



Florida Department of Transportation

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PROGRAM MANAGEMENT BULLETIN 16-03

ROADWAY DESIGN BULLETIN 16-05

(FHWA Approved: June 14, 2016)

DATE: August 2, 2016

TO: District Directors of Transportation Operations, District Directors of Transportation Development, District Design Engineers, District Consultant Project Manager Engineers, District Construction Engineers, District Geotechnical Engineers, District Maintenance Engineers, District Roadway Design Engineers, District Traffic Operations Engineers, District Program Management Engineers, District Materials Engineers, District Pavement Design Engineers

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SUBJECT: Asphalt Pavement Binders

The Department has been working with the asphalt pavement industry to change how PG 76-22 asphalt binders (polymer or rubber modified) are selected for FDOT projects. Effective with the January 2017 letting, PG 76-22 (PMA) and PG 76-22 (ARB) will be considered equivalent binders and either may be used by the contractor, including on the same project, when the plans call for a PG 76-22.

REQUIREMENTS

For PG 76-22 structural and friction course materials:

- remove the binder type reference (ARB or PMA) in the pavement design shown on the Typical Section
- replace the pay item number being used

No changes will be made for materials with PG 82-22 (PMA) or PG 76-22 (HP).

COMMENTARY

Due to the bid history associated with the current pay item descriptions (including binder type), the pay items could not be edited to remove the binder type. New pay items had to be established with the new descriptions (without binder type).

BACKGROUND

In July 2013, new specifications were implemented for asphalt rubber binders to make them equivalent to PG 76-22 (PMA) binders in terms of the binder test requirements. At that time, the pavement design selection procedure for rubber and polymer modified binders did not change. Asphalt rubber binder, PG 76-22 (ARB), was still specified in Traffic Level C and lower friction courses and polymer modified binder, PG 76-22 (PMA), was specified in TL D and E structural and friction courses. The intent of the July 2013 specification change was to implement the asphalt rubber binder change and then construct some projects with the new rubber binder for one or two years to monitor constructability and production of the rubber binder on a large scale. The eventual goal was to make the rubber and polymer binders equivalent with respect to pavement design, which will occur with the January 2017 specifications.

IMPLEMENTATION

The requirements of this bulletin are effective on all projects with a letting date of January, 2017 or later. Due to pay item changes, early or late implementation will not be permitted.

No changes to the Design Standards will be required. Minor changes to Section 337 will be available with the January 2017 specifications e-book.

The typical section exhibits shown in the **Plans Preparation Manual** will be updated in November for the 2017 PPM release.

The **Basis of Estimates** within the DQE database has been updated as follows.

Pay Item 334- 1- AA Superpave Asphaltic Concrete, TN

AA = Traffic Level

11 (Traffic A)

12 (Traffic B)

13 (Traffic C)

14 (Traffic D)

15 (Traffic E)

22 (Traffic B, PG 76-22, PMA) valid through 12-31-2016

23 (Traffic C, PG 76-22, PMA) valid through 12-31-2016

24 (Traffic D, PG 76-22, PMA) valid through 12-31-2016

25 (Traffic E, PG 76-22, PMA) valid through 12-31-2016

33 (Traffic Level C, PG 82-22, PMA)

34 (Traffic Level D, PG 82-22, PMA)

35 (Traffic Level E, PG 82-22, PMA)

- 52 (Traffic B, PG 76-22) Effective January 1, 2017
- 53 (Traffic C, PG 76-22) Effective January 1, 2017
- 54 (Traffic D, PG 76-22) Effective January 1, 2017
- 55 (Traffic E, PG 76-22) Effective January 1, 2017

Pay Item 337-7- AA Asphaltic Concrete Friction Course, TN

AA = Type

22 (FC-5, PG 76-22, PMA) valid through 12-31-2016

23 (FC-5, PG 82-22, PMA)

24 (FC-5, PG 76-22, ARB) valid through 12-31-2016

25 (FC-5, PG 76-22) effective 1-1-17

39 (Traffic B, FC 4.75, PG 76-22, PMA) valid through 12-31-2016

40 (Traffic B, FC-9.5, PG 76-22, PMA) valid through 12-31-2016

41 (Traffic B, FC-12.5, PG 76-22, PMA) valid through 12-31-2016

42 (Traffic C, FC-9.5, PG 76-22, PMA) valid through 12-31-2016

43 (Traffic C, FC-12.5, PG 76-22, PMA) valid through 12-31-2016

45 (Traffic D, FC-12.5, PG 76-22, PMA) valid through 12-31-2016

48 (Traffic E, FC-12.5, PG 76-22, PMA) valid through 12-31-2016

54 (Traffic C, FC-9.5, PG 82-22, PMA)

55 (Traffic C, FC-12.5, PG 82-22, PMA)

58 (Traffic D, FC-12.5, PG 82-22, PMA)

70 (Traffic B, FC-4.75, PG 76-22, ARB) valid through 12-31-2016

71 (Traffic B, FC-9.5, PG 76-22, ARB) valid through 12-31-2016

72 (Traffic B, FC-12.5, PG 76-22, ARB) valid through 12-31-2016

73 (Traffic C, FC-9.5, PG 76-22, ARB) valid through 12-31-2016

74 (Traffic C, FC-12.5, PG 76-22, ARB) valid through 12-31-2016

79 (Traffic B, FC 4.75, PG 76-22) see developmental spec; effective 1-1-17

80 (Traffic B, FC-9.5, PG 76-22) effective 1-1-17

81 (Traffic B, FC-12.5, PG 76-22) effective 1-1-17

82 (Traffic C, FC-9.5, PG 76-22) effective 1-1-17

83 (Traffic C, FC-12.5, PG 76-22) effective 1-1-17

85 (Traffic D, FC-12.5, PG 76-22) effective 1-1-17

88 (Traffic E, FC-12.5, PG 76-22) effective 1-1-17

For quantities calculated using CADD software, updates to the FDOT CADD Software resources are available on the Production Support Office/CADD Office's web page at

<http://www.dot.state.fl.us/ecso/downloads/software/software.shtm>

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