



**CITY OF BATTLE CREEK**

**ADDENDUM 1  
IFB#2017-060B**

**2017 Capital Preventive Maintenance Program**

**ADDENDUM ISSUED: March 1, 2017**

**The following changes, additions and deletions have been provided:**

**REPLACE – Seal, Single Chip, Modified with the attached Seal, Single Chip, Modified dated 2-27-2017.**

**Due date and time remains the same.**

**THIS ADDENDUM DOES NOT NEED TO BE ACKNOWLEDGED.**

CITY OF BATTLE CREEK  
 SPECIAL PROVISION  
 FOR  
 SEAL, SINGLE CHIP, MODIFIED

CEF

1 of 1

2-27-2017

**a. Description.** This work consists of the application of a Seal, Single Chip in accordance with section 505 of the Standard Specification for construction, except as modified in this special provision. Seal, Single Chip, Modified pay item includes the application of a fog seal following the Seal, Single Chip as per contract documents except as modified in this special provision.

**b. Material.** The material must meet the following requirement:

Asphalt Emulsion: CRS-2M.....904  
 Asphalt Emulsion: CSS-1h.....904

Fine Aggregate shall be **Trap Rock** consistent with the Gradation and Physical requirements for **34CS-M** found below:

**Table 1: Gradation Requirements**

Sieve Analysis (MTM 109), Total Percent Passing (a)		
Sieve Size	CS-T	34CS-M
3/4 inch	100	100
1/2 inch	100	100
3/8 inch	100	90-100
1/4 inch	85-100	N/A
No. 4	N/A	0-15
No. 8	0-15	0-5
No. 200 (Loss by Wash)	2.0 maximum	2.0 maximum

**Table 2: Physical Requirements**

Physical Requirements for Coarse Aggregates (CS-T & 34CS-M)	
Test – Description	Specification
<i>MTM 102</i> – L.A. Abrasion Resistance	35% maximum (b) 45% maximum (c)
<i>MTM 117</i> – Percent of Crushed Particles	ADT > 4,000 100% minimum on single face, 90% on 2 faces ADT < 4,000 95% minimum on single face 85% on 2 faces
<i>MTM 110</i> – Deleterious Particles in Aggregate	3.5% maximum (d)
<i>ASTM D 4791</i> – Flat and Elongated Ratio, 3:1(e)	N/A 15.0% maximum
<i>MTM 111</i> – Aggregate Wear Index (f)	ADT > 4,000 60/40 Weighted Average > 260 (g) ADT < 4,000 220 minimum
Moisture Content at time of placement(h)	4% maximum
a. All aggregate must be washed. b. Natural aggregate. c. Iron Blast-Furnace slag aggregate. d. Includes the sum of shale, silt stone, structurally weak and clay ironstone. e. As determined for material retained on the No.4 sieve. The ratio between any combination of length, width or thickness. f. Does not apply to a shoulder chip seal. g. The top course will be weighted at 60% and base course will be weighted at 40% with the higher AWI aggregate as the top course. h. As described in MDOT Procedures for Aggregate Inspection.	

**c. Equipment.**

1. **Street Sweeping.** Vacuum sweeping will only be permitted on this project.

**d. Application Rates.**

1. Apply Asphalt Emulsion CRS-2M for Seal, Single Chip, Modified at a rate of 0.25 to 0.32 gallons per square yard.
2. Apply Fine Aggregate Trap Rock at a rate of 15 pounds to 20 pounds per square yard.
3. Apply Asphalt Emulsion CSS-1h for fog seal at a rate of 0.08 to 0.12 gallons per square yard.

- e. Measurement and Payment.** The completed work, as described, will be measured and paid for at the contract unit price using the following pay items:

Pay Item	Pay Unit
Seal, Single Chip, Modified	Square Yard