

Decision No. 17588

BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA

In the matter of application of NORTH-  
WESTERN PACIFIC RAILROAD COMPANY, for  
an order authorizing the relocation of  
single track at grade and the construc-  
tion of a second track at grade on and  
along Second Street and across "B", "C",  
"D" and "E" Streets, in the City of San  
Rafael, County of Marin, State of Calif-  
ornia.

**ORIGINAL**

Application No. 12917.

Ralph W. Palmer, for Applicant,  
Jordan L. Martinelli, for City of San Rafael  
on behalf of applicant,  
Joseph K. Hawkins, for Mrs. Catherine Walsh,  
Protestant,  
Mrs. Mary Zappetine, Protestant in propria persona,  
Mrs. Rose E. Dias, Protestant in propria persona.

BY THE COMMISSION:

O P I N I O N

This is an application by Northwestern Pacific Railroad Company for an order authorizing the relocation of the present single track of its Suburban Electric Line to San Rafael at grade and the construction of a second track for said line at grade on and along Second Street and across "B", "C", "D" and "E" Streets, in the City of San Rafael, County of Marin, State of California.

A public hearing was held at San Rafael on September 8th, 1926, before Examiner Austin, at which time the matter was submitted.

The Northwestern Pacific Railroad Company serves San Rafael with two lines of electric railroad operated by propulsion

current carried at a voltage of 600 volts along a third rail which is approximately 4' 8" from the center line of track and 6" above top of track rail. The most important of these two lines, which is the one under consideration in this proceeding, enters San Rafael from the West by way of San Anselmo. The other line enters San Rafael from the Southeast via Greenbrae and does not traverse the streets covered by this application.

The Northwestern Pacific Railroad operates on Second Street in San Rafael under rights granted by the Board of Supervisors of the County of Marin on February 8th, 1873, to North Pacific Coast Railroad Company, predecessor in interest of the Northwestern Pacific Railroad Company. The minutes of that date show the following proceedings:

"Minutes of Board of Supervisors, Marin County,  
February Term 1873 - Saturday, Feb. 8, 1873.

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Under the application of the North Pacific Coast Railroad Company, San Francisco, February 8th, 1873, to the Honorable Board of Supervisors of Marin County.

The North Pacific Coast Railroad Company have completed the line of survey of the road into and through the village of San Rafael the street through which the line is surveyed is Second Street, from the head of said street when it abutts against the lot occupied by the wood yard of Isaac Shaver and thence down through the length of said Street, said Company now petition your Honorable Board to be allowed to lay down its line of road through said street and your petitioner will ever pray, etc.

The North Pacific Coast Railroad Company.

(Signed) A. D. Moore, President.

Ordered by the Board that said petition be and the same is hereby allowed."

It is to be noted that the rights, though granted to a Company operating a narrow gauge railroad, do not specify the kind

of railroad or the motive power to be used. Although Mr. James K. Hawkins, representing Mrs. Catherine Walsh at the hearing, stated that he believed this franchise was amended to cover electric operation in 1903 by the City of San Rafael, the applicant has advised the Commission that it does not find any record of such change or amendment.

There appears to be two matters before the Commission in this proceeding; first, the construction and relocation of crossings across certain streets; second, the safety to the public in constructing the double track operated by third rail in and along Second Street. These two matters are so related that the first can only be granted in conjunction with the second. The matter of establishing the crossings will be discussed first. It appears from the testimony and the report of Assistant Engineer, L. R. Kessing of the Commission's staff, that the individual crossings are described as follows:

At "B" Street it is proposed to shift the tracks slightly to the north, in order that travel on the southerly side of Second Street may enter "B" Street without crossing the track as is now necessary with the single track in its present position. This re-arrangement will do away with the necessity of the present Second Street crossing which is narrow and in very poor condition.

The existing "B" Street crossing is Type 3 construction of plank with guard rail and is in good condition although the asphalt paving along the northerly edge of the planking is broken down and needs repairing. There are rooming houses on all four corners of the crossing, which cut off the view until one has passed the property line. The street grades are 2-1/2 per cent on each side of the present crossing. The present single track crosses the street intersection on a 10° curve. The proposed double track crossing will be on a 17° 30' curve with the same street gradients. The street is paved the full width between curbs

and the plank crossing extends the full width of the paving.

The crossing at "C" Street is of Type 2 construction, of plank with gravel filling and is only sixteen feet wide. The crossing needs gravel, is in poor condition and needs widening. The street is of macadam construction and paved from curb to curb. The present crossing has a level approach 24 feet to the north, then up on a 7% grade. It has a 5-1/2% down grade to the South for about thirty feet. It is proposed to lower the tracks across "C" Street almost two feet which give a straight 7% grade on the North side and a level grade on the South side of the crossing. There are houses on three corners of this street intersection and a lot with a cypress hedge along the property line on the northwest corner. It would appear desirable to remove this hedge. This street appears from its construction to be of less importance than "B", "D" and "E" Streets.

"D" Street is paved with asphalt eighteen to twenty feet wide. It appears to be an important street. The street intersection is blind on the northwest and southeast corners. There is an open lot on the northeast corner and an open yard on the southwest corner. The crossing is of plank the same width as the paving and is very uneven. The approaches to the existing track at "C" Street are level for about fifty feet and then up 2-1/2% to the north and are down 2-1/2% to the south. It is proposed to lower the tracks at this street about one and one-quarter feet.

"E" Street is paved between curbs but the track crossing, which is of plank, is in poor condition and only fifteen feet wide. The gravel filling on each end of the planks is insufficient. The street intersection is blind on all four corners. The approach grades to the crossing are level for about thirty feet and then up to the north on a 6% grade. On the south side the approach is about 4% down to the south. It is proposed to lower the tracks at "E" Street about one and one-half feet, the Eastbound track

being 3-1/2 inches lower than the westbound track. It has been found by experience that a difference in elevation of more than 2 to 2-1/2 inches between tops of rails of double track crossings give very poor riding qualities to the crossing and the tops of rails on all double track crossings should be kept within that limit and as near the same elevation as possible.

West of "E" Street the roadways are on private right-of-way. The crossing of the tracks to reach the alley on the north of the right-of-way between "E" and Shaver Streets is in particularly poor condition between the rails and on the south approach. The crossing needs filling between the rails.

The crossings of "B", "C", "D" and "E" Streets are all protected by standard crossing signs and by fixed light signals which flash red on the approach of trains. These light signals are rather hard to see from automobiles on the opposite side of the street when nearly even with the signal or close to the track. There are about fifty-five interurban trains operated daily over these crossings at speeds restricted to ten miles per hour.

It appears that there will be some increase in hazard on these street crossings from train operation on double track as compared to the present operation on single track due to the probability of two trains approaching the crossing from opposite directions at the same time. However, this increase in hazard can be neutralized to some extent by improving the character of the crossing protection afforded. Also such increase in hazard is probably more than offset by the other public conveniences which will be afforded by the installation of the double track. It is the opinion of the Commission that the portion of this application requesting permission to construct double track crossings should be granted, providing certain conditions of hazard to the public shall be eliminated from the plan proposed in the application for operation along Second Street.

That portion of the application referring to operation in and along Second Street will now be discussed.

Second Street runs from "E" Street on the West to the vicinity of Grand Avenue, a north and south street about two blocks east of the Northwestern Pacific main line to Eureka. It crosses the Toll Road leading to the Richmond-San Rafael Ferry near its crossing with the railroad main line. Second Street is shown on the maps filed with the application as being fifty-six and one-half feet in width between property lines and having ten and eleven foot sidewalks. From "E" Street to "B" street, it is occupied along its center line by the single track of the Northwestern Pacific Railroad Company's Electric Suburban line equipped with third rail. West of "E" Street and east of "B" Street, the railroad enters private right-of-way. The three blocks between "B" to "E" Streets are chiefly residential. The third rail is protected by wooden guards mounted on one side and along the top, the side facing the track being open. The single track third rail line is fenced on both sides and at every street intersection a warning sign is posted on the fence as follows:

D A N G E R  
Private Property  
This road is operated by an electric rail  
Walking on the tracks or other  
trespassing is forbidden.  
Keep off.

Such a sign is nothing more than the company's public announcement of the generally accepted fact of the hazard of this type of construction, even on private property.

The record shows that Second Street and the track thereon are both in a very bad state of repair. It is proposed in the application to double track the railroad line, to cut back the sidewalks from 10 feet to 8 feet on the north side of the street and from eleven to eight feet on the south side of the street, to pave the street up to the gauge lines of the inside rails of the double

track and to construct a fence down the center of the street between the two tracks with a third rail on each side of the fence, the third rails to be protected by wooden guards along the top of the rails and along the sides facing the fence. The sides facing the pavement are shown unprotected on the plans submitted with the application, but it was stated by witness for applicant that a wooden guard could also be placed on the track side of the third rails.

It appears from the record that the City of San Rafael is very desirous of improving and paving Second Street in order to relieve the present unsatisfactory conditions on this street and to relieve traffic conditions on Fourth and Fifth Streets, the main East and West arteries through San Rafael.

Mayor D. B. Bowman of San Rafael testified that the communities northwest and west of San Rafael have been growing rapidly and that a great deal of the sand and gravel used in building in those districts is hauled by truck along Fourth and Fifth Streets, and that as a result these two streets are overloaded and overcrowded and the pavements are breaking down. He further testified the City authorities are desirous of improving an additional street to take the industrial traffic and had picked Second Street for several of reasons, namely:

- (1) Third Street does not extend west of "E" Street;
- (2) First Street is interfered with and made narrow between "D" and "E" Streets by a creek;
- (3) Second Street is in need of repair and is now too narrow.

It appears from the record that Second Street, like Third Street, does not now extend west of "E" Street, that the Northwestern Pacific Railroad Company does not intend to donate its right-of-way west of "E" Street for street purposes and that the condemnation of railroad property and construction of the

street along and over the creek between "Z" and Shaver Streets would probably be as difficult and expensive as the construction of a street along the creek on First Street. It further appears that First Street extends west to West End Avenue, where it connects with the through state highway to San Anselmo and other points.

At the present time not more than twenty-three feet of Second Street is devoted to vehicular traffic, approximately 10 feet lying north of the track fence and 13 feet south of the fence. Both roadways are too narrow for two wide vehicles to pass, and the north side is too narrow for two pleasure cars to pass. Parked cars must encroach on the sidewalk area.

Under the proposed double tracking it would be impossible to erect fences at standard clearance outside of the double track as there would be only five feet, three inches left for vehicles, which is not wide enough for one automobile. With a train on the street about eight and one-half feet are left for vehicular use which is too narrow for an automobile to pass between the train and a parked car. Trains will, therefore, slow up vehicular traffic on this street, which would not be the case on First or Third Streets.

The representatives of the Engineering Department of the Commission, took the position at the hearing that the driving of vehicles along this street under the proposed double track construction would present considerable hazard in that vehicles whose wheels might accidentally drop over the inside track rail might collide with the third rail structure and knock it down with disastrous results. Mr. Brainerd, City Manager, testified that if a heavy vehicle dropped over the rail it would probably have to travel to the next street intersection before regaining the pavement. Such a condition would present a hazard of accident in case a train were moving along behind such a vehicle. The railroad superintendent testi-



fied that it had been proposed to slope the paving from the outside rails down to the base of the inside rails, but the City Manager said that such a thin paving would not stand up under traffic and was objectionable. The city representatives stated that a plan had been suggested whereby the third rail would remain dead except at such times as trains were passing but the railroad witnesses testified that plans for such a device had not been perfected and no estimates had been made as to the cost of such an installation.

Mrs. Rose Dias, property owner, testified that a petition had been drawn up and presented to the City Trustees of San Rafael by a number of property owners of Second Street in which they opposed the cutting down of the sidewalks for the installation of a double track third rail system but were willing to give part of the sidewalk if overhead trolleys were installed. City Manager Brainerd testified that a trolley system would be more desirable. Mrs. Dias, personally, objected to the installation of the proposed third rail on account of the hazard to children. She cited an accident which occurred two years ago in which an automobile was struck at "E" Street and dragged between "D" and "E", where it caught fire and also set the train on fire. She also cited a recent accident at the west part of town where a grocery delivery boy was thrown across the third rail. It also appears that a young Chinese girl was electrocuted on the main and third rail at Ross about a month previous to the hearing.

In this state other interurban electric railroads operating by means of third rail are operating through urban and suburban communities of the type of San Rafael with overhead trolley construction. It appears to the Commission that the installation of the proposed double track third rail system is not in the interest of public safety and is, in fact, more hazardous than the existing fenced single track line and that the improvement of First Street would present less hazard to vehicular traffic, particularly truck

traffic, than the plan suggested in this proceeding for improving Second Street. If the double track is to be constructed and Second Street paved as proposed, the Commission is convinced that it should only be done, provided the third rail system is replaced with an overhead trolley installed where the tracks are to occupy a public street.

The pending application will be therefore granted only under such conditions.

### O R D E R

Northwestern Pacific Railroad Company, a corporation, having made application for an order authorizing the relocation of single track at grade and the construction of a second track at grade on and along Second Street and across "B", "C", "D" and "E" Streets, in the City of San Rafael, County of Marin, State of California, a public hearing having been held, the Commission being apprised of the facts, the matter being under submission and ready for decision,

IT IS HEREBY ORDERED that Northwestern Pacific Railroad Company be, and it is, hereby authorized to relocate a single track at grade and to construct a second track at grade on and along Second Street and across "B", "C", "D" and "E" Streets, in the City of San Rafael, County of Marin, State of California, as follows:

Commencing at a point in the westerly line of "E" Street at its intersection with the center line of Second Street; running thence in an easterly direction on a tangent along the center line of Second Street, crossing "E", "D" and "C" Streets a distance of nine hundred seventy-one and four tenths (971.4) feet to a point of curve; thence leaving the center line of Second Street and running on a curve to the right increasing 4° to each thirty (30) feet a distance of one hundred one and three tenths (101.3) feet to a point of compound curve; thence continuing on a curve to the right with a radius of three hundred twenty-seven and seventy-two hundredths (327.72)

feet, a distance of twenty-three and two tenths (23.2) feet to a point in the westerly line of "B" Street; thence continuing on the curve to the right with a radius of three hundred twenty-seven and seventy-two hundredths (327.72) feet, a further distance of seventy-one and one tenth (71.1) feet to a point in the easterly line of said "B" Street, distant five and forty-three hundredths (5.43) feet, measured southerly along the easterly line of "B" Street, from the southeast corner of Second and "B" Streets;

and as shown by the map (C.E. 1734-C-44) attached to the application; said trackage to be constructed subject to the following conditions, namely:

(1) The entire expense of constructing the crossings of "B", "C", "D" and "E" Streets, together with the cost of their maintenance thereafter in good and first-class condition for the safe and convenient use of the public, shall be borne by applicant.

(2) Said crossings shall be constructed equal or superior to type shown as Standard No. 3, in General Order No. 72 of this Commission and shall be constructed of a width to conform to those portions of said streets now paved, but in no case less than twenty-four feet, with the tops of rails flush with the pavements, and with not more than 2 inches difference in elevation between tracks except at "B" Street, and with grades of approach as shown on drawing C.E. 1734-F-44 attached to the application; shall be protected by suitable crossing signs and shall in every way be made safe for the passage thereover of vehicles and other road traffic.

(3) An automatic flagman shall be installed and maintained for the protection of said crossings at the sole expense of applicant, said automatic flagman to be of a type and installed in accordance with plans or data approved by the Commission.

(4) Applicant shall, within thirty (30) days thereafter, notify this Commission, in writing, of the completion of the installation of said crossings.

(5) If said crossings shall not have been installed within one year from the date of this order, the authorization herein

granted shall then lapse and become void, unless further time is granted by subsequent order.

(6) The Commission reserves the right to make such further orders relative to the location, construction, operation, maintenance and protection of said crossings 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.

IT IS HEREBY FURTHER ORDERED that Northwestern Pacific Railroad Company be and it is hereby authorized to relocate its single track at grade on and along Second Street from "B" to "E" Streets and to construct a second track on and along Second Street from "B" to "E" Streets, all in the City of San Rafael, County of Marin, subject to the following conditions and not otherwise:

(1) Said tracks shall be equipped with overhead trolley instead of third rail construction, as applied for in application and as now exists on single track.

(2) Said Second Street shall be paved from curb to curb.

(3) If said tracks and overhead trolley shall not have been constructed within one year from the date of this order, the authorization herein granted shall then lapse and become void, unless further time is granted by subsequent order.

(4) The Commission reserves the right to make such further orders relative to the location, construction, operation, maintenance and protection of said tracks 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 effective date of this order shall be twenty (20) days from the date hereof.

Dated at San Francisco, California, this 10<sup>th</sup> day of November, 1926.

H. P. Bunnings  
Secretary  
James L. Burt  
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Commissioners.