



PROJECT PROFILE

Larkspur Parking Garage

Investigation and Repair Design | Larkspur, CA



CLIENT

Savoy Corporation

BACKGROUND

The structure is a two-level cast-in-place concrete parking garage that was designed and built in the early 1980s. For years, a height restriction limited access to the garage's upper level to relatively small vehicles. After the local fire department ordered removal of the height restriction, much larger and heavier vehicles could drive on the upper level.

Soon after the vehicle height restriction was removed from the upper level of a parking structure, large cracks (up to 1/2-inch wide) were noticed in a number of the upper level concrete structural members. As a result of this damage, the Savoy Corporation had questions about the structure's immediate stability, the source of the damage, and what, if any, repairs would be needed.



SOLUTION

Within a few hours of being contacted, WJE visited the site and designed emergency shoring to support heavily damaged members. A quick review of the structural system revealed that the entire garage had been designed to support typical automobile loading but that there had been no intent to allow anything larger on the upper level. Based on this information, WJE recommended that the height restriction be reinstated and assisted the owner in obtaining fire department approval to do so. WJE also designed repairs to the damaged joists and affected areas of waterproofing membrane.

