10 Railroad Preemption Plan

All contract plans shall be plotted “B” size (11”x17”) Railroad Plan sheets shall normally be drawn at a scale of 40:1. This is set with Annotation Scale. You can turn this on and off from many different locations including

- The drawing scale toolbar
- The place active cell dialog
- The place text dialog

For additional information on using Annotation Scale click on the following link: MicroStation Users Guide.

Intersection layout shall be drawn showing:

- The railroad preemption plan sheet shall contain the following:
  - Traffic Signal Title Block and upper right hand title information
  - T.R.S. Drawing Number
  - T.R.S. approval signature
  - North arrow
  - USDOT Crossing number and railroad milepoint (obtained from the Rail Division)
  - Normal phase rotation diagram
  - Traffic signal railroad preemption sequence text, modified to accurately represent the site specific conditions:
    - V.C.O.I. green clear-out phases (if they exist)
    - P.C.O.I. value (obtained by Region Traffic Operations Engineer)
    - P.C.O.I used to serve V.C.O.I phases (contact Traffic-Roadway Section for this text)
    - Limited service phases. If a conflicting FYA indication is present, it must be listed
    - Use of Type 7 signal heads
    - Use of PTR signs
    - A plan view of the intersection and railroad crossing (either to scale or graphically represented not to scale) with the following elements labeled:
      - Highway and street names
      - Signal equipment shown symbolically, but not labeled (signal poles, mast arms, vehicle heads)
      - Signal equipment shown symbolically and labeled:
        - PTR signs
        - Type 7 signal heads
      - Pedestrian phases labeled in the corresponding crosswalk
      - Vehicular phases labeled in the corresponding approach lanes
      - Signs (ground mounted or overhead) that directly related to the preemption operation, shown symbolically and labeled:
        - “STOP HERE ON RED” sign
        - “NO TURN ON RED” sign
The railroad preemption plan sheet may contain the following additional features:

- The RxR cabinet
- The signal cabinet
- The service cabinet
- The pedestrian signal heads shown symbolically, but not labeled
- The RxR gate locations
- Stationing (if the plan view is to scale)
- Right-of-way
- Each installed, removed, abandoned or retained item shall have the correct bubble and a leader(s) to each item.
- Railroad preemption text for the intersection.
- Pedestrian Clear-Out Interval (P.C.O.I.) time required. Consult the signal timing person in your region/district for this number.
- The grade crossing system is shown, but not detailed, on the signal plan sheets because the contractor will not be doing the work. This work is paid for through Railroad

**NOTE:** The Railroad Preemption Plan Sheet is NOT part of the contract plan set!

See next 3 pages for railroad preemption plan examples.
Figure 10-3 | Sample Railroad Preemption Plan