Decision No. 2021.

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 ENGINEER-ING for permission to construct a State Highway Crossing under the track of Southern Pacific Company and Central Pacific Railway Company, near Andora, about one mile northerly from the city limits of Roseville, Placer County, California.

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Application No. 1061.

George D. Squires, for Southern Pacific Company, C. C. Carleton, for State Highway Commission.
GORDON. Commissioner.

OBINION

This is an application made by the State Highway Commission for permission to construct an undergrade crossing at a point about a mile north of Roseville, to replace a crossing at present in existence about four hundred (400) feet south of the proposed crossing. There was no question raised at the hearing regarding the advisability of this undergrade crossing and there is no question in my mind but that advantage should be taken of the physical characteristics of the country and the grades separated at this point. Some attempt had been previously made to adjust this matter informally, but there existed a pronounced difference of opinion between the Railroad Company and the Highway Commission regarding the character of the proposed under-crossing and the division of expense of the same between the two parties concerned.

The original plan made for this crossing by the Highway Commission was for a right-engle subway, but after a study of different types of construction, a forty-five (45) degree skew subway

was adopted as being better suited for a highway of the character of this one, and the application was made for a crossing at that angle.

There are two reatures to be considered: First, the angle at which this crossing is to be made; second, the matter of the division of expense between the parties interested.

Regarding the first: this state highway will be the main road running from Sacramento to the north It will be very much traveled and the crossing should be built of a type which will serve the best interests of all concerned. Once built, it will remain for very many years, and there is no question in my mind but what the skew crossing in comparison with a crossing at right angles with the track is much more desirable and much the better type of construction as far as the highway is concerned. It is true that as far as the Southern Pacific Company, alone, is concerned, a right-engle crossing would answer for the requirements of the railway. But the difference in cost as between a cheaper right-engle crossing and one which will be satisfactory to both the reilroad company and the State is comparatively small, and it is my opinion that the skew crossing is by far the better investment.

Estimates made by the Highway Commission, covering these crossings, show about \$12,500.00 to be the cost of a right-angle crossing and about \$15,700.00 to be the cost of the crossing skewed at an angle of 45 degrees with the track. These figures are the estimates submitted for a double track substructure and single track bridge plus the cost of additional steel for a second track. The estimate of the Southern Pacific Company for the right-angle crossing is \$10,110.00 and for the skew crossing, \$16,670.00.

There is no considerable difference between the two estimates.

They seem to be based upon about the same sort of construction and

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for the purpose of this opinion I will consider the right-angle crossing as costing \$11,500.00 and the skew crossing as costing \$15,000.00.

These figures show there is but \$4,500.00 difference between the cost of the skew crossing and the right angle crossing.

I find, therefore, that the type of construction to be adopted should be that of the skew crossing.

It was testified by Southern Pacific Company witnesses, and admitted as reasonable by the Highway Commission, that a second track would in a short time be built at this point and that the subway should be built to care for this future construction, and the cost should be considered in this connection. The approximate estimates, as noted above, are based upon a double track structure, and I think it proper to consider the cost of the second track bridge as being part of the cost of the subway.

There now remains to be considered the division of expense between the two parties at interest. When the plans comtemplated a right-angle crossing the Southern Pacific Company expressed its willingness to bear one-half (1/2) of the total cost. It feels, however, that since in its opinion the right-angle crossing will serve the purpose of grade separation as well as the skew crossing, it should not be called upon to bear more than one-half (1/2) of the estimated cost of such right-angle crossing.

No hard and fast rule can be made in cases of this kind. In this instance the construction of a subway will do away with the grade crossing at present in use, to the south of this proposed crossing, and the abolition of this grade crossing considered alone would probably be worth to the Southern Pacific Company half the entire cost of this proposed skew subway. It is my opinion, however, that it would not be fair to assess to the rail-

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way company an even one-half (1/2) or such additional expense as will be incurred principally for the benefit of the State highway. And this additional expense is represented by the difference in cost between the right-angle and the skew crossing.

I find that it would be equitable for the Southern Pacific Company to pay, in this case, one-half (1/2) the estimated
cost of the right-angle crossing and one-quarter (1/4) of the
difference between the estimated cost of the right-angle crossing
and the actual cost of the skew crossing. The Highway Commission,
of course, will be required to pay the difference, and this I will
recommend.

I recommend the following form of order:

ORDER

People of the State of California on Relation of the Department of Engineering, hereinafter called the State Highway Commission, having on April 1, 1914 made application to the Commission for permission to construct its highway under the track of the Southern Pacific Company, a corporation, and Central Pacific Railway Company, a corporation, near Andora, about one (1) mile northerly from the city limits of Roseville, Placer County, California, shown more particularly on the map and profile accompanying the application; and a public hearing having been held, at which all interested parties were represented; and it appearing that this application should be granted under certain conditions hereinafter specified;

IT IS HEREBY ORDERED, That the State Highway Commission be, and the same is hereby, authorized to construct a state high-way under the track of the Southern Pacific Company, at or near the point shown on the map attached to the application, subject to the following conditions, and not otherwise:

- (1) This crossing shall be a subway or undergrade crossing constructed at the point shown on the map attached to the application, subject, however, to a slight variation either north or south along the track, as later surveys and estimates shall determine the most economical location.
- (2) Said crossing shall be constructed at an angle of fortyfive (45) degrees with the track of the Southern Pacific Company,
 but bridge seats for girders of the bridge shall be constructed

 10 form angle of ninety (90) degrees with the track of Southern Pacific Company.
- (3) Seid crossing shell be constructed so that all clearances shell conform to the Commission's General Order No. 26.
- (4) Said crossing shall provide for two (2) tracks for the Southern Pacific Company, and the expense of providing for the second track shall be considered as part of the cost of the subway.
- (5) The cost of the subway or undergrade crossing shall be borne as follows: Southern Pacific Company and the State High-way Commission shall each pay Five Thousand Seven Hundred and Fifty Dollars, (\$5,750.00), or one-half (1/2) of an estimated cost of a right-angled crossing of Eleven Thousand Five Hundred Dollars, (\$11,500.00), and all cost in excess of this estimated cost of \$11,500.00 shall be borne one-quarter (1/4) by the Southern Pacific Company and three-quarters (3/4) by the State Highway Commission.
- (6) The present grade crossing about four hundred (400) feet south of the proposed crossing shall be legally closed and abandoned as a public highway crossing.
- (7) The Commission reserves the right to make such further orders relative to the location, construction, operation, maintenance and protection of said crossing as to it may seem right and

proper, and to revoke its permission if, in its judgment, the 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 74 day of December, 1914.

Commissioners.