

- (1)
1. Presentation by State of California Department of Transportation on Repair of American River Bridge on I-5. Jim Nicholas, Deputy Director of CalTrans District 3, to speak.

LETTER FROM CALTRANS ATTACHED

**DEPARTMENT OF TRANSPORTATION**

DISTRICT 3, SACRAMENTO RIDESHARE

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SACRAMENTO, CA 94274-0001

Telephone (916) 445-POOL  
Fax No. (916) 323-7669



May 22, 1991

Honorable Joe Serna, Jr.  
Councilman, City of Sacramento  
915 I Street, Room 205  
Sacramento, CA 95814

Dear Mr. Serna:

Caltrans will initiate work to repair the northbound lanes of the Interstate 5 American River Bridge beginning in July. The project should be completed by mid-October.

The first phase of construction is expected to last six weeks and will reduce the number of available northbound traffic lanes from four to two. The Richards Boulevard onramp and the Garden Highway offramp from the northbound direction will be closed. The second phase of the project will result in a third lane opening for the next six weeks and reopening of the Richards Boulevard and Garden Highway ramps.

To minimize inconvenience to commuters and to businesses in the project area, we have begun a comprehensive public awareness and business outreach campaign.

We will provide commuters with all the information and assistance they need to use transportation options such as carpools and public transit. In addition, we will provide information regarding alternate routes. We will also establish satellite parking facilities in South Natomas, Arco Arena, and at Northgate Boulevard near Interstate 80 where commuters can park their cars and carpool.

We have already begun contacting businesses in the project area to alert them of the project. We are working closely with the South Natomas Transportation Management Association and the Central City Transportation Management Association.

We are committed to completing this project as quickly as possible and minimizing any inconvenience our work may cause.

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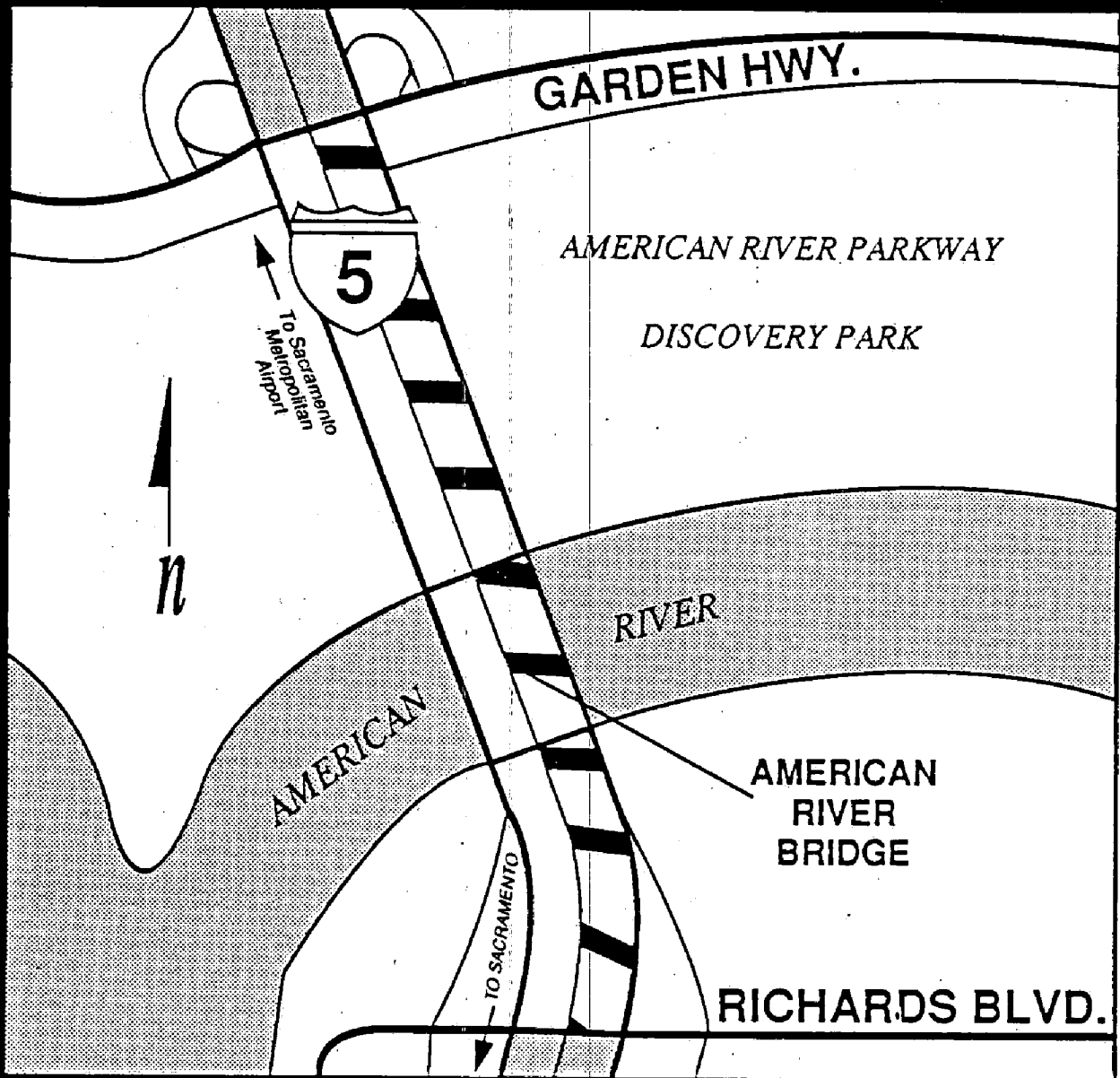
I have enclosed information about the project. If you have any additional questions, please call me at (916) 327-4584. If your staff requires more details on the project or wish to refer public inquiries to our office, please call Pat Miller, District Public Affairs Officer, at 741-4571 or Jeff Pulverman, Chief, Sacramento Rideshare, at 323-0839.

Sincerely,

  
ROBERT O. WATKINS  
District Director

Enclosures

# CONSTRUCTION ZONE



**Repair of Interstate 5 Bridge  
Over the American River  
In Sacramento**

**THE PROBLEM:**

There is deterioration of the concrete hinge joints on the northbound Interstate 5 bridge across the American River. The problem was discovered during an inspection in March following the appearance of a 2' x 2' hole in the pavement. (See page 4, "Background" for information on the cause of the deterioration.)

**THE REPAIR:**

The California Department of Transportation has designed a project to repair the bridge. The work includes removing and replacing deteriorated sections of concrete underneath the deck surface. This will require removing the asphalt and concrete deck to access the structure below.

Bidding on the contract will begin in early to mid June, with bids opened under an accelerated bidding process. Actual construction is expected to begin in late June or early July.

Estimated cost of the repair is \$2 to \$3 million.

**WORK SCHEDULE:**

The entire contract will be expedited to minimize the impact on traffic and to complete the work prior to winter when high water flows in the American River could cause problems to the temporary supports in the river channel. The contract will be set up with an extremely tight time frame of 85 calendar days to complete the work. The contractor will probably work 24 hours a day to finish within the given time. There will be a cash incentive for early completion and a penalty for not completing the work on time. It is not expected the work can be significantly expedited since it takes a certain amount of time for the concrete to cure to its full strength before traffic can be put on it.

**Late June/  
early July:**

When work begins in late June or early July, the contractor will have 10 to 13 calendar days to build the support and framing for the repair. This work will be done from underneath the bridge and there should be no interference to traffic. There will be no interference to traffic prior to Tuesday, July 9.

**Mid-July:**

Then, beginning in mid July, work will start on Stage 1 (see attached diagram) requiring work on top of the northbound bridge. Traffic will be reduced to two lanes 24 hours a day, seven days a week for about six weeks. One of the lanes will be 11 feet wide and the other the standard 12 feet wide. There will be no shoulder areas.

We anticipate severe congestion and delay for motorists during peak traffic times, particularly during the morning and afternoon outbound commute periods between 6 a.m. and 9 a.m. and 3 p.m. and 6 p.m. weekdays.

During Stage 1, the on-ramp from Richards Boulevard to northbound I-5 and the NB I-5 off-ramp to Garden Highway will be closed. Motorists will be detoured to alternate routes.

**Late August:**

Stage 2 will follow completion of Stage 1, starting sometime in late August. During Stage 2, there will be three traffic lanes open for motorists (see attached diagram). The three lanes will be 11 feet wide and there will be no shoulders. The Richards Boulevard on-ramp to northbound I-5 and the Garden Highway off-ramp will be reopened.

**Time Frame  
Updates:**

Updates on precise dates will be provided during the course of the project.

**TRAFFIC HANDLING:**

Based on current traffic volumes, Caltrans traffic experts predict a 3-hour delay during peak times if motorists continue their current driving patterns when only 2 lanes are available during Stage 1. If traffic is reduced by 25 percent, the delay would be 1 hour, 15 minutes. If traffic is reduced by 50 percent, delay would

be reduced to about 6 minutes. The goal, therefore, is to reduce volumes to 50 percent of normal. To do that, Caltrans is doing the following:

**Carpooling:**

We are encouraging motorists to carpool. There are only a few routes across the Sacramento and American Rivers out of the downtown area. Using alternate routes will help, but putting more traffic on the already heavily traveled routes out of the downtown may only serve to congest those routes. **Motorists are encouraged to call 445-POOL for a free carpool match list.**

Caltrans Sacramento Rideshare will be purchasing advertising to encourage ridesharing during the work.

A brochure with information on the project and motorists' options will be distributed to state government offices and employers in the downtown and South Natomas areas. The brochure will encourage carpooling.

Caltrans will be working with the South Natomas and Central City Transportation Management Associations to encourage carpooling.

**Park & Rides:**

Caltrans is in the process of setting up three additional park and ride lots to encourage ridesharing. We are also exploring the possibility of using shuttle buses to shuttle workers in from the outlying park and ride lots during the work. The additional lots are located at Arco Arena, at the I-80/Northgate Boulevard interchange and on Natomas Park Drive in South Natomas.

**Alternates:**

Alternate routes are shown on the map in the brochure. However, as stated above, additional traffic on alternate routes may only serve to congest them and cause lengthy delays at other locations.

Caltrans will have signs (including electronic changeable message signs) along northbound I-5 south of Sacramento advising trucks and through traffic to use westbound Business 80 (to West Sacramento), to eastbound Interstate 80 and back on northbound I-5.

**Construction Measures:**

There will be a screen between the traffic lanes and the work to prevent "gawking."

The off-ramp to West El Camino Avenue will be widened to two lanes prior to the start of work. This will provide additional capacity at West El Camino during closure of the Garden Highway off-ramp.

Changeable message signs will be used along northbound I-5 to alert motorists to the work. The signs will also be used to detour traffic as needed.

**WEEKLY BRIEFINGS:**

Caltrans bridge engineer Dave DeFoe and traffic engineer Jim Nicholas will be available each Wednesday morning at 10 a.m. at this location (in Discovery Park) to update media on progress of the work. These will be informal sessions and opportunities to do interviews.

**BACKGROUND:**

Concrete, like virtually all engineering materials, expands and contracts as a result of temperature changes. This effect is much more pronounced than one might think and, in fact, the American River Bridge would be about 17 inches longer on Sacramento's hottest day than on one of our cooler days. This expected change in total length was accommodated in the design and construction of the bridge through the use of eight expansion hinges which effectively divide the structure into nine separate frames.

The joints between adjacent frames are small enough to allow traffic to comfortably pass across the opening. Even though the upper several inches of these joints are filled with an elastic material (usually an extruded neoprene device), the actions of traffic and environmental effects can break down the seal and begin to allow debris into the space provided for expansion of the bridge.

The problem was detected in March of this year. At that time, the department shored the bridge to ensure its continued ability to safely carry traffic. A contractor was hired to cut access holes into the underside of the bridge. The department's engineering staff then



conducted a comprehensive inspection from within each cell of the structure. They noted the extent and severity of the distress that was evident and designed the repair and reconstruction project. The repair will fully restore the 20-year-old bridge to full strength and capacity.

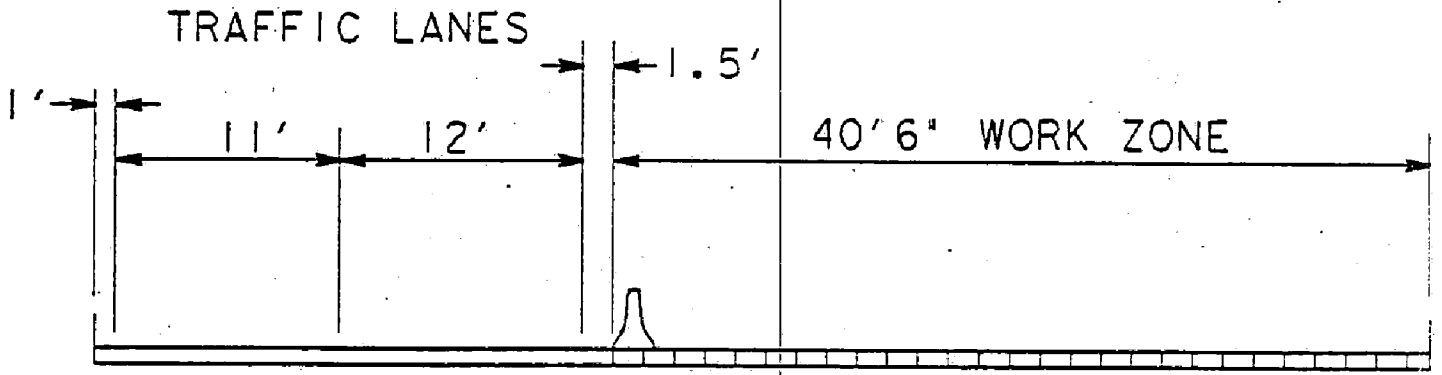
The state's contractor also provided access to the twin southbound bridge and engineering staff has inspected that structure. There is some evidence of impacted expansion joints, but nothing urgent or of a nature that cannot be repaired without the disruption of traffic.

**CONTACTS:**

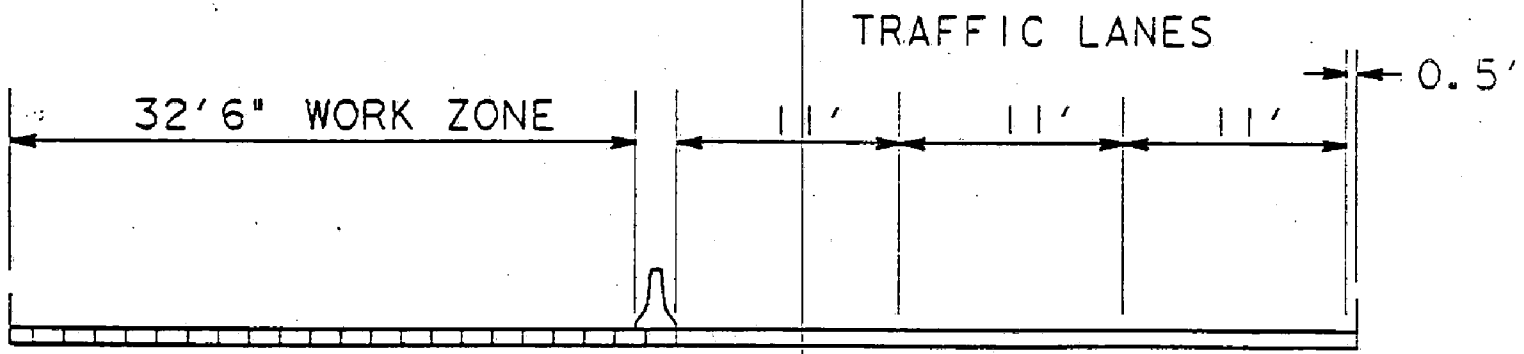
**Motorists** can call **445-POOL** or **1-800-468-POOL** for carpooling information and updates on the project.

**Media** should call **Pat Miller at 916-741-4571** to arrange for interviews and to get updates in between briefings.

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STAGE 1 CONSTRUCTION



STAGE 2 CONSTRUCTION