FY2018 Contract Seal Coat Guidelines

* **Plans, Specifications and Estimate**

* + For MoDOT Striping: Plan templates are located in ProjectWise in the design seed files:

SEAL\_COAT\_01\_Title\_05\_2017

SEAL\_COAT\_02\_Typical\_05\_2017

SEAL\_COAT\_03\_Quantities\_05\_2017

SEAL\_COAT\_04\_TC\_1\_05\_2017

SEAL\_COAT\_05\_TC\_2\_05\_2017

SEAL\_COAT\_06\_TC\_3\_05\_2017

SEAL\_COAT\_07\_TC\_4\_05\_2017

* + For Contractor Striping: Plan templates are located in ProjectWise in the design seed files:

SEAL\_COAT\_01\_Title\_05\_2017

SEAL\_COAT\_02\_Typical\_05\_2017

SEAL\_COAT\_03\_Quantities\_05\_2017

SEAL\_COAT\_04\_TC\_1\_05\_2017

SEAL\_COAT\_05\_TC\_2\_05\_2017

SEAL\_COAT\_06\_TC\_3\_05\_2017

SEAL\_COAT\_07\_TC\_4\_05\_2017

SEAL\_COAT\_08\_TC\_5\_05\_2017

The ADT of the routes should be listed in the left top corner of the Title sheet. This information is used by the Project Reviewer to set the liquidated damages and is also beneficial to the contractor to be aware of the amount of traffic on the route.

* Selection guidance on the aggregate grade of seal coat will be as follows:

The type of bituminous material and grade of liquid asphalt is selected by the contractor. Differing aggregate qualities are available and specified according to the roadway traffic as shown in the tables below:

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| **Two Way Traffic** |
| **Seal Coat Grade** | **ADT** |
| C | < 750 and any shoulders |
| B1 & B2 | < 1,700 |
| A1 | < 3,500 |
| A2 | < 8,500 |

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| **Divided Highways** |
| **Seal Coat Grade** | **ADT** |
| B1 & B2 | < 3,500 |
| A1 | < 14,000 |
| A2 | < 17,000 |

Grades A1 and B1 are coarse (3/8”) aggregate seals and should be used on pavement surfaces with minor distresses. Grades A2 and B2 are fine (1/4”) aggregate seals and should be used on pavement surfaces with little to no distresses. Higher grades (grades associated with higher ADT) maybe substituted for lower grades.

A seal coat placed on a porous surface such as an aggregate base should receive a prime coat. If a prime coat is used, the appropriate pay item must be added to the project.

* The JSP template is located in [EPG 409 Seal Coat Program](http://epg.modot.mo.gov/index.php?title=Category:409_Seal_Coat). The DBE Program Requirements should not be included with Seal Coat Projects. Additionally, QM and Contractor QC JSP’s are not included with Seal Coat Projects.
* Any surface irregularities will be accounted for by adjusting the application rate in the field per the direction of the Engineer. No additional quantities should be accounted for in the plans. Major surface irregularities should be corrected by maintenance forces at least two weeks prior to placement of the Seal Coat, by placing cold or hot mix.
* Proper design of a seal coat consisits of determining the proper rate of application for the bituminous material and cover aggregate. Contact the District Pavement Specialist for the target emulsion application rate to place on typicals, and to determine quantities.

**MoDOT Pavement Marking:**

The District will need to coordinate with the striping crews to have the stripe completed within 14 days after the seal coat is completed. Routes that have an existing edgeline, will need to include quantities for Temporary Pavement Markers for the edgeline in addition to the centerline marking. If used, intersection marking should be coordinated with District Traffic.

**Contractor Pavement Marking:**

Contractor striping should be preformed after a minimum 7 day cure time after placement of the seal coat. When contractor striping is included, mobilization must be added. The contractor is required to provide temporary pavement marking for both the centerline and any edgelines. No pay item is included for temporary pavement marking when contractor striping is provided.

* **Contract Time:** The contract time will need to be specified in the *Contract Liquidated Damages* JSP. The general rule is two (2) calendar days for every one (1) working day with a minimum of 30 calendar days unless the district has justification for a tighter time frame due to impacts to the traveling public. Calendar days for each route should be included in the PS&E submittal.

Recommended Completion Date: September 1, 2018

Recommended Completion Date if let after March 31, 2017: September 1, 2019

For projects with a 2019 completion date, Seal Coat Completion of Work JSP (JSP-15-08) must be included in the JSPs. Additionally; the RE will be responsible to advise maintenance staff of the contractor proposed completion date in order to address any impacts to maintenance activities performed in effort to prepare the route for the contract treatment.

* **Bridges**: Bridges should be excepted unless prior written approval is obtained from the Bridge Division and submitted with the transmittal package. If included, bridge slab drains should be plugged.
* **Pay Items:**

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| ***CONTRACTOR STRIPING***  |
| **Item No.** | **Description** |
| 4091048 | Emulsified Asphalt, Seal Coat |
| 40940XX | Seal Coat Aggregate, Grade A1, A2, B1, B2, or C |
| 6161005 | Construction Signs |
| 6161009 | Flag Assemblies |
| 6181000 | Mobilization |
| 6206000B | 4 In White Acrylic Waterborne Pavement Marking Paint |
| 6206001B | 4 In. Yellow Acrylic Waterborne Pavement Marking Paint |

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| ***MoDOT STRIPING***  |
| **Item No.** | **Description** |
| 4091048 | Emulsified Asphalt, Seal Coat |
| 40940XX | Seal Coat Aggregate, Grade A1, A2, B1, B2, or C |
| 6161005 | Construction Signs |
| 6161009 | Flag Assemblies |
| 6181000 | Mobilization |
| 6208064A | Temporary Raised Pavement Marker |