

BEFORE THE OFFICE OF THE COMMISSIONER OF RAILROADS

STATE OF WISCONSIN

Petition of the Wisconsin Department of Transportation for the Improvement of a Public Crossing of the Union Pacific Railroad Co. Tracks with Church Street (STH 26) in the City of Watertown, Dodge County

9040-RX-1237

FINAL DECISION

By letter dated February 2, 2007, the Wisconsin Department of Transportation (DOT) filed a petition with the Office of the Commissioner of Railroads (OCR) under §§86.13, 195.28 and 195.29, Stats., for the improvement of a public crossing of the Union Pacific Railroad Co. (UP) tracks with Church Street (STH 26) in the City of Watertown, Dodge County (crossing no. 177 656M / 131.58).

Pursuant to due notice, public hearing was held in this matter on March 28, 2007 in Watertown, Wisconsin with hearing examiner Douglas S. Wood presiding.

On May 31, 2007, the hearing examiner issued a proposed decision. On June 12, 2007, the DOT filed comments generally supporting the proposed decision. The DOT did comment that a sidelight is needed for the northwest signal facing the access drive for the propane dealer in the southeast quadrant. The OCR typically does not specify whether sidelights should be installed or not, but rather leaves that determination for the post-decision field review. Likewise, the OCR typically does not specify the need for bells. The proposed decision referenced the need for two bells, which are in fact needed in this instance, but again are the type of item that the OCR does not specify in the order. The Commissioner removes the reference to bells from the order and otherwise adopts the proposed decision as final.

Appearances:

**Parties**

Wisconsin Department of Transportation, Petitioner  
by  
Mark Morrison, PE  
Grade Crossing Safety Engineer  
PO Box 7914  
Madison, WI 53707-7914

In Support:

City of Watertown  
by  
Joseph Radocay, City Engineer  
106 Jones Street  
Watertown, WI 53094

No Appearance by Union Pacific Railroad Co.

### Findings of Fact

#### THE COMMISSIONER FINDS:

The DOT proposes to reconstruct Church Street (STH 26) in the City of Watertown during the 2008 construction season. The improvement will cross the UP tracks.

Church Street (STH 26) is 36' wide between curbs and intersects the UP tracks at an angle of 21° (right-hand forward). The reconstructed roadway will also be 36' wide between curbs and will intersect the tracks at the same angle. A new concrete-paneled crossing surface is needed to meet the project improvements. The crossing has one 7.5' wide sidewalk on the east side of the roadway. The project will build 8'-wide sidewalks on each side of the roadway. The sidewalks will be warped around the gate mechanism at the crossing. The crossing consists of one mainline track.

Church Street (STH 26) carries 10,300 ADT (average daily traffic). The DOT projects Church Street (STH 26) will carry 8800 ADT in the design year of 2026. The highway traffic volume is projected to decrease based on the planned construction of the STH 26 Bypass in 2012. The speed limit is 25 mph.

The railroad currently operates 2 through train movements per day over the crossing location at a speed of 10 mph.

A driver traveling at 25 mph needs a distance of 187' to stop safely. The crossing is visible from more than 187' in each direction. Assuming a train speed of 10 mph, a driver traveling at 25 mph needs to see a train when it is 105' from the crossing from a point 187' down the highway. The sight distance available in each quadrant from the safe stopping distance is adequate.

At all crossings, except those with gates, a driver stopped 15' short of the near rail must be able to see far enough down the track, in both directions, to determine if sufficient time exists for moving their vehicle safely across the tracks to a point 15' past the far rail, prior to the arrival of a train. Required clearing sight distance along both directions of the track, from the stopped position of the vehicle, is dependent upon the maximum train speed and the acceleration characteristics of the "design" vehicle. The necessary clearing sight distance at the Church Street (STH 26) crossing is 225'. The available clearing sight distance is more than 225'.

The exposure factor at this crossing is about 20,600. The exposure factor at this crossing will exceed 17,000 in the design year assuming 2 train movements per day. The exposure factor equals the product of the number of trains per day and the number of highway vehicles per day, which yields a numerical value for the potential conflicts each day at the crossing.

One train-vehicle accident has occurred at this crossing since 1973. The crash occurred in 1985.

The crossing presently has old rotatable cantilevered automatic flashing lights for warning devices. These warning devices are inadequate. The existing warning devices will be adequate until such time as the new warning devices are installed. In order to adequately protect public safety, walkout cantilevered 12" LED automatic flashing lights with gates and constant warning time circuitry are needed because of the extreme skew of the crossing.

*Constant warning time circuitry* adjusts for train speed and causes the crossing signals to always operate for the same amount of time before the train reaches the crossing, regardless of train speed. A motion detector simply detects the train operation, but does not adjust for train speed so that the amount of warning time varies based on train speed.

*Light emitting diodes (LED)* lamps replace incandescent bulbs. LEDs have higher conspicuity, a wider cone of vision, and longer life than incandescent lights. LEDs are especially useful on east-west roadways where the rising and setting sun may make the signals difficult to see.

In summary, the improvement of the crossing at-grade of the Union Pacific Railroad Co. tracks with Church Street (STH 26) will promote public safety and convenience by improving the crossing surface and warning devices.

**Source of funding:** The signal materials and installation shall be paid for from public funds, including state and federal funding. The cost of the crossing work shall be apportioned 14% to the UP and 86% to the public. DOT has agreed to make public funding available for the crossing work pursuant to s. 86.13 (5).

#### Ultimate Conclusions on the Issues

#### THE COMMISSIONER CONCLUDES:

1. That the improvement of the crossing at-grade of Church Street (STH 26) with the Union Pacific Railroad Co. tracks in accordance with the design plans of the Wisconsin Department of Transportation and the City of Watertown in the City of Watertown, Dodge County will promote public safety and convenience.

2. That in order to adequately protect and promote public safety, it is necessary to install and maintain cantilevered 12" LED automatic flashing lights with gates.

3. That it is reasonable that the Union Pacific Railroad Co. bear 14% of the cost for the crossing construction.

## Conclusion of Law

### THE COMMISSIONER CONCLUDES:

That the jurisdiction of the Office of the Commissioner of Railroads under §§86.13, 195.28 and 195.29, Stats., extends to this matter. Accordingly, the Office enters an order consistent with the findings of fact.

### Order

### THE COMMISSIONER ORDERS:

1. That the **Union Pacific Railroad Co.** shall install and maintain a concrete-paneled crossing at-grade of **Church Street (STH 26)** with its tracks in accordance with the design plans of the Wisconsin Department of Transportation and the City of Watertown in the City of Watertown, Dodge County by **August 1, 2008** (crossing no. 177 656M / 131.58).

2. That the **Union Pacific Railroad Co.** shall install and maintain cantilevered 12" LED automatic flashing lights with gates, constant warning time circuitry and other appropriate appurtenances in accordance with such plans as are filed with and approved by the Office of the Commissioner of Railroads at the crossing of its tracks with **Church Street (STH 26)** at-grade in the City of Watertown, Dodge County by **October 15, 2008** (crossing no. 177 656M / 131.58).

3. That the **Union Pacific Railroad Co.** shall submit to the Office of the Commissioner of Railroads signal and circuit plans with the cost estimate of its proposed installation and upon completion of the signal project, a detailed statement of the actual cost to the Office and to the Wisconsin Department of Transportation.

4. That the signal installation work herein ordered shall not begin until the regional office of the Wisconsin Department of Transportation informs the railroad that they may start such work and such start notice will not be issued until appropriate federal aid or other funding arrangements have been assured. The cost of the new project initiated before the start notice will not be reimbursed with public funds and shall be the responsibility of the railroad.

5. That the **Wisconsin Department of Transportation and the City of Watertown** shall not open Church Street (STH 26) at the railroad crossing to unrestricted public use until the installation and activation of the automatic warning devices ordered above.

6. That the **Union Pacific Railroad Co.** shall bear 14% of the cost of the crossing construction. The Wisconsin Department of Transportation and the City of Watertown shall bear the remaining costs, except for any cost assessed to the railroad pursuant to §195.60, Stats., for the investigation of this matter by the Office. The railroad shall not pass on those assessment costs either directly or indirectly.

7. That jurisdiction is retained.

Dated at Madison, Wisconsin, (June 20, 2007).

By the Office of the Commissioner of Railroads.

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Rodney W. Kreunen  
Commissioner of Railroads

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