
0029	7301000000-E	1715	DIRECTIONAL DRILL (*********) (2, 2")	2,025 LF		
0030	7312000000-N	1716	JUNCTION BOX (*************) (SPECIAL OVERSIZED)	2 EA		
0031	7324000000-N	1716	JUNCTION BOX (STANDARD SIZE)	41 EA		
0032	7348000000-N	1716	JUNCTION BOX (OVER-SIZED, HEAVY DUTY)	32 EA		
0033	736000000-N	1720	WOOD POLE	2 EA		

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Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0034	7408000000-E	1722	1" RISER WITH WEATHERHEAD	4 EA		
0035	7444000000-E	1725	INDUCTIVE LOOP SAWCUT	910 LF		
0036	7456100000-E	1726	LEAD-IN CABLE (14-2)	2,940 LF		
0037	7528000000-E	1730	DROP CABLE	7,525 LF		
0038	7540000000-N	1731	SPLICE ENCLOSURE	5 EA		
0039	7541000000-N	1731	MODIFY SPLICE ENCLOSURE	1 EA		
0040	7552000000-N	1731	INTERCONNECT CENTER	10 EA		
0041	7566000000-N	1733	DELINEATOR MARKER	10 EA		
0042	7684000000-N	1750	SIGNAL CABINET FOUNDATION	6 EA		
0043	790100000-N	1753	CABINET BASE EXTENDER	6 EA		
0044	798000000-N	SP	GENERIC SIGNAL ITEM 10KVA SINGLE PHASE STEP-UP/STEP- DOWN TRANSFORMER	6 EA		
0045	798000000-N	SP	GENERIC SIGNAL ITEM 5/8" X 10' GROUNDING ELECTRODE	27 EA		
0046	798000000-N	SP	GENERIC SIGNAL ITEM AUTOMATED LICENSE PLATE READER SYSTEM	2 EA		
0047	798000000-N	SP	GENERIC SIGNAL ITEM AUTOMATED TIRE MONITORING SYSTEM	2 EA		
0048	798000000-N	SP	GENERIC SIGNAL ITEM CHANGEABLE MESSAGE SIGN	4 EA		
0049	7980000000-N	SP	GENERIC SIGNAL ITEM COMPUTER WORKSTATION	2 EA		
0050	7980000000-N	SP	GENERIC SIGNAL ITEM EQUIPMENT CABINET DISCONNECT	5 EA		

ITEMIZED PROPOSAL FOR CONTRACT NO. DD00464

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Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0051	798000000-N	SP	GENERIC SIGNAL ITEM ETHERNET EDGE SWITCH	10 EA		
0052	798000000-N	SP	GENERIC SIGNAL ITEM JUNCTION BOX (SPECIAL OVERSIZED) (BROADBAND)	6 EA		
0053	798000000-N	SP	GENERIC SIGNAL ITEM LANE CONTROL SIGN	12 EA		
0054	798000000-N	SP	GENERIC SIGNAL ITEM MAST ARM WITH METAL POLE DESIGN	1 EA		
0055	798000000-N	SP	GENERIC SIGNAL ITEM METAL POLE WITH SWINGING MAST ARM	1 EA		
0056	798000000-N	SP	GENERIC SIGNAL ITEM METER BASE/DISCONNECT COMBINATION PANEL	3 EA		
0057	798000000-N	SP	GENERIC SIGNAL ITEM MODIFY EQUIPMENT CABINET DISCONNECT	1 EA		
0058	798000000-N	SP	GENERIC SIGNAL ITEM OVERVIEW CAMERA ASSEMBLY	2 EA		
0059	798000000-N	SP	GENERIC SIGNAL ITEM PRINTER	2 EA		
0060	798000000-N	SP	GENERIC SIGNAL ITEM SERVER	2 EA		
0061	798000000-N	SP	GENERIC SIGNAL ITEM SOIL TEST	1 EA		
0062	798000000-N	SP	GENERIC SIGNAL ITEM TSG DATA COLLECTION SYSTEM	2 EA		
0063	798000000-N	SP	GENERIC SIGNAL ITEM TYPE 332 BASE MOUNTED EQUIPMENT CABINET	6 EA		
0064	798000000-N	SP	GENERIC SIGNAL ITEM UPS	2 EA		
0065	798000000-N	SP	GENERIC SIGNAL ITEM WEIGH-IN-MOTION SYSTEM	2 EA		
0066	798500000-N	SP	GENERIC SIGNAL ITEM CENTRAL CONTROL SOFTWARE	Lump Sum	L.S.	

ITEMIZED PROPOSAL FOR CONTRACT NO. DD00464

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Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0067	798500000-N	SP	GENERIC SIGNAL ITEM SCALE HOUSE BUILDING MODIFICATIONS	Lump Sum	L.S.	
0068	798500000-N	SP	GENERIC SIGNAL ITEM TRAINING	Lump Sum	L.S.	
0069	798500000-N	SP	GENERIC SIGNAL ITEM TSG CENTRAL CONTROLLER INTERFACE	Lump Sum	L.S.	
0070	799000000-E	SP	GENERIC SIGNAL ITEM #4 SOLID BARE GROUNDING CONDUCTOR	270 LF		
0071	799000000-E	SP	GENERIC SIGNAL ITEM 3-WIRE COPPER FEEDER CONDUCTORS	4,020 LF		
0072	799000000-E	SP	GENERIC SIGNAL ITEM 4-WIRE COPPER FEEDER CONDUCTORS	40 LF		
0073	7992000000-E	SP	GENERIC SIGNAL ITEM DRILLED PIER FOUNDATION	4 CY		
0074	7985000000-N	SP	GENERIC SIGNAL ITEM SYSTEM WARRANTY	Lump Sum	L.S.	
1056/4	ua05/Q36530/D4950382	00000/F74	Total Amount Of B	lid For Entire Project -		