

**SPECIAL PROVISION**

**REGARDING**

**TRUCK-MOUNTED AND TRAILER-MOUNTED ATTENUATORS**

**Description**

This work consists of providing and operating support trucks with a truck-mounted and trailer-mounted attenuators (TMAs) to safely conduct work zone protection on projects while performing Short-Term Duration Stationary, Short Duration, or Mobile Operation work that occurs within 12 feet of the traveled way for roads with posted speed limit of 50 miles per hour or greater.

**Equipment**

- A. Provide truck-mounted and trailer-mounted attenuators (TMAs) that meet the requirements of and be listed on the Department's Qualified Products List (QPL).
- B. Provide support trucks for the TMAs to be attached. The support truck shall be equipped with a vehicle warning lights and an arrow board or portable changeable message sign (PCMS). A work truck shall not be used as a support truck.

The mass of the support truck shall be a minimum of 15,000 pounds. Additional mass may be added to the support truck to achieve the range recommended by the manufacturer of the TMAs provided the total mass is properly balanced without overloading any one axle and is within the Gross Vehicle Weight Recommendation of the support truck. The added mass shall be securely attached or contained to the support truck to prevent movement during an impact or movement of the support truck. The additional mass and attachment method shall be self-certified by the Contractor and a copy of the self-certification letter shall always be with the support truck.

- C. Provide warning lights on the support trucks meeting the following:
  - 1. Four (4) strobe lights (with auto-dimmers) positioned rear facing
    - a. Two (2) mounted under rear bumper
    - b. Two (2) mounted at cab level
  - 2. One (1) standard cab mounted light bar.

- D.** Provide a truck mounted Arrow Board (Type B or C) or a PCMS with a full matrix display and a minimum panel size of 72" W x 35" H mounted as per manufacturer specifications. The arrow board or PCMS shall meet the requirements in the current edition of the Manual of Uniform Traffic Control Devices (MUTCD) in Sections 2L and 6F and shall meet the requirements of and be listed on the Department's QPL.

**Construction Requirements**

The TMAs warning light and arrow board or PCMS shall be functioning while performing any work within 12 feet of traveled way.

The TMAs shall be operated and placed in accordance with these requirements, the manufacturer's recommendations, and best practices from accredited training.

TMAs shall be used during the placement and removal of traffic control devices maintaining minimum distances from work activities as required.

TMAs shall be placed in the work zone between the work activity area and the buffer zone. They shall be placed a minimum of 125 feet behind the work activity, be in second gear with the parking brake set, and the front wheels should be centered with no steering angle.

TMAs used for multilane closures shall be placed maintaining proper taper lengths meeting MUTCD requirements.

TMAs shall be used for all aspects of work during mobile operations and should maintain a minimum of 150 feet behind the work vehicle and proceed at the same speed.

Provide TMA operators that are trained and certified in the operation and application of TMAs by the American Traffic Safety Services Association (ATSSA).

The Department will accept TMA training programs developed and conducted by construction industry associations, consultant organizations, and contractors if they have an established, program that meets all MUTCD requirements and Department Policy. The Department will review and determine if an alternative training program is acceptable prior to use. Alternative training programs shall meet all MUTCD requirements and follow FHWA guidance.

**Method of Measurement**

The Department will measure the truck-mounted and trailer-mounted attenuators by the unit, per each, based on the maximum number of TMAs used at one time.

**Basis of Payment**

The Department will pay for accepted quantities, complete in place, at the contract prices as follows:

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>
712-08.25	Truck-Mounted & Trailer-Mounted Attenuators (TMA)	EACH

Such payment will be full compensation for the truck-mounted or trailer mounted attenuators, support truck, vehicle warning lights, vehicle mounted signs, electronic arrow boards, PCMS, maintenance, and shall include all work specified including labor, materials, equipment, tools, and incidentals to complete the work.

TMA's not designated in the Contract as a separate pay item, but where additional TMA's are required as determined and authorized by the Engineer, will be measured in hours of actual use required and will be paid for at the rate of \$55 per employed hour when used.