



INDIANA DEPARTMENT OF TRANSPORTATION

Driving Indiana's Economic Growth

Design Memorandum No. 19-07

September 5, 2019

TO: All Design, Operations, and District Personnel, and Consultants

FROM: /s/ Elizabeth W. Phillips
Elizabeth W. Phillips
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THRU: Stephanie Wagner
Director, Bridge Design

SUBJECT: Pedestrian Fence

REVISES: *Indiana Design Manual (IDM) Section 404-4.05 Pedestrian Fence*

EFFECTIVE: Stage 3 Submittal on or after September 5, 2019

The referenced section of the IDM has been rewritten to include additional considerations for the use of pedestrian fence on bridge structures. The revised section is included for reference below and will be incorporated in the IDM on-line at a later date.

Questions regarding project-specific pedestrian fence applications should be discussed with the Bridge Design Division Director, Stephanie Wagner at swagner2@indot.in.gov.

IDM Revisions

404-4.05 Pedestrian Fence

404-4.05(01) Considerations for Use

Where a pedestrian or bicycle traffic is anticipated on a bridge, INDOT considers the use of pedestrian fence (protective screening) on a project-by-project basis and in conjunction with the Bridge Aesthetics Policy.

Where pedestrians and bicyclists are prohibited, such as an interstate or freeway, pedestrian fence should not be used.

The AASHTO *Roadside Design Guide* includes general considerations where protective screening at overpasses may be appropriate, including, but not limited to:

- Existing structures where incidents of objects being dropped or thrown from the overpass have occurred and where increased surveillance, warning signs, or apprehension of a few individuals has not effectively alleviated the problem;
- An overpass near a school, playground, or other location where it would be expected that the overpass would be frequently used by children not accompanied by adults;
- All overpasses in urban areas used exclusively by pedestrians and not easily kept under surveillance by law enforcement personnel;
- Overpasses with walkways where experience on similar structures indicates a need for such screens; and
- Overpasses where private property that is subject to damage, such as buildings or power stations, is located beneath the structure

Project specific considerations include:

- Design speed;
- Vehicular traffic volume;
- Pedestrian traffic volume;
- Crash history;
- Geometric impacts (for example, sight distance);
- Practicality of providing proper end treatments;
- Construction costs; and
- Local preference.

404-4.05(02) Placement and Traffic Separation

Where pedestrian fence is used on a high-speed facility (50 mph or higher), the pedestrian/bikeway area must be separated from adjacent traffic with a traffic or combination (traffic/pedestrian) railing.

Where pedestrian fence is used on a low-speed facility (45 mph or lower), the pedestrian/bikeway area must be either be raised (for example, sidewalk or multi-use path) or separated from adjacent traffic by a traffic or combination (traffic/pedestrian) railing.

404-4.05(03) Details

INDOT *Standard Drawings* series 706-BRPF contains pedestrian fence details for use with an F-shaped concrete bridge railing. The details utilize chain link fabric with a 2-in. by 2-in. opening. Requests to use non-standard details should be coordinated with the Bridge Design Division.