

Decision No. 24693.

BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of  
the City of Palo Alto for an Order on  
the Railroad Commission of the State  
of California Installing Gates at the  
Crossing of Embarcadero Road with the  
Tracks of the Southern Pacific Company  
in said City.

**ORIGINAL**

Application No. 17071.

Norman E. Malcolm, City Attorney, Frank L.  
Crist, Assistant City Attorney, and  
J. F. Byrbee, City Engineer, for the  
City of Palo Alto.

H. W. Hobbs, Attorney, for Southern Paci-  
fic Company.

WHITSELL, COMMISSIONER:

O P I N I O N

In this proceeding the City of Palo Alto seeks an order directing that the grade crossing of Embarcadero Road with Southern Pacific Company's main line tracks, in the City of Palo Alto, be protected by crossing gates.

A public hearing was conducted at Palo Alto on April 1st, 1932, at which time the matter was taken under submission.

At the hearing the city modified its original application for gate protection at this grade crossing by specifying "manually controlled gates" instead of the more general term "crossing gates," which would include either manual or automatic gates. The city specifically stated that it did not desire the automatic type of gate protection for this crossing.

The city's plan for manual gates is shown on its Exhibit No. 3, which provides for a double set of crossing gates on each side of the railroad. In addition to special lights on each gate arm, the city proposes to have the arms illuminated with flood lights. No estimates of cost of construction or maintenance and operation hereinafter referred to as the maintenance costs were presented by applicant to cover the proposed installation. Southern Pacific Company's signal engineer, however, testified that it would cost approximately \$4,400. to install the gates planned by the city and that the annual maintenance costs would be approximately \$2,700.

The record shows that the Embarcadero Road crossing accommodates a comparatively large volume of vehicular traffic, a considerable part of which consists of students traveling to and from the Stanford University and the Palo Alto High School, located to the southwest of the crossing, the residential section of the city being located on the northeasterly side of the railroad.

Witnesses for the city testified that in their opinion the most desirable and effective type of protection for this crossing, if it is to remain at grade, was manual gates, taking the position that if the gates were manually controlled, highway traffic would be interfered with only when there was an impending danger of an approaching train, and in cases where there was a switching move or other operation on the track, which approached but did not cross the highway, the gate operator would be in a position to close the gates across the highway only when necessary.

Southern Pacific Company's Exhibit No. 8 consists of a report of an engineering committee dealing with the matter of proper protection for the grade crossing under consideration, as well as the grade crossing of California Avenue with Southern Pacific Company's tracks. This committee was composed of representatives of

the Engineering Departments of the City of Palo Alto, Southern Pacific Company and the Commission. The recommended protection for the grade crossing of Embarcadero Road consists of three flashlight signals with rotating stop banner, commonly referred to as the Griswold type, together with the recommendation that the City of Palo Alto, in so far as it reasonably could do so, have a traffic officer patrol the crossing during times when students were crossing the track, morning, noon and night, this plan of protection to replace the present type consisting of one wigwag and a human flagman for a period of sixteen hours per day.

Southern Pacific Company is opposed to the city's plan to install manually operated gates, taking the position that this type of protection is not in keeping with modern methods of protecting grade crossings and is on the decrease throughout the United States. The company's Exhibit No. 9 shows that during the five-year period 1925 to 1930, inclusive, the number of manually operated gate protected crossings has decreased about 21 per cent, whereas the number of crossings protected by automatic signals during this time has increased nearly 100 per cent. Exhibit No. 10 shows the result of a study by the company of accidents occurring at various grade crossings on the line between San Francisco and San Jose, which develops that, on the whole, more accidents involving trains and automobiles have occurred at gate protected crossings than at those equipped with double automatic signals, to the effect that, on the average, the time between accidents at those particular crossings protected by gates was 2,932 days, whereas at the signal protected crossings the time was 3,111 days. It should be pointed out that while this evidence is worthy of consideration, the accident record, by itself, is not complete unless other factors are considered, such as volume and speed of traffic on both the highway and railroad and physical conditions.

The company estimates that it will cost approximately \$4,860. to install the flashlight signals with rotating stop banner, as proposed in the engineering committee's report referred to above. The maintenance of the signals recommended in this type of protection is estimated at about \$150. a year. The expense of maintaining the present protection at this crossing amounts to approximately \$1,800. a year.

It is the company's contention that the proposed automatic signals are in accordance with the established practice of regulating traffic on public highways, including grade crossings, and that it cannot be expected to do more than give the motorists reasonable and adequate warning of an approaching train and, therefore, its obligation should not go to the construction of barriers across the highway in an attempt to force vehicular traffic to stop when a train is approaching.

As a fundamental principal in prescribing grade crossing protection, we must give first consideration to an effective and economical means of reducing hazard in the interest of saving human lives. It is recognized that one of the reasons the company desires automatic signal protection, as is recommended by the engineering committee, to replace the existing crossing protection or as a substitute for the city's plan for manual gate protection, is that the maintenance of the automatic signals will be much less than that of either of the other forms of protection. The record in this case, however, goes further than proving that the proposed automatic signals are the more economical to operate, as it is shown that they are both practical and effective in preventing grade crossing accidents.

In considering the grade crossing problem at any particular crossing, we must not lose sight of the entire grade crossing situation in this state. It is not in public interest to prescribe an expensive type of protection at a few crossings which may have

the effect of deferring needed protection at other crossings equally deserving of some type of signals, as it must be recognized that the money available for grade crossing protection should be spent where it will perform the greatest public service. This especially is true unless it is shown that as a result of special conditions the type of protection with low operating costs is not appropriate.

The record shows that the ideal solution of reducing hazard at this grade crossing would be by means of a grade separation; that treatment, however, would require the expenditure of a considerable sum of money. The Commission, by its Decision No. 20456, dated November 13th, 1928, in Application No. 14323, granted authority for a separation at this particular location which the city has not exercised. Continuing as a grade crossing, the highway traffic crossing the tracks at this location should be afforded reasonable and adequate advance warning of an approaching train. When such warning has been given, it is incumbent upon the driver of a vehicle to do his part, in the way of recognizing this signal; in fact, Section 114 of the Motor Vehicle Act provides that it shall be unlawful for a motorist to cross railroad tracks without first coming to a complete stop when a signal is being displayed at a grade crossing indicating the immediate approach of a train.

After carefully considering the record in this proceeding, it is concluded that the appropriate type of grade crossing protection to be provided at this crossing is the automatic signal installation recommended in the report of the engineering committee and shown as Exhibit No. 8 in this proceeding, as this plan is in keeping with present-day practice of controlling highway traffic

throughout the country and the city has not shown that its plan of protecting this crossing is of a superior type. On the other hand, weight should be given the expressed desires of the city officials representing the people who are most concerned with the safety of this particular crossing. The city officials, by resolution, have indicated their desire that the crossing be protected by manually operated gates, notwithstanding their high maintenance expense. The Commission is reluctant to oppose the carrying out of the city's request in this matter, provided the city is willing to bear all maintenance cost over and above that estimated for said automatic signal system, as there is nothing in the record to show that the city's plan would result in an unsafe condition. The order, therefore, will provide that unless the city, within ninety (90) days from the date hereof, presents an acceptable plan of financing the greater portion of maintenance cost of the gate protection it has proposed, the company, at its own expense, will be directed to install and maintain traffic signals substantially in accordance with the plan shown on Exhibit No. 8 in this proceeding, with the urge that the city carry out its part of fulfilling the recommendations of said engineering committee, particularly in the way of providing uniformed officers to protect the crossing during times when the students cross the tracks, morning, noon and night.

The following form of order is recommended.

#### O R D E R

A public hearing having been held on the above entitled proceeding, the matter being under submission and now ready for decision,

IT IS HEREBY ORDERED that:

A. Southern Pacific Company shall install and maintain manual gates for the protection of the grade crossing of Embarcadero

Road with its tracks in the City of Palo Alto under the following conditions and not otherwise:

- (1) The entire expense of installing said manual gates shall be borne by Southern Pacific Company.
- (2) The expense of maintaining said manual gates shall be divided between the city and company on the following basis; the City of Palo Alto shall pay to Southern Pacific Company the sum of Two Hundred Dollars (\$200) per month toward the maintenance of said manual crossing gates and Southern Pacific Company shall bear the remainder.
- (3) The City of Palo Alto, within ninety (90) days from the date hereof, shall file with the Commission, for its approval, a plan of financing its portion of the maintenance cost of said manual crossing gates. This plan, before being filed with the Commission, shall be submitted to Southern Pacific Company for its approval. In the event the company fails to approve said plan, the reason given for such action shall be reported to the Commission at the time the city's plan is offered.
- (4) Upon the approval of a plan of financing, Southern Pacific Company shall prepare plans and specifications for said manual gates which shall be approved by the City of Palo Alto and filed with the Commission for its approval within sixty (60) days from the date upon which the financing plan is approved.
- (5) Upon receiving approval of the plans for the construction of said manual gates, the company forthwith shall begin the construction of said gates and pursue the work in a diligent manner to its completion.

B. In the event the City of Palo Alto elects not to comply with the terms of Condition (3) of Paragraph A of this Order, Southern Pacific Company shall install and maintain, for the protection of said Embarcadero Road crossing, a system of automatic flash-light signals with rotating stop banner and equipped with two-train indicators. Said signals shall be constructed substantially in conformity with the plan set forth in said Exhibit No. 8, under the following conditions:

- (1) Southern Pacific Company, within one hundred twenty (120) days from the date hereof, shall file with the Commission, for its approval, plans and specifications for the construction of said automatic signals, said plans to bear the approval of the City of Palo Alto or a statement why such approval is not given.
- (2) Upon receiving the approval of the Commission, Southern Pacific Company shall begin the construction of said automatic signals, which shall be completed and in operation within ninety (90) days from the date of receiving the Commission's approval of the plans.
- (3) The entire expense of constructing and maintaining said automatic signals shall be borne by Southern Pacific Company.
- (4) Upon placing said automatic signals in service, the existing protection shall be discontinued.

The Commission reserves the right to make such further orders in this proceeding as to it may seem right and proper if, in its judgment, public convenience and necessity demand such action.

The foregoing Opinion and Order are hereby approved and ordered filed as the Opinion and Order of the Railroad Commission of the State of California.

Dated at San Francisco, California, this 18<sup>th</sup> day of April, 1932.

C. J. Seaver  
Leon White  
M. A. ...  
M. B. Harris  
Fred G. Stewart  
 Commissioners.