

Cold In Place Recycling



US 123, Pickens County

Original Project Plan

- 8 Inch Full Depth Patching (Nearly 40% of Job)
- Shoulder Widening
- Milling (2 In)
- Paving (200# Int + 200# Surf)



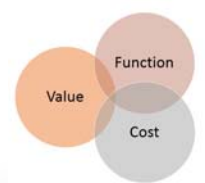
Project Limits

- 7.93 Miles of US 123 (20,000 ADT – 15% Trucks)



Proposed Changes

- Value Engineering Proposal
- Cold In Place Recycling on Outside or Both Lanes to 8 Inches
- Widen with the CIP Process
- Cover with Same Asphalt as Planned



Investigation



Investigation

- Very Consistent Existing Materials
6 Inches Asphalt
12 Inches Aggregate Base
- Changes Under Bridges
Asphalt Reduced
- Existing Structural Value about 3.0

Value Analysis

- Structural Value Higher
- Schedule Not Delayed
- Costs Equivalent



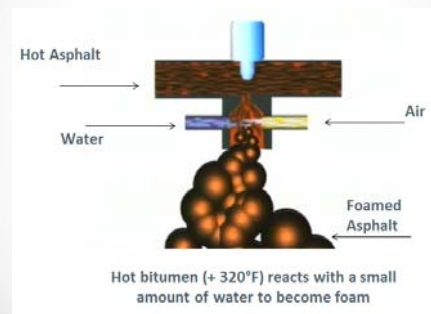
Partnering



Specification

- SCDOT Existing Specification Based Largely From VDOT (Virginia)
- Contractor, Equipment Manufacturer & SCDOT Completed Several Rounds of Reviews and Edits
- Finalized a Specification Prior to Construction, but Remains a Working Document
- For a copy of the spec, please email klineLC@scdot.org

Design



Design



Test Strip (Off Site)

- The week prior to construction, King Asphalt conducted a series of small test strips on their plant site to get more familiar with the equipment.



Test Strip (On Project)

- After a successful off site test strip, the on site test strip was completed using project depths, rates, etc.
- Lessons Learned
 - Roller Pattern & Coordination
 - Stop & Go Operations
 - Re-Working of Surface
 - Fog Seal Application
 - Coring

Construction



Construction



Construction



Construction



Construction



Construction



Construction



Construction



Testing and Acceptance

- Compaction (98% + of Target from Roller Pattern)
- Gradation (Checked at Beginning of Production)
- Depth & Rates



Final CIP Product



Project Contacts

- King Asphalt
 - Mike Crenshaw
 - Doug Limbaugh
- Wirtgen
 - Mike Marshall
 - Loyd Amos
- Pickens SCDOT
 - RCE Joe Laws
 - ARCE Scott Baldwin
- District 3 SCDOT
 - Patrick McKenzie
 - Ben Olson
- Office of Materials & Research
 - Jay Thompson
 - Laura Kline

