

2016 ASPHALT BINDER AND MIX SPECIFICATION UPDATE REFERENCE GUIDE

Beginning in October of 2016, the Iowa DOT will be changing the nomenclature and recommended asphalt binder grades for Iowa's roadways. In addition, the current ESAL mix design levels will have new N design levels and nomenclature under the new specifications. The following handy reference guide will provide guidance on the new classifications and the new bid items developed by the Iowa DOT.

ASPHALT MIXTURE

DESIGN TRAFFIC (1 X 10 ⁶ ESALS)	MIX DESIGNATION
≤ 1 M	ST
1-10 M	HT
>10 M	VT

PG BINDER

DESIGN TRAFFIC (1 X 10 ⁶ ESALS)	DESIGN SPEED (MPH)	CLASS I PROJECTS	CLASS II PROJECTS	
≤ 1 M AND/OR > 45		 58-28S	 58-34S	58-28S
1-10 M AND/OR 15-45		58-28H	58-34H	58-28H
>10 M OR <15		58-28V	58-34V	58-28V
>10 M AND <15		58-28E	58-34E	58-28E

S = Standard H= High V = Very High E = Extremely High

CLASS I PROJECTS: Full Depth Hot-Mix Asphalt | HMA + Cold-in-place Recycling | HMA + Rubblization | HMA + Crack and Seat HMA Overlay >4" | HMA + Full Depth Reclamation (FDR)

CLASS II PROJECTS: Overlay ≤ 4" | Parking Lot Secondary | Trails

Link to IDOT New Binder Designation Webinar:
<http://iowadepotoftransport.adobeconnect.com/p9u69f7atxj/>



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STEP-BY-STEP BID ITEM CONSTRUCTION

STEP 1. SELECT NOMINAL MAX. AGGREGATE SIZE.

- 3/8" (Thin lifts, Trails and Tennis Courts)
- 1/2" (General Surface and Intermediate Mix)
- 3/4" (General Base Mix)

STEP 2. DETERMINE TRAFFIC LEVEL

- Standard Traffic (ST) <= 1M ESALs
- High Traffic (HT) 1M – 10 M ESALs
- Very High Traffic (VT) > 10M ESALs

STEP 3. CHOOSE LIFT DESIGNATION

- Base • Intermediate • Surface

STEP 4. CHOOSE THE APPROPRIATE BINDER

- Check location and use the chart on front of this card

BID ITEM EXAMPLE

HMA Standard Traffic (ST) Surface, 1/2", PG 58-28S

EXAMPLE COMPARISON FOR PG XX-28

CURRENT PG	AFTER OCT 2016	BINDER BUMP FOR RAM
58-28	58-28 S	52-34 S
64-28	58-28 H	52-34 H
70-28	58-28 V	52-34 V
76-28	58-28 E	52-34 E

ADDITIONAL INFORMATION

USE "S" BINDER AT DEPTHS > 4"

HMA INTERLAYER BID ITEMS

- MIX = HMA Interlayer Base Course, 3/8"
- BINDER = PG 58-34 E

HIGH PERFORMANCE HMA THIN LIFT BID ITEMS

- MIX = HMA Thin Lift Surface Course
- BINDER = PG 58-34 E (90% Min Recovery)

SHOULDERS PAVED SEPARATELY

- HMA ST Base Course, 1/2"
- PG 58-28 S

WIDENING

- HMA ST Base Course, 1/2" or 3/4"
- PG 58-28 S

PATCHING

- Any 1/2" or 3/8" MIX
- PG 64-22 S

COLD-IN-PLACE RECYCLING

- PG 52-34 S