



North Carolina
Department of Administration
Division of Purchase & Contract

Machelle Sanders
Secretary

Odessa McGlown
State Purchasing Officer

Contract Award Certification

Date: March 23, 2020

Bid/File Number: 201901224

Commodity: 550-89
Traffic Signal Parts

To:

John Rosenblatt
RAI Products
421 Rountree Road
Charlotte, NC 28217
john@raiproducts.com
704-525-1852

From:

Nicole Mathis for Rich Reber
919-807-4539
richard.reber@doa.nc.gov
Division of Purchase and Contract

Agency Requisition Number: 54-KM-20190819

I am pleased to inform you that, following the evaluation process, the Division of Purchase and Contract proposes to accept your offer in relation to the above commodity. You will be contacted with further details and instructions by the using agency.

Item(s)

Line Item 44: \$7,925.00
Line Item 46: \$528.40
Line Item 47: \$12,856.00
Line Item 49: \$52,300.00
Lot #7 (Line Items 50 – 51) \$3,639.00
Lot #11 (Line Items 70 – 73) \$153,950.00
Lot #13 (Line Items 76 – 77) \$46,400.10

Award Amount:
\$277,598.50

Using Agency:

DEPARTMENT – Transportation
Kris May
919-707-2624
ktmay@ncdot.gov
Raleigh, NC 27611

Contract Term: Three (3) year term, upon contract award

Comments: This is an Agency Specific Term Contract. Quantities are estimated but no minimum or maximum quantities are guaranteed. Continuation of the contract is subject to availability of funds.

Please Note:

1. This is not a purchase order. Do not make shipment until you have received an official order from the using agency.
2. Invoices should be made out to the using agency and forwarded directly to them for payment.
3. The exact items certified and ordered must be shipped. No substitutions shall be made without prior approval of the Division of Purchase and Contract.
4. Applicable North Carolina Sales and use tax shall be added to invoices as a separate item.
5. Please note the contract award description above, the contract awarded to you may be a portion of the contract, rather than the complete contract.

Richard J. Reber

Signature

STATE OF NORTH CAROLINA
Department of Transportation

Refer ALL Inquiries regarding this IFB to: Richard J. Reber State Procurement Specialist I Email: richard.reber@doa.nc.gov	Invitation for Bids # 201901224 Bids will be publicly opened: November 20, 2019 @ 2:00 PM ET
Contract Type: Agency Specific	Using Agency: Department of Transportation
Commodity No.: 550-89 Traffic Signals	Requisition No.: N/A

EXECUTION

In compliance with this Invitation for Bids, 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 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 that it is not an ineligible Vendor as set forth in G.S. 143-59.1. False certification is a Class 1 felony. 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. 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.

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: <i>Rosenblatt Associates, Inc., d/b/a RAI Products</i>		
STREET ADDRESS: <i>421 Roundtree Rd.</i>	P.O. BOX: <i>240772</i>	ZIP: <i>28224</i>
CITY & STATE & ZIP: <i>Charlotte, NC 28217</i>	TELEPHONE NUMBER: <i>704.525.1852</i>	TOLL FREE TEL. NO: <i>888.776.7325</i>
PRINCIPAL PLACE OF BUSINESS ADDRESS IF DIFFERENT FROM ABOVE (SEE INSTRUCTIONS TO VENDORS ITEM #12):		
PRINT NAME & TITLE OF PERSON SIGNING ON BEHALF OF VENDOR: <i>John Rosenblatt, President</i>	FAX NUMBER: <i>704.525.1859</i>	
VENDOR'S AUTHORIZED SIGNATURE*: 	DATE: <i>11/19/19</i>	EMAIL: <i>john@raiproducts.com</i>

Offer valid for at least 90 days from date of bid opening, unless otherwise stated here: _____ days.

ACCEPTANCE OF BID

If any or all parts of this bid are accepted by the State of North Carolina, authorized representative of **Division of Purchase and Contract** shall affix his/her signature hereto and this document and all provisions of this Invitation for Bid along with the Vendor bid response and the written results of any negotiations shall then constitute the written agreement between the parties. A copy of this acceptance will be forwarded to the successful Vendor(s).

<p>FOR STATE USE ONLY: Offer accepted and Contract awarded this <u>23</u> day of <u>March</u>, 20<u>20</u> as indicated on the attached certification, by <u><i>J. Matthews</i></u> (Authorized Representative of Division of Purchase and Contract).</p>
--

Table of Contents

1.0	PURPOSE AND BACKGROUND	4
2.0	GENERAL INFORMATION.....	4
2.1	INVITATION FOR BIDS DOCUMENT	4
2.2	E-PROCUREMENT SOLICITATION	4
2.3	NOTICE TO VENDORS REGARDING IFB TERMS AND CONDITIONS.....	4
2.4	IFB SCHEDULE	5
2.5	BID QUESTIONS	5
2.6	BID SUBMITTAL	5
2.7	BID CONTENTS.....	6
2.8	ALTERNATE BIDS	6
2.9	DEFINITIONS, ACRONYMS, AND ABBREVIATIONS.....	7
3.0	METHOD OF AWARD AND BID EVALUATION PROCESS.....	7
3.1	METHOD OF AWARD.....	7
3.2	CONFIDENTIALITY AND PROHIBITED COMMUNICATIONS DURING EVALUATION.....	8
3.3	BID EVALUATION PROCESS.....	9
3.4	PERFORMANCE OUTSIDE THE UNITED STATES	9
3.5	INTERPRETATION OF TERMS AND PHRASES	10
4.0	REQUIREMENTS.....	10
4.1	CONTRACT TERM.....	10
4.2	PRICING	11
4.3	INVOICES	11
4.4	PRODUCT IDENTIFICATION.....	11
4.5	TRANSPORTATION AND IDENTIFICATION	11
4.6	DELIVERY.....	11
4.7	PACKAGING AND SHIPPING INSTRUCTIONS	12
4.8	AUTHORIZED RESELLER.....	12
4.9	ESTIMATED QUANTITIES.....	12
4.10	QUALITY ACCEPTANCE INSPECTION	12
4.11	WARRANTY	12
4.12	REFERENCES.....	13
4.13	FINANCIAL STABILITY	13
4.14	SAMPLES AND DESCRIPTIVE LITERATURE.....	13
5.0	PRODUCT SPECIFICATIONS	14
5.1	SPECIFICATIONS.....	14
5.2	SCHEMATICS AND PART LISTS	35
5.3	DEVIATIONS.....	35
5.4	SUBSTITUTIONS.....	35
5.5	CERTIFICATION AND SAFETY LABELS.....	35
5.6	VENDOR'S REPRESENTATIONS	36
6.0	CONTRACT ADMINISTRATION.....	36
6.1	PROJECT MANAGER AND CUSTOMER SERVICE.....	36
6.2	DISPUTE RESOLUTION.....	36
6.3	CONTRACT CHANGES	36

6.4	PRODUCT RECALL.....	37
6.5	PRICE ADJUSTMENT.....	37
7.0	VENDOR'S LICENSE OR SUPPORT AGREEMENT.....	37
	ATTACHMENT A: PRICING.....	38
	ATTACHMENT B: INSTRUCTIONS TO VENDORS	39
	ATTACHMENT C: NORTH CAROLINA GENERAL CONTRACT TERMS & CONDITIONS	43
	ATTACHMENT D: LOCATION OF WORKERS UTILIZED BY VENDOR.....	49
	ATTACHMENT E: DESCRIPTION OF EXECUTIVE ORDER #50 AND CERTIFICATION	50
	ATTACHMENT F: CERTIFICATION OF FINANCIAL CONDITION.....	54
	ATTACHMENT G: SUPPLEMENTAL VENDOR INFORMATION	55
	ATTACHMENT H: SUPPLEMENTAL INFORMATION TECHNOLOGY TERMS & CONDITIONS.....	56

1.0 PURPOSE AND BACKGROUND

The purpose of this solicitation is to obtain pricing and award an Agency Specific Term Contract to a qualified Vendor for the purchase of **Traffic Signal Equipment** for the Department of Transportation on an as needed basis. The usage of this contract is limited to the Department's annual needs subject to continued funding.

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

The contract resulting from this IFB is primarily for use by the Department of Transportation. The contract may also be utilized, without further competition, by non-mandatory State Agencies and Other Eligible Entities.

2.0 GENERAL INFORMATION

2.1 INVITATION FOR BIDS DOCUMENT

The IFB is comprised of the base IFB document, any attachments, and any addenda released before Contract award. All attachments and addenda released for this IFB in advance of any Contract award are incorporated herein by reference.

2.2 E-PROCUREMENT SOLICITATION

ATTENTION: This is an E-Procurement solicitation. See paragraph #16 of Attachment C: North Carolina General Contract Terms and Conditions.

The Terms and Conditions made part of this solicitation contain language necessary for North Carolina's Statewide E-Procurement Services. It is the Vendor's responsibility to read these terms and conditions carefully and to consider them in preparing the offer. By execution of its bid, Vendor agrees to and acknowledges acceptance of all terms and conditions, including those related to E-Procurement usage. General information on the E-Procurement Services can be found at: <http://eprocurement.nc.gov/>.

2.3 NOTICE TO VENDORS REGARDING IFB TERMS AND CONDITIONS

It shall be the Vendor's responsibility to read the Instructions, the State's 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 are also responsible for obtaining and complying with all Addenda and other changes that may be issued concerning this IFB.

If Vendors have questions, issues, or exceptions regarding any term, condition, or other component within this IFB (including proposed alternate language), those **must** be submitted as questions in accordance with the instructions in Section 2.5. BID QUESTIONS. If the State determines that any changes will be made resulting from 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 post-contract negotiation and amendment of specific provisions of the Contract that have been addressed during the question and answer period. Other than through this process, 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.* **By execution and delivery of a bid in response to this IFB, the Vendor agrees that any additional or modified terms and conditions, whether submitted purposefully or inadvertently, shall have no force or effect, and will be disregarded. Noncompliance with, or any attempt to alter or delete, this paragraph shall constitute sufficient grounds to reject Vendor's bid as nonresponsive. Any bid that contains language that indicates the bid is non-binding or subject to further negotiation before a contractual document may be signed shall be rejected.**

Contact with anyone working for or with the State regarding this IFB other than the State Contract Lead named on the face page of this IFB or in the manner specified by this IFB shall constitute grounds for rejection of said Vendor's offer, at the State's election.

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	October 24, 2019
Submit Written Questions	Vendor	November 1, 2019 by 10:00 AM ET
Provide Responses to Questions	State	November 6, 2019 by 2:00PM ET
Submit Bids	Vendor	November 20, 2019 at 2:00PM ET
Contract Award	State	TBD

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 above due date.

Written questions shall be e-mailed to richard.reber@doa.nc.gov by the date and time specified above. Vendors will enter "IFB #201901224 – Questions" as the subject for the email. Questions submittals will include a reference to the applicable IFB section and be submitted in a 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 Interactive Purchasing System (IPS), <http://www.ips.state.nc.us>, 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 concerning 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 for late submission due to unintended or unanticipated delay—whether submitted electronically, delivered by hand, U.S. Postal Service, courier or other delivery service. It is the Vendor's sole responsibility to ensure its bid has been submitted to this Office by the specified time and date of opening. The date and time of submission will be marked on each bid when received, and any bid received after the bid submission deadline will be rejected. Sealed bids, subject to the conditions made a part hereof, will be received at the address indicated in the table in this Section, for furnishing and delivering the commodity or service as described herein.

By Mail

If applicable to this IFB, sealed bids, subject to the conditions made a part hereof and the submission requirements described below, shall be delivered to the physical address indicated in the table below, for furnishing and delivering those items or Services as described herein.

Vendors shall deliver to the address identified in the table above: one **(1) paper** and one **(1) electronic copy** (un-redacted) of its executed bid on flash drive, and, if required for confidentiality, one (1) redacted copy of your bid (with all marked proprietary and confidential information redacted) on a separate flash drive. Clearly mark on the electronic media whether it contains a redacted or unredacted copy.

All bids shall be submitted in a sealed envelope. Clearly mark each package with: (1) Vendor name; (2) the IFB number; and (3) the due date. Address the package(s) for delivery as shown in the table, above. File contents **shall**

IFB # 201901224

Vendor: _____

NOT be password-protected but, shall be in .PDF or XLS format, and shall be capable of being copied to other sources.

Bids shall be marked on the outside of the sealed envelope with the Vendor's name, IFB number and date and time of opening. If Vendor is submitting more than one bid, each bid shall be submitted in separate sealed envelope and marked accordingly. For delivery purposes, separate sealed bids from a single Vendor may be included in the same outer package. Do not include bids for more than one solicitation in the same package.

MAILING ADDRESS FOR DELIVERY OF BID VIA U.S. POSTAL SERVICE (U.S. POSTAL PRIORITY MAIL)	OFFICE ADDRESS FOR DELIVERY BY ANY OTHER MEANS, SPECIAL DELIVERY, HAND DELIVERY, OVERNIGHT DELIVERY OR BY ANY OTHER CARRIER
BID NUMBER: 201901224 (US Mail Only) Attn: Richard J. Reber NC Department of Administration Division of Purchase and Contract Address: Mail Service Center 1305 Raleigh, NC 27699-1305:	BID NUMBER: 201901224 Attn: Richard J. Reber NC Department of Administration Division of Purchase and Contract 116 West Jones Street, Room 4062, 4th Floor Raleigh, NC 27603-8002:

The US Postal Service **DOES NOT** deliver any mail (US Postal Express Mail, Certified, Priority, Overnight, etc.) to our physical address of 116 West Jones Street.

Note that the U.S. Postal Service does not deliver mail to the specified office address but to the State's Mail Service Center. Vendors are cautioned that bids sent via U.S. Mail, including Express Mail, may not be delivered by the Mail Service Center to the agency's purchasing office on the due date in time to meet the bid deadline. All Vendors are urged to take the possibility of delay into account when submitting a bid. **Attempts to submit a bid via facsimile (FAX) machine, telephone or e-mail, in response to this IFB shall NOT be accepted.**

Contact with anyone working for or with the State regarding this IFB other than the State Contract Lead named on the face page of this IFB in the manner specified by this IFB shall constitute grounds for rejection of said Vendor's offer, at the State's election.

2.7 BID CONTENTS

Vendors shall populate all attachments of this IFB that require the Vendor to provide information and shall include an authorized signature where requested. Vendor response to this IFB shall include each of the following items and these items should be arranged in the following order:

- a) Completed and signed version of EXECUTION PAGE, along with the body of the IFB and signed receipt pages of any addenda released in conjunction with this IFB (if required to be returned).
- b) Completed version of ATTACHMENT A: PRICING FORM
- c) ATTACHMENT B: INSTRUCTIONS TO VENDORS
- d) ATTACHMENT C: NORTH CAROLINA GENERAL CONTRACT TERMS AND CONDITIONS
- e) Completed version of ATTACHMENT D: LOCATION OF WORKERS UTILIZED BY VENDOR
- f) Completed and signed version of ATTACHMENT E: DESCRIPTION OF EXECUTIVE ORDER #50 form that confirms that a price matching opportunity is requested
- g) Completed and signed version of ATTACHMENT F: CERTIFICATION OF FINANCIAL CONDITION
- h) Completed and signed version of ATTACHMENT G: SUPPLEMENTAL VENDOR INFORMATION
- i) ATTACHMENT H: SUPPLEMENTAL INFORMATION TECHNOLOGY TERMS & CONDITIONS

2.8 ALTERNATE BIDS

Vendor may submit alternate bids for various methods or levels of service(s) or that propose different options, in addition to its principal bid. 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 ("name of Vendor"). Each bid must be for a specific set of goods 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 document. Each bid must be complete and independent of other bids offered.

2.9 DEFINITIONS, ACRONYMS, AND ABBREVIATIONS

- a) **AGENCY SPECIFIC TERM CONTRACT:** A contract generally intended to cover all normal requirements for a commodity for a specified period of time based on estimated quantities for a single entity.
- b) **BAFO:** Best and Final Offer, submitted by a Vendor to alter its initial bid, made in response to a request by the issuing agency.
- c) **BUYER:** The employee of the State or Other Eligible Entity that places an order with the Vendor.
- d) **COMMUNITY COLLEGE:** Any of the fifty-eight (58) public North Carolina Community Colleges.
- e) **CONTRACT LEAD:** Representative of Department of Transportation identified on the first page of this IFB who will correspond with potential Vendors concerning solicitation issues and will contract with the Vendor providing the best offer to the State and is the individual who will administer The Contract for the State.
- f) **E-PROCUREMENT SERVICES:** The program, system, and associated services through which the State conducts electronic procurement.
- g) **FOB-DESTINATION:** Title changes hand from Vendor to purchaser at the destination point of the shipment; Vendor owns commodity in transit and files any claims, and Vendor pays all freight and any related transportation charges. A solicitation may request a Vendor to separately identify freight charges in its bid, but no amount or charge not included as part of the total bid price will be paid.
- h) **IFB:** Invitation for Bids.
- i) **LOT:** A grouping of similar products within this IFB.
- j) **NC BIDS:** The North Carolina Business Invitation Delivery System provides vendors the opportunity to submit bid responses electronically.
- k) **ON-TIME DELIVERY:** The delivery of all items within a single order to the receiving point designated by the ordering entity within the delivery time required.
- l) **QUALIFIED BID:** A responsive bid submitted by a responsible Vendor.
- m) **STATE:** The State of North Carolina, including any of its sub-units recognized under North Carolina law.
- n) **STATE AGENCY:** Any of the more than 400 sub-units within the executive branch of the State, including its departments, boards, commissions, institutions of higher education and other institutions.
- o) **STATE DEPARTMENTS:** Department of Administration, Department of Agriculture, Department of Commerce, Department of Cultural and Natural Resources, Department of Environmental Quality, Department of Health and Human Services, Department of Information Technology, Department of Insurance, Department of Justice, Department of Labor, Department of Military and Veteran Affairs, Department of Public Instruction, Department of Public Safety, Department of Revenue, Department of State Treasurer, Department of the Secretary of the State, Department of Transportation, Wildlife Resources Commission, Office of Budget and Management, Office of the Governor, Office of the Lieutenant Governor, Office of The State Auditor, Office of the State Controller.
- p) **THE CONTRACT:** A contract resulting from or arising out of Vendor responses to this solicitation document.
- q) **VENDOR:** Supplier, bidder, proposer, company, firm, corporation, partnership, individual or other entity submitting a response to an Invitation for Bids. Following award of a contract, the term refers to an entity receiving such an award.

3.0 METHOD OF AWARD AND BID EVALUATION PROCESS

3.1 METHOD OF AWARD

Contracts will be awarded in accordance with G.S. 143-52 and the evaluation criteria set out in this solicitation. Prospective Vendors shall not be discriminated against on the basis of any prohibited grounds as defined by Federal and State law.

All qualified bids will be evaluated, and award or awards will be based on lowest responsive bid meeting specifications within each Lot as described below.

While the intent of this IFB is to award a Contract to single Vendor for each Lot. 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 lots, 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.

Lots:

- Items 1 – 8 as one composite lot (LOT 1)
- Items 9 – 32 as one composite lot (LOT 2)
- Items 33 – 35 as one composite lot (LOT 3)
- Items 36 – 38 as individual items (LOT 4)
- Items 39 – 42 as one composite lot (LOT 5)
- Items 43 – 49 as individual (LOT 6)
- Items 50 – 51 as one composite lot (LOT 7)
- Items 52 – 55 as one composite lot (LOT 8)
- Items 56 – 60 as one composite lot (LOT 9)
- Items 61 – 69 as one composite lot (LOT 10)
- Items 70 – 73 as one composite lot (LOT 11)
- Items 74 – 75 as individual items (LOT 12)
- Items 76 – 77 as one composite lot (LOT 13)
- Items 78 – 79 as one composite lot (LOT 14)
- Items 80 – 83 as one composite lot (LOT 15)

To accommodate the replacement of existing proprietary and incompatible system components, secondary awards for line items 49 – 51 may be given.

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 E: DESCRIPTION OF EXECUTIVE ORDER #50 AND CERTIFICATION. 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 status of a Vendor's E-Procurement Services account(s) shall be considered a relevant factor in determining whether to approve the award of a contract under this IFB. Any Vendor with an E-Procurement Services account that is in arrears by 91 days or more at the time of bid opening may, at the State's discretion, be disqualified from further evaluation or consideration.

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

3.2 CONFIDENTIALITY AND PROHIBITED COMMUNICATIONS DURING EVALUATION

During the evaluation period—from the date bids are opened through the date the contract is awarded—each Vendor submitting a bid (including its representatives, sub-contractors and/or suppliers) 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 purchaser named above, department secretary, agency head, members of the general assembly and/or governor's office), or private entity, if the communication refers or relates to the content of Vendor's bid or qualifications, the contents of another Vendor's bid, another Vendor's qualifications or ability to perform the contract, 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 bids or the award of the contract. A Vendor not in compliance with this provision shall be disqualified from contract award, unless the State makes a written determination, in its discretion, that the communication was harmless, that it was made without intent to influence and that the best interest of the State would not be served by the disqualification. If a Vendor, its sub-contractor or supplier engage in any of the foregoing communications during the time that the solicitation is open (i.e., the issuance date of the procurement to the date of bid opening), such conduct shall constitute sufficient cause to disqualify the Vendor's bid. Only those discussions, communications or transmittals of information authorized or initiated by the

issuing agency for this IFB or general inquiries directed to the Contract Lead named in the IFB and regarding requirements of the IFB (prior to bid submission) or the status of the contract award (after submission) are excepted from this provision.

3.3 BID EVALUATION PROCESS

The State shall review all Vendor responses to this IFB to confirm that each one complies with the specifications and requirements of the IFB.

Bids are requested for the items as specified, or item(s) equivalent in design, function and performance. The State reserves the right to reject any bid on the basis of fit, form and function as well as cost. All information furnished on this bid may be used as a factor in determining the award of this contract.

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

Bids will be received from each responsive Vendor in the method stated in section 2.6.

All bids shall be received by the issuing agency not later than the date and time specified on the cover sheet of this IFB, or as modified by a bid addendum.

At the date and time specified as the bid opening, the bid responses from each responding Vendor will be opened publicly and the name of the Vendor and bid's total cost will be announced. 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 its option, the State may request clarifications, oral presentations or discussion with any or all Vendors in order to clarify or to amplify the materials presented in any part of the bid or requested in the IFB. Vendors are cautioned, however, that the State is not required to request presentations or other clarification—and often does 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.

The State reserves the right to reject all original offers and request one or more of the Vendors submitting bids within a competitive range to submit a best and final offer (BAFO), based on discussions and negotiations with the State, if the initial responses to the IFB have been evaluated and determined to be unsatisfactory.

Upon completion of the evaluation process, the State will make Award(s) based on the evaluation and post the award(s) to IPS 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.

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 bids at any time if such rejection is deemed to be in the best interest of the State.

3.4 PERFORMANCE OUTSIDE THE UNITED STATES

Vendor shall complete ATTACHMENT D: 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 and to ensure that any award will be in the best interest of the State—how that performance may affect or be affected by the following factors:

- 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 Invitation for Bids serves two functions: (1) to advise potential Vendors of the parameters of the solution being sought by the Department; and (2) to provide (together with other specified documents) the terms of the Contract that results from this procurement. As such, all terms in the Invitation for Bids shall be enforceable as contract terms in accordance with the General Contract Terms and Conditions. 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 Department will take into consideration the degree to which Vendors have proposed or failed to propose solutions that will satisfy the Department's needs as described in the Invitation for Bids. Except as specifically stated in the Invitation for Bids, no one requirement shall automatically disqualify a Vendor from consideration. However, failure to comply with any single requirement, if determined to be essential under the circumstances then existing, may result in the Department exercising its discretion to reject a bid in its entirety.

4.0 REQUIREMENTS

Equipment herein offered shall be in accordance with the NCDOT 2018 Standard Specifications for Roads and Structures (Section 1098), NCDOT 2018 Roadway Standard Drawings (Division 17), and Signals & Intelligent Transportation Systems Project Special Provisions (Version 18.2) with additions and modifications as noted in the attached Traffic Signal Equipment Specifications. **The attached Traffic Signal Equipment Specifications will take precedence over the other specifications. Equipment offered must be produced by a qualified manufacturer, tested and proved in service, all to the satisfaction of the State.** It is understood and agreed that any equipment offered meets the full requirements of these specifications. It should be understood that all items listed in this bid invitation may not show the full requirements of the specifications, but in all cases the requirements of the specifications will govern.

NCDOT 2018 Standard Specifications for Roads and Structures (Section 1098):

<https://connect.ncdot.gov/resources/Specifications/StandSpecLibrary/2018%20Standard%20Specifications%20for%20Roads%20and%20Structures.pdf>

NCDOT 2018 Roadway Standard Drawings (Division 17):

<https://connect.ncdot.gov/resources/Specifications/2018StandardRdwyDrawings/Division%2017%20Signals%20and%20Traffic%20Management%20Systems.pdf>

Signals & Intelligent Transportation Systems Project Special Provisions (Version 18.2):

<https://connect.ncdot.gov/resources/safety/Congestion%20Mngmt%20and%20Signing/ITS%20and%20Signals%20Qualified%20Products/2018%20PSP.pdf>

4.1 CONTRACT TERM

It is the intent of this Invitation for Bids (IFB) to establish an Agency Specific Term Contract with a qualifying Vendor per the stated specifications herein, on an as needed basis. The Contract shall have a term of **three (3) years**, beginning of the date the Contract is executed by the State (the "Effective Date"). In addition, the State reserves the right to extend a contract term for a period of up to 180 days in 90-day-or-less increments.

4.2 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. Vendor shall not invoice for any amounts not specifically allowed for in this IFB. Complete ATTACHMENT A: PRICING FORM and include in Bid.

4.3 INVOICES

Vendor shall invoice the Ordering Entity. The standard format for invoicing shall be Single Invoices meaning that the Vendor shall provide the Buyer with an invoice for each order. Invoices shall include detailed line item information to allow Buyer 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.

4.4 PRODUCT IDENTIFICATION**SUITABILITY FOR INTENDED USE**

Vendors are requested to offer only 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.

4.5 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 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 show on all packages. A complete packing list shall accompany each shipment. Vendors shall not ship any products until they have received an order.

4.6 DELIVERY

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

Any Location in North Carolina

Thirty (30) consecutive calendar days for items 1-38, 48-69 unless otherwise stated here: _____ days.

Thirty (30) consecutive calendar days for items 39-47 for order quantities of 10 or less, unless otherwise stated here: _____ days; larger quantities sixty (60) consecutive calendar days, unless otherwise stated here: _____

Sixty (60) consecutive calendar days for items 70-83 unless otherwise stated here: _____ days.

The State reserves the right to evaluate delivery offered in determining the award of the proposed contract.

Vendors are cautioned that excessively long delivery schedules, as determined by this Division, may be cause for non-award. The state expects that the delivery schedule offered herein to be firm and fully expects compliance with the stated delivery schedule. Failure of the Vendor to meet contracted delivery schedules shall constitute cause for removal from the contract.

In the event the delivery is not received within the contract delivery period, the Vendor may be held in default in accordance with **ATTACHMENT C, DEFAULT AND PERFORMANCE BOND**, in the North Carolina General Contract Terms and Conditions, and the State may procure the articles or services from other sources and hold the Vendor responsible for any excess cost occasioned thereby.

For completion by Vendor: Delivery will be made from Charlotte, NC (city, state) within 30 consecutive calendar days after receipt of purchase order. Promptness of delivery [shall or may] be used as a factor in the award criteria.

4.7 PACKAGING AND SHIPPING INSTRUCTIONS

Each item is to be completely assembled and individually boxed showing manufacturer's part number, purchase order number, and NCDOT part number (if shown on purchase order) on the outside of the box. The end-user will refuse shipments of items that are not packaged correctly. These inappropriately packaged items will be returned for proper packaging at the Vendor's expense. A packing slip is to accompany each shipment showing part number as ordered on the purchase order and also showing purchase order number.

The successful Vendor agrees to the above Packaging & Shipping Instructions:

Yes No

4.8 AUTHORIZED RESELLER

The Vendor shall be authorized by the manufacturer to resell the products and/or maintenance offered in the IFB. The Vendor shall provide with its bid response a signed statement from the manufacturer confirming authorization. Failure to provide the statement shall constitute sufficient grounds for rejection of Vendor's offer.

Vendor is the: Manufacturer Dealer Reseller Distributor

Authorized: Yes No Attached Manufacturer's Authority: Yes No

4.9 ESTIMATED QUANTITIES

All product quantities listed in the IFB are estimates based on the State's historical needs. The State shall not be obligated to purchase the amount represented by the estimated quantities contained herein or any other quantities. The successful Vendor(s) shall be required to fulfill the State's complete requirements, nonetheless. Quantities referenced herein are three-year estimates.

4.10 QUALITY ACCEPTANCE INSPECTION

It is the responsibility of the receiving agency to inspect all materials, supplies and equipment upon delivery to ensure compliance with the contract requirements and specifications.

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

4.11 WARRANTY

Provide manufacturer's warranties on equipment for material and workmanship by the equipment manufacturer and insure warranty period of at least two years in length from the date of delivery. Include unconditional coverage for all parts and labor necessary or incidental to the repair of defective equipment or workmanship and malfunctions that arise during the warranty period. All warranties and guarantees that are customarily issued by the equipment manufacturer which exceed this requirement shall be acceptable.

Vendor is authorized by manufacturer to repair equipment offered during the warranty period. YES NO

Will the Vendor provide warranty service? YES NO, a manufacturer-authorized third party will perform warranty service.

Contact information for warranty service provider:

Company Name: RAT Products

Company Address: PO Box 240772
Charlotte, NC 28217

Contact Person (name): Allan Foster

Contact Person (phone number): 704 525-1852

Contact Person (email): Allan@raiproducs.com**4.12 REFERENCES**

Vendors shall provide at least three (3) references for which your company has provided goods and services of substantially the same features and quantity to those solicited herein. The State shall contact one or more all of these users to determine the goods provided are substantially similar to those bid herein and Vendor's performance has been satisfactory. Information obtained will be considered in evaluation of the bids.

COMPANY NAME	CONTACT NAME	TELEPHONE NUMBER
NCDOT	Mohd Aslam	919-661-3259
City of Greensboro, DOT	Brian Swenaker	336-373-2604
City of Charlotte DOT	Steve Phifer	980-722-0460

4.13 FINANCIAL STABILITY

Each Vendor shall certify it is financially stable by completing the ATTACHMENT F: 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.

4.14 SAMPLES AND DESCRIPTIVE LITERATURE**SAMPLES**

Samples are not required prior to bid opening date; however, if required later, Vendor agrees to furnish samples of items offered at no expense to the State within **five (5) consecutive calendar days** after request is made by the State. Samples are to be properly identified with line item number, Vendor's name, and model number. Requests for the return of samples must be made within **fourteen (14) calendar days** following the date samples are received by the State, otherwise samples will become State property. Samples may be retained for any length of time until contract expiration, and will be returned, if requested, to the respective Vendor(s) at their expense. Bids, which do not comply with these requirements, may be subject to rejection.

DESCRIPTIVE LITERATURE/CERTIFICATION

Each bid shall be accompanied by complete descriptive literature, specifications, certifications, and all other pertinent data necessary for thorough evaluation of the item(s) bid and sufficient to determine compliance of the item(s) with the specifications. **Failure to include such information to shall be a sufficient basis for rejection of the bid.**

4.15 VENDOR PERFORMANCE

The performance of each contractor will be monitored and recorded as necessary over the duration of the contract with respect to satisfactory fulfillment of all contractual obligations. Such performance may include but is not necessarily limited to: delivery, condition of delivered goods, specification compliance of delivered goods, prompt and appropriate resolution of warranty claims, adequate servicing of contract in any and all aspects which the contract may call for, and prompt, complete and satisfactory resolution of any contractual discrepancies other than those resulting from Acts of God or from inadequate performance of the State or user. The record of such performance will be considered in the evaluation of future bids. Any bidder whose record identifies inadequate performance on a prior contract with the State, and who has not subsequently demonstrated to the State's complete and sole satisfaction that the causes (both indirect and direct) of such inadequate performance have been removed, may be rejected on that basis and reported accordingly to the Board of Award.

4.16 PERFORMANCE OF WARRANTY REPAIR AND MAINTENANCE

Provide authorization to the Traffic Electronics Center of the North Carolina Department of Transportation (NCDOT) to perform all warranty repairs. The decision to perform warranty work at the Traffic Electronics Center by NCDOT electronics technicians or to have warranty work performed by the vendor shall be at the discretion of the State. Provide any training required by the manufacturer to authorize the Traffic Electronics Center to perform warranty work and furnish parts to the Traffic Electronics Center for all warranty repairs at no cost to the State. In addition, ensure the manufacturer agrees to provide prompt technical support to the NCDOT electronics technicians for a period of one year after the end of the warranty period at no cost to the State. Defective parts replaced under warranty by the Traffic Electronics Center will be returned to the vendor at the vendor's request. Provide **schematics, part lists, and other documentation** to perform bench repair to the Traffic Electronics Center within two weeks upon request. The Department agrees not to divulge any proprietary information in the schematics, part lists, and other documentation upon request from the vendor. At the request of the State, perform warranty repairs to equipment which fails during the warranty period at no cost to the State including freight costs to ship repaired equipment back to the Traffic Electronics Center. Ensure all equipment is repaired and returned to the Traffic Electronics Center within twenty-one calendar days of receipt by the manufacturer.

The successful Vendor agrees to provide authorization to the NCDOT Traffic Electronics Center to perform all warranty repairs and agrees to provide schematics, part lists, and other documentation within two weeks upon request to the NCDOT Traffic Electronics Center.

YES NO

5.0 PRODUCT SPECIFICATIONS

5.1 SPECIFICATIONS

TRAFFIC SIGNAL EQUIPMENT SPECIFICATIONS

Provide signal heads with all exterior and interior hardware made of stainless steel.

For polycarbonate signal heads, fabricate the signal head housings, end caps, and visors from virgin polycarbonate material. Provide U.V. stabilized polycarbonate plastic with a minimum thickness of 0.1 ± 0.01 inches that is highway yellow (Federal Standard 595C, Color Chip 13538), unless a different color is specified on purchase order. Ensure the color is incorporated into the plastic material before molding the signal head housings and end caps. Ensure the plastic formulation provides the following physical properties in the assembly (tests may be performed on separately molded specimens):

Test	Required	Method
Specific Gravity	1.17 minimum	ASTM D 792
Vicat Softening Temperature, °F (°C)	305-325	ASTM D 1525
Brittleness Temperature, °F (°C)	Below -200	ASTM D 746
Flammability	Self-extinguishing	ASTM D 635
Tensile Strength, yield, PSI (MPa)	8500 minimum	ASTM D 638
Elongation at yield, %	5.5-8.5	ASTM D 638
Shear, strength, yield, PSI (MPa)	5500 minimum	ASTM D 732
Izod impact strength, ft-lb/in (J/m) [notched, 1/8 inch]	15 minimum	ASTM D 256
Fatigue strength, PSI (MPa) at 2.5 mm cycles	950 minimum	ASTM D 671

Provide hanger extension assemblies to comply with the ITE standard "Vehicle Traffic Control Signal Heads." Furnish hanger extension assemblies that consist of a 23" long, 1.5" galvanized standard pipe or rigid conduit, with 3" of threading on each end. Ensure the threading complies with NEC requirements for rigid metal conduit. Provide two sets of signal head mounting hardware. A set of signal head mounting hardware consists of one 1.5" malleable iron locknut, one 1.5" malleable iron locknut with set screw (machined for serrated locking ring), one aluminum serrated locking ring, one galvanized flat steel washer, and one neoprene washer. Ensure the assembly, when mounted to the signal head, is watertight. Provide assemblies that can withstand the vertical signal head loading and a horizontal wind loading as specified in the ITE Standards. Furnish assembly with all exterior surfaces painted yellow a minimum of 2.5 mils thick meeting Federal Standards 595C, Color Chip 13538, unless otherwise noted.

Provide Light Emitting Diode (LED) blank-out signs to display the words listed in the bid line item for each sign. Fabricate the sign housing with an approximate depth of 8", a maximum width of 29" and a maximum height of 39". Fabricate the message using 6" high Series "E" letters for the word "NO" and 5" high Series "D" letters for all other words.

- Provide a modular design with the following self-contained modules: message display, rack mounted message drivers, driver rack assembly, and enclosure. Ensure all internal components are adequately supported to withstand mechanical shock and vibration from ratings meeting AASHTO's requirements of 80 mph with a 30% gust factor. Design display to operate without moving parts.
- Provide a message display that is a PCB matrix with a matte black solder mask with minimum thickness of 0.093 inches and a silk-screened component identifier. Mount LEDs on front of the PCB matrix. Mount all other components on the back of the black matrix. Ensure that a person with 20/20 vision can read a fully intensified, legible message from 500 feet in front of the sign under any light conditions. Ensure the message is not legible when the sign is off, even if in direct sunlight.
- Use white LEDs that are the latest InGaN technology or better with a minimum luminous intensity of 6,000 mcd at 20 mA. Distribute the LEDs evenly. Ensure that the maximum distance, center to center, between consecutive LEDs is 0.5 inches, plus or minus 10%. Connect the individual LED light sources so that failure of a single LED will result in a loss of no more than 5 LEDs. Ensure the sign is still legible.
- Protect and seal the rear side of the PCB with a molded polymeric back cover. Mount the display PCB with back cover into the front door, which consists of an aluminum frame and face lens. Provide a clear 0.25-inch, non-glare, matte finish polycarbonate lens with a UV resistant surface treatment. Ensure that the lens has light transmission properties equal to or greater than 80%.
- Design the entire display face and door as a one-piece, self-contained module that can be removed from the sign housing in less than one minute without using tools. Seal the module against dust and moisture intrusion to meet the requirements of NEMA Type 4 enclosures.
- Mount the module on the sign housing with three stainless steel "lift-off" hinges and latch it with a minimum of two stainless steel ¼ turn link locks. Provide a retaining rod to hold the door in the open position. Configure the front door frame assembly to cover a gutter surrounding the full perimeter of the housing body and fit flush to the exterior of the body.
- Fabricate the weatherproof housing out of 0.125-inch aluminum with all corner seams welded their full length. Weld the full length of all corner seams using tungsten inert gas method. Provide a 1-inch diameter vent plug in four bottom corners of the housing to prevent the collection of water from possible gasket leaks. Ensure each vent plug has a corrosion resistant screen, which allows the passage of water but does not allow insects to enter the housing. Install a terminal block that accommodates a spade lug sized for a number 10 terminal screw. Provide 4 terminals with each having 2 terminal screws that have a shorting bar between them. Fabricate an entrance for wires on top-center of the housing that is compatible to connect a standard traffic signal mounting gooseneck (wire entrance)

- Provide a standard sun visor made of 1/16-inch aluminum. Paint the inside of the visor with 2 coats of dull black paint. Paint the exterior and interior of the sign case and the outside of the visor Federal Standard 595C yellow by the dry powder method. Apply the yellow finish by electrostatic spray and heat cure. Ensure the thickness of the finish is a minimum of 2.5 mils thick. Do not apply paint to the latching hardware.
- Provide an aluminum driver rack assembly that is a single part, self-contained module consisting of an interconnect PCB and an anodized aluminum frame. Ensure that it is vented from top to bottom and has latches to lock the modules in place. Design the driver rack assembly to be easily removable in less than one minute without the use of tools.
- Design the driver modules to be industry standard 6.5 x 4.5 inches rack mounted. Provide driver modules that consist of a PCB with aluminum front plate and handle as used for inductive loop detectors. Ensure that the LED current does not exceed the manufacturer's maximum current rating. Ensure that the driver modules are fused. Provide voltage surge protection to withstand high repetition noise transients and low repetition high energy transients as stated in section 2.1.6 of the NEMA Standard TS-2, 1992.
- Ensure compatibility and proper triggering and operation with load switches and conflict monitors in signal controllers currently used by the Department. Ensure the on-board circuitry meets FCC title 47, sub-part B, section 15 regulations on the emission of electronic noise. Design the driver modules to maintain a constant LED drive current regardless of the outside temperature.
- Design the driver modules to automatically reduce the light intensity of the display by 35% based on the ambient light. Include a delay to prevent interference caused by extraneous light. Provide a green LED for power status and a red LED for alarm status on the drive module.
- Design the interconnect PCB to include terminals for all field wiring, 120VAC controls, external photocell, and alarm signals. Design all interconnections within the sign to be accomplished through the PCB with no internal wiring with the exception of a single cable for the message display and wires from the input terminal block. Provide a multi-conductor cable with an individual 2-pin connector for each word. Identify all connectors and terminals by the silk screen identifier on the surface of the PCB. Mount all PCBs vertically to facilitate air-cooling and to prevent collection of dust and moisture.
- Design and certify the LED blank out sign to operate over a temperature range of -35°F to 165°F with an operating voltage range of 105 to 130 volts. Ensure that all electronic components are standard industry items that are available from wholesale electronics distributors. Provide components that are "solid state" type. Do not use electro-mechanical components.

Provide time switches with two (2) output circuits and that operate properly from a 120-volt, 60-hertz power source. Use a fuse or circuit breaker for overcurrent protection. Ensure fuse is replaceable by hand and the rating of the fuse is labeled on a panel surface adjacent to the fuse holder. Furnish each time switch with a connecting cable with a minimum length of 6 feet (1.8m). Ensure connecting cable can attach to the unit by a multi-pin connector with the raw ends having labels indicating their functions. Provide housing in a durable finished metallic or thermoplastic shielded case. Neatly cover any unused openings in the enclosure with blank panels. Ensure time switches are of all solid-state design, except for the output relay. Ensure each output circuit has a minimum rating of 10 amperes at 120 volts, 60 hertz with a resistive load and a "Form C" contact arrangement.

- Ensure each time switch has the following display and programming functional requirements:
- Provide easy to read alpha-numeric display with the time kept in a 24-hour format. As an alternative, display AM and PM at the appropriate times.

- Ensure the front panel has indicating devices showing the current day of the week, the current time of the day, the current date, battery condition, program in effect, and the status of the output (ON or OFF).
- Provide a means for rapidly setting the real-time clock via the front panel from which all time-selectable programs are derived.
- Provide a means to review the time switch program via the keyboard. Ensure such a program review does not affect the operation of the time switch.
- Ensure the time switch contains a real time clock from which all time-selectable programs are derived.
- Provide each unit with an automatic clock calendar that extends a minimum of twenty (20) years beyond the unit's delivery date.
- Ensure the real-time clock and the time settings are programmable in increments of one (1) minute or less
- Provide the functionality to manually synchronize the clocks in two (2) time switches to ± 1 second.
- Provide a means for the manual selection of all programs via the front panel.
- Provide the entry of daylight-saving time data and feature enable via the front panel keyboard. Ensure leap year compensation is automatic.
- Accomplish all programming via a push button keyboard which is an integral part of the time switch. Ensure the functions of the keys are clearly marked on the front of the time switch. Ensure the time-of-day, day-of-week, date, year and the operation of the relay output are easily set from the integral keyboard.
- Ensure the time switch will initiate a minimum of sixteen (16) program steps. A program step is defined as the time of day and the day or days of the week at which the output is turned ON or OFF. Provide the functionality to alter any individual program step without disturbing any other step in the program.
- Ensure the time switch will execute ten (10) separate skip plans programmable up to a year in advance to accommodate school holidays. Have each skip plan programmed by entering the beginning day (month/day/year) and the ending date for which the output of the time switch is not activated. Ensure the time switch will skip as short a duration as one (1) day or as long as six (6) months. Provide the functionality to begin a skip plan in one (1) calendar year and end that same plan in the next consecutive year.
- Provide circuit boards in each time switch that conform to the following requirements:
 - Arrange the components on all printed circuit boards for ease of access. Ensure the components are identified by markings on the components and on the boards.
 - Ensure all contacts, through holes, and conduction tracks are gold or copper plated.
 - Provide a moisture resistant coating on each circuit board.
- Provide an internal battery or capacitor backup power source to operate the real-time clock and memory during power outage. Ensure the backup power source supplies the power for a single outage of 48 hours minimum. Ensure the automatic recharging of the battery or capacitor is within 24 hours after resumption of power. Use a frequency crystal-based design to control the time with an accuracy of ± 0.005 percent throughout the full temperature range. Provide functionality for the time switch to resume normal operation following a power interruption.

- Provide upload/download software that is Windows-based for the Time Switch. Provide the Department a license to duplicate, use, and distribute software to entities maintaining and operating traffic signals on the State Highway System. Furnish the software immediately after receiving the first purchase order for a minimum of five (5) Time Switches. Ensure the software will upload and download all operating parameters. Provide software on CD (compact disc) or other approved media. Provide five (5) manuals and rights to the Department for unlimited duplication for use on the State Highway System.

Supply one copy of the operating manual and maintenance manual for each unit. Include maintenance manual with all documentation necessary for troubleshooting and repairing. This may be paper copy or electronic format copies.

The Table below has description of each item number group by lot number, an excel pricing sheet link will be in ATTACHMENT A PRICING SHEET SECTION.

Item #	DESCRIPTION
LOT 1	
1	<p>SIG HEAD, 3 SEC, 8" LED COMPATIBLE – ALUM</p> <p>One-Way, vertical, three-section, 8-inch aluminum signal head with no reflectors and no lenses (LED compatible). Include tunnel visor for each section. Provide signal head color in highway yellow.</p> <p>Material #:636018510</p> <p>Manufacturer: <u>Econolite</u> Model: <u>EA3LVJ9200EO</u></p>
2	<p>SIG HD 3-SEC, 8" LED ALUM (SPECIFY COLOR)</p> <p>One-Way, vertical, three-section, 8-inch aluminum signal head with no reflectors and no lenses (LED compatible). Include tunnel visor for each section. <u>Signal head color to be specified on purchase order.</u></p> <p>Material #:620018512</p> <p>Manufacturer: <u>Econolite</u> Model: <u>EA3LVJF200EO</u></p>
3	<p>SIG HEAD, 3-SEC, 8" POLY LED (YELLOW)</p> <p>One-Way, vertical, three-section, 8-inch polycarbonate signal head with no reflectors and no lenses (LED compatible). Include tunnel visor for each section. Provide signal head color in highway yellow.</p> <p>Material #:620017506</p> <p>Manufacturer: <u>Econolite</u> Model: <u>EP3LVJY20000 W EP2529P3-14</u></p>

<p>4</p>	<p>SIG HD 3-SEC, 8" LED POLY (SPECIFY COLOR)</p> <p>One-Way, vertical, three-section, 8-inch polycarbonate signal head with no reflectors and no lenses (LED compatible). Include tunnel visor for each section. <u>Signal head color to be specified on purchase order (black, green).</u></p> <p>Material #: 620017507</p> <p>Manufacturer: <u>Econolite</u> Model: <u>EP3IVJF20000W EP1529P3-14</u></p>
<p>5</p>	<p>TUNNEL VISOR-8 IN. (YELLOW COLOR)</p> <p>Tunnel Visor, aluminum for 8-inch signal head (color to be specified on purchase order)</p> <p>Material #:620018740</p> <p>Manufacturer: <u>Econolite</u> Model: <u>E826OPT-12</u></p>
<p>6</p>	<p>TUNNEL VISOR-8IN. POLY (YELLOW COLOR)</p> <p>Tunnel Visor, polycarbonate for 8-inch signal head (color to be specified on purchase order - highway yellow, black, green)</p> <p>Material #:62018745</p> <p>Manufacturer: <u>Econolite</u> Model: <u>EP1529P3-14</u></p>
<p>7</p>	<p>BACKPLATES FOR 3-SECTION 8" SIGNALS</p> <p>Non-Louvered Aluminum Backplate for 3 section 8-inch signal head (item 1)</p> <p>Material #:636010700</p> <p>Manufacturer: <u>Econolite</u> Model: <u>E1572P43-14</u></p>
<p>8</p>	<p>BACKPLATES FOR 3-SECT 8" SIGNALS (POLY)</p> <p>Non-Louvered Polycarbonate/Vacuum Formed ABS Plastic Backplate for 3 section 8-inch signal head (item 1)</p> <p>Material #:609010702</p> <p>Manufacturer: <u>Pelco</u> Model: <u>BK1006</u></p>

LOT 2	
9	<p>SIG HEAD, 3-SEC, 12" LED COMPATIBLE-ALUM.</p> <p>One-Way, vertical, three-section, 12-inch aluminum signal head with no reflectors and no lenses (LED compatible). Include tunnel visor for each section. Provide signal head color in highway yellow.</p> <p>Material #: 636018520</p> <p>Manufacturer: <u>Econolite</u> Model: <u>TA32VJY20000 w/E8265P1-12</u></p>
10	<p>SIG HD 3-SEC, 12" LED ALUM (SPECIFY COLOR)</p> <p>One-Way, vertical, three-section, 12-inch aluminum signal head with no reflectors and no lenses (LED compatible). Include tunnel visor for each section. Signal head color to be specified on purchase order.</p> <p>Material #: 620018522</p> <p>Manufacturer: <u>Econolite</u> Model: <u>TA31VJF20000 w/E8265P1-12</u></p>
11	<p>SIG HEAD, 3-SEC, 12" POLY LED (YELLOW)</p> <p>One-Way, vertical, three-section, 12-inch polycarbonate signal head with no reflectors and no lenses (LED compatible). Include tunnel visor for each section. Provide signal head color in highway yellow.</p> <p>Material #: 620017516</p> <p>Manufacturer: <u>Econolite</u> Model: <u>TP31VJY20000 w/1106-1001-012</u></p>
12	<p>SIG HD, 3-SEC 12" POLY LED (SPECIFY COLOR)</p> <p>One-Way, vertical, three-section, 12-inch polycarbonate signal head with no reflectors and no lenses (LED compatible). Include tunnel visor for each section. Signal head color to be specified on purchase order (black, green).</p> <p>Material #: 620017517</p> <p>Manufacturer: <u>Econolite</u> Model: <u>TP32VJF20000 w/1106-1001-012</u></p>
13	<p>SIG HEAD, 4-SEC, 12" LED COMPATIBLE-ALUM.</p> <p>One-Way, vertical, four-section, 12-inch aluminum signal head with no reflectors and no lenses (LED compatible). Include tunnel visor for each section. Provide signal head color in highway yellow.</p> <p>Material #: 636018540</p> <p>Manufacturer: <u>Econolite</u></p>

	<p>Model: <u>TA44VJ920000 W E8265P1-12</u></p>
14	<p>SIG HD, 4-SEC 12" LED ALUM (SPECIFY COLOR)</p> <p>One-Way, vertical, four-section, 12-inch aluminum signal head with no reflectors and no lenses (LED compatible). Include tunnel visor for each section. <u>Signal head color to be specified on purchase order.</u></p> <p>Material #:620018542</p> <p>Manufacturer: <u>Econolite</u> Model: <u>TA44VJ920000 W E8265P1-12</u></p>
15	<p>SIG HEAD, 4-SEC 12" LED POLY (YELLOW)</p> <p>One-Way, vertical, four-section, 12-inch polycarbonate signal head with no reflectors and no lenses (LED compatible). Include tunnel visor for each section. Provide signal head color in highway yellow.</p> <p>Material #:620017536</p> <p>Manufacturer: <u>Econolite</u> Model: <u>TP44VJ920000 W 106-1001-012</u></p>
16	<p>SIG HD, 4-SEC 12" LED POLY (SPECIFY COLOR)</p> <p>One-Way, vertical, four-section, 12-inch polycarbonate signal head with no reflectors and no lenses (LED compatible). Include tunnel visor for each section. <u>Signal head color to be specified on purchase order (black, green).</u></p> <p>Material #:620017537</p> <p>Manufacturer: <u>Econolite</u> Model: <u>TP44VJ920000 W 106-1001-012</u></p>
17	<p>SIG HEAD, 5-SEC, CLUSTER 12" LED COMPAT.</p> <p>One-Way, cluster, five-section, 12-inch aluminum signal head with no reflectors and no lenses (LED compatible). Include tunnel visor for each section. Provide signal head color in highway yellow.</p> <p>Material #: 636018560</p> <p>Manufacturer: <u>Econolite</u> Model: <u>TA56VJ9A0000 W E8265P1-12</u></p>
18	<p>SIG HD, 5-SEC 12" LED ALUM (SPECIFY COLOR)</p> <p>One-Way, cluster, five-section, 12-inch aluminum signal head with no reflectors and no lenses (LED compatible). Include tunnel visor for each section. <u>Signal head color to be specified on purchase order.</u></p> <p>Material #:620018562</p>

Vendor:

	<p>Manufacturer: <u>Econolite</u> Model: <u>TAS6VJFA0000 w/ EB26SP1-12</u></p>
19	<p>SIG HD, 5-SEC 12" LED POLY (YELLOW)</p> <p>One-Way, cluster, five-section, 12-inch polycarbonate signal head with no reflectors and no lenses (LED compatible). Include tunnel visor for each section. Provide signal head color in highway yellow.</p> <p>Material #:620017546</p> <p>Manufacturer: <u>Econolite</u> Model: <u>TP56VJ9A0000 w/ 106-1001-012</u></p>
20	<p>SIG HD, 5-SEC 12" LED POLY (SPECIFY COLOR)</p> <p>One-Way, cluster, five-section, 12-inch polycarbonate signal head with no reflectors and no lenses (LED compatible). Include tunnel visor for each section. <u>Signal head color to be specified on purchase order (black, green).</u></p> <p>Material #:620017547</p> <p>Manufacturer: <u>Econolite</u> Model: <u>TP56VJFA0000 w/ 106-1001-012</u></p>
21	<p>SIG HEAD, 1-SEC, 12" LED COMPATIBLE-ALUM.</p> <p>One-Way, one-section, 12-inch aluminum signal head with no reflector and no lens (LED compatible). Include tunnel visor. Provide signal head color in highway yellow.</p> <p>Material #:636018500</p> <p>Manufacturer: <u>Econolite</u> Model: <u>TA11VJ910000 w/ EB26SP1-12</u></p>
22	<p>SIG HD, 1-SEC 12" LED ALUM (SPECIFY COLOR)</p> <p>One-Way, one-section, 12-inch aluminum signal head with no reflector and no lens (LED compatible). Include tunnel visor. <u>Signal head color to be specified on purchase order.</u></p> <p>Material #:620018502</p> <p>Manufacturer: <u>Econolite</u> Model: <u>TA11VJ910000 w/ EB26SP1-12</u></p>
23	<p>SIG HD, 1-SEC 12" LED POLY (YELLOW)</p> <p>One-Way, one-section, 12-inch polycarbonate signal head with no reflector and no lens (LED compatible). Include tunnel visor. Provide signal head color in highway yellow.</p> <p>Material #:620017406</p> <p>Manufacturer: <u>Econolite</u> Model: <u>TP11VJ910000 w/ 106-1001-012</u></p>

24	<p>SIG HD, 1-SEC 12" LED POLY (SPECIFY COLOR)</p> <p>One-Way, one-section, 12-inch polycarbonate signal head with no reflector and no lens (LED compatible). Include tunnel visor. <u>Signal head color to be specified on purchase order (black, green).</u></p> <p>Material #:620017407</p> <p>Manufacturer: <u>Econolite</u> Model: <u>TP11VJF10000 w/106-1001-012</u></p>
25	<p>TUNNEL VISOR-12 IN.</p> <p>Tunnel Visor, aluminum for 12-inch signal head (color to be specified on purchase order)</p> <p>Material #:620018750</p> <p>Manufacturer: <u>Econolite</u> Model: <u>EB265PI-12</u></p>
26	<p>TUNNEL VISOR-12IN. POLY (SPECIFY COLOR)</p> <p>Tunnel Visor, polycarbonate for 12-inch signal head (color to be specified on purchase order - highway yellow, black, green)</p> <p>Material #:620018755</p> <p>Manufacturer: <u>Econolite</u> Model: <u>106-1001-012</u></p>
27	<p>BACKPLATES FOR 3-SECTION 12" SIGNALS</p> <p>Non-Louvered Aluminum Backplate for 3 section 12-inch signal head (item 9)</p> <p>Material #:636010710</p> <p>Manufacturer: <u>Econolite</u> Model: <u>E1592P43-14</u></p>
28	<p>BACKPLATES FOR 4-SECTION 12" SIGNALS</p> <p>Non-Louvered Aluminum Backplate for 4 section 12-inch signal head (item 13)</p> <p>Material #:636010730</p> <p>Manufacturer: <u>Econolite</u> Model: <u>E1592P44-14</u></p>
29	<p>BACKPLATES FOR 5-SECT 12" CLUSTER SIGNALS</p> <p>Non-Louvered Aluminum Backplate for 5 section 12-inch signal head (item 17)</p> <p>Material #:636010760</p> <p>Manufacturer: <u>Econolite</u></p>

Vendor: _____

	Model: <u>E259365-14</u>
30	<p>BACKPLATES FOR 3-SECT 12" SIGNALS (POLY)</p> <p>Non-Louvered Polycarbonate/Vacuum Formed ABS Plastic Backplate for 3 section 12-inch signal head (item 9)</p> <p>Material #:609010712</p> <p>Manufacturer: <u>Pelco</u></p> <p>Model: <u>BK1003</u></p>
31	<p>BACKPLATES FOR 4-SEC 12" SIGNALS (POLY)</p> <p>Non-Louvered Polycarbonate/Vacuum Formed ABS Plastic Backplate for 4 section 12-inch signal head (item 13)</p> <p>Material #:609010732</p> <p>Manufacturer: <u>Pelco</u></p> <p>Model: <u>BK1004</u></p>
32	<p>BACKPLATES FOR 5-SECT 12" SIGNALS (POLY)</p> <p>Non-Louvered Polycarbonate/Vacuum Formed ABS Plastic Backplate for 5 section 12-inch signal head (item 17)</p> <p>Material #:609010782</p> <p>Manufacturer: <u>Pelco</u></p> <p>Model: <u>BK1005</u></p>

LOT 3

33	<p>HANGER, 1 WAY SPANWIRE W/ BOTTOM CAP</p> <p>One-Way span wire signal mounting assembly with cap for bottom and female gooseneck. <u>Provide color in highway yellow only for bottom cap and female gooseneck. (DO NOT PAINT SPAN WIRE HANGER)</u></p> <p>Material #:636013020</p> <p>Manufacturer: <u>Pelco</u></p> <p>Model: <u>SP-1006-NC-P29</u></p>
34	<p>HANGER, 1 WAY SPANWIRE W/ BOTTOM CAP (sp. color)</p> <p>One-Way span wire signal mounting assembly with cap for bottom and female gooseneck. <u>Color to be specified on purchase order only for bottom cap and female gooseneck. (DO NOT PAINT SPAN WIRE HANGER).</u></p> <p>Material #: N/A</p> <p>Manufacturer: <u>Pelco</u></p>

Vendor: _____

	Model: <u>SP-1006-NC-PXX</u>
35	<p>BALANCE ADJUSTER, UNIVERSAL</p> <p>Universal Balance Adjuster with 360-degree positioning. (DO NOT PAINT)</p> <p>Material #:636011100</p> <p>Manufacturer: <u>Pelco</u></p> <p>Model: <u>SE-3219-0.75-0.75-SS-PNC</u></p>

LOT 4

36	<p>LOUVER, 0 DEG. STRAIGHT FOR 12" SIGNAL</p> <p>Louver 0-degree cut off for 12-inch signal head.</p> <p>Material #:648015010</p> <p>Manufacturer: <u>Traffic Parts</u></p> <p>Model: <u>7437</u></p>
37	<p>LOUVER, 7 DEG CUT-OFF FOR 12" SIGNAL</p> <p>Louver 7-degree cut off for 12-inch signal head.</p> <p>Material #:648015000</p> <p>Manufacturer: <u>Traffic Parts</u></p> <p>Model: <u>3435</u></p>
38	<p>HANGER, EXT. ASSY, FOR SEPARATION, YEL</p> <p>Hanger Extension Assembly (for two one-section signal heads flasher assembly).</p> <p>Material #:648012950</p> <p>Manufacturer: <u>Pelco</u></p> <p>Model: <u>SE-5218-04-P29</u></p>

LOT 5

39	<p>POLE, ALUM SIG PEDESTAL 4' W/CAP</p> <p>4-foot Signal Pedestal Pole with Cap & Threaded (4.5-inch OD Non-Taper Aluminum Pole Shaft). For Type I Pedestal.</p> <p>Material #:113007018</p> <p>Manufacturer: <u>Pelco</u></p> <p>Model: <u>PB-5100-04</u></p>
----	--

Vendor:

<p>40</p>	<p>POLE, ALUM SIG PEDESTAL 7' W/CAP</p> <p>7-foot Signal Pedestal Pole with Cap & Threaded (4.5-inch OD Non-Taper Aluminum Pole Shaft). For Type II Pedestal.</p> <p>Material #: 113007020</p> <p>Manufacturer: <u>Pelco</u></p> <p>Model: <u>PB-5100-01</u></p>
<p>41</p>	<p>POLE BASE, SQUARE TYPE FOR PEDESTAL</p> <p>Square-Type Base & Hardware with Upper End Threaded for Pedestal Pole without Anchor Bolts.</p> <p>Material #: 113007010</p> <p>Manufacturer: <u>Pelco</u></p> <p>Model: <u>PB-5334</u></p>
<p>42</p>	<p>POLE BASE, OCTAGONAL TYPE FOR PEDESTAL</p> <p>Octagonal-Type Base & Hardware with Upper End Threaded for Pedestal Pole without Anchor Bolts.</p> <p>Material #: 113007015</p> <p>Manufacturer: <u>Pelco</u></p> <p>Model: <u>PB-5349</u></p>

LOT 6

<p>43</p>	<p>POLE, STEEL SIG PEDESTAL&BASE 14' W/CAP</p> <p>14-foot Signal Pedestal Pole and Transformer Base with Cap (4.5 OD 120 Steel Pipe). For Type III Pedestal.</p> <p>Material #: 113007050</p> <p>Manufacturer: <u>Pelco</u></p> <p>Model: <u>SP-1009-NC-14-G/LV</u></p>
<p>44</p>	<p>POLE BASE, TRANSFORMER FOR 14' STEEL POL</p> <p>Transformer Base (same Base that is included for line item 43)</p> <p>Material #: 113007055</p> <p>Manufacturer: <u>Pelco</u></p> <p>Model: <u>PB-5514</u></p>
<p>45</p>	<p>ANCHOR BOLTS 18" FOR TYPE I PED - 4/SET</p> <p>18-inch Anchor Bolts (4 bolts per set) for Type I Pedestal.</p>

	<p>Material #: 113000502</p> <p>Manufacturer: <u>Threadline Products</u></p> <p>Model: <u>GAB-NC DOT-Type C</u></p>
46	<p>ANCHOR BOLTS 2' FOR TYPE II PED - 4/SET</p> <p>2-foot Anchor Bolts (4 bolts per set) for Type II Pedestal.</p> <p>Material #: 113000504</p> <p>Manufacturer: <u>Threadline Products</u></p> <p>Model: <u>GAB-NC DOT-Type II</u></p>
47	<p>ANCHOR BOLTS 4' FOR TYPE III PED - 4/SET</p> <p>4-foot Anchor Bolts (4 bolts per set) for Type III Pedestal.</p> <p>Material #: 113000506</p> <p>Manufacturer: <u>Threadline Products</u></p> <p>Model: <u>GAB-NC DOT-Type III</u></p>
48	<p>BUTTON, PEDESTRIAN PUSH- W/ HARDWARE - LG</p> <p>Large Pedestrian push button complete with mounting Hardware. <u>Provide color in highway yellow and black – color to be specified on purchase order.</u></p> <p>Material #: 607068530</p> <p>Manufacturer: <u>Pelco</u></p> <p>Model: <u>SE-2005-08-P29</u></p>
49	<p>APS PUSH BUTTON DETECTOR STATION (NO CCU)</p> <p>Accessible Pedestrian Signal (APS) "Push Button" Pedestrian Detector Station for no required Central Control Unit. <u>Provide color in highway yellow and black – color to be specified on purchase order.</u></p> <p>Material #: 607001634</p> <p>Manufacturer: <u>Pelco</u></p> <p>Model: <u>SE-2900-PXX</u></p>

LOT 7

50	<p>APS PUSH BUTTON DETECTOR STATION FOR CCU</p> <p>Accessible Pedestrian Signal (APS) "Push Button" Pedestrian Detector Station for a required Central Control Unit. <u>Provide color in highway yellow and black – color to be specified on purchase order.</u></p> <p>Material #: 625001630</p>
----	---

	Manufacturer: <u>Pelco</u> Model: <u>SE-2900-PXX</u>
51	APS CENTRAL CONTROL UNIT Central Control Unit with associated panel(s), cable(s), and hardware for a APS. Material #:625001632 Manufacturer: <u>Pelco</u> Model: <u>SE-6172-PXC</u>

LOT 8

52	POLE SIGNAL MOUNTING ASSY FOR 1-WAY PED One-Way Side of Pole Signal Mounting assembly for one-way pedestrian head with both pole plates having a 1.5-inch horizontal hub and a 1.25-inch vertical hub. <u>Provide color in highway yellow and black – color to be specified on purchase order.</u> Material #:607015770 Manufacturer: <u>Pelco</u> Model: <u>SP-5523-PXX</u>
53	POLE SIGNAL MOUNTING ASSY FOR 2-WAY PED Two-Way Side of Pole Signal Mounting assembly for one-way pedestrian head with both pole plates having a 1.5-inch horizontal hub and a 1.25-inch vertical hub. <u>Provide color in highway yellow and black – color to be specified on purchase order.</u> Material #:607015780 Manufacturer: <u>Pelco</u> Model: <u>SP-5522-PXX</u>
54	SLIP FITTER 1-WAY POST TOP ASSY One-Way 4.5-inch post top slip fitter assembly. <u>Provide color in highway yellow and black – color to be specified on purchase order.</u> Material #:607018600 Manufacturer: <u>Pelco</u> Model: <u>SE-3310-PXX</u>
55	SLIP FIT 2WAY POST TOP ASSEMBLY Two-Way 4.5-inch post top slip fitter assembly with center pipe (use for 16-inch pedestrian signal heads). <u>Provide color in highway yellow and black – color to be specified on purchase order.</u>

Material # 607018610
Manufacturer: <u>Pelco</u>
Model: <u>SE-3257-PXY</u>

LOT 9	
56	<p>PED HEAD, 1 SECTION 16" CLAMSHELL(LEFT)</p> <p>One-Way, one-section, 16-inch aluminum pedestrian signal head housing clamshell mount with traditional visor (no reflector and no lens - LED compatible), left mounting orientation. <u>Provide color in highway yellow and black – color to be specified on purchase order.</u></p> <p>Material #:607015530</p> <p>Manufacturer: <u>Econolite</u></p> <p>Model: <u>PED16LONVYN</u></p>
57	<p>PED HEAD, 1 SECTION 16" CLAMSHEL (RIGHT)</p> <p>One-Way, one-section, 16-inch aluminum pedestrian signal head housing clamshell mount with traditional visor (no reflector and no lens - LED compatible), right mounting orientation. <u>Provide color in highway yellow and black – color to be specified on purchase order.</u></p> <p>Material #:607015535</p> <p>Manufacturer: <u>Econolite</u></p> <p>Model: <u>PED16RYNLYN</u></p>
58	<p>PED HEAD, 1-SEC 16" ALUM LED COMPATIBLE</p> <p>One-Way, one-section, 16-inch aluminum pedestrian signal head housing with traditional visor (no reflector and no lens - LED compatible). <u>Provide color in highway yellow and black – color to be specified on purchase order.</u></p> <p>Material #:607015505</p> <p>Manufacturer: <u>Econolite</u></p> <p>Model: <u>PED16SONVYN</u></p>
59	<p>TUNNEL VISOR FOR 16" PED</p> <p>Traditional Visor, aluminum for 16-inch pedestrian signal head</p> <p>Material #:620018785</p> <p>Manufacturer: <u>Econolite</u></p> <p>Model: <u>105-1007-012</u></p>
60	<p>PED HEAD, 1SEC 16" POLY LED COMPATIBLE</p>

	<p>One-Way, one-section, 16-inch polycarbonate pedestrian signal head housing with traditional visor (no reflector and no lens - LED compatible). <u>Provide color in highway yellow and black – color to be specified on purchase order.</u></p> <p>Material #:607015550</p> <p>Manufacturer: <u>Econolite</u></p> <p>Model: <u>PP16SAAPCNAYNN</u></p>
--	---

LOT 10	
61	<p>SIGNAL BRACKET, 46" TUBE</p> <p>46-inch Tube with one threaded end and vinyl insert (for a 3-section mast arm assembly)</p> <p>Material #:625012325</p> <p>Manufacturer: <u>Pelco</u></p> <p>Model: <u>AB-2003-46-PNC</u></p>
62	<p>SIGNAL BRACKET, 58" TUBE</p> <p>58-inch Tube with one threaded end and vinyl insert (for a 4-section mast arm assembly)</p> <p>Material #:625012305</p> <p>Manufacturer: <u>Pelco</u></p> <p>Model: <u>AB-2003-58-PNC</u></p>
63	<p>SIGNAL BRACKET, ARM KIT FOR 3-SEC</p> <p>Arm Kit for one-way 3-section/4-section mast arm signal head assembly</p> <p>Material #:625012310</p> <p>Manufacturer: <u>Pelco</u></p> <p>Model: <u>AB-4005-PNC</u></p>
64	<p>SIGNAL BRACKET, 37" TUBE</p> <p>37-inch Tube with one threaded end and vinyl insert (for a 5-section mast arm assembly)</p> <p>Material #:625012320</p> <p>Manufacturer: <u>Pelco</u></p> <p>Model: <u>AB-2003-37-PNC</u></p>
65	<p>SIGNAL BRACKET, ARM KIT FOR 5-SEC</p> <p>Arm Kit for 5-section cluster mast arm signal head assembly</p>

	<p>Material #:625012330</p> <p>Manufacturer: <u>Pelco</u></p> <p>Model: <u>AB-5005-PNC</u></p>
66	<p>SIGN BRACKET, 18" TUBE (FOR 24" SIGN)</p> <p>Tube for mast arm sign bracket with hardware (for 24-inch sign)</p> <p>Material #:625012340</p> <p>Manufacturer: <u>Pelco</u></p> <p>Model: <u>AB-0507-18-PNC</u></p>
67	<p>SIGN BRACKET, 24" TUBE (FOR 30" SIGN)</p> <p>Tube for mast arm sign bracket with hardware (for 30-inch sign)</p> <p>Material #:625012350</p> <p>Manufacturer: <u>Pelco</u></p> <p>Model: <u>AB-0507-24-PNC</u></p>
68	<p>SIGN BRACKET, 30" TUBE (FOR 36" SIGN)</p> <p>Tube for mast arm sign bracket with hardware (for 36-inch sign)</p> <p>Material #:625012360</p> <p>Manufacturer: <u>Pelco</u></p> <p>Model: <u>AB-0507-30-PNC</u></p>
69	<p>SIGNAL/SIGN CLAMP KIT, CABLE MOUNT 96"</p> <p>Clamp Kit for mast arm assembly – cable mount (cable length 96")</p> <p>Material #:625012385</p> <p>Manufacturer: <u>Pelco</u></p> <p>Model: <u>AG-3055-96-SS-PNC</u></p>

LOT 11

70	<p>LED SIGN, NO L/R TURN TRAIN</p> <p>"No (Left or Right) Turn Train" Light Emitting Diode (LED) Blank-out Sign</p> <p>Material #:60704550</p> <p>Manufacturer: <u>Orange Traffic</u></p> <p>Model: <u>LS-NBLTT</u></p>
----	---

71	<p>LED SIGN, BLANKOUT (DO NOT ENTER TRAIN)</p> <p>"Do Not Enter Train" Light Emitting Diode (LED) Blank-out Sign</p> <p>Material #:607045510</p> <p>Manufacturer: <u>Orange Traffic</u></p> <p>Model: <u>LS-DNETD</u></p>
72	<p>LED SIGN, BLANKOUT (NO TURN ON RED)</p> <p>"No Turn on Red" Light Emitting Diode (LED) Blank-out Sign</p> <p>Material #:607045520</p> <p>Manufacturer: <u>Orange Traffic</u></p> <p>Model: <u>LS-NTOR</u></p>
73	<p>LED SIGN, BLANKOUT (LEFT TURN YIELD)</p> <p>"Left Turn Yield" Light Emitting Diode (LED) Blank-out Sign</p> <p>Material #:607045530</p> <p>Manufacturer: <u>Orange Traffic</u></p> <p>Model: <u>LS-LTYD</u></p>

LOT 12

74	<p>BEACON CONTROLLER ASSY. TYPE F1</p> <p>Type F1 Beacon Controller Assembly</p> <p>Material #:609024100</p> <p>Manufacturer: <u>Southern Manufacturing Co.</u></p> <p>Model: <u>SW-NEB310-NC DOT-1</u></p>
75	<p>BEACON CONTROLLER ASSY. TYPE F3</p> <p>Type F3 Beacon Controller Assembly with Pluggable Surge Protector</p> <p>Material #:609024300</p> <p>Manufacturer: <u>RAI Products</u></p> <p>Model: <u>TCSEFLN20EX</u></p>
LOT 13	
76	<p>BEACON CONTROLLER ASSY. TYPE F2</p> <p>Type F2 Beacon Controller Assembly with Pluggable Surge Protector (include Time Switch with two output circuits - same requirements as line item 77)</p>

	Material #:609024200 Manufacturer: <u>RAI Products</u> Model: <u>TCSFLN20T</u>
77	TIME SWITCH WITH 2 OUTPUT CIRCUITS Time Switch with two output circuits Material #:609024210 Manufacturer: <u>Eltec Corp.</u> Model: <u>TC-18</u>

LOT 14

78	BOX, PULL, CONCRETE POLYMER WITH COVER Polymer Concrete Standard Sized Junction Box with cover and cover hardware (provide cover logo as Traffic Signal) Material #: 106001010 Manufacturer: <u>Quazite Products</u> Model: <u>PG1118BA12w/PG1118HA46</u>
79	COVER, PULL BOX, CONCRETE POLYMER Cover and hardware for item 78 (provide cover logo as Traffic Signal) Material #: 106007510 Manufacturer: <u>Quazite Products</u> Model: <u>PG1118HA46</u>

LOT 15

80	BOX, OVERSIZED PULL W/COVER "NCDOT FIBER Polymer Concrete Oversized Heavy-Duty Junction Box with cover and cover hardware (provide cover logo as NCDOT Fiber Optic) Material #: 106001016 Manufacturer: <u>Quazite Products</u> Model: <u>PG1730BA24w/PG1730HANW</u>
81	COVER, OVERSIZED PULL BOX "NCDOT FIBER Cover and hardware for item 80 (provide cover logo as NCDOT Fiber Optic) Material #: 106007512

	Manufacturer: <u>Quartzite Products</u> Model: <u>PG1730HANW</u>
82	BOX, OVERSIZED PULL W/COVER "TRAFFIC SIGNAL" Polymer Concrete Oversized Heavy-Duty Junction Box with cover and cover hardware (provide cover logo as Traffic Signal) Material # 106001015 Manufacturer: <u>Quartzite Products</u> Model: <u>PG1730BA24 W/ PG1730HA46</u>
83	COVER, OVERSIZED PULL BOX "TRAFFIC SIGNAL" Cover and hardware for item 82 (provide cover logo as Traffic Signal) Material #: 106007511 Manufacturer: <u>Quartzite Products</u> Model: <u>PG1730HA46</u>

VENDOR'S RESPONSE

Item #	Specifications	Product/Service Offered Meets Specification
1-8	Lot 1 Meet Specifications	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
9-32	Lot 2 Meet Specifications	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
33-35	Lot 3 Meet Specifications	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
36-38	Lot 4 Meet Specifications	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
39-42	Lot 5 Meet Specifications	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
43-49	Lot 6 Meet Specifications	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
50-51	Lot 7 Meet Specifications	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO

Vendor: _____

52-55	Lot 8 Meet Specifications	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
56-60	Lot 9 Meet Specifications	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
61-69	Lot 10 Meet Specifications	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
70-73	Lot 11 Meet Specifications	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
74-75	Lot 12 Meet Specifications	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
76-77	Lot 13 Meet Specifications	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
78-79	Lot 14 Meet Specifications	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
80-83	Lot 15 Meet Specifications	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO

5.2 SCHEMATICS AND PART LISTS

Vendors shall provide schematics, part lists, and other documentation within five (5) consecutive calendar days after request is made by the State for the evaluation of the Vendor's submittal. The Department agrees not to divulge any proprietary information in the schematics, part lists, and other documentation upon request from the Vendor. Failure to provide this documentation by the requested time may result to a rejection for a bid award.

5.3 DEVIATIONS

The nature of all deviations from the *Specifications and Requirements* 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 and Requirements*, and the successful Vendor shall be held responsible to supply conforming goods. Deviations shall be explained in detail below or 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 General Contract Terms and Conditions in this section.

5.4 SUBSTITUTIONS

Substitutions are not permitted without prior written approval of this division. Failure of the contractor to comply with this requirement may result in the removal of the contractor from the contract

5.5 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.

5.6 VENDOR'S REPRESENTATIONS

- a) Vendor warrants that qualified personnel shall provide all services that may be required under The Contract in a professional manner. "Professional manner" means that the personnel performing the services shall possess the skill and competence consistent with at least the prevailing business standards in the industry. Vendor agrees that it shall not enter any agreement with a third party that may abridge any rights of the State under The Contract. Vendor shall serve as the prime contractor under The Contract and shall be responsible for the performance and payment of all subcontractor(s) that may be approved by the State. Names of any third-party Vendors or subcontractors of Vendor may appear for purposes of convenience in Contract documents; and shall not limit Vendor's obligations hereunder.
- b) If any goods, services, functions, or responsibilities not specifically described in The Contract are required for Vendor's proper performance, provision and delivery of the goods and services under The Contract, or are an inherent part of or necessary sub-requirement included within such goods and services, 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 goods and services.
- c) Vendor warrants that it has the financial capacity to perform and to continue 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 The Contract; and that entering into The Contract is not prohibited by any contract, or an order by any court of competent jurisdiction.

6.0 CONTRACT ADMINISTRATION

6.1 PROJECT MANAGER AND CUSTOMER SERVICE

The Vendor shall designate and make available to the State a single point of contact for contract related issues and issues concerning performance, progress review, scheduling and any service required.

6.2 DISPUTE RESOLUTION

The parties agree that it is in their mutual interest to resolve disputes informally. A claim by the Vendor shall be submitted in writing to the State's Contract Lead for resolution. A claim by the State shall be submitted in writing to the Vendor's Project Manager for resolution. The Parties shall 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 The Contract. If a dispute cannot be resolved between the Parties within thirty (30) days after delivery of notice, either Party may elect to exercise any other remedies available under The Contract, or at law. This term shall not constitute an agreement by either party to mediate or arbitrate any dispute.

6.3 CONTRACT CHANGES

Contract changes, if any, over the life of the contract are implemented by contract written amendments signed by both parties. If the Vendor is accepting orders and/or delivering through other parties, for example a manufacturer accepting orders and delivering through a dealer network or dealers receiving orders through a network of other dealers, then it is the responsibility of the Vendor to apprise such parties of all such contract amendments.

6.4 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.

6.5 PRICE ADJUSTMENT

Price increase requests shall be submitted in writing to the Contract Lead, which shall include the reason(s) for the request and contain supporting documentation of the need. Price increases will be negotiated and agreed to by both the State and Vendor in advance of any price increase going into effect. The State is not obligated to accept pricing adjustments or increases and reserves the right to accept or reject them in part or in whole. Price de-escalation or decreases may be requested by the State at any time. Acceptance of any price increases shall be solely at the discretion of the State and shall be in accordance to the attached "Terms and Conditions" for Price Adjustments and/or cancellation procedure.

It is understood and agreed that orders will be shipped at the established Contract prices in effect on dates orders are placed. Invoicing at variance with this provision will subject the Contract to cancellation

7.0 VENDOR'S LICENSE OR SUPPORT AGREEMENT

The terms and conditions of the Vendor's standard services, license, maintenance or other agreement(s) applicable to Services, Software and other Products acquired under this IFB may apply to the extent such terms and conditions do not materially change the terms and conditions of this IFB. In the event of any conflict between the terms and conditions of this IFB and the Vendor's standard agreement(s), the terms and conditions of this IFB relating to audit and records, jurisdiction, choice of law, the State's electronic procurement application of law or administrative rules, the remedy for intellectual property infringement and the exclusive remedies and limitation of liability in the Terms and Conditions of this IFB herein shall apply in all cases and supersede any provisions contained in the Vendor's relevant standard agreement or any other agreement. The State shall not be obligated under any standard license and/or maintenance or other Vendor agreement(s) to indemnify or hold harmless the Vendor, its licensors, successors or assigns, nor arbitrate any dispute, nor pay late fees, legal fees or other similar costs.

ATTACHMENT A: PRICING

FURNISH AND DELIVER:

Quantities referenced herein are three-year estimates, with no guarantee of usage.

1. Vendors are to provide pricing for each line item within each of the lots provided on the following link:

[ATTACHMENT_A_PRICING-Traffic Signal Parts](#)

2. The completed Excel Document from the link provided above must be printed and submitted in PDF format with the bid as **Attachment A: Pricing**
3. Upon bid opening the State may request Vendors to provide the Excel Spreadsheet via email in Excel Format.

The remainder of this page is intentionally left blank

ATTACHMENT B: INSTRUCTIONS TO VENDORS

1. **READ, REVIEW AND COMPLY:** It shall be the Vendor's responsibility to read this entire document, review all enclosures and attachments, and any addenda thereto, and comply with all requirements specified herein, regardless of whether appearing in these Instructions to Vendors or elsewhere in this IFB document.
2. **LATE BIDS:** Late bids, regardless of cause, will not be opened or considered, and will automatically be disqualified from further consideration. It shall be the Vendor's sole responsibility to ensure the timely delivery of bids at the designated office by the designated time.
3. **ACCEPTANCE AND REJECTION:** The State reserves the right to reject any and all bids, to waive any informality in bids and, unless otherwise specified by the Vendor, to accept any item in the bid. If either a unit price or an extended price is obviously in error and the other is obviously correct, the incorrect price will be disregarded. Regardless of error or omission, a Vendor shall not be permitted to increase its pricing after the deadline for submitting bids.
4. **BASIS FOR REJECTION:** Pursuant to 01 NCAC 05B .0501, the State reserves the right to reject any and all offers, in whole or in part, by deeming the offer unsatisfactory as to quality or quantity, delivery, price or service offered, non-compliance with the requirements or intent of this solicitation, lack of competitiveness, error(s) in specifications or indications that revision would be advantageous to the State, cancellation or other changes in the intended project or any other determination that the proposed requirement is no longer needed, limitation or lack of available funds, circumstances that prevent determination of the best offer, or any other determination that rejection would be in the best interest of the State.
5. **EXECUTION:** Failure to execute page 1 of the IFB (Execution Page) in the designated space shall render bid non-responsive, and it will be rejected.
6. **ORDER OF PRECEDENCE:** In cases of conflict between specific provisions in this solicitation or those in any resulting contract documents, the order of precedence shall be (high to low) (1) any special terms and conditions specific to this IFB, including any negotiated terms; (2) requirements and specifications and administration provisions in Sections 4, 5 and 6 of this IFB; (3) North Carolina General Contract Terms and Conditions in ATTACHMENT C: NORTH CAROLINA GENERAL CONTRACT TERMS AND CONDITIONS; (4) Instructions in ATTACHMENT B: INSTRUCTIONS TO VENDORS; (5) ATTACHMENT A: PRICING, and (6) Vendor's Bid.
7. **INFORMATION AND DESCRIPTIVE LITERATURE:** Vendor shall furnish all information requested and, in the spaces, provided in this document. Further, if required elsewhere in this bid, each Vendor shall submit with its bid any sketches, descriptive literature and/or complete specifications covering the products and services offered. Reference to literature submitted with a previous bid or available elsewhere will not satisfy this provision. Failure to comply with these requirements shall constitute sufficient cause to reject a bid without further consideration.
8. **RECYCLING AND SOURCE REDUCTION:** It is the policy of the State to encourage and promote the purchase of products with recycled content to the extent economically practicable, and to purchase items which are reusable, refillable, repairable, more durable and less toxic to the extent that the purchase or use is practicable and cost-effective. We also encourage and promote using minimal packaging and the use of recycled/recyclable products in the packaging of commodities purchased. However, no sacrifice in quality of packaging will be acceptable. The Vendor remains responsible for providing packaging that will adequately protect the commodity and contain it for its intended use. Vendors are strongly urged to bring to the attention of purchasers those products or packaging they offer which have recycled content and that are recyclable.
9. **CERTIFICATE TO TRANSACT BUSINESS IN NORTH CAROLINA:** As a condition of contract award, each out-of-State Vendor that is a corporation, limited-liability company or limited-liability partnership shall have received, and shall maintain throughout the term of The Contract, a Certificate of Authority to Transact Business in North Carolina from the North Carolina Secretary of State, as required by North Carolina law. A State contract requiring only an isolated transaction completed within a period of six months, and not in the course of a number of repeated transactions of like nature, shall not be considered as transacting business in North Carolina and shall not require a Certificate of Authority to Transact Business.

10. **SUSTAINABILITY:** To support the sustainability efforts of the State of North Carolina we solicit your cooperation in this effort. Pursuant to Executive Order 156 (1999), it is desirable that all responses meet the following:
- All copies of the bid are printed double sided.
 - All submittals and copies are printed on recycled paper with a minimum post-consumer content of 30%.
 - Unless absolutely necessary, all bids and copies should minimize or eliminate use of non-recyclable or non-reusable materials such as plastic report covers, plastic dividers, vinyl sleeves, and GBC binding. Three-ringed binders, glued materials, paper clips, and staples are acceptable.
 - Materials should be submitted in a format which allows for easy removal, filing and/or recycling of paper and binder materials. Use of oversized paper is strongly discouraged unless necessary for clarity or legibility.
11. **HISTORICALLY UNDERUTILIZED BUSINESSES:** The State is committed to retaining Vendors from diverse backgrounds, and it invites and encourages participation in the procurement process by businesses owned by minorities, women, disabled, disabled business enterprises and non-profit work centers for the blind and severely disabled. In particular, the State encourages participation by Vendors certified by the State Office of Historically Underutilized Businesses, as well as the use of HUB-certified vendors as subcontractors on State contracts.
12. **RECIPROCAL PREFERENCE:** G.S. 143-59 establishes a reciprocal preference requirement to discourage other states from favoring their own resident Vendors by applying a percentage increase to the price of any bid from a North Carolina resident Vendor. To the extent another state does so, North Carolina applies the same percentage increase to the bid of a vendor resident in that state. Residency is determined by a Vendor's "Principal Place of Business," defined as that principal place from which the overall trade or business of the Vendor is directed or managed.
13. **INELIGIBLE VENDORS:** As provided in G.S. 147-86.60 and G.S. 147-86.82, the following companies are ineligible to contract with the State of North Carolina or any political subdivision of the State: a) any company identified as engaging in investment activities in Iran, as determined by appearing on the Final Divestment List created by the State Treasurer pursuant to G.S. 147-86.58, and b) any company identified as engaged in a boycott of Israel as determined by appearing on the List of restricted companies created by the State Treasurer pursuant to G.S. 147-86.81. A contract with the State or any of its political subdivisions by any company identified in a) or b) above shall be void *ab initio*.
14. **CONFIDENTIAL INFORMATION:** To the extent permitted by applicable statutes and rules, the State will maintain as confidential trade secrets in its bid that the Vendor does not wish disclosed. As a condition to confidential treatment, each page containing trade secret information shall be identified in boldface at the top and bottom as "CONFIDENTIAL" by the Vendor, with specific trade secret information enclosed in boxes, marked in a distinctive color or by similar indication. Cost information shall not be deemed confidential under any circumstances. Regardless of what a Vendor may label as a trade secret, the determination whether it is or is not entitled to protection will be determined in accordance with G.S. 132-1.2. Any material labeled as confidential constitutes a representation by the Vendor that it has made a reasonable effort in good faith to determine that such material is, in fact, a trade secret under G.S. 132-1.2. Vendors are urged and cautioned to limit the marking of information as a trade secret or as confidential so far as is possible. If a legal action is brought to require the disclosure of any material so marked as confidential, the State will notify Vendor of such action and allow Vendor to defend the confidential status of its information.
15. **PROTEST PROCEDURES:** When a Vendor wishes to protest the award of The Contract awarded by the Division of Purchase and Contract, or awarded by an agency in an awarded amount of at least \$25,000, a Vendor shall submit a written request addressed to the State Purchasing Officer at: Division of Purchase and Contract, 1305 Mail Service Center, Raleigh, NC 27699-1305. A protest request related to an award amount of less than \$25,000 shall be sent to the purchasing officer of the agency that issued the award. The protest request must be received in the proper office within thirty (30) consecutive calendar days from the date of the Contract award. Protest letters **shall** contain specific grounds and reasons for the protest, how the protesting party was harmed by the award made and any documentation providing support for the protesting party's claims. **Note:** Contract award notices are sent only to the Vendor actually awarded the Contract, and not to every person or firm responding to a solicitation. Bid status and Award notices are posted on the Internet at <https://www.ips.state.nc.us/ips/>. All

protests will be handled pursuant to the North Carolina Administrative Code, 01 NCAC 05B .1519.

If a ground of a protest is based on a challenge to the qualification of a North Carolina resident Vendor to be awarded a Contract pursuant to Executive Order #50 (price-matching opportunity), the State Purchasing Officer or procurement officer may request the North Carolina resident Vendor to produce documentation substantiating the North Carolina resident Vendor's qualification for the subject opportunity. These documents shall be requested and received prior to any decision on whether to deny or grant a protest meeting. As provided herein, the North Carolina resident Vendor is required to produce to the State the requested documentation within five (5) business days of the State's request and failure to produce the documents within that time period may result in the cancellation of the Contract. Also note that any tax, financial, accounting or banking documents the North Carolina resident Vendor submits to the State in connection with the resolution of a protest shall **not** be disclosed to the protester pursuant to G.S. 132-1.1 and 105-259(b) and the State shall preserve the confidentiality of such documents

16. **MISCELLANEOUS:** Any gender-specific pronouns used herein, whether masculine or feminine, shall be read and construed as gender neutral, and the singular of any word or phrase shall be read to include the plural and vice versa.
17. **COMMUNICATIONS BY VENDORS:** In submitting its bid, the Vendor agrees not to discuss or otherwise reveal the contents of its bid to any source, government or private, outside of the using or issuing agency until after the award of the Contract or cancellation of this IFB. All Vendors are forbidden from having any communications with the using or issuing agency, or any other representative of the State concerning the solicitation, during the evaluation of the bids (i.e., after the public opening of the bids and before the award of the Contract), unless the State directly contacts the Vendor(s) for purposes of seeking clarification or another reason permitted by the solicitation. A Vendor shall not: (a) transmit to the issuing and/or using agency any information commenting on the ability or qualifications of any other Vendor to provide the advertised good, equipment, commodity; (b) identify defects, errors and/or omissions in any other Vendor's bid and/or prices at any time during the procurement process; and/or (c) engage in or attempt any other communication or conduct that could influence the evaluation or award of a Contract related to this IFB. Failure to comply with this requirement shall constitute sufficient justification to disqualify a Vendor from a Contract award. Only those communications with the using agency or issuing agency authorized by this IFB are permitted.
18. **TABULATIONS:** Bid tabulations can be electronically retrieved at the Interactive Purchasing System (IPS), <https://www.ips.state.nc.us/ips/BidNumberSearch.aspx>. Click on the IPS BIDS icon, click on Search for Bid, enter the bid number, and then search. Tabulations will normally be available at this web site not later than one working day after the bid opening. Lengthy or complex tabulations may be summarized, with other details not made available on IPS, and requests for additional details or information concerning such tabulations cannot be honored.
19. **VENDOR REGISTRATION AND SOLICITATION NOTIFICATION SYSTEM:** The North Carolina electronic Vendor Portal (eVP) allows Vendors to electronically register free with the State to receive electronic notification of current procurement opportunities for goods and services of potential interests to them available on the Interactive Purchasing System, as well as notifications of status changes to those solicitations. Online registration and other purchasing information is available at the following website: <http://ncadmin.nc.gov/about-doa/divisions/purchase-contract>.
20. **WITHDRAWAL OF BID:** Bids submitted electronically may be withdrawn at any time prior to the date for opening bids identified on the cover page of this IFB (or such later date included in an Addendum to the IFB). Bids that have been delivered by hand, U.S. Postal Service, courier or other delivery service may be withdrawn **only** in writing and if receipt is acknowledged by the office issuing the IFB prior to the time for opening bids identified on the cover page of this IFB (or such later date included in an Addendum to the RFP). Written withdrawal requests shall be submitted on the Vendor's letterhead and signed by an official of the Vendor authorized to make such request. Any withdrawal request made after the opening of bids shall be allowed only for good cause shown and in the sole discretion of the Division of Purchase and Contract.

21. **INFORMAL COMMENTS:** The State shall not be bound by informal explanations, instructions or information given at any time by anyone on behalf of the State during the competitive process or after award. The State is bound only by information provided in writing in this IFB and in formal Addenda issued through IPS.
22. **COST FOR BID PREPARATION:** Any costs incurred by Vendor in preparing or submitting offers are the Vendor's sole responsibility; the State of North Carolina will not reimburse any Vendor for any costs incurred or associated with the preparation of bids.
23. **VENDOR'S REPRESENTATIVE:** Each Vendor shall submit with its bid the name, address, and telephone number of the person(s) with authority to bind the firm and answer questions or provide clarification concerning the firm's bid.
24. **INSPECTION AT VENDOR'S SITE:** The State reserves the right to inspect, at a reasonable time, the equipment, item, plant or other facilities of a prospective Vendor prior to Contract award, and during the Contract term as necessary for the State's determination that such equipment, item, plant or other facilities conform with the specifications/requirements and are adequate and suitable for the proper and effective performance of the Contract.

This Space is Intentionally Left Blank

ATTACHMENT C: NORTH CAROLINA GENERAL CONTRACT TERMS & CONDITIONS

1. **PERFORMANCE AND DEFAULT:** If, through any cause, Vendor shall fail to fulfill in timely and proper manner the obligations under The Contract, the State shall have the right to terminate The Contract by giving written notice to the Vendor and specifying the effective date thereof. In that event, any or all finished or unfinished deliverable items under The Contract prepared by the Vendor shall, at the option of the State, become its property, and the Vendor shall be entitled to receive just and equitable compensation for any acceptable work completed as to which the option is exercised. Notwithstanding, Vendor shall not be relieved of liability to the State for damages sustained by the State by virtue of any breach of The Contract, and the State may withhold any payment due the Vendor for the purpose of setoff until such time as the exact amount of damages due the State from such breach can be determined. The State reserves the right to require at any time a performance bond or other acceptable alternative performance guarantees from a Vendor without expense to the State.

The Vendor shall be in default, if its Certification submitted for a price-matching opportunity under Executive Order #50 and G.S. 143-59 was false and/or contained materially misleading or inaccurate information, and/or Vendor failed to provide information and documentation requested by the State to substantiate Vendor's Certification. The State may take action against the Vendor under the False Claims Act, G.S. 1-605 through 1-617, inclusive, for submitting a false Certification for the price-matching opportunity under Executive Order #50 (including but not limited to treble damages and civil penalties).

In the event of default by the Vendor, the State may procure the goods and services necessary to complete performance hereunder from other sources and hold the Vendor responsible for any excess cost occasioned thereby. In addition, in the event of default by the Vendor under The Contract, or upon the Vendor filing a petition for bankruptcy or the entering of a judgment of bankruptcy by or against the Vendor, the State may immediately cease doing business with the Vendor, immediately terminate The Contract for cause, and may take action to debar the Vendor from doing future business with the State.

2. **GOVERNMENTAL RESTRICTIONS:** In the event any Governmental restrictions are imposed which necessitate alteration of the material, quality, workmanship or performance of the goods or services offered prior to their delivery, it shall be the responsibility of the Vendor to notify the Contract Lead at once, in writing, indicating the specific regulation which required such alterations. The State reserves the right to accept any such alterations, including any price adjustments occasioned thereby, or to cancel the Contract.
3. **AVAILABILITY OF FUNDS:** Any and all payments to the Vendor shall be dependent upon and subject to the availability of funds to the agency for the purpose set forth in The Contract.
4. **TAXES:** Any applicable taxes shall be invoiced as a separate item.
- a) G.S. 143-59.1 bars the Secretary of Administration from entering into Contracts with Vendors if the Vendor or its affiliates meet one of the conditions of G.S. 105-164.8(b) and refuses to collect use tax on sales of tangible personal property to purchasers in North Carolina. Conditions under G.S. 105-164.8(b) include: (1) Maintenance of a retail establishment or office, (2) Presence of representatives in the State that solicit sales or transact business on behalf of the Vendor and (3) Systematic exploitation of the market by media-assisted, media-facilitated, or media-solicited means. By execution of the bid document the Vendor certifies that it and all of its affiliates, (if it has affiliates), collect(s) the appropriate taxes.
 - b) The agency(ies) participating in The Contract are exempt from Federal Taxes, such as excise and transportation. Exemption forms submitted by the Vendor will be executed and returned by the using agency.
 - c) Prices offered are not to include any personal property taxes, nor any sales or use tax (or fees) unless required by the North Carolina Department of Revenue.
5. **SITUS AND GOVERNING LAWS:** This Contract is made under and shall be governed and construed in accordance with the laws of the State of North Carolina, without regard to its conflict of laws rules, and within which State all matters, whether sounding in Contract or tort or otherwise, relating to its validity, construction, interpretation and enforcement shall be determined.
6. **PAYMENT TERMS:** Payment terms are Net not later than 30 days after receipt of correct invoice or acceptance

of goods, whichever is later. The using agency is responsible for all payments to the Vendor under the Contract. Payment by some agencies may be made by procurement card, if the Vendor accepts that card (Visa, MasterCard, etc.) from other customers, and it shall be accepted by the Vendor for payment under the same terms and conditions as any other method of payment accepted by the Vendor. If payment is made by procurement card, then payment may be processed immediately by the Vendor.

7. NON-DISCRIMINATION:

- a. The Vendor will take necessary action to comply with all Federal and State requirements concerning fair employment and employment of people with disabilities and concerning the treatment of all employees without regard to discrimination on the basis of any prohibited grounds as defined by Federal and State law.
- b. The vendor will take necessary action to ensure its internal employee policies and procedures are consistent with Executive Order #82 (Roy Cooper, December 6, 2018), which extends workplace protections and accommodations to pregnant employees.

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

9. INTELLECTUAL PROPERTY WARRANTY AND INDEMNITY: Vendor shall hold and save the State, its officers, agents and employees, harmless from liability of any kind, including costs and expenses, resulting from infringement of the rights of any third party in any copyrighted material, patented or patent-pending invention, article, device or appliance delivered in connection with The Contract.

- a. Vendor warrants to the best of its knowledge that:
 - i. Performance under The Contract does not infringe upon any intellectual property rights of any third party; and
 - ii. There are no actual or threatened actions arising from, or alleged under, any intellectual property rights of any third party;
- b. Should any deliverables supplied by Vendor become the subject of a claim of infringement of a patent, copyright, trademark or a trade secret in the United States, the Vendor, shall at its option and expense, either procure for the State the right to continue using the deliverables, or replace or modify the same to become non-infringing. If neither of these options can reasonably be taken in Vendor's judgment, or if further use shall be prevented by injunction, the Vendor agrees to cease provision of any affected deliverables and refund any sums the State has paid Vendor and make every reasonable effort to assist the State in procuring substitute deliverables. If, in the sole opinion of the State, the cessation of use by the State of any such deliverables due to infringement issues makes the retention of other items acquired from the Vendor under this Agreement impractical, the State shall then have the option of terminating the Agreement, or applicable portions thereof, without penalty or termination charge; and Vendor agrees to refund any sums the State paid for unused Services or Deliverables.
- c. The Vendor, at its own expense, shall defend any action brought against the State to the extent that such action is based upon a claim that the deliverables supplied by the Vendor, their use or operation, infringes on a patent, copyright, trademark or violates a trade secret in the United States. The Vendor shall pay those costs and damages finally awarded or agreed in a settlement against the State in any such action. Such defense and payment shall be conditioned on the following:
 - i. That the Vendor shall be notified within a reasonable time in writing by the State of any such claim; and
 - ii. That the Vendor shall have the sole control of the defense of any action on such claim and all negotiations for its settlement or compromise provided, however, that the State shall have the option to participate in such action at its own expense.
- d. Vendor will not be required to defend or indemnify the State if any claim by a third party against the State for infringement or misappropriation results from the State's material alteration of any Vendor-branded deliverables or services, or from the continued use of the deliverable(s) or Services after receiving notice of infringement on a trade secret of a third party.

10. TERMINATION FOR CONVENIENCE: If this contract contemplates deliveries or performance over a period of time, the State may terminate this contract at any time by providing 60 days' notice in writing from the State to

the Vendor. In that event, any or all finished or unfinished deliverable items prepared by the Vendor under this contract shall, at the option of the State, become its property. If the contract is terminated by the State as provided in this section, the State shall pay for those items for which such option is exercised, less any payment or compensation previously made.

11. **ADVERTISING:** Vendor agrees not to use the existence of The Contract or the name of the State of North Carolina as part of any commercial advertising or marketing of products or services. A Vendor may inquire whether the State is willing to act as a reference by providing factual information directly to other prospective customers.
12. **ACCESS TO PERSONS AND RECORDS:** During and after the term hereof, the State Auditor and any using agency's internal auditors shall have access to persons and records related to The Contract to verify accounts and data affecting fees or performance under the Contract, as provided in G.S. 143-49(9).
13. **ASSIGNMENT:** No assignment of the Vendor's obligations nor the Vendor's right to receive payment hereunder shall be permitted.

However, upon written request approved by the issuing purchasing authority and solely as a convenience to the Vendor, the State may:

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

In no event shall such approval and action obligate the State to anyone other than the Vendor and the Vendor shall remain responsible for fulfillment of all Contract obligations. Upon advance written request, the State may, in its unfettered discretion, approve an assignment to the surviving entity of a merger, acquisition or corporate reorganization, if made as part of the transfer of all or substantially all of the Vendor's assets. Any purported assignment made in violation of this provision shall be void and a material breach of The Contract.

14. **INSURANCE:**

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

- a) **Worker's Compensation** - The Vendor shall provide and maintain Worker's Compensation Insurance, as required by the laws of North Carolina, as well as employer's liability coverage with minimum limits of \$500,000.00, covering all of Vendor's employees who are engaged in any work under the Contract in North Carolina. If any work is sub-contracted, the Vendor shall require the sub-Contractor to provide the same coverage for any of his employees engaged in any work under the Contract within the State.
- b) **Commercial General Liability** - General Liability Coverage on a Comprehensive Broad Form on an occurrence basis in the minimum amount of \$1,000,000.00 Combined Single Limit. Defense cost shall be in excess of the limit of liability.
- c) **Automobile** - Automobile Liability Insurance, to include liability coverage, covering all owned, hired and non-owned vehicles, used within North Carolina in connection with the Contract. The minimum combined single limit shall be \$250,000.00 bodily injury and property damage; \$250,000.00 uninsured/under insured motorist; and \$2,500.00 medical payment.

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

15. **GENERAL INDEMNITY:** The Vendor shall hold and save the State, its officers, agents, and employees, harmless

from liability of any kind, including all claims and losses accruing or resulting to any other person, firm, or corporation furnishing or supplying work, services, materials, or supplies in connection with the performance of The Contract, and from any and all claims and losses accruing or resulting to any person, firm, or corporation that may be injured or damaged by the Vendor in the performance of The Contract and that are attributable to the negligence or intentionally tortious acts of the Vendor provided that the Vendor is notified in writing within 30 days that the State has knowledge of such claims. The Vendor represents and warrants that it shall make no claim of any kind or nature against the State's agents who are involved in the delivery or processing of Vendor goods or services to the State. The representation and warranty in the preceding sentence shall survive the termination or expiration of The Contract.

16. ELECTRONIC PROCUREMENT [RESERVED] Optional:

a) Purchasing shall be conducted through the Statewide E-Procurement Service. The State's third-party agent shall serve as the Supplier Manager for this E-Procurement Service. The Vendor shall register for the Statewide E-Procurement Service within two (2) business days of notification of award in order to receive an electronic purchase order resulting from award of this contract.

b) THE SUCCESSFUL BIDDER(S) SHALL PAY A TRANSACTION FEE OF 1.75% (.0175) ON THE TOTAL DOLLAR AMOUNT (EXCLUDING SALES TAXES) OF ALL GOODS INCLUDED ON EACH PURCHASE ORDER ISSUED THROUGH THE STATEWIDE E-PROCUREMENT SERVICE. This applies to all purchase orders, regardless of the quantity or dollar amount of the purchase order. The transaction fee shall not be stated or included as a separate item on the invoice. There are no additional fees or charges to the Vendor for the services rendered by the Supplier Manager under this contract. Vendor will receive a credit for transaction fees they paid for the purchase of any item(s) if an item(s) is returned through no fault of the Vendor. Transaction fees are non-refundable when an item is rejected and returned, or declined, due to the Vendor's failure to perform or comply with specifications or requirements of the contract.

c) Vendor or its Authorized Reseller, as applicable, will be invoiced monthly for the State's transaction fee by the Supplier Manager. The transaction fee shall be based on a) purchase activity for the prior month, or b) purchases for which the supplier invoice has been paid. Unless Supplier Manager receives written notice from the Vendor identifying with specificity any errors in an invoice for the transaction fee within thirty (30) days of the receipt of invoice, such invoice shall be deemed to be correct and Vendor shall have waived its right to later dispute the accuracy and completeness of the invoice. Payment of the transaction fee by the Vendor is due to the account designated by the State within thirty (30) days after receipt of the invoice for the transaction fee. If payment of the transaction fee is not received by the State within this payment period, it shall be considered a material breach of contract. Pursuant to G.S. 147-86.23, the Service will charge interest and late payment penalties on past due balances. Interest shall be charged at the rate set by the Secretary of Revenue pursuant to G.S. 105-241.21 as of the date the balances are past due. The late-payment penalty will be ten percent (10%) of the account receivable. Within thirty (30) days of the receipt of invoice, Vendor may dispute in writing the accuracy of an invoice. No interest shall be charged on disputed and overdue amounts to the extent the State agrees to reduce or adjust the amount in dispute. The Supplier Manager shall provide, whenever reasonably requested by the Vendor in writing (including electronic documents), supporting documentation from the E-Procurement Service that accounts for the amount of the invoice.

d) The Supplier Manager will capture the order from the State approved user, including the shipping and payment information, and submit the order in accordance with the E-Procurement Service. Subsequently, the Supplier Manager will send those orders to the appropriate Vendor on State Contract. The State or State-approved user, not the Supplier Manager, shall be responsible for the solicitation, bids received, evaluation of bids received, award of contract, and the payment for goods delivered.

e) Vendor shall at all times maintain the confidentiality of its username and password for the Statewide E-Procurement Services. If Vendor is a corporation, partnership or other legal entity, then the Vendor may authorize its employees to use its password. Vendor shall be responsible for all activity and all charges by such employees. Vendor agrees not to permit a third party to use the Statewide E-Procurement Services through its account. If there is a breach of security through the Vendor's account, Vendor shall immediately change its password and notify the Supplier Manager of the security breach by email. Vendor shall cooperate with the State and the Supplier Manager to mitigate and correct any security breach.

VENDOR IS AND SHALL REMAIN RESPONSIBLE FOR PAYING THE TRANSACTION FEE ON BEHALF OF

ANY SUB-CONTRACTOR OR DEALER INVOLVED IN PERFORMANCE UNDER THIS CONTRACT IN THE EVENT THAT SUCH SUB-CONTRACTOR OR DEALER DEFAULTS ON PAYMENT.

- 17. SUBCONTRACTING:** Performance under The Contract by the Vendor shall not be subcontracted without prior written approval of the State's assigned Contract Lead. Unless otherwise indicated, acceptance of a Vendor's bid shall include approval to use the subcontractor(s) that have been specified therein in accordance with paragraph 21 of Attachment A: Instructions to Vendor.
- 18. CONFIDENTIALITY:** Any State information, data, instruments, documents, studies or reports given to or prepared or assembled by or provided to the Vendor under The Contract shall be kept as confidential, used only for the purpose(s) required to perform The Contract and not divulged or made available to any individual or organization without the prior written approval of the State.
- 19. CARE OF PROPERTY:** The Vendor agrees that it shall be responsible for the proper custody and care of any property furnished it by the State for use in connection with the performance of The Contract or purchased by or for the State for The Contract, and Vendor will reimburse the State for loss or damage of such property while in Vendor's custody.
- 20. OUTSOURCING:** Any Vendor or subcontractor providing call or contact center services to the State of North Carolina or any of its agencies shall disclose to inbound callers the location from which the call or contact center services are being provided.
- If, after award of a contract, the contractor wishes to relocate or outsource any portion of performance to a location outside the United States, or to contract with a subcontractor for any such the performance, which subcontractor and nature of the work has not previously been disclosed to the State in writing, prior written approval must be obtained from the State agency responsible for the contract.
- Vendor shall give notice to the using agency of any relocation of the Vendor, employees of the Vendor, subcontractors of the Vendor, or other persons providing performance under a State contract to a location outside of the United States.
- 21. COMPLIANCE WITH LAWS:** Vendor shall comply with all laws, ordinances, codes, rules, regulations, and licensing requirements that are applicable to the conduct of its business and its performance in accordance with The Contract, including those of federal, state, and local agencies having jurisdiction and/or authority.
- 22. ENTIRE AGREEMENT:** This IFB and any documents incorporated specifically by reference represent the entire agreement between the parties and supersede all prior oral or written statements or agreements. This IFB, any addenda hereto, and the Vendor's bid are incorporated herein by reference as though set forth verbatim.
- All promises, requirements, terms, conditions, provisions, representations, guarantees, and warranties contained herein shall survive the contract expiration or termination date unless specifically provided otherwise herein, or unless superseded by applicable Federal or State statutes of limitation.
- 23. ELECTRONIC RECORDS:** The State will digitize all Vendor responses to this solicitation, if not received electronically, as well as any awarded contract together with associated procurement-related documents. These electronic copies shall constitute a preservation record and shall serve as the official record of this procurement with the same force and effect as the original written documents comprising such record. Any electronic copy, printout or other output readable by sight shown to reflect such record accurately shall constitute an "original."
- 24. AMENDMENTS:** This Contract may be amended only by a written amendment duly executed by the State and the Vendor.
- 25. NO WAIVER:** Notwithstanding any other language or provision in The Contract, nothing herein is intended nor shall be interpreted as a waiver of any right or remedy otherwise available to the State under applicable law. The waiver by the State of any right or remedy on any one occasion or instance shall not constitute or be interpreted as a waiver of that or any other right or remedy on any other occasion or instance.
- 26. FORCE MAJEURE:** Neither party shall be deemed to be in default of its obligations hereunder if and so long as it is prevented from performing such obligations as a result of events beyond its reasonable control, including

without limitation, fire, power failures, any act of war, hostile foreign action, nuclear explosion, riot, strikes or failures or refusals to perform under subcontracts, civil insurrection, earthquake, hurricane, tornado, or other catastrophic natural event or act of God.

27. **SOVEREIGN IMMUNITY:** Notwithstanding any other term or provision in The Contract, nothing herein is intended nor shall be interpreted as waiving any claim or defense based on the principle of sovereign immunity or other State or federal constitutional provision or principle that otherwise would be available to the State under applicable law.

This Space Is Intentionally Left Blank

ATTACHMENT D: LOCATION OF WORKERS UTILIZED BY VENDOR

In accordance with NC General Statute 143-59.4, the Vendor shall detail the location(s) at which performance will occur, as well as the manner in which it intends to utilize resources or workers outside of the United States in the performance of The Contract. The State will evaluate the additional risks, costs, and other factors associated with such utilization prior to making an award. Vendor shall complete items a) and b) below.

a) Will any work under this Contract be performed outside the United States? YES NO

If the Vendor answered "YES" above, Vendor shall complete items 1 and 2 below:

1. List the location(s) outside the United States where work under The Contract will be performed by the Vendor, any sub-Contractors, employees, or other persons performing work under the Contract:

Mexico

2. Describe the corporate structure and location of corporate employees and activities of the Vendor, its affiliates or any other sub-Contractors that will perform work outside the U.S.:

Rosenblatt & Assoc (d/b/a RAI Products) is a North Carolina Corporation
Except for the manufacture of our Signal Head & Pedestrian beils, has
operations in Mexico
Orange Transit the manufacture of our black-out signs is a
Canadian Corporation

b) Vendor shall identify all U.S. locations at which performance will occur:

Charlotte, NC & Anaheim, CA

Vendor shall provide notice, in writing to the State, of the relocation of the Vendor, employees of the Vendor, sub-Contractors of the Vendor, or other persons performing services under the Contract to a location outside of the United States.

NOTE: All Vendor or sub-Contractor personnel providing call or contact center services to the State of North Carolina under the Contract shall disclose to inbound callers the location from which the call or contact center services are being provided.

This Space is Intentionally Left Blank

ATTACHMENT E: DESCRIPTION OF EXECUTIVE ORDER #50 AND CERTIFICATION

NORTH CAROLINA RESIDENT VENDORS TAKE NOTE:

Pursuant to G.S. 143-59 and Executive Order No. 50 (issued February 17, 2010, entitled "Enhanced Purchasing Opportunities for North Carolina Businesses"), a North Carolina resident Vendor may receive an opportunity to obtain an award by agreeing to match the final price(s) of the lowest Vendor on a Contract for the purchase of goods, if that lowest price is offered by a non-North Carolina resident Vendor. This opportunity arises when a North Carolina resident Vendor offers a price that is the lowest among all bids by a qualified in-State resident Vendor and also is within five percent (5%) or \$10,000 (whichever is less) of the non-resident Vendor's overall lowest price. This price-match opportunity applies to a Contract awarded under this solicitation.

G.S. 143-59(c) (1) defines a "resident Vendor" as a "Vendor that has paid unemployment taxes or income taxes in this State **and** whose principal place of business is located in this State." All other Vendors are considered to be non-resident Vendors. G.S. 143-59(c)(3) defines a "principal place of business" as the "principal place from which the trade or business of the Vendor is directed or managed." This refers to overall operations for the entire business entity, not merely a division or office location.

In order to qualify for this opportunity, a resident Vendor shall: (1) request the price-match opportunity by marking the appropriate checkbox, below; (2) provide all information requested; and (3) complete and sign the "Resident Vendor's Certification for Price-Matching Opportunity under Executive Order #50" (hereinafter the "Certification") included at the end of this Section. The Certification may not be submitted after the public opening of the bids. By executing the Certification, the Vendor affirms that the information provided is accurate and agrees to provide any additional information or documentation requested by the State to confirm the above certifications and statements within five (5) business days of request (including but not limited to income tax or unemployment tax returns, reports and/or filings (annual and/or quarterly); banking statements or financial/accounting statements reflecting Vendor's payment of income taxes or unemployment taxes to the State of North Carolina and such other information regarding Vendor's management or directors of its business or trade of its principal place of business).

Requesting a price-match opportunity below does not require any resident Vendor to match the lowest price in the event a Vendor qualifies for receiving the opportunity.

The State will evaluate the bids in accordance with the award criteria stated in this IFB to determine the lowest Vendor meeting the requirements of the IFB without regard to any Vendor's residency. If the Vendor with the lowest price is a North Carolina resident Vendor, then no consideration of the price-matching procedure is necessary. If the lowest bid by a Vendor meeting all requirements was submitted by a non-resident Vendor and there are no North Carolina resident Vendors that submitted a price bid that was within 5% or \$10,000 of the non-resident Vendor's price, then none of the North Carolina resident Vendors qualify for the price-matching opportunity and no review of a resident Vendor's Certification is required.

If the lowest price bid by a Vendor meeting requirements was submitted by a non-resident Vendor and there are one or more North Carolina resident Vendors that submitted a price bid that was within 5% or \$10,000 of the non-resident Vendor's price, then the State will determine if the Vendor has requested a price-matching opportunity, review the Certification(s) of the resident Vendor(s) to determine whether the resident Vendors have properly executed the Certification and ensure that the information and documentation provided in or with the Certification or otherwise submitted to the State supports the resident Vendor(s) qualification to exercise the price-match opportunity. The State may seek clarification of the Certification and/or information in a resident Vendor's Certification and request additional information and documentation, if needed. If any resident Vendor's award is challenged in a bid protest, based on the accuracy of that Vendor's claim of qualification for the price-matching, the resident Vendor shall provide additional information and/or documents to the State within five (5) business days of receiving a request from the State for such information and/or documentation, or its award shall be subject to cancellation.

Pursuant to G.S. 132-1.1, 105-259(b) and Paragraph 12 of the Instructions to Vendors, the State is prohibited from making public disclosure of the Vendor's tax information and documents submitted (subject to those exceptions set out in G.S. 105-259(b)) and the State shall preserve the confidentiality of the tax information and/or documents received in response to a request for clarification or to resolve a bid protest challenging a resident Vendor's qualification for the price-matching opportunity in accordance with applicable law. In order to further preserve the

confidentiality of any Vendor's tax information and documentation provided to the State, the Vendor shall comply with Paragraph 14 of the Instructions to Vendors and mark "CONFIDENTIAL" at the top and bottom of each page of such information and documentation. After review of all relevant material, the State shall include in its recommendation for award a finding that the North Carolina resident Vendor(s) is or is not qualified for the price-matching opportunity.

If more than one North Carolina resident Vendor qualifies for the price-matching opportunity, then the State will prioritize the qualified North Carolina resident Vendors according to the prices bid, from lowest to highest, so that the qualified North Carolina resident Vendor that submitted the lowest bid receives the first opportunity to match the bid price of the lowest non-resident Vendor that met all IFB requirements. If the lowest qualified North Carolina resident Vendor that met all IFB requirements declines to accept Contract award, then the Contract will be offered to the next lowest qualified North Carolina resident Vendor meeting all IFB requirements and continue in this manner until either a qualified North Carolina resident Vendor accepts the Contract award or the award is made to a non-resident Vendor if no qualified North Carolina resident Vendor agrees to match the lowest price bid.

If two resident Vendors qualify for the price-matching opportunity, and both score the same on price, then the State may: (1) consider the information provided in those Vendors' Certifications or publicly available information to determine with which Vendor the Contract award would have a greater impact of stimulating or sustaining the North Carolina economy and/or is most likely to create or save jobs (e.g., if the choice is between a resident broker and a resident manufacturer of the subject goods, then the Contract will be awarded to the resident manufacturer); (2) consider the unemployment rates in the municipality or county where each Vendor's principal place of business is located; (3) seek clarification from the Vendors to ascertain the impact on their respective businesses if offered the award of the Contract; or (4) utilize any other approved method of deciding between equal bids.

If a resident Vendor requests and qualifies for the price-matching opportunity, the resident Vendor will be notified of its opportunity to agree to match the lowest price and receive Contract award, and it will have two (2) business days from the date and time of such notification to indicate its response, either agreeing or declining to match the lowest responsible non-resident Vendor's price and receive the Contract award based on that price match. If the IFB requests bids on alternative configurations or components, then the price match shall apply to the actual alternative chosen by the State.

If at any time during or after the procurement process (including but not limited to clarifications and resolution of bid protests) the State determines that: any certifications or information in the Certification is false, substantially inaccurate, materially misleading or that the Vendor failed to provide, within the specified time period, any additional information requested, then the State may:

- (1) Cancel any award, Contract and/or purchase order that was awarded to such Vendor based on the price-matching opportunity, and the resident Vendor shall be liable for all costs incurred as a result of the cancellation, including any increased costs the State may incur as a result of awarding the Contract to another Vendor;
- (2) Bar the Vendor from all price-matching opportunities in future State procurements for a period of time not to exceed three (3) years, exclusive of any debarment period;
- (3) Take action against the Vendor under the False Claims Act, G.S. 1-605 through 1-617, inclusive, for submitting a false Certification for the price-matching opportunity under Executive Order #50 (including but not limited to treble damages and civil penalties); and/or
- (4) Debar Vendor from doing business with the State of North Carolina for a period of time not to exceed three years, as determined by the State. Any such debarment period shall not begin to run until all damages, costs and penalties as may be assessed against such Vendor have been fully paid.

ALL VENDORS (BOTH RESIDENT AND NONRESIDENT) SHOULD ANSWER QUESTION #1. A RESIDENT VENDOR REQUESTING A PRICE-MATCHING OPPORTUNITY SHALL ANSWER BOTH QUESTIONS:

1. Vendor is a resident of North Carolina as defined in G.S. 143-59? YES NO
2. Resident Vendor requests a price-matching opportunity? YES NO

The following Sections shall be completed if a resident Vendor is requesting a price-matching opportunity:

PART I – EO50

Vendor shall check the applicable boxes below, in order to be considered for the price-matching opportunity under Executive Order #50 and G.S. 143-59(c)(1).

- I hereby certify that the Vendor paid unemployment taxes to the State of North Carolina for the most recent quarter or annually and has specifically done so for the last such payment period.
- I hereby certify that the Vendor paid income taxes to the State of North Carolina each calendar quarter, or otherwise annually, and has specifically done so for the last such payment period.

PART II – EO50

I hereby certify that the Vendor's principal place of business is located in North Carolina.

A. Business Type (Please check the applicable box):

- Corporation (all types)
- Limited Liability Company
- General Partnership
- Limited Partnership
- Limited Liability Partnership
- Sole Proprietorship
- Individual
- Unincorporated Association
- Other: _____

B. Provide address of principal place of business:

421 Rountree Rd Charlotte, NC 28217
Street Address (no P.O. Box number)

City, State, Zip Code

Is the above address the location of Vendor's overall headquarters? YES NO

If Vendor has a public website, provide the link/address: www.raiproducts.com

C. ATTACH A COPY OF VENDOR'S MOST RECENT FILINGS WITH THE NORTH CAROLINA SECRETARY OF STATE (such as Vendor's Certificate of Authority, Annual Report or such other filing that discloses a North Carolina business address for the Vendor).

OR (check the box below)

Vendor certifies that its business is **not** required to make filings with the North Carolina Secretary of State. If box is not checked, state reason why no filings are required:

RESIDENT VENDOR'S CERTIFICATION FOR PRICE-MATCHING OPPORTUNITY

UNDER EXECUTIVE ORDER #50

NOTICE: The Price-Matching Opportunity will only be given to a Vendor that fully completes this Attachment (i.e., all information shall be provided, all supporting documents shall be attached, the affidavit shall be signed by an authorized representative of the Vendor and the affidavit shall be notarized) and demonstrates their qualifications for the Price-Matching Opportunity through the certification and information provided in this affidavit and any other required information. A certification shall be submitted with each bid for which Vendor seeks a price-matching opportunity.

Rosenblatt & Associates, Inc., d/b/a RAI Products

Affidavit of _____ (name of resident Vendor, hereinafter the "Vendor").

The undersigned hereby certifies that he or she has read this certification, that all information provided in Part I and Part II, above, is true and accurate, and that he or she is an officer, member, partner, owner or such managing employee of the Vendor (the "Authorized Representative") that is authorized to execute this affidavit and to bind the Vendor to the certifications, statements and agreements herein.

Name of Authorized Representative: John Rosenblatt
Signature: [Handwritten Signature]
Title: President
Date: 11/19/19

NOTARY:
State of North Carolina, County of Mecklenburg
Subscribed and sworn to before me this 19 day of November 2019
Notary Public: [Handwritten Signature] My commission expires April 29, 2024





AMENDED BUSINESS CORPORATION ANNUAL REPORT

SOSID: 0126558
Date Filed: 4/5/2019 11:59:00 PM
Elaine F. Marshall
North Carolina Secretary of State
CA2019 095 08347

NAME OF BUSINESS CORPORATION: Rosenblatt and Associates, Inc.
SECRETARY OF STATE ID NUMBER: 0126558 STATE OF FORMATION: NC

REPORT FOR THE FISCAL YEAR END: 12/31/2018



Filing Office Use Only
 Changes

SECTION A: REGISTERED AGENT'S INFORMATION

1. NAME OF REGISTERED AGENT: Jack Rosenblatt

2. SIGNATURE OF THE NEW REGISTERED AGENT: _____
SIGNATURE CONSTITUTES CONSENT TO THE APPOINTMENT

3. REGISTERED OFFICE STREET ADDRESS & COUNTY
421 Rountree Road
Charlotte, NC 28217 Mecklenburg

4. REGISTERED OFFICE MAILING ADDRESS
421 Rountree Road
Charlotte, NC 28217 Mecklenburg

SECTION B: PRINCIPAL OFFICE INFORMATION

1. DESCRIPTION OF NATURE OF BUSINESS: Manufacturing Rep

2. PRINCIPAL OFFICE PHONE NUMBER: (704) 525-1852 3. PRINCIPAL OFFICE EMAIL: Privacy Redaction

4. PRINCIPAL OFFICE STREET ADDRESS & COUNTY
421 Rountree Road
Charlotte, NC 28217 Mecklenburg

5. PRINCIPAL OFFICE MAILING ADDRESS
421 Rountree Road
Charlotte, NC 28217 Mecklenburg

6. Select one of the following if applicable. (Optional see instructions)
- The company is a veteran-owned small business
 - The company is a service-disabled veteran-owned small business

SECTION C: OFFICERS (Enter additional officers in Section E.)

NAME: <u>Jack E. Rosenblatt</u>	NAME: <u>John E. Rosenblatt</u>	NAME: _____
TITLE: <u>President</u>	TITLE: <u>Vice President</u>	TITLE: _____
ADDRESS: _____	ADDRESS: _____	ADDRESS: _____
<u>PO Box 240772</u>	<u>PO Box 240772</u>	_____
<u>Charlotte, NC 28224</u>	<u>Charlotte, NC 28224</u>	_____

SECTION D: CERTIFICATION OF ANNUAL REPORT. Section D must be completed in its entirety by a person/business entity.

[Signature] SIGNATURE DATE: 3/26/19
Form must be signed by an officer listed under Section C of this form.
John E. Rosenblatt Vice President
Print or Type Name of Officer Print or Type Title of Officer

ATTACHMENT G: SUPPLEMENTAL VENDOR INFORMATION

HISTORICALLY UNDERUTILIZED BUSINESSES

Historically Underutilized Businesses (HUBs) consist of minority, women and disabled business firms that are at least fifty-one percent owned and operated by an individual(s) of the categories. Also included in this category are disabled business enterprises and non-profit work centers for the blind and severely disabled.

Pursuant to G.S. 143B-1361(a), 143-48 and 143-128.4, the State invites and encourages participation in this procurement process by businesses owned by minorities, women, disabled, disabled business enterprises and non-profit work centers for the blind and severely disabled. This includes utilizing subcontractors to perform the required functions in this IFB. Any questions concerning NC HUB certification, contact the North Carolina Office of Historically Underutilized Businesses at (919) 807-2330. The Vendor shall respond to question #1 and #2 below.

- a) Is Vendor a Historically Underutilized Business? Yes No
- b) Is Vendor Certified with North Carolina as a Historically Underutilized Business? Yes No

If so, state HUB classification: _____

SUSTAINABILITY

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.

Do the items offered have any recycled content? Yes No

If yes, what is the post-consumer recycled content? _____% What is the total recycled content? _____%

Other sustainable properties:

ATTACHMENT H: SUPPLEMENTAL INFORMATION TECHNOLOGY TERMS & CONDITIONS

1. **Standards:** Manufactured items and/or fabricated assemblies comprising Deliverables shall meet all requirements of the Occupational Safety and Health Act (OSHA), and State and federal requirements relating to clean air and water pollution, if applicable. Vendor will provide and maintain a quality assurance system or program that includes any Deliverables and will tender to the State only those Deliverables that have been inspected and found to conform to the requirements of this Contract. All manufactured items and/or fabricated assemblies comprising Deliverables are subject to operation, certification or inspection, and accessibility requirements as required:

- by State or Federal Regulation,
 - by the Chief Information Officer's (CIO) policy or regulation, or
 - acceptance with appropriate standards of operations or uses of said Deliverables as may be shown by identification markings or other means of the appropriate certifying standards organization.
- a) **Site Preparation:** Vendors shall provide the Purchasing State Agency complete site requirement specifications for the Deliverables, if any. These specifications shall ensure that the Deliverables to be installed shall operate properly and efficiently within the site environment. The Vendor shall advise the State of any site requirements for any Deliverables required by the State's specifications. Any alterations or modification in site preparation which are directly attributable to incomplete or erroneous specifications provided by the Vendor and which would involve additional expenses to the State, shall be made at the expense of the Vendor.
- b) **Goods Return:** Deliverables and any other goods or materials furnished by the Vendor to fulfill technical requirements shall be in good working order and be maintained in good working order by Vendor for the duration of the Contract; unless otherwise provided in a separate maintenance agreement or in the Solicitation Documents. Deliverables failing to meet the State's technical requirements shall be considered non-conforming goods and subject to return to the Vendor for replacement at the State's option, and at the Vendor's expense. The State is responsible for the return costs related to the termination of a Contract, including deinstallation, and freight to destinations within the Continental United States; except in the case of default by the Vendor or delivery of non-conforming goods by Vendor. Shipping or freight charges, if any, paid by the State for non-conforming goods will be reimbursed to the State.
- c) **Specifications:** The apparent silence of the specifications as to any detail, or the apparent omission of detailed description concerning any point, shall be regarded as meaning that only the best commercial practice is to prevail and only material and workmanship of the first quality may be used. Upon any notice of noncompliance provided by the State, Vendor shall supply proof of compliance with the specifications. Vendor must provide written notice of its intent to deliver alternate or substitute products, goods or Deliverables. Alternate or substitute products, goods or Deliverables may be accepted or rejected in the sole discretion of the State; and any such alternates or substitutes must be accompanied by Vendor's certification and evidence satisfactory to the State that the function, characteristics, performance and endurance will be equal or superior to the original Deliverables specified.

2. **Warranties:** Vendor shall assign all applicable third party warranties for Deliverables to the Purchasing State Agency.

3. **Subcontracting:** The Vendor may subcontract the performance of required services with other Vendors or third parties, or change subcontractors, only with the prior written consent of the contracting authority. Vendor shall provide the State with complete copies of any agreements made by and between Vendor and all subcontractors. The selected Vendor remains solely responsible for the performance of its subcontractors. Subcontractors, if any, shall adhere to the same standards required of the selected Vendor. Any contracts made by the Vendor with a subcontractor shall include an affirmative statement that the State is an intended third party beneficiary of the contract; that the subcontractor has no agreement with the State; and that the State shall be indemnified by the Vendor for any claim presented by the subcontractor. Notwithstanding any other term herein, Vendor shall timely exercise its contractual remedies against any non-performing subcontractor and, when appropriate, substitute another subcontractor.

4. Vendor's Representation: Vendor warrants that qualified personnel will provide services in a professional manner. "Professional manner" means that the personnel performing the services will possess the skill and competence consistent with the prevailing business standards in the information technology industry. Vendor agrees that it will not enter any agreement with a third party that might abridge any rights of the State under this Contract. Vendor will serve as the prime Vendor under this Contract. Should the State approve any subcontractor(s), the Vendor shall be legally responsible for the performance and payment of the subcontractor(s). Names of any third party Vendors or subcontractors of Vendor may appear for purposes of convenience in Contract documents; and shall not limit Vendor's obligations hereunder. Third party subcontractors, if approved, may serve as subcontractors to Vendor. Vendor will retain executive representation for functional and technical expertise as needed in order to incorporate any work by third party subcontractor(s).

- a) Intellectual Property. Vendor has the right to provide the Services and Deliverables without violating or infringing any law, rule, regulation, copyright, patent, trade secret or other proprietary right of any third party. Vendor represents that its Services and Deliverables are not the subject of any actual or threatened actions arising from, or alleged under, any intellectual property rights of any third party.
- b) Inherent Services. If any Services, Deliverables, functions, or responsibilities not specifically described in this Contract are required for Vendor's proper performance, provision and delivery of the Service and Deliverables pursuant to this Contract, or are an inherent part of or necessary sub-task included within the 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 in the Contract, 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 Deliverables
- c) Vendor warrants that it has the financial capacity to perform and to continue 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
- d) Warranty as to Equipment; Hardware. Vendor warrants that the equipment and hardware that it provides pursuant to this Contract shall be free from defects in materials, in good working order and be maintained in good working order.

5. Software License (for internal embedded software, firmware and unless otherwise provided in the State's solicitation document, or in an attachment hereto): Deliverables comprising goods, equipment or products (hardware) may contain software for internal operation, or as embedded software or firmware that is generally not sold or licensed as a severable software product. Software may be provided on separate media, such as floppy diskettes or CD-ROM, or may be included within the hardware at or prior to delivery. Such software is proprietary, copyrighted, and may also contain valuable trade secrets and may be protected by patents. Vendor grants the State a license to use the Code (or any replacement provided) on, or in conjunction with, only the Deliverables purchased, or with any system identified in the solicitation documents. The State shall have a worldwide, nonexclusive, non-sublicensable license to use such software and/or documentation for its internal use. The State may make and install copies of the software to support the authorized level of use. Provided, however that if the hardware is inoperable, the software may be copied for temporary use on other hardware. The State shall promptly affix to any such copy the same proprietary and copyright notices affixed to the original. The State may make one copy of the software for archival, back-up or disaster recovery purposes. The license set forth in this Paragraph shall terminate immediately upon the State's discontinuance of the use of the equipment on which the software is installed. The software may be transferred to another party only with the transfer of the hardware. If the hardware is transferred, the State shall i) destroy all software copies made by the State, ii) deliver the original or any replacement copies of the software to the transferee, and iii) notify the transferee that title and ownership of the software and the applicable patent, trademark, copyright, and other intellectual property rights shall remain with Vendor, or Vendor's licensors. The State shall not disassemble, decompile, reverse engineer, modify, or prepare derivative works of the embedded software, unless permitted under the solicitation documents.

6. Maintenance/Support Services: Unless otherwise provided in the State's solicitation document, or in an attachment hereto, for the first year and all subsequent Contract years, Vendor agrees to provide the following

services for the current version and one previous version of any Software provided with the Deliverables, commencing upon installation of the Deliverables or delivery of the Software:

- a) Error Correction. Upon notice by State of a problem with the Software (which problem can be verified), Vendor shall use reasonable efforts to correct or provide a working solution for the problem. The State shall comply with all reasonable instructions or requests of Vendor in attempts to correct an error or defect in the Program. Vendor and the State shall act promptly and in a reasonably timely manner in communicating error or problem logs, other related information, proposed solutions or workarounds, and any action as may be necessary or proper to obtain or affect maintenance services under this Paragraph.
 - b) Vendor shall notify the State of any material errors or defects in the Deliverables known, or made known to Vendor from any source during the Contract term that could cause the production of inaccurate, or otherwise materially incorrect, results. Vendor shall initiate actions as may be commercially necessary or proper to effect corrections of any such errors or defects.
 - c) Updates. Vendor shall provide to the State, at no additional charge, all new releases and bug fixes (collectively referred to as "Changes") for any Software Deliverable developed or published by Vendor and made generally available to its other customers at no additional charge. All such Updates shall be a part of the Program and Documentation and, as such, be governed by the provisions of this Contract.
 - d) Telephone Assistance. Vendor shall provide the State with telephone access to technical support engineers for assistance in the proper installation and use of the Software, and to report and resolve Software problems, during normal business hours, 8:00 AM - 5:00 PM Eastern Standard Time, Monday-Friday. Vendor shall respond to the telephone requests for Program maintenance service, within four hours, for calls made at any time.
- 7. Patent, Copyright, and Trade Secret Protection:**
- a) Vendor has created, acquired or otherwise has rights in, and may, in connection with the performance of services for the State, employ, provide, create, acquire or otherwise obtain rights in various concepts, ideas, methods, methodologies, procedures, processes, know-how, techniques, models, templates and general purpose consulting and software tools, utilities and routines (collectively, the "Vendor Technology"). To the extent that any Vendor Technology is contained in any of the Deliverables including any derivative works, the Vendor hereby grants the State a royalty-free, fully paid, worldwide, perpetual, non-exclusive license to use such Vendor Technology in connection with the Deliverables for the State's purposes.
 - b) Vendor shall not acquire any right, title and interest in and to the copyrights for goods, any and all software, technical information, specifications, drawings, records, documentation, data or derivative works thereof, or other work products provided by the State to Vendor. The State hereby grants Vendor a royalty-free, fully paid, worldwide, perpetual, non-exclusive license for Vendor's internal use to non-confidential Deliverables first originated and prepared by the Vendor for delivery to the State.
 - c) The Vendor, at its own expense, shall defend any action brought against the State to the extent that such action is based upon a claim that the services or Deliverables supplied by the Vendor, or the operation of such Deliverables pursuant to a current version of Vendor-supplied software, infringes a patent, or copyright or violates a trade secret in the United States. The Vendor shall pay those costs and damages finally awarded against the State in any such action. Such defense and payment shall be conditioned on the following:
 - i) That the Vendor shall be notified within a reasonable time in writing by the State of any such claim; and,
 - ii) That the Vendor shall have the sole control of the defense of any action on such claim and all negotiations for its settlement or compromise, provided, however, that the State shall have the option to participate in such action at its own expense.
 - d) Should any services or software supplied by Vendor, or the operation thereof become, or in the Vendor's opinion are likely to become, the subject of a claim of infringement of a patent, copyright, or a trade secret in the United States, the State shall permit the Vendor, at its option and expense, either to procure for the State the right to continue using the goods/hardware or software, or to replace or modify the same to become noninfringing and continue to meet procurement specifications in all material respects. If neither of these options can reasonably be taken, or if the use of such goods/hardware or software by the State shall be prevented by injunction, the Vendor agrees to take back such goods/hardware or software, and refund any sums the State has paid Vendor less any reasonable amount for use or damage and make every reasonable effort to assist the State in procuring substitute Deliverables. If, in the sole opinion of the State, the return of

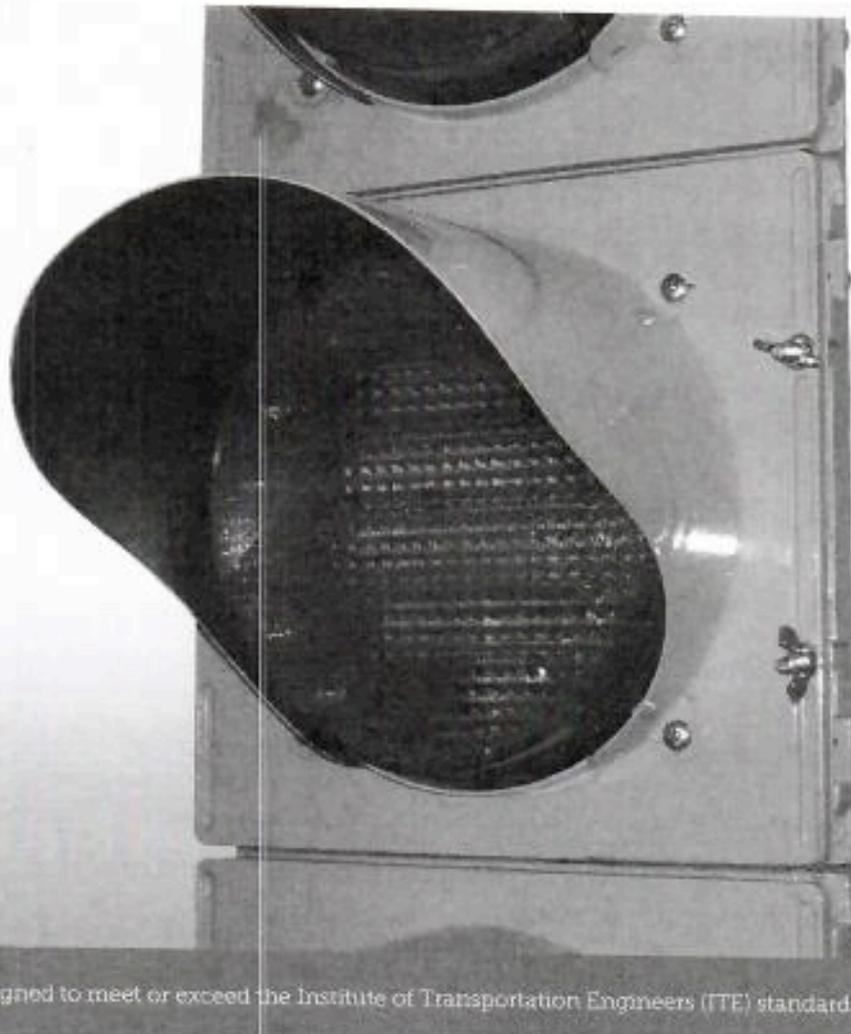
such infringing Deliverables makes the retention of other items of Deliverables acquired from the Vendor under this Contract impractical, the State shall then have the option of terminating the Contract, or applicable portions thereof, without penalty or termination charge. The Vendor agrees to take back such Deliverables and refund any sums the State has paid Vendor less any reasonable amount for use or damage.

e) Vendor will not be required to defend or indemnify the State if any claim by a third party against the State for infringement or misappropriation (i) results from the State's alteration of any Vendor-branded product or Deliverable, or (ii) results from the continued use of the good(s) or Services and Deliverables after receiving notice they infringe a trade secret of a third party.

f) Nothing stated herein, however, shall affect Vendor's ownership in or rights to its preexisting intellectual property and proprietary rights.

8. Date and Time Warranty: The Vendor warrants that any Deliverable, whether hardware, firmware, middleware, custom or commercial software, or internal components, subroutines, and interface therein which performs any date and/or time data recognition function, calculation, or sequencing, will provide accurate date/time data and leap year calculations. This warranty shall survive termination or expiration of the Contract.

8" Aluminum Vehicle Signal



All Econolite signals are designed to meet or exceed the Institute of Transportation Engineers (ITE) standards.

About Signals

Traffic and pedestrian signals represent the foundation of safety at any signalized intersection. They also represent the first, and arguably the most important, interaction motorists, bicyclists and pedestrians have with Intelligent Transportation Systems (ITS).

For more than eight decades, Econolite has led the industry in both innovation and breadth of traffic and pedestrian signal solutions for virtually every application, helping transportation agencies and Metropolitan Planning Organizations (MPOs) efficiently and cost-effectively meet evolving traffic management programs.

Each aluminum traffic signal head consists of a number of identical signal sections rigidly fastened together to present a continuous, pleasing signal appearance. Each section has a separate, completely assembled housing. The traffic signal meets or exceeds the equipment standard of the Institute of Transportation Engineers' (ITE) latest revision. Constructed from corrosion resistant aluminum alloy castings and stainless steel hardware, each signal section unit is virtually weatherproof.

At A Glance

- ▷ Tested with over 80 mph wind loading on single point attachment
- ▷ Aesthetically designed - no protruding hinges or latches
- ▷ Stainless steel hardware
- ▷ Doors equipped with 2 latches
- ▷ Reversible door - left side standard, right side optional
- ▷ "Fast-on" tab terminal block
- ▷ Terminal block identifiers cast into housing

ECONOLITE



Durable Housing

Housing and door assembly die castings were designed with the aid of a computer to deliver maximum strength with minimum weight for unmatched tolerance to wind loading and resistance to knock-down damage. Corrosion resistant aluminum alloy castings and stainless steel hardware make the unit virtually immune to weathering.

Corrosion Resistant Finishes

A 90,000V negative charge is applied to the paint to insure proper application to the aluminum components. The paint is then baked on and cured in Econolite's finishing department.

Positive Sealing

The door gasket seals out dirt and moisture, while the precision-molded lens gasket provides a second barrier to outside contamination.

Shurlock Boss

Radial angular grooves cast into the top and bottom of the signal head housing (along with Econolite Shurlock fittings) permit alignment adjustments in five-degree increments and hold the head firmly in place. Two attaching washers and three bolts make it easy to add sections. They also permit any section to be rotated independently about the vertical axis and hold each section securely in place to prevent misalignment.

Terminal Block

One five-position terminal block with "Fast-on" tabs on one side and screw clamps on the other side is provided. Mounting points for a second block are also present. Raised letters cast into the housing identify each position on the terminal block.

Basic Specifications

- ▷ **Dimensions (less visor)**
 - 10 in. H x 10.5 in. W x 6¾ in. D
- ▷ **Weight, typical:**
 - Poly = 7.2 lb (less visor)
 - Glass = 7.8 lb (less visor)
- ▷ **Standard Colors:**
 - Dark Olive Green (matches Federal Standard 595b-14056)
 - Yellow (matches Federal Standard 595b-13538)
 - Dull Black (matches Federal Standard 595b-37038)

Reversible Door Mounting

The door may be mounted on either side, permitting easy access to closely mounted signals. This is ideal for cluster-mounted signals. Two integrally-cast hinge lugs and latch screw slots are located on each side of the housing. Built upon a symmetrical concept, each housing is capable of providing either a right or left-hand door opening. While the left hinge is standard, the right hinge is optional and must be specified.

Versatility

In addition to most other manufacturers' signals, the 8-inch section may be used vertically or horizontally as a single-section beacon or in combination with 12-inch sections. Flat-back housing simplifies mounting for special applications. A complete line of visors, louvers, and back-plates is available.

ECONOLITE

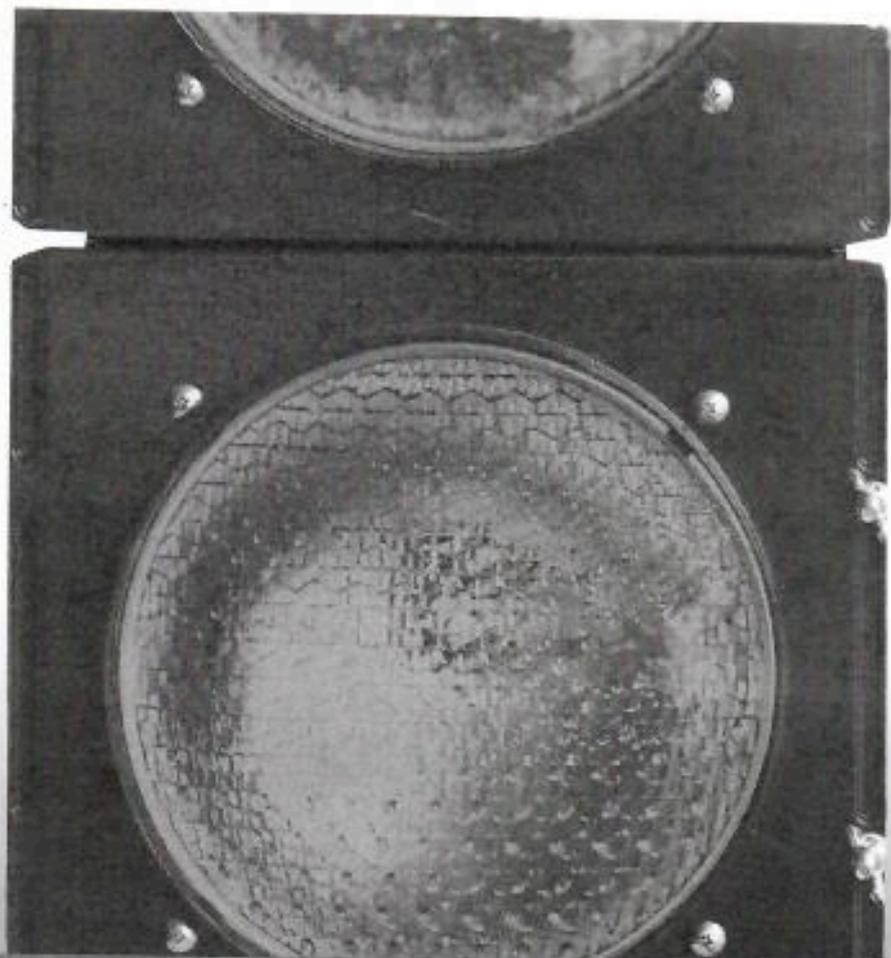


3360 E La Palma Avenue, Anaheim, CA 92806 • 714-630-3700 • sales@econolite.com • www.econolite.com

212067016-5

© 2007 Econolite Control Products, Inc. All rights reserved. Econolite Control Products, Inc. is an Econolite Group, Inc. company and reserves the right to change or update these specifications at any time without prior notification.

8-Inch Polycarbonate Signal



All Econolite signals are designed to meet or exceed the Institute of Transportation Engineers (ITE) standards.

About Signals

Traffic and pedestrian signals represent the foundation of safety at any signalized intersection. They also represent the first, and arguably the most important, interaction motorists, bicyclists and pedestrians have with Intelligent Transportation Systems (ITS).

For more than eight decades, Econolite has led the industry in both innovation and breadth of traffic and pedestrian signal solutions for virtually every application, helping transportation agencies and Metropolitan Planning Organizations (MPOs) efficiently and cost-effectively meet evolving traffic management programs.

Polycarbonate provides transportation agencies and MPOs with key benefits such as reduced weight, corrosion resistance and reduced maintenance. Reduced weight is necessary when adding signals to existing mast arms or new longer reach structures. Polycarbonate signals are also less susceptible to corrosion in high humidity applications, as well as pitting from sand in high wind areas. Each traffic signal consists of a number of identical polycarbonate signal sections rigidly fastened together to present a continuous, attractive appearance. Each section has a separate and complete housing. The traffic signal meets or exceeds the latest version of the equipment standard from the Institute of Transportation Engineers' (ITE).

At A Glance

- ▷ Tested to ITE-required wind loading on a single-point attachment
- ▷ Reversible door - left side standard, right side optional
- ▷ Lower maintenance with molded-on color
- ▷ Stainless steel hardware
- ▷ Doors equipped with 2 latches
- ▷ "Fast-on" tab terminal block
- ▷ Provisions for 2 five-position terminal blocks in each housing

ECONOLITE



Housing

The housing of each section is a one-piece molded ultraviolet and heat-stabilized polycarbonate unit. Two integrally-cast hinge lugs and latch screws are cast on each side of the housing. Built upon a symmetrical concept, each housing is capable of providing either right or left-hand door openings. While the left hinge is standard, the right hinge is special and must be specified. The top and bottom of the housing have openings to accommodate standard 1½-inch pipe brackets. Each signal section is rigidly attached, one above the other, by means of corrosion-resistant bolts and a washer attachment that allow sections to be rotated about a vertical axis. Alternate means for attaching sections together are available. The housing consists of four matching punch-out locations, on the top and bottom of each section, to allow sections to be bolted together with four 1½-inch and 10-32 corrosion-resistant screws.

The top and bottom of the signal housing have an integrally-cast Shurlock boss. The radial angular grooves of the Shurlock boss, when used with Shurlock fittings, provide positive five-degree increment positioning of the entire signal head to eliminate rotation or misalignment of the signal. Each housing has cast bosses for two five-position terminal blocks. Each housing has provisions for easily adding a back-plate. Hinge pins, door latching hardware, visor back-plate, and lens clip screws are high-quality stainless steel.

Wiring

Each receptacle provides two leads with "Fast-on" type terminals. Wires are color coded per customer specifications.

The lamp receptacle conductors are No. 18 AWG (or larger) 600V appliance wiring material, which conforms to Military Specification MIL-W-16878 D, Type-B with a vinyl nylon jacket rated 115°C.

Basic Specifications

- ▶ **Dimensions (less visor)**
 - 10 in. H x 10 in. W x 6 5/8 in. D
- ▶ **Weight, typical:**
 - Poly = 3.1 lb (less visor)
 - Glass = 3.65 lb (less visor)
- ▶ **Standard Colors:**
 - Dark Olive Green (matches Federal Standard 595b-14056)
 - Yellow (matches Federal Standard 595b-13538)
 - Dull Black (matches Federal Standard 595b-37038)

Terminal Block

Each complete signal face is provided with a terminal block. The terminal block is placed in the bottom section, unless otherwise specified. The terminal block for a standard three-section head is a five-position, ten-terminal, barrier-type strip. To one side of each "Fast-on" terminal strip is the attached AC common, red, yellow, and green signal section leads, leaving the opposite screw clamp terminal for field wires.

ECONOLITE

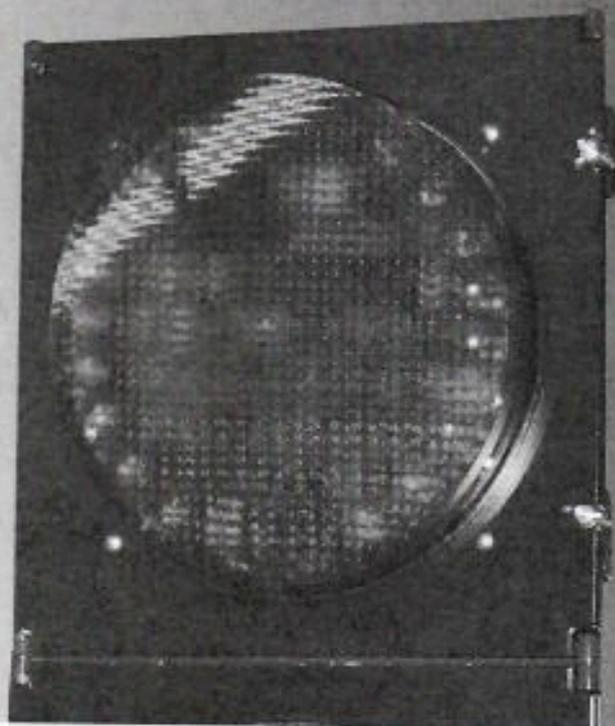


3360 E La Palma Avenue, Anaheim, CA 92806 • 714-630-3700 • sales@econolite.com • www.econolite.com

210371016-4

© 2017 Econolite Control Products, Inc. All rights reserved. Econolite Control Products, Inc. is an Econolite Group, Inc. company and reserves the right to change or update these specifications or any time without prior notification.

12-Inch Aluminum Signal



Each section has a separate and complete housing. The traffic signal meets or exceeds the latest version of the Equipment Standard from the Institute of Transportation Engineers' (ITE).

About the 12-Inch Aluminum Signal

Traffic and pedestrian signals represent the foundation of safety at any signalized intersection. They also represent the first, and arguably the most important, interaction motorists, bicyclists and pedestrians have with Intelligent Transportation Systems (ITS).

For more than eight decades, Econolite has led the industry in both innovation and breadth of traffic and pedestrian signal solutions for virtually every application, helping transportation agencies and Metropolitan Planning Organizations (MPOs) efficiently and cost-effectively meet evolving traffic management programs.

Each aluminum traffic signal head consists of a number of identical signal sections rigidly fastened together to present a continuous, pleasing signal appearance. Each section has a separate, completely assembled housing. The traffic signal meets or exceeds the equipment standard of the Institute of Transportation Engineers' (ITE) latest revision. Constructed from corrosion resistant aluminum alloy castings and stainless steel hardware, each signal section unit is virtually weatherproof.

At A Glance

- Tested to ITE required wind loading on single-point attachment
- Straight sides - no protruding hinges or latches
- Stainless steel hardware
- Reversible door - left side standard, right side optional
- Provisions for two, five, or six-position terminal blocks in each housing
- Ethylene Propylene Diene Monomer (EPDM)

ECONOLITE

Housing

The housing of each section is a one-piece corrosion-resistant aluminum alloy die-casting. Two integrally-cast hinge lugs and latch screws are cast on each side of the housing. Built upon a symmetrical concept, each housing is capable of providing either right or left-hand door openings. While the left hinge is standard, the right hinge must be specified. The top and bottom of the housing have openings to accommodate standard 1½-inch pipe brackets. Each signal section is rigidly attached, one above the other, by means of corrosion-resistant bolts and a washer attachment that allows sections to be rotated about a vertical axis. Alternate means for attaching sections together are available. The housing consists of four matching punch-out locations on the top and bottom of each section to allow sections to be bolted together with four 1½-inch and 10-32 corrosion-resistant screws.

The top and bottom openings of the signal housing have an integrally-cast Shurlock boss. The radial angular grooves of the Shurlock boss, when used with Shurlock fittings, provide positive five-degree increment positioning of the signal head to eliminate rotation or misalignment of the signal. Each housing has cast bosses for two-, five-, or six-position terminal blocks. Each position is identified with both number and function cast on housing. Each housing has provisions for easily adding a back-plate. Hinge pins, door latching hardware, visor back-plate, and lens clip screws are high-quality stainless steel.

Optical System

All LEDs shall be fully compliant to the ITE Vehicle Traffic Control Signal Heads (VTC SH) LED Circular Supplement specifications dated and adopted June 27, 2005. Tests of

the LEDs shall include but not be limited to the luminous intensity measurements and requirements outlined in the ITE specification sections 6.4.4 through 6.4.4.4.2 (25°C and 74°C/149°C).

Painting

All interior and exterior parts of the housing, door, back-plate, and visor are pre-treated for painting (door and housings are unpainted on the outside) in the following stages: Degrease, rinse, etch with an iron phosphate solution, rinse, final dionized water rinse, and then dry for 10 minutes at 400°F. The parts are then painted with a single coat of environmentally-safe, ultraviolet-resistant, polyester powder coating which is applied electrostatically at 90 kV and baked for 20 minutes at 400°F per ASTM D-3359, ASTM D-3363, and ASTM D-522. The signal head color is specified by the customer, except for the inside of the visor and the front side of the backplate which are painted dull black.

Wiring

Each receptacle provides two leads with "Fast-on" type terminals. Wires are color coded per customer specifications.

Lamp receptacle conductors are No.18 AWG (or larger) 600V appliance wiring material, which conforms to Military Specification MIL-W-16878 D, Type-B with a vinyl nylon jacket rated 115°C.

Standard Colors Are:

- Dark Olive Green (matches Federal Standard 595b-14056)
- Yellow (matches Federal Standard 595b-13538)
- Dull Black (matches Federal Standard 595b-37038)

ECONOLITE

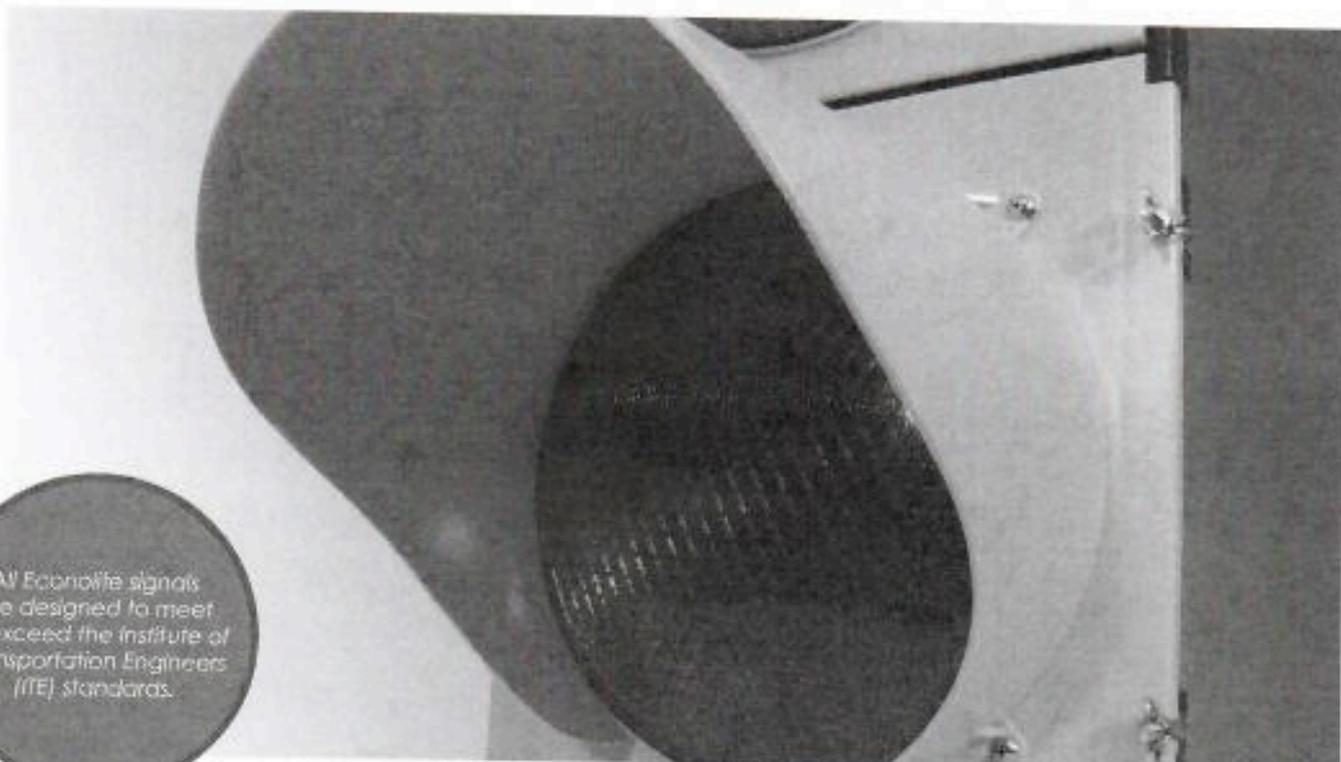
3360 E La Palma Avenue, Anaheim, CA 92806 • 714-630-3700 • sales@econolite.com • www.econolite.com

212010214-2

© 2014 Econolite Corporation, Inc. All rights reserved. Econolite Control Products, Inc. is an Econolite Group, Inc. company. All other marks are the property of their respective owners. The right to change or update these specifications at any time without notice is reserved.



12-Inch Polycarbonate Signal



All Econolite signals are designed to meet or exceed the Institute of Transportation Engineers (ITE) standards.

About the 12-inch Polycarbonate Signal

Traffic and pedestrian signals represent the foundation of safety at any signalized intersection. They also represent the first, and arguably the most important, interaction motorists, bicyclists and pedestrians have with Intelligent Transportation Systems (ITS).

Polycarbonate provides transportation agencies and MPOs with key benefits such as reduced weight, corrosion resistance and reduced maintenance. Reduced weight is necessary when adding signals to existing mast arms or new longer reach structures. Polycarbonate signals are also less susceptible to corrosion in high humidity applications, as well as pitting from sand in high wind areas. Each traffic signal consists of a number of identical polycarbonate signal sections rigidly fastened together to present a continuous, attractive appearance. Each section has a separate and complete housing. The traffic signal meets or exceeds the latest version of the equipment standard from the Institute of Transportation Engineers' (ITE).

At A Glance

- Tested to ITE required wind loading on single-point attachment
- Reversible door - left side standard, right side optional
- Doors equipped with two latches
- "Fast-on" tab terminal block
- Provisions for one five-position and one six-position terminal block in each housing
- Ethylene Propylene Diene Monomer (EPDM)

ECONOLITE



Housing

The housing of each section is a one-piece molded, ultraviolet and heat-stabilized polycarbonate unit. Two integrally-cast hinge lugs and latch screws are cast on each side of the housing. Built upon a symmetrical concept, each housing is capable of providing either right or left-hand door openings. While the left hinge is standard, the right hinge must be specified. The top and bottom of the housing have openings to accommodate standard 1½-inch pipe brackets. Each signal section is rigidly attached, one above the other, by means of corrosion-resistant bolts and a washer attachment that allows sections to be rotated about a vertical axis. Alternate means for attaching sections together are available. The housing consists of four matching punch-out locations on the top and bottom of each section to allow sections to be bolted together with four 1½-inch and 10-32 corrosion-resistant screws.

The top and bottom of the signal housing have an integrally-cast Shurlock boss. The radial angular grooves of the Shurlock boss, when used with Shurlock fittings, provide positive five-degree increment positioning of the entire signal head to eliminate rotation or misalignment of the signal. Each housing has molded bosses for one five and one six-position terminal block. Each housing has provisions for easily adding a back-plate. Hinge pins, door latching hardware, visor back-plate, and lens clip screws are high-quality stainless steel.

Housing Door

The housing door of each section is a one-piece molded ultraviolet and heat-stabilized polycarbonate unit. Two hinge lugs are molded into one side and two latch jaws are molded onto the other side. The door is attached to the housing by means of two stainless steel hinge pins. Two stainless steel "eye" bolts and wing nuts on one side of the door allow for opening and closing the signal door without the use of any

special tools. A gasket groove on the inside of the door accommodates a weatherproof and mildew-proof resilient gasket which, when the door is closed, seals flat against the housing, creating a positive seal. The outer face of the door has four metal threaded inserts, equally spaced about the circumference of the lens opening, with four screws to accommodate the signal head visors. The door and visor overlap to prevent light escaping between visor and door.

Terminal Block

Each complete signal face is provided with a terminal block. The terminal block is placed in the bottom section, unless otherwise specified. The terminal block for a standard three-section head is a five-position, ten-terminal, barrier-type strip. To one side of each "Fast-on" terminal strip is the attached AC common, red, yellow, and green signal section leads, leaving the opposite screw clamp terminal for field wires.

Visors

Visors are tunnel, full-circle, or cap, and are a minimum of ten inches long. Visors are molded from ultraviolet and heat-stabilized polycarbonate and include attaching tabs to facilitate installation.

Basic Specifications

- Dimensions - 14 in. H x 15¼ in. W x 7¾ in. D
- Weight, typical:
 - Single Section: 3.4lbs
- Standard Colors:
 - Dark Olive Green (matches Federal Standard 595b-14056)
 - Yellow (matches Federal Standard 595b-13538)
 - Dull Black (matches Federal Standard 595b-37038)

ECONOLITE

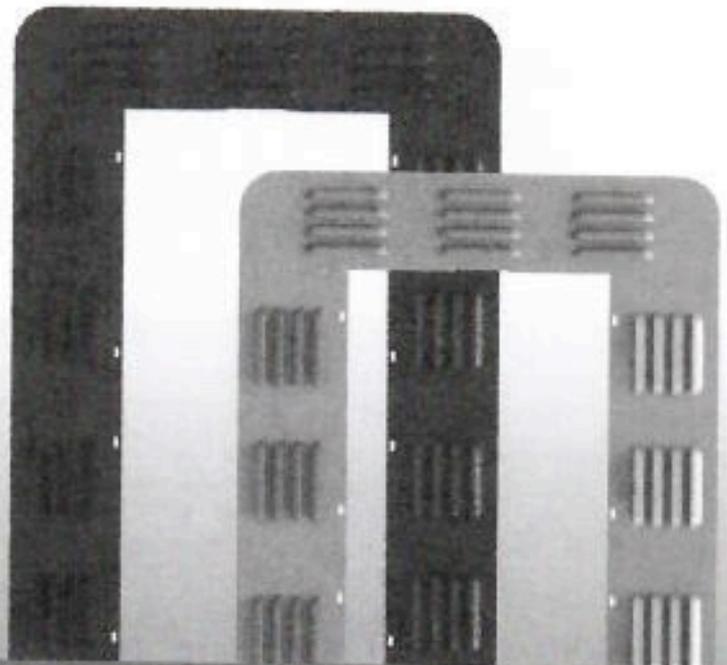
3360 E La Palma Avenue, Anaheim, CA 92806 • 714-630-3700 • sales@econolite.com • www.econolite.com

212030214-0



© 2018 Econolite Control Products, Inc. All rights reserved. Econolite Control Products, Inc. is an Emerson Group. All company content is the property of Emerson. The right to change or update these specifications at any time without prior notification.

Backplates



Durable backplates that meet or exceed the ITE Equipment Standard

About Backplates

Traffic and pedestrian signals represent the foundation of safety at any signalized intersection. They also represent the first, and arguably the most important, interaction motorists, bicyclists and pedestrians have with Intelligent Transportation Systems (ITS).

For more than eight decades, Econolite has led the industry in both innovation and breadth of traffic and pedestrian signal solutions for virtually every application, helping transportation agencies and Metropolitan Planning Organizations (MPOs) efficiently and cost-effectively meet evolving traffic management programs.

Backplates provide improved visibility of the illuminated face of the signal by introducing a controlled-contrast background. Improved signal indication visibility will lead to increased safety performance at the intersection. Adding backplates have been shown to be a cost effective method to reducing right angle crashes associated with red-light running.

At A Glance

- ▷ Aluminum or ABS material
- ▷ Available for both 8-inch and 12-inch signals
- ▷ 5-inch or 8-inch borders
- ▷ Louvers available on aluminum backplates
- ▷ Aluminum backplates painted with environmentally-safe, ultraviolet-resistant, polyester powder coating
- ▷ ABS backplates are molded flat black

 **ECONOLITE**



12" Signal with 5" Border Number of Signal Sections	One-Piece		Two-Piece	
	Length (in)	Width (in)	Length (in)	Width (in)
1	24.22	24.00	24.22	24.00
2	38.26	24.00	38.26	24.00
3	52.30	24.00	52.30	24.00
4	66.34	24.00	66.34	24.00
5	80.38	24.00	80.38	24.00
6	-	-	94.42	24.00

Cluster Backplates 12" Signal with 5" Border Number of Signal Sections	Two-Piece	
	Length (in)	Width (in)
5 (w/2.5 in filler plate)	50.98	37.00
5 (w/4.0 in filler plate)	52.48	37.00

All aluminum backplates are manufactured with 0.05 in. thick aluminum material

Reflective Trim Tape

1, 2, or 3 inch options

Specifications

- ▷ Standard Colors:
 - Dark Olive Green (matches Federal Standard 595b-14056)
 - Yellow (matches Federal Standard 595b-13538)
 - Flat Black (matches Federal Standard 595b-37038)
 - Gloss Black (matches Federal Standard 595B-17038)
- ▷ Reflective Tape Sizes:
 - 3/4", 1", 2", or 3" options
- ▷ Reflective Tape Type
 - 3M 4081 - Fluorescent Yellow - Diamond Grade
 - 3M 4091 - Yellow - Diamond Grade
 - 3M 3931 - Yellow - High Intensity Prismatic



1250 N. Tustin Avenue, Anaheim, CA 92806 · 714-630-3700 · sales@econolite.com · www.econolite.com

21201016-4

© 2017 Econolite Control Products, Inc. All rights reserved. Econolite Control Products, Inc. or Econolite Group, Inc. company and reserves the right to change or update these specifications at any time without prior notification.



PECO
 P.O. Box 343-344
 Fax 434-343-3438
 Brentwood, TN 37029
 www.pcoinc.com

This drawing is the property of Peco
 and is not to be used or copied
 without Peco's written permission.

ASSEMBLY CUT SHEET

PART NO.:

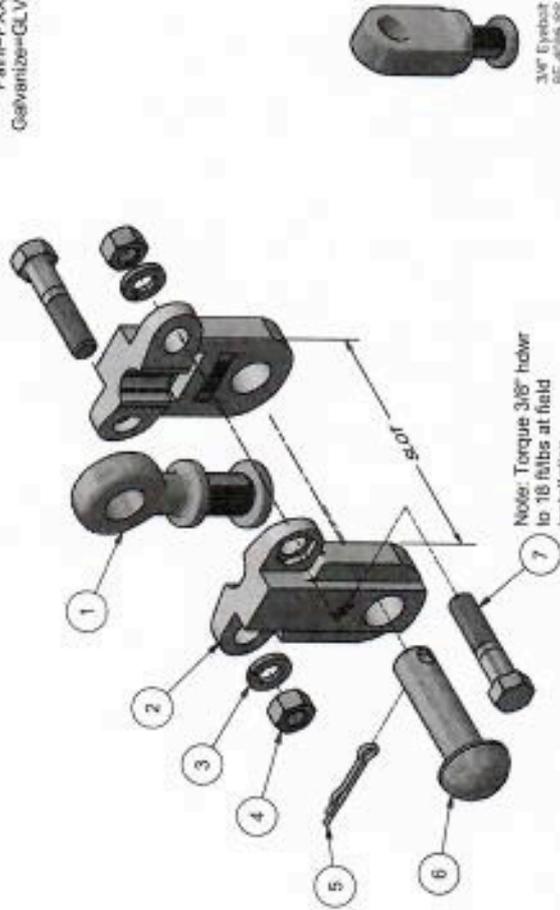
SE-3219

REF:

TITLE:
 Balance Adjuster P.A.L. (Pivot & Lock),
 Stainless Eyebolt, Steel

Example Part No.
 SE-3219-0.50-0.75-GLV
 SE-3219-0.75-0.75-SS-GLV

Slot
 Eyebolt
 Stainless Upgrade
 Paint=PXX
 Galvanizer=GLV



3/8" Eyebolt
 SE-4095-SS

OPTIONS	
Size:	
3/4" Slot & 3/4" Wide Eyebolt	
3/4" Slot & 1/2" Wide Eyebolt	
1/2" Slot & 1/2" Wide Eyebolt	
1/2" Slot & 3/4" Wide Eyebolt	
SS=Stainless Upgrade (FS-6001-SS)	
Paint	

Size	Body P/N	Eyebolt P/N
1/2"	SE-4356-GLV	SE-4410-SS
3/4"	SE-4357-GLV	SE-4095-SS

Note: Bag P.A.L. assembly & instruction bulletin #2048.

ITEM	PART NUMBER	DESCRIPTION	QTY
1	SEE CHART	Eyebolt, CF8M Stainless, Heat Treated & Solution Anneal	1
2	SEE CHART	Balance Adjuster Body, Investment Cast, C1045 Steel, Galv	2
3	FS-4205-SS	Lock Washer, Split, 3/8", Type 304 Stainless	2
4	FS-1003-SS	Nut, Hex 3/8"-16, Type 304 Stainless	2
5	FS-6100-SS	Pin, Cotter, Humped, 5/32" X 1.775", 304 Stainless	1
6	FS-6001-GLV	Pin, Crevis, 5/8" x 2" Galv	1
7	FS-2047-SS	Bolt, Hex Hd, 3/8"-16 x 1-3/4", Type 304 Stainless	2
8	B-2003	Bag, Poly, .003 x 8" x 7" Plain	1
9	Z-2049	Instructions, PAL Balance Adjuster	1



www.pelcoinc.com
 EDMOND, OK 73013
 405-340-3434
 FAX: 405-340-3435

This drawing is for reference only. It is the property of Pelco and is not to be used in whole or in part without Pelco's permission.

ASSEMBLY SHEET

REF:

TITLE:

Pole, 4"-8 NPT TOE Sch 40, Spun Alum

PART NO.:

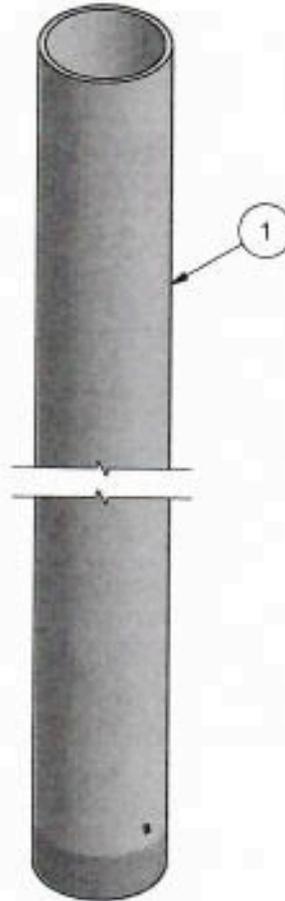
PB-5100

PART NO
 PB-5100-L-PXX

Length

Process No Color=PNC

Paint=PXX



OPTIONS

Length

Paint

ITEM	PART NUMBER	DESCRIPTION	QTY
1	PB-5100-L	Pole, 4"-8 NPT TOE Sch 40, Spun w/ Pelican, Alum	1

CRWBY: Christina Medda DATE: 11/23/2009

CHKD: KAK

DATE: 11/23/2009

REV: A-12/16/09 CM

REV: KBM

DATE: 12/17/2009

SHEET 1 OF 1



www.pelcoinc.com
 EDMOND, OK 73013
 405-340-3434
 FAX: 405-340-3435

This drawing is for reference only, it is the property of Pelco and is not to be used in whole or in part without Pelco's permission.

ASSEMBLY SHEET

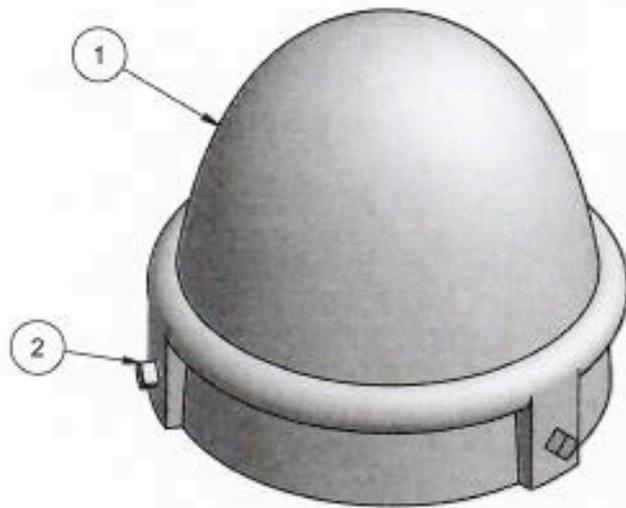
REF:

TITLE:
Pole Cap, Acorn Type, for 4-1/2" OD Pole, Alum

PART NO.:
PB-5401

PART NO
 PB-5401-PNC

Process No Color=PNC
 Paint=PXX



OPTIONS
 Paint

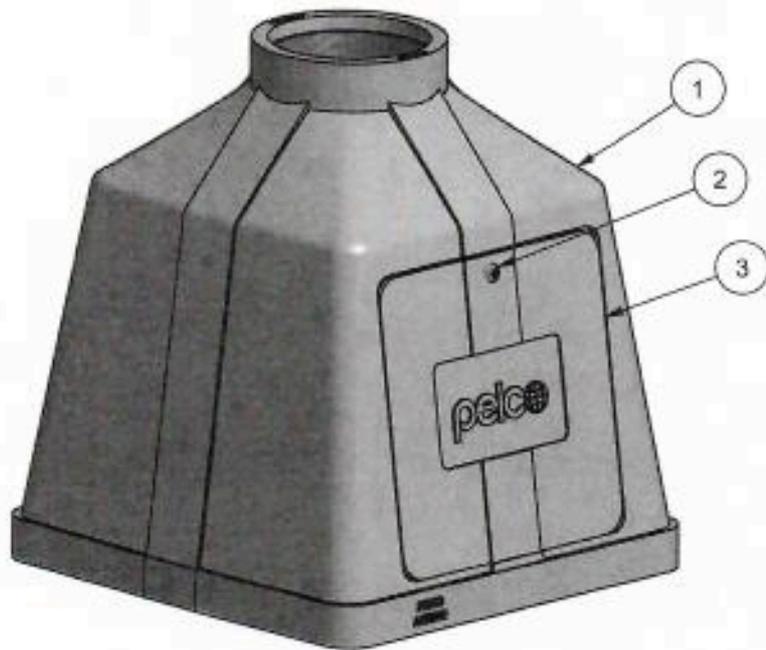
ITEM	PART NUMBER	DESCRIPTION	QTY
1	PB-5401-M1	Cap, Acorn Post, 4-1/2" OD Pole, Alum	1
2	FS-3218-SS	Set Screw, Square Hd, Cup Point, 1/4"-20 x 1/2", Type 304 Stainless	3

DRAWN: L ACORD DATE: 12/17/1990 CHECKED: KAK DATE: 2/24/2010 REV: B-02/23/10 CM REV: KAK DATE: 2/24/2010 SHEET 1 OF 1

REF:

TITLE:
Base Assy, Square w/ Alum Door, Alum

PART NO.:
PB-5334



PART NO
PB-5334-NL-1S-GL-PNC

Door, No Logo
Collar Screws
Ground Lug
Process No Color



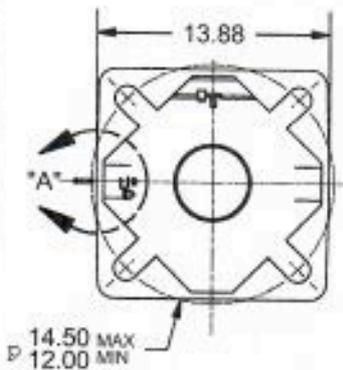
PB-0542-00
Alum Door w/o Logo



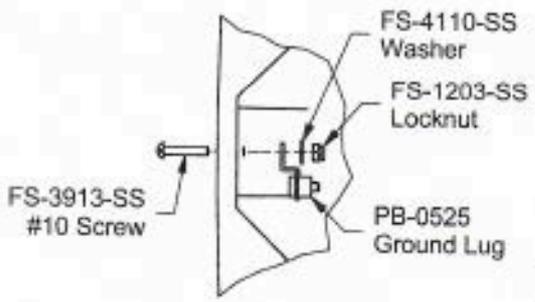
-1S = FS-2035-SS
Tap Bolt, Hex Hd
3/8"-16 x 1"



-3S = FS-3257-SS
Set Screws, Soc Hd
3/8"-16 x 3/4"
Screws in Collar



Base Bolt Circle



Bottom View
PB-5323
Grounding Lug

OPTIONS	
NL=	No Logo on Plastic Door
	Screws in Collar
1S=(1)	3/8" Hex Hd Bolt
3S=(3)	3/8" Soc Hd Set Screws
GL=	Grounding Lug
	Paint

ITEM	PART NUMBER	DESCRIPTION	QTY
1	PB-0545	Base, Square w/o door, Alum	1
2	FS-2039-SS	Screw, Soc Button Hd, 5/16"-18 x 1", Type 304 Stainless	1
3	PB-0542	Door, Square Base, w/ Pelco Logo, 319 Alum	1

Pelco/vertical.tbr 3/16/15

L. ACCORD (UWVN)	9/18/1991 DATE	KAK (D-PC-00)	1/22/2010 DATE	JLH (MFB-PNG)	12/31/2013 DATE	CJB (C)	1/6/2014 DATE	F (REV)	04/16/15 CBJ DATE	JDC (REV/CHG)	4/16/2015 DATE	SHEET 1 OF 2
---------------------	-------------------	------------------	-------------------	------------------	--------------------	------------	------------------	------------	----------------------	------------------	-------------------	--------------

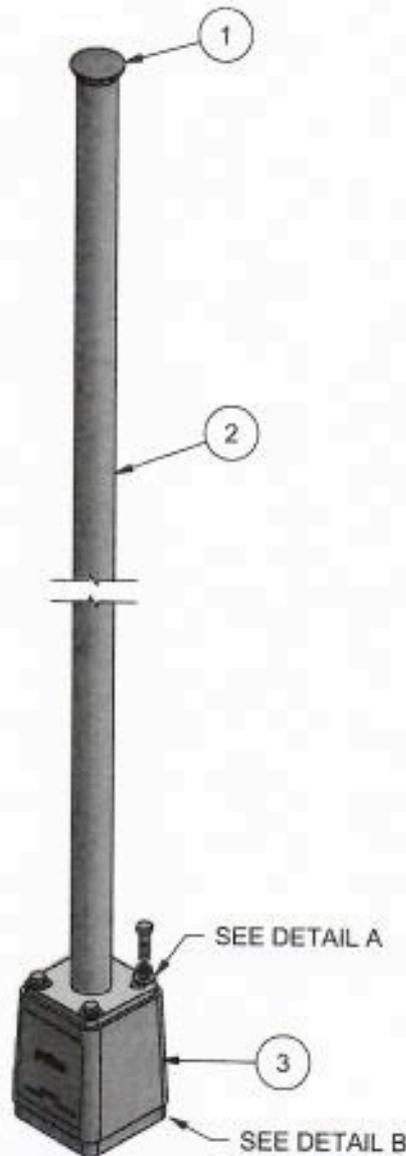
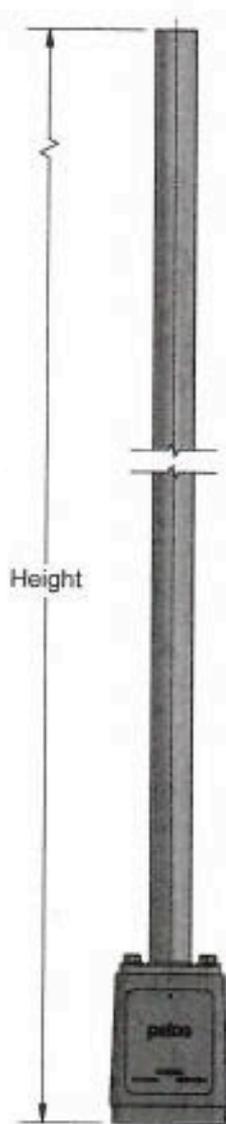


PH: 405-340-3434
 FAX: 405-340-3435
 Edmond, OK 73013
 www.pelcoinc.com

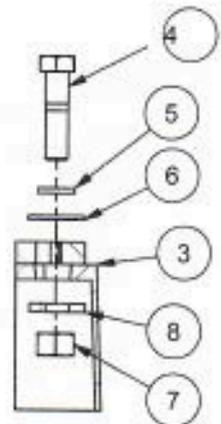
This drawing is the property of Pelco and is not to be used in whole or in part without Pelco's written permission.

ASSEMBLY SHEET

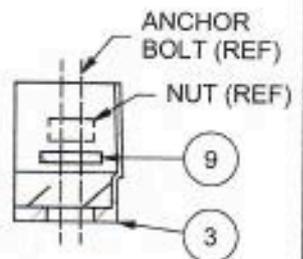
REF: State of North Carolina	TITLE: Ped Pole Assy, Heavy Duty, 4" Sch 120 x Height w/ Transformer Base, 11"-12" BC, Steel, Galv	PART NO.: SP-1009-NC
---------------------------------	---	-------------------------



PART NO	SP-1009-NC-14-PXX
Height	
Galvanized=GLV	
Paint=PXX	



DETAIL A



DETAIL B

OPTIONS
Height: 14', 17'
Paint

ITEM	PART NUMBER	DESCRIPTION	QTY
1	PB-5402-PXX	Pole Cap Assy, Dome Type, 4", Alum	1
2	PB-5620-L-GLV	Weldment, Pole & Plate, 4-1/2" OD Sch 120 x Length, 10"-11" BC, Steel, Galv	1
3	PB-5514	Transformer Base w/ Pelco Door, TB 2-17, Alum. "CAUTION" Label Shipped Loose	1
4	FS-2422-GLV	Bolt, Hex Hd, 1"-8 x 4", ASTM A-325, Galv	4
5	FS-4221-GLV	Lock Washer, Split, 1", Galv	4
6	FS-4118-GLV	Washer, Flat USS, 1", Galv	4
7	FS-1013-GLV	Nut, Hex Heavy, 1"-8, Hot Dip Galv	4
8	PB-5439-GLV	Hardware Kit, T-Base Washers, 1-1/8" ID x 2-1/2" OD x 3/8" Thk, Set of 4, Steel, Galv	1
9	PB-5440-GLV	Hardware Kit, T-Base Washers, 1-1/8" ID x 2-3/4" OD x 1/2" Thk, Set of 4, Steel, Galv	1

Pelco Assy Shw 8/17/17

CBJ	8/13/2014	JLH	8/13/2014	KAK	8/13/2014	ZSM	8/12/2014	D	01/16/18	CBJ	KAK	1/16/2018
DSWb	DATE	CHECKED	DATE	REV. ENG	DATE	QA	DATE	REV	DATE	DATE	REV. QSRD	DATE

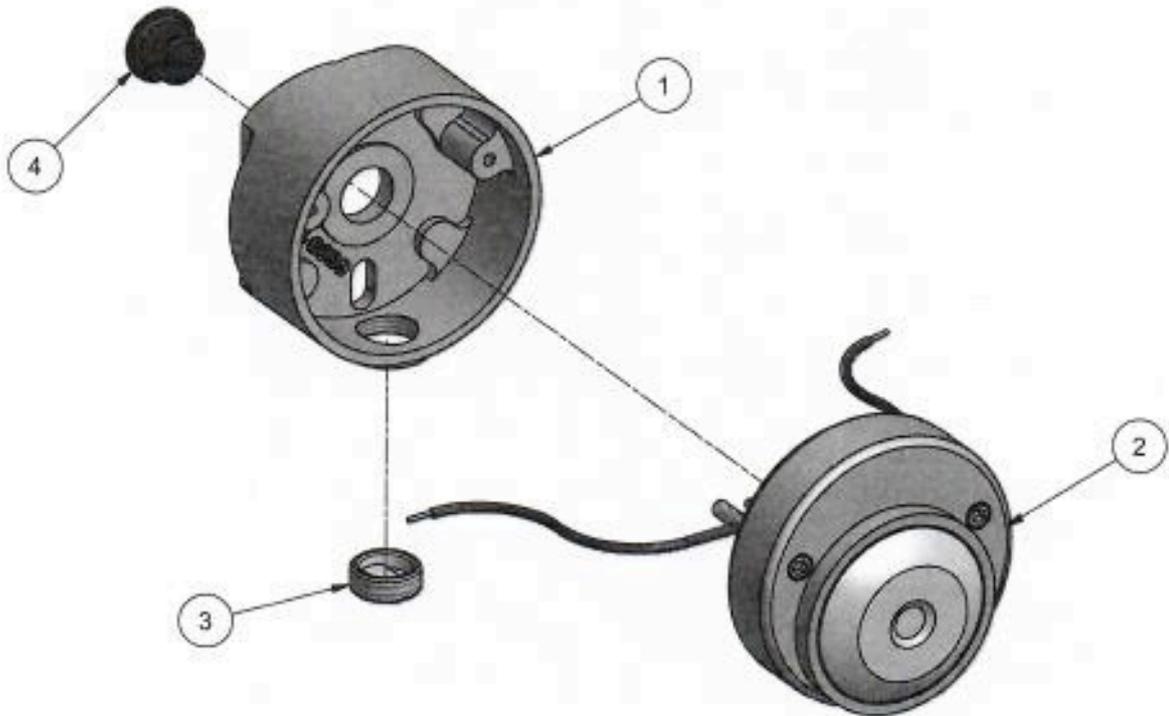
REF:

TITLE:
**PUSH BUTTON ASSY, ROUND POLE MOUNT
W/ 2" PLUNGER, ALUM**

PART NO.:
SE-2005-08

PART NO.
SE-2005-08-PXX

ALODINE=ALO
PAINT=PXX



OPTIONS
PAINT

ITEM	PART NUMBER	DESCRIPTION	QTY
1	SE-6099-M1	PUSH BUTTON BODY, ROUND POLE MOUNT, ALUM	1
2	SE-2009-08	COVER ASSY, PUSH BUTTON, W/ 2" PLUNGER, ALUM	1
3	SE-0245	PLUG, THREADED CONDUIT 1/2", DIE CAST, ALUM	1
4	SE-0296	Plug, Tapered #21 Blue	1



PH: 405-340-3434
 FAX: 405-340-3435
 Edmond, OK 73013
 www.pelcoinc.com

This drawing is for reference only. It is the property of Pelco and is not to be used in whole or in part without Pelco's written permission.

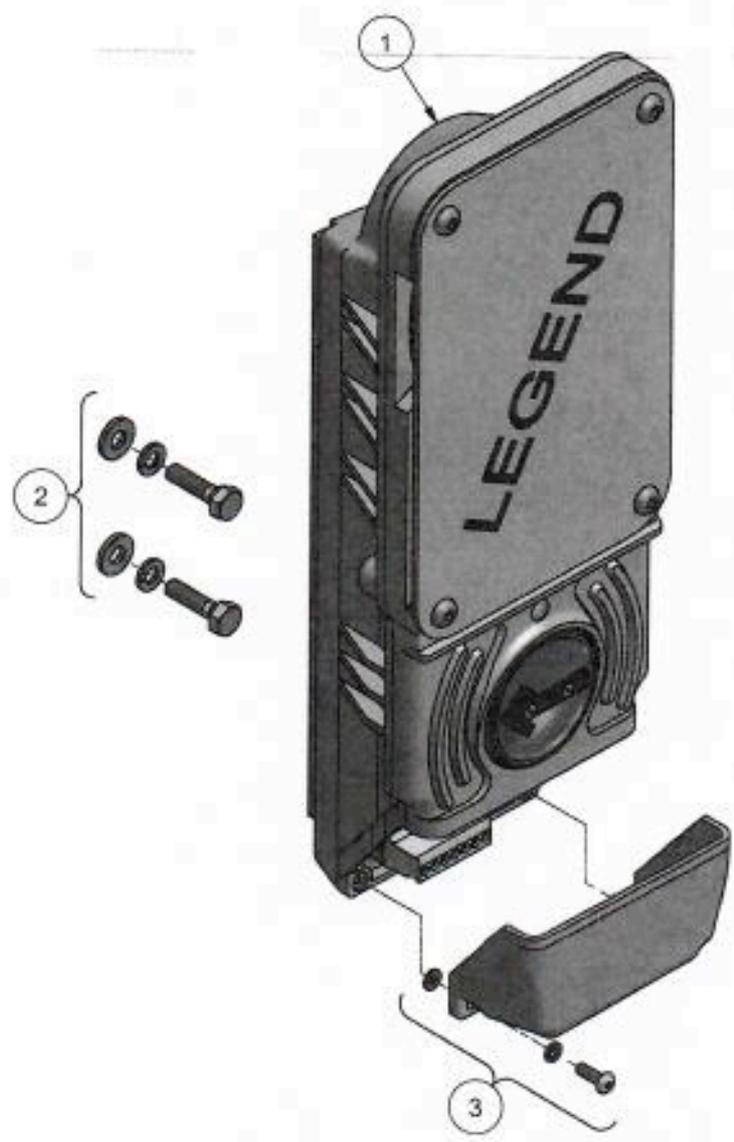
ASSEMBLY SHEET

REF:

TITLE:
**APS Assy, Intelli-Cross w/ Single Arrow,
 for 5" x 7-3/4" Sign, Alum**

PART NO.:
SE-2900

PART NO
SE-2900-PXX
 Paint



Optional Items
 Ordered Separately



SE-2171-PXX
 6x12 Sign Adapter
 w/ Hardware



SE-2174-PXX
 9x15 Sign Adapter
 w/ Hardware



SE-6170-2-EC2
 Black Double Arrow
 w/ Hardware

OPTIONS
 Paint

Note: Assembly includes Power Interface Module

ITEM	PART NUMBER	DESCRIPTION	QTY
1	AK-4014-PXX	Assy Kit, APS Intelli-Cross w/ Single Arrow, Alum	1
2	SE-2523-SS	Hardware Kit, APS Intelli-Cross Mounting, 1/4"-20, Stainless	1
3	SE-2525-PXX	Cover Kit, APS Intelli-Cross User Access, Alum	1
4	SE-6171-PNC	PIM, Power Interface Module, IntelliCross, APS	1
5	Z-2087	Instructions, APS Intelli-Cross Quick Install Guide	1
6	Z-2088	Instructions, IntelliCross Quick Start Guide	1

PelcoVertical/Rev 3/15/15

CHG/OPN DRAWN	5/18/2015 DATE	ARS CHECKED	6/9/2015 DATE	JLH MFG ENG	6/9/2015 DATE	RKV QA	6/9/2015 DATE	C REV	11/09/15 CBJ DATE	JLH REV CHGD	11/10/2015 DATE	SHEET 1 OF 1
------------------	-------------------	----------------	------------------	----------------	------------------	-----------	------------------	----------	----------------------	-----------------	--------------------	--------------

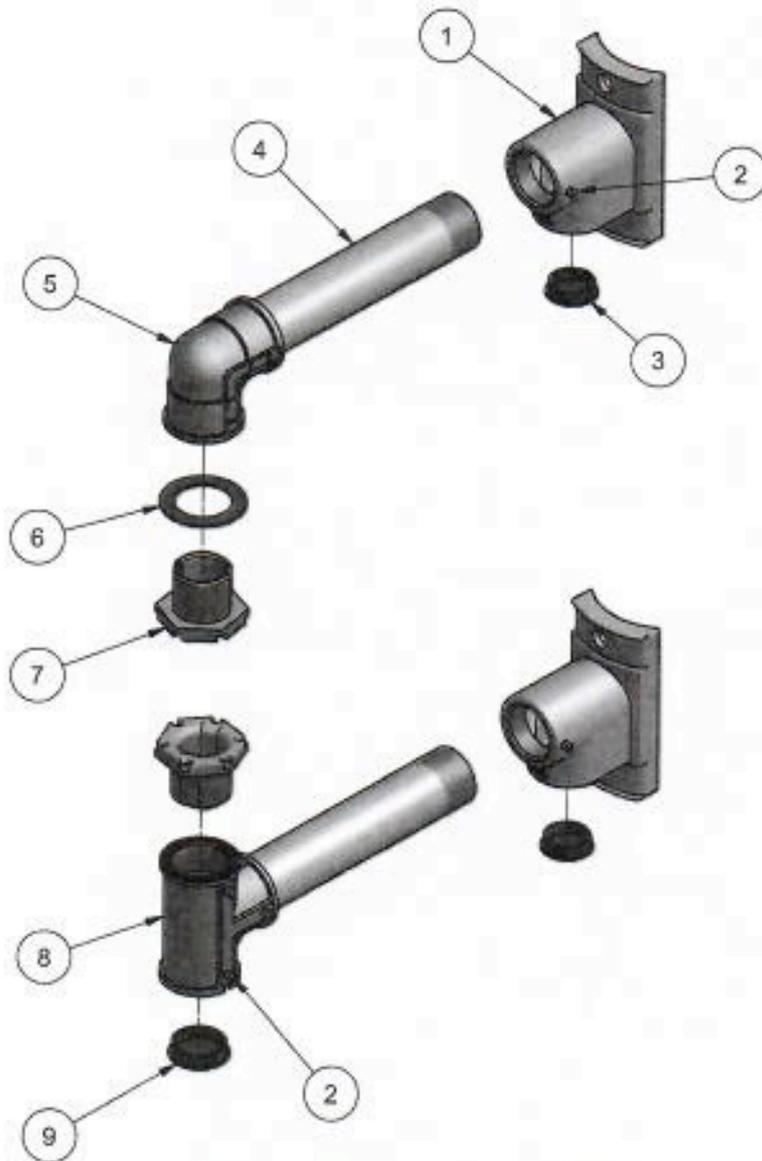
REF: Rai Products

TITLE: Side-of-Pole Assy, 1-Way Upper & Lower, Ext Hubs w/ Down Hole, Alum

PART NO.: SP-5523

PART NO
SP-5523-PNC

Process No Color=PNC
Paint=PXX



OPTIONS
Paint

ITEM	PART NUMBER	DESCRIPTION	QTY
1	SE-0381-M2	Hub Plate, Extended 1-1/2" NPS w/ 1-1/4" NPT Downhole, Alum	2
2	FS-3218-SS	Set Screw, Square Hd, Cup Point, 1/4"-20 x 1/2", Type 304 Stainless	7
3	SE-0419-PXX	Fitting Cap, 1-1/4", Plastic	2
4	SE-0436-10	Nipple, 1-1/2" NPS x 10", Alum	2
5	SE-0457-M1	Elb, Serrated, 1 1/2" NPS, Alum	1
6	SE-0354-PNC	Gasket, 70 Duro Neoprene	1
7	SE-0443-PNC	Nipple, Hex, 1-1/2" NPS, Alum	2
8	SE-0458-M1	Tee, Serrated, 1-1/2" NPS, Alum	1
9	SE-0304-PXX	Cap, Fitting, 1-1/2", Plastic	1



www.pelcoinc.com
 EDMOND, OK 73013
 405-340-3434
 FAX: 405-340-3435

This drawing is for reference only. It is the property of Pelco and is not to be used in whole or in part without Pelco's permission.

ASSEMBLY SHEET

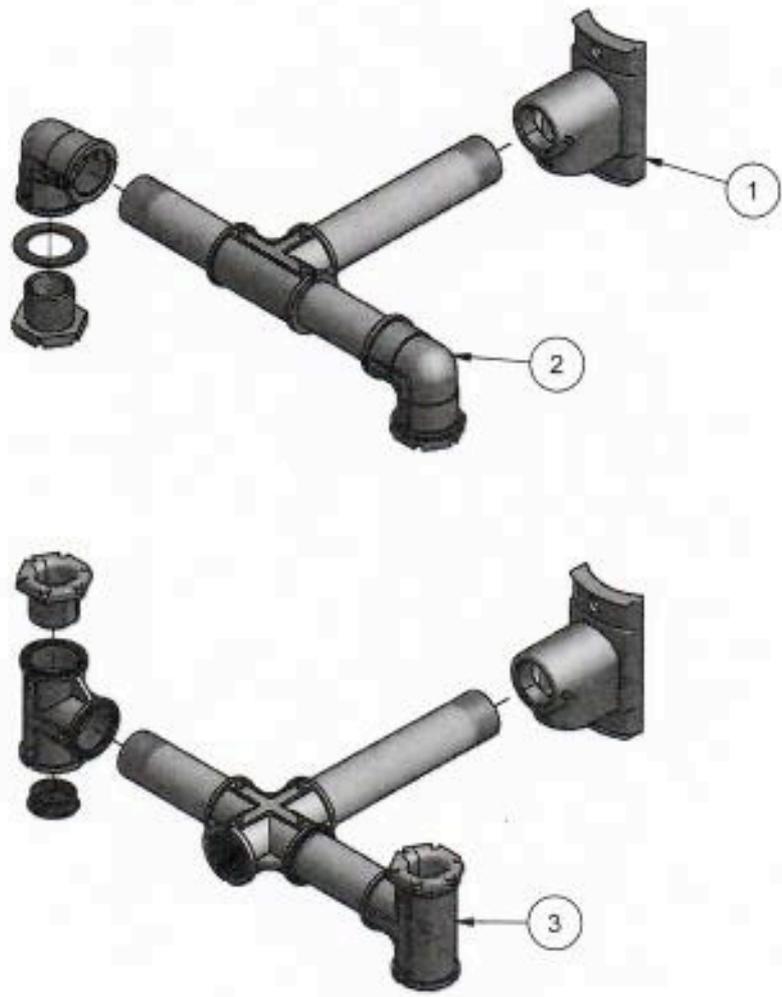
REF: Rai Products

TITLE: Side-of-Pole Assy, 2-Way Upper & Lower, Ext Hubs w/ Down Hole, 16-1/2" CTC, Alum

PART NO.: SP-5522

PART NO
 SP-5522-PNC

Process No Color=PNC
 Paint=PXX



OPTIONS
 Paint

ITEM	PART NUMBER	DESCRIPTION	QTY
1	SE-0382-P29	Hub Plate, Extended, 1-1/2" NPS w/ 1-1/4" NPT Downhole & Set Screw, Alum	2
2	SE-3014-P29	Side-of-Pole Assy, 2-Way Upper Arm, 16-1/2' CTC, Alum	1
3	SE-3015-P29	Side-of-Pole Assy, 2-Way Lower Arm, 16-1/2' CTC, Alum	1

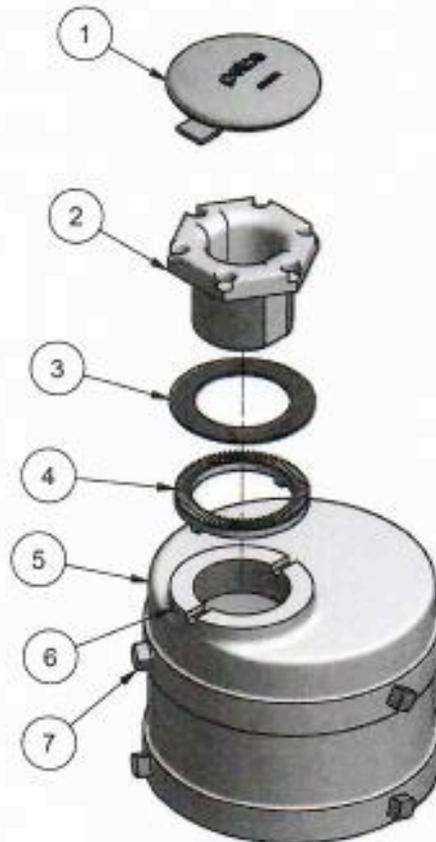
REF:

TITLE:
Slip Fitter Assy, 1-Way Offset for 4-1/2" OD Pole, Alum

PART NO.:
SE-3310

PART NO
SE-3310-PNC

Process No Color=PNC
Paint=PXX



Important:
Use this assembly in conjunction w/ Econolite Ped Housings

Note:
The off-set is necessary for the proper opening and closing of the door

OPTIONS
Paint

ITEM	PART NUMBER	DESCRIPTION	QTY
1	SE-3054-PXX	Kit, Signal Closure	1
2	SE-0443-PNC	Nipple, Hex, 1-1/2" NPS, Alum	1
3	SE-0354-PNC	Gasket, 70 Duro Neoprene	1
4	SE-0360-PNC	Lockring, Serrated, 380 Die Cast Alum	1
5	SE-3107-M1	Slip Fitter, 1-Way Offset, Alum	1
6	FS-3217-SS	Set Screw, Soc Hd, 1/4"-20 x 3/8", Type 304 Stainless	1
7	FS-3204-SS	Set Screw, Square Hd, Cup Point, 3/8"-16 x 3/4", Type 304 Stainless	6



www.pelcoinc.com
 EDMOND, OK 73013
 405-340-3434
 FAX: 405-340-3435

This drawing is for reference only. It is the property of Pelco and is not to be used in whole or in part without Pelco's permission.

ASSEMBLY SHEET

REF:

TITLE:

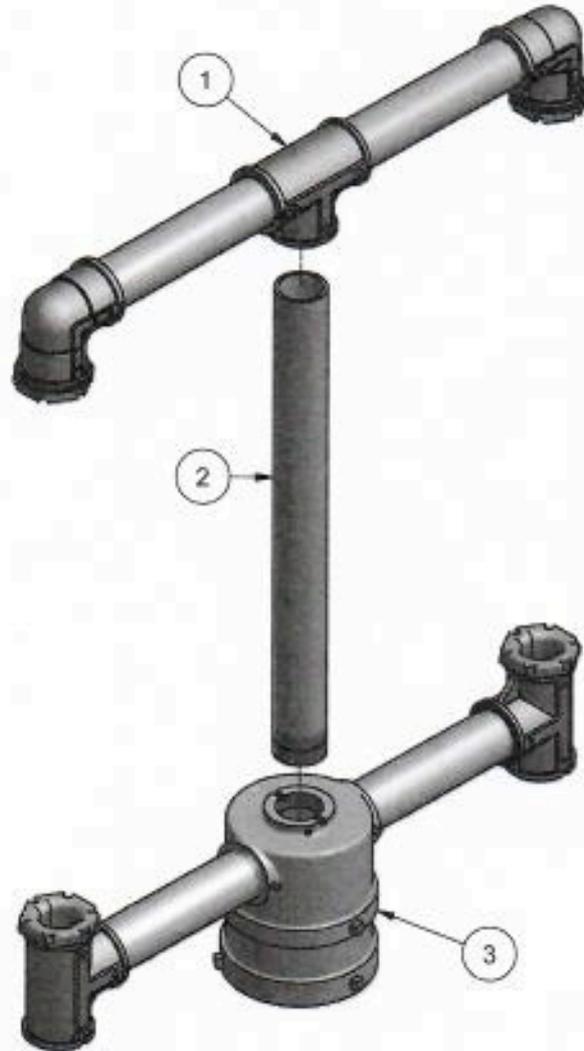
Slip Fitter Assy, 2-Way, for ICC Ped Head Signals, 24-1/2" CTC, Alum

PART NO.:

SE-3257

Part No
 SE-3257-PNC

Process No Color=PNC
 Paint=PXX



Options
 Paint

ITEM	PART NUMBER	DESCRIPTION	QTY
1	SE-3010-24.5-PXX	Slip Fitter Assy, 2-Way Upper for ICC Ped Head Signals, 24 1/2" CTC, Alum	1
2	SE-0326-20-PXX	Support Tube, 1-1/2" NPS x Length, Alum	1
3	SE-3005-24.5-PXX	Slip Fitter Assy, 2-Way Lower for ICC Ped Head Signals, 24-1/2" CTC, Alum	1

DRAWN: L ACORD DATE: 1/13/1999 CHECKED: R WOODS DATE: 8/10/2005 REV: H-10/5/10-KG REV CHECKED: KAW DATE: 10/5/2010 SHEET 1 OF 1

16-Inch LED Aluminum Pedestrian Signal

The 16-inch pedestrian signal is specifically designed to accept all LED manufacturer's modules.

General

The 16-inch LED aluminum pedestrian signal includes a cast aluminum housing, a solid-state LED indication message lens, a single-piece cast aluminum swing-down door, a "Solar Screen" sun visor, a terminal block, and optional mounting hardware.

The 16-inch LED aluminum pedestrian signal displays bright and uniform symbol messages - "HAND" in Portland Orange and "PEDESTRIAN" in Lunar White. The pedestrian signal is designed to be easily visible during extreme ambient light conditions.

Housing

The housing is a one-piece, corrosion-resistant, aluminum alloy die-casting. Two integrally-cast hinge lugs and screw slots are on each side of the housing. Through symmetrical design, the housing is capable of providing a swing-down door opening.

The housing has two openings to accommodate standard 1½-inch pipe brackets. The top and bottom opening of the signal housing have an integrally-cast Shurlock boss. The radial angular grooves of the Shurlock boss, when used with Shurlock fittings, provide positive five-degree increment positioning of the signal head to eliminate rotation or misalignment of the signal. Each housing includes cast bosses for one three-terminal pair (six-screw) terminal block.

Door

The door consists of a one-piece, corrosion-resistant, aluminum alloy die-casting. Two hinge lugs are cast on top of the door and two latch points are cast on the bottom.



The door is attached to the housing by means of two hinge pins. Two eye bolts and wing nuts on one side of the door are provided for opening and closing the door without the use of special tools.

A gasket groove on the inside of the door will accommodate a weatherproof and mildew-proof resilient gasket which, when the door is closed, will seal against a raised bead on the housing, creating a positive seal.

The Solar Screen visor is inserted through the back side of the door. The visor overlaps the door by ½ inch and is sealed when the door is closed to prevent light from escaping between the visor and the door.

Features

- Slim profile, allowing for 5% less weight than the alternatives
- Mounts left or right with use of the side mount bracket
- Reduced energy consumption - up to 90% less energy consumption than pedestrian signals with incandescent lamps
- Meets or exceeds applicable Institute of Transportation Engineers (ITE) specification
- Outlasts neon and incandescent lighting
- No LED "Hot Spots"
- "Fast-on" tab terminal block

Field Terminal Assembly

The field terminal assembly includes a three-terminal pair (six-screw) type terminal block for termination of the three field wires for AC (+) for the HAND display, AC (+) for the PEDESTRIAN display, and AC (-). Connected to the opposite side of these terminals is a pigtail lead. The free end of each lead is terminated with an insulated female quick-disconnect socket that mates with the male lug, supplied on the message module. The field terminal assembly includes an aluminum base or back-plate that is bolted to the signal housing.

LED Option

The LED module is a fully-encapsulated LED HAND/PEDESTRIAN module. The LED PC board is enclosed in a plastic module and is mounted to be impervious to shocks generated during shipping, handling, and installation. In order to facilitate installation and maintenance, the signal is designed so that the LED message module is removable and the field wiring terminals are readily accessible from the front by merely opening the signal door. The rear of the tray provides three male quick-disconnect lugs for connection of AC (+) for the HAND display, AC (+) for the PEDESTRIAN display, and AC (-). The tray is sealed with a 1/8-inch (3 mm) clear, UV-stabilized, refraction-type, 3/16-inch polycarbonate lens which is weather, craze, and heat resistant. The module is further sealed with a

one-piece Ethylene Propylene Diene Monomer (EPDM) neoprene gasket fitted around the perimeter to provide positive protection of the enclosed LEDs and electronics from handling, weather, and moisture. Removal and insertion of the module does not require the use of tools.

Messages are displayed in the Portland Orange "HAND" and the Lunar White "PEDESTRIAN", illuminated by multiple configuration Light-Emitting Diodes. The "HAND" and "PEDESTRIAN" symbols are each a minimum of 12 inches in height and seven inches in width and are configured as shown in the Manual on Uniform Traffic Control Devices (MUTCD).

Solar Screen Visor Option

The Solar Screen visor option is designed to eliminate sun phantom and minimize damage to the LED signal module.

The Solar Screen visor is installed parallel to the face of the "HAND/PEDESTRIAN" symbol. The Solar Screen visor assembly is held in place by the use of stainless steel screws.

The Solar Screen assembly consists of a minimum of 20 straight horizontal louvers and 21 zigzag pattern horizontal louvers.

Warranty

The entire pedestrian signal, including LEDs, solid-state control, and polycarbonate parts, are warranted for one year from the date of original ship-

ment against defects in workmanship and/or materials.

Dimensions & Weight

The maximum overall dimension of the signal is 18 inches wide, 16.5 inches high, and seven inches deep (457 x 419 x 178 mm), including the Solar Screen type visors and hinges. The distance between the mounting surfaces of the upper Shurlock and the lower Shurlock openings is 16 inches (406 mm). The weight of the signal, excluding mounting hardware, is 23 pounds, maximum.

LED Specifications

- Voltage Range 80V to 135V AC; normal 120V AC (less than 10% variation in intensity)
- Power; Maximum 15W Hand; maximum 10W Pedestrian
- Operating Temperature: -40°C to +74°C
- Storage Temperature: -40°C to +93°C
- Power Factor Correction: >0.90
- Total Harmonic Distortion: <20%
- Dimensions: 18 in. x 16 in. x 4.5 in.
- Fuse and transient suppressor incorporated for line and load protection
- LEDs interconnected to minimize effect of LED string failure
- Meets or exceeds NEMA Moisture Resistance STD 250-1991 for Type-4 enclosures (ITE 6.4.6.2 Moisture Resistance)

© 2009 Econolite Control Products, Inc. All rights reserved. Econolite Control Products, Inc. reserves the right to change or update these specifications at any time without prior notification.

3360 E. La Palma, Anaheim, CA 92806-2856

Tel: (714) 630-3700 • Fax: (714) 630-6349

Email: sales@econolite.com

www.econolite.com

21305EG607-4

ECONOLITE

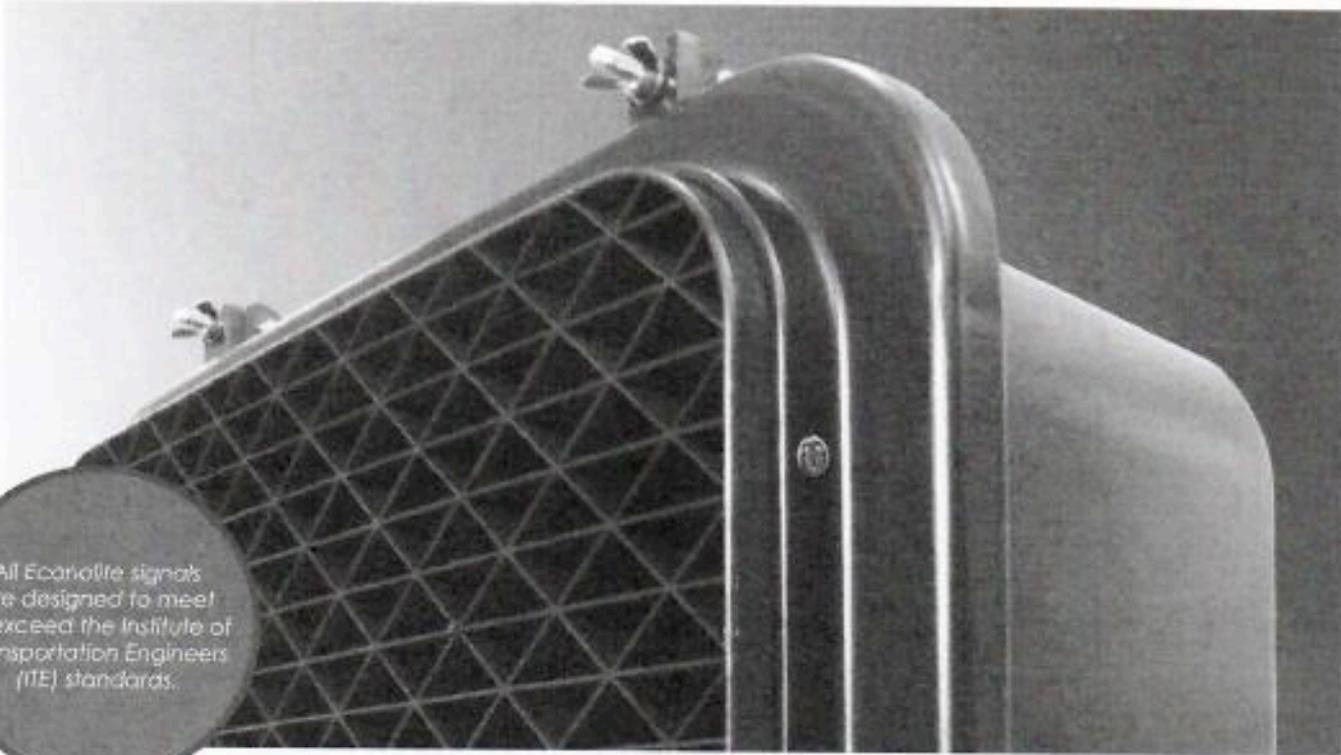
ECONOLITE
Solutions that Move the WorldSM

ISO
9001

REGISTERED



16-inch Polycarbonate Pedestrian Signal



All Econolite signals are designed to meet or exceed the Institute of Transportation Engineers (ITE) standards.

About the 16-inch Polycarbonate Pedestrian Signal

Traffic and pedestrian signals represent the foundation of safety at any signalized intersection. They also represent the first, and arguably the most important, interaction motorists, bicyclists and pedestrians have with Intelligent Transportation Systems (ITS).

For more than eight decades, Econolite has led the industry in both innovation and breadth of traffic and pedestrian signal solutions for virtually every application, helping transportation agencies and Metropolitan Planning Organizations (MPOs) efficiently and cost-effectively meet evolving traffic management programs. Econolite utilizes the latest industrial design techniques to develop and manufacture some of the industry's most durable signal products that meet or exceed industry specifications. Our products are designed using computer-aided 3D software and modeling, including Finite Element Analysis (FEA) to accurately predict how our signal equipment will react to practically all known environmental forces. In addition, actual production units are tested to handle multiple wind loads and other real world factors to ensure durability.

At A Glance

- Molded mounting bosses inside housing that accommodate all major audible pedestrian equipment manufacturers
- Permanent or removable door pins
- Available clips for LED attachment to housing
- Lower maintenance with molded-in color
- Stainless steel hardware

ECONOLITE

Housing

The main housing of the 16-inch signal is one-piece, manufactured with ultraviolet and heat-stabilized, flame-retardant polycarbonate material. The signal is capable of providing either a top or bottom door opening. The top and bottom of the housing have knockout openings to accommodate standard 1½-inch (38 mm) pipe brackets. This knockout eliminates the need for additional hardware to close openings when using the terminal field assembly. Each opening has a Shurlock boss integrally cast into the housing. The radial angular grooves of this boss, when used with Shurlock fittings, allow positive five-degree increment alignment of the signal head. Alternatively, a field terminal assembly is available that includes an aluminum base and back-plate that can be bolted to either side of the signal housing. Econolite has also designed molded-in mounting bosses that accommodate all major audible pedestrian equipment manufacturers. For added convenience, the Econolite 16-inch polycarbonate housing is completely interchangeable with the Econolite 16-inch aluminum pedestrian signal without the need for new framework or field terminal assemblies.

Housing Door

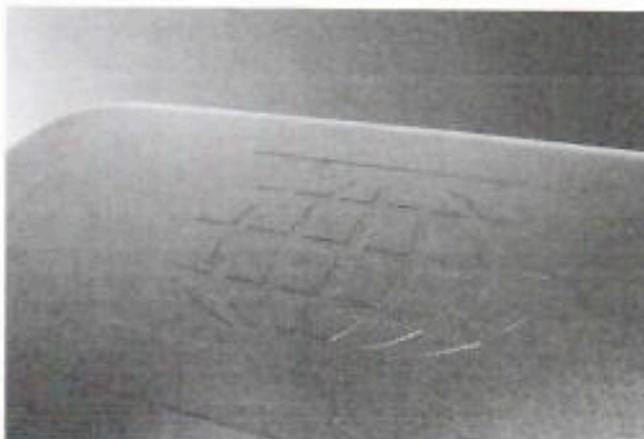
The structural part of the door is one-piece, manufactured with ultraviolet and heat-stabilized, flame-retardant polycarbonate material. Two integrally-molded hinge lugs and two integrally-cast latch screw slots are on opposite sides of the door. Aluminum doors are also available. The door is attached to the housing by means of two stainless steel hinge pins that allow easy removal without the use of tools. Removable locking pins and permanent knurled pins are also available. Two latch screws with wing nuts on one side of the door allow quick and easy opening and closing of the door without the use of tools. In addition, clips are available that can attach the LED to the signal housing for safe door opening.

Visor Options

The 16-inch signal has an available aluminum visor option. In addition, the Solar Screen visor option is designed to eliminate "sun phantom" and minimize damage to the LED signal module. Stainless steel hinge pins, door-latching hardware, and screws are used to attach the visor and Solar Screen to the housing door.

Plastic Material and Color

The housing and door are molded in one-color polycarbonate material throughout. For long life and maximum mechanical strength, no reprocessed or scrap polycarbonate material is used. The color of the door, Solar Screen, and the inside of the visor are black.



Dimensions

- Depth
 - 7.00" (housing only)
 - 8.52" (with door)
- Height
 - 18.70" (housing only)
 - 18.75" (with tabs)
- Width
 - 17.88" (housing only)
 - 18.38" (with door)

Housing and Aluminum Visor Color Options

- Black (matches Federal Standard 595b-17038)
- Dark Olive Green (matches Federal Standard 595b-14056)
- Yellow (matches Federal Standard 595b-13538)

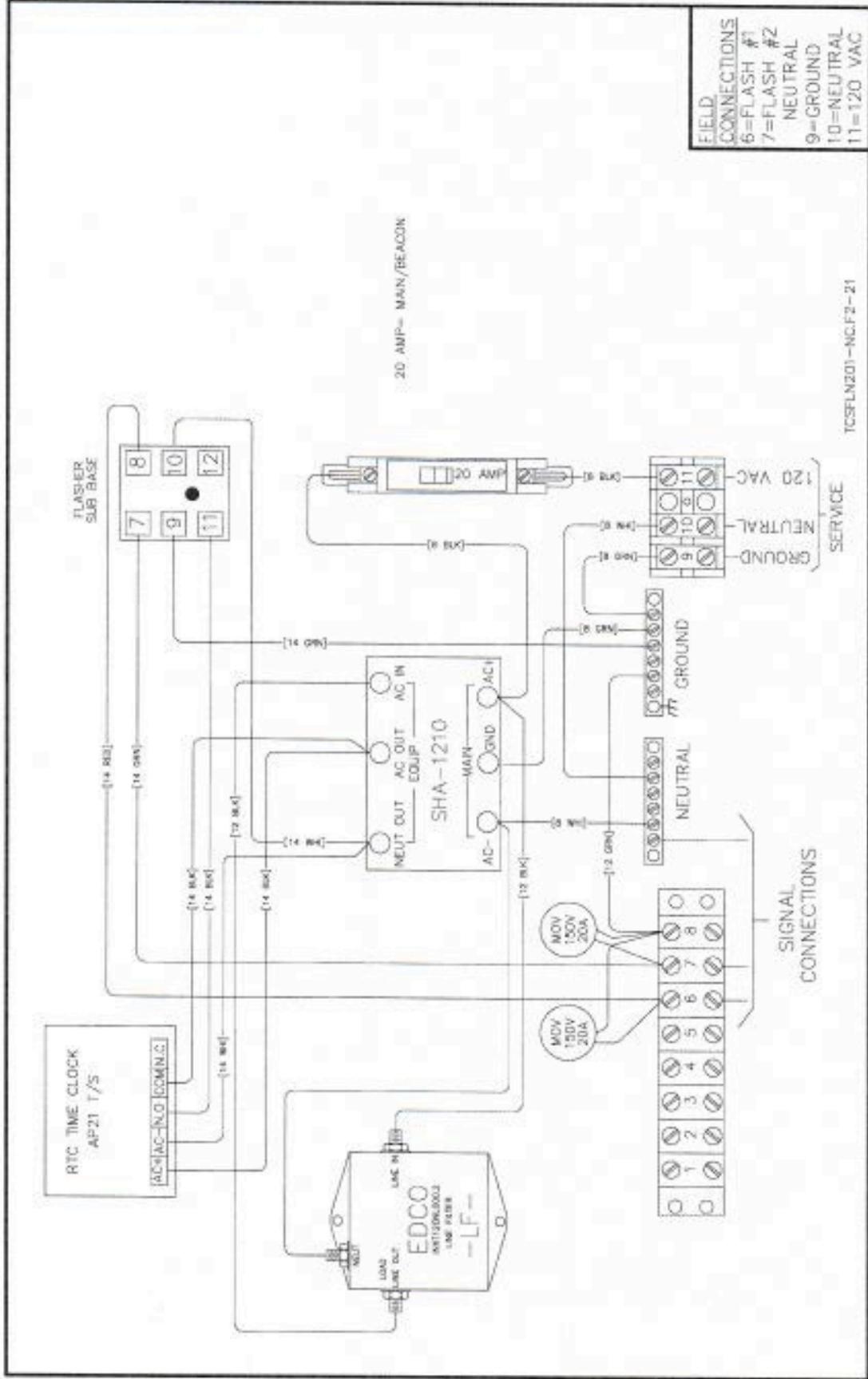
ECONOLITE

3360 E La Palma Avenue, Anaheim, CA 92806 • 714-630-3700 • sales@econolite.com • www.econolite.com

212090214-1

© 2018 Econolite Device Products, Inc. All rights reserved. Econolite Device Products, Inc. is an Econolite Group, Inc. company. Certified to ISO 9001:2015, and ISO 14001:2015. Changes or errors to these specifications at any time without your notification.



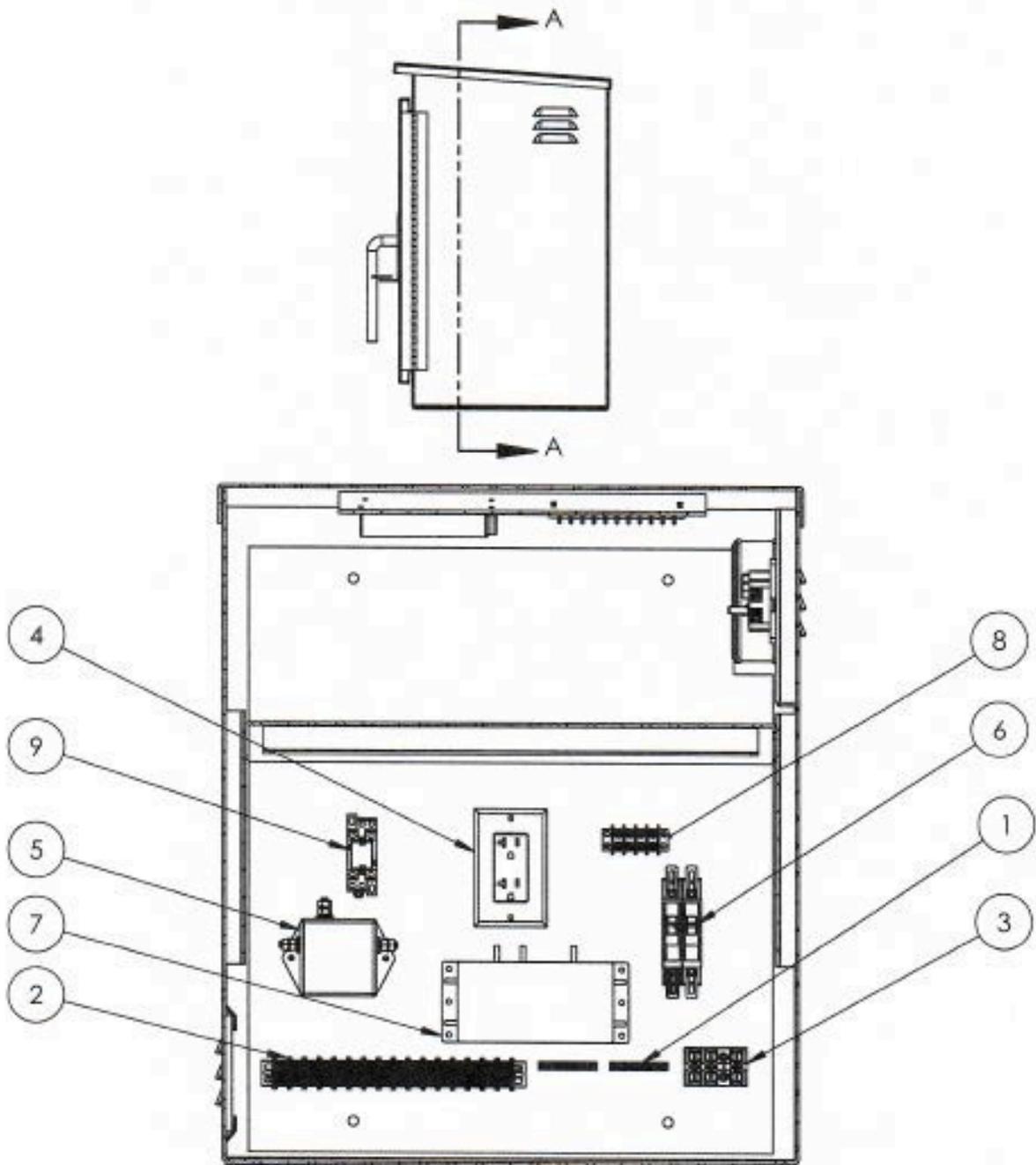


Panel 16W x 20H x 12D
STD. POLE TAB'S
#2 LOCK
REMOVE JUMPER AC- TO GROUND

TITLE NC. DOT F2 FLASHING BEACON CABINET
CUSTOMER RAI PRODUCTS
LOCATION F2 BEACON
SALES ORDER # XXXX PROJECT # XXXX
DATE XX/XX/XX

DO NOT DISCONNECT THIS WIRE FROM THE BEACON UNIT.

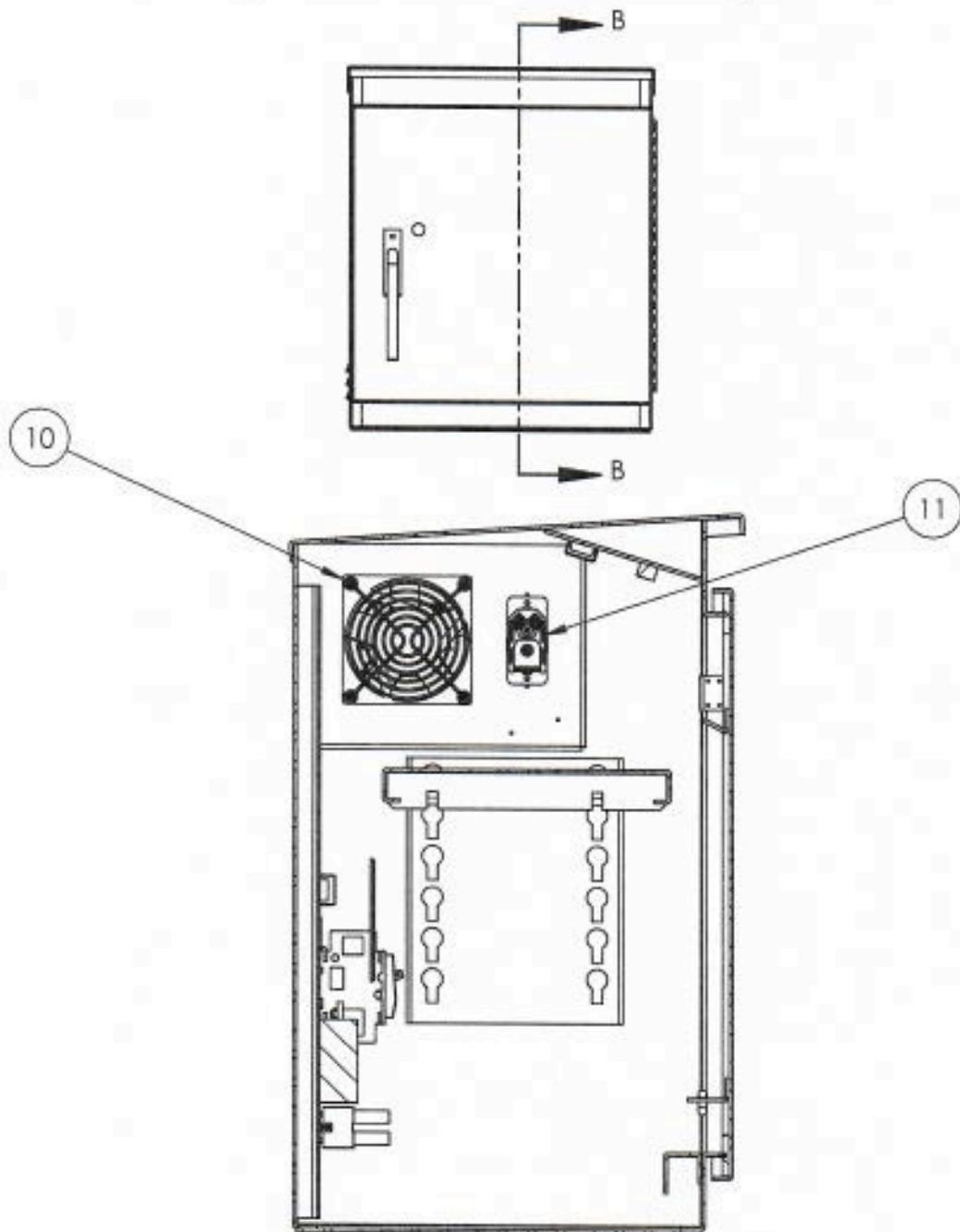
SECTION VIEW A-A (INSIDE: PANEL COMPONENTS)



SECTION A-A
SCALE 1 : 6

		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±		NAME AG	DATE 12/07/18			TITLE FLN201-F3-NQR-SLOPED	
		MATERIAL		G.A.				CUSTOMER	
NEXT ASSY		USED ON		PROPRIETARY AND CONFIDENTIAL <small>THE INFORMATION CONTAINED IN THIS DRAWING IS THE PROPERTY OF TCS. IT IS TO BE USED ONLY FOR THE PROJECT AND NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM. WITHOUT THE WRITTEN PERMISSION OF TRANSPORTATION CONTROL SYSTEMS, INC.</small>		LOCATION		PROJECT	
APPLICATION		DO NOT SCALE DRAWING		SIZE: SALES ORDER A		DRWG. NO. B252215W2S1BS-1		REV.	
				SCALE: 1/12		WEIGHT:		SHEET 2 OF 3	

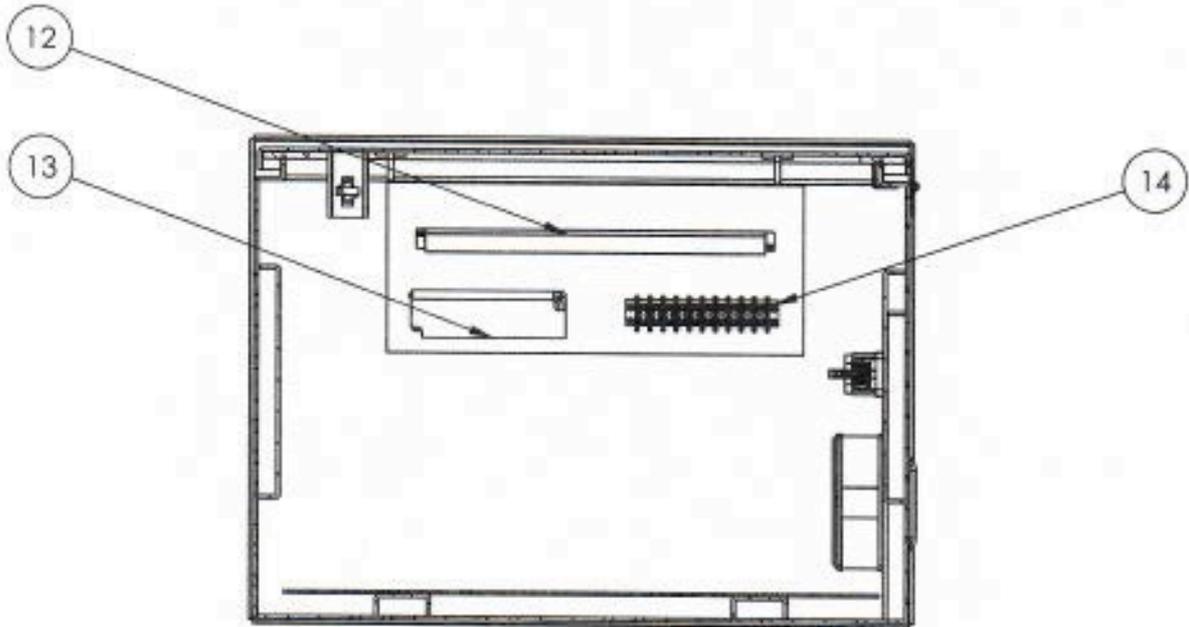
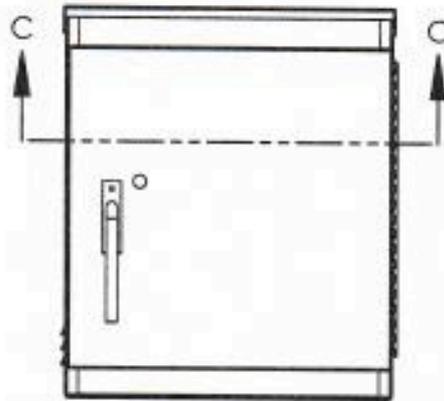
SECTION VIEW B-B
(INSIDE: VENT COMPONENTS)



SECTION B-B
SCALE 1 : 6

DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±		NAME AG	DATE 12/10/18		
MATERIAL		Q.A.	PROPRIETARY AND CONFIDENTIAL		
NEXT ASSY	USED ON	FINISH	SALES ORDER	DWG. NO.	REV.
APPLICATION	DO NOT SCALE DRAWING		SCALE 1:10	WEIGHT	SHEET 3 OF 5

SECTION VIEW C-C
(INSIDE: LIGHT COMPONENTS)



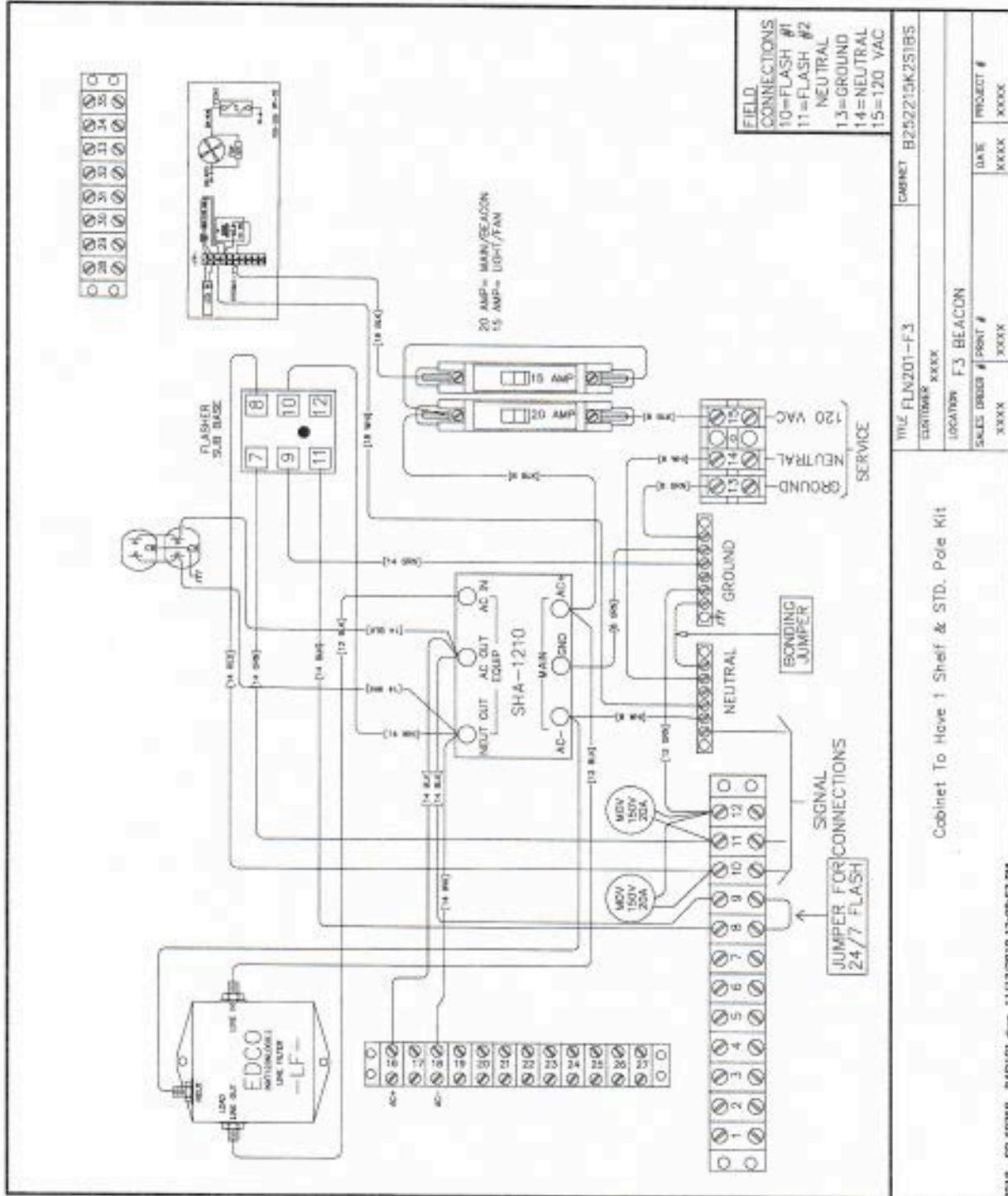
SECTION C-C
SCALE 1 : 6

		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	NAME AG	DATE 12/10/18		
		MATERIAL	DRAWN	CHECKED		
		FINISH	ENG APPR	WFO APPR	CUSTOMER	
NEXT ASSY	USED ON	DO NOT SCALE DRAWING	PROPRIETARY AND CONFIDENTIAL <small>THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF TRANSPORTATION CONTROL SYSTEMS. IT IS TO BE USED ONLY FOR THE PROJECT AND AS A WORK PRODUCT OF THE TRANSPORTATION CONTROL SYSTEMS PROJECT.</small>		LOCATION	PROJECT
APPLICATION			SCALE: 1:12	WEIGHT	SIZE: SALES ORDER A	DWG. NO.
						SHEET 4 OF 5

BILL OF MATERIALS

ITEM NO.	PART NUMBER	DESCRIPTION	FLN201-F3-NQR-SLOPED/QTY.
1	GROUND BUS		2
2	TERMINAL 6-8		1
3	TERMINAL PWR		1
4	GFI		1
5	INXT120N2000-1	AC POWER FILTER	1
6	QOU115	15A BREAKER	2
7	SHA-1250	SURPPRESSOR	1
8	TERMINAL 4-6		1
9	RELAYBASE		1
10	4" Fan		1
11	THERMOSTAT		1
12	LED		1
13	LED DRIVER		1
14	TERMINAL 10		1

DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR MATCH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±		NAME AG	DATE 12/10/18	 TRANSPORTATION CONTROL SYSTEMS	TITLE FLN201-F3-NQR-SLOPED
MATERIAL FINISH	G/A PROPRIETARY AND CONFIDENTIAL <small>THE INFORMATION CONTAINED IN THIS DRAWING IS THE PROPERTY OF TRANSPORTATION CONTROL SYSTEMS. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF TRANSPORTATION CONTROL SYSTEMS IS PROHIBITED.</small>	CUSTOMER	LOCATION		PROJECT
NEXT ASSY USED ON APPLICATION	DO NOT SCALE DRAWING	SIZE SALES ORDER A	SCALE: 1:12 - WEIGH	DWG. NO.	REV.
					SHEET 3 OF 3



FIELD CONNECTIONS
 10=FLASH #1
 11=FLASH #2
 NEUTRAL
 13=GROUND
 14=NEUTRAL
 15=120 VAC

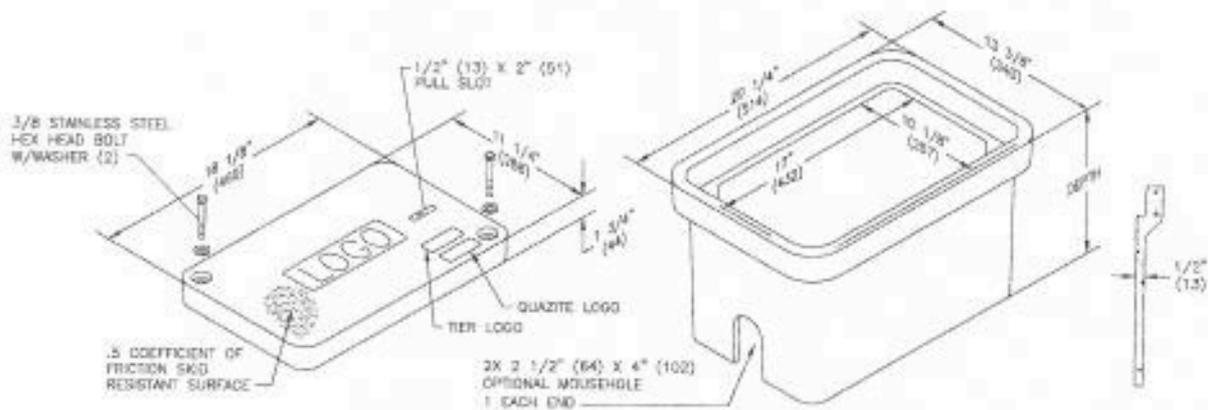
TYPE	FLN201-F3	CABINET	B252215K251B5
DATE	XXXX	PROJECT #	XXXX
LOCATION	F3 BEACON	DATE	XXXX
SALES ORDER #	XXXX	PROJECT #	XXXX

Cabinet To Have 1 Shelf & STD. Pole Kit

Dimensions / Data

11" x 18" PG Style Polymer Concrete (Stackable) Assembly

Hex Head Bolts are Standard



Covers

	DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Ⓛ	W/ 2 Bolts	8	8,000 / 12,000	27	40	PG1118CA00**
Ⓛ	W/ 2 Bolts	15	15,000 / 22,500	27	40	PG1118HA00**
Ⓛ	No Bolts	8	8,000 / 12,000	27	40	PG1118WA00**
Ⓛ	W/ 2 Bolts	22	22,500 / 33,750	27	40	PG1118HA00**

To order gasketed covers, replace the letter "A" with the letter "G".
 Replace ** with a logo code found on page 60. See page 65 for meter and touch/radio read cover options.
 NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

Boxes

	DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Ⓛ	Standard Open Bottom	12"	22	22,500 / 33,750	40	30	PG1118BA12
Ⓛ		18"					PG1118BA18
Ⓛ	Solid Bottom	12 1/2"	22	22,500 / 33,750	43	30	PG1118DA12
Ⓛ		18 1/2"					PG1118DA18
Ⓛ	Footed Box	12 1/2"	22	22,500 / 33,750	41	30	PG1118IA12
Ⓛ		18 1/2"					PG1118IA18

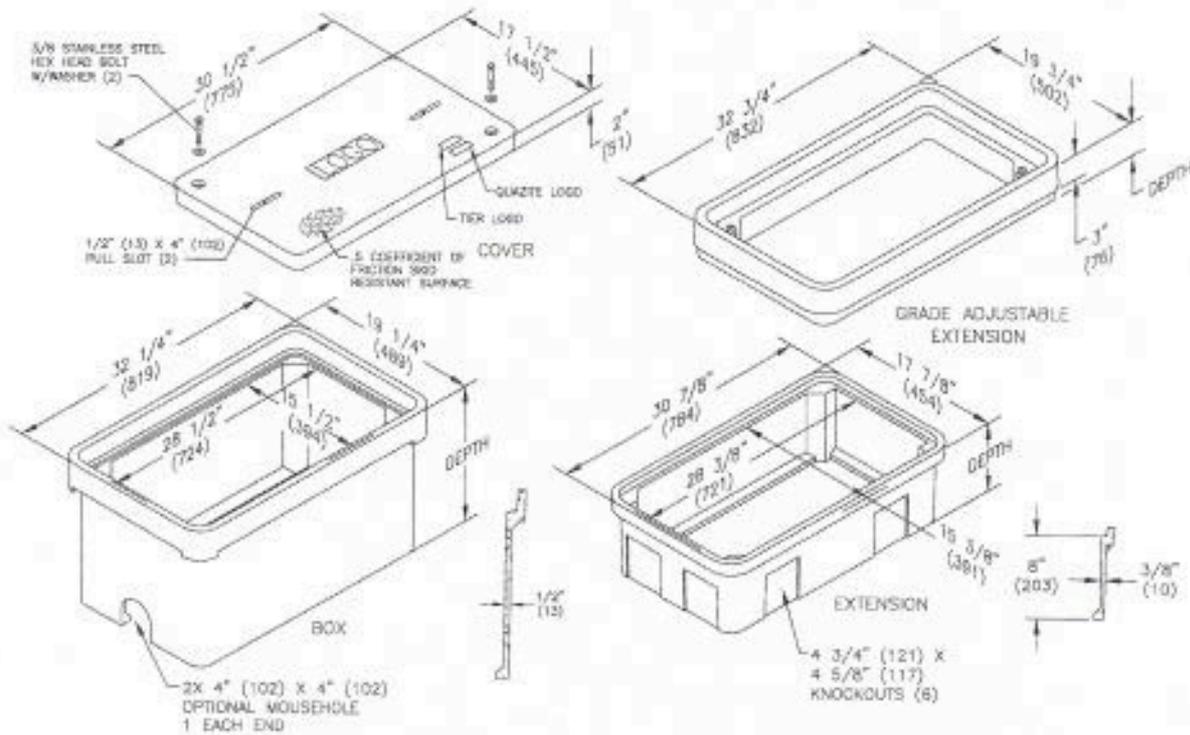
To order boxes with 2 standard mouseholes, replace the letter "A" with the letter "B".
 To order gasketed boxes, replace the letter "A" with the letter "G".
 NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

QUAZITE

Dimensions / Data

17" x 30" PG Style Polymer Concrete (Stackable) Assembly

Hex Head Bolts are Standard



QUAZITE

Covers

DESCRIPTION	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
W/ 2 Bolts	8	8,000 / 12,000	52	20	PG1730CA00**
W/ 2 Bolts	15	15,000 / 22,500	83	20	PG1730HA00**
W/ 2 Bolts	22	22,500 / 33,750	83	20	PG1730HA00**
No Bolts	8	8,000 / 12,000	52	20	PG1730WA00**

To order gasketed covers, replace the letter "A" with the letter "G".

Replace ** with a logo code found on page 60. See page 65 for meter and touch/radio read cover options.

NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

Dimensions / Data 17" x 30" PG Style Polymer Concrete (Stackable) Assembly (Continued)

Hex Head Bolts are Standard

Boxes (Box depths 22" thru 30" must be used as bottom of any stack)

	DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
Ⓜ	Standard Open Bottom	12"	22	22,500 / 33,750	67	10	PG1730BA12
Ⓜ		18"		22,500 / 33,750	94	8	PG1730BA18
Ⓜ		22"		22,500 / 33,750	106	6	PG1730BA22
Ⓜ		24"		22,500 / 33,750	122	6	PG1730BA24
Ⓜ		30"		22,500 / 33,750	144	4	PG1730BA30
Ⓜ	Solid Bottom	12 1/2"	22	22,500 / 33,750	85	10	PG1730DA12
Ⓜ		18 1/2"		22,500 / 33,750	112	8	PG1730DA18
Ⓜ		22 1/2"		22,500 / 33,750	124	6	PG1730DA22
Ⓜ		24 1/2"		22,500 / 33,750	137	6	PG1730DA24
Ⓜ		30 1/2"		22,500 / 33,750	150	4	PG1730DA30

To order boxes with 2 standard mouseholes, replace the letter "A" with the letter "B".

To order gasketed boxes, replace the letter "A" with the letter "G".

NOTE: Gasketed cover and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

Bottom Extensions (for use under 12" and 18" boxes only, one per box)

	DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
	Open bottom	8 3/4"	22	22,500 / 33,750	36	12	PG1730EA08
	Solid bottom	9 1/4"	22	22,500 / 33,750	55	12	PG1730EA08

Grade Adjustable Extension (for use on top of box only, one per box)

	DESCRIPTION	DEPTH	TIER	DESIGN / TEST LOAD #	WEIGHT #	PALLET QTY	PART NO.
	3" top extension	5 1/8"	22	22,500 / 33,750	48	12	PG1730ED03

QUAZITE

NCDOT - North Carolina Department of Transportation

ITS and Signals Qualified Products List

Search the Drive QPL Database (Last Updated - 10/22/2019)

Year: 2018

Group: (All Groups)

Manufacturer: Quantra Products/Strongwell

Approved Applications: (All Applications)

SEARCH

Year		Project TIP No. / Signal Inventory No.		Project Number	
2018					
Group	Construction Item No And Description	Manufacturer Product No Assigned By DOT	Manufacturer	Manufacturer Model Number or Other Designation	Approved Construction Application
SHG	ROSLEDNET-PSR2018 Blank-Out Sign, LED On Red Error Flash	TAS90SL EDDNET	Orange Traffic	LS-DNET	1747
SHG	ROSLEDTY-PSR2018 Blank-Out Sign, LED Left Turn Yield	TAS90SL EDDTY	Orange Traffic	LS-LTY	1747
SHG	ROSLEDNACT-PSR2018 Blank-Out Sign, LED No (Left or Right) Turn Flash	TAS90SL EDDNHT	Orange Traffic	LS-NELTT	1747
SHG	ROSLEDNTOR-PSR2018 Blank-Out Sign, LED No Turn On Red	TAS90SL EDDTOR	Orange Traffic	LS-NTOR	1747
CHG	BCATYPER1-2018-1098-17 Beacon Controller Assembly, Type F1	SOUBCATYPER1	Southern Manufacturing Co.	SM-WET31310-MC00T-1	1755
CHG	BCATYPER2-2018-1098-17 Beacon Controller Assembly, Type F2	RABBCATYPER2	RAL Products	TC9NLU20T	1755
CHG	BCATYPER3-2018-1098-17 Beacon Controller Assembly, Type F3	RABBCATYPER3	RAL Products	TC9PLVAREX	1755
SHG	SHPS16AVECHLTY-PSR2018 Signal Head, Pedestrian 1 Section 16" Aluminum Yellow Empty Canted Mount on Left with Tunnel Vase	ECOSHP16AVECHLTY	Econolite Control Products	PEE16AVVVM	1705
SHG	SHPS16AVECHRTV-PSR2018 Signal Head, Pedestrian 1 Section 16" Aluminum Yellow Empty Canted Mount on Right with Tunnel Vase	ECOSHP16AVECHRTV	Econolite Control Products	PEE16RVVVM	1705
SHG	SHPS16AVEVTV-PSR2018 Signal Head, Pedestrian 1 Section 16" Aluminum	ECOSHP16AVEVTV	Econolite Control Products	PEE16SSVVM	1705

	PSF2018 Signal Head, Vehicular 4 Section 12" Vertical Aluminum Yellow Empty Red, Yellow, and Green Section		Products	ESB6SP1-12 view	
	SHW512CPERVGS-PSF2018 Signal Head, Vehicular 4 Section 12" Vertical Polycarbonate Yellow Empty Red, Yellow, and Green Section	ECOSHWS12CPERVGS	Econote Control Products	TA56VJVA0000 w/ E826SP1-12 view	1705
SHG	SHW512CPERVGS-PSF2018 Signal Head, Vehicular 5 Section 12" Cluster arrangement Aluminum Yellow Empty Red, Yellow, and Green Section	ECOSHWS12CPERVGS	Econote Control Products	TA56VJVA0000 w/ E826SP1-12 view	1705
SHG	SHW512CPERVGS-PSF2018 Signal Head, Vehicular 5 Section 12" Cluster arrangement Aluminum Yellow Empty Red, Yellow, and Green Section	ECOSHWS12CPERVGS-2	Econote Control Products	TA56VJVA0000 w/ E826SP1-12 view	1705
SHG	SHW512CPERVGS-PSF2018 Signal Head, Vehicular 5 Section 12" Cluster Polycarbonate Yellow Empty Red, Yellow, and Green Section	ECOSHWS12CPERVGS	Econote Control Products	TP56VJVA0000 w/ 106-1001-012 view	1705
SHG	SHW512CPERVGS-PSF2018 Signal Head, Vehicular 5 Section 12" Cluster Polycarbonate Yellow Empty Red, Yellow, and Green Section	ECOSHWS12CPERVGS-2	Econote Control Products	TP56VJVA0000 w/ 106-1001-012 view	1705
SHG	APSCOU-PSF2018 Accessible Pedestrian Signal Control Unit	PELAPSCOU	Pelco Products, Inc.	SE-6172-PWC	1705
	BSHVFABSP3512-2018-1008-2 Backplate for Signal Head, Polycarbonate Vacuum Formed ABS Plastic, 3 Section 12"	PELBSHVFABSP3512	Pelco Products, Inc.	PK1003	1706
SHG	BSHVFABSP358-1018-1008-2 Backplate for Signal Head, Polycarbonate Vacuum Formed ABS Plastic, 3 Section 12"	PELBSHVFABSP358	Pelco Products, Inc.	PK1006	1706
	BSHVFABSP4512-2018-1008-2 Backplate for Signal Head, Polycarbonate Vacuum Formed ABS Plastic, 4 Section 12"	PELBSHVFABSP4512	Pelco Products, Inc.	PK1004	1706
SHG	BSHVFABSP4512-2018-1008-2 Backplate for Signal Head, Polycarbonate Vacuum Formed ABS Plastic, 4 Section 12"	PELBSHVFABSP4512	Pelco Products, Inc.	PK1005	1706

	Signal Head, Polycarbonate Vacuum Formed ABS Plastic, 5 Section 12"						
SHG	PPBACN-PSP2018 Pedestrian Push Button, ADA Yellow	PELPPBACN	Peco Products, Inc.	SP-2005-08-P29			1705
SHG	SNHP90A-2018-1098-14 Signal Mounting Hardware, Pedestal Base Octagonal Aluminum	PEL-SNHP90A	Peco Products, Inc.	PP-5349			1743
SHG	SNHP95A-2018-1098-14 Signal Mounting Hardware, Pedestal Base Square Aluminum	PEL-SNHP95A	Peco Products, Inc.	PP-5334			1743
SHG	SNHPCCAT-2018-1098-14 Signal Mounting Hardware, Pedestal Pole Cap Aluminum Acorn Type	PEL-SNHPCCAT	Peco Products, Inc.	PP-5401			1743
SHG	SNHP5AT412SC940-2018-1098-14 Signal Mounting Hardware, Pedestal Sign Aluminum Threaded 4 1/2" outside diameter SOI 40	PEL-SNHP5AT412SC940	Peco Products, Inc.	PP-5100-L			1743
SHG	SNHP7SNW161SP5AV-PSP2018 Signal Mounting Hardware, Post Top Splitter 2 Way for 16" Section Pedestrian Signal Aluminum Yellow	PEL-SNHP7SNW161SP5AV	Peco Products, Inc.	SE-3257-929			1706
SHG	SNHP7SAV05W59K-PSP2018 Signal Mounting Hardware, Post Top Splitter Aluminum Yellow Offset w/ Signal Mounting Kit	PEL-SNHP7SAV05W59K	Peco Products, Inc.	SE-3310-P29 painted yellow			1706
SHG	SNHSW9AM48SSSH11W-ESP2018 Signal Mounting Hardware Span Wire Suspension with Balance Adjuster Notched Iron/Steel Stainless Steel Hardware Yellow 1 Way	PEL-SNHSW9AM48SSSH11W	Peco Products, Inc.	SP-1006-NC-P29			1705
SHG	SNHTB1-SPCT3-2018-1098-14 Signal Mounting Hardware, Transformer Base 14 ft. Pedestal Pole with Cap for Type III	PEL-SNHTB1-SPCT3	Peco Products, Inc.	SP-1009-NC-14-GLV			1743
SHG	SCPSWSPWQCA-PSP2018 Side Of Pole Signal Mount With Pole Flare With Conduit Entrance for Wood Pole Aluminum	PEL-SCPSWSPWQCA	Peco Products, Inc.	SP-5523-129 painted yellow			1705
PUL	PECOMHOCOS-2018-1098-5 Full Box, Composite w/ Heavy Duty Cover Over Side	QUA-PECOMHOCOS	Quanze Products (Strongwell)	PGL730BA24(Box) PGL730HAWA(Cover)			1716
PUL	PECOMHOCOS-2018-1098-5 Full Box, Composite w/ Heavy Duty Cover Over Side	QUA-PECOMHOCOS	Quanze Products (Strongwell)	PGL118BA12 (Box) G1118HAW6 (Cover)			1716



to Overlaid records | New York | New York | New York | New York | New York

LED Intermittent Railroad Crossing Sign

Orange Traffic

Intermittent railroad crossing signs are used to indicate that certain manoeuvres are allowed or forbidden when a train is travelling in an intersection or at a level crossing. They are highly visible and can be used to forbid manoeuvres in certain situations and can therefore ensure optimal traffic flow and direct road users during the passing of trains through simple and easy-to-read messages.



Description

These signs are the most readable on the market because they are built with high-quality components such as LEDs specially designed for road traffic and a unique constant current modular power system that eliminates flickering.

Orange Traffic's advance lane control signs also enable energy cost savings because they consume up to 90% less electricity than conventional fibre optic signs. Furthermore, their components are designed to facilitate installation, maintenance and upgrading and therefore lower operating costs. Finally, it is also possible to reuse the enclosure and wiring and replace only the front (LED) panel.

The wiring may be installed in the panel itself or consolidated with other power supplies in a more accessible area to minimize traffic disturbances during maintenance operations.

Orange Traffic offers an array of standard LED panels and several messages can be combined in a single panel. However, thanks to their modular design, these panels are easily adaptable to your requirements, and Orange Traffic is also able to design special or oversized panels. Feel free to inform us about your specific needs.

Specifications

Functional characteristics

- Independently powered and controlled messages. The power modules are compatible with all Orange Traffic LED display panels and can be replaced while powered
- The front panel assembly, as well as the main components, can be replaced using just a flat screwdriver, which facilitates upgrading and maintenance operations
- Fully compatible with:
 - Standard traffic signal conflict monitors (NEMA and 170)

- STI-Tassimco's SPC-22 programmable clock, allowing for the panel's autonomous operation according to pre-established schedules
- Earlier versions of Orange Traffic lane control panels (backward compatibility)
- Dry contact for the confirmation or display control alarm of each message and for interlocking two contiguous messages without additional material
- 4.8-mm (3/16") thick UV-resistant front lens for longer LED life

Technical characteristics

- Waterproof aluminum enclosure that meets NEMA requirements for type 4 enclosures
- Compliance with Institute of Transportation Engineers (ITE) requirements applying to LED road signs
- Exterior dimensions:
 - 710 x 710 mm (28 x 28") for 600-mm (24") messages
 - 710 x 965 mm (28 x 38") for 750-mm (30") messages
- Depth: 200 mm (8")
- Supply voltage: 90-135 VAC/60 Hz
- Maximum power: 30 W; nominal power: 15 W
- Power factor > 90%
- Compliance with operating temperature criteria of NEMA T52 standard (-34 to +74°C (-30 to +165°F))
- LEDs of stable brightness and chromaticity over the entire power and temperature ranges

Optional accessory

- 300-mm (12") deep visor for improved visibility in direct sunlight

For more information: 1 800 363-5913

Created on 19.11.2019 at 15:35:31 EST

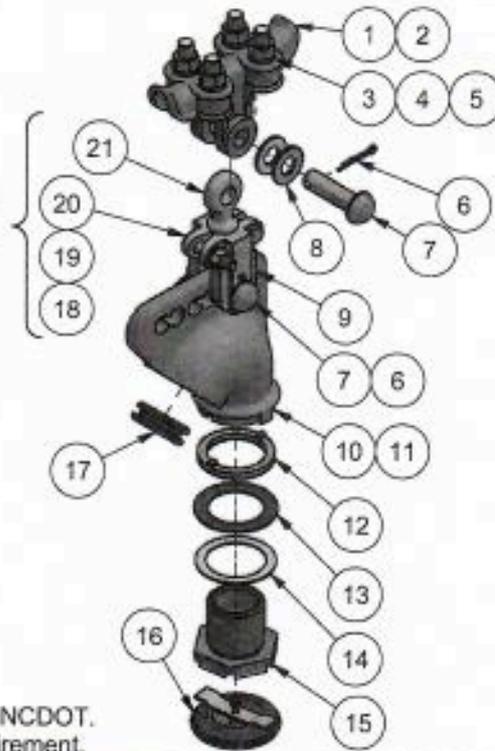
REF: State of North Carolina

TITLE: Span Wire Hanger Assy, w/ PAL Balance Adjuster, 1/2" Eyebolt & 1/2" Wide Slot, Iron

PART NO.: SP-1006-NC

SE-3219-0.50-0.50-SS
 PAL Balance Adjuster
 w/ Stainless Upgrade

Note:
 Torque to 18 ft/lbs
 at field installation


 Example Part No
 SP-1006-NC-PXX

 Galvanized=GLV
 Paint=PXX

Options
Galvanized
Paint

- Notes:
1. Stainless hardware as required per NCDOT.
 2. Fully assembled per customer requirement.

ITEM	PART NUMBER	DESCRIPTION	QTY
1	SE-4054-GLV	Clamp Body, Span Wire, Hot Dip Galv, Ductile Iron	1
2	SE-4055-GLV	Cable Bar, Span Wire Clamp, Hot Dip Galv, Ductile Iron	1
3	FS-4202-SS	Lock Washer, Split, 1/2", Type 304 Stainless	4
4	FS-1005-SS	Nut, Hex 1/2"-13, Type 304 Stainless	4
5	FS-2507-SS	U-Bolt, 1/2"-13 x 2-1/8" x 49/64" x 1-3/8", Type 304 Stainless	2
6	FS-6100-SS	Pin, Cotter, Humped, 5/32" X 1.775", 304 Stainless	2
7	FS-6001-SS	Pin, Clevis, 5/8" x 2", Stainless	2
8	FS-4106-SS	Washer, Flat, 5/8", .656" ID x 1.312" OD x .074/.181" Thk, Type 304 Stainless	2
9	SE-4356-GLV	Balance Adjuster Body, 1/2", Investment Cast, C1045 Steel, Galv	2
10	SE-4118-M1	Wire Outlet Body, 1/2", 1-1/2" NPS, Iron	1
11	FS-3207-SS	Set Screw, Square Hd, Cup Point, 1/4"-20 x 3/4", Type 304 Stainless	1
12	SE-0360-PNC	Lockring, Serrated, 380 Die Cast Alum	1
13	SE-0354-PNC	Gasket, 70 Duro Neoprene	1
14	SE-4061-SS	Washer, .061" x 2.605" x 1.965", Stainless	1
15	SE-0644-ZN2	Hex Nipple, 1-1/2" NPS x 1-3/4" Lg, Steel, Zinc 2	1
16	SE-3054-PXX	Signal Closure Kit	1
17	SE-0449-PNC	Grommet, 1-1/2", w/ Diaphragm	1
18	FS-4205-SS	Lock Washer, Split, 3/8", Type 304 Stainless	2
19	FS-1003-SS	Nut, Hex 3/8"-16, Type 304 Stainless	2
20	FS-2047-SS	Bolt, Hex Hd, 3/8"-16 x 1-3/4", Type 304 Stainless	2
21	SE-4410-SS	Eyebolt, Balance Adjuster, 1/2", CF8M Stainless, Heat Treated & Solution Anneal	1
22	Z-2049	Instructions, PAL Balance Adjuster	1

Pelco Assy.dwg 8/20/18

C Medden DRAWN	6/3/2008 DATE	GWA CHECKED	8/13/2008 DATE	JLH DESIGN	6/16/2014 DATE	ZSM DL	8/17/2014 DATE	J REV	4/6/19 KRS DATE	BPM REV CHG	4/4/2019 DATE	SHEET 1 of 1
-------------------	------------------	----------------	-------------------	---------------	-------------------	-----------	-------------------	----------	--------------------	----------------	------------------	--------------



PH: 405-340-3434
 FAX: 405-340-3435
 Edmond, OK 73013
 WWW.pelcoinc.com

This drawing is the property of Pelco and is not to be used in whole or in part without Pelco's written permission.

ASSEMBLY CUT SHEET

REF:

TITLE:

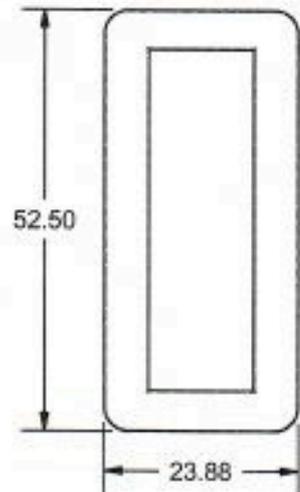
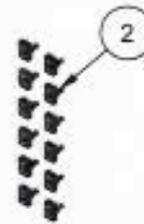
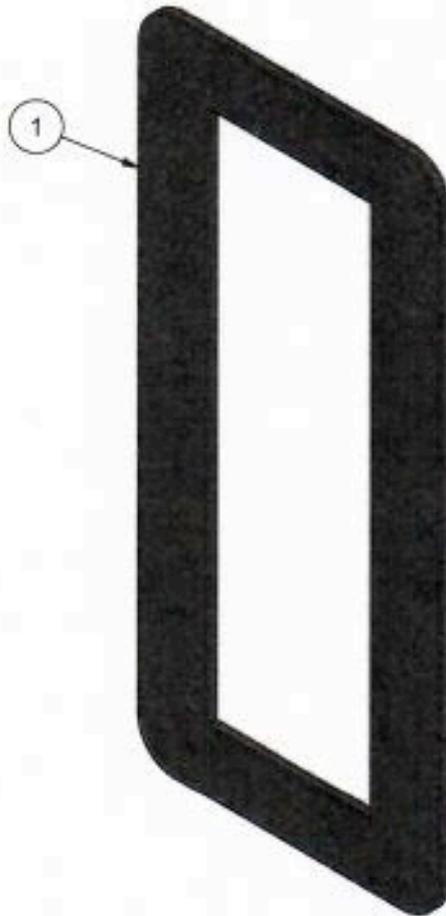
Backplate w/ Hardware Kit, VF,
 3-Sec 12", ABS - Econolite Alum

PART NO.:

BK-1003-L4-PNC

Example Part No
 BK-1003-L4-PNC

Process No Color



ITEM	PART NUMBER	DESCRIPTION	QTY
1	BK-1003-L4	Backplate, VF, 3-Sec 12', .125" ABS - Econolite	1
2	BK-0117-SS	Hardware Kit, Backplate, Econolite Alum & Poly Signal, #8, Set of 12, Stainless	1

christina.jackson	8/12/2012	KAK	11/19/2012	JSH	8/20/2019	PCV	8/26/2019	A	8/15/19	KRS	KAK	8/20/2019	SHEET 1 of 1
DATE	DATE	CHKD	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	

Pelco Assy. Inv. 5/20/18