

Decision No. 93065 MAY 19 1981

ORIGINAL

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of the State of)
 California, Department of Trans-)
 portation on behalf of the City of)
 Sacramento for orders authorizing)
 the construction of a new cross-)
 ing at grade for a bikeway over)
 the tracks of the Western Pacific)
 Railroad Company's main line track)
 at approximate Railroad Mile Post)
 140.7 and bikeway station 341+08+)
 and for construction of a new)
 crossing at grade for a bikeway)
 over the Western Pacific Railroad)
 Company's minor spur track west of)
 main line Railroad Mile Post)
 139.78 and at bikeway station)
 340+20 in the City of Sacramento,)
 County of Sacramento.)

Application No. 58801
 (Filed April 12, 1979;
 amended April 19, 1979
 and July 16, 1979)

- O. J. Solander and Eugene Bonnstetter, Attorneys at Law, for the State of California Department of Transportation, and City of Sacramento, applicants. ✓
- Eugene J. Toler, Attorney at Law, for the Western Pacific Railroad Company, protestant. ✓
- Robert W. Stich, for the Commission staff. ✓

FINAL OPINION

The California Department of Transportation (Caltrans) requests authority on behalf of and for the City and County of Sacramento, pursuant to Caltrans' authority in Streets and Highways Code Section 2548, to construct bicycle crossings of the

tracks of the Southern Pacific Transportation Company (Southern Pacific) and The Western Pacific Railroad Company (Western Pacific) in the City of Sacramento, Sacramento County, as follows:

1. At grade across Western Pacific's main line tracks at approximate Railroad Milepost 140.7
2. At grade across Western Pacific's minor spur track at approximate Railroad Milepost 139.78.
3. At separated grades under Southern Pacific's main line tracks and 3 yard tracks at approximate Railroad Milepost 89.9.
4. At grade across Southern Pacific's two drill tracks 150 feet and 230 feet, respectively, north of Southern Pacific's main line tracks at approximate Railroad Milepost 89.9.

The bicycle facility will extend from near 16th and B Streets in the City of Sacramento to M Street in Rio Linda, Sacramento County. Caltrans was mandated by the California Legislature to acquire the property for this project in accordance with Streets and Highways Code Sections 2540 and 2548, and Section 3 of Chapter 1130 of the Statutes of 1976. ✓

The City of Sacramento is the lead agency for the construction of the bicycle facility pursuant to the California Environmental Quality Act of 1970 (CEQA), as amended, Public Resources Code, Section 21000 et seq.

After preparation and review of an Initial Study, the City of Sacramento issued a Negative Declaration and approved the project. On October 26, 1977, a Notice of Determination was filed with the Sacramento County Clerk which found that the project will not have a significant effect on the environment. The Commission is a responsible agency for this project under CEQA and has independently evaluated and assessed the lead agency's initial study and Negative Declaration. The site of the proposed project has also been inspected by the Commission staff. Notice of the original application and amendments were published in the Commission's Daily Calendar on April 13, 1979, April 20, 1979, and July 19, 1979, respectively.

The Commission issued an interim order on September 25, 1979 (Decision No. 90858) which authorized construction of a crossing at grade of Western Pacific's minor spur track and Southern Pacific's two drill tracks; the interim order also authorized construction of a tunnel to extend the bike path under the tracks of Southern Pacific's main line, and 3 yard tracks.

Western Pacific protested the proposed at-grade crossing of its main line tracks at approximate Railroad Milepost 140.7. The protest is based on the risk of accidents at the crossing and interference with railroad operations, since long trains will block the

crossing while the trains are parked and waiting for the signal to proceed. The City of Sacramento and the Department are opposed to a crossing at separated grades due to the expense.

A public hearing on the protest was held in San Francisco, California on September 24 and 25, and November 3 and November 7, 1980 before Administrative Law Judge Edward G. Fraser. Evidence was presented by Caltrans, Western Pacific, and by the Commission staff. ✓ Concurrent briefs were filed by all three parties during December 1980.

Testimony from Caltrans' engineer revealed that the route ✓ was chosen over 6 alternates, since it keeps the bike path on top of a levee more than 6 feet high used only by bikers and pedestrians, is one of the more direct routes, and is also comparatively low in cost. He advised that the tracks intercept the bike path at 45 degrees rather than the approved 90-degree angle. He stated that the crossing will be protected by advance warning signs, automatic gates, lights, and bells. It will be necessary to fill in between the tracks with a rubber mat or other solid substance to provide a smooth surface for a moving bicycle. The cost of a tunnel under the Western Pacific tracks was estimated as \$115,000. A railroad bridge over the bike path will cost \$235,000. Cost of an at-grade crossing is listed at \$11,200 for construction and \$47,500 for warning devices and circuits, a total of \$58,700. No estimate was made on maintenance expense.

A police officer from the Sacramento Crime Prevention Unit testified that tunnels usually come with inherent police problems. A tunnel under the Western Pacific main line will be approximately 500 feet from the nearest street. Police cars couldn't get close. Local transients will use it as a live-in area with possible vandals, muggers, juveniles, and others who prefer isolation and darkness. Lighting is uncertain, since bulbs will be broken and tunnels become littered with paper, glass, bottles, and garbage. Bicyclists have poor visibility at times, entering and leaving a tunnel. If confronted suddenly, it would be impossible to turn around and avoid the problem by retreating. The police department favors an at-grade crossing. The bicyclists approach the crossing and can see in all directions. If danger threatens they can retreat. The tunnel presently constructed under the Southern Pacific tracks is accessible from 14th Street or North A Street. It can be illuminated by headlights or a flashlight and is adjacent to a residential area.

The chief of bicycle facilities for Caltrans is a bike ✓
rider. He is also a civil engineer and responsible for the Caltrans ✓
Bike Program. The State Legislature has appropriated \$4,490,000 to
construct bikeways in northern and southern California. Sacramento
was selected in the northern area and \$1,400,000 has been allocated

for this project. All alternate routes were considered and construction of a tunnel (at an estimated cost of \$250,000) was recommended to the California Transportation Commission which has the responsibility for approving the funding on bikeway projects. The funding was denied. He has inspected the proposed at-grade crossing and thinks it is the best alternate proposed. On cross-examination, the witness admitted that the through-town route on existing streets would cost far less, but was considered and rejected because of the hazards involved where bicycles and motor vehicles move together on heavily traveled streets. Another Caltrans employee testified as a representative of the Capitol Bicycle Commuter Association. He testified that the association is in favor of the route and rail crossing proposed by applicant. Its obvious advantage is the separation of bike and motor vehicles. Another advantage is the alignment and location on the levee for most of the route. The city engineer in charge of special projects and bikeway construction testified that he has been involved in this project since 1974. The purpose of a bikeway is to eliminate auto traffic. He estimated that 2,000 riders a year will use the facility, which totals about 80 a day. The witness stated that the bikeway is designed for commuters, not recreational riding. It will extend on top of a levee averaging 5 to 10 feet in height. The path will be 12 feet wide with 3-foot

shoulders on each side, a total of 18 feet. The pavement at the railroad crossing will probably be extended so a bicyclist can cross at an approximate 90-degree angle. An associate engineer in Sacramento's Public Works Department testified that he checked the proposed crossing for visibility from the point of view of an approaching bicyclist. Calculations indicated 300 feet is the required minimum stopping distance for a bike moving at 30 miles per hour. The visibility in both directions exceeds 1,000 feet at the crossing. On July 11, 1979, the train dispatcher told him that approximately 15 trains a day use the crossing; seven or eight of the total during daylight hours. He stated he spent six hours next to the crossing on July 11 and 3 trains passed at 30 to 35 miles per hour, measured by radar. He was told by the dispatcher that trains heading out of Sacramento may proceed as fast as 50 miles per hour. It is his opinion the crossing is safe.

A signal engineer for Western Pacific testified he recommends that gates and movement detectors be installed at the crossing if this application is granted. The total cost of protection and construction within 2 feet outside of the rails was estimated at \$58,700 (Exhibit 10). This estimate does not include work on the approaches or necessary grading. He stated that the flange way at the rails is about 2-1/2 inches wide. The tire on a touring bike is 1 inch wide. Bike tires may catch on the rails which would damage the bike

or throw the rider. The flange way cannot be filled, since the speed and weight of passing trains will disintegrate the filler. The crossing already has special signal boxes which control the movement of the trains towards Sacramento. These signals have to be close to the track so the engineer can see the warning lights on top of the boxes. If gates are installed they will be moved further from the tracks to clear the signal box. This may encourage people to go through or around the gates when they are down.

He stated that vandalism is a serious problem. Lights have been broken, wire stolen, and signals damaged. On one occasion a red light became green due to unauthorized tampering with the train signal. It is one of the worst areas in this State. In other areas where gates are installed, vandals break the gates, or tie them to the post so they cannot descend; lights are broken and equipment is smashed. This crossing is out of town and is unprotected most of the time.

A series of photographs (Exhibits 11a, b, c) were placed in evidence showing a 97-car train parked on the track with 11 cars extending past the proposed crossing. The witness stated that trains transporting grain are usually long and must stop at the American River Bridge, before the train continues on Sacramento Northern and Southern Pacific tracks. The Western Pacific crew dismounts here and

the Sacramento Northern crew takes over. There is a normal 15-to 20-minute delay before the train moves off with its new crew. The train could be parked over the crossing for as long as an hour. If the train was broken to clear the crossing it would delay the train. A study (Exhibit 12) was placed in evidence to show 15 trains passed through the crossing during an average 24-hour day. There could be as few as 12 or as many as 19. The witness stated that the times shown in Exhibit 12 cannot be used as a basis for determining when the train will reach the crossing because the time indicated shows only when the crews start work. There is no indication when the trains will leave the yard. The witness advised that the distance between the proposed crossing and the American River Bridge is approximately one mile. He stated that a 75-car grain train would block the crossing.

A representative of the Western Pacific Railroad Engineering Division testified as follows:

The railroad is opposed to the crossing because it is not safe. All at-grade crossings are dangerous, this one especially so because of the 45-degree angle. As a bicyclist approaches the crossing he must look over his shoulder to check for trains. The crossing is higher than the approaches requiring the bike rider to negotiate an up and down grade at the crossing and distracting

him from approaching trains. Bike crossings are also inherently dangerous. Motor vehicles are usually driven by adults, operators are licensed, and autos and trucks are confined to the roadway. Bicycles are handled by every age from 8 to 80, they are not licensed, and a bike is light enough to be carried anywhere. They can be conveniently pushed around - or under - gates designed to stop an auto.

He stated that the crossing site is 5,000 feet from the American River Bridge and the interchange with Southern Pacific and Sacramento Northern tracks. It is an area where trains are parked while waiting for authority from the dispatcher to proceed. A train of 72 cars will extend through the crossing site. Many of the trains will be longer. The trains are scheduled to conform with the consignee's requirements. Trains could pass the crossing at any time. Speeds will vary from about 60 to less than 45 miles an hour, depending on direction. General merchandise trains usually have less than 50 cars and should not affect the crossing. The transportation of grain requires trains which may have more than 72 cars. Western Pacific is also preparing to transport coal by train to the proposed PG&E coal-fired power plant at Collinsville, on the Sacramento Northern line. This may require 2 or 3 extra round-trip trains a week

on the route. It is estimated that coal trains will require a minimum of 70 cars to ensure a profitable operation. An application has been filed to merge Western Pacific and Union Pacific Railroad Company. If the merger is authorized, two additional round trips will be scheduled every day. Western Pacific is also working with Amtrak on scheduling a daily passenger train in each direction.

The witness produced Exhibit 14 to illustrate a 7-foot high tunnel, 84 feet long, to extend the bike path under the tracks at an estimated cost of \$115,000. A second proposal (Exhibit 15) carries the main rail line of the Western Pacific 8 feet over the bike path on a 16-foot wide bridge, at an estimated cost of \$235,000. Police cars could drive up to this bridge, and its 16-foot width precludes anyone from concealing himself under it.

The witness briefly discussed the 4 alternate bike routes originally proposed, each with several modifications the distances on the routes vary from 1-1/3 to 1-2/3 miles in length. The witness recommended the routes which do not traverse the rail lines on the basis of safety and costs.

On cross-examination, the witness admitted that general merchandise trains will go through the crossing without stopping, that grain unit trains of less than 50 cars will not block the crossing, and that trains coming out of Sacramento would not stop. He further

admitted that the bike path is designed for commuters and will be used primarily from 6:30 a.m. to 8 a.m. and from 4 to 5:30 p.m. five days a week, less holidays. Also, that even if an underpass is constructed under the Western Pacific main line, a second track (Swanston Branch line) next to the main line would still be crossed by an at-grade crossing. He stated that an application will be filed with the Interstate Commerce Commission to abandon this branch line later this year. The line may be abandoned before the work on the proposed crossing is completed. He advised that the approach grades to the tunnel or underpass may be steeper than recommended for bikes, but this can be corrected when the branch line is abandoned.

A staff engineer placed a report in evidence (Exhibit 16) which showed all bike-train crossing accidents in California between January 1, 1975 and March 27, 1980, the date of the last accident report. There were 3 in Los Angeles County in 1976, 1 in Los Angeles in 1977, 1 in 1979 in Riverside County and 1 in San Mateo County in 1980. There were 2 fatalities out of the 6 accidents reported.

The witness placed a letter in evidence from the American River Flood Control District dated September 19, 1980, which stated that the district has already denied the request of the city of Sacramento to put the bike path on the levee on each side of the

proposed crossing. A second letter, dated September 22, 1980, states that the district may not object to a path which crosses the levee if proper access ramps are constructed, but district policy does not favor paths which extend along the top of the levee. The second letter was placed in evidence (Exhibit 18). Counsel for Caltrans stated that Sacramento was denied the use of the levee on a bike path in the city, but the denial was reversed by the State Reclamation Board after a hearing requested by the California Bicycle Association. ✓

Caltrans presented testimony from two rebuttal witnesses. The first witness observed the crossing site from 12 noon to 5:30 p.m. on Thursday, October 30, 1980; only 1 northbound train passed at 3:55 p.m.; it did not stop and took 90 seconds to clear the crossing. On Friday, October 30, 1980, the witness remained at the crossing from 6:30 a.m. to noon and observed 3 trains: One at 6:50 a.m., a northbound, with 55 cars, did not stop and took 90 seconds to clear the crossing. The next train at 7:35 a.m., southbound, with 67 cars did not stop and took 2 minutes to clear the crossing. The third train was not identified. On November 5, 1980, the witness remained at the site from 6:30 a.m. to 5:30 p.m. Eight trains passed, only 2 during commuter hours. One of these at 7:43 a.m., northbound, with 66 cars, mostly boxcars, did not stop and took 2 minutes 20 seconds to pass. The other train, a southbound of ✓

49 boxcars, came by at 5:17 p.m. and did not stop. Seven of the 8 trains were 66 cars or less in length and the average time to clear the crossing was about 2 minutes.

A City of Sacramento engineer testified that the city has plans to construct an additional holding area for Sacramento Northern trains so trains will not be parked at the crossing site. This project has low priority and is scheduled to start in 1984, with completion in 1985. On cross-examination the witness admitted that Western Pacific was never asked whether they want a holding track, although they have been informed of the project.

Discussion

This is a railroad crossing of a bicycle path. No vehicles are involved and it will be used by comparatively few riders in the early morning and late evening. It is a commuter facility and we can infer that unescorted children and family groups will ordinarily not be on the path.

We must, therefore, provide safety at a reasonable cost. Even a grade separation does not ensure against all accidents, since there are a few who will be tempted to liter on the tracks. Warning signs on approaches, good visibility, gates, lights, and bells to warn of approaching trains, with the paucity of train traffic favor

granting this application. Motor vehicle crossings at grade are authorized where vehicle and train traffic are light; this application differs from those circumstances only in that it extends a bicycle path across railroad tracks.

The testimony indicates that a 45-degree angle crossing may be unsafe due to the need for bicyclists to look backwards to approaching trains and the possibility that bicycle tires may catch in the groove of the track. The testimony of the Caltrans witness indicates that the pavement at the railroad crossing can be extended so that a bicyclist can cross at an approximate 90-degree angle. We will require that the site be widened sufficiently to permit a 90-degree crossing to be constructed to eliminate these safety hazards.

Findings of Fact

1. Caltrans and the City of Sacramento are extending a bicycle path from 16th and B Streets in the City of Sacramento, to Rio Linda, in Sacramento County. ✓
2. The proposed bikeway is designed to cross the main line tracks of Western Pacific at grade, at approximately Railroad Milepost 140.7.
3. The bike path was designed for commuters, with most riders using it from 6:30 to 8:00 a.m. and 4:00 to 5:30 p.m., five days a week, less holidays.

4. About 15 trains will traverse the crossing at irregular intervals during a 24-hour period. Train traffic could vary from 12 to 19 daily.

5. Visibility from the crossing site extends along the track for more than 1,000 feet in each direction.

6. The crossing will have railroad crossing signs on both approaches, with automatic gates, bells, and lights at the crossing, to warn of approaching trains.

7. The path crosses the tracks at a 45-degree angle.

8. An 84-foot long tunnel under the track would cost about \$115,000. A 16-foot wide bridge to carry the tracks 8 feet over the path, would cost about \$235,000. An at-grade would cost about \$58,700.

9. Vandalism against railroad property is continuous at the crossing site.

10. A tunnel would be isolated, and difficult for the police to cover. Vandalism, problems with itinerants, possible muggings, and juvenile crime would be likely, if the path goes under the tracks.

11. The City and Caltrans have rejected 5 alternate routes because of the hazard involved where bikes are routed on streets carrying fast-moving auto and truck traffic. ✓

12. The railroad is opposed to at-grade crossings because signals and gates may be damaged or destroyed by vandals, and bike riders may disregard a lowered gate and warning signal.

13. Safety and convenience require that the crossing site be widened to permit bicycle riders to cross the railroad tracks at an approximate right angle.

14. Caltrans does not have permission as yet to extend the bike path along the American River Flood Control District levee, but it is anticipated that the necessary authority will be granted prior to completion of the path.

15. The considerations of expense, restricted use of the proposed crossing by commuters, the irregular spacing of comparatively few trains, and the disadvantages of other alternatives require that the application be granted as provided in the following order.

16. This project will have no significant impact on the environment.

Conclusions of Law

1. The application, as amended, should be granted as set forth in the following order.

2. The order should be effective on date of issuance so that contracts can be let before June 1, 1981, the date present funding expires.

FINAL ORDER

IT IS ORDERED that:

1. The City of Sacramento is authorized to construct a pedestrian and bike path across the tracks of The Western Pacific

Railroad Company's main line in the City of Sacramento, Sacramento County, to be identified as Crossing 4-140.7-D.

2. Construction of the crossing shall be equal or superior to Standard No. 1 of General Order 72-B.

3. Clearances shall conform to General Order 26-D. Walkways shall conform to General Order 118.

4. Protection at the crossing shall be two Standard No. 9 automatic gate-type signals (General Order 75-C).

5. Construction expense of the crossing and installation cost of the automatic protection shall be borne by applicant.

6. Maintenance of the crossing shall conform to General Order 72-B. Maintenance cost of the automatic protection shall be borne by applicant..

7. The crossing site shall be widened and prepared in such a manner that bicycle riders can cross the railroad tracks at an approximate right angle.

8. Construction plans of the crossing approved by The Western Pacific Railroad Company, together with a copy of the agreement entered into between the parties involved, shall be submitted to the Commission prior to commencing construction. ✓

9. Within 30 days after completion, pursuant to this order, applicant shall so advise the Commission in writing. ✓

10. This authorization shall expire if not exercised within two ✓
years unless time be extended or if the above conditions are not
complied with. Authorization may be revoked or modified if public
convenience, necessity, or safety so require.

This order is effective today. ✓

Dated MAY 19 1981, at San Francisco, California.

John E. Guyer President
Richard W. Powell
Samuel M. Jones
Arthur Castro
Francis C. Yuen Commissioners