



Highway Maintenance Manual

Bureau of Highway Maintenance

Chapter 9 Right-of-Way Use & Permits

December 2010

Section 15 Utility Accommodation

Subject 30 Structure Attachments

1.0 General

Attachments to structures should be avoided. However, attaching utility facilities to highway structures may be permitted when they do not materially affect the:

- 1) Structure design and appearance,
- 2) Safe operation of traffic, and
- 3) Efficiency of maintenance.

Utilities currently attached to structures are not automatically allowed to reattach when WisDOT re-decks, reconstructs or does any other type of improvement that may force a utility to move its facilities. Utilities must prove to WisDOT that their situation warrants reattachment to the structure.

A utility shall be responsible for all WisDOT costs associated with structure attachments. This includes, but is not limited to, additional design time, increased bridge deck thickness and future bridge maintenance such as painting and inspection.

Pipelines that will be attached to a highway structure shall not exceed a maximum internal pressure of 150 PSIG. Pipelines carrying pressures in excess of 150 PSIG shall be considered only if no other alternative location off the structure is feasible.

2.0 Installation Requirements

When a utility facility is attached to a structure, the installation shall be located:

- 1) Beneath the structure floor,
- 2) Inside the outer girders or beams or within a cell, and
- 3) At an elevation above low superstructure steel or masonry that would not inhibit bridge inspections or repairs.

A utility facility may be located within the structure's deck for new construction or deck reconstruction projects if the utility notifies WisDOT in advance of or while the structure is being designed.

3.0 Installation Openings

The openings created in the bridge abutments and concrete diaphragms to allow passage of the permitted facility shall be of the minimum size necessary.

- 1) The opening in the abutment or and/or diaphragm around the permitted facility shall be completely filled to seal the opening and effectively preclude the leakage of any moisture or backfill material through the abutment/diaphragm.
- 2) If the utility sleeves the facility through the abutment and/or concrete diaphragm, the sleeve shall be tight-sealed into the abutment/diaphragm. Any space between the sleeve and the facility it encloses shall be sealed.