

# Portland Cement Concrete Paving

Project No:

Date:

Reviewer:

In Company With:

References: Current State Standard Specifications  
Materials Specification  
Participant Manual for Construction of PCC Pavements (NHI  
#131003)

Generally describe the paving operation (i.e. reinforcement or non,  
fixed or slip form, weather, joint assembly, etc.)

## Before the Pour

1. Has the inspection staff scratch-boarded or stringlined between forms and/or across the grade?

YES NO

2. Was a prepaving meeting convened prior to beginning paving operations? Did the Engineer in Charge (EIC) examine and approve all equipment to be used in the operation?

YES NO

3. Does the slip-form paver have rigid side forms that laterally support the concrete and minimize edge slumping?

YES NO

4. Is the slip-form paver equipped with internal vibrators meeting the contract requirements? (daily check of operating frequencies)

YES NO

5. Regarding dowel baskets, are tie wires being cut that hold the 2 upper transverse support members in position? Each tie wire should be cut twice, once near each weld.

YES NO

6. Are dowel bar locations marked after placement?

YES NO

7. Was a joint layout submitted by the contractor to the EIC at least 10 days prior to paving?

YES NO

### Preparing the Base

8. Has the entire base surface upon which the concrete is to be placed been kept moistened in front of the paver without areas of standing water? (spec reference)

YES NO

9. For fixed form paving, have all forms been cleaned and oiled before concrete placement? Are all forms secured with a minimum of 3 pins to prevent movement during operation? (spec ref.)

### Concrete Mixing, Transporting and Discharging

10. Is the discharge of mixed concrete from **non-agitating** hauling equipment accomplished within thirty minutes after batching?\*

YES NO

11. Is the discharge of mixed concrete from **agitating** hauling equipment accomplished within ninety minutes after batching? (Agitating speed should be 2-6 rpm)\*

YES NO

12. Are a maximum of two additions of water being allowed at the discharge point to obtain initial slump? (30 revolutions after each addition)

YES NO

### Placing the Concrete (spec reference)

13. Is concrete being placed in a continuous, smooth manner with few interruptions? If the operation is stopped, are the vibrators shut off?

YES NO

14. What is being done to ensure the pavement is placed to the specified line, grade and cross section?

15. Is the concrete being deposited in such a manner as to require as little re-handling as possible?

YES NO

16. For slip form paving, is edge slump being checked to make sure there is none occurring greater than 6 mm?

YES NO

17. Are slump and air tests being performed during the initial daily placement and thereafter at a rate of one set per 150 to 200 cubic yards?

YES NO

### Concrete Mixtures from Table XXX (standard specs)

Concrete Class	Air Content-desired/(range)	Slump Range (mm)
C	6.5	40-65
	(5.0-8.0)	
F	6.5	50-75
	(5.0-8.0)	

16. If cylinders are cast for opening pavement early, are a minimum of 3 cylinder pairs cast for each 300 m of paving length, or fraction thereof? Is each pair cast from different delivery trucks? (502-3.18C)

YES NO

### **Joint Construction (spec ref.)**

19. Are transverse joint dowel bars lubricated and/or coated with a bond-breaker and are they being placed parallel to the centerline of the pavement at mid depth (+/- 6mm)?

YES NO

20. Have first stage transverse saw cuts been done as soon as the concrete has hardened sufficiently to permit sawing without causing raveling?

YES NO

21. Are first stage saw cuts being done in succession down the pavement? Sawing every other joint is not allowed.

YES NO

22. Are second stage saw cuts being performed no earlier than 72 hours after placement of concrete?

YES NO

23. Are transverse construction joints being constructed wherever there is an interruption in paving operations of more than 30 minutes?

YES NO

24. For longitudinal joints, are tie bars placed at least 375 mm away from a transverse joint?

YES NO

25. Are longitudinal saw cuts being performed within 24 hours of placement and immediately after first stage transverse saw cuts are complete?

YES NO

### **Finishing and Texturing (spec ref.)**

26. Is hand finishing being kept to a minimum? Is water being added to the surface to close imperfections? (Not acceptable)

YES NO

27. Is transverse texturing being done with random spaced tines? Are the tines kept free of hardened concrete?

YES NO

28. For transverse tining, is there a 75-100 mm blank band at each transverse joint saw cut location?

YES NO

### **Curing Concrete Pavement (spec. ref.)**

29. Is the entire pavement being cured immediately after texturing with a white-pigmented membrane? Is the curing compound mixed before use and continuously agitated during application?

YES NO

30. Are all faces (including slip form edges and formed edges immediately after removal) thoroughly and uniformly coated with the curing compound?

YES NO

31. If the provisions of cold weather curing do not apply is concrete that is placed between October 16 and March 31 covered with curing covers?

YES NO

32. If curing covers are needed, are all exposed surfaces covered and extended at least 300 mm beyond pavement edges? Are successive covers overlapped a minimum of 300 mm? Are the covers free from tears or holes?

YES NO

33. Is form insulating material supplied when the air temperature is expected to fall below 4 degrees C at any time in the curing period? (Cold weather curing)

YES NO

34. Are the following curing times being adhered to?

Concrete Class	Placement Dates	Min. Curing Time
C	6/1-9/15	4 Days
	9/16-5/31	6 Days
F	-	3 Days

35. YES NO

### Sealing/Filling Joints (spec. ref.)

35. Is first stage saw cutting debris removed within 24 hours of saw cutting and before it rains or the pavement is open to **any** traffic?

YES NO

36. When filling contraction joints, are the joints first cleaned with an abrasive blasting or pressure washing? Are the joints air blasted to remove any debris and dry the exposed surfaces?

YES NO

37. Are joints filled within 6 hours of cleaning?(Joints should be filled from the bottom of the cut to 5-7 mm below the pavement surface)

YES NO

38. When sealing joints with a silicone sealant, are the second stage saw cuts first abrasive blasted and then air blasted prior to joint sealing? Are joints cleaned and sealed immediately after the second stage saw cutting is performed?

YES NO

39. Is the sealant for contraction joints recessed below the pavement (6-8 mm)?

YES NO

40. If adjacent sections have been completed and opened to traffic, sealers/sealant should be inspected for debonding at the joint faces.

### Other

41. After the concrete has hardened, is the entire longitudinal center of each lane tested with a 3 m minimum straight edge? Are any spots marked where there are deviations greater than 10 mm in 3 m?

YES NO

42. If using Class C concrete, is the pavement opened to **construction** traffic 7 days after paving? (This time frame can be shortened to 3 days if cylinders reach a 17 Mpa (2500 psi) compressive strength)

YES NO

43. If using Class C concrete, is the pavement opened to **general** traffic 10 days after paving (6/1-9/15) or 15 days after paving (9/16-5/31)? (This time frame can be shortened to 4 days if cylinders reach a 21 Mpa (3000 psi) compressive strength)

YES NO

44. If using Class F concrete, is the pavement opened to **all** traffic 3 days after paving?

YES NO

### Significant Findings: