



# STATE OF CALIFORNIA

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## DEPARTMENT of TRANSPORTATION

### DIVISION OF ENGINEERING SERVICES

#### MATERIALS ENGINEERING and TESTING SERVICES

5900 Folsom Boulevard  
Sacramento, California 95819



Interstate 15 – South Bound  
PM 55.7 to PM 53.5

## PAVEMENT EVALUATION - Part II

**DISTRICT 8**  
**San Bernardino County**  
**Interstate 15 – South Bound**

**CONTRACT NUMBER: 08-4277U4**

**August 2001**

## **ACKNOWLEDGEMENTS**

The Office of Rigid Pavement and Structural Concrete would like to express our gratitude to the following for their participation, assistance, and support:

**Headquarters - Division of Maintenance**

**DISTRICT 08**

**Maintenance**

**Materials Engineering**

**Design**

**PAVEMENT EVALUATION, Part II**

**District 08  
San Bernardino County  
Contract Number: 08-4277U4**

This report reflects the observations, findings, conclusions, and recommendations of the authors. The contents do not necessarily reflect the official views or policies of the State of California.

This report does not constitute a standard, specification, or regulation. The Office of Rigid Pavement and Structural Concrete is responsible for the accuracy of the information and data presented in this report.

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Co-Investigators ..... Karl Smith  
Raul Alarcon  
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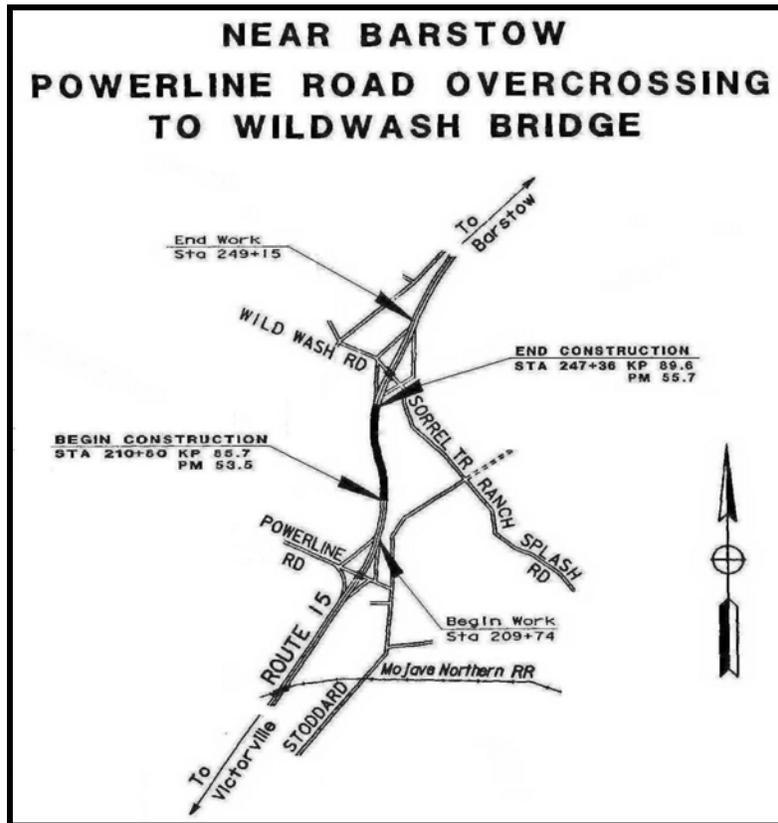
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## SUMMARY

A recently accepted concrete pavement project on Interstate 15 (I-15), near Barstow in San Bernardino County, widened a segment of I-15 between Powerline Road and Wild Wash Road in the southbound direction. The project was completed in May 2000.



**Figure 1.** Project Location

This is the second of four evaluations to monitor and assess the condition of the pavement at the reference points established during the initial evaluation on March 8, 2001. This evaluation was performed on July 9, 2001.

The Office of Rigid Pavement and Structural Concrete has released a report, dated July 2001, containing the observations, findings, conclusions, and recommendations associated with the initial evaluation.

**INSPECTION TEAM**

The pavement inspection was performed by:

**Office of Rigid Pavement and Structural Concrete**

Doran Glauz	Senior Materials & Research Engineer
Karl Smith	Maintenance Manager I
Raul Alarcon	Transportation Engineer
Daniel Zulke	Transportation Engineer

**District 08 Maintenance**

Armand Silva	Maintenance Superintendent
John Harper	Maintenance Supervisor
Basem Muallem	Project Manager
Larry Heasley	Maintenance Manager I (North Region)

**District 08 Materials Engineering**

Bruce Kean	District Materials Engineer
Ruben Guerrero	Pavement Specialist

**District 08 Design**

David K. Thomas

## REFERENCE POINTS

A series of six reference points were established from station 218+49 to 239+05.

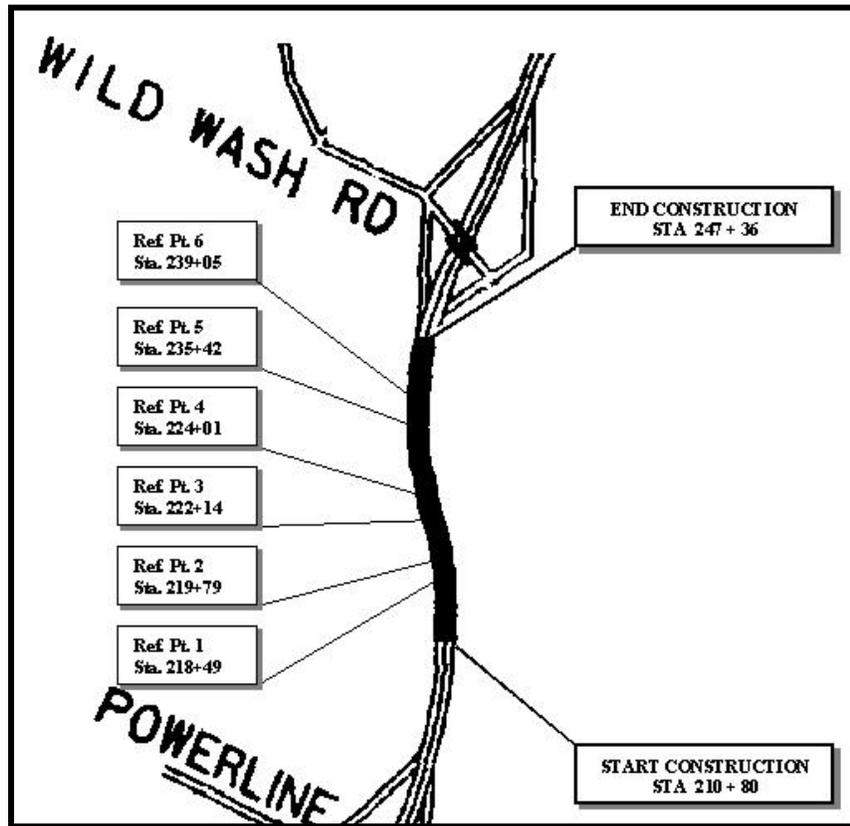
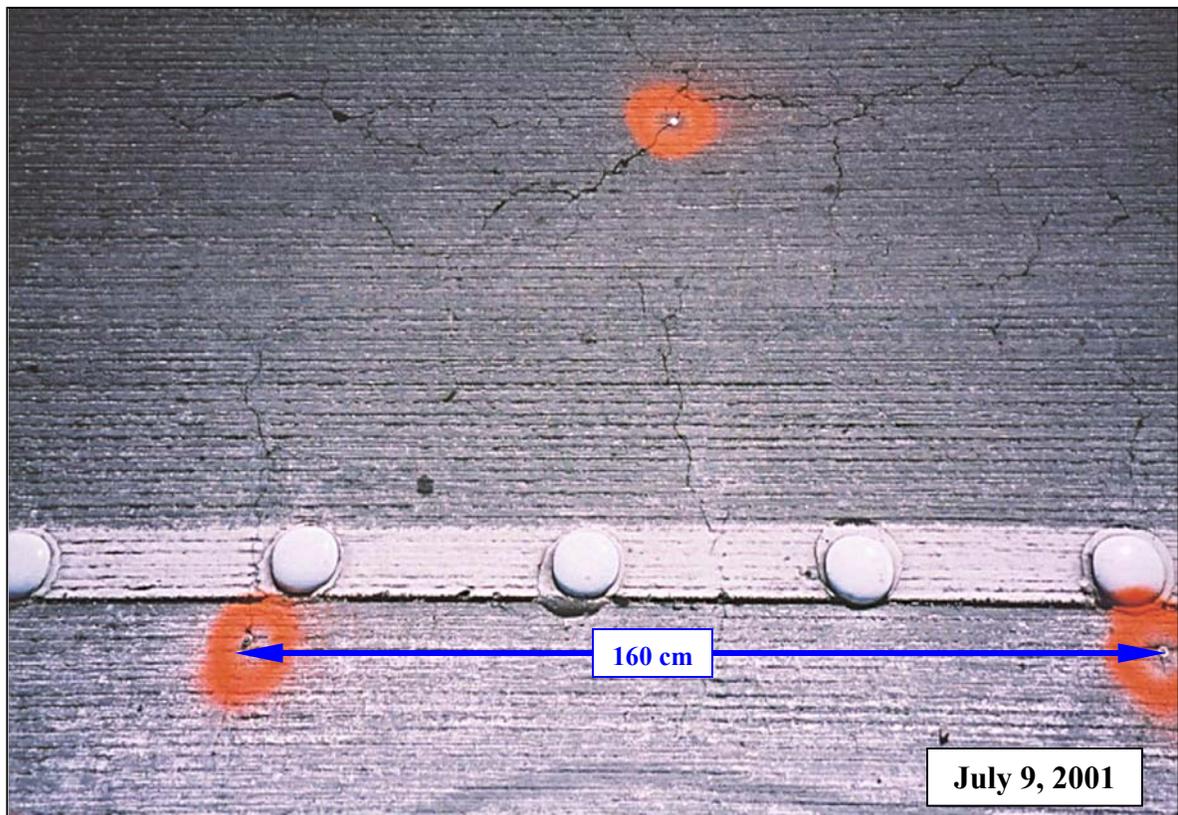
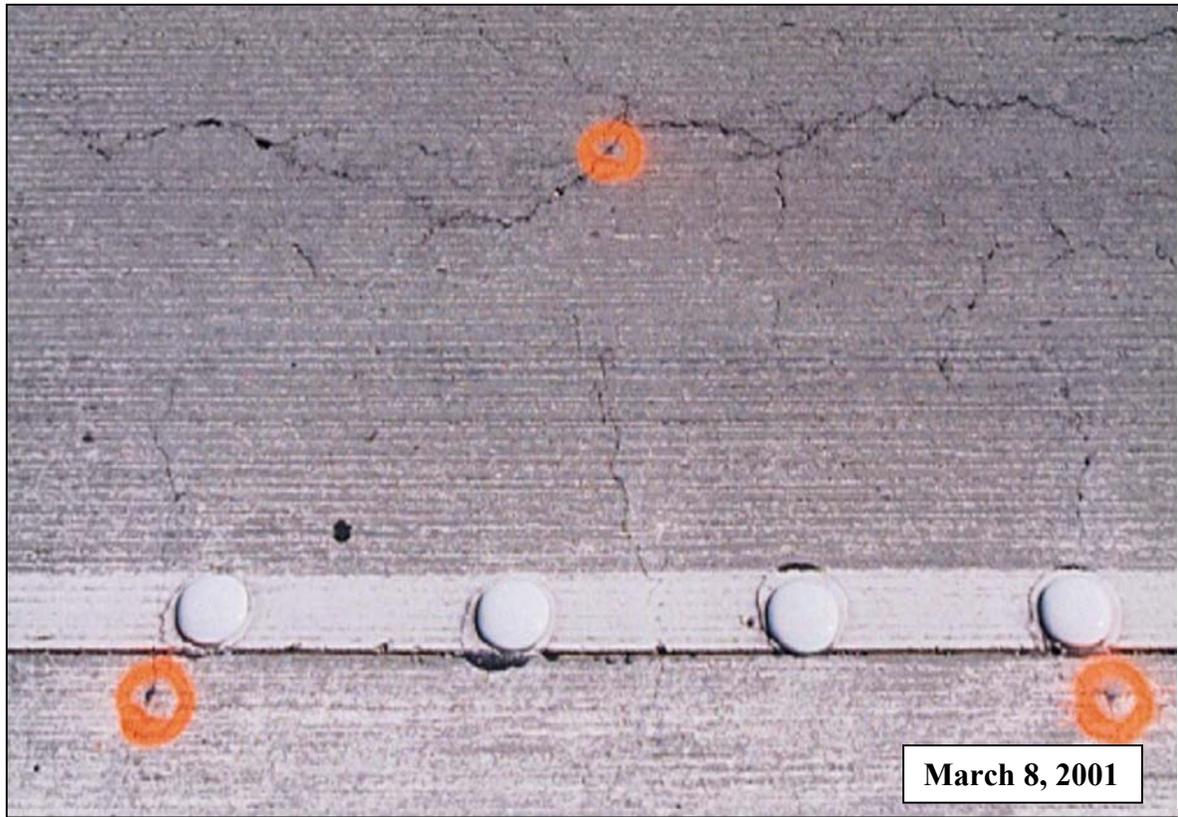


Figure 2. Reference Point Locations

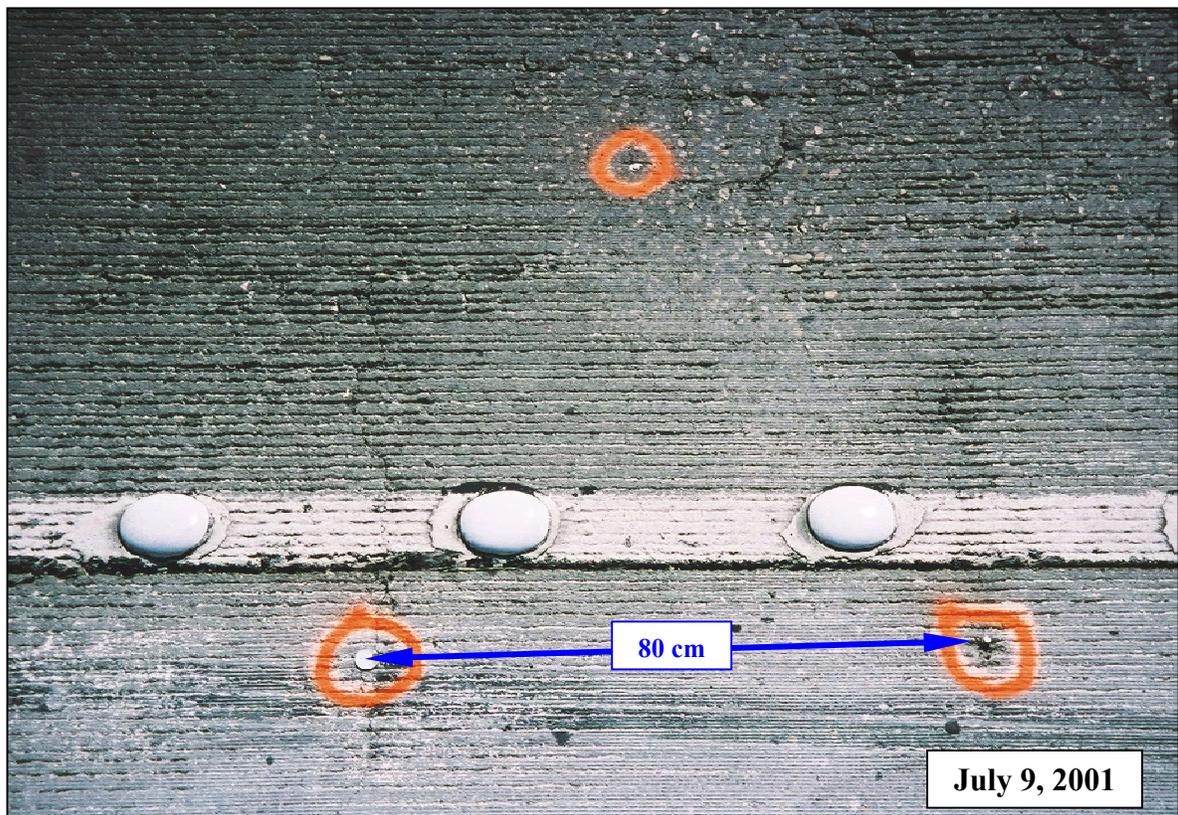
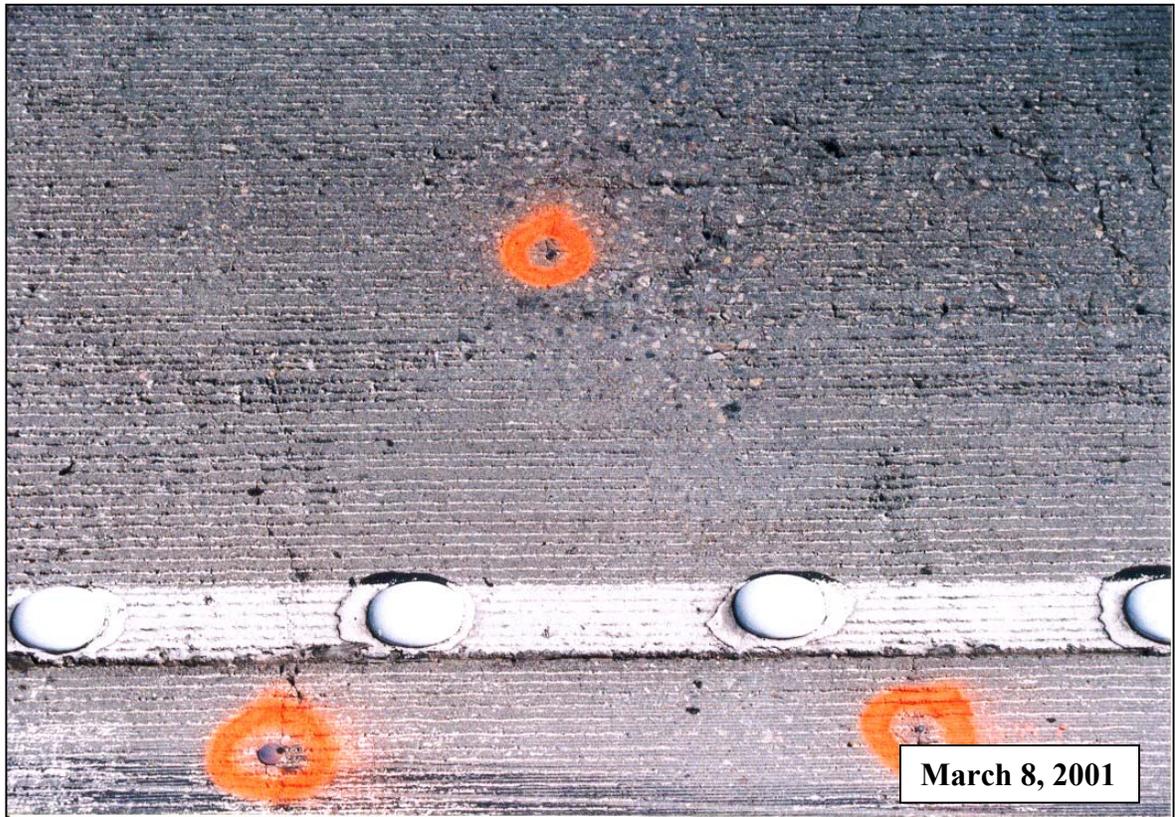
Reference Point #	Station
1	218 + 49
2	219 + 79
3	222 + 14
4	224 + 01
5	235 + 42
6	239 + 05

The following photographs show the pavement conditions at the reference points during the initial evaluation and during this evaluation.

**Figure 3.** Reference Point #1



**Figure 4.** Reference Point #2



**Figure 5.** Reference Point #3

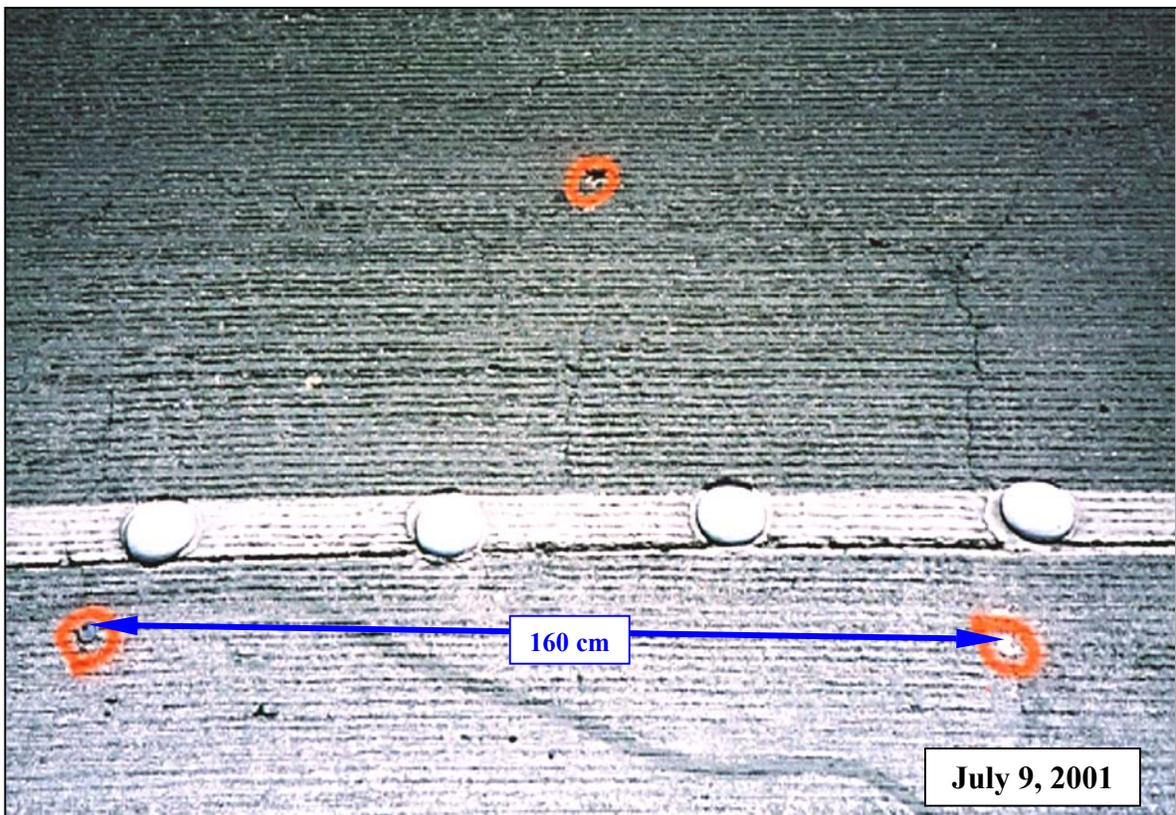
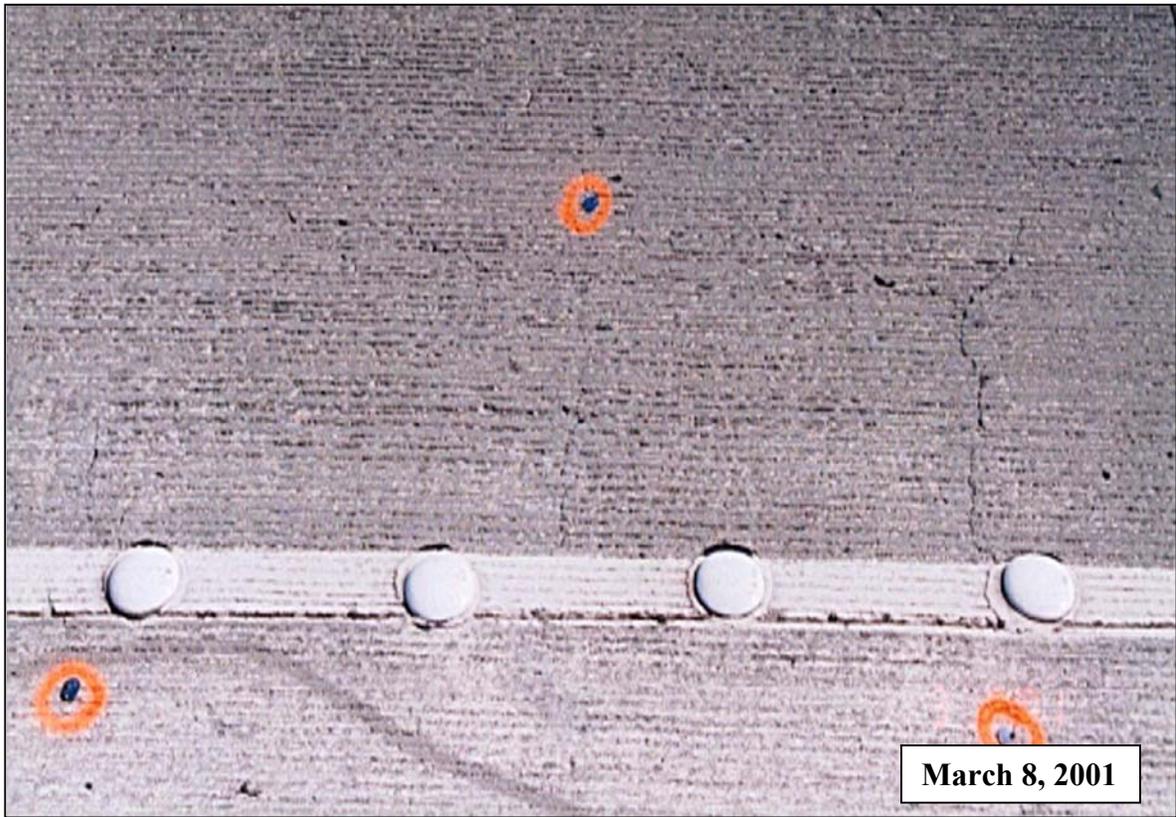
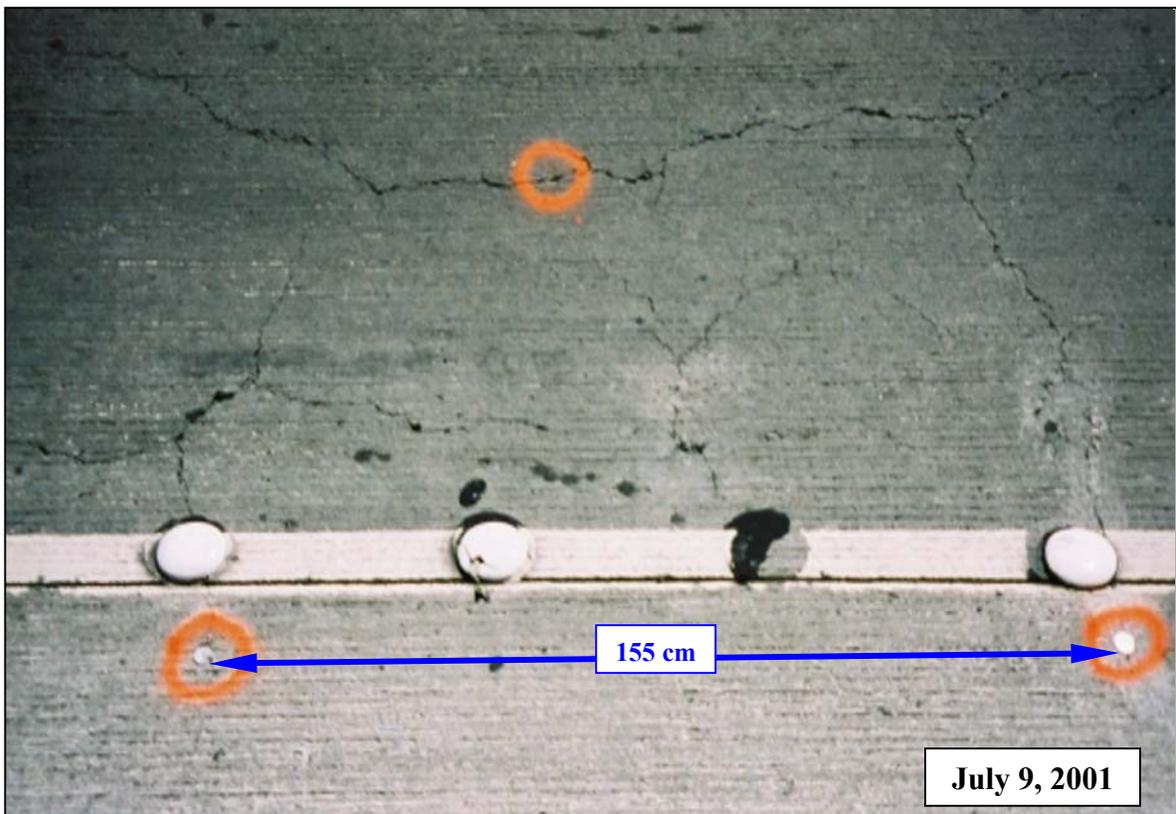
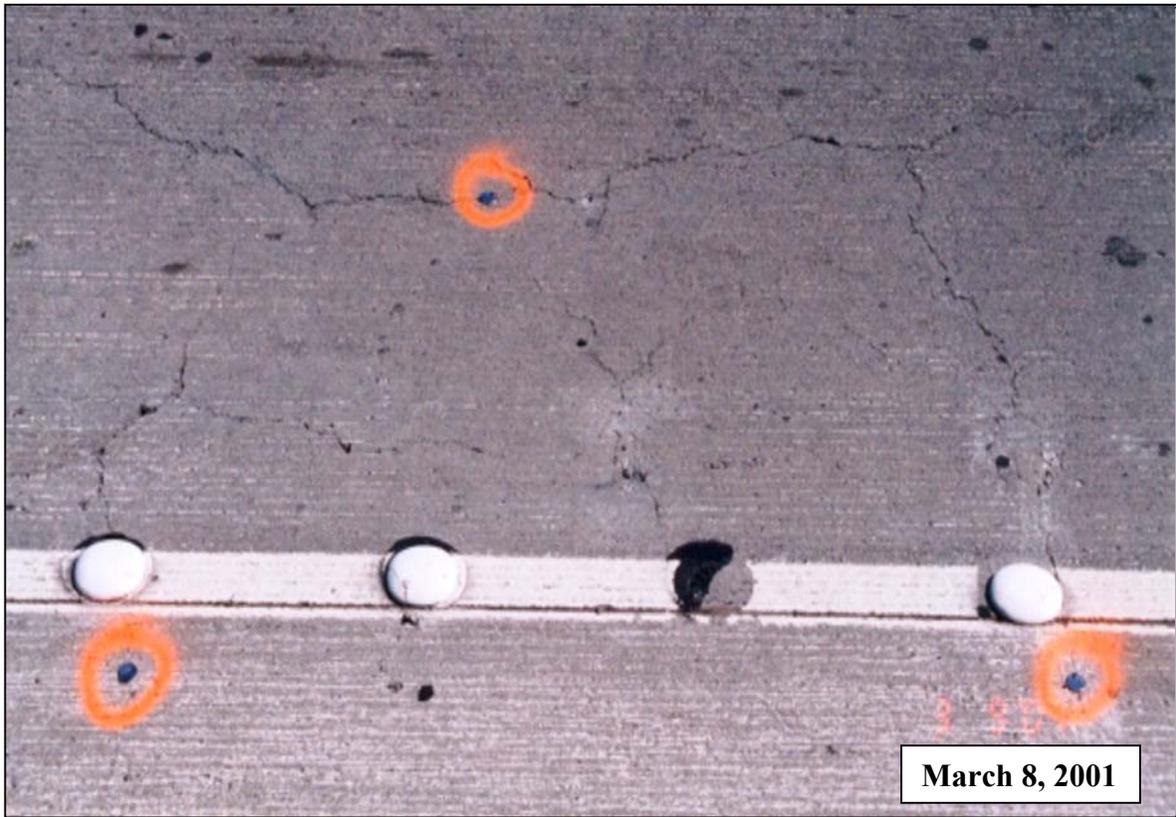
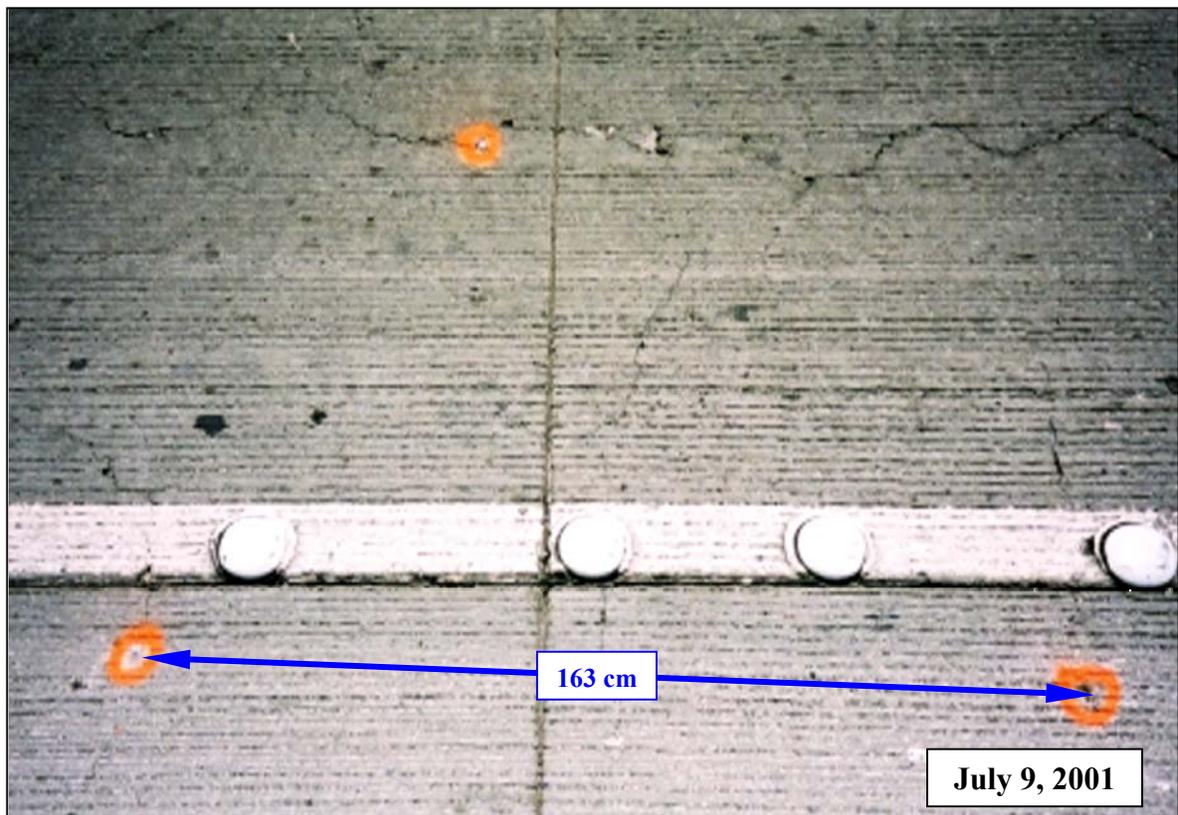
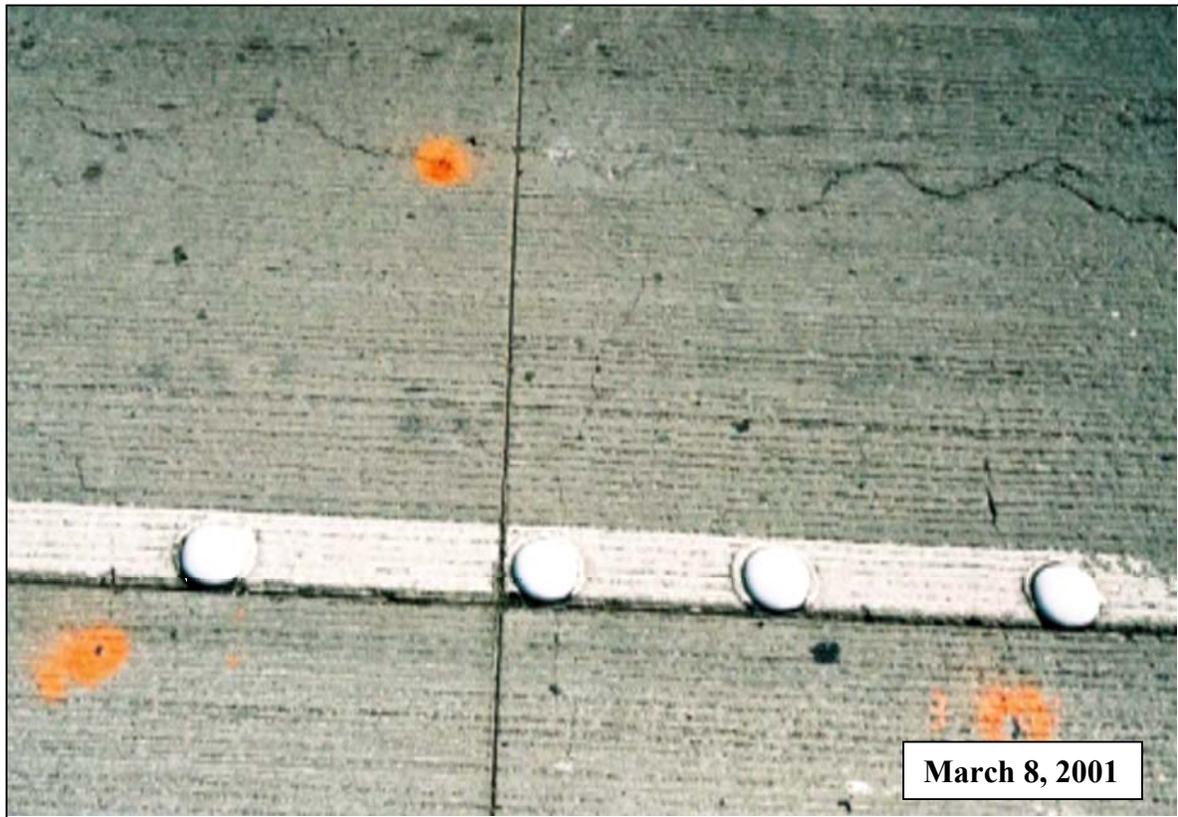


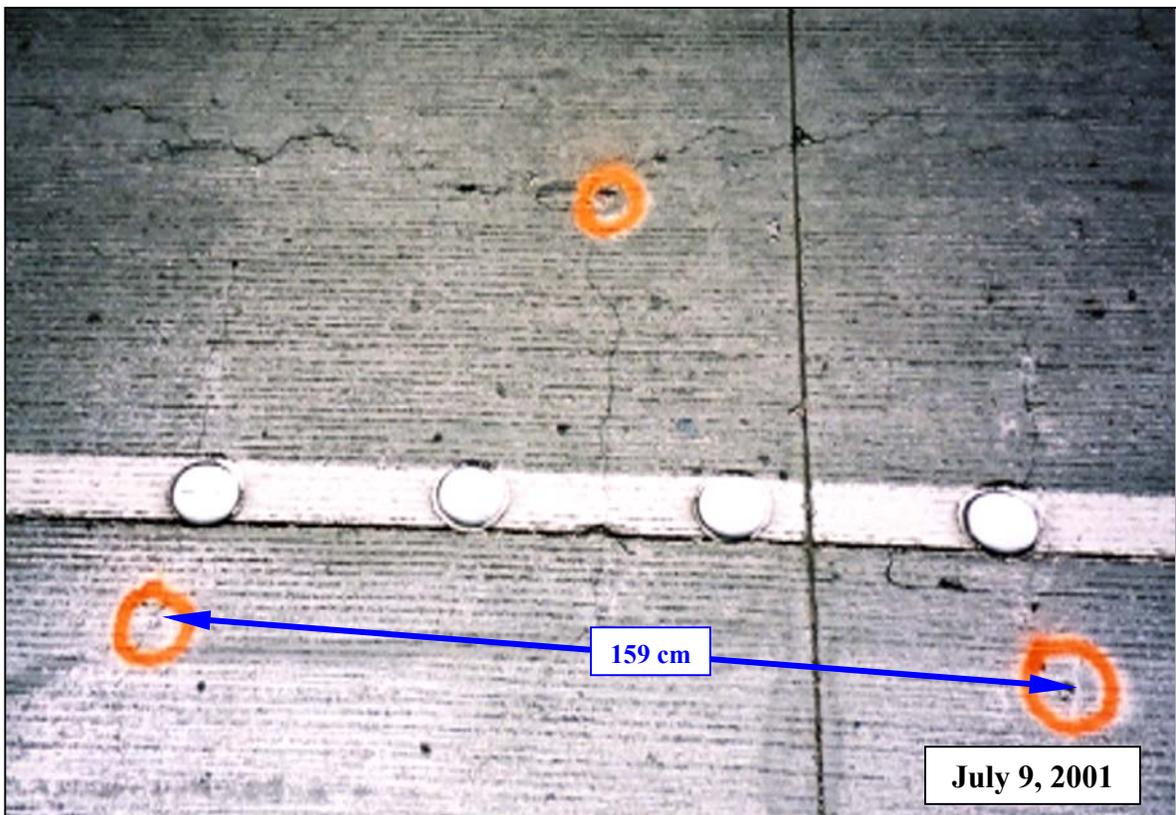
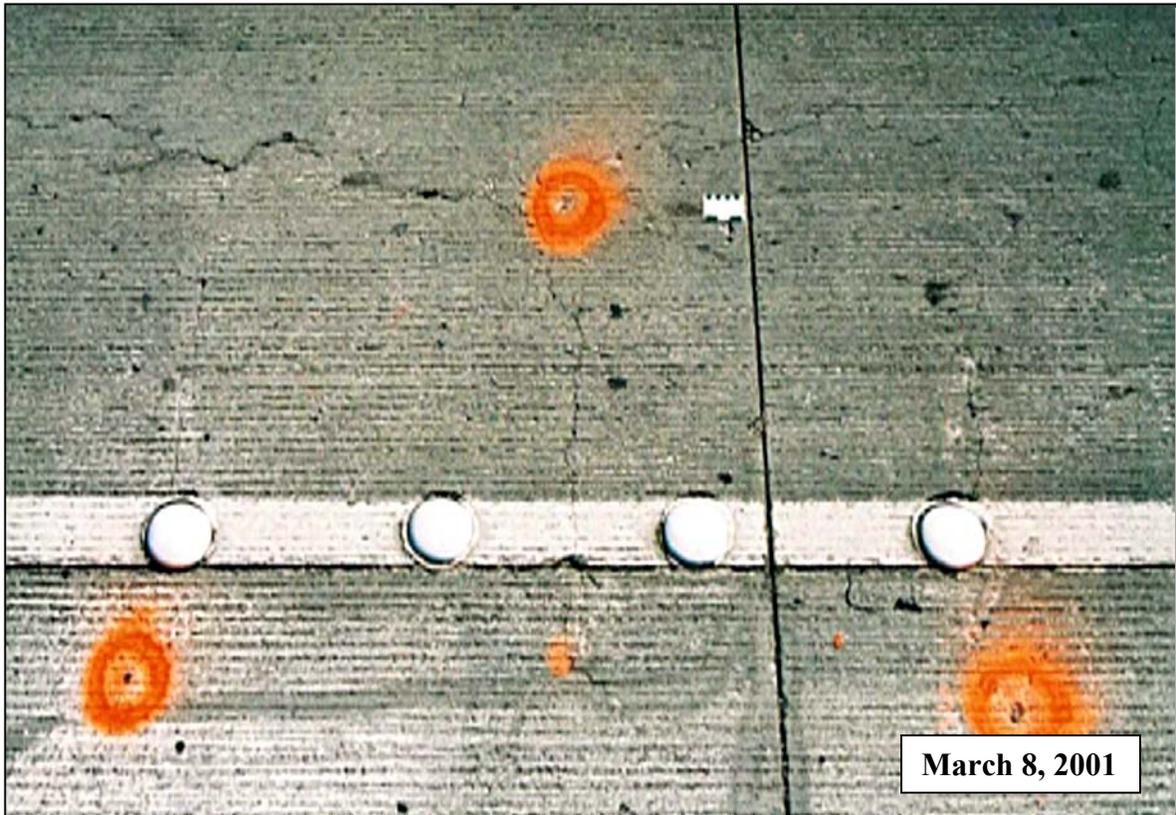
Figure 6. Reference Point #4



**Figure 7. Reference Point #5**



**Figure 8.** Reference Point #6



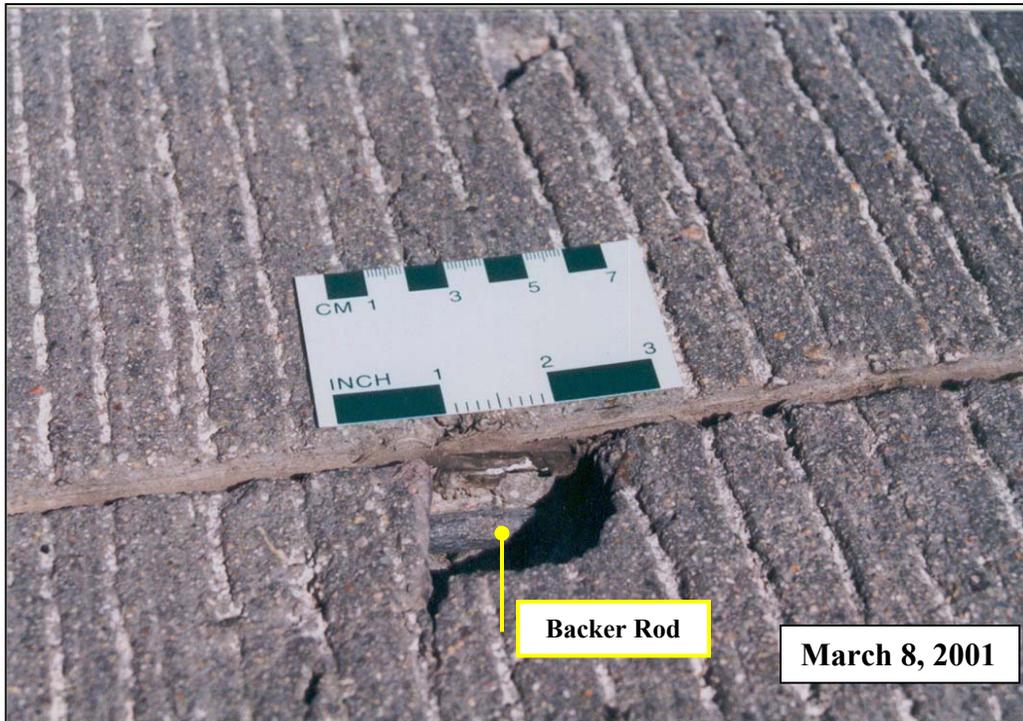
**OBSERVATIONS**

Select panels and spalls were revisited.

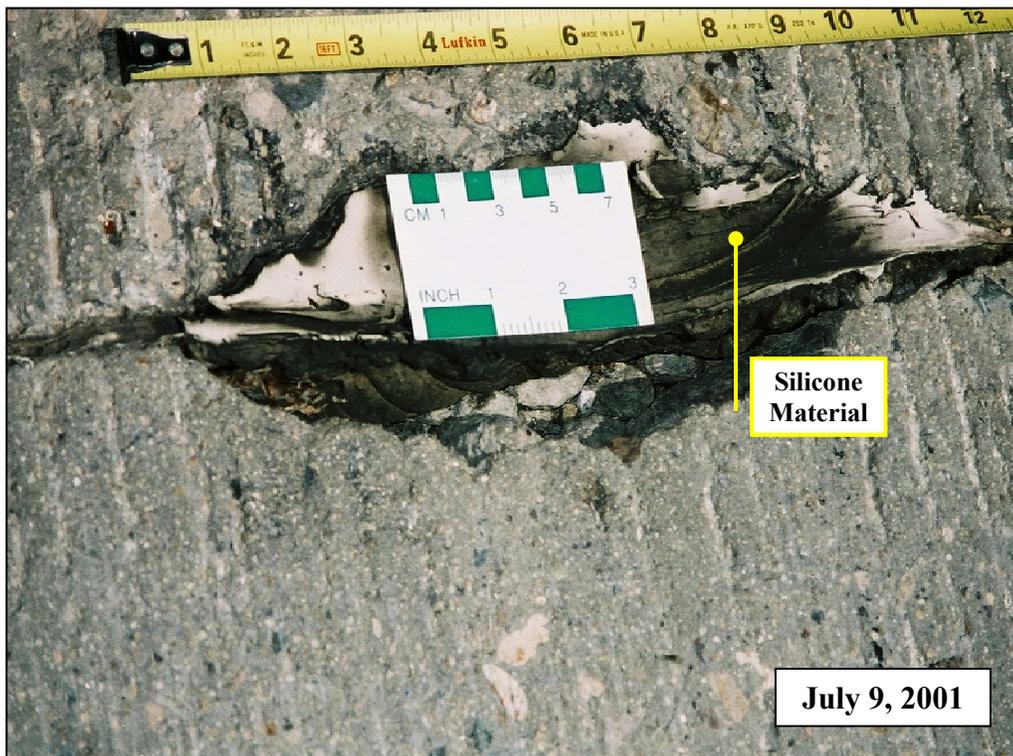
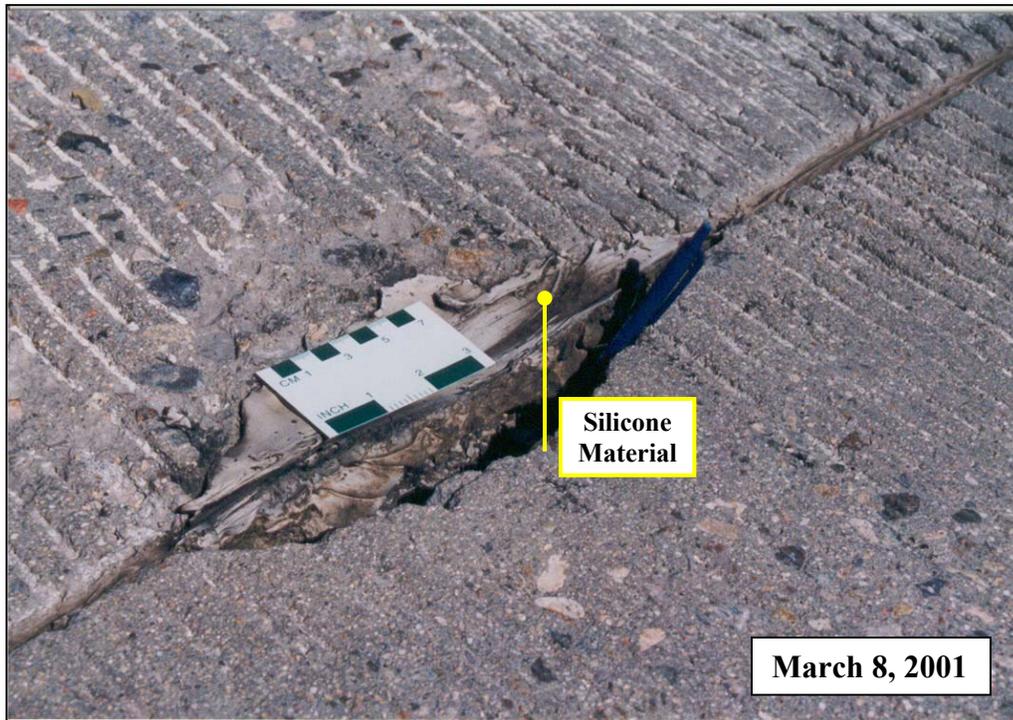
**Figure 9.** Panel near Station 224+10



**Figure 10.** Spall near Station 223+37



**Figure 11.** Spall near Station 224+56



During the inspection, District 08 expressed their desire to remove and replace the entire concrete pavement for this project.

The Headquarters HA-22 Program Advisor has recommended against the removal and replacement of the concrete pavement until the progress of the deterioration is evaluated.

### **CONCLUSION**

The pavement has been visited twice and the surface condition has been documented each time. Based on the photo-documentation, surface distress does not appear to be progressing.

### **RECOMMENDATIONS**

Because there is no apparent deterioration in the pavement, corrective measures are not recommended at this time. It is anticipated that after the third visit, there should be sufficient data to make a preliminary recommendation for remedial action.

Pavement evaluations should be continued. Follow-up inspections are scheduled on or about the following dates:

1. November 8, 2001
2. March 7, 2002

## **POINTS OF CONTACT**

### **Office of Rigid Pavement and Structural**

Tom Pyle	Office Chief	(916) 227-7281
Ken Beede	Consultations and Investigations	(916) 227-7060
Doran Glauz	Materials & Research	(916) 227-7272
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### **Headquarters - Division of Maintenance**

Leo Mahserelli	HQ HA22 Advisor	(916) 651-2007
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### **District 08 Maintenance**

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Basem Muallem	Project Manager	(909) 383-4278
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### **District 08 Materials Engineering**

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Ruben Guerrero	Pavement Specialist	(909) 383-7442

### **District 08 Design**

David K. Thomas		(909) 383-4118
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**APPENDIX A**

**AIR and PAVEMENT TEMPERATURES**

**GPS COORDINATES**

**Table A-1. Air / Pavement Temperatures**

<b>Reference Point</b>	<b>Air Temperature, °C</b>	<b>Pavement Temperature, °C</b>
1	31.1	37.9
2	30.6	38.9
3	30.6	40.0
4	30.6	45.6
5	30.6	47.8
6	30.6	47.2

**TableA-2. GPS Coordinates**

<b>Reference Point</b>	<b>Latitude / Longitude*</b>	<b>Northing / Easting**</b>	
1	N 34°40.440'	N	3836912
	W 117°12.660'	E	480669
2	N 34°40.507'	N	3837036
	W 117°12.677'	E	480644
3	N 34°40.631'	N	3837266
	W 117°12.713'	E	480589
4	N 34°40.729'	N	3837446
	W 117°12.742'	E	480546
5	N 34°41.323'	N	3838544
	W 117°12.746'	E	480540
6	N 34°41.500'	N	3838871
	W 117°12.653'	E	480684

\* based on WGS 84 datum

\*\* based on NAD 83 datum