WisDOT Hot Topics

Illinois Bituminous Paving Conference
February 3, 2015

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WAPA / WisDOT Initiatives

- Green Team and HMA Tech Team
- High Recycle Pilot Program
- HMA Paving Inspection
- Thin Overlay Pilot
- Cold In Place Recycling
- Longitudinal Construction Joint
- Tack Coat Application Rate Specification
- Base Course Compaction
- Combined Bid Item
- VMA Change
- Performance Based Testing of Mixtures
- Cold weather paving Specification
High Recycle Pilot Program

- Use of more Recycled Asphalt Pavement & Recycled Asphalt Shingles
- 3 Pilot Project Initially Selected
  - STH 77, Ashland County (constructed in 2014)
  - STH 73, Dane County (constructed in 2014)
  - USH 141, Marinette County (To be constructed in 2015)
- Use of 50%+ Binder Replacement, Test Strips & Performance Testing
RAS Stockpile Testing Requirements

- One Test per 250 Tons during pile production
  - Gradation (Pilot)
    - 100% Passing the 3/8” Sieve
    - 93% Passing the #4 Sieve
    - Less than 1% Deleterious on R4 Material

- Old specification
  - 100% Passing ½” Sieve
RAP Stockpile Testing Requirements

» One Test per 2000 Tons during pile production
  » P200 within 2% of stockpile average
  » Asphalt content within 0.75% of stockpile average
  » All properties within described tolerances for 80% of the tests
  » Minimum of 5 tests
Performance Testing

- Striping Resistance – Hamburg Wheel
  - AASHTO T324-11

- Fatigue Cracking – Semi Circular Bend Test (SCB)
  - AASHTO XXXX-XX – In Development (ASTM & AASHTO)

- Low Temperature Cracking – Disc Shaped Compact Test (DCT)
  - ASTM D 7313-07
65% Binder Replacement

50% Binder Replacement
Economics

- All projects were let with a Standard Specification & High Recycle Pilot mix (All E-3 mixes)

- Let savings of varied from 5 to 15% on HMA Items (including asphalt binder costs) for higher recycle mixes than standard E-mix.
Cold In Place Recycling

- Pulverize, foam inject and compact existing pavement
- Overlay with HMA afterwards
- Alternative to mill and overlay
- 1 pilot in 2014 – STH 64, Taylor County
  - Late season – Weather was a factor
- Potential of 4 or more pilots in 2015 & 2016
- Lessons learned from STH 64 to be implemented in the SPV
Tack Coat Application Rates

- Increased from 0.025 gal/sy to 0.05-0.07 gal/sy
  - ASP6 Implementation
- Team reviewing to update standards in 2015
  - Need to develop a test for residual application rate
  - Guidance for application based on surface type
    - Milled, Concrete, New Construction
Combined Bid Item

- Looking at paying for Asphalt Binder and Mix as one combined bid item
  - Implementing new binder testing protocols
  - Eliminating seldom used mixes
- Specification under development currently
- Goal – 2016 Standard Specification
Questions

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