SECTION 02500

PAVING AND SURFACING

PART 1 - GENERAL

1.1 DESCRIPTION

A. Scope

- 1. Furnish and install full depth hot mix asphalt (HMA) pavement for access road, interior roads, parking area and other areas as indicated on the Drawings
- 2. Furnish and install aggregate base course (ABC) shoulder on access and interior roadways as shown on Drawings or otherwise specified
- 3. Miscellaneous items of paving and surfacing Work

B. Additional Requirements Specified Elsewhere

- 1. Section 01010: Summary of Work
- 2. Section 01340: Shop Drawings, Product Data, and Samples
- 3. Section 01400: Quality Control
- 4. Section 01500: Construction Facilities and Temporary Controls

C. Related Requirements Specified Elsewhere

- 1. Section 02200: Earthwork
- 2. Pikes Peak Region Asphalt Paving Specifications

1.2 QUALITY ASSURANCE

A. Reference Standards

- 1. "Pikes Peak Region Asphalt Paving Specifications", latest edition, referenced to herein as "Standard Specifications"
 - a. Incorporated into the Contract Documents as if physically attached and bound hereto for those sections referenced herein
 - b. Each Bidder/Contractor responsible for procuring sufficient copies for use in bidding and construction of the project
 - c. Owner and/or Engineer will not furnish copies
 - d. Copies are available for examination at the office of the Engineer during regular business hours

1.3 SUBMITTALS

A. Test Reports: Perform and submit test reports for the following products in accordance with above general reference standards and specific standards set forth hereafter

- B. Proposed Mix Design: Prior to commencing paving work, submit and obtain Engineer's approval of certified test report describing proposed hot bituminous pavement mix design including
 - 1. Aggregates: Source, type, gradation, deleterious substances and saturated surface dry specific gravity (ASTM C128)
 - 2. Bituminous materials
 - 3. Filler materials
 - 4. Conform to Section 1.003.A. of the Standard Specifications
- C. Tack Coat Materials
- D. Aggregate Base Course
 - 1. Source
 - 2. Type
 - 3. Gradation
 - 4. Deleterious substances
 - 5. Saturated surface dry specific gravity
 - 6. Resistance value as determined by Hveem stabilometer method

PART 2 - PRODUCTS

2.1 PERFORMANCE AND DESIGN REQUIREMENTS

- A. Hot Mix Asphalt Pavement (HMA)
 - 1. Refer to Standard Specifications, Table 1.003.1
 - a. Low-Moderate
- B. Aggregate Base Course (ABC)
 - 1. Class 5 or 6 as specified by the Colorado Department of Transportation (CDOT) Specifications, latest edition
 - 2. Source of aggregate base course not designated
 - 3. Resistance value greater than or equal to 80 as determined by the Hveem stabilometer method

2.2 MATERIALS

- A. Aggregate Base Course (ABC)
 - 1. Conform to CDOT Standard Specification, Section 703.03, Class 5 or 6 acceptable
- B. Aggregate for Bituminous Pavement
 - 1. Conform to Standard Specification, Table 1.002.1 and 1.002.2
 - a. Grading S for HMA lifts under top wearing surface course
 - b. Grading SX for HMA top wearing surface course

C. Bituminous Materials

- 1. Conform to Standard Specifications, Paragraph 1.002.E
- 2. Conform to requirements of performance graded binder grade 64-22

D. Filler Material

1. Conform to Standard Specifications, Paragraph 1.002.B

E. Tack Coat Material

- 1. Conform to Standard Specifications, Paragraph 1.002.E.2
- 2. Emulsified asphalt tack coat

PART 3 - EXECUTION

3.1 AGGREGATE BASE COURSE (ABC)

- A. Install in accordance with CDOT Specifications, Section 304, Subsections 304.01 through 304.06 on prepared subgrade
 - 1. Place at roadway shoulder to specified cross-section within 24 hours of installation of HMA

B. Minimum Thickness

- 1. Shoulder section for full depth HMA: 6 inches total compacted thickness
 - a. Furnish and install final lift of ABC to conform with final lift of HMA
- C. Compact to 95% of maximum density at optimum moisture content per ASTM D1557 (Modified Proctor Density) on prepared subgrade

3.2 HOT MIX ASPHALT PAVEMENT

- A. Install in accordance with Standard Specifications, Section 1.004
- B. Thickness of Pavement Section
 - 1. Lower Fountain Heights: Full depth pavement section: 6.5 inches
 - 2. Place in lifts with a maximum compacted thickness of 3 inches
 - a. Place two lifts to a minimum total thickness of 5 inches prior to commencement of major site work
 - b. Place final top lift to provide total minimum pavement thickness of 6.5 inches upon completion of all major work at the site
 - 1) Consult with Owner and Engineer to reach agreement on date of final HMA lift

3.3 TACK COATS

- A. Install in accordance with Standard Specifications, Paragraph 1.004.J.
 - 1. Required adjacent to existing HMA pavement and concrete surfaces

END OF SECTION