MEPNN Supplier Scouting Opportunity Synopsis

| Section 1: General Informa | tion |
|---|--|
| Scouting Number | 2025-271 |
| Item to be Scouted | Pedestrian Signal Assembly |
| Days to be scouted | 30 |
| Response Due By | 09/19/2025 |
| Description | Pedestrian Signal Assemblies (Countdown Pedestrian Signal and Internationals symbol Pedestrian Signal) must meet the Manual on Uniform Traffic Control Devices (MITCD) and the Institute of Transportation Engineers |
| Section 2: Technical Inform | nation |
| Type of supplier being sought | Defined acronyms II E => Institute of Transportation Engineers Manufacturer |
| Reason | Florida BABA |
| Describe the manufacturing processes (elaborate to provide as much detail as possible) | file. Requirements include: 995-5.4 Electrical: Wiring and terminals must meet the size, insulation, length, and color-coding of the current ITE Pedestrian Traffic Control Signal Indicators LED specification. Wires must not have bare wiring exposed where wires are secured. The pedestrian signal must include a terminal block containing a minimum of three circuits, each with two noncorrosive screw-type terminals. Each terminal must accommodate three No. 18 AWG conductors and be labeled for ease of identification. The terminal block must not be obstructed and be visible when the housing is open. 995-5.5 Hardware: All brackets used to mount pedestrian signals must be an aluminum alloy cast fitting, pipe, or equivalent material approved by the Department. Aluminum and aluminum alloy bars, rods, wires, profiles, and tubes must meet ASTM B221. Aluminum-alloy sand casting must meet ASTM B26. All mounting hardware must be painted black with a reflectance value not exceeding 25 percent as measured by ASTM E97. Ensure that all assembly hardware, including nuts, bolts, external screws and locking washers less than 5/8 inch in diameter, are Type 304 or 316 passivated stainless steel. Stainless Steel bolts, screws and studs must meet ASTM F593 Nuts must meet ASTM F594. All assembly hardware greater than or equal to 5/8 inch in diameter must be galvanized. Bolts, studs, and threaded rod must meet ASTM A307. Structural bolts must meet ASTM F3125, Grade A325. |
| Provide dimensions / size / tolerances / performance specifications for the item | Countdown pedestrian signal module must meet the requirements of the latest ITE LED Pedestrian Signal Specifications. |
| List required materials needed to make the product, including materials of product components | Products must meet FDOT Standard Specification requirements; see attached file. |
| Are there applicable certification requirements? | Yes |
| Certification(s) required | UL |
| Details | MUTCD (FHWA Manual for Uniform Traffic Control Devices), and the ITE LED Pedestrian Signal Specifications. |
| Are there applicable regulations? | Yes |
| Details | Product needs to be compliant with Federal BABA rules. See Section 4 for contact information. |
| Are there any other stndards, requirements, etc.? | Yes |

| | FDOT (Florida Department of Transportation) Standard Specifications, Section 653; see additional information for file. |
|-------------------------------|--|
| Additional Technical Comments | |

| Section 4: Business Information | | | |
|---|---|--|--|
| Estimated potential business volume | Estimated 2500 annually | | |
| Estimated target price / unit cost information (if unavailable explain) | Approximately \$500 per each | | |
| When is it needed by? | 5 months | | |
| Describe packaging requirements | No packaging requirements. Best available. Delivered undamaged. Specifics discussed in negotiation. | | |
| Where will this item be shipped? | Florida | | |

| Additional Comments | |
|---|---|
| Is there other information you would like to include? | Agency providing funds: Florida Department of Transportation Name/POC for BABA related questions: Melissa Hollis or Karen Byram Email address of contact: Melissa.Hollis@dot.state.fl.us or Karen.Byram@dot.state.fl.us |

SECTION 653 PEDESTRIAN SIGNAL ASSEMBLIES

653-1 Description.

Furnish and install pedestrian signal assemblies as shown in the Plans and Standard Plans, Index 653-001. Meet the requirements of Section 603.

653-2 Materials.

Use pedestrian signals that meet the requirements of Section 995 and are listed on the Department's Approved Product List (APL). Pedestrian signal assemblies must meet the requirements of the latest edition of the Federal Highway Administration's (FHWA) Manual on Uniform Traffic Control Devices (MUTCD) and the Institute of Transportation Engineers (ITE) standard for Pedestrian Traffic Control Signal Indications.

653-3 Installation.

- **653-3.1 General:** Use pedestrian signal assemblies capable of being maintained, adjusted, and disassembled with ordinary hand tools. Pre-assemble the pedestrian signal, with the exception of mounting hardware, prior to installation at the site. Construct the pedestrian signal assembly (including the mounting hardware) to be a weather-tight unit. Conceal all conductors.
- **653-3.2 Placement:** Position pedestrian signals and all mounting assembly members as either plumb or level, and symmetrically arranged. Align signals in the line of the pedestrian's vision for the crosswalk being used.
- **653-3.3 Installation Sequence:** Install all pedestrian signal assemblies at any intersection as a single operation unless a staged operation is approved by the Engineer. Do not install signals at any intersection until all other signal equipment, including the controller, and pedestrian detectors are in place and ready for operation, unless completely covered in accordance with 650-3.10.

653-4 Method of Measurement.

The Contract unit price per assembly for pedestrian signal assembly, furnished and installed, (including mounting hardware but not including poles or pedestals) will include all materials and equipment as specified in the Contract Documents, and all labor and materials necessary for a complete and accepted installation.

Payment for removal of pedestrian signal assemblies will be made only when the pole/pedestal is to remain. Otherwise, the removal of pedestrian signal assemblies are included in the removal of the pole or pedestal.

653-5 Basis of Payment.

Price and payment will be full compensation for all work specified in this Section. Payment will be made under:

Item No. 653- Pedestrian Signal - per assembly.

SECTION 995 TRAFFIC CONTROL SIGNAL AND DEVICE MATERIALS

995-1 Description.

995-1.1 General: This Section governs the requirements for all permanent traffic control signals and devices. All equipment shall be permanently marked with manufacturer name or trademark, part number, and date of manufacture or serial number.

995-1.2 Product Acceptance: All specified products shall be items listed on the Department's Approved Product List (APL), unless otherwise noted below. Manufacturers seeking evaluation of products for inclusion on the APL shall submit an application in accordance with Section 6 and include the following documentation. A separate application must be submitted for each product to be evaluated, showing that the product meets the applicable requirements.

| Table 995-1 | | |
|--|---|--|
| Documentation | Requirements | |
| Assembly and Installation Instructions | Include any surface preparations, | |
| | assembly/installation instructions, operation | |
| | manual, troubleshooting guides, and repair | |
| | procedures. | |
| Independent Laboratory Test Results | Product meets requirements of this Section. | |
| Product Label Photo | Labeling shows the manufacturer's name, | |
| | trademark, and product model number/name. Label | |
| | shows the date of manufacture and/or the | |
| | manufacturer's batch number. Additional label | |
| | requirements, as listed within this Section. | |
| Product Photo | Displays the significant features of the product as | |
| | required in this section. | |
| Compliance Matrix | Include completed compliance matrix at | |
| | https://www.fdot.gov/traffic/traf-sys/product- | |
| | specifications.shtm | |
| Manufacturer's Product Specifications | Include product specifications showing electrical | |
| | requirements, voltages, etc. | |
| Product Drawings or Cut Sheet | Show mounting points, mechanical details, block | |
| | diagrams, schematics, etc. | |
| Parts List | List major parts and field serviceable components. | |

995-1.3 Abbreviations: The following abbreviations are used in this Section:

Acrylonitrile Butadiene Styrene (ABS)

Alternating Current (AC)

Direct Current (DC)

Global Positioning System (GPS)

Hypertext Transfer Protocol (HTTP)

Institute of Transportation Engineers (ITE)

Internet Protocol (IP)

Local Area Network (LAN)
Network Time Protocol (NTP)
Telecommunications Industry Association (TIA)
Uniform Code Flash (UCF)
Uniform Resource Locator (URL)
Ultraviolet (UV)

995-5 Pedestrian Signal Assemblies.

995-5.1 General: Pedestrian signal assemblies must meet the requirements of Section 603, the MUTCD, and the ITE standard for Pedestrian Traffic Control Signal Indications.

995-5.2 Housing and Visor: The housing must be weatherproof, sectional and may consist of as many sections as optical units. The housing must prevent light from escaping from one unit to another. The top and bottom opening of the housing must include a circular 72-tooth serrated connection (2-inch nominal I.D.) capable of providing positive positioning and alignment in 5 degree increments. When assembled and tightened, these connections must prevent rotation or misalignment. The serrated area must start at the outside of the 2-inch hole and be at least 1/8 inch wide. The teeth must have a minimum depth of 3/64 inch between peaks and valleys, free from burrs or other imperfections, and provide positive locking with the grooves of mating sections, framework, and brackets. The serration on the top circular connection of a signal section must have a valley at the 0-degree position and the serration on the bottom circular connection must have a peak at the 0-degree position, both aligned perpendicular to the front of the section. Housings must include latch pads and manual stainless steel latching devices that are captive, or non-removable. Housings must have at least two latching points.

Reinforce all mounting points and adjacent housing material. The door enclosing the lens must be hinged and held securely to the housing. Provide a gasket meeting the requirements of ASTM D1056, Grade 2B2 between the housing and door and between the lens and door. If the fitting between the housing and door is weather-tight, the gasket may be omitted.

Provide a visor or egg-crate louver that eliminates sun phantom for each signal face. Visor must be three-sided and extend a minimum of 7 inches at the top from the face of the lens. The visor must be constructed of noncorrosive No. 18 gauge sheet metal, not less than 0.05 inch thick, or 0.1 inch thick polycarbonate.

All metal housings and visors must be powder-coat painted black in accordance with Military Standard MIL-PRF-24712A or AAMA-2603-02 with a reflectance value not exceeding 25 percent as measured by ASTM E97. For polycarbonate heads, the black color must be incorporated into the material before the molding process.

The housing must be constructed of a non-corrosive material. Cast metal parts must have a minimum tensile strength of 1 ksi (117 MPa) and sheet metal parts a minimum tensile strength of 27 ksi (186 MPa).

995-5.2.1 Die Castings: Meet the requirements in ASTM B85 for the physical characteristics and chemical content for alloys S12A, S12B, SC84A, SC84B, SG100A and SG100B.

995-5.2.2 Sand Castings: Meet the requirements in ASTM B26 for the physical characteristics and chemical content for alloys S5A and CS72A.

995-5.2.3 Permanent Mold Castings: Meet the requirements in ASTM B108 for the physical characteristics and chemical content for alloys S5A and CS72A.

995-5.2.4 Polycarbonate: Polycarbonate housing assemblies, doors and visors must be molded from ultraviolet stabilized polycarbonate plastic with a minimum thickness of 0.1 inch, plus or minus 0.01 inch, and provide the following physical properties:

| Table 995-5 | | | | |
|---|-----------------------------------|------------|--|--|
| Polycarbonate Housing Assemblies, Doors, and Visors | | | | |
| Test | Minimum Requirement | Method | | |
| Specific Gravity | 1.17 | ASTM D792 | | |
| Vicat Softening Temp. | 305-325°F (152 – 163°C) | ASTM D1525 | | |
| Brittleness Temp. | Below -200°F (-129°C) | ASTM D746 | | |
| Flammability | Self-extinguishing | ASTM D635 | | |
| Tensile Strength | Yield, 8500 psi (58 MPa) | ASTM D638 | | |
| Elongation at yield | 5.5 - 8.5% | ASTM D638 | | |
| Shear Strength | Yield, 5500 psi (38 MPa) | ASTM D732 | | |
| Izod impact strength | 15ft-lb/in (800 J/m) | ASTM D256 | | |
| Fatigue strength | 950 psi (6.5MPa) at 2.5 mm cycles | ASTM D671 | | |

995-5.3 Light Emitting Diode (LED) Pedestrian Signal Optical Unit (State

Standard): Provide a countdown pedestrian signal module meeting the requirements of the latest ITE LED Pedestrian Signal Specifications.

995-5.4 Electrical: Wiring and terminals must meet the size, insulation, length, and color-coding of the current ITE Pedestrian Traffic Control Signal Indicators LED specification. Wires must not have bare wiring exposed where wires are secured.

The pedestrian signal must include a terminal block containing a minimum of three circuits, each with two noncorrosive screw-type terminals. Each terminal must accommodate three No. 18 AWG conductors and be labeled for ease of identification. The terminal block must not be obstructed and be visible when the housing is open.

995-5.5 Hardware: All brackets used to mount pedestrian signals must be an aluminum alloy cast fitting, pipe, or equivalent material approved by the Department. Aluminum and aluminum alloy bars, rods, wires, profiles, and tubes must meet ASTM B221. Aluminum-alloy sand casting must meet ASTM B26. All mounting hardware must be painted black with a reflectance value not exceeding 25 percent as measured by ASTM E97.

Ensure that all assembly hardware, including nuts, bolts, external screws and locking washers less than 5/8 inch in diameter, are Type 304 or 316 passivated stainless steel. Stainless Steel bolts, screws and studs must meet ASTM F593. Nuts must meet ASTM F594. All assembly hardware greater than or equal to 5/8 inch in diameter must be galvanized. Bolts, studs, and threaded rod must meet ASTM A307. Structural bolts must meet ASTM F3125, Grade A325.