

**cn512-000130-00 QUEUE MANAGEMENT TEAM(QMT)** will only be required where designated in the Plans.

The QMT shall consist of two vehicles, each equipped with a hands free cell phone, two-way radio communications for areas with limited cell phone coverage, a 360° amber high-intensity rotating, flashing, oscillating, or strobe light and a vehicle mounted changeable message sign (CMS). The amber warning light on the vehicle shall not interfere with the visibility and recognition of the CMS. The QMT vehicles shall not be equipped with white flashing lights of any kind. The CMS shall consist of a full matrix display and shall be capable of displaying 12 inch letters and rotating 180 degrees around the horizontal axis. All controls of the CMS shall be inside of the QMT vehicle. The tailgate of the QMT vehicles shall be fully delineated with retroreflective yellow-green and red six inch stripes installed in an inverted V formation extending outward from the center of the rear panel. Each vehicle shall be marked on both sides with their company's name. QMT vehicles shall never face oncoming traffic. The QMT vehicles will be authorized to use cross-overs.

One vehicle will be considered "active," and the other "transitory." These roles shall swap between the vehicles to meet the requirements of this specification. The CMS two-phase message on the Active Vehicle shall be displaying ROAD WORK AHEAD and SLOW OR STOPPED TRAFFIC to approaching traffic. The CMS two-phase message on the Transitory Vehicle shall display ROAD WORK AHEAD and SLOW TRAFFIC AHEAD to approaching traffic when the vehicle is stationary.

During the initial lane closure, the active vehicle shall be stationed approximately 2000 feet upstream of the Advance Warning Area, as defined by the VWAPM. The operator of the Active Vehicle shall update the Traffic Operations Center (TOC) and onsite work zone safety coordinator of queue status every 30 minutes and when the queue length changes. The Contractor shall employ a leap-frog methodology to ensure the Active Vehicle provides constant warning to travelers. The Transitory Vehicle shall be stationed approximately 1/2 mile upstream of the Active Vehicle. The QMT vehicles will switch roles when the end of the queue reaches a point approximately 2000 feet downstream of the Active Vehicle.

When traffic queues become shorter, the active vehicle moves with traffic on the shoulder, staying within 2000 feet of the end of queue, and the transitory vehicle stays within 1/2 mile of the active vehicle.

An operator shall remain with each vehicle at all times. The QMT shall be in position with operators whenever lane closures are in place.

**Queue Management Team** will be measured in hours of actual use, as required by the Engineer, and will be paid for at the Contract hour price. This price shall include vehicles, equipment, vehicle mounted changeable message signs, cell phones, radio communications, operators, fuel, and maintenance. QMT begins when the vehicle is positioned as required and placement of channelizing devices for lane closure begins. QMT ends when the lane closure is removed and the queues are dissipated with traffic moving at 45 MPH or greater, or as directed by the Engineer,

Payment will be made under:

<b>Pay Item</b>	<b>Pay Unit</b>
Queue Management Team	Hour

9-6-17 (SPCN)