



# Report of Selected Concrete Overlays: Iowa / Minnesota Highways

Tour Date: November 6, 2014

Previous Tour: November 8, 2007

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### CPAM Staff / Tour Operators

Matt Zeller  
Greg Bauer  
Bob McPartlin

## Tour of selected Iowa County Highways – Concrete Overlays

### November 6, 2014

#### **Executive Summary:**

All routes are in “farm country” – lots of product to market. Edge cracking could be the result of “lack of support” from the underlying blacktop or narrow driving lanes. Tined pavement (not used anymore in Minnesota, due to noise reduction efforts) did not appear to cause any major spalling across the joints. Joints appeared tight and without any distress. This table recaps each project’s details, and is in the order of the Tour.

County	Route	Mile, approx.	Termini	Year –V. P. D.	Thick x Width	Existing Road	Surface Prep
Freeborn	1	13.6	Emmons to Gordonville	2014 – 300 to 500	5” x 24’	Asphalt	Broomed
Worth	US-65	11	TH 9 to Northwood	2009	5” x 34’	Asphalt	Milled
Mitchell	T38	4.3	Osage to S.C.L	1983 - 1150	6	Asphalt	Milled
Floyd	B60	2.5	Marble Rock to IA-14	1989 - 970	5	Asphalt	None
Hardin	D15	6.8	1 mi E of S55 to Iowa Falls	1989 - 1140	4.5	2 - 2” lifts HMA 4” rolled stone 6” cement treated soil	None
Wright	C54	2.65	Eagle Grove to R33	1990 - 810	5	6” HMA 6” rolled stone 4” Soil Aggregate	None
Hancock	R68	5.6	B55 to B36	1993 - 390	5	Existing section not indicated on plan sheet	None
Worth	S14	23.25	B14 to Z38 (section observed)	2009 – 130 to 760	4” x 22’	Asphalt	Broomed

#### **Conclusions:**

“Choppy” ride observed at Mitchell, Floyd and Hardin with remaining sections observed as still having a “smooth ride”

#### **Attendance:** County Engineers and staff

Fillmore - Ron Gregg

Freeborn - Sue Miller and Dan Kenison

Houston – Brian Pogodzinski

Rice - Dennis Luebbe and Chad Sweeney

Waseca – Nathan Richman

Winona – Dave Kramer

Benton – Chris Byrd

Brown – Wayne Stevens

Lyon – Aaron VanMoer

Redwood – Willy Rabenberg

Steele – Anita Benson

Washington – Wayne Sandberg

MnDOT State Aid – Joel Ulring

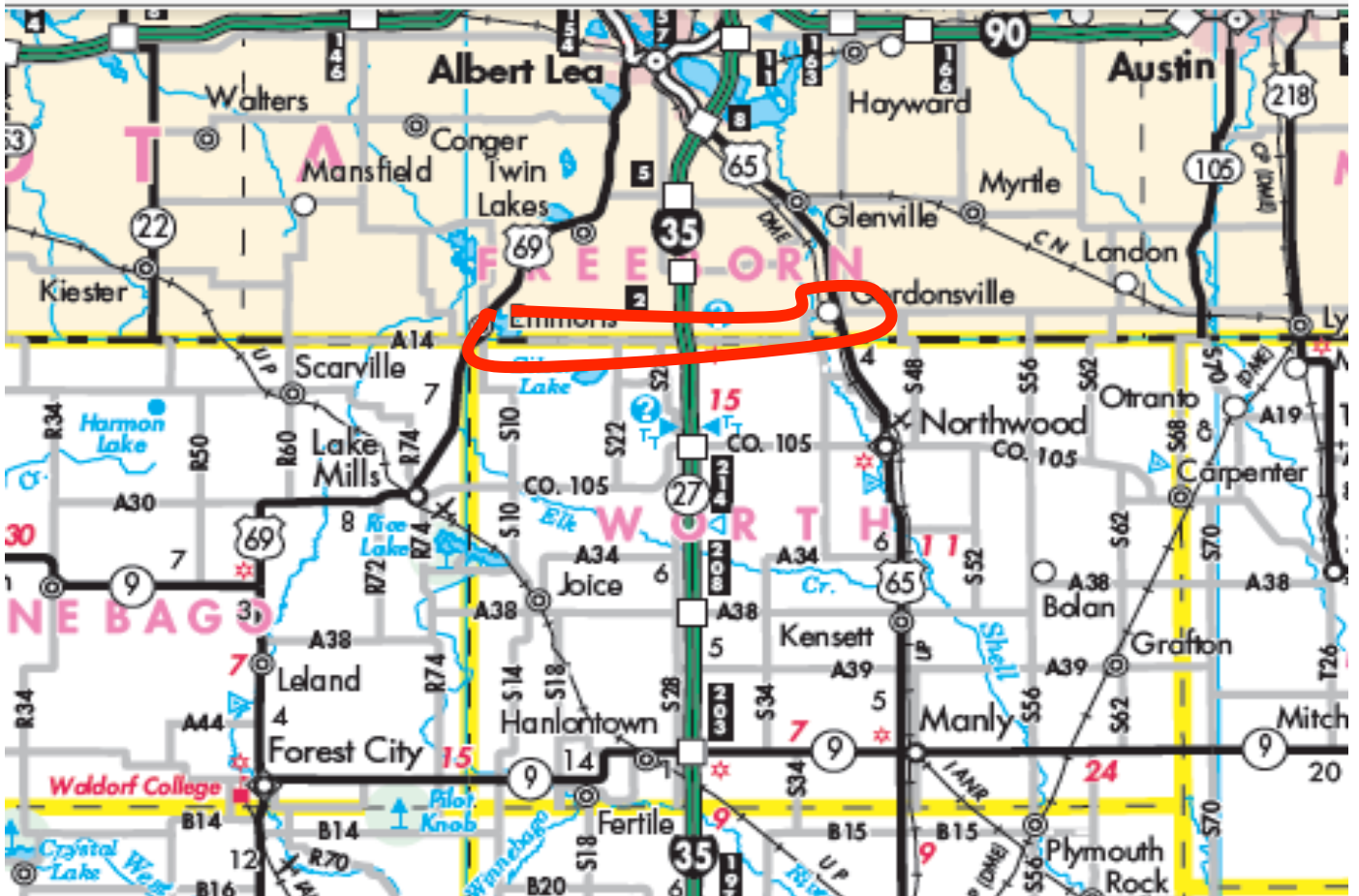
Worth and Mitchell (IA) – Richard Brumm

Iowa Concrete Paving Ass’n: Tom Parsons

Concrete Paving Ass’n of Minnesota:

Matt Zeller, Greg Bauer, Bob McPartlin

Freeborn Co (MN) – CSAH 1;  
Worth Co (IA) – State Line Rd;  
Freeborn Co – CR 7



Termini – Emmons to Gordonville

Construction Date: 2014, 300 – 500 ADT, Thickness: 5" x 24'

Surface preparation: broomed

Present County Engineer / Phone #: Sue Miller 507.377.5188

2014 photos on this page



## TH 65 – Manley to Northwood





**Iowa US Highway 65**

Termini – TH 9 to Northwood

Construction Date – Sept 2009

Thickness – 5" x 34'

Existing Asphalt thickness and surface prep - Milled

2009 photos on left side and 2014 photos on right side of this page



## Mitchell Co – T38





**County: Mitchell      Route Number: T38**

Termini: Osage to South Co. Line 4.3 miles

Construction Date: 1983 – 1150 vpd (1340 in 2014)      Thickness: 6" x 22'

Existing asphalt thickness & surface prep: milled asphalt surface

Present County Engineer / Phone #: Rich Brumm / 641-732-5849

2014 General comments:

"Choppy ride." 12' panel, skewed joints. Rock quarry and construction stockpile yard are on this segment. 2007 photos on the left and 2014 photos on the right of this page.





## Floyd Co - B60



**County: Floyd                      Route Number: B60**

Termini: Marble Rock to TH 14, 2.5 miles

Construction Date: 1989, 970 vpd, Thickness: 5" x 22' wide, Surface preparation: None

County Engineer / Phone #: Dustin Rolando 641.257.6151 ext 102

15', square panels. "Choppy ride."

2007 photos on the left and 2014 photos on the right side of this page.



Attempted patching



## Hardin Co – D15





**County: Hardin****Route Number: D15**

Termini: 1 mile east of S55 to Iowa Falls, 6.8 miles

Construction Date: 1989, 1140 vpd, Thickness: 4.5" x 24' wide

Existing asphalt thickness & surface prep: 6" cement-treated soil, 4" rolled rock, 4"

HMA (2 lifts) – no prep

County Engineer / Phone # - Daryl Albertson, 641.858.5058

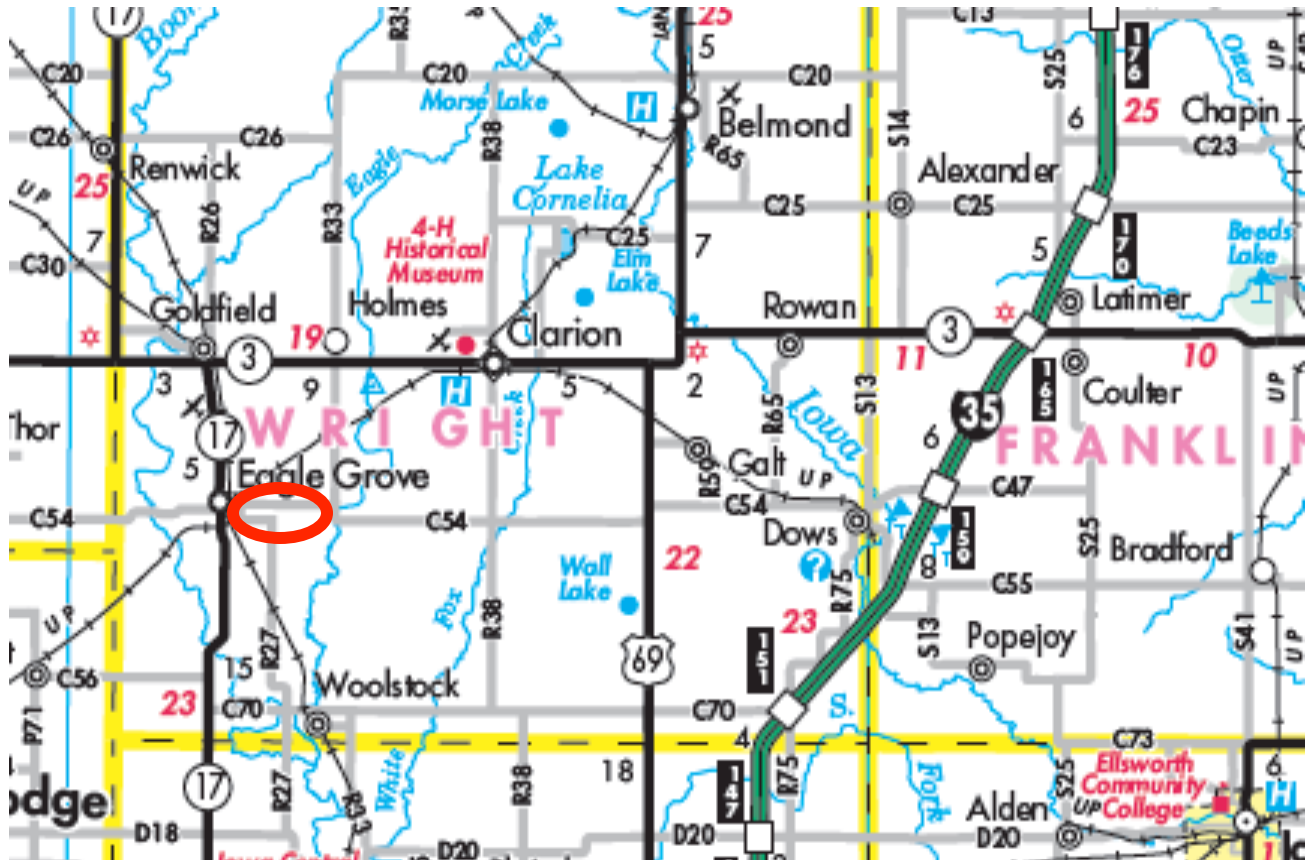
Skewed joints. "Choppy ride."

2007 photos on the left and 2014 photos on the right side of the page.





## Wright Co – C54



**County: Wright      Route Number: C54**

Termini: Eagle Grove to R33 - 2.65 miles

Construction Date: 1990, 810 vpd, Thickness: 5" x 22' wide, Surface prep: None

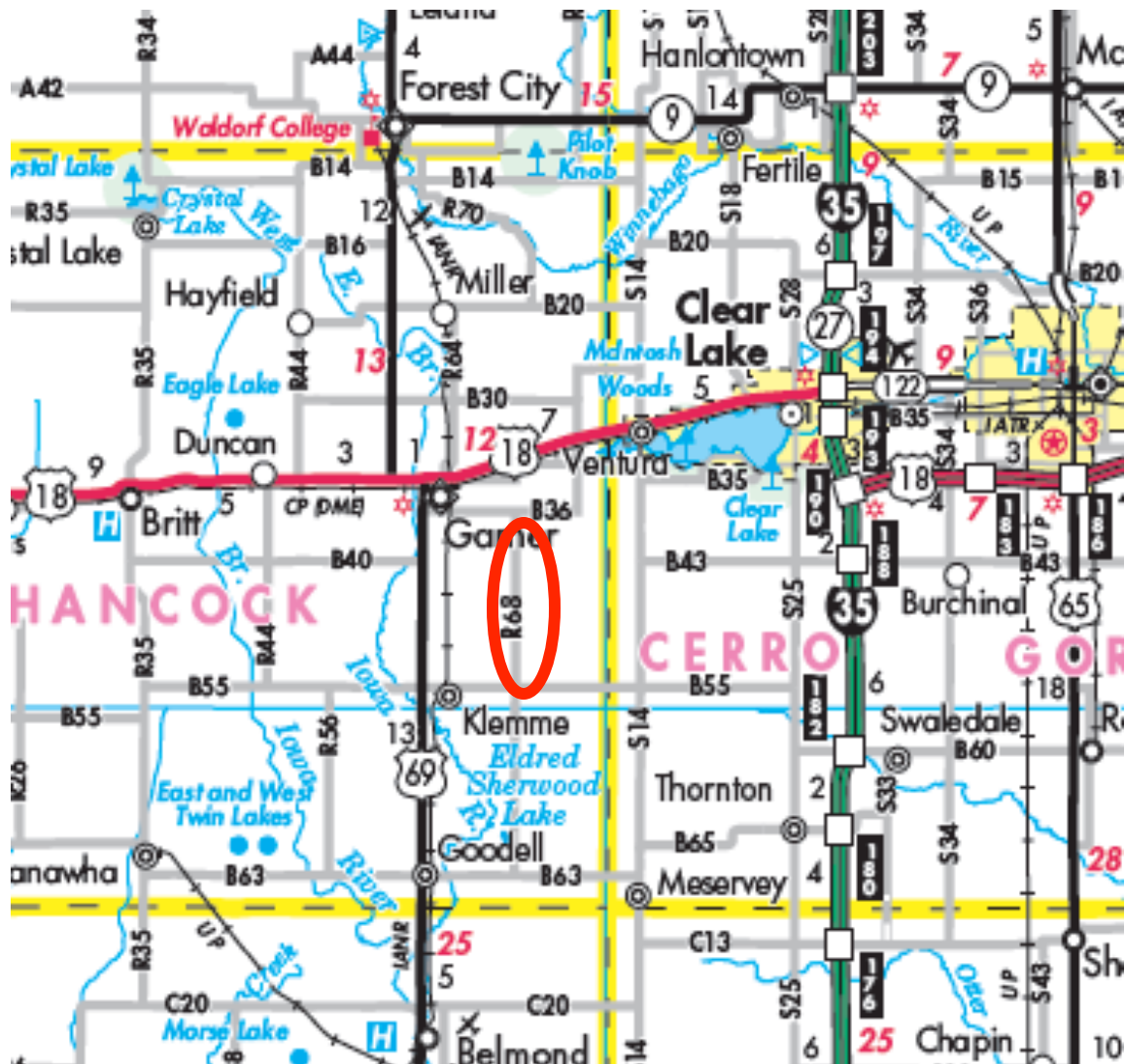
Present County Engineer / Phone # - Adam Clemons, 515.532.3597

15' skewed panels virtually no cracking. Still a smooth ride.

2007 photos on the left and 2014 photos on the right side of the page.



## Hancock Co – R68





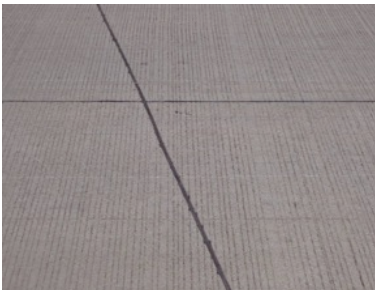
**County: Hancock      Route Number R68**

Termini from B55 to B36 – 5.6 miles

Construction Date: 1993, 290 vpd, Thickness: 5" x 22' wide, Surface prep: None

Present County Engineer / Phone # - Bill Waddingham, 641.923.2243

2007 photos on the left and 2014 photos on the right side of the page.





## Worth Co – S14, etal



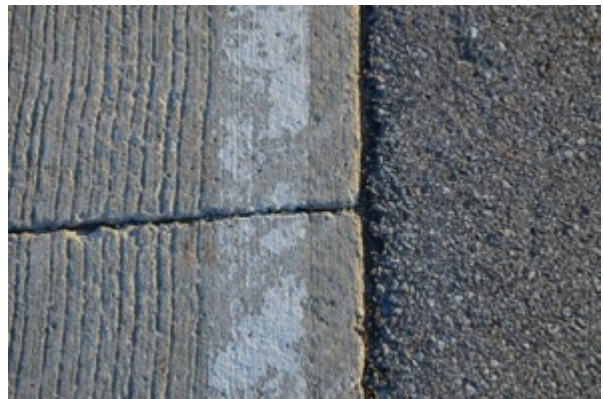
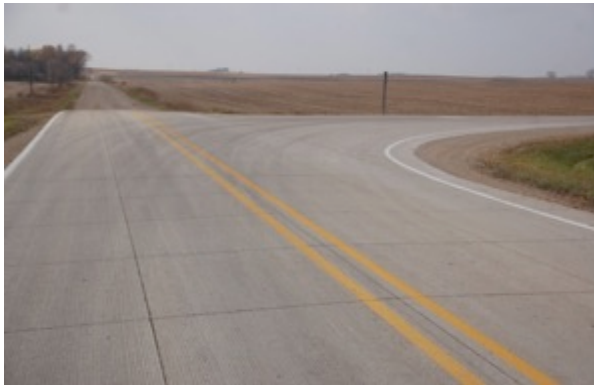
**County: Worth    Route Number S14, etal**

Termini from B14 to A38

Construction Date: 2009, 130 - 760 vpd, Thickness: 4" x 22', Surface prep: None

County Engineer / Phone # - Rich Brumm, 641.324.2154

2014 photos this page



## Tour of selected Iowa County Highways – Concrete Overlay November 8, 2007

### **Executive Summary:**

All routes are in “farm country” – lots of product to market. T38 in Mitchell also had a construction company stockpile yard along the route, plus an active rock quarry. Edge cracking could be the result of “lack of support” from the underlying blacktop or narrow driving lanes. Tined pavement (not used anymore in Minnesota, due to noise reduction efforts) did not appear to cause any major spalling across the joints. Joints appeared tight and without any distress, except parts of Mitchell Co. T38, where spalling appeared to be a mix problem, not a thickness design problem.

This table recaps each project’s details, and is in the order of the Tour.

County	Route	Mile	Termini	Year –V. P. D.	Thick	Existing Road	Surface Prep
Mitchell	T38	4.3	Osage to S.C.L	1983 - 1150	6	Asphalt	Milled
Floyd	B60	2.5	Marble Rock to IA-14	1989 - 970	5	Asphalt	None
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Hancock	R68	5.6	B55 to B36	1993 - 390	5	Existing section not indicated on plan sheet.	None

All surfaces were 22’ wide; except \*, at 24’

### **Conclusions:**

Minimal preparation for construction  
Thicknesses are not “designed”  
Smooth ride, with minimal faulting  
Structurally sound after 15 – 20 years of service.  
Maintenance activities not required!

**Attendance:** County Engineers (unless noted otherwise)  
Fillmore - John Grindeland      Freeborn - Sue Miller  
Houston – Marcus Evans      McLeod - John Brunkhorst  
Rice - Dennis Luebbe  
Olmsted - Curt Bolles, Bruce Belter (Construction)  
Waseca – Nathan Richman Winona – Dave Kramer

Iowa Concrete Paving Ass’n: Tom Parsons, Clare Schroeder  
Concrete Paving Ass’n of Minnesota:  
Matt Zeller, Brad Skow, Bob McPartlin