Michigan Department
of Transportation
0557 (02/2024)

Clear Form

CHIP SEAL CONSTRUCTION INSPECTOR CHECKLIST

JOB NUMBER	ROUTE	INSPECTOR NAME	DATE

PRIME CONTRACTOR	SUBCONTRACTOR(S) (If applicable)

WEATHER (Clear or Overcast, Temp, Humidity, etc.,)

DOCUMENT REVIEW

- ☐ Daily Report
- ☐ Load Tickets
- ☐ Job Mix Formula

MATERIALS (Per 505.02)

COARSE AGGREGATE

Select applicable aggregate, note supplier of on-site material, compare with MSL

- ☐ 34CS (Single Course, or First Course of Double Chip Seal) _____
- ☐ CS-T (Top Course of Double Chip Seal) _____
- ☐ Moisture content of aggregate < 4%
- ☐ Aggregate stockpiles are free of standing water and no soil beneath is being scooped into trucks
- ☐ Coarse Aggregate Stockpile Daily Sample
- ☐ Sieve analysis meets requirements of Table 902-7 and QC tolerances of Table 505-1

EMULSION

Select applicable emulsion, note supplier of on-site material, compare with the submitted MSL

- ☐ CSEA Supplier: _____
- ☐ CRS-2M Supplier: _____

CONSTRUCTION (Per 505.03)

PAVEMENT PREPARATION

- ☐ If applicable, overband pretreatment was performed and all cracks between ¼" and 1-¼" or 3 feet or longer
- ☐ If applicable, overband pretreatment was done at least 7 days prior to placing chip seal
- ☐ Special markings are removed
- ☐ Pavement swept with power brooms to remove loose material

EQUIPMENT

Pressure Distributor

- ☐ Equipped with computerized application rate and speed control
- ☐ Equipped with radar ground-sensing device
- ☐ Uniform triple-lap application fan spray
- ☐ All nozzles are free of clogs
- ☐ Calibration of the distributor has been checked (see "Application Rate" section)

Chip Spreader

- ☐ Equipped with computerized speed control
- ☐ All gate controls and settings have been checked
- ☐ The chip spreader is following closely to the distributor
- ☐ Calibration across entire chip spreader has been checked (see "Application Rate" section)

Compacting Equipment

- ☐ At least 3 rollers with pneumatic tires that have a smooth tire surface
- ☐ Rollers weigh at least 8 tons
- ☐ Rollers travel no greater than 5 mph
- ☐ No more than 2 minutes between chip spreading and initial rolling
- ☐ Entire surface is rolled twice

Brooms

- ☐ Bristles are proper length
- ☐ Broom can be adjusted to avoid excessive pressure
- ☐ Brooming should be done until loose stones have been cleared from roadway

General

☐ All other equipment used on the jobsite is in good working order

WEATHER

☐ Pavement and ambient temperature at least 55º F at time of placement _____ º F

☐ Pavement temp is below 130º F at time of placement _____ º F

☐ Air temps will be above 40º F within 24-hours of placement

☐ Weather is clear with no fog or rain during placement

APPLICATION RATE

Coarse Aggregate (per QC Sampling and Testing 505.03.G.2)

a. Weigh 1 yd² tarp or geotextile material: W_{Tare} =_____ lbs
b. Place the tarp or geotextile on the roadway
c. Have the chip spreader apply the aggregate over the tarp or geotextile
d. Weigh the tarp or the geotextile material with the aggregate: W_{Gross} =_____ lbs
e. Subtract the two numbers to obtain the application rate of aggregate: $W_{Agg} = W_{Gross} – W_{Tare}$ =_____ lbs/yd²

☐ Application rate of aggregate (W_{Agg})is within ± 1 pound of JMF application rate

Emulsion QC and Testing (per QC Sampling and Testing 505.03.G.2)

a. Park the distributor on level ground, measure the emulsion, and recover the number of gallons area of emulsion (note: not aconversion) $G_{Initial}$ =_____ gal
b. Measure off a 1000-foot-long test section and multiply by width and divide the result by 9 to find the area A = (1000 ft x_____ ft) ÷ 9 =_____ yd²
c. Have the distributor apply emulsion to the test section
d. Park the distributor on level ground and remeasure and record the gallons of emulsion: G_{Final} =_____ gal
e. Subtract the two numbers to obtain the gallons of emulsion applied: $G_A = G_{Initial} – G_{Final}$ =_____ gal
f. Divide the gallons applied by the area covered by emulsion to find the application rate: G_A/A =_____ gal/yd²

☐ Application rate of emulsion is withing ± .01 gallon per square yard of JMF target rate

* This checklist is intended to aid inspectors with a convenient list of select chip seal specification requirements and procedures to look for during construction. This list is not inclusive of all specification requirements during construction. The 2020 Standard Specifications for Construction, project proposal, and contract documents take precedence in case of a conflict with this checklist.