

Design Manual Chapter 5 - Roadway Design 5O - Railroad Crossings

# **Railroad Crossings**

### A. Railroad Crossing Improvements

Improvements to railroad crossings can take several forms. These include closing of an existing crossing, improvements to the existing crossing, and separating the roadway from the railroad tracks. Potential improvements to existing crossings include installation of adequate signage, signals, and signals with gate arms.

The local jurisdiction must use judgment in the selection process for crossing improvements. Several factors weigh into the selection process including the amount and speed of traffic on the roadway and railroad, available sight distance, and safety benefits. Traffic control systems for railroad-highway grade crossings must comply with the Manual on Uniform Traffic Control Devices (MUTCD).

The Jurisdiction should contact the offices of Rail Transportation and Local Systems at the Iowa DOT for any agreements and requirements that must be followed.

### **B. Railroad Crossing Construction**

When railroad crossings are required on streets subject to heavy loads, an approved high quality grade crossing material should be installed. Some railroads may require an asphalt separation between the header and the crossing to allow for easier railroad maintenance of the crossing. Some railroads may require that the crossing material be installed by their own forces, with the costs borne by or shared with the local jurisdiction. Example railroad crossing approaches are included in Figures 1 and 2. In all cases, the railroad should be contacted for their specific crossing requirements.

## C. Working with a Railroad

Working with a railroad company requires coordination at numerous steps along the planning, design, and construction process. A list of potential coordination steps follows; however, these requirements differ for each company and should be verified early in the planning process.

Phase	Possible Coordination Required
Planning	Right of entry permit for survey
	Coordination regarding potential modifications/improvements
Design	Right of Entry Permit for Survey
	Utility Accommodation Permit
	Maintenance Consent Agreement
	Coordination regarding crossing material and safety elements
Construction	Railroad Protective Liability Insurance
	Right of Entry for Construction
	Railroad Flaggers

## D. Railroad Related Agencies in Iowa

Two governmental agencies are involved in regulating railroad activities within the State of Iowa. Additional information about these organizations is available at their respective websites:

Iowa DOT, Rail Transportation <a href="https://iowadot.gov/iowarail/">https://iowadot.gov/iowarail/</a>

800 Lincoln Way Ames, Iowa 50010 515-239-1140

Federal Railroad Administration

Region 6 Office

http://www.fra.dot.gov/ 901 Locust Street – Suite 464 Kansas City, MO 64106

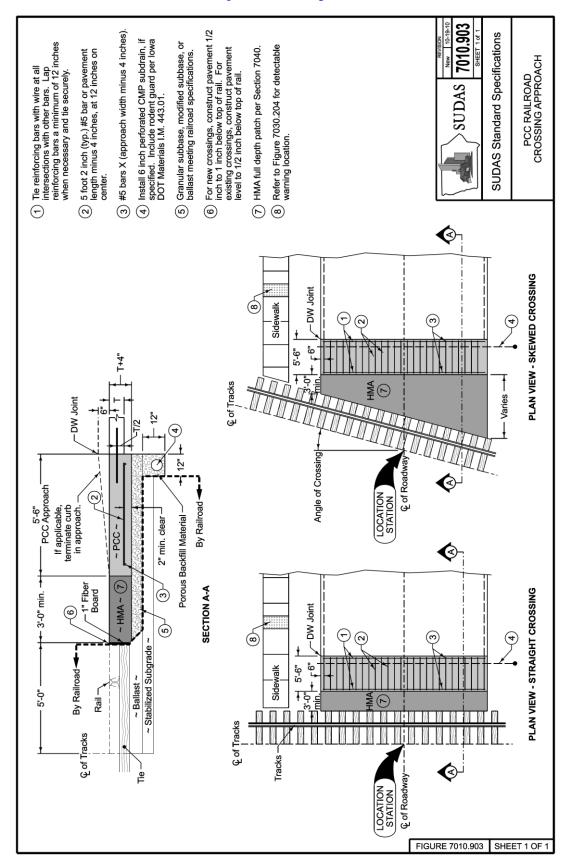
816-328-3840

## E. Railroad Companies in Iowa

Currently there are 18 railroads operating within the State of Iowa. These include three Class I railroad companies, Amtrak, and several regional and local railroads. The Iowa DOT maintains a website with links to the websites of the freight railroads operating within the state (https://iowadot.gov/iowarail/Iowa-Freight-Rail/Profiles).

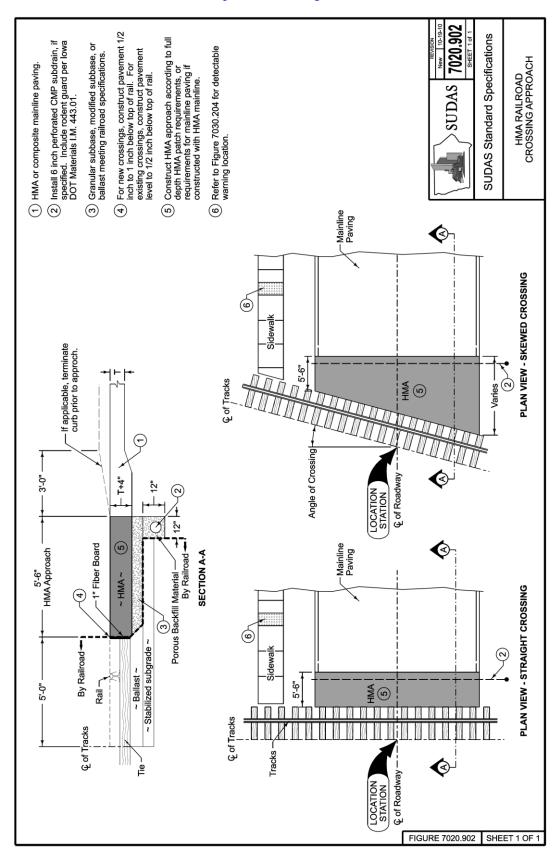
2 Revised: 2021 Edition

**Figure 50-1.01:** PCC Railroad Crossing Approach (SUDAS Specifications Figure 7010.903)



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**Figure 50-1.02:** HMA Railroad Crossing Approach (SUDAS Specifications Figure 7020.902)



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