Pedestrian Facilities During Construction

A. Introduction

When projects impact pedestrians, it is important for the engineer to develop a temporary traffic control plan for pedestrians, including those with disabilities. For Iowa DOT projects, see Iowa DOT Design Manual Section 9A-5 for temporary traffic control plans. The applicable guidelines for the temporary traffic control plan are the July 26, 2011 "Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way" (PROWAG) and the Manual on Uniform Traffic Control Devices (MUTCD).

According to PROWAG, when a pedestrian circulation path is temporarily closed for construction or maintenance activities, an alternate pedestrian access route complying with sections 6D.01, 6D.02, and 6G.05 of the MUTCD shall be provided (R205). However, MUTCD (Section 6D.01) also requires knowledgeable persons to conduct appropriate evaluations or use engineering judgment in determining temporary traffic controls for pedestrian circulation paths. This section includes guidance on conducting the evaluation when an alternate pedestrian access route may not be practical.

B. Evaluating Pedestrian Needs

The initial design activity should be to determine the level of the accessibility of the current pedestrian circulation path within the area of the project and the adjacent areas. The impact to the pedestrian circulation path, including transit stops, from the construction or maintenance activity needs to be determined. Develop pedestrian accommodations to provide the best accessibility practical through all stages of work. Consider obtaining local input through a public meeting or contact with residents or public officials to see where additional accessibility needs should be addressed (e.g. senior centers, medical facilities, schools, public facilities, etc.).

Whenever possible, the work should be done in such a manner that does not create a need to detour pedestrians from existing routes. Pedestrians rarely observe detours and the cost of providing accessibility and detectability might outweigh the cost of maintaining a continuous route through the construction zone (MUTCD 6D-01). All methods should be given consideration, including providing alternate means of traversing the construction zone. If pedestrians are to be directed through the construction zone, safety as well as accessibility must be addressed. If a pedestrian detour is developed, it should replicate the accessibility of the existing route.

C. Facility Options

To address the impacts to the pedestrian circulation path, including transit stops, consider the following:

- Develop a temporary traffic control plan to guide the pedestrians through the construction zone.
- Close the pedestrian circulation path through the construction zone.
- Close the pedestrian circulation path through the construction zone; develop a detour route consistent with the accessibility features present in the pedestrian circulation path being closed.
- Provide alternate means for pedestrians to traverse the construction zone, such as free accessible shuttles or other forms of assistance.

D. Barricades, Channelizing Devices, and Signs

Pedestrian barricades and channelizing devices shall comply with sections 6F.63, 6F.68, and 6F.71 of the MUTCD.

1. **Barricades:** Barricades are used for pedestrian circulation path closures. See Iowa DOT Specifications Section 2528.

2. **Channelizing Devices:** The designer should consider the safety of pedestrians and vehicles when choosing channelizing devices.

   a. **Type A:** Type A devices are redirective barriers designed for highway applications. These devices are suitable when pedestrians are routed into the travel way and allow for the most protection for pedestrians from vehicular intrusion.

   b. **Type B:** Type B devices are crashworthy but do not redirect vehicles. These devices are designed to minimize risks associated with flying debris.

   c. **Type C:** Type C devices include any device that meets ADA requirements for channelizing pedestrians and may not be crashworthy. These devices are for locations where vehicular intrusions are unlikely (e.g. closed roads, when there is a separation between pedestrians and vehicular traffic, or where vehicular traffic is at low speeds).

3. **Signs:** See Iowa DOT Standard Road Plan TC-601 and TC-602.

E. Temporary Pedestrian Facilities

Temporary pedestrian facilities should comply with the other sections within this chapter to the extent practical. It is strongly recommended that detour routes be on paved surfaces.

Temporary pedestrian facility surfaces must be firm, stable, and slip resistant. Granular surfacing for short term, temporary pedestrian facilities is acceptable. The granular surfacing material should be well graded, such as Class A road stone (Iowa DOT Specifications Section 4109, Gradation No. 8) or special backfill (Iowa DOT Specifications Section 4109, Gradation No. 30). Maintenance of the temporary pedestrian facility surface to meet the firm, stable, slip resistant, and minimum width is required at all times. The temporary pedestrian facility surface must be removed and a permanent pedestrian facility must be replaced prior to the end of the construction season.

F. Utility Construction

If the pedestrian circulation path is disturbed during utility construction, the requirements of this section and Section 12A-2 shall apply.

Chronology of Changes to Design Manual Section:

012A-004 Pedestrian Facilities During Construction

11/12/2020	Revised Changed spec reference on page 2 to Section 4109.
9/20/2012	Revised Updated header to include SUDAS for joint publication.
4/17/2012	NEW New.