



- crack mitigation techniques.
- 3. Evaluation of the test road to assess which crack mitigation strategies are the most appropriate.
- 4. Laboratory testing of specimens sampled from WKH WRDQV DQG IURP ¿HOG SURMFWV WR FRPSDUH laboratory test results with measurements from DFWXDO SURMFWV DQG WR LGHQWLI\ VXLWDEOH FULWHULD IRU UH¿QLQJ PHFKDQLVWLF HPSLULFDO GHVLJQ procedures and performance models for pavements with cement-treated layers.
- 5. 3UHSDUDWLRQ RI D SURMFW UHVHDFK UHSRUW DQG guidelines for crack mitigation in cement-treated layers.

IMAGES

WHAT WAS THE OUTCOME?

The test road was constructed with 34 test sections and 4 control sections. The variations included were cement content, roller type, timing of microcracking, number of roller passes, target VWL¿QHVV UHGXFWRQ DQG OHYHO RI YLEUDWLRQ)LHOG testing included frequent visual evaluations, various lightweight devices to evaluate their H¿HFWLYHQHVV DV TXDOLW\ DVVXUDQFH WRROV DV ZHOO as FWD testing. Preliminary observations of the cracking indicate that timing of the microcracking is dependent on cement content/design strength and that microcracking will reduce the severity of shrinkage cracks, but will not prevent them.

WHAT IS THE BENEFIT?

By developing guidelines for mitigation measures to limit/prevent shrinkage cracking in cement-stabilized layers Caltrans will have another recycling strategy to help maintain our network.

Image 1: Cement placement prior to being mixed into the asphalt and base

Image 2: Roller microcracking the newly cemented base at 24 hours.

7KH FRQWHQW RI WKLV GRFXPHQW UHÁHFW WKH YLHZV RI WKH DXWKRUV ZKR DUH HPSLULFDOHQVLEOHHG RROR QHFHVVDULO\ UHÁHFW WKH RFLDO YLHZV RU SURJUDGLHV RI WKH WLVWRQ & D&EHFWLYHQHVV IRU DSDUHQW WRU DRUL RYKH H7 GRFXPHQW GRHV QRW FRQVLWXWH D VWDQGDUG VSHFL¿FDWLRQ RU UHJXODWLRQ 1R SDUW RI WKLV manufacturer, contractor, or consultant. Any trade names or photos of commercial products appearing in this document are for clarity only.