

LOW VOLUME ROAD PROJECT REVIEW

Highway Name and Location	SH 86A, Milepost 38.1 to 50.05
Treatment Used	Overlay w/ Pre-Patching and Surgical Full Depth Repair

2013



2014



2015



LOW VOLUME ROAD PROJECT REVIEW

2016



2017



2018



Condition before treatment

See Below:

BMP	Emp	Year	Iri	Rut	Fatg	Tran	Long	Crbk	DL	DL_idx	Cond
38.1	43.1	1989	71	99	69	63	95	0	2	TRAN	LOW
43.1	48.1	1989	70	100	84	73	99	0	4	TRAN	MODERATE
48.1	50.6	1989	65	100	81	65	98	0	2	TRAN	LOW

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Condition after treatment Yr 1	See Below:
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BMP	Emp	Year	Iri	Rut	Fatg	Tran	Long	Crbk	DL	DL_idx	Cond
38.1	43.1	2014	92	100	100	98	99	0	7	IRI	MODERATE
43.1	48.1	2014	93	100	100	87	100	0	6	TRAN	MODERATE
48.1	50.6	2014	91	100	100	90	100	0	7	TRAN	MODERATE

Condition after treatment Yr 2	See Below:
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BMP	Emp	Year	Iri	Rut	Fatg	Tran	Long	Crbk	DL	DL_idx	Cond
38.1	43.1	2014	92	100	100	96	99	-1	7	IRI	MODERATE
43.1	48.1	2014	91	100	100	83	100	-1	6	TRAN	MODERATE
48.1	50.6	2014	90	100	100	86	100	-1	6	TRAN	MODERATE

Condition after treatment Yr 2	See Below:
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BMP	Emp	Year	Iri	Rut	Fatg	Tran	Long	Crbk	DL	DL_idx	Cond
38.1	43.1	2014	92	100	100	94	99	-1	7	IRI	MODERATE
43.1	48.1	2014	90	100	100	79	99	-1	5	TRAN	MODERATE
48.1	50.6	2014	89	100	100	82	99	-1	5	TRAN	MODERATE

Condition after treatment Yr 2	See Below:
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BMP	Emp	Year	Iri	Rut	Fatg	Tran	Long	Crbk	DL	DL_idx	Cond
38.1	43.1	2014	91	100	100	91	99	-1	7	TRAN	MODERATE
43.1	48.1	2014	88	100	99	73	99	-1	4	TRAN	MODERATE
48.1	50.6	2014	88	100	100	80	100	-1	5	TRAN	MODERATE

Change in DL condition documented:	Average DL increase of 2 to 5.
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Treatment	Quantity	Unit	Treatment Area (SY)	Unit Cost	Cost	Calculated Cost (SY)
HMA (Gr SX) (75)(PG 64-22) (1.5")	20,359	Ton	246,775	\$84.00	\$1,710,156.00	\$6.93
Emulsified Asphalt (Slow Setting)	10,258	Gal	246,775	\$3.00	\$30,774.00	\$0.12

Takeaways	<p>This project is not holding up very well. The cracks below appeared within 6 months of the project completion, some immediately. Comparing the DL prior to overlay to after overlay in the three DL segments; it went from DL of 2, 4, and 2 to a meager 7, 6, and 6, which is not cost effective in the slightest and nowhere near the thin overlay benefits we are attributing to the DL model. Region 4 expects, ultimately, it will have the same failure mode as what was anticipated prior to this thin treatment (T-Cracks/Reflective Cracking and some Fatigue). Model improvements based on field performance are being pursued. Timely crack sealing to the new pavement surface will be important to maximize any benefits of the thin overlay placed.</p>
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