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Southern
Pacific's
Soledad Canyon Link



SOUTHERN PACIFIC'S
SOLEDAD CANYON ROUTE

THE OLD ROAD TO LOS ANGELES

By Bruce Kelly

T WAS IN THE DAYS OF MAMMOTH STEAM power, highly evolved and high-driven, and also of covered wagons—that is to say, diesel electric—that Southern Pacific's Saugus Line between Los Angeles and Palmdale was the principal route for anything rolling to or from the railroad's westernmost reaches. The lesser used Coast Line through San Luis

Obispo handled the high priority Overnighters and trailer trains between L.A. and San Francisco, but it was the Valley Line to Bakersfield, of which the Saugus Line was a part, that trembled more frequently beneath the weight of Pacific Fruit Express blocks out of the San Joaquin, lumber products from Oregon, and mixed loads of salt, potash, and borax from the Searles branch. To enter the Los Angeles area, such trains had first to struggle with the intricacies of the Saugus Line, or, in its more geographic description, Soledad Canyon. Within this 56-mile piece of desert railroad, 100-car freights conquered two separate summits and endured inclines of 1.9, 2.2, and 2.4 percent. Close to a century of transportational progress chuffed, droned, and rolled across Soledad. What spiraled westbound down Tehachapi's famous loop in Espee colors did so only after running the marathon course of Soledad Canyon.

As the late 1960s saw second-generation dieselization brought into full swing, Southern Pacific began spiking down its long-talked-about bypass line between Palmdale and West Colton. Opened on July 11, 1967, the Palmdale Cutoff performed its intended task of clearing the metropolitan routes of unwanted through-traffic. A typical unit train launched from Yuma or points east



It's a hazy day on the Soledad Canyon line as westbound Southern Pacific symbol freight *LABRF* ascends a 1.8% grade approaching the east switch of Ravenna Siding, M.P. 430. "Westbound" trains actually travel east between Saugus and Vincent summit. —BRUCE KELLY

could now avoid 41 miles of crowded suburbia en route to Northern California. This left Soledad with only a handful of predominantly late-night movements, requiring an equally small percentage of railroaders employed with SP's Los Angeles Division to handle them. The few railfans who even knew of Soledad's camera qualities followed the course of change to find new stomping grounds, probably settling into Cajon Pass to record Espee action that by all rights should have been hauled via the Saugus Line.

The Old Road, you say? . . . Yes indeed.

The 1870s—Building the Rail Link

STEADILY ADVANCING ITS STEEL ARM south between a cleft in the Tehachapi Mountains, the Southern Pacific Railroad Company (as it was called in 1874) was the dread of nearly all of the 10,000 citizens of early Los Angeles. A modest yet domineering network of SPRR trackage was already in place throughout L.A. County, and once tied with the approaching main trunk, it would virtually wipe out all competition from horsedrawn wagon freighters as well

as any other form of transport. A hotly debated election only two years earlier had led to a subsidy of \$602,000 to the SP by Los Angeles which, at the time, feared that the railroad would otherwise route its mainline through San Bernardino, some 50 miles to the east. Dr. David Burbank alone sold a 100-foot-wide, 14,000-foot-long plot to the SP for one dollar as part of the early and very eager inducement red carpet treatment. Although the Southern Pacific originally contracted to link up directly with L.A. once past the Tehachapis, a more immediate path by way of Cajon Pass and San Bernardino to the long-term destination of Yuma, Arizona, did in fact become more desirable to avoid costly tunnel work through the San Fernando Mountain north of Los Angeles. Besides, sailing vessels already served the scanty wharves of San Pedro Harbor, and a branch line could always be extended west from San Bernardino if needed.

The Cajon Pass had long since been claimed by the Los Angeles & Independence Railroad, forerunner of the eventual Santa Fe invasion and SP's only local rival. In January of 1875, the LA&IRR ensured its control of the pass by breaking ground in the narrow Blue Cut Canyon region of Cajon's lower half. There was room enough for only one track through Blue Cut, and SP



Headed to Colton via the cutoff line over Cajon Pass, an eastbound train is just clearing the switch at Palmdale as a westbound Saugus line local holds its ground on a 1.4% descending grade. —BRUCE KELLY

knew it. David D. Colton of the SPRR then went to Washington, D.C., with a bill asking for permission to connect his company's Tehachapi line with the expanding L.A. line via the Mojave Desert and Cajon Pass. In effect, the bill would enable Southern Pacific to put off the digging of San Fernando Tunnel, perhaps abandoning the Los Angeles trackage altogether, and at the same time locking the LA&IRR out of the rich silver trade pouring from the distant Panamint Range, which for years had given L.A. much of its wealth. Much in contrast to their prior demeanor, a few prominent Angelenos reminded the Californians in Congress that the Southern Pacific had signed a contract in 1872 promising that L.A. shall remain on the main trunk. With the Colton bill thereby defeated, the SPRR on March 2, 1875, mounted its construction forces on two fronts: eastward to Yuma over the dusty San Gorgonio Pass, and north into San Fernando Mountain toward the Santa Clara (now Santa Clarita) Valley and Soledad Canyon.

Frank Frates, supervising 330 Chinese and white laborers, commenced the tunnel blasting on March 27, and soon increased his gang to 1,000 Chinese diggers, 350 white mechanics, and nearly 100 cooks and tool dressers. Simultaneously, William Hood was pressing across the Tehachapis and would soon be building into Soledad's back door. Hood's scheme of looping the track up and over itself at Walong was one of many engineering feats which earned him a promotion to chief engineer. With the deadline for the \$602,000 subsidy growing near (trains were to be running into L.A. by Nov. 5, 1876, or the SP would forfeit), Frates

decided to drop three vertical shafts into San Fernando Mountain. This created a total of eight faces for the tunnel men to deal with—an ongoing lesson in fear wrought by crumbling shale and sandstone, flooding by subterranean springs, and the mere thought of being 400 feet underground. Only one man, Coroner A.B. Moffitt, kept a record of the fatalities, but he never revealed the death toll to anyone, not even to Charles Crocker, then president of the SPRR.

On the night of July 14, 1876, two Chinese coolies, using candles as illumination, dug past the final wall of dirt, and San Fernando Tunnel was holed through. Dollars spent on the project totaled two million, and at 6,966 feet, the tunnel ranked as the third longest in the U.S.—fourth in the world. Tracks were soon laid inside San Fernando Tunnel and extended to what would become the towns of Saugus and Newhall. From Lyons Station, just north of the bore, the telegraph dispatch of August 9, 1876, read, "The iron horse poked his head through the San Fernando Tunnel this evening at six o'clock and neighed long and loud his hearty greeting to the citizens of Santa Clara Valley." In the sixteen months it took to build this marvel, Hood's men had already threaded rails up from the Mojave Desert to a 3,196-foot summit at Soledad Summit (later Vincent), thence moving west into Soledad Canyon. Railheads met on Sept. 5, 1876, at the mouth of the canyon, an area eventually honored by the presence of the on-line station of Lang. Four thousand Chinese stood assembled in military rank and file along the last 1,050 feet of roadbed, with the two rivalrous gangs from Los Angeles and San Francisco—the men of Frates and Hood—



Back in 1936, 2-10-2 No. 3689 storms upgrade through the semaphores at Paris siding, hauling 33 cars that were the consist of westbound freight No. 813. —RALPH E. MELCHING

at opposite ends. Following oratory from railroad and civic officials, SPRR President Charles Crocker gave the order to "Fall to!" and the climactic tracklaying race was on. Although the L.A. team was victorious in spiking down its last rail ahead of their northern brethren, a sense of mutual accomplishment made the Hood team equally and rightfully triumphant. Crocker drove the proverbial gold spike to officially complete the line. "Last spike connecting Los Angeles and San Francisco by Rail" was inscribed on the spike, and that it was, because little more than stub-end trackage and obscure gradings existed in the Cajon on the day Soledad Pass became L.A.'s first rail link to the outside world.

Soledad Today

SIX DAYS A WEEK AT 9:00 A.M., THE SAUGUS Local is fired up to begin the day's routine. Standard power for the Local is a pair of four-axled units coupled back to back, ranging from GP-9s to SW-1500s. Gemco, on the SP's Coast Line, is home base to the Saugus Local; from there the cars are switched to stations like Sun Valley, Pacoima, San Fernando, and

Sylmar—all on the company's Saugus Line. Beyond Sylmar, the gradient sharpens to 1.6%; the 1.3-mile San Fernando bore, hidden below crisscrossing freeway bridges, looms just ahead; the ascent to Soledad Canyon has begun. The climb tops out near No. 25's west end, dropping upon the Saugus/Newhall area at 2.1%. The Saugus turn graces its namesake town during the lunch hour, often holing up for over an hour to allow the daytime westbound symbol run to proceed undelayed. Yard limits surround the switching leads of Saugus, but the roadbed west of there, although classified as a low-density freight line, is strictly for through trains. Extras dispatched to the Saugus Line require a clearance card listed "Saugus Dispatcher" for the run to Mojave, and one labeled "Valley Mountain Dispatcher" for passage to Bakersfield.

The brunt of Soledad's action takes place late at night, a whopping total of two or three westbounds at best, with daylight hours bringing two additional trains. A westbound out of Los Angeles normally clears Tunnel 25 before 11:00 a.m. Proceeding at prescribed speeds (40 mph between No. 25 and Humphreys, 30 mph through Soledad Canyon to Harold), trains complete their journey from Saugus to Palmdale in roughly 90 minutes. Typically, there is also an afternoon eastbound train through Soledad.



One of the now-gone railfan pleasures was photographing Soledad Canyon from the half-open "dutch door" of a vestibule aboard the San Joaquin *Daylight*, as on this sunny day in spring 1966. Heading the train were six F7 units. —JIM WALKER

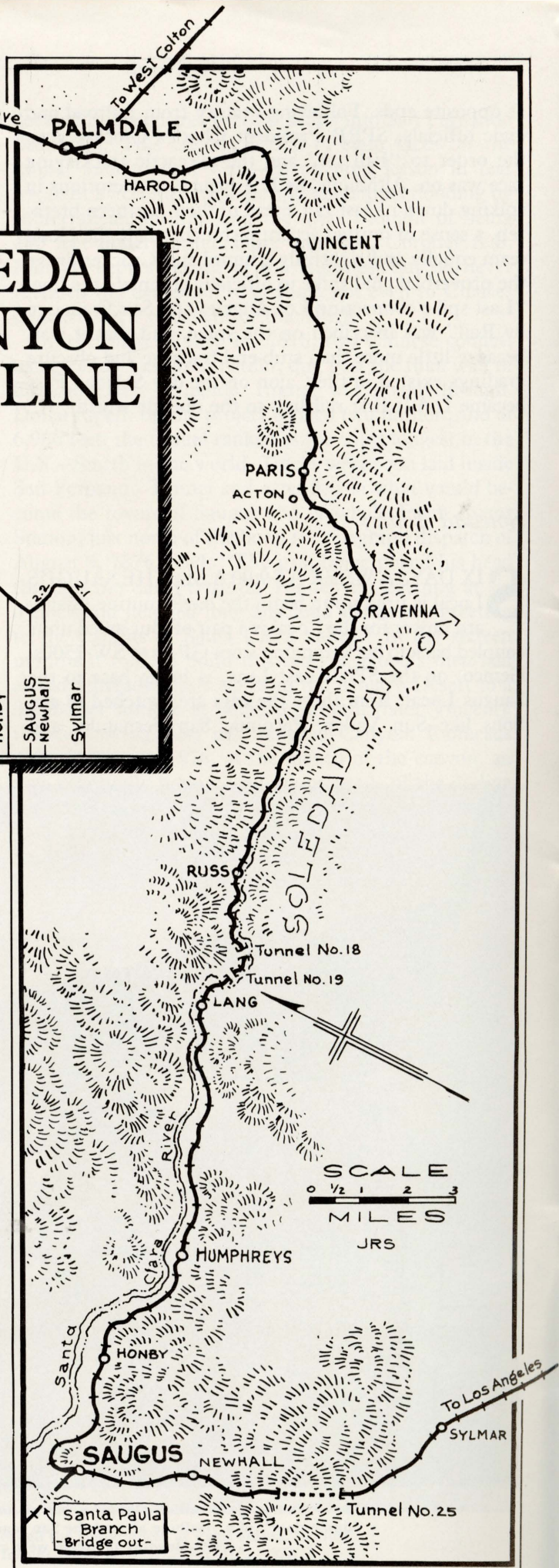
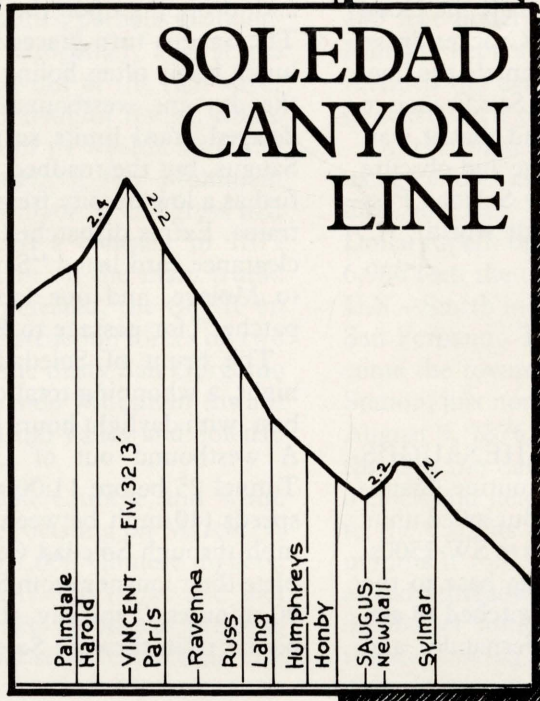
Considering the primitive tools and methods used, construction of the rail line through Soledad Canyon in the 1870s was a major triumph.
 —MAP BY JOHN SIGNOR

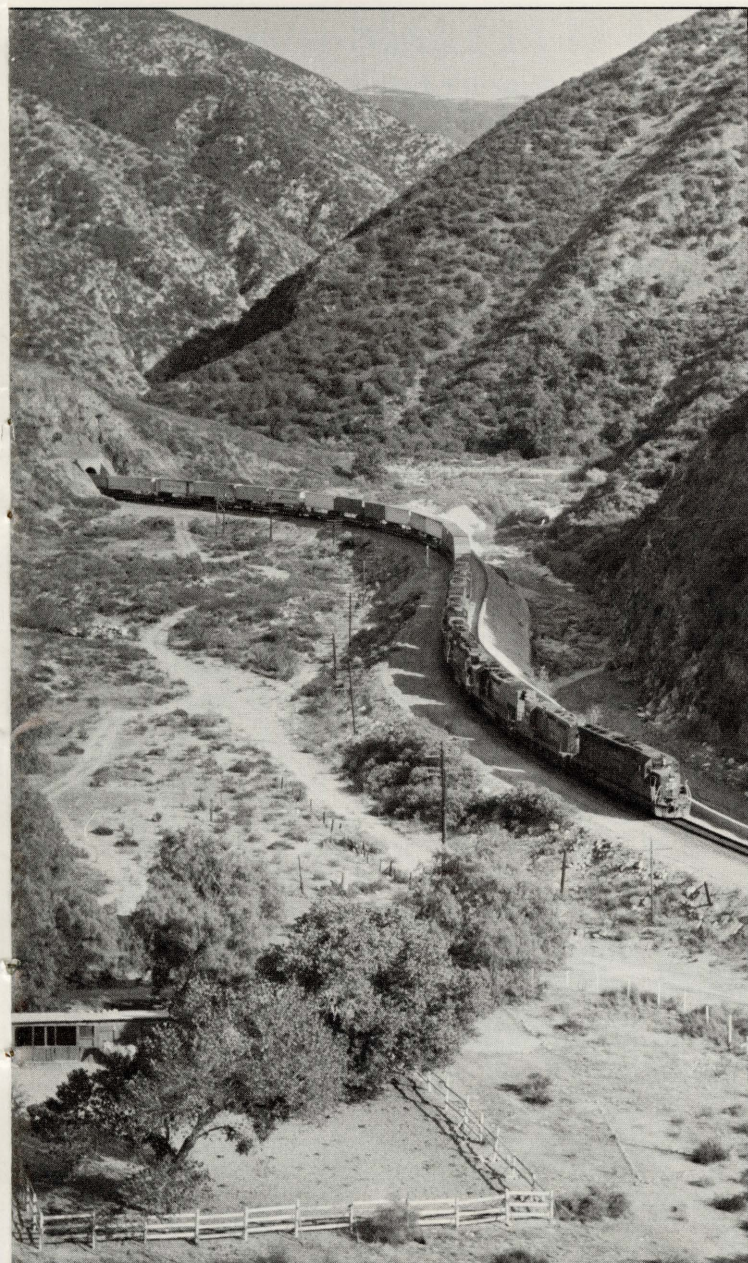
It should be noted that Soledad Canyon aligns westbound trains—west being toward San Francisco, via Bakersfield—into eastward motion between Saugus and Vincent, thus confusing railfans and railroaders alike.

Distributed into this slim, two-trains-per-day schedule (plus the overnight activity) are two designated symbol runs. Anthony Adams, public relations manager at SP's Los Angeles headquarters, reports that today's LABRF (Los Angeles-Brooklyn Yard, Portland) contains assorted forwarder loadings to and from the Pacific Northwest. The LAPTT (Los Angeles-Portland Trailers) has replaced the LABRT on Southern Pacific's train sheet. This purely TOFC/COFC train originates at SP's LATC-Los Angeles Transportation Center, an all-piggyback yard fanning out east from the L.A. River at Mission Tower. In fact, the Saugus Line physically terminates at LATC, giving over to the Alhambra Line, which is SP's main track linking L.A. and West Colton. A common sight in Soledad Canyon is the combined operation of both piggyback and forwarder freight as one train.

From a CTC panel in Bakersfield the chief dispatcher exerts his sovereignty throughout the heavily used Colton Line from Mojave to Palmdale to West Colton. Such a realm of precise pushbutton control ceases at Vincent Summit for there are just too few trains over this crest to warrant CTC, and so Automatic Block Signals meter the flow of trains on the Saugus Line. Just as the Palmdale-to-Colton route is a veritable bridge for east-west long hauls, the Saugus Line is an equally vital shortcut for parallel traffic arriving or departing downtown Los Angeles. The modest fleet of trains now using the Saugus Line might present a major problem if they instead rolled east from L.A. to enter the busy track up Cajon Pass.

Having once been the sole route north of the metropolitan basin, the Soledad Canyon route continues its



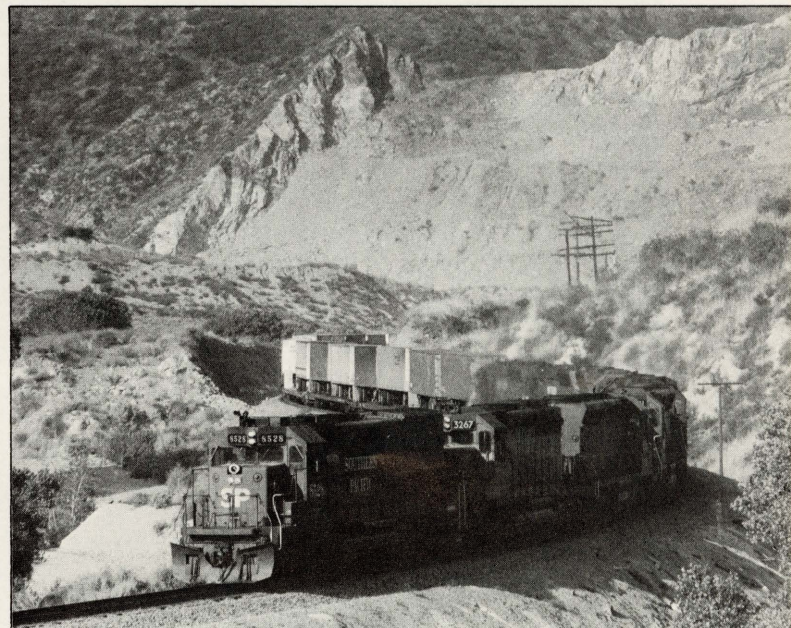


The eastbound *PLATT* follows the Santa Clara River between Tunnels 18 and 19 in Soledad Canyon in September 1983. The flood of March 2, 1938, made a shambles of this area.
—BRUCE KELLY



WESTBOUND TO PALMDALE

Above: The Saugus Local trades loads for empties at Thatcher Glass Mfg. Co., in Saugus. Below: The Westbound *LAPTT* snakes along canyon trackage between Lang and Russ; a UP unit follows the lead locomotive. Bottom: A westbound boxcar/piggyback consist rolls over the 3,213-foot Vincent Summit. These views were taken in August/September 1983. —BRUCE KELLY



usefulness into the 1980s as a corridor for oceangoing containers and fast freight gliding along California's industrial and agricultural spine.

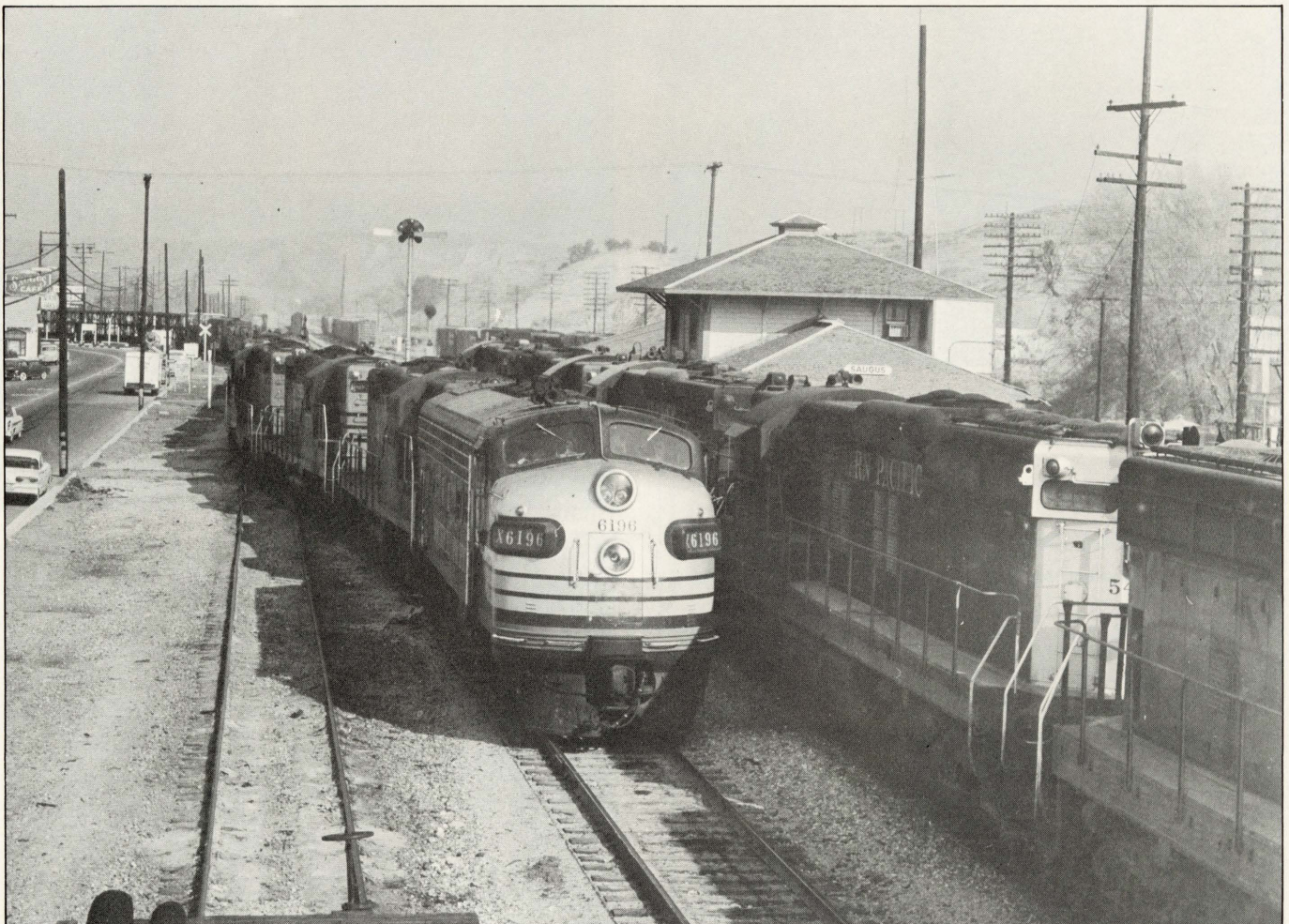
The new Colton route came to the rescue of the Old Road in the aftermath of February 1971's Sylmar earthquake. A 100-foot-high concrete overpass, still in construction stages as part of an interchange from the I-5 "Ridge Route" to the Antelope Valley Freeway collapsed directly onto the Saugus Line below the San Fernando Tunnel (Tunnel 25 in SP's timetable); similar bridge failures blocked locations elsewhere on the line. Tonnage continued to roll from Bakersfield to L.A. by way of Cajon, but Soledad remained closed for four more days of clean-up and repair work.

ON FEBRUARY 27, 1938, SOME OF THE heaviest rainfall in Southern California history swept in off the Pacific in hurricane proportions, filling streams and rivers far beyond their capacity. By the morning of March 2, the storm began yielding its destructive force against critical sections of the Southern Pacific; worst struck was the Soledad Canyon region. A total of 13 miles of track was affected. Between Russ and Lang, where the SP right-of-way hugged the banks of the Santa Clara River, four miles of mainline, including five steel bridges, were torn out by charging flood waters. Sand and debris blanketed three more bridges, and Tunnels 18 and 19, having become temporary culverts for the swollen river, were clogged with several feet of mud. The Valley route over Soledad reopened on March 15, 1938, but not without some necessary remodeling to safeguard against future disasters. New roadbed below Russ siding was moved a considerable distance from the river, and a concrete floodwall erected between Tunnels 18 and 19 still protects an otherwise vulnerable earthen fill.

Further alterations in Soledad Pass came about during 1942-1944. In conjunction with CTC installation elsewhere on the Southern Pacific, 1,400 miles of new rail was laid systemwide. Grade changes and daylighting of tunnels in the Tehachapi, Cuesta, and Soledad Passes eliminated nine original bores. Evidence of these "lost tunnels" can be found in SP's Los Angeles & San Joaquin Divisions timetable, where the surviving tunnels are numerically listed as follows:

Tunnels 1, 2, 3, 5, 7, 8, 9, 10, 14, 15, 16, 17	Tehachapi Pass
Tunnels 18, 19, 25	Soledad Canyon
Tunnels 26, 27, 28	Santa Susana Pass
Tunnel 29	Searles Branch

It is apparent that five additional tunnels had once been part of the Soledad Canyon route, but are now lost to oblivion. The ancient cuts and fills west of Lang fade into a weedy landscape behind the relatively young trackage where today's gray and red diesels make their occasional appearances.



Saugus was a very important junction in February 1963, when fire damage in one of the tunnels at Santa Susana Pass caused diversion of all coast line traffic onto the Santa Paula branch. Train No. 374 is headed off the branch toward Los Angeles. —*JOHN E. SHAW*