



## 1.0 Background

WisDOT has statutory authority to manage access to the State Trunk Highway (STH) system, which is done through a variety of ways. One way is to issue permits for driveways, private and public road connections, and recreational trails and trail crossings (collectively: connections). Highway Maintenance Manual Chapter 9, Section 10 (HMM 09-10) has been developed in accordance with WisDOT's statutory authority to establish policy and procedures for the STH connection permit process.

## 2.0 Legal Authority

In Wisconsin, the maintaining authority of a highway is the permitting authority. STH connection permits are issued under [Wis. Stat. § 86.07\(2\)\(a\) Digging in Highways...](#) and [Trans 231 Permits for Driveways and Alterations in State Trunk Highways](#). The statute requires a person to obtain a permit, "to excavate or fill" within highway right-of-way (ROW), which correlates to connection construction, alteration, maintenance, and removal. It also allows WisDOT to place any necessary "conditions" on a permit for "highway preservation and public safety." This correlates to connection permits meeting the standards, concepts, and policies that comprise safe, effective, and reasonable access management. Additional access management laws include:

- [§ 84.09](#) *Acquisition of Lands and Interests Therein (a/k/a "Purchased Access Control")*
- [§ 84.25](#) *Controlled-Access Highways (a/k/a "Administrative Access Control")*
- [§ 84.29](#) *National System of Interstate Highways*
- [§ 84.295](#) *Freeways and Expressways*
- [§ 86.05](#) *Entrances to Highways Restored*
- [§ 86.09](#) *Entrances to Cemetery Preserved*
- [Ch. 236](#) *Platting Lands and Recording and Vacating Plats*
- [Trans 233](#) *Division of Land Abutting a STH or Connecting Highway*

Follow the statutes and administrative rules when reviewing a STH connection permit application. To view this language, click on any hyperlink on this page or <https://docs.legis.wisconsin.gov/>.

When WisDOT denies a permit application or revokes a permit issued under § 86.07(2)(a), the affected individual(s) has the right to appeal the decision under [§ 86.073](#). Appeals for unpermitted connection removals may be made using [§ 227.42](#). Case law may also be applicable to the denial/revocation. However, only an WisDOT Office of General Counsel or State of Wisconsin Department of Justice attorney shall provide the necessary guidance to determine if a case law decision is also applicable to a permitting issue.

## 3.0 Policy Development

HMM 09-10 policy has been developed by reviewing guidance from the following national sources:

- Transportation Research Board (TRB) (e.g., Access Management Manual)
- National Cooperative Highway Research Program (NCHRP)
- American Association of State Highway Transportation Officials (AASHTO)
- Federal Highway Administration (FHWA)
- Other state DOTs

Most of these publications are consistent with each other, which enables WisDOT to also be consistent with its policy development for the STH connection permit process. If a policy element is not addressed in HMM 09-10, consult one or more of these national sources for answers to questions and issues and/or to develop new policy on the subject.

## 4.0 WisDOT Responsibilities

The **Bureau of Highway Maintenance** (BHM) is responsible for STH system maintenance, which includes all STH permit processes. Specifically for the connection permit process, BHM is responsible for:

- Establishment and revision of HMM 09-10 policy
- Development and revision of the permit and supplemental forms
- Development and revision of WisDOT's website (see [6.0](#))
- Handling connection policy and permit issues
- Training of WisDOT staff
- Administration of the State Highway Access and Permitting Electronic System (SHAPES). See [7.0](#).

Direct questions to [Kathy Jennings](#), Highway Maintenance Engineer, (608) 261-8976.

The **Bureau of Technical Services** (BTS) is responsible for the:

- Development of criteria used to apply full or partial access control on a particular STH section, which is documented in [Chapter 7](#) of the Facilities Development Manual.
- Coordination of access management issues on a statewide basis
- Handling questions regarding connection permits that also involve access modifications, § 84.25 authorizations, improvement projects, Trans 233, or legal issues
- Handling of appeals of connection permit denials or revocations
- Administration of the State Highway Access and Permitting Electronic System (SHAPES). See [7.0](#).

Direct questions to [Mike Roach](#), Statewide Access Engineer, (608) 516-6340, or [Steve Sydow](#), Statewide Access Coordinator, (715) 836-3912. Contact Steve for SHAPES questions.

The **Bureau of Project Development** (BPD) is responsible for the:

- Establishment of design policies and standards related to connections, which is documented in Chapter 11 of the Facilities Development Manual.

Direct questions to [John Jenkins](#), Design Standards Engineer, (608) 267-6975.

The **Bureau of Planning and Economic Development** (BPED) in the Division of Transportation Investment Management is responsible for the State Access Management Plan (SAMP). When reviewing a connection permit application, also review the SAMP to determine if the proposed connection will fit with the future vision of the associated highway corridor.

The **Regional Transportation Offices** are responsible for implementing the STH connection permit process, which includes, but is not limited to:

- Performing STH connection surveillance to review unauthorized, ongoing, or completed work
- Issuing and revoking permits
- Maintaining connection records
- Removing or temporarily blocking illegal connections
- Checking connection permit requests for the following items to ensure that the proposed connection is legal and would function properly and safely:
  - Existing and/or planned changes to access controls
  - Design features (width, radii, drainage, sight distance, etc.)
  - Corridor plans
  - Subdivisions (Trans 233)
  - Future improvement projects

Each region office should have an access management coordinator and/or engineer who handles the items listed above. WisDOT staff responsible for issuing connection permits may be aided by other staff, including staff from county highway departments under contract with WisDOT to perform STH system maintenance, to review applications, meet with customers, inspect ongoing or completed work, and remove illegal connections.

The **Bureau of Management Services**, Forms Management section, in the Division of Business Management approves revisions to the connection application/permit and related forms.

## 4.1 Other WisDOT Manuals

While the majority of information on STH connection permits is contained in HMM Chapter 9, Section 10, other WisDOT manuals contain information related to access and will be referred to throughout this chapter.

### Construction & Materials Manual (CMM)

[230.6](#) Temporary construction access on a controlled access highway

[780](#) Constructing and restoring access points

[780.1](#) How a project manager should check plan information against state and local rules and regulations, verifying the proposed locations, staking, and constructing driveways

[780.2](#) The statutory basis for reconstructing driveways during a highway project and instructs the project manager to contact the transportation region access management coordinator before agreeing to any additional access points not shown on the plan. It also mentions the Attorney General's legal opinion that requires the restoration of a maximum of one entrance per economically separate premise or property of separate ownership on each side of the highway, except when adjoining portions of the premises are divided by a natural barrier such as a stream, a second entrance may be restored.

[780.3](#) Driveway construction standards from Trans 231

### Highway Real Estate Manual Chapter 2, Appraisal Policy

[2.4.3.4](#) Valuation of site improvements: Driveways

[2.4.5.5](#) Severance damages resulting from a change in access (access control)

## 5.0 Terms, Definitions and Acronyms

The following terms, definitions, and acronyms are used throughout this chapter:

1. **AADT.** Annual Average Daily Traffic. The number of vehicles expected to pass a given location on an average day of the year. For a connection, this is also the number of trips per day. Going in and out of a connection equals two trips.
2. **AASHTO.** American Association of State Highway Transportation Officials
3. **Abutting.** Used to define property that shares a border with STH ROW.
4. **Access controlled highways.** Those state trunk or other highways on which WisDOT has restricted the rights of access to abutting owners according to §§ 84.09, 84.25, 84.29, or 84.295 or where partial control is exercised according to Ch. 236, or Trans 231 and Trans 233.
5. **Alter.** Any change done to a connection beyond routine maintenance such as widening, paving, replacing a culvert, and highway improvements (e.g., adding a turn lane). This includes a change of use.
6. **Alternative access.** A connection to a non-STH road.
7. **Applicant.** A property owner, or a person with a *bona fide interest* in the property, who requests a permit.
8. **Change of Use.** Any modification to a property that results in a change in the number or types of vehicles using a connection between private property and the roadway. This often results from a property use change when a single residence is replaced with multiple residential use or commercial use, property is subdivided to accommodate additional residences or businesses, or the type of business conducted on a property change from a business that attracts a modest number of vehicles to one that attracts a large number of vehicles. For example, a typical farm operation hosting tourist or wedding activities, or a small office being converted into a fast food restaurant with a drive-up.
9. **Connection.** A driveway, public or private road, or recreational trail that physically connects to a STH.
10. **Connection – Agricultural.** A field entrance for planting, maintaining, and/or harvesting crops or tending livestock, or an entrance specifically for recreational land and/or hunting use, next to a rural-type highway. This use may serve farm buildings but may not serve residential buildings. This includes timber harvesting.
11. **Connection – Commercial.** A connection that serves a retail, wholesale, industrial or non-profit business. This may be a driveway or private road that only serves and is maintained by the business.
12. **Connection – Public road.** A road, street, highway, etc. that connects to a STH for public travel and use and is maintained by a local unit of government. A road not maintained by a local unit of government is categorized under #10 or 12.

13. **Connection – Residential.** Connections that serve single and multiple family (duplex, 4-plex) homes involving a limited number of units, apartments, condominiums, townhouses, etc.
14. **Driveway.** A connection built to provide access to a public highway from adjacent private property.
15. **FDM.** Facilities Development Manual
16. **FHWA.** Federal Highway Administration
17. **Highway.** The entire width between ROW lines open to public use as a matter of right for the purposes of vehicular travel. See [drawing](#).
18. **Landing area.** The portion of a connection adjacent to the curb and gutter or shoulder point that will accommodate a stationary vehicle.
19. **NCHRP.** National Cooperative Highway Research Program
20. **Non-Abutting.** Property that does not share a border with STH ROW.
21. **Radii area.** The curved portion of the curb-line or shoulder-line common to intersecting roadways and a fixed distance from a common point of radius.
22. **Rural-type highway cross-section.** A highway segment usually having a ditch instead of curb and gutter.
23. **Roadway.** The portion of a highway between the regularly established curb lines or that portion that is improved, designed, or ordinarily used for vehicular travel excluding the berm or shoulder. See [drawing](#).
24. **SAMP.** State Access Management Plan
25. **Shared connection.** A single driveway that serves two or more adjoining properties. It differs from a private road in that a private road typically has multiple driveways connecting to it to serve homes or businesses.
26. **Surveillance.** Periodic travel by WisDOT or CHD staff to review unauthorized, ongoing, or completed STH connection work.
27. **State Trunk Highway (STH).** All numbered roads currently part of the [STH system](#) maintained by WisDOT.
28. [TEOps](#). Traffic, Engineering, Operations & Safety Manual
29. **TRB.** Transportation Research Board
30. **Trail or trail crossing.** Any pedestrian, bicycle, snowmobile, equestrian, etc., trail that runs longitudinally along and/or crosses a STH.
31. **Urban-type highway cross-section.** A highway segment usually having curb and gutter instead of a ditch.
32. **Vision corners.** Areas adjacent to the intersection of highways or public streets acquired to provide sufficient sight distance for drivers.

## 6.0 [WisDOT Website Information](#)

WisDOT maintains a [website](#) that provides customers with important information regarding the STH connection permit process. The Bureau of Highway Maintenance maintains the website, which contains the following topics:

- Background information on the overall process
- Definition of a STH connection
- General requirements (when a permit is needed)
- STH connection types (classifications)
- How to apply for a permit
- Access restrictions
- SHAPES
- Existing unpermitted connections
- Maintenance of connections
- Statutory authority
- Links to forms, § 86.07(2)(a), and Trans 231
- Regional office locations and contacts
- Central office (BHM) contact
- Frequently asked questions

## 7.0 SHAPES

SHAPES (State Highway Access and Permitting Electronic System) is WisDOT's e-Permitting and access management software. It will be used for STH connection permit reviews, processing, revocations, notifications, and record keeping, and includes the use/storage of all access management related inquiries and documents (e.g., covenants, subdivisions, Trans 233, access modifications, etc.). Guidance will reside in [HMM 09-10-35](#). SHAPES will be replacing the Highway Access Management System (HAMS). ★*All policies and guidance referencing SHAPES in this document will be active upon implementation, which is projected to be January 2027. Until then, staff should continue using HAMS as applicable.*★