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(February 6, 2023)

Accessible Pedestrian Signal (APS) Pushbuttons

When required in the Contract, APS Pushbuttons shall be provided for traffic signal systems. Each accessible pedestrian signal (APS) shall be a complete APS pushbutton system at each pedestrian pushbutton location shown in the Plans.

Each pushbutton station shall include the following:

1. Flat dark green colored housing. All exterior housing screws shall be security (pinned) Torx™ type.
2. High contrast pushbutton arrow (dark on a light background or light on a dark background). White on silver or silver on white are not acceptable as high contrast.
3. Integral 9" x 15" R10-3e Sign. Braille shall not be included. Adaptor plates shall be included if required to accommodate the sign.
4. Interface unit for installation in associated pedestrian display:
5. Percussive tone / rapid tick walk indication.
6. Voice messages, as specified below, pre-installed. Voice shall be male.
7. Interconnect cable for installation between pushbutton station and pedestrian display interface unit. Four conductor cable meeting the requirements of Standard Specification 9-29.3(2)B or 9-29.3(2)G may be used if it meets the pushbutton manufacturer's requirements. Otherwise, cable shall be provided by the pushbutton manufacturer.

The following shall be provided at each intersection:

1. One USB flash drive with copies of all voice message audio files for that intersection, placed in the traffic signal cabinet drawer or drawing envelope. A separate flash drive is required for each intersection.
2. One USB cable of the appropriate type (A to A, A to B, male/female, etc.), placed in the traffic signal cabinet drawer or drawing envelope for connection of a laptop to the APS button.

Any other equipment or software required by the manufacturer for setup, operation, and maintenance of the pushbutton stations shall be provided.

Dual button adaptor brackets are required for all installations with two APS pushbuttons on the same Type PPB, Type PS, or Type I Signal Standard. Where dual button adaptor brackets are required, they shall be obtained from the same manufacturer as the pushbutton station - brackets from other manufacturers shall not be used.

Extensions, when allowed, shall be in accordance with WSDOT Standard Detail IS-2 (see <https://wsdot.wa.gov/engineering-standards/all-manuals-and-standards/plan-sheet-library/illumination-signals-and-its#IS-2>). Where the signal system is owned

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by another agency, extensions shall be in accordance with the owning agency's requirements.

APS Speech Messages

Speech messages shall be provided in the following format:

- "Wait."
- "Wait to cross ____ (A) ____ at ____ (B) ____."
- "Walk sign is on to cross ____ (A) ____."

Tables with the entries for (A) and (B) above, as well as quantities for button and arrow orientations, are provided in the Plans for each intersection.

Order forms shall be completed by the Contractor using the information presented above.

Each APS pushbutton shall include a label tape with the text "Crossing (A) at (B)", where (A) and (B) are the street names as described here and programmed into the pushbutton. The label shall be installed directly on the side or back of the APS pushbutton and shall remain intact and legible until final installation.

Delivery and Setup

All APS pushbuttons shall be delivered to the region signal shop or owning agency shop for verification and owner setup. After the owning agency has completed setup, the Contractor will be notified that the APS pushbuttons are ready for pickup and installation.

Wireless access features (Bluetooth and/or WiFi), if included, will be disabled upon installation.

Approved APS Equipment

APS equipment shall be one of the following systems:

1. Model: **Campbell Guardian Independent 4-Wire APS**

Components:

APS Pushbutton Kit: KAC-32021-2BT
Pedestrian Display Interface Unit: 501-0300 SPI

Manufacturer:

Campbell Company
450 W McGregor Dr
Boise, ID 83705
(208) 345-7459
www.pedsafety.com

2. Model: **Pelco IntelliCross Intelligent Pedestrian System**

Components:

APS Pushbutton: SE-2901-#-P30 9x15
Pedestrian Display Interface Unit: SE-6190-PNC

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Manufacturer:
Pelco Products, Inc.
320 W 18th St
Edmond, OK 73013
(405) 340-3435
intellicross@pelcoinc.com
www.pelcointellicross.com

3. Model: **Polara iNS iNavigator Push Button Station**

Components:
APS Pushbutton: iNS23TN1-G
Pedestrian Display Interface Unit: iPHCU3S
PC Interface Module: iN-DGL (one per intersection; place in cabinet drawer).

Manufacturer:
Polara Enterprises
1497 CR 2178
Greenville, TX 75402
(903) 366-0300
www.polara.com

Only one brand of equipment shall be used for the entire Contract.