

FHWA Emulsion Task Force (ETF)

Micro surfacing

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**Rocky Mountain West Pavement Preservation
Partnership Meeting**
October 8, 2014
Phoenix, AZ



Presentation Outline

- **Subcommittee membership**
- **Products developed in AASHTO format**
- **Status**



Design Group – Mixtures Members

- **Co Chairs**

- **Jim Moulthrop**
- **Gary Hicks**

- **Members**

- **Chris Anspaugh**
- **Deborah Deep**
- **Tim Folwell**
- **Larry Galehouse**
- **Tom Wood**

- **Members (con't)**

- **Greg Harder**
- **Mark Ishee**
- **Ian Jack**
- **Bob Jerman**
- **Chris Lubbers**
- **Rusty Price**
- **Troy Tindall**

Products Developed

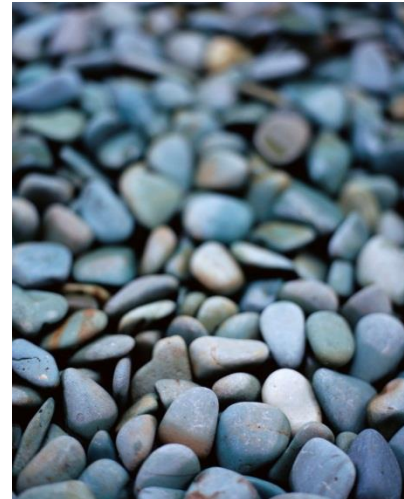
- **Standard Specification for Materials for Micro Surfacing**
- **Standard Practice for Micro Surfacing Design**
- **Standard Specification for Micro Surfacing Construction**
- **Micro surfacing Best Practices**

Process Used

- **The Need- improve current practice and specification in AASHTO format for nationwide use**
- **Go by-Specification Developed by MNDOT for cold climate applications**
- **Development-draft prepared and circulated for review by the ETF mix group**
- **Comments were received, debated and incorporated**
- **Final draft standards and specification sent to the ETF members and to AASHTO**

Elements of the Materials Spec

- **Scope**
- **Referenced Documents**
- **Terminology**
- **Significance and Use**
- **Emulsified Asphalt Requirements**
- **Aggregate Requirements**
- **Mineral Filler**
- **Water**
- **Additives**



Elements of Design Practice

- **Scope**
- **Referenced Documents**
- **Summary of Practice**
- **Significance and Use**
- **Evaluation of Materials**
- **Determining Mixing Time**
- **Determining Set and Cure Characteristics**
- **Determining Binder Content**
- **Determining Asphalt to Aggregate Compatibility**
- **Determining Vertical and Lateral Displacement**
- **Report**
- **Key Words**

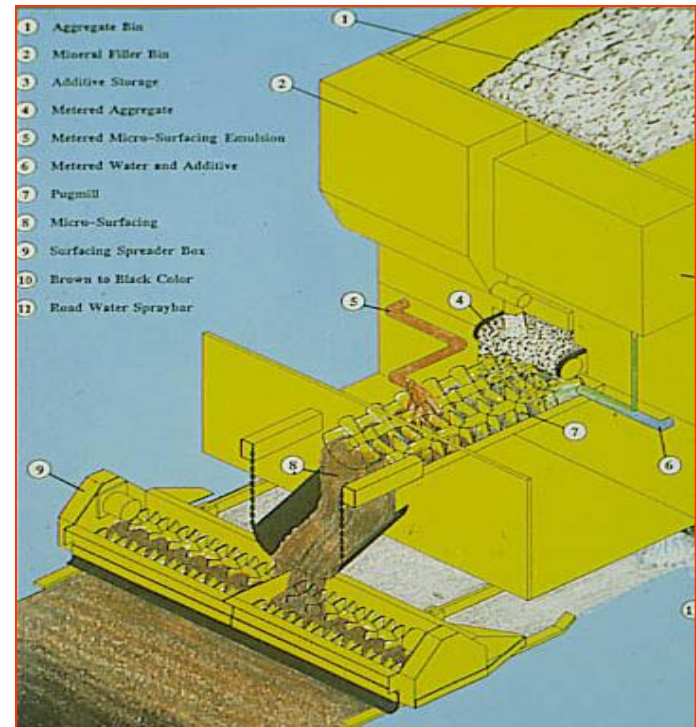
Elements of Construction Spec

- Description
- Materials
- Mix Design
- Equipment
- Construction
- Quality Control
- Acceptance
- Method of Measurement
- Basis of Payment



Elements of Construction Spec

- **Equipment**
 - **Mixing**
 - **Proportioning Devices**
 - **Spreading Equipment**
 - **Secondary Strike-off**
 - **Rut Box**
 - **Brooms**
 - **Rolling**



Elements of Construction Spec

- **Construction**
 - **Weather Limitations**
 - **Calibration**
 - **Preconstruction Meeting**
 - **Pavement Surface Preparation**
 - **Test Strip**
 - **Application of Mixture**
 - **Workmanship**
 - **Opening to Traffic**

Elements of Construction Spec

- **Quality Control**
 - **Aggregate**
 - **Emulsified Asphalt**
 - **Project Documentation**

Elements of Construction Spec

- **Acceptance**
 - **Aggregate**
 - **Emulsified Asphalt**
- **Method of Measurement**
- **Basis of Payment**

Best Practices for Micro surfacing

- Supports the specifications and practice
- Provides guidance
- Identifies gaps in current knowledge and research needs
- Stand alone document for micro surfacing
- Still under review



What's Next-Micro Surfacing

- Re-distribute the updated version of Best Practices to the mix group for comments
- Once the comments are incorporated, distribute it to the ETF for their review



What's next for the Mix Group?

- **Slurry Seals**
 - **Materials spec**
 - **Design practice**
 - **Construction Guide**
 - **Best practices**
- **Need to develop a team to do this work**
- **Cold Patching materials**
 - **Materials spec**
 - **Design practice**
 - **Construction Guide**
 - **Best practices**
- **Need to develop a team to do this work**

Questions?



FOR PAVEMENT PRESERVATION

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