

Decision No. 25882.

BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA.

In the Matter of the Application of
the People of the State of California,
on relation of the Department of Public
Works, for an order authorizing the
construction of a crossing at separated
grades of the State Highway and the
tracks of the Southern Pacific Railroad
at McConnell Station, Sacramento County.)

ORIGINAL

Application No. 17928.

Frank B. Durkee, for Applicant.

H. W. Hobbs, for Southern Pacific
Company, Protestant.

BY THE COMMISSION:

O P I N I O N

In this application the Department of Public Works, Division of Highways, requests authority to separate an existing grade crossing with the tracks of Southern Pacific Company, in the vicinity of McConnell Station, Sacramento County. A public hearing was conducted by Examiner Hunter at San Francisco on March 28, 1933.

The proposed grade separation is on State Highway Route No. 4, which is the main north and south highway route between Sacramento and Los Angeles through the San Joaquin Valley. This road carries an average daily traffic of about 2,500 vehicles and is also a portion of U. S. Route No. 99, which is one of the main north and south highways between the Canadian Border and the Mexican Line. At present it crosses a main line of Southern Pacific Company at McConnell Station, between Sacramento and Stockton, over which there are now

operated five passenger and five freight trains daily with extra passenger and freight trains during times of peak travel. This train traffic is materially less than it has been in the past few years; in 1931 there were some twenty trains operating over this crossing daily. The existing crossing is at grade and in this application the State proposed to construct a separation at the same location by carrying the highway under the railroad.

The highway approaches the tracks at McConnell from the north on a long tangent, making an angle of approximately 25 degrees with the railroad. The tangent continues for about 800 feet beyond the track where the road curves to the right on a 2000-foot radius curve. About 1600 feet south of the crossing both the railroad and the highway cross Cosumnes River. There are two tracks at the point of crossing, one being the main line and the other a passing track, both of which are within the limits of the dispatcher control district of the railroad between Stockton and Brighton. The switches to this passing track are operated by the dispatcher located at Stockton and trains entering and leaving the passing track effect meets with trains on the main track without stopping. Under this system the conditions are similar to double track operation, excepting that trains normally operate on both tracks in either direction. The south switch of the passing track is located about 1000 feet south of the crossing and the track is approximately 6000 feet in length, having a capacity for a 130-car train.

The protection at this crossing consists of two automatic wigwags equipped with second train indicators, maintained by the railroad, and two distinctive illuminated overhead railroad warning signs and pavement markings, maintained by applicant.

While the surrounding territory is for the most part open, there are some obstructions to the view at this crossing caused

principally by a small station building and stock corrals. The acute angle of the crossing also adds to the hazard. The record shows that there have been three accidents at this point since January 1, 1926, none of which resulted in casualties but in one instance the vehicle was a total loss.

Both the applicant and Southern Pacific Company have made comprehensive checks of the delay to highway traffic caused by the existence of this grade crossing. The study made by the Division of Highways is based on a complete check of all vehicles using the crossing for an entire week and, in addition to the delays caused by trains blocking the crossing and the delay to trucks and busses making the statutory stops, this study also includes an item which is termed "Caution Delay," consisting of the loss of time incurred by motorists who slow down because of the fact that they are approaching a grade crossing. By applying certain ratios which were developed, the data contained in this check have been expanded to cover a year's operation of trains and vehicles over the crossing and, in Exhibit No. 26, applicant finds that the total delay to highway traffic in the year 1931 at this crossing was 39,066 vehicle minutes, or 661 vehicle hours.

Southern Pacific Company questions the necessity for a grade separation and presented an economic study, Exhibit No. 38, in which it purports to show that the total monetary advantages, such as elimination of delays, accidents, and the cost of maintaining and protecting the crossing, amount to only \$850 a year, whereas the maintenance, operation, depreciation and interest on investment of a subway would vary from \$5,000 to \$9,500, depending upon the type and width of the grade separating structure.

In computing the cost of delay the railroad has not included all of the delay which applicant's study reveals and has based its

value on a purely theoretical price per minute abstracted from Johannesson's "Highway Economics."

Because there have been no casualties at the McConnell Crossing, the railroad, in its economic study, makes no monetary allowance for such an item. While the actual accident record of a particular crossing over a period of years may give some indication of the probable number of accidents that will occur, it cannot be considered as the sole test in a forecast of casualties. The probability of an accident resulting in a casualty should be based upon past experience over a period of years with a large number of crossing accidents. The Commission's records indicate that at state highway crossings one grade crossing accident in seven results in a fatality and in seven-tenths of such accidents someone is injured. If these ratios are applied to the record of the McConnell Crossing, a much higher monetary value of accidents will be reached than that presented by the railroad.

Several plans for effecting a grade separation at McConnell are presented in the record. Consideration to both a subway and an overhead structure has been given by the railroad and estimates for two-lane and three-lane structures were presented. A summary of the various plans and estimates of cost of a separation at this location is given in the following table:

Exhibit	Number of Plan	Est.	Type	Road-way Width	Other Details	Estimated Cost	Prepared by
						Highway	Southern Pacific
6	6		Subway	34	Existing tracks only.	\$115,483	-
6	6		"	34	One future track.	126,126	-
6	7		"	24	Existing tracks only.	96,536	-
40	39		"	34	Existing tracks only; no raise of tracks.	-	\$107,320
40	40		"	34	Existing tracks only; 3' raise of tracks.	-	110,500
43	43		Overhead	34		-	87,154
43	44		"	24		-	70,280

The Division of Highways proposes that a subway 34 feet in width be constructed, that being the width of roadway provided on bridges along this portion of Route No. 4, with the intention that eventually the present 20-foot pavement will be widened to 30 feet. While subways of lesser widths have been constructed and carry large volumes of traffic, such installations have generally occurred on highways of lesser importance, or inside of cities where traffic generally moves under control and at slower speeds.

With respect to the question of whether the highway should be carried over or under the tracks, we believe that so far as fulfilling its obligation to provide a safe and adequate crossing with its tracks is concerned, participation by the railroad should be based upon the construction of an overhead, as such a separation can be effected at a lesser cost by avoiding underground water conditions.

The record in this proceeding, from a strictly economical point of view, does not appear to justify the construction of the proposed separation at this time. However, we must look into the future in constructing highways, both for capacity and safety. There is no question but what both of these elements will be met through the construction of the proposed separation and if applicant has the finances available and is desirous of effecting a separation at this point, the Commission should not deny it the right to make this improvement. While the railroad is not opposed to the granting of this application, it takes the position that its direct monetary benefit from a grade separation is very slight and its assessment should be based on such benefit. It is apparent that one of the chief reasons for a grade separation at McConnell is the presence of the railroad's passing track with its attendant hazard and delay, and in passing upon the question of apportionment of

cost, we must give due consideration to this factor as well as the railroad's direct and indirect benefits and other obligations. The record clearly shows that if the proposed separation is constructed the railroad will receive some direct benefit through the elimination of accidents, with their attendant expense in the way of awards for casualties and property damage, as well as the elimination of maintaining existing automatic protective devices. The railroad also will receive some direct benefits through having exclusive use of the tracks over the roadway, whereas at present it must divide the use of this crossing with vehicular traffic.

After carefully considering the record it is concluded that the railroad should contribute a lump sum of Fifteen Thousand (15,000) Dollars towards defraying the expense of constructing a suitable and adequate separation at this point, the remainder to be borne by applicant. Applicant will be permitted to select the type of separation, to be approved by the railroad and subject to the approval of this Commission, and the following order will so provide.

O R D E R

A public hearing having been had in the above entitled application and the matter being under submission and ready for decision,

IT IS HEREBY ORDERED that the People of the State of California, on relation of the Department of Public Works, Division of Highways, are hereby authorized to construct Highway Route No. 4 at separated grades with the main line track of Southern Pacific Company at a point within the vicinity of McConnell Station, Sacramento County, and at the location more particularly shown by the

map attached to the application, subject to the following conditions and not otherwise:

- (1) If the Division of Highways elects to construct a subway at this location, the grade separation shall be identified as Crossing No. D-119.6-B. If an overhead structure is constructed, said grade separation shall be identified as Crossing No. D-119.6-A.
- (2) Southern Pacific Company shall contribute Fifteen Thousand Dollars (\$15,000) towards the cost of construction of said separation. The entire remaining cost of construction shall be borne by applicant.
- (3) Prior to the beginning of construction Applicant shall file with the Commission a copy or copies of an agreement or agreements with Southern Pacific Company covering the terms of construction and maintenance of said grade separation.
- (4) Prior to the beginning of construction applicant shall file with the Commission, for its approval, a set of plans for said grade separation, which plans shall have been approved by Southern Pacific Company.
- (5) Said grade separation shall be constructed with clearances conforming to the provision of this Commission's General Order No. 26-C.
- (6) Applicant shall, within thirty (30) days thereafter, notify this Commission, in writing, of the completion of the installation of said grade separation and of its compliance with the conditions hereof.
- (7) The authorization herein granted shall lapse and become void if not exercised within one (1) year from the date hereof, unless further time is granted by subsequent order.
- (8) The Commission reserves the right to make such further orders in this proceeding if, in its judgment, public convenience and necessity demand such action.

The effective date of this order shall be twenty (20) days from the date hereof.

Dated at San Francisco, California, this 10th day of

May, 1933.

C. C. Seawey
Leon Seawey
W. A. ...
M. B. ...
M. ...
Commissioners.