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 Interchanges) 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

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 accommodations
- Lane closure restrictions, traffic pacing restrictions, and portable changeable message sign (PCMS) messages for each phase
- Legend for traffic control devices

921.3 Phase Typical Sections

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

- Defined work area limits
- Available lane widths (motor vehicle and bicycle) and shoulder widths
- Locations 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 the ***Standard Plans*** or ***Standard Specifications***. 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 a separate sheet.

921.5 Critical Sectional Views

Provide sectional views where clarification is necessary. Sectional views should provide pertinent dimensions and illustrate the locations of active traffic lanes, work zones, walls or piers, and temporary barrier walls.

Place critical sectional views on TTCP Plan sheets near the location the view pertains to, or on a separate sheet.

921.6 TTCP Plan Sheets

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

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):

(1) Orientation of the roadway (i.e., north arrow, stationing, road names)

(2) Open travel lanes, work area, geometry for lane tapers or shifts

(3) Placement of temporary pavement

(4) Placement of temporary construction signs and traffic control devices

(5) Temporary or permanent drainage work

(6) Disposition of existing sign installations (e.g., guide signs, route signs, speed limit signs)

(7) Pedestrian and bicycle accommodations

(8) Designate locations where temporary barrier is to be used along with installation requirements (i.e., free-standing, anchored, or low profile barrier). Do not specify the type of temporary barrier (i.e., concrete, steel, or water-filled) or components unless required by the Standard Plans or FDM (e.g., drop-off criteria, setback requirements, etc.).

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 on the TTCP 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 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 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.

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

Refer to ***FDM 943*** for required plan content.