

801-C-229 PORTABLE CHANGEABLE MESSAGE SIGNS

(Adopted 04-19-12)

The Standard Specifications are revised as follows:

SECTION 801, AFTER LINE 22, DELETE AND INSERT AS FOLLOWS:

<i>Portable Changeable Message Sign</i>	923.05
Steel Posts	910.14
Temporary Barrier Delineator	926.02(d)
Temporary Highway Illumination Materials	807
Temporary Panel Signs	919.01
Temporary Pavement Marking Tape	923.01
Temporary Raised Pavement Markers	923.02
Traffic Signal Materials and Equipment	922
Traffic Signs	802
Tubular Marker	923.067
Wood Sign Posts	911.02(e)
Worksite Speed Limit Sign Assembly	923.056

SECTION 801, BEGIN LINE 711, DELETE AND INSERT AS FOLLOWS:

(b) Portable Changeable Message Signs, PCMS

This shall consist of furnishing, installing, and maintaining a trailer-mounted, portable sign upon which varying electronically generated messages will be displayed to traffic. The message being relayed to traffic shall be legible and easily understood for a minimum distance of 650 ft (~~200 m~~).

~~A malfunctioning sign shall be repaired or replaced within 24 h~~

The messages shall be as shown on the plans or as approved or directed by the Engineer. Messages shall be formatted in accordance with INDOT Guidelines for Portable Changeable Message Signs. Only upper case letters shall be used. Each message phase shall be displayed for at least 2 s. Display time for an entire message shall not exceed 8 s.

Placement of PCMSs shall be as shown on the plans or as directed by the Engineer. A minimum clearance of 7 ft from pavement to the bottom of the PCMS shall be provided. Units shall be level and PCMSs shall be turned away from traffic, placed in stand-by mode, or left blank until there is a valid message to be displayed. When in use PCMSs shall be turned approximately 3° from perpendicular towards oncoming traffic to minimize glare. A drum shall be placed immediately in front of the PCMS trailer at both corners for delineation.

SECTION 801, BEGIN LINE 848, DELETE AND INSERT AS FOLLOWS:

801.17 Method of Measurement

Construction signs, detour route marker assemblies, detour route marker assemblies-multiple routes, temporary worksite speed limit sign assemblies, road closure sign assemblies, ~~temporary~~ portable changeable message signs, *Aries Field Processor for PCMS*, and temporary raised pavement markers will be measured by the number of units installed, maintained, and removed.

SECTION 801, BEGIN LINE 918, DELETE AND INSERT AS FOLLOWS:

801.18 Basis of Payment

The accepted quantities of construction signs, detour route marker assemblies, detour route marker assemblies-multiple routes, temporary worksite speed limit sign assemblies, road closure sign assemblies, permanent road closure sign assemblies and temporary raised pavement markers will be paid for at the contract unit price per each. Payment for temporary worksite speed limit assemblies, ~~and temporary changeable message signs~~ *PCMS*, and *Aries Field Processors* will be made for the maximum number of such assemblies in place at any one time during the life of the contract. Type III-A, type III-B, and permanent type III barricades will be paid for at the contract unit price per linear foot (~~meter~~).

SECTION 801, BEGIN LINE 1009, DELETE AND INSERT AS FOLLOWS:

Pay Item	Pay Unit Symbol
<i>Aries Field Processor for PCMS</i>	<i>EACH</i>
Barricade, _____ type	LFT(m)
Barricade, III, Permanent	LFT(m)
Barrier, Direction Indicator	EACH
Construction Sign, _____ type	EACH
Detour Route Marker Assembly	EACH
Detour Route Marker Assembly, Multiple Routes	EACH
Drum, Permanent	EACH
Energy Absorbing Terminal, CZ, TL - _____ test level	EACH
Flashing Arrow Sign	DAY
Maintaining Traffic	LS
Patroller	DAY
<i>Portable Changeable Message Sign</i>	<i>EACH</i>
Road Closure Sign Assembly.....	EACH
Road Closure Sign Assembly, Permanent	EACH
Temporary Buzz Strips	LFT(m)
Temporary Changeable Message Sign	EACH

SECTION 801, BEGIN LINE 1121, DELETE AND INSERT AS FOLLOWS:

Each construction sign, barricade, temporary worksite speed limit sign assembly, ~~temporary portable~~ changeable message sign, or flashing arrow sign will be paid for only once regardless of how many times each is moved, ~~or replaced, or how many times each is altered to change the message~~. Payment will not be made for signs or barricades used for the convenience of the Contractor.

Additional materials necessary to place the PCMS in a secure and level manner for site conditions shall be included in the cost of the pay item. All costs to furnish, install, program, activate, deactivate, change messages, and maintain the PCMS shall be included in the cost of the pay item. The cost of IP cellular phone service shall be included in the cost of the pay item.

SECTION 923, AFTER LINE 230, DELETE AND INSERT AS FOLLOWS:

923.05 Portable Changeable Message Sign

Portable changeable message signs shall be capable of displaying 3 lines with of 8 characters per line. Letter height shall be a minimum of 18 in. The sign shall have automatic dimming capability for nighttime operation.

Portable changeable message signs shall be selected from the Department's list of approved Solar Power Traffic Control Devices.

923.056 Temporary Worksite Speed Limit Sign Assembly

The temporary worksite speed limit sign assembly shall be an all weather, self-contained unit designed to display speed limit signs in accordance with the MUTCD and as shown on the plans. The signs shall be installed on frangible posts or mounted on movable stands or trailers in accordance with 910.14(f). The power source shall be capable of operating the strobe lights, without service, for the period which the sign is in effect. An on/off switch will be required.

923.067 Tubular Marker

The vertically placed portion of this device shall consist of high density polyethylene plastic in accordance with ASTM D 5203. The base material shall be butyl rubber in accordance with ASTM D 5900 or high impact polystyrene in accordance with ASTM D 4549. Epoxy material used to attach the base to the roadway surface shall be in accordance with the manufacturer's recommendations. The tubular portion shall be reflectorized with high intensity reflective sheeting in accordance with 919.01(b)1 as shown on the plans.

923.078 Acceptance of Temporary Traffic Control Devices

Temporary traffic control devices will be accepted by visual inspection unless otherwise indicated.
