

REQUEST FOR QUOTATION

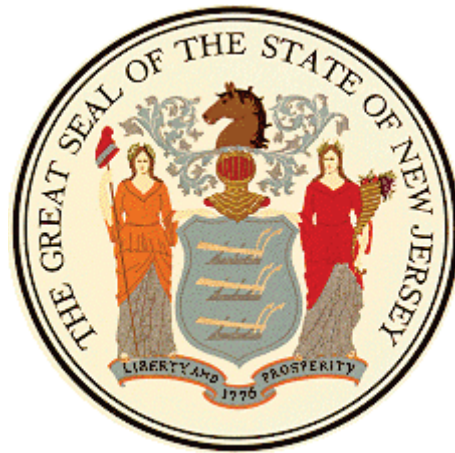
Camera with Portable Message Board

STATE OF NEW JERSEY

Honorable Philip D. Murphy, Governor
Honorable Sheila Y. Oliver, Lt. Governor

DEPARTMENT OF TRANSPORTATION

Francis K. O'Connor, Commissioner



January 15th, 2025

Important Dates

Question Cut-Off:	January 22 nd , 2025 @ 10:00 AM Email: dot-ems_bid.procurement@dot.nj.gov
Answers to Bid Questions:	Bidders are encouraged to monitor the NJDOT – EMS website daily for updates, changes and responses to questions through the submission due date. http://www.nj.gov/transportation/business/procurement/ems/current.shtm
Bid Opening:	January 29 th , 2025 @ 10:00 AM Email: dot-ems_bid.procurement@dot.nj.gov Please identify the Project Name in the subject line of your e-mail. Quotes sent to any other e-mail address may result in the quote being rejected. The quote must be submitted in PDF format. No other format will be accepted.
Procurement Contact:	Nikki Ghorbani Email: dot-ems_bid.procurement@dot.nj.gov

1.0 Purpose

The purpose of this Request for Quotation is for the purchase eight (8) Cameras with Portable Message Boards.

Per the specifications listed below. The description and parts are minimum requirements and are provided for reference. Equivalent or better equipment may be acceptable as substitutions.

2.0 Specifications

The specifications are detailed in the table below:

Portable Message and Camera System	Requirements
GENERAL	
STANDARDS COMPLIANCE	MUTCD Compliant Graphic Symbols NEMA TS 4 2023 Section 2 for ambient temperature, vibration, shock, electro-static discharge, and radio interference IP 66 code standard minimum
TRAILER GENERAL REQUIREMENTS	
TRAILER TYPE	Heavy-Duty all steel welded
OPERATING HEIGHT	142 inch minimum
TRAVELING HEIGHT	108 inch maximum
OVERALL LENGTH	143 inch minimum
OVERALL WIDTH	92 inch maximum
WEIGHT	Shall not exceed 3000 lbs
RETRACTION	Telescopic
CONTROL BOX	Lockable for security
DISPLAY SIGN FULL MATRIX LED DISPLAY	
MATRIX	27 x 48 pixels minimum
PANEL DIMENSIONS	Minimum Width: 92" Minimum Height: 54"
ILLUMINATION	Color LED Display
RESOLUTION	Three (3) LED's minimum per pixel
CHARACTERS	3 rows, 8 characters per row minimum
SIGN ROTATION	360 degrees. Rotation shall be locked with an adjustable lever
DMS HOUSING	Comply with Type 3R enclosure and AASHTO Standard Specifications
PIXEL UNIT	Each pixel is to have 4 colors of LED - Green, White, Amber, Red. LED output is to adjust according to ambient light conditions via photocell from 1% - 100% with 1% increments. The display is to be housed in aluminum cabinet with a polycarbonate UV protective face. Total viewing angle shall be 30 degrees, provide both daylight and nighttime legibility and word recognition with default font shall be 1000ft. Auto dimming feature shall be provided utilizing at least two (2) photocells mounted inside the cabinet.
OPERATING TEMP RANGE	-40° F to 165° F (-34° C to 74° C)
ELECTRICAL SYSTEM	
TYPE	Battery powered and Solar charged
OPERATING VOLTAGE	12 volts minimum
BATTERIES	AGM Type, maintenance free, Deep Cycle and shall run for a minimum of 48 hours with no charge or sunlight with Manufacturer's recommended battery configuration.
BATTERY CHARGER	Manufacturer's Standard charging system Each unit shall be provided with two (2) out door rated hard usage 50 ft extension cords with SOOW or SEOW insulation and factory installed connector on received end of the truck.
SOLAR PANELS	Shall be provided and provide a tilt and rotate mechanism. Solar panels shall be high-efficiency Monocrystalline type and shall support the minimum requirement for 48 hours of operation after up to a 2 week idle period.
ELECTRICAL INTERFERENCE PREVENTION	Electromagnetic Interference by power lines, radio frequencies, cellular phones shall not compromise any other electrical component of the unit.
WIRE SHIELDING	Any exposed wires shall be outdoor UV rated, shielded or covered to reduce the possibility of a short circuit or electronic failure during severe weather (heavy snow, rain, wind).
CAMERA GENERAL	
PAN RANGE	360 deg continuous
CAMERA CONTROL	Pan, tilt, zoom (PTZ) Dome Style
ENCLOSURE	The camera is to be encased in a clear hemispherical enclosure to prevent damage. The camera and all of its components are to be encased in a waterproof compartment. NEMA Type 4X, As a minimum, IP 66 Environmental Rating
PRODUCT SAFETY	Complies with UL, CE, CSA, EN, and IEC Standards
CAMERA SPECIFICATIONS	
LENS	Automatic day/night, autofocus
ZOOM	30x optical minimum, 12x digital minimum
FILE TYPE	MPEG-4, H.264
IMAGE SETTINGS	Compression, color, brightness, sharpness, white balance, exposure control, automatic backlight compensation, Aspect ratio correction, Autofocus and Iris, Wide Dynamic Range (WDR)
POWER	Manufacturer's Standard
LIGHT SENSITIVITY (ILLUMINATION)	.01 LUX minimum - Color .01 LUX minimum - Black & White
MODES	Color, Black & White
PROPORTIONAL PAN/TILT SPEED	Speed decreases in proportion to the increasing depth of zoom
IP	Accepts IP-network cameras
HDTV	Shall be 1080p HD minimum
AUTOFLIP	The camera is to have an "autoflip" option where the picture will be digitally flipped when the camera is being adjusted from one end of the viewing spectrum to the other.
COMPUTER / CONTROLLER	

GENERAL CAMERA	A computer controller is to be incorporated into the design of the unit. The controller should be hard mounted on to the unit. The computer is to be able to control the camera manually and remotely through the communications module. The controller is to be housed in a water tight lockable enclosure to prevent unauthorized access to the video camera. Controller is to also monitor solar panel output and prevent overcharging of the batteries. Controller shall be a heavy duty touch screen and shall be built to keep unit cool. Manual override shall be featured. Password protection shall be featured. Operating temperature limits shall be -4 to 158 degrees F.
GENERAL MESSAGE BOARD	The LCD touch screen display will be integrated into the computer controller unit. User is able to store approximately 250 custom messages and 250 changeable graphics in the controller. Note: Standard Keyboard shall not be featured to prevent jamming of keys and overheating. All controls to be conducted via computer controller unit. Operating temperature limits shall be -4 to 158 degrees F.
KEYBOARD	Keyboard shall be available as an option if requested.
STANDARDS COMPLIANCE (MESSAGE BOARD)	NTCIP compliant 1203 V03 compliant and incorporate three (3) levels of password security protection.
CONTROL CONSOLE DISPLAY	The controller will consist of an LCD display, and controller unit to transmit the data to the advisory sign
ENCLOSURE	The controller will be housed in a lockable enclosure to prevent unauthorized access to the message board.
PASSWORD PROTECTION	Default password must be changed prior to delivery. Shall be featured for security.
REMOTE PROGRAMMING	Ability to program sign remotely must be featured, but ability to connect wirelessly must be disabled prior to delivery for security reasons until DOT SIM card is installed and passwords changed.
COMMUNICATIONS	
MODULES	The trailer is to be able to communicate remotely with the current base module used by NJDOT. Computer and communications module are to be NTCIP compliant, GPS, 4G LTE-A cellular or above capable. The 4G-LTE modem shall be a Sierra MP70 model with Sierra Wireless 6-in-1 SharkFin antenna, or approved equal, and be compatible with the NJOIT's existing wireless network security management. Cap unused ports with dust covers. Compatible with the latest video management system. Ensure the provided equipment is compatible from the camera to the head end Genetec controller software and meets applicable NTCIP requirements. Message Board shall be compatible with the latest DMS Central Control Software Vanguard.
SUPPORTED PROTOCOLS	Supported Protocols IPv4: TCP/IP, UDP/IP (unicast, Multicast IGMP), SNMP, QoS, HTTP, HTTPS, LDAP, UPnP, DNS, DHCP, DDNS, RTP, RTSP, NTP, SSH, SSL, SMTP, FTP, and 802.1x (EAP), IPv6: TCP/IP, UDP/IP (unicast, Multicast IGMP), HTTP, RTP, FTP, SMTP, DNS, NTP, SNMP. Security Access-Password Protected, 2-Level Security
DATA TRANSMISSION	Trailer is to be able to transmit data regarding battery life, GPS location and current message display. Communications module is to be able to instate standby mode to conserve power when camera trailer is not in use. Communications module is to have a port for easy programming. Shall feature an indication for power, GPS and network connection as a minimum. Any outdoor-rated antennas and/or accessories needed for GPS, 4G LTE-A cellular or above capability shall be provided. Alerts and alarms, i.e., low battery, must be automatically initiated by the trailer communications module.
MODULE BOX	Module is to be installed in a water-resistant lockable enclosure and should be fastened securely to the unit. Any USB Drives Type C needed to program the communications module will be included with the unit on the day of delivery. Communication Module must work as "Turn-Key" with SIM cards.
TRAILER REQUIREMENTS	
FRAME	The trailer frame is to be all steel welded construction rectangular steel tubing adequately designed to carry the load at normal highway speeds. The axle assembly shall have a 3500 lb. capacity.
DRAWBAR	Heavy duty with lunette ring: - Outer diameter: 6-1/4" - Inner diameter: 3" - Round Stock: 1-1/8" Drawbar Length: To be of sufficient length to provide unobstructed clearance of 48" between lunette and trailer frame. Drawbar Height: From drawbar to the ground is to be 20" Two (2) 3/8" steel safety chains securely fastened to the main frame (routed through support eyes welded or bolted along the length of the drawbar) are to be extended 8" beyond the lunette. Approximately rated, forged alloy steel, eyehooks with spring loaded locks are to be attached to loose ends.
TOUNGE JACK ASSEMBLY	Trailer is to have a crew jack type with corrosion resistant jack foot. It is to be securely attached to the drawbar as far as practicable from the pintle eye.
TIRES, AXLES AND SPRINGS	The unit weight applied to the axle is not to exceed the gross axle weight rating. Tires, axels and springs are to be sized accordingly with industry acceptable safety factors used in the design. Spare tire shall be provided.
FENDERS	Trailer is to be equipped with fenders capable of supporting a 200 lb. individual. Fenders are not to contact the tires when the suspension is fully compressed. Tire pressure is to be stenciled in black paint on each fender over the tire with lettering to be 2" high.
CABLE CONNECTOR	An ATA approved, 7-wire quick detachable trailer connector (Midland model 23753 male) with 7-wire trailer cable made to SAE and ATA specifications is to be provided. Cable is to be cut to extend 3' beyond the lunette, with connector attached and wired. Wiring is to conform to ATA color code. A weatheright connector housing shall be installed on the trailer tongue to protect the 7-way connector from the elements when ht trailer is parked.
LIGHTS	LED combination tail lights recessed in metal framing; dual stop, directional, 4-way flasher, all in one housing with lighted license plate bracket. Lights are to be adequately shielded for protection against breakage and vandalism.
SUPPORT	The unit is to incorporate five (5) screw type jacks positioned near the four (4) corners of the trailer frame and one (1) at the tounge. Jacks are to be welded to the frame (or bolted using appropriate rade, corrosion resistant bolts with lock nuts so vibrations will not result in the jack coming loose). Limited pivoting feet on the jacks are to stabilize the unit when it is deployed. Jacks should be positioned to be able to support the unit during adverse weather scenarios. High wids, heavy snowfall or rain should not affect the unit's ability to stand upright on the four jacks.
LICENSE PLATE HOLDER	An illuminated license plate holder shall be mounted to the rear of the frame and reflectors mounted to the sides.
STRIPING REQUIREMENTS	Horizontal stripe on the sides of the tow bar, (left and right). Horizontal stripe along the full width of rear frame rail. Vertical stripe on the left and right fenders (rear facing).
REQUIRED, TO BE INCLUDED	
BATTERY BOX	Batteries are to be located in an easily accessible area of the trailer. The batteries are to be in a water tight enclosure and are to be secured into the enclosure so that the batteries will not move, shift or come loose during transportation of the unit. Use of the compartment lid as the primary hold down is unacceptable. Brackets or battery tie downs must be the primary hold down mechanism. Each terminal is to be properly labeled with terminal protectors; red protector on the positive, black protector on the negative. Metal box with a locking mechanism that can be keyed.

WIRE SHIELDING

The entire electrical system of the unit is to incorporate appropriate wire shielding so that electrical interference by power lines, radio frequencies, cellular phones shall not compromise the display, charging ability or any other electrical component of the unit. Any exposed wires will be shielded or covered to reduce the possibility of a short circuit or electronic failure during severe weather (heavy snow, rain, wind). Wiring to be enclosed in flexible liquid-tight conduit with appropriate fittings and junction boxes. Climate conditions up to 120 deg Fahrenheit and down to -20 deg Fahrenheit may be encountered during the lifetime of the unit. Appropriate design precautions to prevent failure of the unit are to be taken. It is understood that battery life will decrease in cold weather scenarios, batteries do not have to be modified in any way because cold weather operation will be only temporary.

3.0 Installation

The Vendor shall furnish all necessary labor and equipment to install components described within its quote. All work shall be performed by factory trained technicians during normal working hours (8am to 4pm), Monday through Friday.

4.0 Testing

Not applicable.

5.0 Freight

The above equipment shall be shipped to:

NJDOT Bordentown Training Facility
391 Route 130
Building 3
Bordentown NJ, 08505

The freight cost for delivery shall be included.

6.0 Delivery

NJDOT Bordentown Training Facility
391 Route 130
Building 3
Bordentown NJ, 08505

Delivery confirmed upon award.

Delivery Point of Contact

Steve Rudic (609-530-2264)

Delivery date shall be confirmed at the time order is placed.

7.0 Warranty

The Vendor agrees to immediately replace and install free of charge any part that may break, fail or malfunction by reason of defective material or workmanship for a minimum period of one (1) year or the manufacturer's standard warranty, whichever is longer, from the date of acceptance by the NJDOT. Bidder must provide warranty information with its proposal.

8.0 Quote Content

A quotation must arrive at NJDOT in accordance with this RFQ, within the time frame indicated to the e-mail address noted in this RFQ. The quote should be submitted in two (2) sections with the content of each as indicated below.

A. Section 1 – Forms

The Vendor must submit all the forms listed on the checklist. The checklist and required forms can be found at the following link:

<https://www.state.nj.us/treasury/purchase/forms/Waiver%20and%20DPA%20Contract%20Checklist.pdf>.

All required DPA forms should be completed and submitted in their entirety with your bid. Failure to submit the required DPA Forms may result in your bid being rejected.

NOTE: The Vendor must be registered in NJSTART to qualify for an award. NJSTART registration link as follows: <https://www.njstart.gov/bsol/>

B. Section 2 – Quote and Price

The Vendor may supply their own quote; however, a signed PB-120 Form should be submitted indicating the total price for all aspects of this RFQ. **Failure to submit this form shall deem your bid non-responsive and your bid will be rejected.**

Cut sheets and/or equipment brochures shall be included with the quote.

The quote must be submitted in PDF format. No other format will be accepted.

9.0 Negotiation and best and final offer (BAFO)

After evaluating the quote, NJDOT may establish a competitive range and enter into negotiations with one (1) Bidder or multiple Bidders within this competitive range. The primary purpose of negotiations is to maximize the State's ability to obtain the best value based on the mandatory requirements, evaluation criteria, and cost. Multiple rounds of negotiations may be conducted with one (1) Bidder or multiple Bidders. Negotiations will be structured by NJDOT to safeguard information and ensure that all Bidders are treated fairly.

Negotiations will be conducted only in those circumstances where they are deemed by NJDOT to be in the State's best interests and to maximize the State's ability to get the best value. Therefore, the Bidder is advised to submit its best price quote in response to this solicitation since NJDOT may, after evaluation, make an award based on the content of the initial submission, without further negotiation and/or Best and Final Offer (BAFO), with any Bidder.

10.0 Award

- A. Award of this contract will be based upon the lowest responsible bid.
- B. The New Jersey Department of Transportation (NJDOT) reserves the right to reject all bids.
- C. NJDOT reserves the right to award this project in whole, in part or not make an award.
- D. Awarded Contractors, along with their proposal amount will be posted on the NJDOT, Equipment Materials & Supplies, Awarded Projects' webpage.

- E. Award of this contract shall not be interpreted to mean approval to proceed until an authorized purchase order is issued to the contractor.

11.0 Additional Notices & Requirements

A) DIANE B. ALLEN EQUAL PAY ACT

Pursuant to N.J.S.A. 34:11-56.14(b), any employer, regardless of the location of the employer, who enters into a contract with a public body to perform any public work for the public body shall provide to the Commissioner of the New Jersey Department of Labor and Workforce Development, through certified payroll records required pursuant to P.L.1963, c.150 (C.34:11-56.25 et seq.), information regarding the gender, race, job title, occupational category, and rate of total compensation of every employee of the employer employed in the State in connection with the contract. The employer shall provide the commissioner, throughout the duration of the contract or contracts, with an update to the information whenever payroll records are required to be submitted pursuant to P.L.1963, c.150 (C.34:11-56.25 et seq.).

Information regarding the Diane B. Allen Equal Pay Act and its requirements may be obtained from the New Jersey Department of Labor and Workforce Development (LWD) web site at: <https://nj.gov/labor/equalpay/equalpay.html>

LWD forms may be obtained from the online web site at: https://nj.gov/labor/forms_pdfs/equalpayact/MW-562withoutfein.pdf

- B) NJDOT is required to comply with P.L. 2012, c. 4, which requires all agencies to encourage awarded contractors to notify their employees of organ and tissue donation options.

“Organ and Tissue Donation: As defined in section 2 of P.L. 2012, c. 4 (N.J.S.A. 52:32-33), contractors are encouraged to notify their employees, through information and materials or through an organ and tissue awareness program, of organ donation options. The information provided to employees shall be prepared in collaboration with the organ procurement organizations designated pursuant to 42 U.S.C. §1320b-8 to serve in this State.”

C) ANTI-DISCRIMINATION

All parties to any contract with the State agree not to discriminate in employment and agree to abide by all anti-discrimination laws including those contained within N.J.S.A. 10:2-1 through N.J.S.A. 10:2-4, N.J.S.A. 10:5-1 et seq. and N.J.S.A. 10:5-31 through 10:5-38, and all rules and regulations issued thereunder are hereby incorporated by reference.

The contractor or subcontractor, where applicable, agrees to comply with any regulations promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 et seq., as amended and supplemented from time to time.