



## City of Ketchum

### CITY COUNCIL MEETING AGENDA MEMO

Meeting Date:  Staff Member/Dept:

Agenda Item:

#### Recommended Motion:

**"Recommendation to approve Resolution 24-010 and accompanying Purchase Orders 24089, 24090, 24091 for Sole Source Purchases for equipment related to Main Street Rehabilitation Project."**

#### Reasons for Recommendation:

- Due to the unique nature of this Project, with the City coordinating and cooperating with the Idaho Transportation Department (ITD), there are specific criteria and specifications for the Project established by ITD. The compatibility and specifications of the equipment and materials is a paramount consideration for the Project.
- The City of Ketchum (City) is pursuing the procurement of certain traffic control materials and devices associated with the Main Street/SH75 Project. Timely and cost-effective provision of these materials and devices is a primary concern for keeping the Project on schedule and on budget.
- The City finds that current economic circumstances make the timely provision of the materials and devices a critical concern where delay is costly. Supply-chain and production schedules, as well as the timing needs of the Project, make traditional competitive solicitation impractical, disadvantageous, and unreasonable; whereas, direct procurement provides substantial time and cost advantages to the Project.
- Where reasonably possible, the City is also piggy-backing upon procurement contracts for materials and equipment already bid on and entered into by other governmental agencies of the State of Idaho, as further detailed in Exhibit A hereto.
- Valmont (signal mast arms and signal posts) and Signal-Tech (blank out signs) signal components will be purchased under the IMC contract by a subcontractor (likely Electric One West) vs. direct purchase, as these items cannot be purchased directly from the manufacturer. Approximate conservative cost estimates for these two purchases = \$60,000-70,000
- Econolite Group, Swarco, and PedSafety are the manufacturers we will purchase from directly (see Purchase Orders, price quotes, and applicable piggyback contracts attached)
- Econolite Group approximate breakdown – Piggy-backing off City of Nampa contract = \$128,736 of the \$172,936 Total (see price quote)
- Swarco - approximately \$22,037
- PedSafety approximate breakdown – Piggy-backing off Ada County Highway Department contract = \$4,400 of the \$4,666.50 total.
- Approximate total direct purchase amount = \$199,640

Sustainability Impact:

No impact to sustainability present

Financial Impact:

None OR Adequate funds exist in account:

Adequate funds have been approved by council within the Main St Rehabilitation Project account to fund the purchase amount of \$199,640

Attachments:

1. Resolution 24-010 declaring Sole Source Procurements and Expenditures associated with the Main Street Rehabilitation Project
2. Econolite Group Purchase Order 24089, price quote, and City of Nampa Agreement
3. Swarco Purchase Order 24090 and price quote
4. PedSafety Purchase Order 24091, price quote, and Ada County Highway Department Agreement

RESOLUTION 24-010

A RESOLUTION OF THE CITY OF KETCHUM DECLARING  
SOLE SOURCE PROCUREMENTS AND EXPENDITURES ASSOCIATED WITH THE  
MAIN STREET PROJECT

- A. The City of Ketchum (City) is pursuing the procurement of certain traffic control materials and devices associated with the Main Street/SH75 Project. Timely and cost-effective provision of these materials and devices is a primary concern for keeping the Project on schedule and on budget.
- B. The City finds that current economic circumstances make the timely provision of the materials and devices a critical concern where delay is costly. Supply-chain and production schedules, as well as the timing needs of the Project, make traditional competitive solicitation impractical, disadvantageous, and unreasonable; whereas, direct procurement provides substantial time and cost advantages to the Project.
- C. Due to the unique nature of this Project, with the City coordinating and cooperating with the Idaho Transportation Department (ITD), there are specific criteria and specifications for the Project established by ITD. The compatibility and specifications of the equipment and materials is a paramount consideration for the Project.
- D. Where reasonably possible, the City is also piggy-backing upon procurement contracts for materials and equipment already bid and entered into by other governmental agencies of the State of Idaho, as further detailed in Exhibit A hereto.

THEREFORE, based upon the findings above, the City declares that the procurement contracts and agreements attached as Exhibit A, and hereby incorporated, are appropriate sole source procurements from those vendors necessary and advantageous to the Project, and declares a sole source procurement for such pursuant to Idaho Code §67-2808(2).

Pursuant to Idaho Code §67-2808(2)(b), the City Clerk is directed to file a fourteen (14) day notice of such sole source procurement in the official newspaper upon this declaration.

**ADOPTED** by the City Council of the City of Ketchum, Blaine County, State of Idaho

**APPROVED:**

Dated: \_\_\_\_\_, 2024

Signed: \_\_\_\_\_  
Neil Bradshaw, Mayor

**ATTEST:**

By \_\_\_\_\_  
Trent Donat, City Clerk



**CITY OF KETCHUM**  
 PO BOX 2315 \* 191 5TH ST. \* KETCHUM, ID 83340  
 Administration 208-726-3841 (fax) 208-726-8234

**PURCHASE ORDER**  
 BUDGETED ITEM? \_\_\_ Yes \_\_\_ No

**PURCHASE ORDER - NUMBER: 24089**

<b>To:</b> 6167 ECONOLITE GROUP	<b>Ship to:</b> CITY OF KETCHUM PO BOX 2315 KETCHUM ID 83340
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P. O. Date	Created By	Requested By	Department	Req Number	Terms
05/02/2024	KCHOMA	KCHOMA		0	

Quantity	Description	Unit Price	Total
1.00	MAIN STREET REHAB 03-4193-7135	172,936.00	172,936.00
	SHIPPING & HANDLING		0.00
	TOTAL PO AMOUNT		172,936.00

\_\_\_\_\_ Authorized Signature

Date: April. 2, 2024

To: <b>Attn: Estimator</b>	<b>Re: ITD Dist. Ketchum Signal Upgrades</b>
	<b>Econolite Reference: Q-13-4224A</b>

Bid Item #	Part #	Qty	Description	Price per	Extended
1		1	<b>TRAFFIC SIGNAL Cabinets</b>		
	Cab-17974	3	TS2/T1 Traffic Control Cabinet Per ITD Spec. To include the following: Stretch P-16+ UPS Cabinet UL Double Door 1-Cobalt Controller 1-MMU16LEiP CONFLICT MONITOR 1-CISCO IE-3200-8P2S SWITCH 2- MSA Power cables.55 & 11 Pin. 1-TS2 Power Supply 16-Reno Load Switch 1-Flasher 6 FTR Relays 3-BIU's 2-8 Position Detector Racks 1-Zink Blue inverter 2-Zink Blue Batteries-48 Volt 1-Zink Blue PIM Data Base programming of Cobalt controller before shipping for testing. On Site Tech Support on day of turn on. And all other standard Cabinet components. Training, Support, Manuals And Schematics.	\$31,912.00	\$95,736.00
			TOTAL CABINETS		\$95,736.00
2	COB21120110000	3	COBALT ATC NEMA CONTROLLER ITD environmental testing, ON SITE TECH SUPPORT	\$11,000.00	\$33,000.00
			TOTAL CONTROLLER		\$33,000.00
3	143-1001-503	4	<b>Two Direction Radar Sensor</b>	<b>\$7,500.00</b>	<b>\$30,000.00</b>
	143-1003-503	2	<b>EVO Radar HUB</b>	<b>\$6,500.00</b>	<b>\$13,000.00</b>
	143-1004-500	3	<b>500' spool of 3 conductor cable</b>	<b>\$.50</b>	<b>\$750.00</b>
	FSR	3	<b>On Site Tech Support</b>	<b>\$1,500.00</b>	<b>\$4,500.00</b>
			<b>Total Radar.</b>		<b>\$44,200.00</b>

Nampa piggyback

<b>SubTotal</b>		<b>\$172,936.00</b>
<b>Shipping &amp; Handling*</b>		
<b>Taxes**</b>		
<b>TOTAL</b>		<b>\$172,936.00</b>

**NOTE:**

PRICE QUOTE ONLY INCLUDES THOSE ITEMS LISTED ABOVE. IF ADDITIONAL MATERIAL IS

REQUIRED, A REVISED QUOTE WILL BE NECESSARY.

TECH SUPPORT WILL BE PROVIDED AT TIME OF TURN-ON ASSUMING AT LEAST 14 DAYS  
ADVANCE NOTICE

**Quote Valid For: 60 DAYS**  
**FOB: Econolite Factory**  
**Terms: Net 30 days from date of shipment**  
**\*Shipping: Included**  
**\*\*Taxes: Not Included**

**Jeff Wolf**  
Jeff Wolf  
Mobile: 206-276-6283  
jwolf@econolite.com

Delivery: 12 weeks ARO, approved credit terms and submittal approval when applicable



CITY OF NAMPA

REQUEST FOR QUOTATION

TRAFFIC SIGNAL MATERIALS PROCUREMENT

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PROJECT NO. PWST230032

Prepared by

City of Nampa Engineering Division

City of Nampa Engineering Department

Matt Ricks

500 12th Avenue South

June 2023

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## I. PROCUREMENT INFORMATION

This Request for Quotation (RFQ) will procure traffic signal equipment for City of Nampa.

The BIDDER proposes to furnish the following equipment F.O.B. to the City of Nampa 212 W Railroad Street for the price(s) shown in section II. The BIDDER agrees that the price(s) stated in section II will be honored by the BIDDER for a period of forty-five (45) days after the date for this RFQ. Bids shall be due on June 29, 2023 at 3:00pm. Bids can be submitted via email to Matt Ricks; [ricksm@cityofnampa.us](mailto:ricksm@cityofnampa.us) or submitted in person at 500 12<sup>th</sup> Avenue South, Nampa, ID, 83651.

## II. QUOTATION BID SCHEDULE

ITEM NO.	SPEC. PAYMENT REFERENCE	ITEM DESCRIPTION	EST. QTY.	UNIT	UNIT PRICE	EXTENDED PRICE
1	1101.08	Red ball indication	84	EA	\$90.00	\$7,560.00
2	1101.08	Yellow ball indication	84	EA	\$90.00	\$7,560.00
3	1101.08	Green ball indication	84	EA	\$90.00	\$7,560.00
4	1101.08	Yellow arrow indication	20	EA	\$90.00	\$1,800.00
5	1101.08	Bi-modal yellow indication	10	EA	\$250.00	\$2,500.00
6	1101.08	Bi-modal green indication	10	EA	\$250.00	\$2,500.00
7	1101.09	Pedestrian head modules	75	EA	\$250.00	\$18,750.00
8	1101.13	Traffic signal cabinet	2	EA	\$49,985.00	\$99,970.00
9	SP (INCLUDED BELOW)	Rectangular rapid flashing beacon units	24	EA	\$6,000.00	\$144,000.00

TOTAL BID SCHEDULE: \$ 292,200.00

TOTAL BID SCHEDULE (written out): Two Hundred Ninety-two Thousand and Zero Cents

### III. TECHNICAL SPECIFICATIONS

#### SP 1101 – Traffic Signal and Appurtenances

##### PART 1 – RRFB GENERAL

###### A. SECTION INCLUDES

1. This section includes the requirements for RRFB equipment.

###### B. General Requirements

1. Each RRFB shall consist of two or more rapidly and alternately flashed rectangular yellow indications having LED array based pulsing light sources,
2. Each RRFB shall be designed, located, and operated as shown on the plans, and shall be in full compliance with MUTCD and FHWA guidelines and standards.
3. Each RRFB shall be a complete two-directional crosswalk warning system consisting of RRFBs, pedestrian notification lights, push buttons with signs, controller, electrical components, and all required hardware for a complete and operational system.

###### C. Functional Requirements

1. Each RRFB shall be AC/DC as outlined in the plans.
2. Each RRFB shall be activated by ADA compliant push buttons.
3. The RRFB shall rest in dark mode. It shall initiate operation only upon an actuation of a pedestrian and shall cease operation after a pre-determined time limit of 2.5 ft feet per second of walking speed from the initiating pedestrian ramp to the accepting pedestrian ramp, unless otherwise directed by the Consulting Engineer or the City of Nampa Traffic Engineer.

###### D. Mechanical Construction Requirements

###### 1. Control Cabinet:

- All RRFB control equipment shall be housed in one aluminum cabinet for both directions that run simultaneously. Two cabinets may be required if each direction runs independently or if otherwise specified on the plans or as directed by the Consulting Engineer or the City of Nampa Traffic Engineer.
- The control cabinet shall be constructed from aluminum with a lockable industry standard #2 lock and tamper-proof hinged door. No other external control cabinet shall be required.
- The control cabinet shall be vented to provide air circulation and cooling of the electronic system. The vents shall be screened to prevent ingress by insects and debris.
- The overall weight of the control cabinet shall not exceed 90lbs (41 kg) and shall have the approximate dimensions: 24" H x 16" W x 8" D (61cm H x 41cm W x 21 cm D).
- Fasteners shall be stainless steel. The Cabinet enclosure shall be powder coated black.

###### 2. Fixtures Light Bars:

- Each system shall have back to back (2 EA) or Bi-Directional RRFB Light Bars powder coated Black in Color.
- Each RRFB shall provide a unidirectional indication to motorists according to the appropriate direction of travel for each side of the street.
- At Roundabout locations the RRFB shall actuate with both directions running simultaneously. This determination should be specified on the plans as directed by the Consulting Engineer or the City of Nampa Traffic Engineer.

- The light bars shall be current-driven LED strings without active electronics. The LEDs shall be driven by pulse-width modulated fixed current. The light bar housing shall be constructed from aluminum and shall have the approximate dimensions: 24" L x 1.5" D x 4.5" H (61.0 cm L x 3.8 cm D x 11.4 cm H). Each light bar shall conform to all provisions of the MUTCD and FHWA requirements.
- Each of the two modules in a light bar shall have 8 LEDs and shall be purpose-built by the manufacturer of the RRFB including the optics. The optics shall be premium, UV-resistant polycarbonate.
- Each end of each light bar shall include a side-emitting pedestrian confirmation light composed of a single LED. Users shall have the option of using both confirmation lights for median applications or have the option of covering one confirmation light with an included sticker for side-of-road applications.
- The light bar shall be mounted to the post or pole using a separate bracket assembly to facilitate mounting two light bars back-to-back (bi-directional) and to allow the light bar(s) to rotate horizontally for aiming.
- The light bar bracket shall be constructed from galvanized or stainless steel and shall have both banding and bolting mounting options and shall be able to be mounted to all specified pole types.
- The light bar assembly shall open for access to the wiring connections for the LED modules. LED modules shall be rated to NEMA 3R.
- Light bar wiring harnesses shall be included.
- Fasteners shall be stainless steel.

### 3. Mounting:

- Mounting adapter hardware for the RRFB cabinet shall be available for 4" - 4.5" round poles. Side-of-Pole mounting shall offer strapping as standard with an option for Z-bar and U-bolts.
- Mounting configurations shall not require specialized tools.

### 4. Configuration:

- The RRFB cabinet shall house an auto-scrolling LED on-board user interface that provides on-site configuration adjustment, system status and fault notification.
- The user interface shall provide a display of four (4) alphanumeric characters and three (3) control buttons to navigate and change settings and activate functions.
- When editing the configuration, the user interface will flash the display indicating it is ready to accept editing and will flash the display rapidly 3 times to indicate the setting change has been accepted.
- The flash duration shall be adjustable in-the-field from 5 to 60 seconds in one second increments, 60 to 1,200 seconds in 60-second steps, and 3,600 seconds. Default flash duration shall be 20 seconds.
- The system shall provide configurable nighttime intensity settings ranging from 10% to 100% of daytime intensity.
- The system shall be capable of enabling or disabling ambient brightness auto-adjustment. This feature allows the system to provide optimal output brightness in relation to ambient light levels while always maintaining adherence to SAE J595 Class I specifications. If

enabled, the ambient brightness auto-adjustment shall adjust output to a range between 50% and 100% of daytime intensity.

- The User Interface shall provide viewing and/or programming access for the following:
  - \* Activation Duration (5 to 60, 60 to 1200, or 3600 seconds)
  - \* Digital output that is active during the flashing cycle that allows the control of external devices such as crosswalk illumination. Digital output shall be configurable for night operation only or operation day or night
  - \* Radio Channel (Choice of 1 to 14)
  - \* Radio Status
  - \* Night Intensity Setting
  - \* Adjustment for Ambient Daytime Brightness
  - \* Self-Test / BIST (Built-In Self-Test) including the detection of shorts or open circuits in the fixture outputs
  - \* Battery Status – General description and actual battery voltage (not applicable for AC model)
  - \* Day or Night Status (as determined by dedicated photosensor)
  - \* Solar Panel Voltage (not applicable for AC model)
  - \* Automatic Light Control. If this safety feature is enabled, it allows the RRFB to temporarily reduce the intensity of the light bars to maintain energy equilibrium. The user interface shall report the amount of dimming being applied in the range of 10% to 100%
  - \* Daily activations averaged over 90 days
  - \* Pushbutton detection
  - \* Firmware Version number
- Activation duration, Night intensity setting and adjustment for ambient daytime brightness shall be automatically broadcast to all RRFBs in the system when changed in one RRFB.

#### 5. AC/DC Power Supply:

- AC: 90-264 VAC input, 6-14 AWG
  - \* Replaceable AC-DC power supply, circuit breaker, terminal block wiring
- The RRFB shall include a universal AC/DC power supply that accepts conventional AC power input and outputs 15 volts DC. It shall be rated for at least 50 watts. AC wiring input shall terminate on a DIN-rail circuit breaker rated for 4 amps.

#### 6. Operational Specifications:

- The RRFB shall meet the minimum photometric specifications of the Society of Automotive Engineers (SAE) standard J595 Class I dated January 2005. A photometric report by a certified third-party testing laboratory shall be provided to demonstrate compliance with J595.
- The color of the yellow light bar indications shall meet the specifications of SAE standard J578 (Color Specification) dated December 2006.
- The controller shall be able to support up to 1.4 amps combined current through the RRFB fixtures simultaneously.
- The system shall use a dedicated light sensor to detect night and day states and apply any optionally-enabled intensity adjustments.

- The system shall operate normally within the temperature range of -40 to +161°F (-40 to +72°C).

7. Radio System:

- The radio system shall operate at 2.4GHz
- Upon detection of a pushbutton press, an RRFB will broadcast an activation to all other nearby RRFBs sharing the same channel.
- The RRFB shall have the capability to activate other RRFBs by wireless communications within 1,000 feet (304 meters).
- The RRFB shall have a minimum of 14 unique channels that can be configured on-site to avoid inadvertent activation of nearby systems.
- The antenna shall be a low-profile “button” shape that cannot be bent or broken by vandals.

8. Activations:

- The system shall be capable of activation by pushbutton and passive microwave detection.
- The pedestrian push buttons that shall have an LED indicator with audible tone with Piezo control and shall be ADA compliant and MUTCD-2009 4E compliant for momentary operation. The RRFB shall be capable of operating with either 1 or 2 pushbuttons.
- The RRFB shall be available with:
  - \* Campbell Guardian Talking Pushbutton - Powder Coated Yellow In Color.
- Custom voice chips shall be available for the XAV2E talking pushbutton.
- All RRFBs in the system shall initiate activation simultaneously within 150ms of activation.
- If an additional activation occurs while the system is activated, the flash duration shall reset. For example, with the flash duration set to 20 seconds, if an additional activation occurs after the RRFB has been activated for 15 seconds the RRFB will continue for an additional 20 seconds, or 35 seconds in total.
- If the RRFB has ceased operation, any subsequent activation shall activate the RRFB without delay regardless of how recently the RRFB ceased operation.
- Pushbutton wiring harnesses shall be included.

9. Environmental Testing:

- The RRFB cabinet and light bars shall be rated to a minimum of NEMA 3R.

10. RRFB Single Upright Pole:

- Each RRFB shall include a 4”x14’ STD spun aluminum pipe/pole powder coated black in color. Pelco part # -PB-5100-14-P33 with an aluminum cap Pelco part # PB-5401-P33 mounted on a 13.75”x15” square aluminum breakaway base Pelco part PB-5336-NL-1S-GL-P33. breakaway base shall also include pole & base collar assembly Pelco part # PB-5325-P33 and the anchor bolt set of 4 w/ hardware 3/4”-10NC x 18, Galv. Pelco part # PB-5518-GLV (set includes 4 bolts, 8 washers and 8 nuts). Approved equals may be considered in place of the Pelco brand named products.

11. RRFB Signage:

- If system is located within a school zone, each system shall have back to back (2 EA) 36" x 36" S1-1 Fluorescent Yellow Green School Signs. Each back side of the S1-1 Pedestrian Signs shall be Black in Color by an application of vinyl sheeting or by an application of powder coating.
- If system is located at a pathway or trail crossing, each system shall have back to back (2 EA) 36" x 36" W11-15 Fluorescent Yellow Trail Crossing Signs. Each back side of the W11-15 Pedestrian Signs shall be Black in Color by an application of vinyl sheeting or by an application of powder coating.
- If system is located at a marked crosswalk, each system shall have back to back (2 EA) 36" x 36" W11-2 Fluorescent Yellow Pedestrian Signs. Each back side of the W11-2 Pedestrian Signs shall be Black in Color by an application of vinyl sheeting or by an application of powder coating.
- Each AGPS Pedestrian Push Button shall include a 9"x12" R10-25 Sign Plate.

#### 12. Qualifications:

- The RRFB shall be FCC certified to comply with all 47 CFR FCC Part 15 Subpart B Emission requirements.
- The RRFB shall be manufactured in the USA and shall be Buy American compliant.
- Manufacturer shall provide a 5-Year Limited Warranty.
- The Manufacturer shall be ISO 9001 certified.
- Or Approved Equal - Approved Equals must be pre-approved by the City Of Nampa ninety (90) days prior to bid date.

## **PART 2 – TRAFFIC SIGNAL HEAD LED INDICATION MODULE GENERAL**

### A. SECTION INCLUDES

1. This section includes the requirements for traffic signal head LED indication modules.

### B. General Requirements

#### 1. Optical

- The red and green ball LED lamps shall meet the January 2005 ITE VTCSH Part II, standards and measurement criteria for LED traffic signal modules. Current test data verifying the compliance of red and green ball LED signals to the January 2005 ITE VTCSH, Part II specification shall be supplied from a certified independent testing lab.
- The control circuitry shall prevent the current flow through the LEDs in the off state to avoid any false indication as may be perceived by the human eye, during daylight and evening hours. The LED traffic signal module shall be operationally compatible with NEMA TS - 1 and NEMA TS – 2 conflict monitoring parameters. The intensity of the LED signal module shall not vary by more than 10% over the allowable voltage range as specified in the electrical section below.

#### 2. Electrical

- Power factor shall be 0.90 or greater, at nominal rated voltage and 25°C, after 60 minutes of operation. Total harmonic distortion (THD) shall be less than 20% at rated voltage, at 25°C.
- All LED traffic signal modules shall follow the FCC noise regulations and must meet the FCC Title 47, Subpart B Section 15 regulation.

- The red, yellow, and Portland Orange LEDs shall utilize exclusively AlInGaP technology, either AS (Absorbing Substrate) or TS (Transparent Substrate) and shall not exhibit degradation of more than 30% of their initial light intensity following accelerated life testing (operating at 85° C and 85% humidity, for 1000 hours). AlGaAs technology is not acceptable.
- The green LEDs shall utilize Indium gallium nitride technology. Green LED traffic signal modules shall not be illuminated when the applied voltage is less than 35 VAC. They shall be illuminated (unregulated) when the applied voltage is 45 VAC to 80 VAC. Their illumination shall be in compliance with the January 2005 ITE VTCSH, Part II, when the applied voltage is between 80
- VAC and 135 VAC.
- The LED signal modules shall be connected directly to line voltage, 120 Volts AC nominal, and shall be able to operate over the voltage range of 80 VAC to 135 VAC.
- The 12” red ball units shall consume no more than 10.5 watts at 120 VAC and 25° C. Maximum power consumption shall not exceed 17 watts at 120 VAC and 74° C.
- Green ball LED traffic signal modules shall consume no more than 14.6 watts for 12” at 120 VAC and 25° C. Maximum power consumption shall not exceed 15 watts at 120 VAC and 74° C.
- Yellow ball LED traffic signal modules shall consume no more than 22 watts for 12” lamps at 120 VAC and 25° C. Maximum power consumption shall not exceed 25 watts at 120 VAC and 74° C.
- Red arrow type LED traffic signal modules shall be temperature-compensated so as to maintain intensity at elevated temperatures.
- Combination hand-walking person LED Pedestrian signal modules shall incorporate a Lunar- white LED walking person symbol. The walking person symbol shall be filled-in. In order to ensure accurate color transmittance, the module shall incorporate a replacement lens that is precisely matched to the dominant wavelength of the LEDs. The hand and walking person symbols shall be side by side. The hand symbol shall be filled-in. The hand and walking person symbols in the combination module, shall consume no more than a nominal 9 and 10 watts each, respectively. The module shall be compliant with NEMA water penetration prevention standards.
- All LED modules must incorporate a sensing and control circuit, capable of detecting proper operation of the module. This sensing circuit will disable the module in the event of a failure of either the LED driver circuit or the LED’s not operating within defined limits. When the sensing circuit disables the module, the module shall not illuminate and appear as a failed incandescent lamp to conflict monitors and malfunction management units.
- Transient voltage suppression rated at 1500 watts for 1 millisecond and fusing with a maximum rating of 2 amps shall be provided to minimize the effect and repair cost of an extreme over voltage situation or other failure mode.

### 3. LED Inserts/Modules

- The following Vehicle Signal Head LED Modules are approved by the City of Nampa Traffic Division.
- Red, Amber, and Full Green Balls:

	Dialight	GELcore	Duralight	Leotek
Red Ball	433-1210-003XL	DR6-RTFB-17A	JXL300-HFTR	TSL-12R-LX-IL6- A1
Amber Ball	433-3230-001XL	DR6-YTFB-17A- VY1	JXL300-HFTY	TSL-12Y-LX-IL6- A1
Green Ball	4300-2220-001XL	DG6-GTFB-17A	JXL300-HFTG	TSL-12G-LX-IL6- A1

- Red, Amber and Green Arrows:

	Dialight	GELcore	Duralight	Leotek
Red Arrow	432-1314-001X-OD	DR6-RTAAN-17A	JXJ300-07TR03	TSL-12RA-IL6- A1
Amber Arrow	431-3334-001X-OD	DR6-YTTAN-17A- VY	JXJ300-07TY03	TSL-12YA-IL6- A1
Green Arrow	432-2374-001X-OD	DR6-GTAAN-17A	JXJ300-07TG03	TSI-12GA-IL6- A1

- Warranty
- All LED traffic signal modules supplied shall be warranted for 15 years against manufacturing defects and shall be tested and approved by the City of Nampa Traffic Division.
- All red, green, and yellow ball LED traffic signal modules shall be performance warranted by the supplier to be in compliance with ITE minimum intensity standards for LED traffic signal modules, at 74° C, for a period of fifteen (15) years. All red, green, and yellow arrow traffic signal modules. Additionally, red and green LED ball type traffic signals shall be warranted by the supplier to be in compliance with January 2005 ITE VTCOSH, Part II specifications for fifteen (15) years.
- PEDESTRIAN SIGNAL HEAD LED INDICATION MODULE (16" x 18") PERFORMANCE SPECIFICATION
- General Information
- All pedestrian signal heads shall meet the requirements of the latest pedestrian head bid specifications and the most recently adopted version of the Manual on Uniform Traffic Control Devices (MUTCD). The Contractor can obtain the latest bid specifications by contacting the City Of Nampa Traffic Division.
- The pedestrian signal heads shall be high performance LED countdown modules or a City of Nampa approved equal.
- Combination hand-walking person LED Pedestrian signal modules shall incorporate a Lunar- white LED walking person symbol. The walking person symbol shall be filled-in. In order to ensure accurate color transmittance, the module shall incorporate a replacement lens that is precisely matched to the dominant wavelength of the LEDs. The hand symbol shall be filled-in. The hand and walking person symbols in the combination module, shall consume no more than a nominal 9 and 10 watts each, respectively. The module shall be compliant with NEMA water penetration prevention standards.



- All LED pedestrian signal modules shall also be warranted for 15 years against manufacturing defects. The LED module shall be manufactured by one of the following vendors:

Dialight	GELcore	LeoTek
430-6479-001X	PS7-CFF1-26A-J1	TSL-PED-I6-CIL-9-P1

- Warranty
- All LED traffic signal modules supplied shall be warranted for 15 years against manufacturing defects and shall be approved by the City of Nampa Traffic Division.
- All pedestrian signal modules shall be performance warranted by the supplier to be in compliance with ITE minimum intensity standards for LED traffic signal modules, at 74° C, for a period of fifteen (15) years.

### **PART 3 – NEMA TS2 TYPE-1, P-1-16 STRETCH CABINET ASSEMBLIES GENERAL**

#### **A. SECTION INCLUDES**

1. This section includes the requirements for NEMA TS2 Type-1 Cabinet Assemblies.

#### **B. General Requirements**

1. Cabinet Assembly Profile Detail:

- Each Cabinet assembly provided to the City of Nampa must include the following as per outlined in the specification:
- (1) – P-69.5 NAT ALUMINUM, DOUBLE DOOR, BASE MOUNTED CABINET HOUSING, CONTINUOUSLY WELDED AND UL LISTED
- (2) – CORBIN #2 DOOR LOCKS
- (1) – FAN PANEL ASSEMBLY W/2 FANS & 2 LED LIGHT STRIPS
- (2) – LED LIGHT STRIPS UNDER BOTTOM SHELF ON EACH SIDE OF THE DRAWER
- (3) – 12” DEEP SHELVES WITH REAR LIP
- (1) – 16 POSITION TS2-TYPE1 HARDWIRED HORIZONTAL MAIN PANEL ASSEMBLY W/PLEXIGLAS COVER ON REAR OF PANEL
- (10) - RED JUMPERS
- (1) – POWER AUXILIARY PANEL ASSEMBLY WITH AN ACP-340 SURGE PROTECTOR & 1/8” PLEXIGLASS COVER
- (2) – 16 CH DETECTOR RACKS AND HARDWIRED INTERFACE PANEL
- (1) – DETECTOR TEST SWITCH PANEL ASS. AND PROG. PANEL
- (1) – 9-POSITION SDLC HUB MOUNTED VERTICALLY 90° TO THE MOUNTING RAIL
- (8) – SDLC CABLE ASSEMBLIES
- (1) – 24” WIDE DOCUMENT DRAWER ASSEMBLY
- (1) – 8 OUTLET AC POWER OUTLET STRIP
- (1) – CABINET POWER DISTRIBUTION ASSEMBLY
- (1) – MODEL MMU2-16LEIP MALFUNCTION MANAGEMENT UNIT

- (16) - LOAD SWITCHES
- (1) – FLASHER
- (6) – FLASH TRANSFER RELAYS
- (1) – TS2 CABINET POWER SUPPLY 5 AMP
- (4) – BUS INTERFACE UNITS
- UPS BATTERY BACKUP SYSTEM YES  NO  - (optional)  
OPTIONAL UPS BATTER QTY.  
(1 ) (2)  (3)  (4)  (5)  (6)
- GENERATOR OUTLET ASSEMBLY WITH YES  NO  - (optional)  
GENERATOR RECEPTACLE, CIRCUIT  
BREAKERS, INDICATOR LIGHTS
- 10” X 5 - 12” X 3.25 - FIBER PATCH PANEL YES  NO  - (optional)  
WITH 2 X 12 - SM-LC-DPLX COUPLER  
PLATES
- FULLY MANAGED ETHERNET SWITCH 12- YES  NO  - (optional)  
port 10/100/1000BASE-T(X) PoE + 4-port  
100/1000BASE SFP (PG 12-13)
- (4) – PLUGGABLE TRANCEIVER – SFP YES  NO  - (optional)  
SINGLEMODE FIBER TRANCEIVER DUPLEX  
LC EX-1250TSP-MB4L-AS (PG 12-13)
- (2) – CABINET DOOR OPEN SWITCH BOTH YES  NO  - (optional)  
DOORS
- KEYLESS DOOR LOCKS IN PLACE OF YES  NO  - (optional)  
CORBIN #2
- GPS TIME MODULE – EXTERNAL PUCK YES  NO  - (optional)  
ANTENNA
- OPTICAL EVP SYSTEM PHASE SELECTOR YES  NO  - (optional)
- ADD NETWORK ENABLES AC OUTLET STRIP YES  NO  - (optional)
- BLUETOOTH SYSTEM DEVICE WITH RADIO YES  NO  - (optional)
- INTERSECTION DISPLAY PANEL 8 PHASE YES  NO  - (optional)  
QUAD
- TS2 – FRAM GRABBER SDLC BUS YES  NO  - (optional)  
CONNECTED

## 2. Cabinet Design and Construction:

- The cabinet shall be constructed from 5052-H32 aluminum with a minimum thickness of 0.125”.
- The P-1-16 Stretch designated cabinet size shall be 69.5” H x 44” w x 26” D.
- The cabinet shall be a double door design with full front and rear doors.
- A stiffener plate shall be welded across the inside of the doors to prevent flexing.
- The cabinet shall be designed and manufactured with materials that will allow rigid pedestal mounting.
- The cabinet must not be able to flex when it is securely mounted.
- A rain channel shall be incorporated into the design of the main door opening to prevent liquids from entering the enclosure. The cabinet door opening must be a minimum of 80 percent of the front surface of the cabinet.

- The top of the cabinet shall incorporate a 1-inch slope toward the rear to prevent rain accumulation.
- Unless otherwise specified, the cabinet shall be supplied with a natural aluminum finish. Sufficient care shall be taken in handling to ensure that scratches are minimized.
- All seams shall be continuously welded. All surfaces shall be free from weld flash. Welds shall be smooth, neatly formed, free from cracks, blowholes and other irregularities. All sharp edges shall be ground smooth.
- The main cabinet door opening shall be double flanged on all four sides.
- All cabinets shall be supplied with a minimum of two (3) removable shelves manufactured from 5052-H32 aluminum. The shelves shall be a minimum of 12 inches deep, extend the full width of the cabinet and have a ½ inch rear lip.
- The shelves shall have horizontal slots at the rear and vertical slots at the front of the turned down-side flange. All screw holes punched or drilled in shelves shall be countersunk. The shelf shall be installed by first inserting the rear edge of the shelf on the cabinet rear sidewall mounting studs, then lowering the shelf on the front sidewall mounting studs. The shelf shall be held in place by a nylon tie-wrap inserted through holes on the front edge of the shelf and around the front side wall mounting studs.
- The front edge of the shelf shall have holes punched every 6 inches to accommodate tie-wrapping of cables/harnesses.
- The bottom shelf shall be mounted so that the back panel of the cabinet can tip forward to allow access to the back of the panel without striking the bottom shelf or the roll-out drawer.
- A minimum of one set of vertical "C" channels shall be mounted on each interior wall of the cabinet for the purpose of mounting the cabinet components. The channels shall accommodate spring mounted nuts or studs. All mounting rails shall extend to within 3 inches of the top and bottom of the cabinet. Rear wall rail spacing shall be 18.50 inches center-to-center.
- Each side wall of the cabinet shall have two (2) sets of equipment mounting rails.
- Each rail set shall be spaced 7.88 inches center-to-center. All channel nuts used to install equipment on the rails shall be the spring-loaded type.
- The roof of the cabinet shall incorporate an exhaust plenum with a vent screen. Perforations in the vent screen shall not exceed 0.125 inches in diameter.
- Main door shall incorporate a shroud to cover the filtered louvered openings as appropriate for the design. The assembly is secured on the interior of the door over the filtered Louvers. The Shroud is louvered downward and matches the door louvers.
- The cabinet main lower door section shall be equipped with a louvered air entrance. The air inlet shall be large enough to allow sufficient air flow per the rated fan capacity. Louvers must satisfy the NEMA rod entry test for 3R ventilated enclosures. A non-corrosive, vermin and insect-proof, removable aluminum air filter shall be secured to the air entrance. The filter shall fit snugly against the cabinet door wall.
- The main cabinet door opening shall be double flanged on all four sides.
- The main door and police door-in-door shall close against a weatherproof and dust-proof, closed-cell neoprene gasket seal. The gasket material for the main door shall be a minimum of 0.250 inches thick by 1.00 inch wide. The gasket material for the police door shall be a minimum of 0.250 inches thick by 0.500 inches wide. The gaskets shall be permanently bonded to the cabinet.

- The main door on the cabinet shall be equipped with a three-point latching mechanism.
- The handle on the main door of the cabinet shall be manufactured from stainless steel. The handle shall include a hasp for the attachment of an optional padlock. The cabinet door handle shall rotate counterclockwise to open. The handle shall not extend beyond the perimeter of the main door at any time. The lock assembly shall be positioned so that the handle shall not cause any interference with the key when opening the cabinet door.
- The main door hinge shall be a one-piece, continuous piano hinge with a stainless-steel pin running the entire length of the door. The hinge shall be attached in such a manner that no rivets or bolts are exposed. The hinge shall be tamper-proof. Hinges shall only be attached to the cabinet and cabinet door with bolts. No welded hinges allowed.
- The main door shall include a mechanism capable of holding the door open at approximately 90, 145, and 165 degrees under windy conditions.
- The main door shall be equipped with a Corbin tumbler lock number 1548-1, exact equivalent or optional keyless lock entry system. Minimum of two keys shall be supplied.
- The police door-in-door shall be provided with a treasury type lock Corbin No. R357SGS or exact equivalent and has a minimum of one key.
- All base mounted cabinets require anchor bolts to properly secure the cabinet to its base. The cabinet flange for securing the anchor bolts shall not protrude outward from the bottom of the cabinet. Size P-1-16 Stretch cabinets shall require four (4) anchor bolts for proper installation.
- All enclosures must be constructed, approved and marked in accordance with the requirements for Type 1 Industrial Control Panel Enclosures contained in UL 508A, the Standard for Industrial Control Panels. Enclosure must meet NEMA 3R rating requirements and be marked with UL approval sticker.

### 3. Terms and Facilities / Main Panel Design:

- The main panel shall be constructed from 5052-H32 brushed aluminum of 0.125 inches minimum thickness and installed to minimize flexing when plug-in components are installed.
- All 16-position main panels are provided with a mounting mechanism which allows easy access to all wiring on the rear of the panel. Lowering of the main panel can be accomplished without the use of hand tools. Complete removal can be accomplished using simple hand tools.
- The terminals and facilities shall be supplied as a minimum in the following configuration;
- Sixteen (16) load switch sockets
- Six (8) flash transfer relay sockets
- One (1) flasher socket, four (4) BIU sockets
- All load switch and flash transfer relay socket reference designators shall be silk-screen labeled on the front and rear of the main panel to match drawing designations. Socket pins shall be marked for reference on the rear of the panel.
- The 16-load switch main panel shall be configured with all 16 load switch sockets mounted in one horizontal row.
- All load switches shall be supported by a bracket, extending at least half the length of the load switch.

- The sixteen (16) load switch main panel shall have all the field wiring terminal blocks configured in one horizontal row across the bottom of the panel.
- All field output circuits shall be terminated on a non-fused barrier type terminal block with a minimum rating of 10 amps.
- All field input/output (I/O) terminals shall be identified by permanent alphanumerical labels. All labels shall use standard nomenclature per the NEMA TS2 specification.
- It shall be possible to flash either the yellow or red indication on any vehicle movement and to change from one color indication to the other by use of a screwdriver.
- The sixteen (16) position main panel shall incorporate four (4) twelve position terminal blocks located above the field terminals for exclusive programming of each output flash color and flasher circuit.
- The main panel shall contain one flasher socket (silk screen labeled) capable of operating a 15-amp, 2 pole, NEMA solid-state flasher. The flasher shall be supported by a bracket, extending at least half its length.
- One RC network shall be wired in parallel with each group of three flash-transfer relays and any other relay coils.
- All logic-level, NEMA-controller and Malfunction Management Unit input and output terminations on the main panel shall be permanently labeled. Cabinet prints shall identify the function of each terminal position.
- Eight (8) 20-position feed-through terminal blocks shall be provided at the top of the main panel. Four (4) terminal blocks on the top right side will provide access to the controller unit's programmable and non-programmable I/O. Terminal blocks for DC signal interfacing shall have a number 6-32 x 7/32-inch screw as minimum.
- All functions of BIU#3 and BIU#4 shall be brought out to four (4) 20-position feed through terminal blocks located on the top left of the main panel for ease of function programming.
- All main panel wiring shall conform to the following wire size and color;
  - Green/Walk load switch output - brown wire - 14 gauge,
  - Yellow load switch output - yellow wire - 14 gauge,
  - Red/Don't Walk load switch - red wire output - 14 gauge,
  - MMU (other than AC power) - violet wire - 22 gauge,
  - Controller I/O - blue wire - 22 gauge,
  - AC Line (power panel to - black wire main panel) - 8/10 gauge,
  - AC Line (main panel) - black wire - 10 gauge,
  - AC Neutral (power panel to - white wire main panel) - 8/10 gauge,
  - AC Neutral (main panel) - white wire - 10 gauge,
  - Earth ground (power panel) - green wire - 8 gauge,
  - Logic ground - gray wire - 22 gauge,
  - Flash programming - Orange wire,
  - Flasher terminal - Black wire red or yellow field terminal - 14 gauge.
- All wiring, 14 AWG and smaller, shall conform to MIL W 16878/1, type B/N, 600V, 19-strand tinned copper. The wire shall have a minimum of 0.010 inches thick PVC insulation with clear nylon jacket and rated to 105 degrees Celsius. All 12 AWG and larger wire shall have UL listed THHN/THWN 90 degrees Celsius, 600V, 0.020 inches thick PVC insulation and clear nylon jacketed.

- Connecting cables shall be sleeved in a braided nylon mesh or poly jacketed. The use of exposed tie-wraps or interwoven cables is unacceptable.
- All Terminals and Facilities configurations shall be provided with BIU wiring assignments consistent with NEMA TS2-1998 specifications.
- All Terminals and Facilities configurations shall be provided with sufficient RS-485 Port 1 communication cables to allow for the intended operation of that cabinet. Each communication cable connector shall be a 15-pin metal shell D subminiature type on both ends of the cable. The cable shall be a shielded cable suitable for RS-485 communications. SDLC cables shall not be hardwired to a terminal block.
- All main panels shall be pre-wired for a Type-16 Malfunction Management Unit.
- All wiring shall be neat in appearance. All cabinet wiring shall be continuous from its point of origin to its termination point. Butt type connections/splices are not acceptable.
- All connecting cables and wire runs shall be secured by mechanical clamps. Stick-on type clamps are not acceptable.
- The grounding system in the cabinet shall be divided into three separate circuits (AC Neutral, Earth Ground, and Logic Ground). These ground circuits shall be connected together at a single point as outlined in the NEMA TS2 Standard.
- The main panel shall incorporate a relay, designated as K1, to remove +24 VDC from the common side of the load switches when the intersection is placed into mechanical flash. The relay shall have a momentary pushbutton to apply power to the load switch inputs for ease of troubleshooting.
- All pedestrian push button inputs from the field to the controller shall be optically isolated through the BIU and operate at 12 VAC.
- All wire (size 16 AWG or smaller) at solder joints shall be hooked or looped around the eyelet or terminal block post prior to soldering to ensure circuit integrity. Lap joint soldering is not acceptable.
- The main panel connections for power and all cabinet switch interfacing shall be hardwired to a twelve (12) position terminal block with #10 screws located on the lower right side of the main panel.
- The main panel shall have one banana plug on lower right side wired to AC+ and supplied with a 4-foot fused size 16 AWG jumper cord with plug for flashing out cabinet during testing.

#### 4. Power Panel Design:

- The Cabinet Power Auxiliary panel (CP) shall distribute power to the cabinet assembly.
- The CP shall be located on the lower right-side wall of the cabinet.
- The CP shall be wired to provide the necessary filtered power to the load switches, flasher, and the Power Distribution Assembly terminal block.
- The power components shall be equipped with a removable 1/4" Plexiglas front cover for technician protection.
- The design will allow a technician access to the main and auxiliary breakers without removing the protective front cover.
- The Cabinet Power panel (CP) shall include the following components;
  - A 50-amp main breaker (CB1) shall be installed. Incoming power to the cabinet must first be wired through the 50A circuit breaker switch (SW7) in the Police

panel assembly and then be wired to the 50A main circuit breaker (CB1) on the Cabinet Power panel.

- The controller, MMU, signals, cabinet power supply and auxiliary panel shall be powered through CB3 and the ACP-340 filter.
- Breakers shall be at minimum, a thermal magnetic type, U.L. listed for HACR service, with a minimum of 10,000 amp interrupting capacity.
- A 15-amp auxiliary circuit breaker (CB2) shall supply power to the fan, light and GFI utility outlet.
- A 15-amp auxiliary circuit breaker (CB3) shall be installed between the main incoming AC+, terminal, to the Line In. (LI) of the ACP-340 surge protector.
- An ACP-340 surge arrester.
- A 60-amp, 125 VAC radio interference line filter.
- A normally open, 75 Amp, Solid State Signal buss relay. The SSR shall be a Crydom Model # HA4875H.
- One (1) 2-position terminal block for incoming AC+ and AC- power lines. The Earth line shall be connected to the EBG1 earth Ground bus.
- A minimum of one (1) 8-position neutral bus bar capable of connecting three #12 wires per position.
- A minimum of one (1) 6-position ground bus bar capable of connecting three #12 wires per position.
- A blank cover shall be installed over the GFI outlet cutout. The GFI outlet will move to the rail in an outlet box, mounted above the Modem Outlet Assembly.

#### 5. Power Distribution Assembly:

- The Cabinet Power panel (CP) shall include the following components:
  - The Power Distribution assembly shall be manufactured from 0.090", 5052-H32 aluminum.
  - It shall provide filtered power for the controller, malfunction management unit, cabinet power supply, and all auxiliary equipment via a twelve (12) position terminal block with #10 screws.
  - The terminal block shall have a Plexiglas cover.

#### 6. Generator Connector/Break Panel Assembly:

- A Generator/Breaker panel assembly shall be installed on the door with access from the outside of the cabinet via a lockable access door from the outside. The generator door lock shall be a Corbin #2 cabinet door lock.
- The panel shall include two (2) 30amp circuit breakers. CB4 shall be the Utility Power circuit breaker and CB5 shall be the Generator Power circuit breaker.
- The circuit breakers shall be protected by a sliding cover over the circuit breakers so that the other circuit breaker cannot be accidentally tripped.
- The panel shall also include two (2) neon indicator lamps to indicate whether the cabinet is under utility power or generator power.
- Generator receptacle shall be mounted in the panel and shall be rated as L5-30P.

#### 7. Auxiliary Cabinet Equipment:

- The cabinet shall be provided with a thermostatically controlled (adjustable between 55-160 degrees Fahrenheit) ventilation fan in the top of the cabinet plenum. The fan plate shall be removable with the use of simple hand tools for serviceability. A minimum of two exhaust fan and thermostat shall be provided. The fan shall be a ball bearing type fan and shall be capable of drawing a minimum of 100 cubic feet of air per minute. The Fan/Thermostat assembly shall be connected to the Power panel by means of a 4-position plug-in cable.
- An LED cabinet lighting system shall be used to illuminate the internal structure of the cabinet assembly. Two (2) LED cabinet lighting strips shall be mounted on the fan panel assembly in the top of the cabinet. The fan panel shall also incorporate the LED lights power supply. There shall be two (2) LED light strips mounted under the bottom shelf, on each side of the document drawer to illuminate the bottom portion of the cabinet. All LED light strips shall be California Model P3100-C-S.
- A re-sealable print pouch shall be mounted to the door of the cabinet. The pouch shall be of sufficient size to accommodate one complete set of folded cabinet prints.
- A minimum of three sets of complete and accurate cabinet drawings shall be supplied with each cabinet.

#### 8. Vehicle Detection:

- Two (2) Detector Racks shall be provided in each cabinet. Detector racks shall be installing on the left and right side of the middle shelf and shall be flush with the front lip of the shelf.
- Each detector rack assembly shall support up to 16-channels of loop detection (either eight (8) 2-channel detectors or four (4) 4-channel detectors), two 2-channel preemption devices and one BIU.
- Detector rack BIU mounting shall be an integral part of the detector rack.
- All BIU rack connectors shall have jumper address pins corresponding to the requirements of the TS2 specification. The jumpers may be moved to change the address of any individual rack. The address pins shall control the BIU mode of operation. BIUs shall be capable of being interchanged with no additional programming.
- Two (2) 16-position detector interface panels shall be provided for a 32-channel rack cabinet. The interface panels shall be secured to the left wall of the cabinet. The Detector interface panels shall be hardwired to the detector racks.
- Each interface panel shall allow for the connection of sixteen independent field loops. A ground bus terminal shall be provided between each loop pair terminal to provide a termination for the loop lead-in cable ground wire.
- Each interface panel shall provide a 10-position terminal block to terminate the field wires for up to two 2 channel preemption devices.
- Loop Interface Panel #1 (LI1) shall provide a 12-position terminal block to terminate the field wires for up to two 2-channel Emergency Preemption devices. Loop Interface Panel #2 (LI2) shall provide a 12-position terminal block to terminate the field wires for two channels of Railroad Preemption wiring via a Model 252 AC isolator card installed in the Detector Rack #2.
- A cable consisting of 20 AWG twisted pair wires shall be provided to enable connection to and from the panel to a detector rack. The twisted pair wires shall be color coded red and white wire.



- All termination points shall be identified by a unique number and silk screened on the panel.
- Each detector rack shall accommodate rack mountable preemption devices such as Opticom.
- Each cabinet shall be wired for one Opticom 768 AUX. I/O Panel located on the right-side wall of the cabinet just below the Bottom Shelf.

#### 9. Cabinet Component Test Switch and Police Panel:

- The cabinet component test switch panel shall be mounted on the inside of the main door.
- The cabinet component test switch panel shall provide as a minimum the following;
  - CONTROLLER ON/OFF - This switch shall control the controller, MMU, and cabinet power supply AC power.
  - AUTO/FLASH - When in the flash position, power shall be maintained to the controller and the intersection shall be placed in flash. The controller shall not be stop timed when in flash. Wired according to NEMA-TS2-2003 the MMU forces the controller to initiate the MUTCD start-up sequence when existing flash.
  - STOP TIME - When applied, the controller shall be stop timed in the current interval.
  - CAMERA/RADAR POWER - This switch will control Camera Power and is wired to the 4-position Camera Power terminal block.
  - RAILROAD POWER - This switch will provide AC+ power for the Railroad power. Cabinet shall not have an interval advance switch installed on test switch panel
  - DETECTOR TEST ASSEMBLY - These momentary test push buttons are for all vehicle and pedestrian inputs to the controller for testing the inputs.
  - DETECTOR PUSH BUTTONS - Shall be wired to detector test terminal blocks, DTB1 and DTB2 mounted on the right side of the cabinet assembly for manual configuration programming phase to input for each test button.
  - SPARE PUSH BUTTONS - Four (4) additional spare test push buttons shall be included for additional device configuration and directly wired into test terminal blocks DTB1 and DTB2 for future use.
- The police door switch panel shall be mounted on the outside top half of the main door and shall contain the following;
  - POLICE AUTO/FLASH - When in the flash position, power shall be maintained to the controller and the intersection shall be placed in flash. The controller shall be stop timed when in flash. Wired according to NEMA-TS2-1998 the MMU forces the controller to initiate the start-up sequence when exiting flash.
  - MAIN CABINET POWER CIRCUIT BREAKER SWITCH - All incoming AC+ wiring to the cabinet is wired through this switch first before being distributed to the Cabinet assembly for powering all cabinet devices. This switch is rated at 50amp and is the Main Power shutdown switch.
- All toggle type switches shall be heavy duty and rated 15 amps minimum. Single or double-pole switches may be provided, as required.
- Any exposed terminals or switch solder points shall be covered with a non-flexible shield to prevent accidental contact.
- All switch functions must be permanently and clearly labeled.

- All wire routed to the police door-in-door and test switch push button panel shall be adequately protected against damage from repetitive opening and closing of the main door.
- All Technician and Police switches are hardwired from each switch to each function point of use

#### 10. Cabinet Interior and Identification Detail:

- Type 1 controller power cable.
- Type 2 controller power cable 9-position SDLC Buss assembly shall be mounted horizontally on the rear set of rails on the left side of the cabinet between the shelves.
- There shall be an 8-position terminal block mounted on the right side, second rail vertically between the two shelves to be used for spare test switch connections.
- Under the 8 - position terminal block above, shall be mounted a 4-position terminal block for terminating the unused yellow BIU wires.
- There shall two (2) Gnd. buss assemblies with staggered AC- buss and earth ground buss mounted on a panel. There shall be one mounted on each side of the cabinet on the lower portion of the front rail set.
- A 24" wide document drawer shall be mounted in the middle of the lower shelf assembly.
- All terminal blocks shall have clear Plexiglas covers
- All required cabinet labeling that is not silkscreened shall be engraved on black plastic with white lettering. Laminated label tape is not allowed.
- Install the GFCI outlet in an outlet box, with an appropriate cover and mount above the Modem Outlet assembly on the front right-side rail.
- Terminal spade lugs shall be used for all wiring terminated to a terminal block in the cabinet assembly except MMU wiring.
- All screws and fasteners must be stainless steel.
- Lifting tabs shall be installed on the cabinet, mounted upside down for shipping.

#### 11. Auxiliary Cabinet Plug In Devices:

- Load Switches:
  - Load switches shall be solid state and shall conform to the requirements of Section 6.2 of the NEMA TS2 Standard.
  - Signal load switches shall have a minimum rating of 10 amperes at 120 VAC for an incandescent lamp load.
  - The front of the load switch shall be provided with six indicators to show the input and output signal from the controller to the load switch.
  - Load switches shall be dedicated per phase. The use of load switches for other partial phases is not acceptable.
  - The full complement of load switches shall be supplied with each cabinet to allow for maximum phase utilization for which the cabinet is designed.
  - The load switches shall be as specified in the C.O.N. standard and specifications.
- Flashers:
  - The flasher shall be solid state and shall conform to the requirements of section 6.3 of the NEMA TS2 Standard.

- Flashing of field circuits for the purpose of intersection flash shall be accomplished by a separate flasher.
- The flasher shall be rated at 15 amperes, double pole with a nominal flash rate of 60 FPM.
- The flashers shall be as specified in the C.O.N. standards and specifications.
- Flash Transfer Relays:
  - Flash transfer relays shall meet the requirements of Section 6.4 of the NEMA TS2 Standard.
  - The coil of the flash transfer relay must be de-energized for flash operation.
  - The full complement of relays shall be supplied with each cabinet to allow for maximum phase utilization for which the cabinet is designed.
  - The flash transfer relays shall be as specified in the C.O.N. standards and specifications.
- Malfunction Management Units (MMU):
  - Each cabinet assembly shall be supplied with one MMU as defined by the requirements of Section 4 of the NEMA TS2 Standard.
  - The supplied MMU2-Type 16 shall be as specified in the C.O.N. standards and specifications.
- Bus Interface Units (BIU):
  - All BIUs shall meet the requirements of Section 8 of the NEMA TS2 Standard.
  - The full Bus Interface Units shall be supplied with each cabinet to allow for maximum phase and function utilization for which the cabinet is designed. Four (4) BIU's shall be supplied.
  - Each Bus Interface Unit shall include power on, transmit and valid data indicators. All indicators shall be LEDs.
  - The BIU relays shall be as specified in the C.O.N. standards and specifications.
- Cabinet Power Supply:
  - The cabinet power supply shall meet the requirements of Section 5.3.5 of the NEMA TS2 Standard.
  - The cabinet power supply shall provide LED indicators for the line frequency, 12 VDC, 12 VAC, and 24 VDC outputs.
  - The cabinet power supply shall provide (on the front panel) jack plugs for access to the +24 VDC for test purposes.
  - One 5 Amp. cabinet power supply shall be supplied with each cabinet assembly.
  - The power supply shall be as specified in the C.O.N. standards and specifications.

## 12. Etherwan Ethernet Switch #EX78934E-0VB

- Ethernet Switch: 12-port 10/100/1000BASE-T(X) PoE + 4-port 100/1000BASE SFP
- 12 ports, 4 SFP's, With Extended POE
- Description: This is a specification that defines an Environmentally Hardened Field Ethernet Switch that may be mounted by Standard DIN Rail or Shelf Mount with up to 16 total ports that is environmentally hardened to operate in harsh environments. This specification defines an Ethernet Switch based on 10/100/1000 Mbps Ethernet standards for both copper and fiber optic connectivity.

- Port Configuration Table: The Ethernet Switch shall be provided in the following configuration:
  - 12 Ports 10/100/1000BASE-TX with PoE
  - 4 Ports 100/1000 SFP
- Materials: Provide an Ethernet Switch that is new and incorporates an environmentally protected aluminum case to IP 40 and is NEMA TS2 Rated.
- General Requirements:
  - System Memory: 2GB
  - Flash Storage: 1GB
  - Minimum of 16k Media Access Control (MAC) addresses
  - 12 Mbits Buffer Memory
  - Port Mirroring
  - MAC Based Port Trunking (up to 3 groups of 4 ports per group)
  - Switching method store-and-forward
    - Non-blocking full wire speed forwarding rate
      - 14,800pps for 10Mbps
      - 148,810pps for 100Mbps
      - 1,488,100pps for 1000Mbps
    - Switching Fabric: 32Gbps
  - Port Configuration Specifications:
    - 10/100/1000-TX ports (Copper Twisted Pair)
      - RJ-45 female connector
      - Automatic and user-selectable speed setting (10/100/1000 Mbps)
      - Automatic and user-selectable half/full duplex setting
      - Rate Controlled 2Mbps to 100Mbps @ 0.5 Mbps Increments
      - Drives up to 100 m of Category 3, 4, or 5 unshielded twisted-pair (UTP) cable at 10 Mbps.
      - Drives up to 100 m of Category 5 UTP cable at 100 Mbps.
      - Drives up to 100 m of Category 5e, 6a, 7, or 8 Twisted Pair cable at 1Gbps.
    - 100/1000 SFP Module Ports
      - Compatible with hardened Small Form Factor Pluggable (SFP) modules
      - Refer to EtherWAN SFP Module list for standard SFP module configurations.
      - Supported Modules:
        - 100BASE SFP Fiber, Single and Duplex LC
        - 1000BASE SFP Fiber, Single and Duplex LC
        - 1000BASE SFP Ethernet (SFP-GT1AM)

### 13. SFP Fiber Transceiver

- Description: This is a specification that defines an environmentally hardened field ethernet SFP fiber transceiver: Duplex LC EX-1250TSP-MB4L-AS
  - Single 10km -40 to 85°C 1310nm
  - Load Compliant with Multi-Sourcing Agreement (MSA) Small Form Factor Pluggable (SFP)

- Eye Safety Compliant with Class 1 laser safety requirements EN 60825-1
- Environmental: RoHS compliant, lead-free
- EMC: FCC part 15, CENELEC EN 55022
- Ethernet Switch Warranty: Ethernet switch products shall be guaranteed free of design and manufacturing defects by the original equipment manufacturer. Product shall have a Limited Lifetime Warranty

#### 14. NEMA TS2-TYPE 1 Cabinet Assembly Testing and Warranty:

- Cabinet Assembly NRTL/UL Testing/Listing:
  - The cabinet shall initially be approved by a Nationally Recognized Testing Laboratory (NRTL)/Underwriters Laboratories (UL) to conform to the UL 50 standard and have the NRTL/UL sticker affixed to the cabinet during manufacturing.
- Cabinet Assembly Manufacturer Testing:
  - The complete cabinet assembly with electronics shall undergo complete input/output function testing by the manufacturer before being released to the City of Nampa.
- Cabinet Assembly General Testing Requirements:
  - Each controller and cabinet assembly shall be tested as a complete entity under signal load for a minimum of 48 hours.
  - Each assembly shall be delivered with a signed document detailing the cabinet final tests performed.
  - The cabinet shall be assembled and tested by the controller manufacturer or authorized local distributor to ensure proper component integration and operation.
  - Each controller and cabinet assembly shall be tested as a complete entity under signal load for a minimum of 48 hours.
  - Each assembly shall be delivered with a signed document detailing the cabinet final tests performed.
  - The cabinet shall be assembled and tested by the controller manufacturer or authorized local distributor to ensure proper component integration and operation.
  - The controller and Malfunction Management Unit shall be warranted by the manufacturer against mechanical and electrical defects for a period of two years from date of shipment. The manufacturer's warranty shall be supplied in writing with each cabinet and controller. Second party extended warranties are not acceptable.
  - The cabinet assembly and all other components shall be warranted for a period of Two years from date of shipment.
  - Any defects shall be corrected by the manufacturer or supplier at no cost to the City.
- Cabinet Assembly Environmental Chamber Testing And Notification:
  - The City of Nampa has identified “redundant” NEMA Environmental Chamber Testing unnecessary due to unreasonable testing procedures \*extremities. (\*A portion of the test profile in the NEMA TS2 Standard includes a temperature and

humidity time profile that lowers the temperature to -30° F for 24 hours then raises the temperature to +165° for 24 hours).

- The cabinet manufacturer or manufacturer's representative shall notify the City of Nampa in writing within thirty days following any governmentally required - TS2 Type 1 cabinet assembly environmental chamber testing procedure failures. Notifications shall also include any known environmental chamber testing procedure failures conducted independently in lieu of the manufacturer or manufacturer's representative testing procedures.

15. Cabinet UPS Battery Backup System - Optional YES  NO

- Definitions;
  - UPS - Uninterruptible Power Supply
  - GUI - Graphical User Interface
  - Ni-Zn - Nickel-Zinc
  - SNMP - Simple Network Management Protocol
  - SMTP - Simple Mail Transfer Protocol
  - TCP/IP - Transmission Control Protocol/Internet Protocol
- UPS Battery Backup System Requirements;
  - Compatibility - The UPS shall be compatible with the agencies current traffic controller cabinet, controller and cabinet components, including the safety monitor, for full time operation. The UPS shall include all necessary cables to connect the UPS and batteries.
  - Run-time - The UPS shall provide a 2-amp cabinet load a minimum run-time of four (4) hours of full color operation at ambient temperature of 25°C.
  - Output Capacity - UPS must provide a minimum of 1000W continuous active output capacity, with a 90% typical inverter efficiency while running in battery backup mode. The UPS must have surge output capability of 2000W.
  - Output Voltage - When under battery power, the UPS output voltage shall be 120 VAC, ±3%, pure sine wave output, with <2% total harmonic distortion (THD), and frequency of 60 Hz ±0.5%.
  - Transfer Time - The maximum transfer time allowed, from disruption of utility line voltage to stabilized inverter line voltage from batteries shall be thirty- three (33) milliseconds max. The maximum transfer time when switching from inverter line voltage to utility line voltage after the line-qualifying period shall be thirty-three (33) milliseconds max. The UPS shall be capable of allowing the user to program the line qualifying period as three (3), ten (10) or thirty (30) seconds.
  - Operating Environment - Operating temperature for the UPS and Power Interface Module (PIM) shall be -35°F to +165°F (-37° to +74°C).
  - Certifications - The UPS battery cells shall be recognized UL-2054, CSA 22.2 No. 60950
- Power & Control Connections;
  - Power Interface Module - The UPS shall utilize a Power Interface Module (PIM) to connect utility AC input to the UPS and batteries as well as routing UPS output power to the cabinet load.

- AC Connection - The AC input and output shall be separate panel mounted plug/receptacles that allow no possibility of accidental exposure to dangerous voltages.
- Battery Connections;
  - The batteries shall have digital battery bus connections to the UPS with locking connectors with provision for six battery ports. There shall be AC power connections from the Power Interface Module to the batteries that are separate from the digital battery bus connections.
  - The UPS must offer six (6) battery ports that can accommodate a mix of any form-factor Ni-Zn batteries compatible with the UPS system.
  - The UPS must be capable of accepting batteries of different capacities at once, giving the user the ability to utilize different battery sizes to achieve required run-times.
  - The UPS must allow the user to 'Hot Swap' any of the battery form-factors while on utility power and/or battery backup power.
- Battery Type;
  - The standard and XRT UPS batteries must utilize a Sealed Nickel-Zinc (Ni-Zn) battery technology. Lead-Acid or Lithium battery technologies will not be accepted.
  - The standard run-time battery panel(s) must incorporate a bendable design, which allows the battery panel(s) to flex or bend for installation between the 19" EIA rack and the sidewall of the 33X cabinet.
  - The standard run-time module(s) must have the capability of being installed on/under a shelf or be rack mountable within the 19" EIA rack.
  - XRT battery solutions shall come with an intelligent management system that consolidates all battery connections to the UPS and manages the battery string.
  - The charging/battery monitoring circuitry shall be incorporated within the panel, module or extended run time battery solutions.
- Charging & Recharging;
  - The UPS must be able to recharge panel and module batteries from 0% to 100% state of charge (full capacity) within four and one half (4.5) hours of complete discharge at 25°C when AC utility line voltage is available.
  - Extended run time batteries shall be able to recharge batteries from 0% to 100% state of charge (full capacity) within ten (10) hours of complete discharge at 25°C when AC utility line voltage is available.
  - The number of batteries connected to the UPS shall have NO effect on the recharge time.
  - The batteries must be able to charge at up to 50°C ambient temperature.
  - The UPS must not require trickle / float charging
- Wall Charging - The UPS panel, module and extended run time batteries shall be able to be charged using a 120VAC, 15A wall outlet (20A for extended run time) without need of a UPS inverter/controller, battery charger or battery tender.
- Unit failure - The UPS must have a fail-safe utility tie feature (bypass mode) with a visual indicator that automatically cuts back to the utility line in the event of a UPS or battery failure, or complete battery discharge.
- Operating Mode - The UPS shall have intelligent two-stage operation defined as;

- Stage One: Line Attenuator, Waveform Monitoring and Switchover to Battery Backup
  - Stage Two: Waveform Monitoring, Return to AC Power.
- Oscilloscope Function – The UPS shall have an oscilloscope function continuously monitoring the incoming utility AC waveform. The oscilloscope function shall continuously evaluate three (3) measures of the incoming utility AC waveform;
  - Voltage: A continuous RMS measurement with user programmable AC voltage thresholds.
  - Waveform Anomalies: Oscilloscope enhanced sensitivity mode compares incoming utility waveform to a mathematically pure sine wave reference waveform.
  - Frequency: Continuously measured with frequency deviation detected as quickly as 1 cycle and a default threshold of 60Hz +6Hz.
- Functionality and Operational Requirements:
  - LCD Display -The UPS shall have a 64 x 128 Pixels LCD display with white LED backlight. From the main screen, the LCD display shall provide the following information;
    - Utility line voltage
    - UPS status
    - Cabinet consumption in watts
    - Most recent AC power outage duration
    - Battery capacity State of Charge percentage
- LCD Display Menu - The LCD Display Menu shall provide the user the ability to program and monitor all UPS parameter.
- Local User Interface - The UPS shall include a navigational dial to allow users the ability to navigate the menu to setup the UPS.
- Voltage Thresholds
  - The UPS shall allow the user to set high and low AC line voltage thresholds to determine parameters to transfer from utility line power to battery backup power.
  - The UPS shall bypass utility line power if the utility line voltage is outside of the set high and low voltage parameters.
  - The UPS shall have a programmable utility AC qualification time after restoration of utility AC power to within specified voltage thresholds with choices of 3, 10 or 30 seconds.
- Notifications - All alarm functions shall be available on SNMP, SMTP and Programmable Relay.
- Programmable Relays - The UPS Inverter/Controller shall include eight (8) Class 2 programmable relays, which can be triggered by power line conditions, and user selected settings of the UPS. Each relay shall have the ability to trigger by multiple conditions simultaneously. The programming options are as follows;
  - Power Fail without delay / Power fail with delay
  - Time of Day
  - Battery Capacity
  - System Fault
- Event Log - The UPS shall provide an event log with a 1000 event capacity, which will allow the user to view the event type, date, time and duration of a given event. UPS configuration changes shall also be defined as an event and captured in the event log.



The data shall be recorded in a FIFO format, so the oldest event is purged as the newest is entered.

- Automatic Bypass Switch
- The UPS shall have an automatic bypass function with a visual indicator to bypass the UPS and allow the utility line voltage through to the cabinet.
- Circuit Breakers -The UPS system shall include a Power Interface Module (PIM) equipped with a 20A circuit breaker and automatic bypass capability.
- Cold Start - The UPS shall be equipped with “Cold Start” capabilities, which provides the user the ability to turn the UPS on and supply battery backup power when no utility line voltage is available. This allows the user the ability to install a UPS and provide backup AC power at an intersection that has no utility line voltage available.
- Audible Indicators - The UPS shall have audible indicators for the following parameters:
  - System Startup
  - Cold Start
  - Inverter On/Off
  - Inverter Output Over Current
  - AC Mis-wire
  - Rotating Navigation Dial with Press to Select and Back Button use
  - UPS Fault
- Maintenance - There shall be no battery maintenance requirements for the life of the batteries including no battery rotation, maintenance discharge or cell balancing.
- Visual Indicators - The UPS shall have visual indicators on its front panel for the following:
  - Red indicator - UPS Fault
  - Solid Green indicator - Backup Mode On
  - Flashing Green indicator - Batteries are below 10% capacity
  - Yellow - Relay Triggered
- Battery Indication - The batteries shall have the following visual indicators through a multi-color LED providing battery status and alarms
  - Green = Backup Mode
  - Blue = Charging Mode
  - Red = Battery Fault
  - White Blinking = Charged, battery at rest
- Communication - The UPS must have the capability to provide Ethernet and IP addressing communications with the capability for remote monitoring and programming as well as remote firmware updating capability. This capability must be provided through embedded webserver software within the UPS.
- Ethernet Port Communications - The UPS shall be equipped with an Ethernet port. The Ethernet port shall be an RJ45, EIA 568B pin out type connector. The Ethernet port shall be 10/100Mbps, TCP/IP capable.
- Graphical User Interface
  - The embedded webserver will provide a Graphical User Interface (GUI) that shall be password protected and require a password and the UPS IP address to access.
  - The GUI shall have a status area that details the UPS status, location, available AC line voltage status and real-time cabinet power consumption. When in

backup mode, the GUI shall display the most recent power failure duration. The status area must be displayed on every page.

- The GUI shall have a Home screen with clickable icons and tabs, which will allow the user to navigate the GUI with ease. The home screen shall allow the user to view real-time graphical charts of the cabinet power consumption and AC line voltage status. The home screen must allow the user the ability to view a live waveform from the AC utility line in the cabinet.
- The GUI shall have an Event Log page to allow the user to view the event type, date, time and duration of a given event. The GUI must provide the user the capability of viewing the waveform of the given event.

16. UPS Battery Backup Warranty - The UPS as a complete system including batteries, must be warranted to be free from defects in material and workmanship for a minimum of 5 years for the battery cells and 2 years for the electronics from the date of shipment.

#### **PART 4 – SUBMITTALS**

- A. Manufacturer shall submit the following item(s) as part of the enclosed bid:
  - 1. Certification by the Manufacturer That the Material Supplied Meets or Exceeds Design Specifications
- B. Shop Drawing(s), Installation Instruction(s) and Operation and Maintenance Manual(s)
- C. Manufacturer's Warranty
  - 1. Five (5) Year Minimum

#### **IV. WORK SITE LOCATION**

The project site is located at the City of Nampa 212 W Railroad Street.

#### **V. COMPLETION TIME AND DATES**

The equipment will be delivered within one hundred and thirty-three (133) days of issuance of the Notice to Proceed.

#### **VI. MEASUREMENT AND PAYMENT**

All prices above will include all labor, tools and materials necessary to complete the work per each. Payment will be made under the project number listed above. Invoice by the 5<sup>th</sup> of each month for any items delivered the previous month.

## **VII. INSURANCE REQUIREMENTS**

Certificate of insurance including Workers Compensation and \$1,000,000.00 Liability will be required.

## **VIII. PERFORMANCE AND PAYMENT BONDS**

Provide Performance and Payment Bonds, each in the amount at least equal to the Contract Price as security for the faithful performance and payment of all Contractors' obligations under the Contract Documents.

**IX. SIGNATURE OF CONTRACTOR**

Please contact City of Nampa Engineering Division for more information, 208-565-5274. Minority and women’s owned businesses are encouraged to quote. The City of Nampa is an Equal Employment Opportunity (EEO) employer.

The City reserves the right to reject any or all bids in the best interests of the City of Nampa. Additionally, all bidders are subject to the “Terms and Conditions” attached in Appendix A.

**RETURN THIS FORM TO:**

City of Nampa Engineering Division  
Attn: Cynthia Reynolds Contract Admin  
500 12<sup>th</sup> Avenue South  
Nampa, ID 83651

Company: Econolite Control Products, Inc.

Signature/Title:  PNW Regional Director

Date: June 29, 2023 Name, printed: Jeff Wolf

Phone: 206-276-6283 Email: jwolf@econolite.com

Public Works License # N/A

## **Appendix A: TERMS and CONDITIONS**

**DEFINITIONS:** (i) "Contract" means the entire written agreement between the parties, including, but not limited to the Invitation to Bid or Request for Proposal and its specifications, terms, and conditions, solicitation instructions, solicitation addenda and contract amendments, if any, and the purchase order or price agreement document. (ii) "Contractor" means a person or organization with whom the City has contracted for the purchase of goods. The terms "Contractor" and "Seller" are synonymous. (iii) "City" means the City of Nampa, Idaho, making the purchase and is synonymous with "Buyer".

**STANDARD AND SPECIAL TERMS:** In addition to the terms and conditions contained herein, there may also be special terms and conditions in an Invitation to Bid or Request for Proposal, if one is issued, which apply to this contract.

**AMENDMENTS:** The terms of this contract shall not be waived, altered, modified, supplemented or amended in any manner whatsoever without prior written approval of the City.

**WAIVER:** Failure of the City to enforce any provision of this contract shall not be a waiver or relinquishment by the City of its right to such performance in the future nor of the right to enforce any other provisions of this contract.

**SEVERABILITY:** If any provision of this contract is declared by a court of competent jurisdiction to be illegal or in conflict with any law, the validity of the remaining terms and provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the contract did not contain the particular provision held to be invalid.

**GOVERNING LAW; JURISDICTION; VENUE:** This contract shall be governed and construed in accordance with the laws of the State of Idaho, without resort to any jurisdiction's conflict of laws, rules or doctrines.

**HOLD HARMLESS:** Contractor shall indemnify, defend, and hold harmless the City and its officers, employees, agents, and members from all claims, suits, or actions of any nature arising out of or related to the activities of Contractor, its officers, subcontractors, agents or employees under this contract.

**COMPLIANCE WITH APPLICABLE LAW:** Contractor agrees to comply with all federal, state, county, and local laws, ordinances, and regulations applicable to work to be done under this Contract. The Contractor agrees to comply with all federal and state laws prohibiting discrimination on the basis of race, sex, national origin, religion, age, or handicap, and the provisions of the American Disabilities Act.

**DELIVERY:** All deliveries shall be F.O.B. to the City of Nampa streets yard located at 212 W Railroad Street, Nampa, Idaho with all transportation and handling charge paid by Contractor. Responsibility and Liability for loss or damage shall remain with Contractor until final inspection and acceptance when responsibility shall pass to the City except as to latent defects fraud and Contractor's warranty obligations.

**INSPECTIONS:** Goods or goods and services furnished under this contract shall be subject to inspection and test by the City. If the City finds goods or services furnished to be incomplete or not in compliance with solicitation specifications, the City may reject the goods or goods and services and require Contractor to either correct them without charge, or provide at a reduced price, whichever is equitable under the circumstances. If Contractor is unable or refuses to cure any defects within a time deemed reasonable by the City, the City may reject the goods or services and cancel the contract in whole or in part.

**WARRANTIES:** All goods shall be new and current model and shall carry manufacturer warranties. Contractor warrants all goods delivered to be free from defects in labor, material and manufacture and to be in compliance with solicitation specifications.

**CITY PAYMENT OF CONTRACTOR CLAIMS:** If Contractor fails, neglects, or refuses to pay promptly, as due, any claim for labor or services furnished to the Contractor or any subcontractor by any person in connection with the goods, or services if applicable, provided under this contract, the City may pay such claim and charge the amount of the payment against funds due or to become due to the Contractor under this contract. The payment of a claim by the City pursuant to this paragraph shall not relieve the Contractor or its surety, if any, from obligation with respect to any unpaid claims.

**PAYMENT:** Payment will be made within 45 days following the date the entire order is delivered and accepted by the City or 45 days from the date the invoice is received, whichever is later.

**ASSIGNMENT/SUBCONTRACTS/SUCCESSORS:** Contractor shall not assign, sell, transfer, or subcontract rights, or delegate responsibilities under this contract, in whole or in part, without the prior written approval of the City. No such written approval shall relieve Contractor of any obligations of this contract, and any transferee or subcontractor shall be considered the agent of Contractor. Contractor shall remain liable to the City under the contract as if no such assignment, transfer, or subcontract had occurred. The provisions of this contract shall be binding upon and shall inure to the benefit of the parties to the contract and their respective successors and assigns.

**SAFETY AND HEALTH REQUIREMENTS:** Goods or services provided under this contract shall comply with all Federal Occupational Safety and Health Administration (OSHA) requirements.

**MATERIAL SAFETY DATA SHEET:** The Contractor shall provide the City with a Material Safety Data Sheet for any goods provided under this contract which may release, or otherwise result in exposure to a hazardous chemical under normal conditions.

**ACCESS TO RECORDS:** The Contractor shall maintain all fiscal records relating to this contract in accordance with generally accepted accounting principles and shall maintain any other records relating to this contract in such a manner as to clearly document Contractor's performance hereunder, The City and their duly authorized representatives shall have access to such fiscal records and to all other books, documents, papers, plans and writing of Contractor which relate to this contract to perform examination, and audits and make excerpts and transcripts.

**BREACH OF CONTRACT:** Should Contractor breach any of the provisions of this contract, the City reserves the right to cancel this contract upon written notice to Contractor. Contractor shall be liable for any and all damages suffered by the City as the result of Contractor's breach of contract, including, but not limited to incidental and consequential damages.

**FORCE MAJEURE:** Neither the City nor Contractor shall be held responsible for delay or default caused by fire, riot, acts of god, terrorist acts, ,acts of political sabotage, or war where such cause was beyond, respectively, the City, or Contractor's reasonable control. Contractor shall, however, make all reasonable efforts to remove or eliminate such a cause of delay or default and shall, upon the cessation of the cause, diligently pursue performance of its obligation under this contract.

**TERMINATION:** This contract may be terminated by mutual consent of both parties or by the City at its discretion. The City may cancel an order for goods or goods and services at any time with written notice to Contractor, stating the extent and effective date of termination. Upon receipt of this written notice, Contractor shall stop performance under this contract as directed by the City. If this contract is so terminated, Contractor shall be paid in accordance with the terms of the contract for goods delivered or services rendered, and accepted.





**CITY OF KETCHUM**  
 PO BOX 2315 \* 191 5TH ST. \* KETCHUM, ID 83340  
 Administration 208-726-3841 (fax) 208-726-8234

**PURCHASE ORDER**  
 BUDGETED ITEM? \_\_\_ Yes \_\_\_ No

**PURCHASE ORDER - NUMBER: 24090**

<b>To:</b> 4041 SWARCO INDUSTRIES, INC. P.O. BOX 89 COLUMBIA TN 38402	<b>Ship to:</b> CITY OF KETCHUM PO BOX 2315 KETCHUM ID 83340
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P. O. Date	Created By	Requested By	Department	Req Number	Terms
05/02/2024	KCHOMA	KCHOMA		0	

Quantity	Description	Unit Price	Total
1.00	MAIN STREET REHAB 03-4193-7135	22,037.00	22,037.00
	SHIPPING & HANDLING		0.00
	TOTAL PO AMOUNT		22,037.00

\_\_\_\_\_  
 Authorized Signature



**QUOTATION**

**Quote #:** TW04072024A - Rev01  
**Agency:** City of Ketchum  
**Job Name:** Maint St signals  
**Bid Date:** 4/12/24

**Estimator:** Tony Wheeler  
760-509-5805  
[tony.wheeler@swarco.com](mailto:tony.wheeler@swarco.com)

Bid Item	Description	Price
6	SIG POLY GRN X/X MC [XXX]12"	
8	SIG POLY GRN X/X MC [XXXX]12"	
6	BP 12"PLY 3SEC 5"SNB1 WITH 2" 3991 TAPE	
8	BP 12"PLY 4SEC 5"SNB1 W/2" TAPE 3M 3991	
50	VISOR POLY TUN BLK 12"	
8	LED GEL 12"ARROW GRN DR6-GCAAN-17A - ITE SPECS - CLEAR LENS	
16	LED GEL 12"ARROW RED DR6-RTAAN-17A - ITE SPECS	
8	LED GEL 12"ARROW YEL DR6-YTAAN-17A-YX ITE/ETL SPECS	
6	LED GEL 12"BALL GRN DR6-GCFB-VLA - ITE SPECS - CLEAR LENS	
6	LED GEL 12"BALL RED DR6-RTFB-VLA - ITE SPECS	
6	LED GEL 12"BALL YEL DR6-YTFB-VLA ITE/ETL SPECS	
4	Pelco Astro-bracket AG-0144-30-120-PNC for 36x36 Street sign	
10	Pelco Astro-bracket AG-0144-66-120-PNC for 72x24 street sign	
2	Pelco Astro-bracket AG-0144-108-120-PNC for 120x24 street sign	
10	MT CAL GRN BRONZE SV1T ROD 4/12	
6	ASTRO-BRAC AS-0125-3-62-PNC, PELCO	
8	ASTRO-BRAC AS-0125-4-62-PNC, PELCO	

*Lead time determined at time of order. Typically 60-80 days.* **\$22,037.00**

Swarco is an international corporation with factories, vendors and suppliers located throughout the world. Unless specifically noted, we are not aware and/or may not comply with Buy America requirements particular to this project.

**This quote valid for 30 days.**

**Reference Total** **\$22,037.00**

Prices firm for 30 days. Freight included. Add sales tax.  
Sale is subject to Swarco's standard terms and conditions.

The information transmitted is intended only for the person or entity to which it is addressed and may contain confidential and/or legally privileged material. Any review, retransmission, dissemination or other use of, or taking of any action in reliance upon, this information by persons or entities other than the intended recipient is prohibited.

If you received this in error, please contact the sender and delete the material from any computer.



**CITY OF KETCHUM**  
 PO BOX 2315 \* 191 5TH ST. \* KETCHUM, ID 83340  
 Administration 208-726-3841 (fax) 208-726-8234

**PURCHASE ORDER**  
 BUDGETED ITEM? \_\_\_ Yes \_\_\_ No

**PURCHASE ORDER - NUMBER: 24091**

<b>To:</b> 6168 PEDSAFETY	<b>Ship to:</b> CITY OF KETCHUM PO BOX 2315 KETCHUM ID 83340
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P. O. Date	Created By	Requested By	Department	Req Number	Terms
05/02/2024	KCHOMA	KCHOMA		0	

Quantity	Description	Unit Price	Total
1.00	MAIN STREET REHAB 03-4193-7135	4,666.50	4,666.50
	SHIPPING & HANDLING		0.00
	TOTAL PO AMOUNT		4,666.50

\_\_\_\_\_  
 Authorized Signature

Pedestrian Safety - the heartbeat in our Solutions!

Date	April 19, 2024
Valid Until	June 18, 2024
Quote #	041924TBA

City of Ketchum, ID

Quote/Project Description
Ketchum, ID Main St Project

Attn: Trent Donat

Quantity	Description	Unit Price	Line Total
10.00	Guardian Wave FS (PN# 5010821C) with 912 AP (PN5010511) SPI (PN 5010300) and AL Sign ( <del>R10-3W</del> <b>R10-3e</b> )	440.00	4,400.00
2.00	nxtCycle Wave Push button (PN 5020102)	125.00	\$ 250.00
2.00	9X12 AL MUTCD Sign ( <del>Suggestion R10-3W</del> <b>R10-25</b> )	8.25	\$ 16.50

green color for housing, and add PBIL isolator

ACHD piggyback

**PLEASE REFERENCE QUOTE# WHEN SUBMITTING PURCHASE ORDER**  
**AWARDED BID PRICE MUST BE DISCLOSED BEFORE PURCHASE ORDER IS PROCESSED**

### Special Notes and Instructions

Please send Purchase Order with any additional required information to expedite your order. Items required may include you completing Campbell's intersection planning sheet template. Prices subject to change if order is not released within 60 days from purchase order date. Shipping charges will be determined at time of shipment and added on.

Subtotal	\$	4,666.50
	\$	-
<b>Total</b>	<b>\$</b>	<b>4,666.50</b>

Above information is not an invoice and only an estimate of services/goods described above.

**Thank you for your business!**

Should you have any inquiries concerning this quote, please contact Sales @ 208-345-7459 x Option 1

450 W. McGregor, Boise, ID 83705

Tel: 208-345-7459 Fax: 208-345-7481 E-mail: sales@pedsafety.com Web: www.pedsafety.com



ADA COUNTY HIGHWAY DISTRICT  
PURCHASE AGREEMENT  
2024 TRAFFIC SIGNAL MATERIALS  
TO24-05

This PURCHASE AGREEMENT (hereinafter “AGREEMENT”) is made and entered into this \_\_\_ January 2024 by and between Ada County Highway District (hereinafter “ACHD”), and PedSafety (hereinafter “VENDOR”).

**RECITALS**

**WHEREAS**, ACHD is a single countywide highway district located in the county of Ada and is responsible for all secondary county and city highways within Ada County, Idaho; and

**WHEREAS**, ACHD has all powers necessary and incidental to the statutory powers granted to it under Title 40, Idaho Code; and

**WHEREAS**, ACHD has consulted with the ACHD Commission and the Development and Technical Services Division Deputy Director, and has determined the necessity of the ITEM(s) specified herein; and

**WHEREAS**, ACHD has advertised for bids, and the VENDOR has responded to the competitive procurement and has been determined to be the lowest cost responsive bidder in accordance with Idaho Code 67-2806; and

**WHEREAS**, ACHD desires to enter into an AGREEMENT with the VENDOR for the purchase of the ITEM(s) specified herein, and has been awarded the contract by the ACHD Commission.

**NOW, THEREFORE, BE IT RESOLVED**, for and in consideration of the mutual covenants and conditions hereof, and the payments to be made hereunder, the parties agree as follows:

**AGREEMENT**

**1. DEFINITIONS**

For the purposes of this AGREEMENT, the following terms are defined:

- A. **ACHD** shall mean the Ada County Highway District, a body politic and corporate of the State of Idaho that is responsible for all secondary city and county highways within Ada County. The ACHD Director or his representative may act on behalf of ACHD. For the purposes of this AGREEMENT, the ACHD mailing address is Ada County Highway District, 3775 Adams Street, Garden City, Idaho, 83714; the telephone number is 208-387-6100; and the facsimile number is 208-345-7650.
- B. **AGREEMENT** shall mean this PURCHASE AGREEMENT between ACHD and VENDOR. The word AGREEMENT may be used throughout this document to also mean CONTRACT DOCUMENTS.
- C. **CONTRACT DOCUMENTS** shall mean the documents that, when combined, make up the ACHD solicitation for the purchase of the ITEM(s) which includes the Invitation to Bid,

Instructions to Bidders, Specifications, Bid Schedule, Bid Proposal, and AGREEMENT as well as any other document identified as part of the solicitation such as Addenda.

- D. **ITEM(s)** shall mean the materials, supplies, or goods, that are the subject of the procurement and this AGREEMENT and are described in SPECIFICATIONS.
- E. **SPECIFICATIONS** shall mean all the dimensions, quantities, provisions, and requirements describing the ITEM(s) under purchase and included in the CONTRACT DOCUMENTS.
- F. **SUPPLY BOND** shall mean a bond obtained by the VENDOR which guarantees that the VENDOR shall furnish the ITEM(s) as contracted in this AGREEMENT. Should the VENDOR fail to furnish the ITEM(s) as contracted in this AGREEMENT or otherwise default on its obligations under this AGREEMENT, the surety shall pay ACHD the amount of the SUPPLY BOND. The SUPPLY BOND shall be equal to one hundred percent (100%) of the Payment value as set forth in Payment.
- G. **VENDOR** shall mean PedSafety. For the purposes of this AGREEMENT, the VENDOR mailing address is 450 West McGregor Drive, Boise, Idaho 83705; the telephone number is 208-345-7459 Ext: 8002.

## 2. PROCUREMENT

- A. VENDOR agrees to provide for sale and deliver the ITEM(s) particularly described in Exhibit "A", SPECIFICATIONS, and attached hereto.
- B. VENDOR will provide additional quantities of the ITEM(s) or otherwise modify the ITEM(s) as described in Exhibit "A", SPECIFICATIONS, as desired by ACHD by means of a written Change Order signed by a person authorized by ACHD to execute such Change Order in accordance with ACHD policy. Such prior written authorization by ACHD shall be a condition precedent to any claim of VENDOR for payment.

## 3. PAYMENT

For the provision and delivery of the ITEM(s), as specified in the Exhibit "A", SPECIFICATIONS, ACHD agrees to pay an amount not to exceed Eighty-Eight Thousand United States Dollars and Zero Cents (\$88,000.00) to the VENDOR as provided in Exhibit "B", PAYMENT SCHEDULE.

- A. Partial payments will be made by ACHD upon periodic invoices submitted by the VENDOR.
- B. Partial payments shall be based upon the value of the ITEM(s) delivered, furnished, and/or installed to date by the VENDOR that conform to the SPECIFICATIONS.
- C. Invoice submittals are to be sent to ACHD via e-mail at [invoices@achdidaho.org](mailto:invoices@achdidaho.org).
- D. ACHD will pay each invoice net 30 days.

## 4. TIME FOR DELIVERY AND EXTENSIONS

VENDOR and ACHD herein agree that the ITEM(s) as set forth in the Procurement is/are required to be delivered within 60 calendar days from the date of the Purchase Order for this AGREEMENT as provided in Exhibit "C", DELIVERY SCHEDULE. ACHD will grant extensions for the following: delays caused by ACHD, excessive time required to process submittals by ACHD, or additional ITEM(s) requested by ACHD.

- A. CONTRACTOR shall not be liable or deemed to be in default for any Force Majeure delay in performance under this AGREEMENT occasioned by unforeseeable causes beyond the

control and without the fault or negligence of CONTRACTOR, including, but not restricted to, acts of God, fires, floods, epidemics, quarantine, restrictions, strikes, freight embargoes, or unusually severe weather, provided that in all cases CONTRACTOR shall notify ACHD promptly in writing of any cause for delay, and ACHD concurs that the delay was beyond the control and without the fault or negligence of CONTRACTOR. The period for the performance shall be extended for a period equivalent to the period of the Force Majeure delay. CONTRACTOR finances shall not constitute a Force Majeure.

- B. Subject to any extensions granted by ACHD in this Section 4 and subject to Subsection a. above, VENDOR agrees and acknowledges that time is of the essence in the performance of the terms and condition of this AGREEMENT and in the event VENDOR fails to perform the terms and conditions of this AGREEMENT in a timely manner, ACHD shall have the right to reduce the monies due the VENDOR by a sum of (1%) of the total AGREEMENT amount per week, commencing on the Date for Delivery date as described in this Section 4, and Exhibit "C", DELIVERY SCHEDULE, and continuing until all the ITEM(s) as set forth in the Section 2 is/are delivered to ACHD.

#### 5. DURATION OF AGREEMENT

This AGREEMENT shall commence immediately upon execution by the ACHD Commission and shall continue until Monday, September 30, 2024.

#### 6. F.O.B. GARDEN CITY

The VENDOR shall, at his own expense and risk, transport any ITEM(s) called for within the CONTRACT DOCUMENTS to ACHD principal place of business located in Garden City, Idaho.

#### 7. CONDITION OF GOODS

The ITEM(s) provided shall conform in all respects to the SPECIFICATIONS provided in CONTRACT DOCUMENTS. Any ITEM(s) offered or shipped by the VENDOR shall be new and warranted to be fit for purposes as set forth in the CONTRACT DOCUMENTS. In the event the ITEM(s) supplied by the VENDOR to ACHD has an irregular appearance or physical blemish, and even though the ITEM(s) is/are fit for the specific purpose intended, nevertheless, ACHD reserves the right to reject such ITEM(s) or require the VENDOR to repair such physical defect or irregularity.

#### 8. RESPONSIBILITY FOR DAMAGES

The VENDOR shall indemnify, save and hold harmless, and defend, regardless of outcome, ACHD and its officers, agents, and employees from and against all liability, claims, damages, losses, expenses, actions, and suits whatsoever, including injury or death of other, or any employee of VENDOR or subcontractor, caused by or arising out of the performance, act, or omission of any term or provision of the CONTRACT DOCUMENTS.

#### 9. ORDER ACKNOWLEDGEMENT

The VENDOR agrees to provide written acknowledgement of all orders received from ACHD within twenty-four (24) hours of order entry. If the VENDOR receives an order from ACHD on a Friday or holiday, then the acknowledgement shall be sent ACHD the next business day.

#### 10. NOTICES

Any and all notices required to be given by either of the parties hereto shall be in writing and deemed delivered when either:

- A. Delivered personally to the contact at the address below; or
- B. Sent by fax to the other party at the facsimile number set forth below; or
- C. Deposited in the United States Mail via certified, return receipt requested, postage pre-paid mail, addressed to the other party at the address set forth below; or

- D. Transmitted by other facsimile number or mailing address as may be provided by written notice of such change given to the other in the same manner as provided above.

FOR ACHD:

Greg Fullerton, Traffic Operations Superintendent  
Ada County Highway District  
3775 Adams Street  
Garden City, Idaho, 83714  
Facsimile Number: (208) 345-7650  
Telephone Number: (208) 387-6192

FOR VENDOR:

Tony Brennan, Marketing Manager  
PedSafety  
450 West McGregor Drive  
Boise, Idaho 83705  
Telephone Number: 208-345-7459 x 8002  
Email: [tony@pedsafety.com](mailto:tony@pedsafety.com)

#### 11. SUBMITTALS

All ITEM(s) submittal documentation that may be required by the SPECIFICATIONS shall include purchase order numbers and appear on all acknowledgements, shipping labels, packing lists, and invoices. All correspondence is to be sent to ACHD as provided in Notices.

#### 12. DELIVERY OF MANUALS

All manuals relating to ITEM(s) shall be submitted to ACHD prior to the time of the delivery as provided by Time for Delivery and Extensions or at the time of the delivery.

#### 13. SUPPLY BOND

If required by ACHD in the CONTRACT DOCUMENTS, the VENDOR agrees to furnish a SUPPLY BOND for one hundred percent (100%) of the contract value within twenty (20) calendar days from execution of this AGREEMENT.

#### 14. RELEASE OF SUPPLY BOND

ACHD will authorize the release of the SUPPLY BOND after, in the opinion of ACHD, the VENDOR has fully and completely performed under this AGREEMENT, and there are no outstanding disputes or claims pursuant to the terms of the CONTRACT DOCUMENTS.

#### 15. LIABILITY INSURANCE

VENDOR agrees to maintain, during the term of this AGREEMENT, Comprehensive General Liability Insurance having a minimum limit of \$100,000 per claim and \$500,000 aggregate, Motor Vehicle Insurance having a minimum limit of \$100,000 per claim and \$500,000 aggregate, and required Workers Compensation Insurance, and all other insurance required to be maintained under the laws of the State of Idaho. VENDOR agrees to furnish a Certificate of Insurance certifying to ACHD that such coverage is in force within twenty (20) calendar days from the execution of this AGREEMENT.

#### 16. INTENT OF AGREEMENT

It is the intent of the parties by the execution of this AGREEMENT, which is integrated and incorporated as part of the CONTRACT DOCUMENTS, is to adequately set forth the full agreement between the parties for the sale and purchase of the ITEM(s).

#### 17. MULTIPLE DOCUMENTS

The parties agree that all CONTRACT DOCUMENTS are essential parts to the complete agreement between ACHD and VENDOR. A requirement occurring in one is as binding as though occurring



in all. The documents are intended to be complementary; however, in the case of discrepancy, SPECIFICATIONS will govern over the Instructions to Bidders.

#### 18. BINDING EFFECT

Upon the execution of this AGREEMENT by ACHD, it shall be binding upon and inure to the benefit of the parties hereto and their successors.

#### 19. ENTIRE AGREEMENT - MODIFICATION

This AGREEMENT and the CONTRACT DOCUMENTS constitute the entire understanding between the parties with respect to this transaction. Any modification must be in writing and signed by both parties.

#### 20. ASSIGNMENT

No order or any interest in this AGREEMENT shall be transferred by VENDOR without the written approval of ACHD.

#### 21. AGREEMENT SUPPLEMENTED BY UNIFORM COMMERCIAL CODE

Both parties agree that the Uniform Commercial Code (UCC) adopted in Idaho as Title 28, Chapters 1 through 12, especially Chapter 2, Sale of Goods, shall govern the parties' relationship with regard to the ITEM(s) to the extent that the UCC does not conflict with any provision specifically set forth in this AGREEMENT and the CONTRACT DOCUMENTS.

#### 22. DUTIES OF THE PARTIES

The VENDOR does herein agree to undertake its duties as set forth in the CONTRACT DOCUMENTS for the sale and delivery of ITEM(s). ACHD does herein agree to accept ITEM(s) conforming to the SPECIFICATIONS, provide notice to cure any non-conforming ITEM(s), and pay monies owed the VENDOR pursuant to ACHD acceptance of conforming ITEM(s).

#### 23. TERMINATION BY VENDOR

The parties agree that the VENDOR may terminate this AGREEMENT for cause based upon the failure of ACHD to tender payment as set forth in Payment.

#### 24. TERMINATION BY ACHD

A. ACHD may terminate for cause if VENDOR:

1. Fails to execute this AGREEMENT; or
2. Fails to begin performance under the terms of this AGREEMENT in a timely manner; or
3. Fails to furnish conforming ITEM(s) and fails to cure after notice has been given; or
4. Performs any service required in SPECIFICATIONS unsuitably or performs work anew as may be rejected as unacceptable and unsuitable; or
5. Fails to continue to perform pursuant to the CONTRACT DOCUMENTS; or
6. Becomes insolvent or is declared bankrupt or commits any act of bankruptcy or insolvency; or
7. Makes assignment for the benefit of creditors; or
8. For any other cause whatsoever, fails to perform the duties set forth in this AGREEMENT and the CONTRACT DOCUMENTS in an acceptable manner.

B. ACHD may terminate this AGREEMENT without cause if ACHD determines that such termination is in the best interests of ACHD. ACHD shall deliver a Notice of Termination to the VENDOR specifying when such termination shall become effective and what

remaining performance by the VENDOR or furnishing of ITEM(s) will be authorized and compensated.

- C. In the event ACHD terminates this AGREEMENT with cause as set forth in Sub-Section (A), any costs and charges incurred by ACHD, together with the cost of completing the work under the CONTRACT DOCUMENTS, will be deducted from any monies due or which may become due the VENDOR. If such expense exceeds the sum which would have been payable under the AGREEMENT, then the VENDOR and his SUPPLY BOND, if required, shall be liable and shall pay to ACHD the amount of the excess. If it is determined that the VENDOR was not in default under Sub-Section (A), then the rights and obligations of the parties shall be the same as if termination had been made pursuant to Sub-Section (B).
- D. In the event ACHD terminates this AGREEMENT without cause for the best interests of ACHD as set forth in Sub-Section (B), then:
1. After Receipt of Notice of Termination, the VENDOR shall submit to ACHD a termination claim no later than ninety (90) calendar days from effective date of termination. Upon failure of the VENDOR to submit a termination claim, ACHD may determine, on the basis of information available, the amount, if any, due to the VENDOR by reason of the termination and shall thereupon pay to the VENDOR the amount so determined.
  2. VENDOR and ACHD may agree upon the whole or any part of the amount or amounts to be paid to the VENDOR by reason of the total or partial termination, provided that such agreed amount or amounts, exclusive of settlement costs, shall not exceed the total contract price as reduced by the amount of payments other made and as further reduced by the contract price of the SPECIFICATIONS not yet completed.

## 25. NONAPPROPRIATION

If ACHD is precluded from committing to make certain future payments due hereunder, this paragraph will apply. ACHD has appropriated the funds necessary to make all payments when due under the Agreement during ACHD's initial fiscal period during the Agreement term. ACHD agrees that in each succeeding fiscal year during the term of this Agreement, ACHD will take all necessary steps to make a timely appropriation of funds in order to pay the payments due hereunder during that period, subject to the annual appropriations limitation imposed upon ACHD under state law. In the event that despite the best efforts of ACHD, ACHD determines that funds for any amounts under this Agreement will not be available or cannot be obtained during any succeeding fiscal period, ACHD may terminate this Agreement prior to the commencement of such succeeding fiscal period by giving written notice to CONTRACTOR/CONSULTANT/VENDOR of such determination at least 60 days prior to the first day of such succeeding period for which an appropriation has not been made by ACHD.

## 26. FORUM, GOVERNING LAW

This AGREEMENT and the integrated CONTRACT DOCUMENTS shall be governed by, construed, and enforced in accordance with the laws of the State of Idaho. The proper forum for any legal action that may arise under this AGREEMENT and the CONTRACT DOCUMENTS shall be the Fourth Judicial District of the State of Idaho, in and for the County of Ada.

## 27. ARBITRATION

Either party may request any dispute arising out of this AGREEMENT be resolved by submitting the dispute to arbitration as provided in Section 7-901 et seq Idaho Code by providing written notice to the other party as provided in Submittals.

### 28. ATTORNEY FEES

In any action arising under this AGREEMENT, the unsuccessful party therein agrees to reimburse the prevailing party for its attorney fees, expended or incurred, in connection therewith.

### 29. ACHD OFFICIALS, AGENTS, AND EMPLOYEES NOT PERSONALLY LIABLE

It is agreed by the parties that in no event shall any official, officer, agent, or employee of ACHD be held in any way personally responsible for any covenant or agreement herein contained, whether expressed or implied, nor for any statement or representation made.

### 30. DISCRIMINATION PROHIBITED

Notwithstanding the foregoing; in performing this AGREEMENT, VENDOR shall not discriminate against any person on the basis of race, color, religion, sex, sexual orientation, gender identity, genetic information, national origin, age or non-job related handicap or because of prior military service or current military status, and shall comply with all applicable Federal and state laws and regulations and executive order of governmental agencies relating to civil and human rights.

### 31. ACKNOWLEDGMENT OF NON-EMPLOYEMENT

VENDOR certifies, warrants, covenants, and agrees that in compliance with Idaho Code § 40-1309 and ACHD Policy Section 2033.4.4, no Ada County Highway District commissioner, director, employee and/or their family member is or shall be contractually or otherwise interested, directly or indirectly, in this AGREEMENT nor in any business providing services under the AGREEMENT whether as a prime, sub, or independent contractor, or employee thereof. For purposes of this paragraph, a family member is defined as any person related to an Ada County Highway District commissioner, director, employee by blood, adoption, or marriage within the second degree and shall mean a father, mother, son, daughter, brother, sister, grandfather, grandmother, grandson, or granddaughter, in full, half, step, or in-law.

### 32. NEGLIGENCE/INDEMNITY

VENDOR agrees to indemnify, defend, release and save and hold harmless ACHD and its respective officers, board, commission, employees, agents and contractors from and against: (1) any and all damages, including but not limited to loss of use, to property or injuries to or death of any person or persons (including but not limited to property and officers, agents and employees of ACHD), and (2) any and all claims, demands, suits, actions, liabilities, costs, expenses (including but not limited to reasonable attorney fees, expert witness fees and all associated defense fees), causes of action, or other legal, equitable or administrative proceedings of any kind or nature whatsoever, of or by anyone whomsoever, regardless of the legal theories upon which premised, including but not limited to contract, tort, express and/or implied warranty, strict liability, and worker's compensation, in any way resulting from, connected with, or arising out of, directly or indirectly, the tortious or negligent actions or omissions of the VENDOR in connection with the operations or performance of this AGREEMENT, including actions or omissions of sub-consultants, and the acts or omissions, of the officers, employees, agents, representatives, invitees, or licensees of the VENDOR; provided however, that VENDOR need not indemnify ACHD or its officers, board members, agents and employees from the damages proximately caused by and apportioned to the negligence of ACHD or its officers, board members, agents and employees. This indemnity clause shall also cover ACHD defense costs in the event ACHD, in its sole discretion, elects to provide its own defense. VENDOR shall obtain, at its own expense, any additional insurance that it deems necessary for ACHD's protection in the performance of this AGREEMENT. This defense and indemnification obligation of VENDOR shall survive the expiration or termination of this AGREEMENT.

### 33. PUBLIC AGENCY CLAUSE

VENDOR agrees that the ITEM(s) and their prices contained in this AGREEMENT shall be extended to other Public Agencies defined in Idaho Code 67-2327 and in accordance with the provisions of Idaho Code 67-2803(1). ACHD advises that it is the responsibility of the Public Agency to independently contract, issue purchase orders, et al., with the VENDOR and/or comply with any other applicable provisions of Idaho Code governing public contracting.

**34. CERTIFICATION OF ANTI-BOYCOTT AGAINST ISRAEL**

VENDOR certifies in compliance with Idaho Code § 67-2346, the “Anti-Boycott Against Israel Act” (the “Act”), that it is a “company” not currently engaged in, and will not for the duration of this AGREEMENT, engage in a “boycott” of goods or services from the “state of Israel” or “territories under its control” as those terms are defined in the Act. This provision does not apply to the following agreements: 1. Those with a total potential dollar value of less than \$100,000 or 2. Those with any VENDOR having less than 10 employees at the time of execution of this AGREEMENT.

**35. GOVERNMENT OF CHINA PROHIBITION CERTIFICATION**

VENDOR certifies in compliance with Idaho Code § 67-2359, prohibiting public entities in Idaho from entering into contracts with companies owned or operated by the “government of China”, that it is a “company” not currently owned or operated by the “government of China” and that it will not for the duration of this AGREEMENT, be owned or operated by the “government of China” as those terms are defined in Idaho Code § 67-2359.

**36. WARRANTY OF AUTHORITY TO EXECUTE**

- A. The person executing this AGREEMENT on behalf of ACHD represents and warrants due authorization to do so on behalf of ACHD, and that upon execution of this AGREEMENT on behalf of ACHD, the same is binding upon, and shall enure to the benefit of, ACHD.
- B. The person executing this AGREEMENT on behalf of VENDOR represents and warrants due authorization to do so on behalf of VENDOR, and that upon execution of this AGREEMENT on behalf of VENDOR, the same is binding upon, and shall enure to the benefit of VENDOR.

**IN WITNESS WHEREOF**, the parties have executed this AGREEMENT, the day, month and year first above-written.

**ADA COUNTY HIGHWAY DISTRICT**

By: \_\_\_\_\_  
Greg Fullerton, Traffic Operations Superintendent

**VENDOR**

By: \_\_\_\_\_

*The Ada County Highway District (ACHD) is committed to compliance with Title VI of the Civil Rights Act of 1964 and related regulations and directives. ACHD assures that no person shall on the grounds of race, color, national origin, gender, disability or age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any ACHD service, program or activity.*

**VENDOR**

STATE OF \_\_\_\_\_ )  
 ) ss.  
County of \_\_\_\_\_ )

On this \_\_\_ day of \_\_\_\_\_, 20\_\_\_, before me, \_\_\_\_\_, a Notary Public in and for the State of \_\_\_\_\_, personally appeared \_\_\_\_\_, known or identified to me to be the person who executed this instrument, and acknowledged to me that he/she executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day month and year in this certificate first above written.

\_\_\_\_\_  
**Notary Public for** \_\_\_\_\_

**Residing at:** \_\_\_\_\_

**My commission expires:** \_\_\_\_\_

**ADA COUNTY HIGHWAY DISTRICT:**

STATE OF \_\_\_\_\_ )  
 ) ss.  
County of \_\_\_\_\_ )

On this \_\_\_ day of \_\_\_\_\_, 20\_\_\_, before me, \_\_\_\_\_, a Notary Public in and for the State of Idaho, personally appeared Greg Fullerton, known or identified to me to be the Traffic Operations Superintendent for Ada County Highway District, the person who executed this instrument on behalf of said District, and acknowledged to me that the Ada County Highway District executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first above written.

\_\_\_\_\_  
**Notary Public for Idaho**

**Residing at:** \_\_\_\_\_

**My commission expires:** \_\_\_\_\_

## **PURCHASE AGREEMENT**

### Exhibit "A"

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## SPECIFICATIONS

### **Schedule F.1      Technical Provisions – Accessible Pedestrian Signal Units (Four-Wire Systems)**

#### A. General:

Where installed, accessible pedestrian signals (APS) shall comply with the guidelines outlined in these technical provisions with regard to pedestrian signals, pedestrian push buttons and directional information/signs. APS installation shall also conform to the most recently adopted version of the Manual on Uniform Traffic Control Devices (MUTCD) and the United States Access Board "Draft Guidelines for Accessible Public Rights of Way" (PROWAG), Section R306. The system shall also meet the following technical requirements, as substantiated by an outside testing services laboratory:

1. NEMA TS2, Section 2.1 – Temperature and Humidity (salt/fog).
2. NEMA TS2, Section 2.1 – Transient Voltage Protection.
3. NEMA TS2, Section 2.1 – Mechanical Shock and Vibration.
4. IEC 61000-4-4, IEC 61000-4-5 – Transient Suppression.
5. FCC, Title 47, Part 15, Class A – Electronic Noise.
6. NEMA 250-4X (push button station only) – Enclosure.
7. NEMA TS4 – Electrical Reliability (applicable portions of Section 8).

#### B. Pedestrian Signals:

If APS are installed at an intersection, each crosswalk with a pedestrian signal indication shall have an accessible pedestrian signal which includes audible and vibrotactile indications of the WALK interval. Where a pedestrian pushbutton is provided, it shall be integrated into the accessible pedestrian signal. Signals should generally sound and vibrate throughout the WALK interval. Where signals rest in WALK, audible operation may be limited to a repetition at short intervals rather than continuous sounding for several minutes.

#### C. Location:

Accessible pedestrian signals shall be located so that the vibrotactile feature can be contacted from the level landing serving a curb ramp, if provided, or from a clear floor or ground space that is in line with the crosswalk line adjacent to the vehicle stop line.

#### D. Crossings:

Accessible pedestrian signal devices should be ten (10) foot minimum from other accessible pedestrian signals at a crossing. The control face of the accessible pedestrian signal shall be installed to face the intersection and be parallel to the direction of the crosswalk it serves.

#### E. Medians and Islands:

Accessible pedestrian signals located in medians and islands should be five (5) foot minimum from other accessible pedestrian signals.

#### F. Reach and Clear Floor or Ground Space:

Accessible pedestrian pushbuttons shall be located within a reach range complying with the criteria provided below. A clear floor or ground space complying with the criteria provided

below shall also be provided at the pushbutton and shall connect to or overlap the pedestrian access route.

1. Forward Reach:

- a. Unobstructed: Where a forward reach is unobstructed, the high forward reach shall be 48 inches maximum and the low forward reach shall be 15 inches minimum above the finish surface.
- b. Obstructed High Reach: Where a high forward reach is over an obstruction, the clear space shall extend beneath the element for a distance not less than the required reach depth over the obstruction. The high forward reach shall be 48 inches maximum where the reach depth is 20 inches maximum. Where the reach depth exceeds 20 inches, the high forward reach shall be 44 inches maximum and the reach depth shall be 25 inches maximum.

2. Side Reach:

- a. Unobstructed: Where a clear space allows a parallel approach to an element and the side reach is unobstructed, the high side reach shall be 48 inches maximum and the low side reach shall be 15 inches minimum above the finish surface. An obstruction shall be permitted between the clear space and the element where the depth of the obstruction is ten (10) inches maximum.
- b. Obstructed High Reach: Where a clear space allows a parallel approach to an element and the high side reach is over an obstruction, the height of the obstruction shall be 34 inches maximum and the depth of the obstruction shall be 24 inches maximum. The high side reach shall be 48 inches maximum for a reach depth of ten (10) inches maximum. Where the reach depth exceeds ten (10) inches, the high side reach shall be 46 inches maximum for a reach depth of 24 inches maximum.

3. Clear Space:

Clear space at accessible pedestrian signals, street furniture, and operable parts shall comply with the information provided in this section.

- a. Surface Characteristics: Surfaces of clear spaces shall have a slope and cross slope of two (2) percent maximum and comply with the provisions provided below.
- b. Size: The clear space shall be 30 inch x 48 inch minimum.
- c. Position: Unless otherwise specified, clear space shall be positioned for either forward or parallel approach to an element.
- d. Approach: One full unobstructed side of the clear space shall adjoin a pedestrian access route or adjoin another clear space.
- e. Maneuvering Space: Where a clear space is located in an alcove or otherwise confined on all or part of three sides, additional maneuvering space shall be provided as follows:
  - 1) Forward Approach: Alcoves shall be 36 inches wide minimum where the depth exceeds 24 inches.

- 2) Parallel Approach: Alcoves shall be 60 inches wide minimum where the depth exceeds 15 inches.

#### G. Audible Walk Indication:

The audible indication of the WALK interval shall be by tone or speech message.

##### 1. Tones:

- a. Tones shall consist of multiple frequencies with a dominant component at 880Hz +/-20%. The duration of the tone shall be 0.15 seconds and shall repeat at intervals of 0.15 seconds. Many APS installations in the United States employ speech messages which are perceived as being more user-friendly than tones. However, such messages may not be intelligible under high ambient noise conditions or to non-English speakers. Electronic tones are more universal and unambiguous. Section 4E.06 of the MUTCD specifies content of speech messages.
- b. While electronic tones are the preferred method of conveying a walk indication, there may be instances where a speech message will be employed with APS installation. This includes locations where a 10' separation between push buttons on a corner is not feasible. At such inter-sections, a speech message shall be used at all corners of an intersection to avoid mixing different WALK interval messages.

##### 2. Volume:

- a. Tone or voice volume measured at three (3) foot from the pedestrian signal device shall be 2 dB minimum and 5 dB maximum above ambient noise level in standard operation and shall be responsive to ambient noise level changes. Where additional volume or beaconing features are available on pedestrian activation, they will momentarily exceed volume limits. An automatic volume adjustment in response to ambient traffic sound level shall be provided up to a maximum volume of 100 dB.

#### H. Pedestrian Pushbuttons:

All pedestrian pushbuttons shall comply with the provisions specified below.

1. Operation: Operable parts shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate operable parts shall be 22 N (5 lbs) maximum. An actuation indicator light and tone shall also be provided within the device. The device shall also be capable of extended press functionality.
2. Pushbutton Locator Tone: Pedestrian pushbuttons shall incorporate a locator tone at the push-button. Pushbutton locator tone volume measured at three (3) foot from the pushbutton shall be 2 dB minimum and 5 dB maximum above ambient noise level and shall be responsive to ambient noise level changes up to 100 dB. The duration of the locator tone shall be 0.15 s maximum and shall repeat at intervals of one second. The locator tone shall operate during the DON'T WALK and flashing DON'T WALK intervals only and shall be deactivated when the pedestrian signal is not operative.



3. Size and Contrast: Pedestrian pushbuttons shall be a minimum of two (2) inches across in one dimension and shall contrast visually with their housing or mounting.
4. Optional Features: An extended button press may be installed to activate additional features. If included, buttons that provide additional features shall be marked with three (3) Braille dots forming an equilateral triangle in the center of the pushbutton.

1. Directional Information and Signs:

Pedestrian signal devices shall provide tactile and visual signs complying with the information included in this section on the face of the device or its housing or mounting to indicate crosswalk direction and the name of the street containing the crosswalk served by the pedestrian signal.

1. Arrow: Signs shall include a vibrating tactile arrow with high visual contrast aligned parallel to the crosswalk direction. The arrow shall be raised 0.03 inches minimum and shall be 1.5 inches minimum in length. The arrow shall contrast with the background.
2. Street Name: When provided, accessible pedestrian signals shall include street name information aligned parallel to the crosswalk direction and shall comply with the specifications outlined in this section or shall provide street name information in audible format.
3. Braille: All Braille installation shall be contracted (Grade 2).
  - a. Dimensions and Capitalization: Braille dots shall have a domed or rounded shape and shall comply with Table 1. The indication of an uppercase letter or letters shall only be used before the first word of sentences, proper nouns and names, individual letters of the alphabet, initials, and acronyms.

**Table 1 – Braille Dimensions**

Measurement Range	Minimum in inches Maximum in inches
Dot base diameter	0.059 in. to 0.063 in.
Distance between two dots in the same cell*	0.090 in. to 0.100 in.
Distance between corresponding dots in adjacent cells*	0.241 in. to 0.300 in.
Dot height	0.025 in. to 0.037 in.
Distance between corresponding dots from one cell directly below*	0.395 in. to 0.400 in.
*Measured Center to Center	

- b. Position: Braille shall be positioned below the corresponding text. If text is multi-lined, Braille shall be placed below the entire text. Braille shall be separated 0.375 inches minimum from any other tactile characters and 0.375 inches minimum from raised borders and decorative elements.

#### 4. Pedestrian Sign

**A sign applicable to pedestrian actuation shall be provided for each pushbutton assembly. ACHD's standard pedestrian sign is a 9" x 12" R10-3 with type III or type IV high intensity prismatic retroreflective sheeting on the copy side, conforming to the most recently adopted version of ASTM D4956 ("Push Button for Walk Indication", MUTCD). This sign shall either be mounted immediately above the pushbutton assembly or incorporated into the pushbutton detector units.**

##### J. Crosswalk Configuration:

When provided, graphic indication of crosswalk configuration shall be tactile.

##### K. Signal Power Interface:

Unless otherwise specified on the Plans, a Signal Power Interface (SPI) shall be supplied in the pedestrian display housing. The APS shall operate independent of a central control with a pedestrian display to pedestrian station ratio of 1:1. The SPI shall have the following capabilities:

1. Interface with the pedestrian displays via WALK, DON'T WALK and neutral inputs.
2. Interface with pedestrian stations via a four (4) wire conductor.
3. A four (4) position, #8 barrier terminal connector for the four (4) conductor cable to be pulled to the pedestrian station.
4. Mountable inside all types of pedestrian signal displays, with the exception of older, neon/trans-former type pedestrian signals.
5. The SPI shall be fully functional at temperatures ranging from -30°F to +150°F and operate properly with power sources ranging from 12 VDC to 220 VAC.
6. There shall be a hand-held device for programming the individual Pedestrian Push Button Stations.

##### L. Environmental Requirements:

The APS push button station shall be rated for the following temperature range: -30°F to +150°F. The station shall also be provided with a weatherproof speaker.

##### M. Warranty:

All components of the APS push button station and CCU shall have a minimum three (3) year warranty.

**ACHD reserves the right to order additional quantities of any bid schedule item at the bid price listed in this submitted bid for the current fiscal year.**

## **PURCHASE AGREEMENT**

### Exhibit "B"

- -

### PAYMENT SCHEDULE

- A. For the provision and delivery of the ITEM(s), as specified in the Exhibit "A", SPECIFICATIONS, ACHD agrees to pay an amount not-to-exceed Eighty-Eight Thousand United States Dollars and Zero Cents (\$88,000.00) to the VENDOR as provided in Section 3, Payment. See attached Bid Schedule.
  
- B. Payment is based on **estimated quantities** as shown in the attached Bid Schedule. Quantities will be paid by the unit price submitted by the VENDOR. ACHD reserves the right to adjust quantities for this contract. ACHD does not guarantee the total estimated quantities will be purchased.



Ada County Highway District

## Procurement

Jesse Goodpasture, Procurement and Contracting Administrator

3775 Adams St., Garden City, ID 83714

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### PROPOSAL DOCUMENT REPORT

ITB No. TO24-05

2024 Traffic Signal Materials

RESPONSE DEADLINE: January 17, 2024 at 3:00 pm

Report Generated: Friday, January 19, 2024

### PedSafety Proposal

#### CONTACT INFORMATION

**Company:**

PedSafety

**Email:**

tony@pedsafety.com

**Contact:**

Tony Brennan

**Address:**

450 W. McGregor Dr

Boise, ID 83705

**Phone:**

(208) 345-7459 Ext: 8002

**Website:**

[www.pedsafety.com](http://www.pedsafety.com)

**Submission Date:**

Jan 5, 2024 10:41 AM

## ADDENDA CONFIRMATION

Addendum #1

*Confirmed Jan 5, 2024 10:15 AM by Tony Brennan*

## QUESTIONNAIRE

**1. 1. Bidder's Information\***

Example: ABC Contractor

PedSafety

**2. 2. Address, City, State and Zip\***

123 Any Street

City, State 12345

Boise, Idaho 83705

**3. 3. State of Domicile\***

ID

**4. 4. Bidder's person to contact for additional information regarding this proposal\***

Example: Joe Smith, Estimator

Tony Brennan, Marketing Manager

**5. 5. Bidder's Phone Number\***

208.345.7459 ext 8002

**6. 6. Bidder's Fax Number**

No response submitted

**7. 7. Email\***

tony@pedsafety.com

**8. 8. Authorize Representative Signature\***

Once you start your proposal you will be asked to complete a DocuSign form.

The undersigned, hereinafter called Bidder, declares that the only persons or parties interested in this proposal are those named herein, that this proposal is, in all respects, fair and without fraud, and that it is made without collusion with any official of the Ada County Highway District (ACHD) or with any person submitting another proposal for this contract.

The bidder further declares that he has carefully examined the "Specifications" applicable to this proposal. The bidder acknowledges the fact that the description of the quantities included here-in is intended only to indicate the general nature of the requirements by the ACHD, and that this proposal is made according to the provisions set forth in the "Specifications" which documents are hereby made a part of this proposal.

The bidder agrees that if this proposal is accepted, they will, within fifteen (15) calendar days after notice of award, sign a contract or purchase order to provide the product(s), service(s) and/or supplies proposed herein and will fulfill all requirements in the manner, in the time, and according to the methods and procedures stipulated.

In the event the bidder is awarded a contract or issued a purchase order and shall fail to provide the product(s), service(s) and/or supplies within the time specified herein, said failure to maintain the delivery time specified constitutes an event of default by the bidder and ACHD will seek compensatory damages, as provided by law.

The bidder further proposes to accept as full payment for the product(s), service(s) and/or supplies proposed herein the amounts computed under the provisions of the Contract Documents and based on the lump sum or unit price amounts, it being expressly understood that the unit prices are independent of the exact quantities involved. The bidder agrees that the lump sum prices and the unit prices represent a true measure of the costs required, including all allowances for overhead and profit, to provide the product(s), service(s) and/or supplies specified.

Having carefully examined the "Invitation to Bid", "Instructions to Bidders" and the "Specifications" affecting the same, the undersigned hereby proposes to furnish and deliver the item(s) as specified in accordance with the "Bid Schedule."

The Bidder shall list all Addendum issued for the Scope contained in the Invitation to Bid. The Bidder acknowledges by their signature(s) to this Proposal below that the Addendum listed have been received by the Bidder and that the Bidder has incorporated their content into the Bid attached hereto.

[COMPLETED 1-5-2024 10:24am]\_Proposal Template.pdf[COMPLETED 1-5-2024 10:24am]\_Summary.pdf

## PRICE TABLES

### SCHEDULE A - SIGNAL HEADS AND LED INSERTS

INDIVIDUAL SCHEDULES MAY BE BID SEPARATELY. HOWEVER, ALL ITEMS WITHIN EACH SCHEDULE MUST BE BID, EXCLUDING ITEMS WITH ZERO QUANTITIES.

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	No Bid
A.1	Side Pole Mounting Brackets - Signal Head		EACH	No Bid	No Bid	X
A.2	12" Pedestrian Hybrid Beacon - Signal Heads - Red, Red, and Amber		EACH	No Bid	No Bid	X

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	No Bid
A.3	12" Three Section Vehicle Signal Heads - Red Ball, Amber Ball, and Green Ball		EACH	No Bid	No Bid	X
A.4	Pedestrian Signal Countdown Heads		EACH	No Bid	No Bid	X
A.5	Pedestrian Head Mounting Brackets, Single Head (L or R)		EACH	No Bid	No Bid	X
A.7	12" Three Section Vehicle Signal Heads - Red Arrow, Amber Arrow, and Green Arrow		EACH	No Bid	No Bid	X
A.8	12" Four Section Vehicle Signal Heads - Red Arrow, Amber Arrow, Amber Arrow, and Green Arrow		EACH	No Bid	No Bid	X
<b>TOTAL</b>					<b>\$0.00</b>	

**SCHEDULE B – LED RETROFIT KITS**

INDIVIDUAL SCHEDULES MAY BE BID SEPARATELY. HOWEVER, ALL ITEMS WITHIN EACH SCHEDULE MUST BE BID, EXCLUDING ITEMS WITH ZERO QUANTITIES.

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	No Bid
B.1	LED Red Ball Display Retro-Fit Kit		EACH	No Bid	No Bid	X
B.2	LED Amber Ball Display Retro-Fit Kit		EACH	No Bid	No Bid	X
B.3	LED Green Ball Display Retro-Fit Kit		EACH	No Bid	No Bid	X
B.4	LED Red Arrow Display Retro-Fit Kit		EACH	No Bid	No Bid	X



Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	No Bid
B.5	LED Amber Arrow Display Retro-Fit Kit		EACH	No Bid	No Bid	X
B.6	LED Green Arrow Display Retro-Fit Kit		EACH	No Bid	No Bid	X
B.7	LED Pedestrian Display 16" Hand/Man Retro-Fit Kit		EACH	No Bid	No Bid	X
<b>TOTAL</b>					<b>\$0.00</b>	

**SCHEDULE C – VIDEO DETECTION**

INDIVIDUAL SCHEDULES MAY BE BID SEPARATELY. HOWEVER, ALL ITEMS WITHIN EACH SCHEDULE MUST BE BID, EXCLUDING ITEMS WITH ZERO QUANTITIES.

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	No Bid
C.1	Two Camera Video Detection Processor Card		EACH	No Bid	No Bid	X
C.2	Video Detection Expansion Module		EACH	No Bid	No Bid	X
C.3	Color Video Monitor		EACH	No Bid	No Bid	X
C.4	Color Video Detection Camera		EACH	No Bid	No Bid	X
C.5	Camera Junction Box		EACH	No Bid	No Bid	X
C.6	Mastarm Video Detection Mounting		EACH	No Bid	No Bid	X
C.8	Video Detection Communications Module		EACH	No Bid	No Bid	X
<b>TOTAL</b>					<b>\$0.00</b>	

**SCHEDULE D – VIDEO DETECTION**

INDIVIDUAL SCHEDULES MAY BE BID SEPARATELY. HOWEVER, ALL ITEMS WITHIN EACH SCHEDULE MUST BE BID, EXCLUDING ITEMS WITH ZERO QUANTITIES.

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total
D.1	Single Point Video Detection Camera with mounting hardware	35	EACH	\$0.00	\$0.00
D.2	Single point camera repeater	0	EACH	\$0.00	
D.3	Single Point Video Detection Processor	10	EACH	\$0.00	\$0.00
<b>TOTAL</b>					<b>\$0.00</b>

**SCHEDULE E - RADAR VEHICLE DETECTON**

INDIVIDUAL SCHEDULES MAY BE BID SEPARATELY. HOWEVER, ALL ITEMS WITHIN EACH SCHEDULE MUST BE BID, EXCLUDING ITEMS WITH ZERO QUANTITIES.

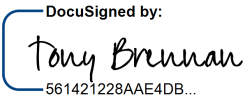
Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	No Bid
E.1	Radar detection stop bar detection head		EACH	No Bid	No Bid	X
E.2	Radar detection advanced detection head		EACH	No Bid	No Bid	X
E.3	Radar detection processor		EACH	No Bid	No Bid	X
<b>TOTAL</b>					<b>\$0.00</b>	

**SCHEDULE F - ACCESSIBLE PEDESTRIAN SIGNAL UNITS**

INDIVIDUAL SCHEDULES MAY BE BID SEPARATELY. HOWEVER, ALL ITEMS WITHIN EACH SCHEDULE MUST BE BID, EXCLUDING ITEMS WITH ZERO QUANTITIES.

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	No Bid
F.1	Accessible Pedestrian Signal 4-Wire Push Button Assemblies Includes SPI	200	EACH	\$440.00	\$88,000.00	
<b>TOTAL</b>					<b>\$88,000.00</b>	

## PROPOSAL

AUTHORIZED REPRESENTATIVE SIGNATURE	
Name of Firm: PedSafety, a Campbell Company	
Address: 450 W. McGregor Dr	
Signature:  561421228AAE4DB... Print Name: Tony Brennan	Title: Marketing Manager

**Certificate Of Completion**

Envelope Id: B51E2F5F141A44478F14B0147E949F15  
 Subject: Please DocuSign: Proposal Template.pdf  
 Source Envelope:  
 Document Pages: 1  
 Certificate Pages: 4  
 AutoNav: Enabled  
 Envelopeld Stamping: Enabled  
 Time Zone: (UTC-08:00) Pacific Time (US & Canada)

Status: Completed  
  
 Envelope Originator:  
 Shannon Shaffer  
 3775 N. Adams St.  
 Garden City, ID 83714  
 SShaffer@achdidaho.org  
 IP Address: 72.24.12.210


**Record Tracking**

Status: Original  
 1/5/2024 9:23:36 AM  
 Holder: Shannon Shaffer  
 SShaffer@achdidaho.org  
 Location: DocuSign

**Signer Events**

Tony Brennan  
 tony@pedsafety.com  
 Marketing Manager  
 PedSafety, a Campbell Company  
 Security Level:  
 DocuSign.email  
 ID: 1  
 1/5/2024 9:23:37 AM

**Signature**

DocuSigned by:  
  
 561421228AAE4DB...  
  
 Signature Adoption: Pre-selected Style  
 Using IP Address: 72.24.12.210

**Timestamp**

Sent: 1/5/2024 9:23:36 AM  
 Viewed: 1/5/2024 9:23:52 AM  
 Signed: 1/5/2024 9:24:33 AM

**Electronic Record and Signature Disclosure:**  
 Accepted: 1/12/2023 8:04:52 AM  
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**In Person Signer Events**

**Signature**

**Timestamp**

**Editor Delivery Events**

**Status**

**Timestamp**

**Agent Delivery Events**

**Status**

**Timestamp**

**Intermediary Delivery Events**

**Status**

**Timestamp**

**Certified Delivery Events**

**Status**

**Timestamp**

**Carbon Copy Events**

**Status**

**Timestamp**

**Witness Events**

**Signature**

**Timestamp**

**Notary Events**

**Signature**

**Timestamp**

**Envelope Summary Events**

**Status**

**Timestamps**

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Certified Delivered	Security Checked	1/5/2024 9:23:52 AM
Signing Complete	Security Checked	1/5/2024 9:24:33 AM
Completed	Security Checked	1/5/2024 9:24:33 AM

**Payment Events**

**Status**

**Timestamps**

**Electronic Record and Signature Disclosure**

## **PURCHASE AGREEMENT**

### Exhibit "C"

- -

### DELIVERY SCHEDULE

#### **A. DELIVERY DATE**

VENDOR and ACHD herein agree that the ITEM(s) as set forth in Section 2 is/are required to be delivered within Sixty (60) calendar days from the date of the Purchase Order of this AGREEMENT as provided in Section 4, Time for Delivery and Extensions.

#### **i. LIQUIDATED DAMAGES**

1. The ACHD and the Vendor agree that the liquidated damages provisions in the Purchase Agreement are a reasonable forecast of the actual damages that would be suffered by the ACHD in the event of Vendor non-performance, that such liquidated damages are not a penalty but represent the reasonable compensation due to the purchaser in the event of a breach, and that such liquidated damages will be assessed as set forth herein.
2. Any delay by the Vendor in meeting the delivery date set forth in this contract will interfere with the proper implementation of ACHD programs and will result in loss and damage to ACHD.
3. As it would be impracticable to fix the actual damage sustained in the event of any such failure(s) to perform, ACHD and Vendor agree that in the event of any such failure(s) to perform, the amount of damage that will be sustained will be the amount set forth in the following subsections and the parties agree that Vendor shall pay such amounts as liquidated damages and not as a penalty.
4. If Vendor does not adhere to the order and delivery procedure as outlined in the Purchase Agreement, then Vendor shall provide a revised Delivery Date and pay to ACHD a fixed and agreed liquidated damages, in lieu of all other damages due to such delay, for each calendar day between the specified Delivery Date and the date that Vendor actually delivers the Equipment. The amount of this liquidated damage shall be an amount of 0.33% of the Purchase Order value per calendar day, not to exceed 20%, as a delivery default to cover the ACHD anticipated administrative expense caused by late delivery.

If the revised Delivery Date is more than Thirty (30) calendar days from the original Delivery Date, then by written notice to Vendor, ACHD may immediately terminate the right of Contractor to deliver the Material in accordance with Section 24, Termination by ACHD, of the Purchase Agreement, and ACHD may obtain substitute Material from another source. In this event, Vendor shall be liable for fixed and agreed-upon liquidated damages.