MICHIGAN DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION FOR

WARRANTY WORK REQUIREMENTS FOR ONE COURSE HOT MIX ASPHALT OVERLAY (CAPITAL PREVENTIVE MAINTENANCE)

CFS:DJW 1 of 2

APPR:KPK:RAG:03-10-20 FHWA:APPR:03-13-20

- **a. Description.** This special provision must be used in conjunction with 20SP-500A to construct warranted pavement using 1½inch or 2 inch preventive maintenance hot mix asphalt (HMA) overlays.
- **b.** Limits of Warranted Work. The warranted work includes all HMA on warranty lanes within the project limits unless otherwise indicated on the plans.
- **c.** Warranty Term. The warranty term will be 3 years from the date of Initial Acceptance otherwise termed the Acceptance Date of Warranted Work.
- **d. Warranty Bond.** The bond will equal 100 percent of the contract cost for the warranted work.
- **e. Warranty Requirements.** Table 1 lists the allowable threshold limit for each condition parameter within each segment and the maximum number of allowable segments within a warranty lane for each condition parameter. If the threshold is exceeded for a condition parameter, for more than the maximum number of allowable segments, corrective action (warranty work) is required.

The defective segments for surface distress may or may not be contiguous to necessitate corrective action. The maximum allowable number of defective segments for each condition parameter applies to each warranty lane in each travel direction. Ensure each warranty lane is evaluated independent of adjacent warranty lanes. Ensure any pavement surface requiring removal/replacement to correct deficiencies, for any condition parameter, is replaced full-width across the warranty lane.

f. Corrective Actions. The Contractor will propose corrective action subject to Department approval. The Department will accept the proposed corrective action if the action will correctly restore both the original preventive maintenance treatment and the benefit that the treatment provides to the underlying pavement structure.

CFS:DJW 2 of 2

Table 1: Warranty Requirements

Condition Parameter	Threshold Limits Per Segment (Length = 528 feet)	Max. Defective Segments (a)
Longitudinal Cracking/Open Joint(d)	25% of segment length	4
De-bonding	25% of segment length	2
Raveling	20% of segment length	4
Flushing	5% of segment length	2
Rutting(c)	average rut depth = 1/4 inch(b)	1

- a. The maximum allowable number of defective segments per warranty lane is determined by multiplying by the length of the specific warranty lane in miles.
- b. The rut depth threshold applies to each wheel path independently.
- c. The pavement surface will be evaluated for the presence of rutting on each warranty lane throughout the warranty period. The pavement surface will be measured beginning at the POB and every 132 feet thereafter to determine average rut depth to quantify rutting for a particular segment. Rut measurements will be done using a straight rigid device that is a minimum of 7 feet long and of sufficient stiffness that it will not deflect from its own weight, or a wire under sufficient tension to prevent sag when extended 7 feet. Measurements will be taken by placing this "straightedge" across the pavement surface perpendicular to the direction of travel. The straightedge shall contact the surface on at least two bearing points with one located on either side of the rut. The straightedge is properly located when sliding the straightedge along its axis does not change the location of the contact points. Rut depth is then measured at the point of greatest perpendicular distance from the bottom of the straightedge to the pavement surface.
- d. A crack in the new surface will be excluded if it is determined to be "reflective" from a similar underlying crack condition.