## New Jersey Turnpike Authority

PO Box 5042, Woodbridge, NJ 07095

# Document Change Announcement



2007 Design Manual

DCA2014-DM-03

DATE:

June 13, 2014

Subject:

Revisions to Section 9 of the Design Manual

## **Description of Change**

The traffic control for the both Roadways has become similar. Revisions to Section 9, 9.1, Introduction and Lane and Roadway Closures Section 9.7.1, Lane Closings.

New Standard Drawings for mobile lane closings has been added as a reference.

#### **Instructions to Designers and Consultants**

Effective immediately, the revisions contained in this announcement shall be applied to all projects that have not reached Phase C of design. Contact your NJTA Project Manager for instructions. Attached revision is noted in italics.

Designers may access these revisions in the NJTA Design Manual, which is available on the Authority's Web Page: http://www.state.nj.us/turnpike/professional-services.html.

#### **Information for In-House Staff**

The revisions have been incorporated into the Design Manual, which is available on the S drive @ S:\Project Files\Design-Procedure Manual. Please distribute the information to your respective Project Managers and have them direct their consultants appropriately.

Approved By:

Robert J. Fischer, P.F.

Chief Engineer

## New Jersey Turnpike Authority DOCUMENT UPDATE REQUEST Forward to Assistant Chief Engineer, Design 4/14/2014 Andre' Luboff Submittal Date Initiator 973-434-3100 **HNTB** Corporation Telephone Firm Document (check one) **Procedures Manual** Design Manual Sample Plans Standard Drawings Standard Specifications Manual for Traffic Control in Work Zones **Description of Change** Suggested revisions to Section 9 of the NJTA Design Manual. New Standard Drawing Nos. TP-28 through TP-34 for Mobile Closings. Suggested revisions to the Manual for Traffic Control in Work Zones text. Reason for Change Section 9 of the Design Manual was written shortly after the Highway Authority and the New Jersey Turnpike Authority merged into a single Authority, and at that time the traffic control during construction was completely different for each roadway, with two Operations Departments. Subsequently, the traffic control for the two roadways has become similar. The suggested revision addresses that issue. Also, reference to the new Standard Drawings for mobile lane closings must be added. New Standard Drawings Nos. TP-28 through TP-34 were developed at the direction of the Turnpike Authority's Engineering, Operations and Maintenance Departments. The suggested revisions to the Manual for Traffic Control in Work Zones are

necessary because of the new Standard Drawings Nos. TP-28 through TP-34.

 Long life traffic stripes or traffic markings may be considered for stage construction, detours, and diversionary roads on those occasions when it can be justified based on cost considerations, site conditions, or length of time when the stripes or markings will be in place.

### 9.7 LANE AND ROADWAY CLOSURES

#### 9.7.1 Lane Closures

The Engineer should modify the Sample Plans to provide a table showing specific restrictions placed on travel lanes, durations of closures and hours when work may be performed, including holidays and weekends. The permissible lane and roadway closing times for the Turnpike and Parkway will be specified by the Operations Department. The closures and lane restrictions on other roadways shall be evaluated in the Traffic Impact Report, refer to Subsection 9.4. The following table is provided as an example of the form of presentation of this information:

Roadway Route Designation and Direction	Type of Closure	Monday thru Thursday	Friday	Saturday	Sunday
	No Closure				,
	One Lane Closure				
	Two Lane Closures				
	Full Closures				
	(indicate duration and				
	type of operation)	}			

Mobile lane closures shall only be permitted for the types of work specified in the Standard Drawings.

#### 9.7.2 Traffic Slowdowns

Total roadway closures (i.e. all lanes, single direction or two directions) required for the erection of overhead sign structures, cantilevered sign structures or bridge steel shall be performed in accordance with the following:

- 1. The use of roadway closures shall be specifically addressed in the Traffic Impact Report, refer to Subsection 9.4, and shall be considered only after detours have been determined to be unavailable or unfeasible.
- Slowdowns shall be approved by the Authority's appropriate Operations Department.
- 3. Slowdowns shall be performed during non-peak hours and with prior approval of the Resident Engineer concerning the timing and method of operation.
- 4. Nighttime construction for the erection of the various structure types is preferred, refer to Subsection 9.10.

# SECTION 9 TRAFFIC CONTROL DURING CONSTRUCTION

#### 9.1 INTRODUCTION

This Section, along with the Standard Drawings and Sample Plans, and the Manual For Traffic Control In Work Zones, have been prepared to provide Engineers with general guidelines and examples of the desirable applications for typical situations requiring lane and shoulder closures and/or lane shifts. This information may be used along with the current Manual on Uniform Traffic Control Devices (MUTCD) Part VI to prepare more detailed and site specific Traffic Control Plans that will enable a contractor to construct the project with adequate consideration of safety to motorists, pedestrians and construction workers.

Engineers should not refer to or use the Standard Drawings without proper evaluation of the specific site constraints and construction procedures required to construct the project. Traffic Control Plans should be prepared in accordance with the current Sample Plans. The Traffic Control methods established for each project should be consistent with the general provisions of this Section and should be based on good safety practices, engineering judgment, the speed and volume of traffic, the duration of the operation, the exposure to potential hazards, sight distance constraints and the physical features of the roadway including horizontal alignment, vertical alignment and the presence of interchanges and driveways. All final Maintenance and Protection of Traffic Plans must meet the approval of the Authority's appropriate Operations Department.

#### 9.2 GENERAL

The first two sheets of the Maintenance and Protection of Traffic Plans should be as shown on the Sample Plan, as appropriately modified for individual project needs. These sheets contain a standard legend of typical traffic control devices, general traffic control notes, an escape ramp detail, a typical section for placement of construction barrier, a table showing recommended spacing of the channeling devices and a table showing recommended sight distances to the beginning of the channel tapers. The legend and general traffic control notes should be reviewed and modified to include other project specific symbols and notes as necessary for each project. The Sample Plans can also be modified to include other project specific information necessary to adequately address traffic control needs. Where required for clarification, sectional views showing the placement of traffic control devices adjacent to the traveled way and the work site should be provided. The Authority's Standard Drawings may never be revised by an Engineer.

Additional Traffic Control Plans should follow the first two (2) standard sheets. These additional plans should be included to show plan views of project specific work sites when those locations need to be represented or where design features of traffic control devices (such as the type of precast construction barrier) or temporary pavement markings need to be indicated. The scale of the Traffic Control Plans should be selected so that the optimum amount of information is shown on a