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ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

SPECIAL PROVISION

ROADWAY SWEEPING

DESCRIPTION: The work shall consist of the removal by mechanical sweeping, or other approved means, of dirt and debris such as tire and metal fragments, hub caps, rocks, etc. accumulated on the roadway along curbs, paved shoulders, gutters, median barriers, bridge curbs and gore areas and ramps at interchanges.

CONSTRUCTION METHODS: All work shall comply with the 2003 edition of the Standard Specifications for Highway Construction, all its supplements and Special Provisions and as modified within these following notes.

- 1. Monthly sweeping cycles shall consist of: area between the edge of the mainline travel lanes and ramp lanes and the face of the curb, barrier wall, bridge rail, guardrail or outside edge of the paved shoulders.
- 2. Once the order in which the routes are being swept has been established it will be followed for the remainder of the contract, unless otherwise directed by the Engineer.
- 3. Sweeping for each section of road shall be accomplished on a schedule that will assure that the spacing between the beginnings of each cycle is constant throughout the entire life of the contract. For this contract, the sections of roadways requiring sweeping will be swept once a month for the life of the contract unless otherwise directed by the Engineer.
- 4. Sweepers shall operate at the unit manufacturer's recommended speed for highway sweeping. No excessive speeds will be allowed when the unit is in the sweeping mode. The water spray system shall always be engaged when the unit is in the sweeping mode.
- 5. Any debris found on the pavement surface or on top of grates in the areas specified to be swept shall be removed and disposed of by the contractor. Hand brooms and other small tools may be required to remove any dirt and debris not removed by the power sweepers. In addition, manual removal of larger debris shall be provided by the Contractor to facilitate the mechanical sweeping.

EQUIPMENT: The Contractor shall furnish all equipment necessary to perform the work within the specified time. Broom mechanical sweepers shall have a minimum 100 HP @ 2500 RPM diesel engine. All sweepers shall have a minimum 26,000 GVD and 10 foot sweeper path. All equipment shall be designed and operated with a water spray system to insure that dust does not create a traffic hazard. All sweepers shall be equipped with a centrifugal dirt separator at the air return outlet of the hopper. All of the Contractor's equipment shall clearly display the Contractor's name and phone number on each side of the vehicle.

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ROADWAY SWEEPING

All equipment shall conform to all Federal, State and Local laws, regulations and ordinances for noise, water and air pollution controls and all Occupational Safety and Health Administration (OSHA) regulations.

All equipment shall be inspected and approved by the Engineer prior to the work beginning. Any previously approved equipment that the Engineer determines to no longer perform as required shall be removed from operation and/or repaired before resuming sweeping operations.

Hand brooms and other small tools may be required to remove any dirt and debris not removed by the power sweepers.

PROJECT SCHEDULING:

- A. All sweeping shall be performed between the hours of 8:00 P.M. to 6:00 A.M.
- B. The Engineer may temporarily suspend work activities during periods of inclement weather, during special events or in Maintenance and Construction work zones.
- C. Some work locations may be deleted due to construction projects taking place.
- D. The Engineer may request additional work and payment will be made at the unit price bid per mile.
- E. Sweeping shall run from December 1, 2013 to November 30, 2014.
- F. The limits of this contract may be altered or portions eliminated upon notification by the Engineer.

LIQUIDATED DAMAGES: This project shall be completed in its entirety by November 30, 2014.

The Contractor shall advise the Engineer or his designated representative at least 3 business days prior to starting any sweeping cycle.

Any delay in beginning the contract activities on time resulting from the Contractor's failure to provide the proper equipment will be cause to deduct \$1,000.00 per day from monies due the Contractor, not as a penalty but as liquidated damages, from the time the equipment is rejected until the work begins.

The number of cycles to be completed during the life of the contract will be twelve (12). The maximum period of time allowed for the completion of an individual cycle will be two weeks. Sweeping for each section of road shall be accomplished on a schedule that will assure that the spacing between the beginnings of each cycle is constant throughout the entire life of the contract. At least 21 days must pass between monthly sweepings. If the time required between the start of each sweeping cycle established above is not adhered to, the next cycle may be deleted at the discretion of the Engineer.

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Each sweeping cycle shall be a continuous operation once started until completion. A continuous operation is defined as the uninterrupted performance of work on successive working days until the completion of all of the work required.

In the event the cycle is not completed in the time period noted in this Special Provision, a deduction equal to the miles that were not completed shall be made from monies due the Contractor, not as a penalty, but as liquidated damages. In the event the Contractor fails to maintain a continuous operation, a deduction equal to five times the dollar value of the unit price the Contractor bid for Sweeping for each day the Contractor fails to work once the cycle has begun shall be made from monies due the Contractor, not as a penalty, but as liquidated damages. Any liquidated damages assessed for failure to complete sweeping within a stated cycle shall be cumulative (per cycle). Should the Contractor fail to complete the work required during a cycle, liquidated damages for that cycle shall be applied at that time and the Contractor shall begin the next cycle at the point the current cycle terminated before beginning the normal cycle sequence. This shall become the new cycle.

TRAFFIC CONTROL AND SAFETY: The Contractor shall maintain traffic and all traffic control devices according to these notes, the State of Arkansas currently adopted edition of the Manual on Uniform Traffic Control Devices (MUTCD) and the Standard Specifications.

All cost of traffic control shall be included in the unit bid price for Roadway Sweeping.

Lighting will be required for all nighttime work and all costs are to be included in the unit bid price for Roadway Sweeping.

Any work requiring lane closures in excess of 30 minutes on Interstates or Controlled Access Highways having an ADT greater than 30,000 shall be accomplished during the hours of 8:00 p.m. and 6:00 a.m. This includes the setup and removal of all traffic control measures. Moving lane closures are considered "lane closures" and any intrusion of equipment into the travel lane requires a lane closure in accordance with the Manual on Uniform Traffic Control Devices. All other work schedules shall be governed by this Special Provision or as directed by the Engineer.

Lane closures will not be allowed during special events or as directed by the Engineer. Allowable lane closure times include the setup and removal of all traffic control measures. All Interstate and Interstate ramp lane closure requests shall be submitted ten days prior to the needed closures for approval. When lane closures are allowed, the Engineer has the authority to instruct the contractor to open the lane to traffic at any time he feels this may be required to avoid traffic or other problems.

Traffic flow around the work in progress shall be maintained. All work shall be accomplished with the traffic flow instead of opposite traffic. All traffic control measures shall be in accordance with the requirements of the current edition of the Manual on

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ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

SPECIAL PROVISION

ROADWAY SWEEPING

Uniform Traffic Control Devices and furnished by the Contractor. The Contractor shall furnish a self-motorized shadow vehicle separate from the sweeper. A sweeper cannot be utilized as a shadow vehicle. This shadow vehicle shall be equipped with a Truck Mounted Attenuator (TMA) that is designed to meet NCHRP 350 requirements TL3. As a minimum, the shadow vehicle will meet the TMA manufacturer's recommendation for mobile operation at the speeds encountered.

The sweeping unit and the shadow vehicle shall be equipped with flashing amber lights. The shadow vehicle shall be equipped with a Type C, 48" x 96" flashing arrow panel. Traffic control will be considered incidental to the work being performed and the cost thereof will be included in the price bid per mile.

DUMP SITES: All accumulated debris and rock materials swept or picked up by the Contractor will be removed from the right-of-way to a Class IV dump site facility with the Contractor being responsible for all fees where applicable. The Contractor shall supply the Engineer with copies of dump tickets for each cycle prior to any payments being made.

METHOD OF MEASUREMENT: Roadway Sweeping will be measured by the mile along the centerline of the roadway swept and cleaned free of all accumulated debris and foreign objects from the area between the edge of the traveled lanes and the face of the curb, barrier wall, bridge, guardrail or outside edge of the paved shoulder. The measurement will be to the nearest 0.01(one hundredth) mile and includes all curbs, paved shoulders, gutters, median barriers, bridge curbs and gore areas and ramps at interchanges. Each roadway sweeping cycle will be measured separately.

The quantities shown on the plans will be considered as the final quantities and no further measurement will be made unless, in the opinion of the Engineer or upon evidence furnished by the Contractor, substantial variations exist between quantities shown on the plans and actual quantities due to changes in alignment or dimensions or to apparent errors.

BASIS OF PAYMENT: Work completed and accepted and measured as provided above will be paid for at the contract unit price bid per mile for Roadway Sweeping, which price shall be full compensation for sweeping; for providing traffic control; for proper disposal of all collected material; and for all labor, equipment, tools, and incidentals necessary to complete the work.

Payment will be made under:

ITEM PAY UNIT

Roadway Sweeping Mile