

**SUBJECT:** Asphalt Pre-Paving and Pavement Marking Conference



**FORM NOs:** [OOC-90](#) QA Project Report – Mixture/Density Samples  
[PM-003](#) As Built Pavement Form

**GENERAL:** The quality construction of Asphalt and Pavement Markings depends on Teamwork between all relevant SHA personnel, the Contractor, the Asphalt producers, and the Pavement Marking Manufacturer and Applicator. It is of the utmost importance that all persons listed be invited to the Pre-paving and Paving Marking Conference.

**PURPOSE:** To establish a uniform procedure to implement Quality Control/Quality Assurance (QC/QA) for HMA Pavement and Pavement Markings.

**PROCEDURE:** Prior to placing HMA pavement and permanent pavement markings on a project, the Construction Project Engineer (CPE) will conduct a conference as follows:

1.) The CPE shall notify the following representatives of the date, time, project number and location of the conference seven days in advance.

- a) Asphalt Technology Field Team Leader for OMT
- b) Regional Construction Engineer
- c) District Area Engineer
- d) Paving Quality Assurance Team Leader for OMT (Profiler)
- e) Independent Audit Team Leader for OMT
- f) Area Materials Engineer for OMT
- g) Assistant Division Chief for Pavement & Geotechnical Division or Representative
- h) Assistant Division Chief for Coatings & Markings Division or Representative
- i) CI inspector assigned to paving operation
- j) CI Safety Officer
- k) Assistant District Engineer-Traffic, or Representative
- l) Resident Maintenance Engineer
- m) FHWA Area Engineer (if applicable)
- n) Contractor's Foreman & Superintendent
- o) Contractor's Safety Officer
- p) Contractor's Traffic Manager
- q) Contractor's Plan Administrator for the Quality Control Plan.
- r) Contractor's Pavement Marking and Striping Representative
- s) Paving sub-contractor (if applicable)
- t) Asphalt Producer/ Supplier
- u) Pavement Marking Material Supplier

2.) A record of the conference will be prepared by the CPE. This record will consist of a list of those in attendance and minutes of the meeting placed in the project files and distributed to the District Engineer and all those in attendance at the conference.

- 3) Topics: Maintenance of Traffic (Category 104)
  - a) Traffic Control Plan (TCP)
  - b) Night time paving (when applicable)
  - c) Safety of personnel and PPE equipment to be used
  - d) Special paving instructions
  - e) Hours of Operation
  - f) Temporary pavement markings
  - g) Inventory Existing Markings (104.02.03b)
  - h) No use of Interstate crossovers
- 4) Topics: Plant and Field operations:
  - a) Safety Requirements of Paving Operations
    - i) Equipment, trucks (backing up/walking between, overhead powerlines)
    - ii) Dump man, Flag Truck (in and out of traffic)
    - iii) Lighting
    - iv) Nuclear Density Gauge Safety Requirements
  - b) QC Plans Approved - shall conform to HMA Paving Section 504.03
    - i) Plant Operations
    - ii) Field Operations
    - iii) Milling Operations (if applicable)
  - c) Plant Operations
    - i) Status of Mix Design Approval
    - ii) Status of Plant Approval
  - d) Field Operations
    - i) Temperature Requirements (Surface and Mix)
    - ii) Milling of Surface
      - 1) Ensure and maintain a uniform surface texture (10' straightedge or sand patch test)
      - 2) Finished surface: no scallops, scabs, gouges, ridges, oil film
      - 3) Provide uniform surface texture for a temporary riding surface
      - 4) Dust control
  - e) Paving Operations
    - i. Number of properly tarped haul vehicles to maintain continuous operation
    - ii. Surface preparation - Adjust to grade manholes, valve boxes, inlets and other construction appurtenances within the area to be paved.
    - iii. Tack coat: truck demo, sampling

- iv. Thin Lift / Wedge and Level courses (Control Strip Required)
  - v. Gap-graded SMA demo strip (Required)
  - vi. Control Strip (Contractor's Option or PE request)
  - vii. Material Transfer Device (weight restrictions, mixing capability)
  - viii. Review/Inspection of paver and rollers to be used on job
  - ix. Grade, cross-slope and alignment controls
  - x. Use of electronic controls
  - xi. Safety Edge, if required
  - xii. Width and depth of passes
  - xiii. Review mixture and density sampling procedures/specifications
  - xiv. Specification for constructing longitudinal and transverse joints.
  - xv. Location of longitudinal joints
  - xvi. Paving around obstructions
  - xvii. Temporary Tie-ins to existing pavement and structures (4:1 for  $\leq 40$  mph; 10:1 for  $> 40$  mph).
  - xviii. Pavement surface checks (10' Straightedge)
  - xix. Pavement surface checks for Asphalt Patches (505.03.11)
  - xx. Truck clean-out area
  - xxi. Equipment staging area
  - xxii. No riding over new permanent markings from a tacked lane.
  - xxiii. Pavement Profile (535)
- f) Required Forms:
- i. OOC-90: QA Project Report – Mixture/Density Samples, email daily to [superpave@sha.state.md.us](mailto:superpave@sha.state.md.us)
  - ii. PM-003: As-Built Information. Upon paving completion, the PE shall complete and submit to Mark Chapman, PAGD, at [mchapman@sha.state.md.us](mailto:mchapman@sha.state.md.us)
- 5) Sampling and Testing of Small Quantities of Asphalt Materials
- a) Asphalt Paving – Mixture Sampling
- i. Quantities of 200 tons or less of asphalt production will not require random field mix samples unless otherwise directed by the Engineer.
  - ii. Random field mix samples must be taken from behind the paver and must not be taken from areas of bridge approaches, entrances, gore areas, handwork, Gradall placed material, paver hoppers and ends of paver augers.
  - iii. Daily quantities greater than 200 tons may be considered small tonnage if accumulated through non-continuous paving. For example, bridge approaches, widening areas, turn lanes, entrances, gore areas. This information must be detailed on the OOC-90 QA Project Report – Mixture/Density Samples.

b) Asphalt Paving – Cores

- i. Density cores and gauge readings will be waived for entrances and gore areas.
- ii. Density cores may be waived on small quantities (200 tons or less). For mainline, ramp and intersection paving requiring less than 200 tons, gauge readings must be performed as per Category 505.03.12
- iii. Daily quantities 200 tons or greater may be considered small tonnage if accumulated through non-continuous paving. For example: bridge approaches, widening areas, turn lanes. Gauge readings must be performed.
- iv. SHA 73.04 – Core Sheets and OOC-90 forms must be submitted daily for all production including low tonnage.

c) Asphalt Patching – Mixture Sampling

- i. Quantities of 200 tons or less of asphalt may not require daily field mix samples. However, one random sample per mix will be required for every 1000 tons of asphalt or one sample per mix for every five days of patching, whichever yields the greater frequency.
- ii. Patches not placed with a paver or patches less than 1,000 sq. ft. (10' wide x 100' long) will not require a mix sample.

d) Asphalt Patching – Cores

- i. A calibrated density gauge will be used.
- ii. A minimum of one test per lift of asphalt will be required and the results recorded for the project records.
- iii. Three cores per 1000 tons (or portion thereof) per mix will be used to validate the density gauge for quality control purposes as per 505.03.13.
- iv. Core sheets must be submitted daily for all production including low tonnage.

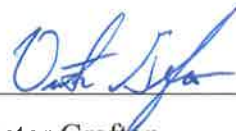
## 6) Weather Restrictions Specification 504.03.02:

- a) Surface conditions
- b) Ambient air and surface temperatures
- c) Material enroute when weather conditions change
  - i. Safety of the traveling public
  - ii. Placing material enroute at the Contractor's risk with approval of the Engineer
  - iii. Testing to ensure quality of the material placed during adverse weather conditions.
  - iv. Temporary lane markings
  - v. Opening lane(s) to traffic

## 7) Topics to be discussed regarding permanent pavement markings:

- a) Safety Requirements
- b) Contractor's Quality Control Plan
- c) Contractor's Quality Control Testing
  - Reference MSMT 729 for Sampling and Testing and the reference for Random Sampling as per ASTM D 3665
  - i. Contractor's Certified Technician
  - ii. Administration's Quality Assurance.
  - iii. Materials specifications
  - iv. Manufacturers' recommendations
  - v. Layout
  - vi. Materials preparation
  - vii. Application procedure
  - viii. Application equipment
  - ix. Temperature requirements
  - x. Inspection procedures
  - xi. Quality Control Results, Pavement Markings & Inspection Request Form, Pavement Marking Data Sheet, Pavement Marking Material Application Sheet: Fax to Structural Materials and Coatings Evaluation Division, Pavement Marking Team at 410-787-0461.


Any deviations from the procedures established at the conference shall be immediately brought to the attention of the Contractor and corrective action shall be taken to insure conformance with the Specifications.



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APPROVED:



 Stephen Bucy  
Director, Office of Construction