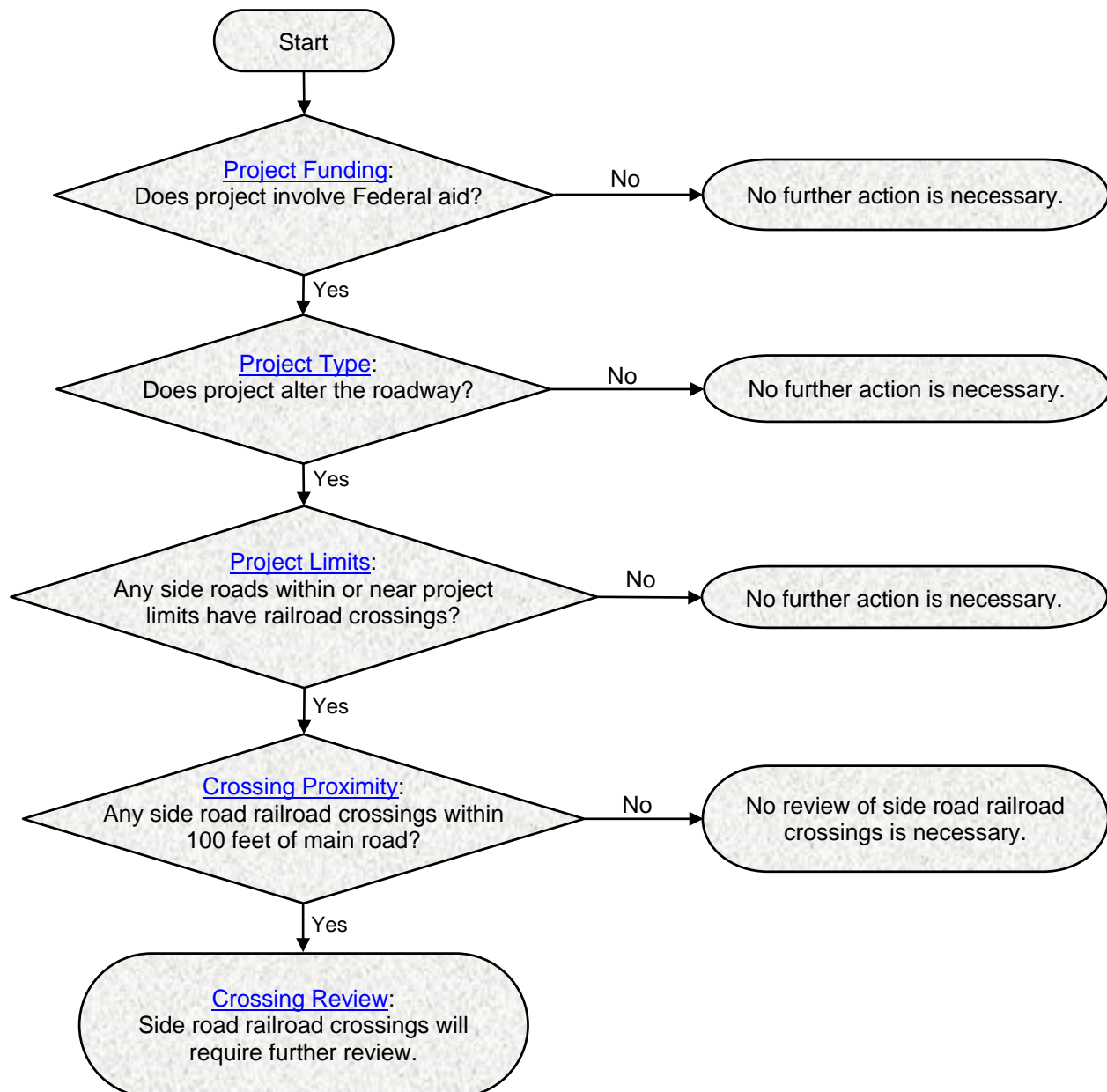


Reviewing Railroad Crossings at Side Roads

Design Manual
Chapter 1
General Information
Originally Issued: 05-09-17

Projects on sections of roads that run parallel to railroads may require side road railroad crossings be reviewed to determine if adequate traffic control, warning devices, and crossing surfaces for the crossing are in place. The flowchart below outlines the process for determining if a crossing needs further review.



Project Funding

Projects that don't involve Federal aid do not need to address side road railroad crossings. Projects that involve Federal aid may require side road railroad crossings be reviewed depending on the project type, the proximity of crossings to the project limits, and proximity of the crossings to the main road.

Project Type

Projects involving an alteration of the road will require side road crossings be investigated to determine their proximity to the project and to the main road. Examples of projects include, but aren't limited to:

- New layer of surface material.
- Reconstruction.
- Concrete pavement rehabilitation and reconstruction.
- Open-graded surface course.
- Microsurfacing and/or thin lift overlays.
- Cape seals (slurry seal or microsurfacing over a new chip seal).
- In-place asphalt recycling.

Project Limits

Side road railroad crossings located outside of the project limits may still be affected, see Figure 1.

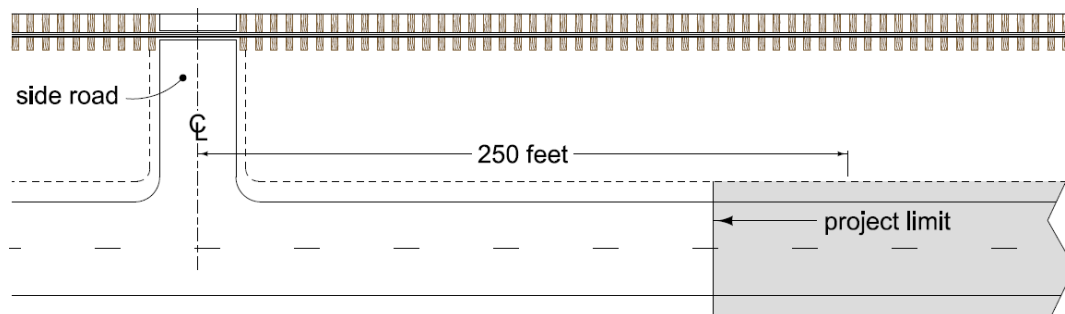


Figure 1: Project limit within 250 feet of side road centerline.

If the project limits are within 250 feet of the centerline of the side road, the crossing may need review depending on the distance from the crossing to the main road.

Crossing Proximity

Google™ earth can be used to locate side road railroad crossings that might be within 100 feet of the main road, see Figure 2. Measure from the outside edge of the railroad ties to the edge of traveled way along the centerline of the side road.

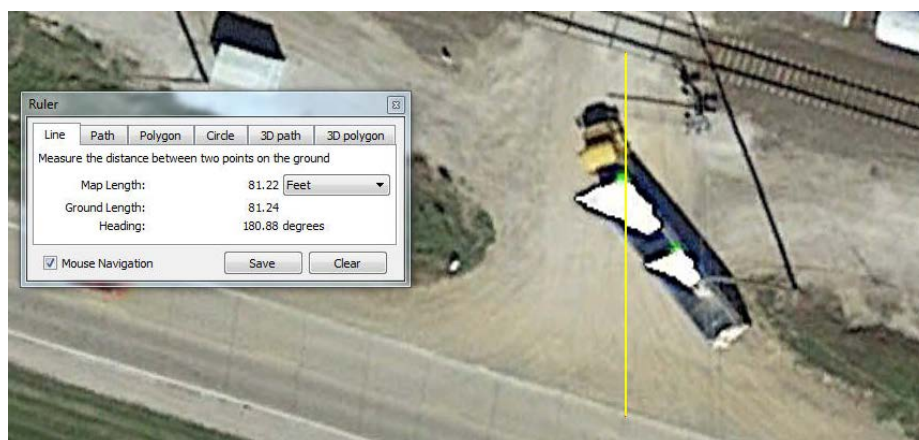


Figure 2: Using Google™ earth to measure distance between crossing and main road.

If an initial measurement indicates a side road railroad crossing may be located within 100 feet of the main roadway, a more accurate measurement will be needed. The distance between the outside edge of track nearest the parallel road and the edge of traveled way for the parallel roadway (measured along the centerline of the side road) will need to be accurately determined, see Figure 3.

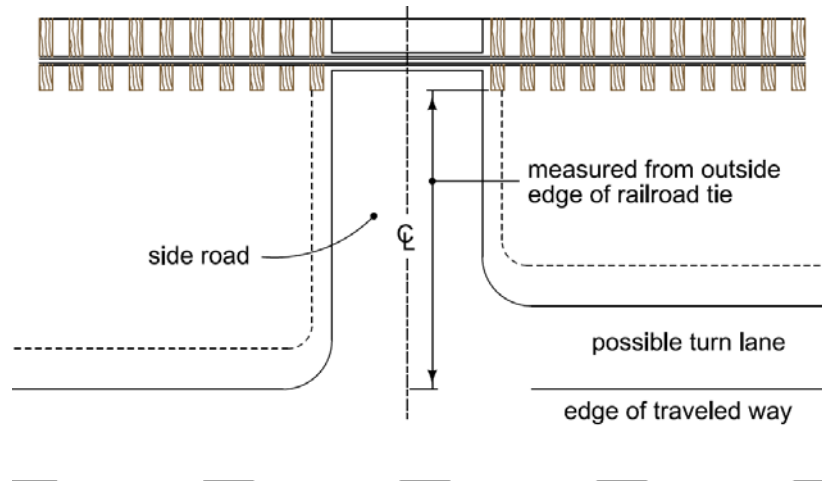


Figure 3: Determining distance from railroad crossing at side road to parallel road.

Note: If a side road crossing is less than 100 feet from the main road, signs such as those shown in Figure 4 should be installed along the main road. Contact the [Office of Traffic and Safety](#) if they are not already in place. Work with the Office of Traffic and Safety to verify existing signs have been placed correctly.



Figure 4: W10 series warning signs for grade crossing (2009 MUTCD).

If the signs shown in Figure 4 are currently installed and the crossing is more than 100 feet from the main road, discuss removing the signs with the Office of Traffic and Safety.

Crossing Review

If the distance from a railroad crossing at side road to a parallel road is less than 100 feet, the crossing will need further review to determine if adequate traffic control, warning devices, and crossing surfaces for the crossing are in place.

Primary Roadway Projects

Contact the [Office of Rail Transportation](#). They will further investigate crossings to determine what measures are required.

Local Systems Roadway Projects

Contact the [Office of Rail Transportation](#) for guidance and assistance with reviews.

Chronology of Changes to Design Manual Section:

001D-020 Reviewing Railroad Crossings at Side Roads

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