

## **110-31 ROAD AND BRIDGE SWEEPING.**

**(REV 8-1-13) (7-21)**

The following new Section is added at the end of Section 110:

### **SECTION 110-31 ROAD AND BRIDGE SWEEPING**

#### **110-31.1 Description.**

Provide routine mechanized road and/or bridge sweeping to clean and remove sand, soil, paper, glass, cans, grass clippings, and other debris. Areas to be swept include but are not limited to; curb and gutters, valley gutters, bridge decks and curbs, inside and outside highway interchange ramps (with paved shoulders greater than 12 inches), outside and median paved shoulders, gore areas, toll plazas (when applicable), bi-directional lanes, areas adjacent to barrier walls, areas adjacent to median-noses and splitter islands, areas on top of inlet grates and other designated sites as determined by the Engineer.

#### **110-31.2 Frequency of Sweeping.**

Mechanically sweep specified areas approximately [REDACTED] times. The total number of sweeping cycles within the contract period may be increased or decreased as determined by the Engineer to meet field conditions.

Complete each sweeping cycle within [REDACTED] calendar days after issuance of the work document. Complete each sweeping cycle in its entirety prior to the beginning of another cycle. In assessing liquidated damages, the calendar days established in this Section will be used for determining delinquency of progress for each sweeping cycle.

No sweeping operations will be performed between the hours of [REDACTED] and [REDACTED].

Submit sweeping schedules to the Engineer for approval.

#### **110-31.3 Safety.**

Provide Maintenance of traffic in accordance with Section 102. The work vehicle (sweeping machine) will have an operating flashing beacon and the shadow vehicles will be equipped with an approved advance warning arrow panel, warning sign, and truck mounted attenuator (crash cushion system).

All sweeping will be accomplished with or in the same direction as the traffic, sweeping opposing the traffic will not be permitted.

The foregoing requirements are to be considered as minimum and the compliance will in no way relieve the Contractor of final responsibility for providing adequate traffic control devices for the protection of the public and employees throughout the work areas.

#### **110-31.4 Equipment.**

Furnish equipment of a type and quantity to perform the work satisfactorily within the time specified. The sweeping equipment will be capable of meeting the quality requirements of 110-31.8 in one pass and a maximum of two passes for areas determined unsatisfactory by the Engineer.

The mechanized road sweeper(s) will have a minimum capacity of four cubic yards.

The Engineer or his representative prior to being placed into service will inspect all safety devices on the sweeping operation equipment. Any deficient safety devices will be corrected or replaced immediately and service will not begin until the deficiency is corrected.

Inspection and approval of the equipment by the Engineer will not relieve the Contractor of responsibility or liability for injury to persons or damage to property caused by the Contractor's operations.

Equipment that damages pavement, curbs, or turf will not be allowed. Damages as a result of the operations will be repaired at no cost to the Department.

#### **110-31.5 Dust Control Equipment.**

The sweeping operation will not create excessive airborne dust or other particles, as determined by the Engineer. Equipment supplied with a functioning water spray system normal to the industry for dust control will satisfy this requirement.

#### **110-31.6 Parked Vehicles.**

Vehicles that are parked in the sweeping area are to be swept around. The area occupied by a parked vehicle will be considered as work accomplished.

#### **110-31.7 Removal and Disposal of Debris.**

Debris may be encountered that is larger than the mechanized sweeper can remove such as; tires, tire parts, hub caps, large stones, boxes, tree limbs, wood, cable, and other such materials. Remove all debris encountered using other means (hand or mechanized), regardless of the size.

Piles of soil may be encountered and vegetation that may require special removal methods during the sweeping operations. Furnish all labor, materials, and equipment required to accomplish removal of these built-up areas.

Stockpiling or disposal of debris on the Department's right-of-way shall not be permitted.

Provide areas for disposing of debris in accordance with all Federal, State, and Local Rules and Regulations in effect at the time of the disposal. Cost involved with the disposal of debris will be included in the contract unit price per mile of mechanized (mechanical) sweeping.

#### **110-31.8 Quality.**

Pick up and remove from the areas to be swept, any obstacle such as wood, tires, cans, etc. that can not be picked-up by the sweeper to include areas under guardrail on paved shoulders. Remove all items such as newspapers, magazines, large boxes, etc. that would be torn, ripped, or scattered by the sweeper and result in an objectionable appearance.

Completed work will be clean and free of all accumulated debris immediately after sweeping, as determined by the Engineer.

Areas determined unsatisfactory by the Engineer will be re-swept to the satisfaction of the Engineer within the time specified, at no additional cost to the Department.

#### **110-31.9 Method of Measurement.**

The quantities to be paid for under this Section will be the number of miles completed and accepted measured longitudinally to the travel lane to the nearest one hundredth of a mile. A second unit of measurement will be required from the Contractor. The cubic yards of material picked up, will be reported to the inspector for each sweeping cycle completed. If the contract is

for more than one county, the number of cubic yards picked up will be prorated by county based on the number of miles swept in each county.

The width will be sufficient to cover the entire width of curb and gutters, valley gutters, bridge decks and curbs, inside and outside highway interchange ramps (with paved shoulders greater than 12 inches in width, outside and median paved shoulders, concrete barriers, gore areas, toll plazas (when applicable), and other designated sites. Areas requiring more than one sweeping pass to sufficiently remove the debris will not be compensated twice.

**110-31.10 Basis of Payment.**

Payment will be full compensation for furnishing all equipment, materials, labor, and incidentals necessary to complete all sweeping operations, including hand work, as specified. Compensation will be at the unit price per mile times the actual miles completed and accepted.

Payment will be made under the items specified in the Bid Price Proposal.