921 Temporary Traffic Control Plan

921.1 General

A project-specific Temporary Traffic Control Plan (TTCP) is required for all projects. The TTCP is used to communicate the requirements for conveying pedestrian, bicycle, and motorized traffic through established work zones.

This chapter provides the requirements for the development of TTCP sheets. See *FDM* **240** for requirements of TTCP designs.

The amount of information that must be communicated depends on the complexity of the TTCP, which is defined as Level I or Level II TTCP. Regardless of level, TTCPs should not exceed four major phases.

- (1) Level I TTCP Simple construction projects, such as RRR, Minor Widening, New Alignment.
 - (a) General / Phasing Notes
 - (b) Phase Typical Sections
 - (c) Special Details
- (2) Level II TTCP Complex construction projects, such as Major Widening or Reconstruction, Innovative Intersections (Roundabouts, Diverging Diamond Interchange) or projects requiring a diversion. This level typically includes the following sheets:
 - (a) General / Phasing Notes
 - (b) Phase Typical Sections
 - (c) Special Details / Critical Sectional Views
 - (d) TTCP Plan
 - (e) Detour Plan
 - (f) Temporary Signal Plan
 - (g) Temporary Highway Lighting Plan

921.2 General / Phasing Notes

Place general and phase notes on standard-format sheets (11"x17").

TTCP notes must communicate the following information (when they apply):

- Description of work to be accomplished during each phase of construction
- Project-specific requirements (e.g., school zones, hospitals, fire stations, railroads, waterborne vessels)
- Work zone speed
- Pedestrian and bicycle accommodation
- Lane closure restrictions, traffic pacing restrictions, and portable changeable message signs (PCMS) message for each phase
- Legend for traffic control devices

921.3 Phase Typical Sections

Place typical sections on standard-format sheets (11"x17").

Typical sections must communicate the following information (when they apply):

- Defined work area limits
- Available lane widths (motor vehicle and bicycle), and shoulder widths
- Location of temporary traffic control devices
- Offset requirements

921.4 Special Details Sheet

Include Special Details to provide project-specific requirements and construction details not covered by <u>Standard Plans</u> or <u>Standard Specifications</u>. Details are often used to illustrate placement of construction signs and traffic control devices when TTCP Plan sheets are not required.

Place details on the General Notes sheet, or on separate standard-format sheets (11"x17").

921.5 Critical Sectional Views

Provide sectional views when clarification is necessary. Sectional views should provide pertinent dimensions and illustrate location of active of traffic lanes, work zone, walls or piers, and temporary barrier walls.

Place critical sectional views on TTCP Plan sheets near the location the view pertains to, or on separate standard-format sheets (11"x17").

921.6 TTCP Plan Sheets

These sheets are typically created referencing the survey and design CADD files.

TTCP plans may be produced on standard-format sheets (11"x17") or large-format sheets (24"x36", 36"x48", or 36"x72"). Use landscape orientation regardless of sheet size selected. Use levels, fonts, and line weights in accordance with the CADD Manual.

A common horizontal scale for the TTCP plan sheets is 1" = 50' for curbed roadways and 1" = 100' for flush shoulder roadways. Another scale may be used if clarity and legibility are maintained.

TTCP plan sheets are often produced for each major phase of construction. These sheets must communicate the following information (when they apply):

- Orientation of the roadway (i.e., north arrow, stationing, road names)
- Open travel lanes, work area, geometry for lane tapers or shifts
- Placement of temporary pavement
- Placement of temporary construction signs and traffic control devices
- Temporary or permanent drainage work
- Disposition of existing sign installations (e.g., guide signs, route signs, speed limit signs)
- Pedestrian and bicycle accommodations

921.6.1 Temporary Diversions (Special Detour)

When temporary ramps, or other roadways, are necessary, provide diversion horizontal and vertical geometry. Include pavement and shoulder widths, curvature, elevations,

cross slope, grades, and tapers. Also display and label required temporary drainage in the TTCP Plan sheet. Include critical sectional views as discussed in *FDM 921.5*.

921.7 Detour Plan Sheets

Detours often use an outline (stick diagram) of the roadway network as a background and use any appropriate horizontal scale that clearly communicates the alternate routes.

Detour plans may be produced on standard-format sheets (11"x17") or a large-format sheet (24"x36", 36"x48", or 36"x72"). Use landscape orientation regardless of sheet size selected.

Detour Plan sheets must communicate the following information (when they apply):

- Orientation of the roadway (i.e., north arrow, road names, railroad, river crossing)
- Location of temporary construction and detour signs necessary to direct pedestrian, bicycle, and motorized traffic
- Location of portable changeable message signs (PCMS)
- Movement of traffic (i.e., arrows)
- Legend for traffic control devices

921.8 Temporary Signal Plan Sheets

Include Temporary Signal Plan sheets for temporary or portable signals, and for alterations to existing signals.

Temporary Signal Plan sheets may be produced on standard-format sheets (11"x17") or a large-format sheet (24"x36", 36"x48", or 36"x72"). Use landscape orientation regardless of sheet size selected.

Provide signal timing for each phase, including temporary actuation, to maintain all existing actuated or traffic responsive mode signal operations for the duration of the Contract.

Refer to *FDM 941* for required plan content.

921.9 Temporary Highway Lighting Plan

Temporary Lighting Plan sheets may be produced on standard-format sheets (11"x17") or a large-format sheet (24"x36", 36"x48", or 36"x72"). Use landscape orientation regardless of sheet size selected.

Refer to FDM 943 for required plan content.