Valley Street Bridge

- Single Span prestressed concrete adjacent box beams on abutments on piles
- Span: 34’
- Roadway 48 f/f guardrail
- Built 1986

- Center two beams to be replaced in 2017

Valley Street Bridge

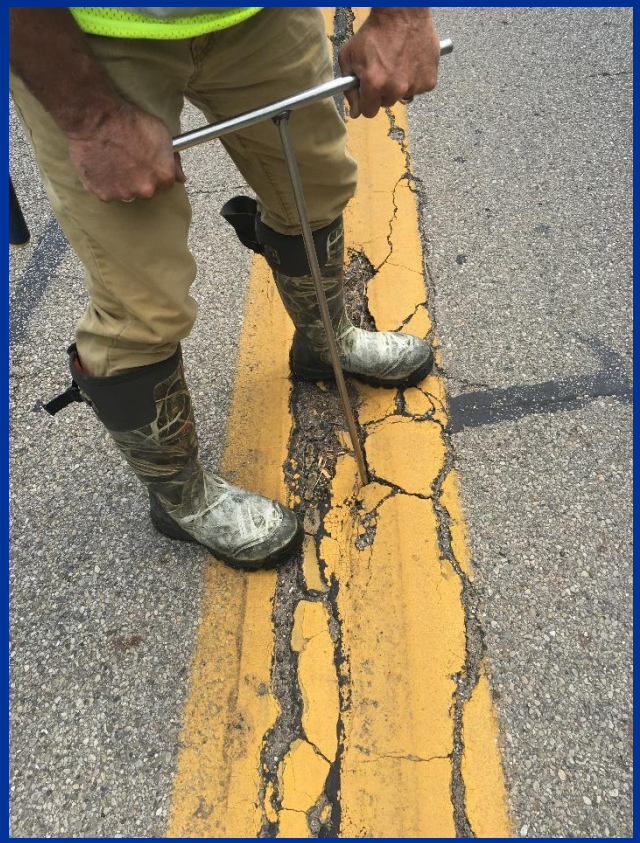
No evident problem visible from above

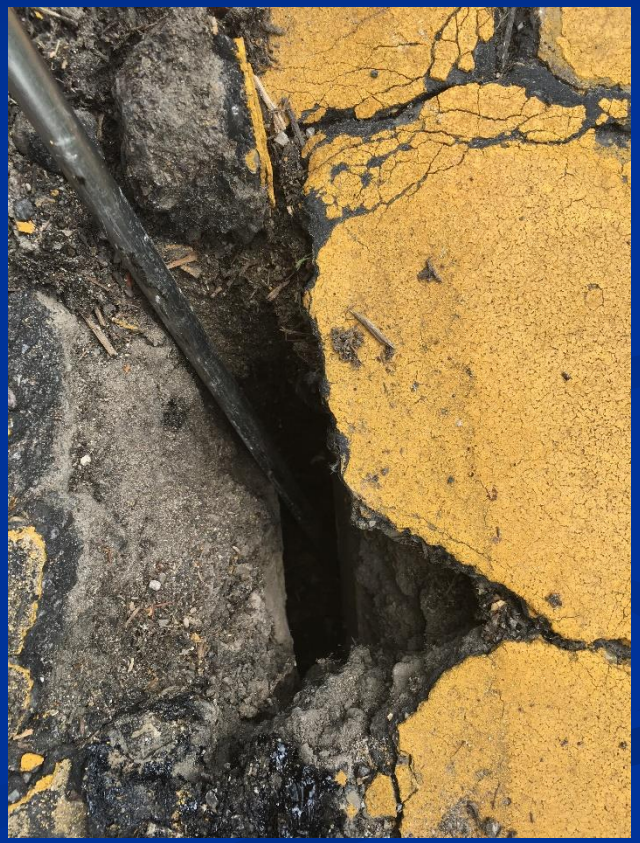
Valley Street Bridge

Underside of beams stained and delaminated

Valley Street Bridge

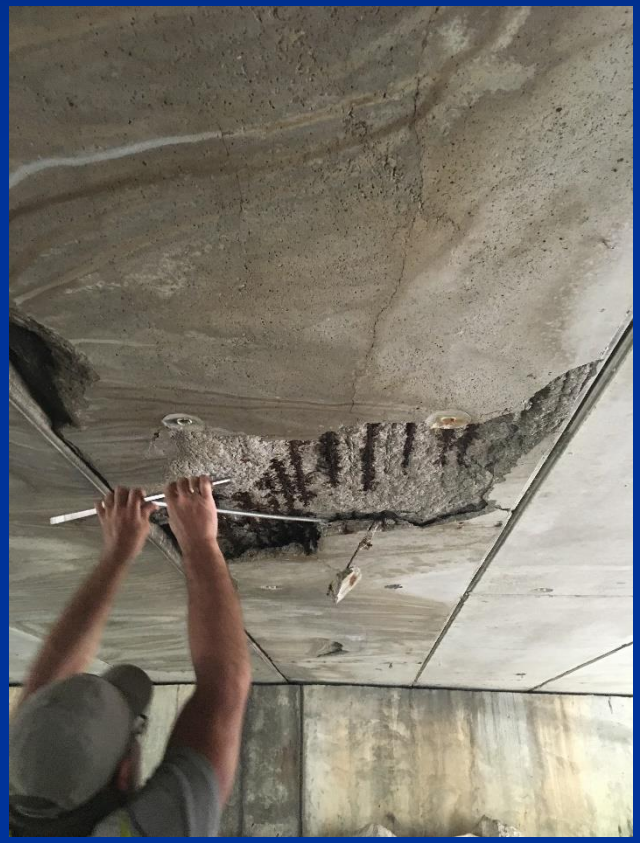
Finding no evidence of grout in center joint; can stick hand completely in it.





Valley Street Bridge

Investigating center beam; Completely delaminated and all strands exposed and/or broken.



Valley Street Bridge

Center beam

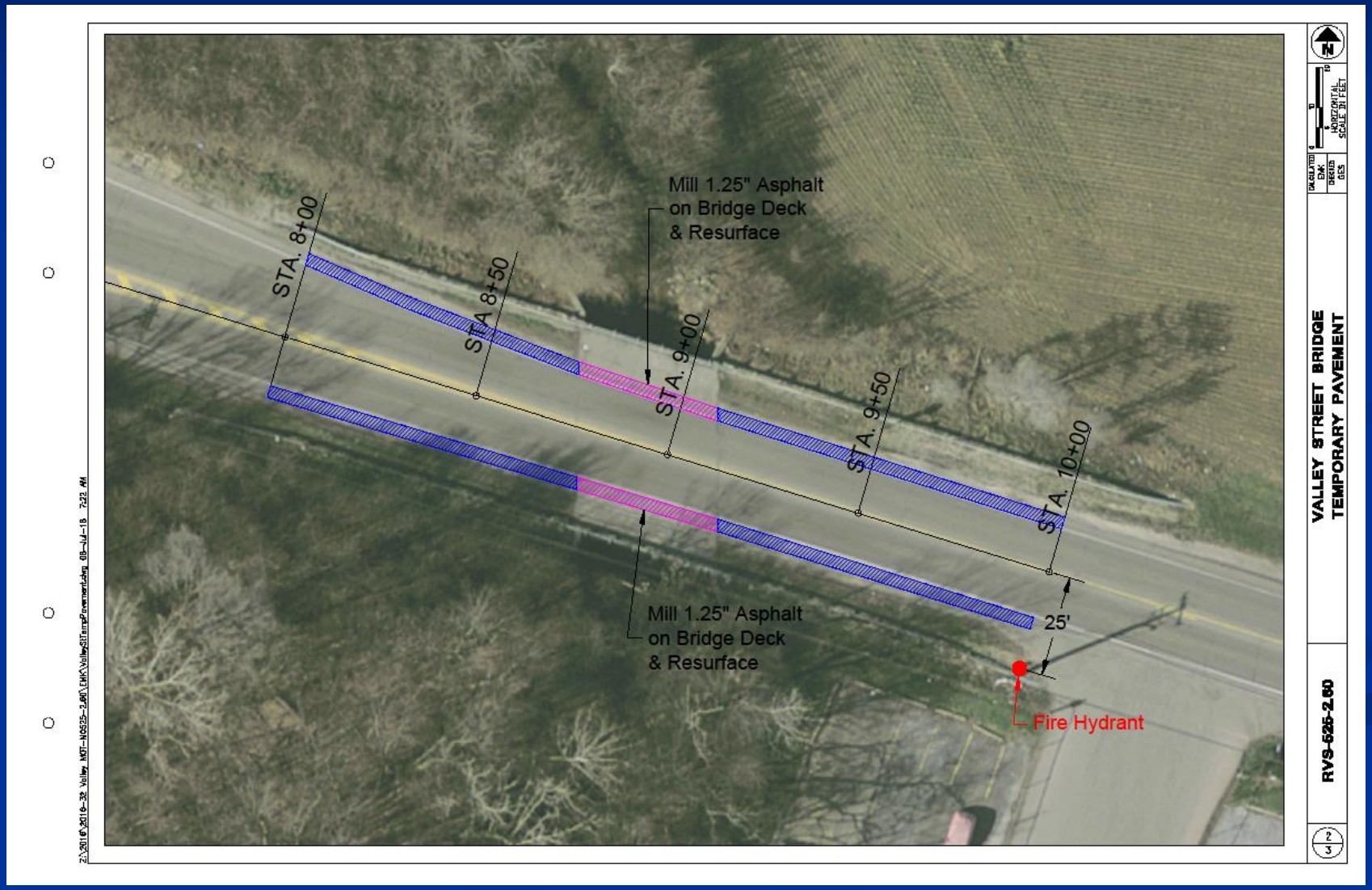
Staining on other center beam

Valley Street Bridge

Beam in 2014

Beam in 2015

Valley Street Bridge



Valley Street Bridge

Widened road and diverted traffic off center two beams

Stroop Bridge

- Single Span prestressed concrete adjacent box beams on abutments on piles
- Span: 33’
- Roadway 50 f/f guardrail
- Built 1963

- Emergency Replacement Scheduled for 2017

Stroop Bridge

Stroop Bridge

- City of Kettering milled road for resurfacing project
- Got call about hole in the bridge from city
- Beams were milled into during this milling process
- Appears beams were milled into on previous mill/fill project as well and not re-waterproofed

Stroop Bridge

Stirrups visible

Top of box beams completely gravel

Stroop Bridge

Stroop Bridge

Box beams show some leaking

Stroop Bridge

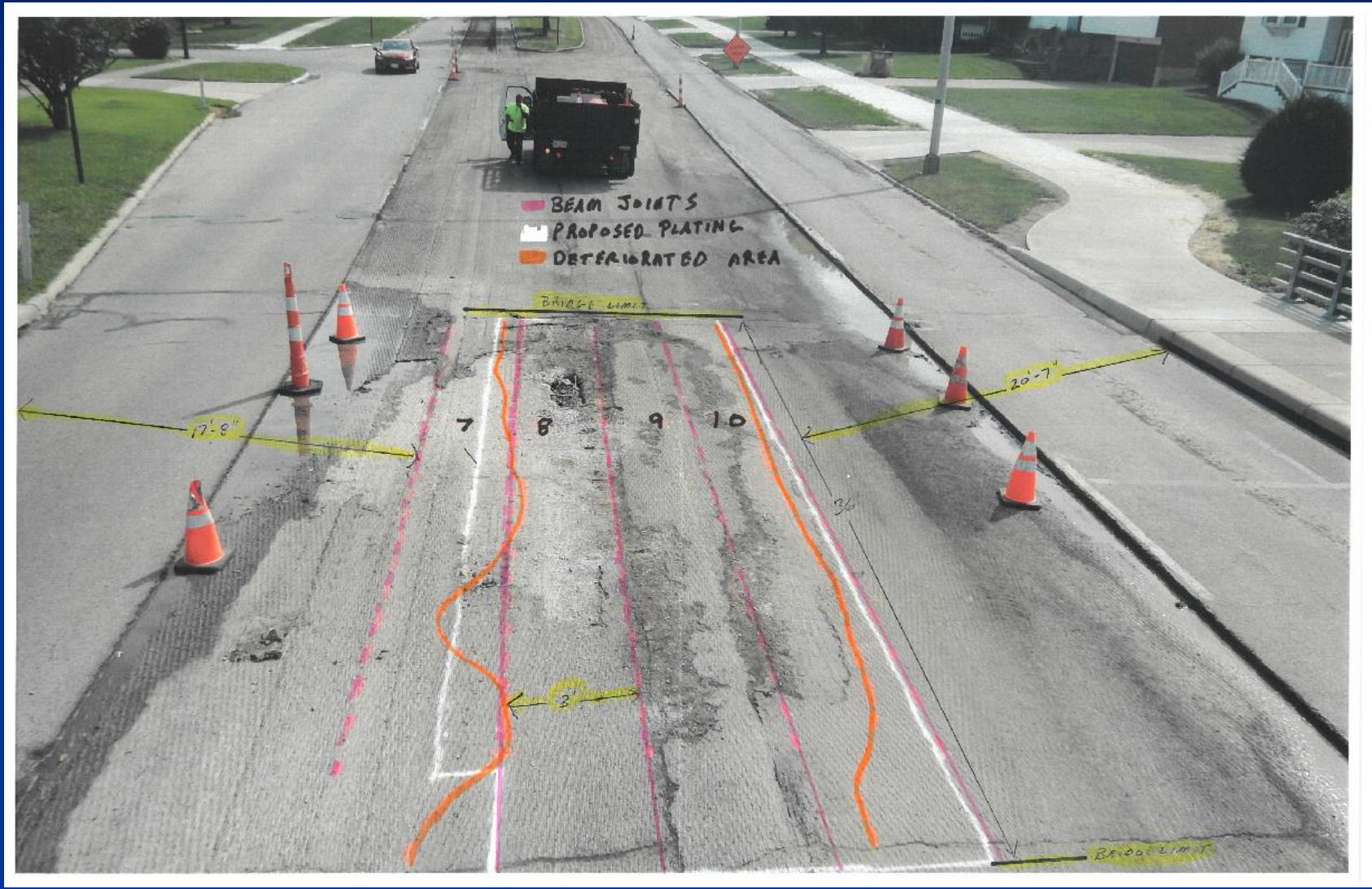
Orange is unsound concrete

Pink is box beam edges

White is location of plates

Missing tie rod discovered

Stroop Bridge



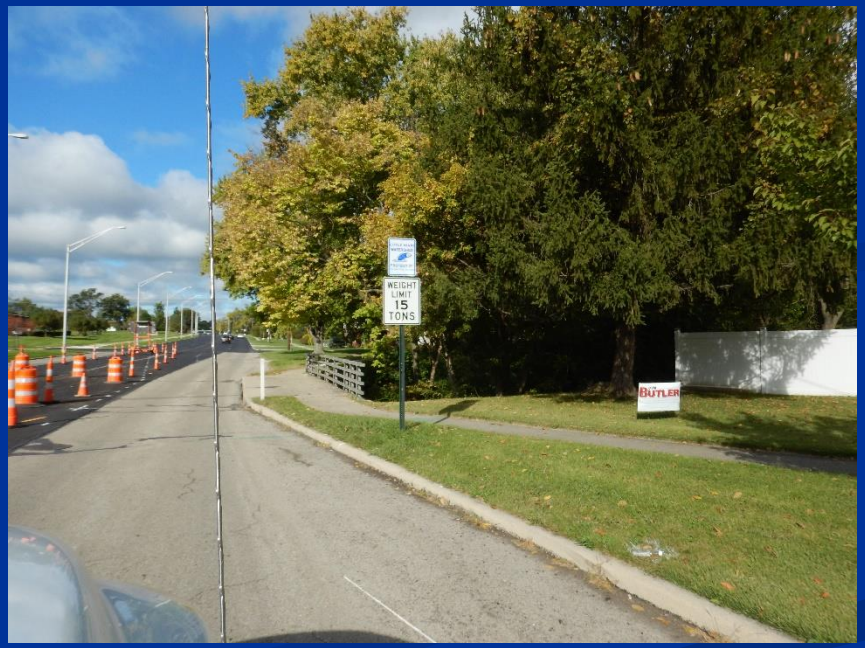
Stroop Bridge

Plates being installed

Stroop Bridge

Limited loads and compaction over beams

Left one lane not milled



Stroop Bridge

Stroop Bridge

Diverted traffic off damaged beams

Reduce traffic from five lanes to three lanes

Westbrook Bridge

- Single Span composite deck
- Span: 25’
- Roadway 32 f/f guardrail
- Built 2000

- Asphalt keeps sliding on the composite deck
- Have this problem on all our composite deck bridges

Westbrook Bridge

Deck exposed

Composite deck

Westbrook Bridge

Deck exposed

Asphalt sliding

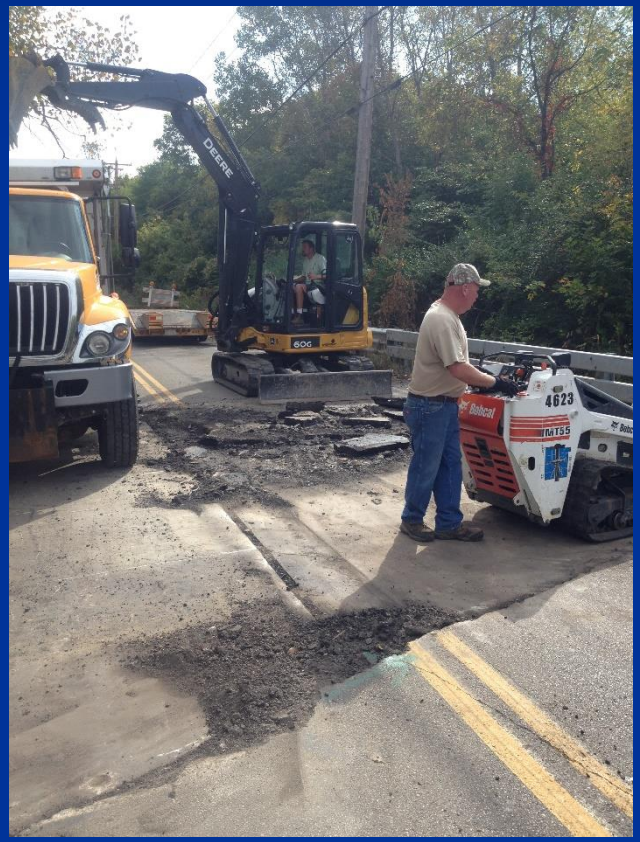
Westbrook Bridge

Asphalt sliding

Removing asphalt

Westbrook Bridge

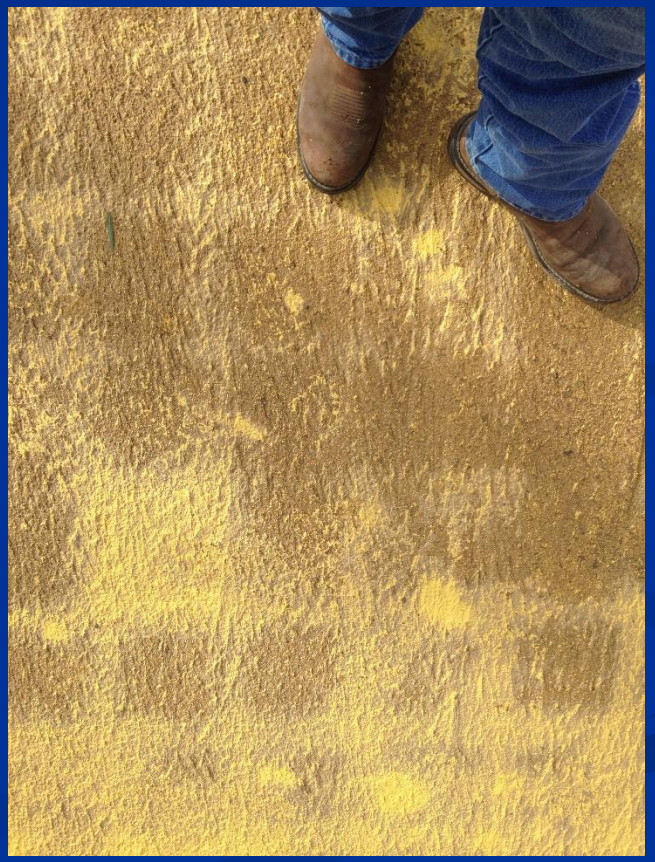
Removing Asphalt



Westbrook Bridge

Power washed with 2 ½ " pump from the creek and then cleaned with acetone

Westbrook Bridge



Westbrook Bridge

- Product was recommended for its resistance to chemicals, oils and heat.
- Used mostly for safety flooring applications due to anti-slip texture. Crew used thick-nap rollers to apply.
- Create ridges in the material surface. Deck was paved with PG70-22M asphalt.
- Purchased through Sherwin Williams
- Contact: Brian Kelley, Dayton, OH 45439, 937-298-8691

Westbrook Bridge

AS-2500 SC/LTC – TECHNICAL BULLETIN #2007A

Revised:12/2016

PRODUCT DESCRIPTION

AS-2500 is a 100% solid, two component epoxy anti-slip coating that provides superior resistance to chemicals and wear while providing safer footing and traction for rolling equipment. It contains no solvent allowing its use in odor sensitive applications such as wineries, food processing facilities, hospitals and confined areas. Also, available in a low temperature cure (LTC) version for use in cold environments and applications down to 35°F.

AS-2500 resists most acids, alkalis, solvents, grease, oil, salt water, detergents, alcohol, gasoline, jet fuels, and hydraulic fluids. Refer to American Safety Technologies Chemical Resistance Table fordetailed performance data.

SURFACE PREPARATION

CONCRETE: Remove oil, grease, dirt, wax, etc..., by dissolving with a commercial grade cleaner/degreaser then flush the area thoroughly with clean water and allow it to dry. Remove all paint films, laitance, and loose concrete by scarification or shot blasting. Patch any holes or significant defects with PolySpec® RezRok 105 Patching Compound. Smooth or glazed surfaces should be roughened and new concrete should cure at least 30 days with good ventilation prior to application. Form release agents, hardeners, sealer, etc… will interfere with adhesion and must be removed. Prime the surface with PS-100 WB Water-based Primer.

Westbrook Bridge

After resurfacing

Farmington Bridge

- Single Span prestressed concrete box beam bridge
- Span: 38’
- Roadway 24 f/f guardrail
- Built 1963

Farmington Bridge

Failed Drip Edge

Farmington Bridge

Drip Edge Replacement

Saw cut and then used spud bar to remove bad concrete

Farmington Bridge

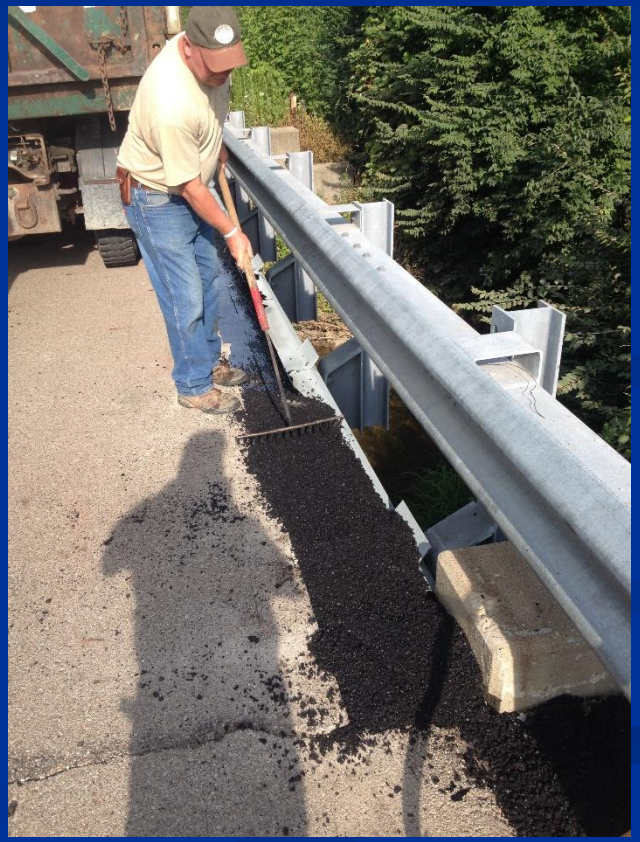
- Cleaned top and used Set 45 to repair beams
- Galvanized drip edged was installed using tapcons and AC

Farmington Bridge

AC over installed drip edge and hand paved

Farmington Bridge

Drip Edge Replacement



Farmington Bridge

Drip Edge Replacement

Farmington Bridge

After Repair

After Repair

Farmington Bridge

Drip Edge Replacement

- Took 1 day for the process from beginning to the end
- Used drip edge in stock
- Total cost under $5,000

- Shown in 2016