



Asphalt Concrete Specification Changes for 2011

Trenton M. Clark, P.E.
Director of Engineering
Virginia Asphalt Association, Inc.



Overview of Changes – Blueprint

- Section 211
- Section 248
- Section 315
- Section 317



Section 211

- Some changes to clarify or remove unused language
- Blueprint related changes:
 - 211.08 – Acceptance
 - Move from 2,000 ton to 4,000 ton lots
 - 8 samples per lot for acceptance
 - No change to gyro samples, one every 1,000 tons of mix



Section 211(cont.)

- Blueprint related changes:
 - Table II-15 modified to include tolerances for 5, 6, 7 and 12 sample lots
 - 211.09 – Deleted last 3 paragraphs regarding pay adjustment for calendar year production standard deviation
 - By Note on CABB reinserted sentence on unit price reduction by 0.5% for each adjustment point applied to standard deviation
 - 211.10 – Modified referee system based on additional samples



Section 248

- Section 248.02(c) – replaced (M) with (E); changed AASHTO M320 reference
- Section 248.04 Process tolerance table updated for additional lot samples



Section 248 (cont.)

- Section 248.04 – Modified F&E testing frequency based on larger lots; 2 of first 8 sublots sampled
- Section 248.05(d) – Modified language for mixing temperatures of PG 70-22 and PG 76-22



Section 315

- General
 - Rename section to “Asphalt Concrete Placement”
 - Remove word “nuclear” where appropriate
 - Minimum paver pass for roller pattern and control strip to 6 feet



Section 315 (cont.)

- Section 315.05(e) – Modified to allow thin-lift nuclear gauge or cores/plugs for density acceptance
- Section 315.05(e)1b – Modified to allow one plug/core per subplot
- Section 315.05(e)1b – Modified referee system, 2 cores per lot, 3 additional cores for final acceptance



Section 317

- Rename section to “Stone Matrix Asphalt Placement”
- Section 317.06 – Weather Restrictions, refer to WMA SP if WMA process is used
- Section 317.07 – Placing and Finishing, refer to WMA SP if WMA process is used
- Section 317.10 – Prepaving Conference, mandatory for contractor if never placed SMA in district



General SPCN

- If a warm mix technology is used to produce the Asphalt Concrete (i.e., WMA, HMA, SMA, etc.), then refer to Sections 211 and 315 of the Warm Mix Special Provisions.



Specification Changes for 2011

- Section 211
- Section 315
- Section 317
- General Use



Section 211

- Modified Table II-14
 - Removed Nini, Density at Nini and Nmax
 - Why? These values not used by VDOT to accept or reject mix
- Modified Table II-14A
 - Increased minimum RAP % to 25% for binder bumping
 - Why? Lab testing results from 2009 and 2010



Section 315

- Modifications To:
 - 315.05 – Lot Size
 - 315.07 – Depth Tolerances



Section 315.05

- Task Force:
 - Sean Fidler
 - Alicia Brooks – Lee Hy Paving
 - Todd Rorrer – VDOT CO Materials
 - David Lee – VDOT Salem Materials
- Upon approval by Engineer, increase lot size from 5,000 ft to 7,500 ft
- Sublot size increase from 1,000 ft to 1,500 ft
- Why?
 - Recognize large production days (2 miles or longer)
 - Minimize number of cores for acceptance



Section 315.07

• Task Force:

- Dave Helmick – Superior Paving
- Ken Arthur – MVT
- Debbie Mintiens
- Robert Reid – VDOT Lynchburg Materials

• Why?

- Recognize tolerance as a function of total base thickness

| Plan Depth | 1 test | 2 tests | 3 tests | 4 tests |
|------------------|--------|---------|---------|---------|
| $\leq 4''$ | 0.6 | 0.5 | 0.4 | 0.3 |
| $>4'' \leq 8''$ | 0.9 | 0.7 | 0.5 | 0.4 |
| $>8'' \leq 12''$ | 1 | 0.9 | 0.7 | 0.5 |
| $>12''$ | 1.2 | 1 | 0.8 | 0.6 |



General Use Special Provisions

- RAS SP – Tearoffs and Tabs
 - Changes:
 - Maximum deleterious material set to 3%
 - Maximum replacement binder from RAP and RAS moved to 30%
 - Documented approach to determining correction factor



General Use Special Provisions

- Crack Sealant
 - Changes:
 - Combined two special provisions into one
 - Modified testing requirements for Type A
 - Adjusted fiber loading for Type B to minimize overbanding
 - Added Type C sealing (rout and seal) to minimize/eliminate overbanding
 - Type of sealing specified in contract

Questions?





Asphalt Concrete Specification Changes for 2011

Trenton M. Clark, P.E.
Director of Engineering
Virginia Asphalt Association, Inc.

