

Title: HMA Laydown – Best Practices Checklist	Pennsylvania Asphalt Improvement Network	Document No.: QPM009-06	Effective Date: 20-Dec-06 Rev: 00	Page: 1 of 6
Owner/Approver:	Reviewed By:	Reviewed By:	Reviewed By:	Reviewed By:

1.0 PURPOSE:

This procedure describes the describes the Best Practices a Hot Mix Asphalt (HMA) laydown contractor should review and apply as a supplement to a HMA construction contract to ensure final products meet contract requirements.

2.0 SCOPE:

This procedure applies to the HMA lay-down construction projects.

3.0 RESPONSIBILITY:

HMA lay-down construction management and operating personnel.

4.0 EQUIPMENT NEEDED:

Based on type of HMA plant and contract requirements.

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Date Printed 12/20/2006

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5.0 **PROCEDURE:**

HMA Field QC Best Practices (Steps to be taken by Contractor Field QC Manager)

Red Indicates a "Key Control Point"

Prepave Meeting

1. Submit QC Plan Covering

			Comments
	a.	Methods.	
	b.	Personnel.	
	c.	Equipment.	
	d.	Trucks.	
	e.	Paving interruptions due to weather or equipment failures.	
	f.	Paving sequencing.	
	g.	Communications methods between plant and field.	
	h.	Paving hours, schedule.	
	i.	Release of material.	
	j.	Discuss sampling procedures to include frequency, responsibility, delivery, storage and identification of samples.	
	k.	Verify which version of the specifications you are working under and discuss any special provisions.	
	l.	Keep a set of agreed upon minutes of the meeting to be distributed to all effected parties.	

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Owner/Approver:	Reviewed By:	Reviewed By:	Reviewed By:	Reviewed By:

Construction

2. Equipment Preparation

Comments

	a.	Set up pavers to meet the needs of the particular project.	
	b.	Perform needed servicing.	
	c.	Deliver equipment to the jobsite and park in a predestinated area.	
	d.	Arrange for proper number of trucks with experienced drivers to be available when needed.	

3. Surface Preparation

Comments

	a.	Proper surface preparation to meet contract requirements	
	b.	Clean existing surface	
	c.	Patch where necessary	
	d.	Seal where necessary	
	e.	Cut paving notches where necessary	
	f.	Use temporary cold patch material where required and remove prior to paving.	
	g.	Verify the stability of the surface to be paved.	
	h.	Paint longitudinal and transverse joints with material specified	

4. Paving Operation Mix Delivery

Comments

	a.	Verify that conditions are conducive for release of the material.	
	b.	Confirm mix design and the number of trucks.	
	c.	Insure traffic control is in place and operating properly.	
	d.	Use three drop method when loading trucks.	

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e.	Have proper release agent as well as proper application equipment available at all plants and see that it is used by all hauling units.	
f.	Have hauling units dump all excess release agent prior to pulling on scale.	
g.	Co-ordinate plant production, paver speed and truck fleet to minimize queuing of trucks at the plant or paver.	
h.	Protect the load to maintain temperatures by the use of tarps' heated bodies and or insulation.	

5. Paving Operation Mix Placement

Comments

a.	Pre-heat paver screed.	
b.	Verify material on road prior to applying tack.	
c.	Insure tack is being applied at the specified application rate and has broken before material is placed on it.	
d.	Monitor the mat to verify that there is no segregation of any type.	
e.	Have contingency plan in place to address equipment breakdown as well as climactic changes.	
f.	Utilize MTV to facilitate proper paving speed as well as working in conjunction with the paver to eliminate both thermal and gradation segregation.	
g.	Setup, maintain and operate the paver in compliance with the manufactures recommendations. Use automated features of paver where specified and or as practical.	
h.	Monitor mat placement to assure that no segregation or contamination occurs either physical or chemical and to correct any problems caused by either.	
i.	Perform adequate thickness checks by measuring depth before compaction has taken place as well as running tests to determine the yield per ton.	

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	j.	Make adequate checks to assure proper grade of pavement is being met, this includes checks for cross slope.	
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6. Compaction

Comments

	a.	Have adequate number and type of roller necessary to deal with particular mat being placed.	
	b.	Operate, maintain and adjust rollers to comply with manufactures recommendations.	
	c.	Establish a rolling pattern and monitor it to assure desired results are being met. Adjust pattern as necessary.	
	d.	Pay particular attention to construction and compaction of the longitudinal joint, selecting the best type of joint to fit the field condition.	
	e.	Operate and maintain the nuclear gage in accordance with manufactures recommendations.	
	f.	Roll in a manner to eliminate surface defects or imperfections caused by the rolling operation.	
	g.	Match roller speed to frequency of the vibrations of the drums. This should be approximately 10 vibrations per foot unless manufacturer recommends otherwise.	
	h.	Do not artificially cool mat or open to traffic before the mat has cooled to 60°C (140°F).	

Post Paving

7. Final Construction Requirements

Comments

	a.	Seal curbs and gutters as specified.	
	b.	Paint traffic lines as specified.	
	c.	Cut cores, package and deliver as specified.	

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6.0 Revision Log

<u>Revision</u>	<u>Date</u>	<u>Description</u>	<u>Requested By</u>	<u>Completed By</u>
00	20-Oct-06	Initial Release	<u>PASIN Core Team</u>	<u>MDL / FJC</u>

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