WISCONSIN	Highway Maintenance Manual				
H L JE	Chapter 09	Right-of-Way Use & Permits			
PART	Section 15	Utility Accommodation			
THI OF TRANSPO	Subject 40	Controlled-Access Highways			

1.0 Background

Controlled-access highways are separated into two categories: fully controlled or "freeways" (and "Interstates") and partially controlled or "expressways." See definitions 3 and 4 in <u>HMM 09-15-05, 2.0</u>. For the purposes of this policy, a list of these highways is provided in <u>Table 1</u>.

2.0 General Policy

Longitudinal utility installations on controlled-access highways are limited to communications and electric transmission facilities¹ only. Other types of utility facilities may be allowed to longitudinally occupy controlled-access highways in rare circumstances. See <u>3.0</u> for details.

A utility may be charged a fee or provide WisDOT with communication infrastructure (e.g., dark fiber), or a combination of fees and infrastructure, for the right to locate its facilities longitudinally on controlled-access highways (see 2.3). If this is warranted, shared resource agreements shall be negotiated with the utility on a case-by-case basis with a goal of providing mutual benefits to all parties involved. Under Wis. Stat. <u>s. 86.16(6)</u>, WisDOT may not charge a fee for the initial issuance of any permit necessary to construct broadband infrastructure to unserved areas of the state as designated under Wis. Stat. <u>s. 196.504(2)(d)</u>.

On highways not presently constructed as controlled-access but the right-of-way (ROW) has been acquired for the construction of such a facility, the requirements for utility installations shall be the same as for controlled-access highways.

2.1 Transmission, Distribution and Service Connection Facilities

Only transmission utility facilities are allowed to longitudinally occupy controlled-access highways. Distribution facilities may be considered in hardship or special cases such as a short underbuild section.

Service connections are not allowed longitudinally or to cross controlled-access highways, but may be permitted to help a utility's customers if feasible alternatives are not available. For example, a feasible alternative would allow access to a facility from a frontage road. Service connections are not allowed to outdoor advertising signs, i.e., the service shall be entirely installed on and accessed from private property.

2.2 Longitudinal Requirements

Longitudinal utility installations on controlled-access highways shall be located at or as near as practical to the ROW line. Facilities located on private easements may be allowed to overhang the ROW with a WisDOT permit. Below ground installations should not be within the clear zone. Aboveground installations shall not be within the clear zone. Utilities shall not be installed longitudinally within the median area.

Due to WisDOT's concerns regarding longitudinal installations on controlled-access highways with respect to safety, aesthetics, and multiple installations through the same corridor, special provisions may be warranted for the facilities. This includes, but is not limited to, requiring:

- 1) Utilities to resolve collocation issues with each other before permits are issued
- 2) Access restrictions to a site during construction and maintenance of the facility
- 3) A full-time inspector representing WisDOT and paid for by the utility
- 4) A full-time traffic control provider
- 5) Installation of a duct (conduit) system and/or placement of its facility within a duct
- 6) Replacement of damaged or destroyed trees/vegetation or transplanting trees that can be saved at the discretion of WisDOT. See <u>HMM 09-15-45, 2.0</u> for additional requirements.

¹ See HMM <u>09-15-01, 3.6</u> for additional information on siting electric transmission line facilities.

2.3 Longitudinal Occupation Fees and Applicable Controlled-Access Highways

Under Wis. Stat. ss. <u>86.07(2)(a)</u> and <u>84.01(31)</u>, WisDOT has authority to require fees or receive communication infrastructure in exchange for the longitudinal occupation of controlled-access highway ROW. The current rates and applicable controlled-access highways are listed in Table 1. State trunk highways (STHs) not listed in Table 1 are excluded from the fee/infrastructure requirement. The rates below also apply to private utility installations on all STHs. All rates cover a 20-year period. Occupation distance is measured along the highway centerline.

Table 1: Longitudinal ROW Occupancy Rates on Controlled-Access Highways*
*Includes Interstates, freeways and expressways listed below

Broadband Infrastructure		Controlled-Access Highways			Bridge Attachments ³		
		≤ 100,000 AADT ¹		> 100,000 AADT	Interstate	Non-Interstate	
No fee on all		\$10	,000/mile	\$12,000/mile	\$25,000	\$10,000	
highways and bridges				duct per mile ²	Add 20% per duct ⁴		
Initial issuance of any permit per Wis. Stat. <u>s. 86.16(6)</u>		 AADT = Annual Average Daily Traffic (<u>counts</u>) Each duct over two 		3) Costs on unique bridges are below4) Each duct over six			
Highway	From		То		Unique Bridge Cost – Description		
I-39 IL state line			WIS 29(E), Wausau		\$50,000 – All river bridges > 500 feet		
I-41 IL state line		I-43, Green Bay		\$100,000 – Lake Butte des Morts			
I-43 I-90, Beloit		I-41, Green Bay		\$250,000 – Frigo			
I-90	IL state line		MN state line (no bridge)		\$50,000 – All river bridges > 500 feet		
I-94	IL state line		MN state line (includes bridge)		\$50,000 – All river bridges > 500 feet		
I-535	Superior		Duluth		\$500,000 – Blatnik		
I-794	1-43/94		WIS 794	WIS 794		\$250,000 – Hoan	
I-894	I-94/US 45 (Zoo interchange)		I-43/94 (Mitch	I-43/94 (Mitchell interchange)			
US 10	I-41		CTH J, Stockton				
US 10	10 I-39/USH 51		WIS 13, Marshfield		\$25,000 – Wisconsin River		
US 12	IL state line		WIS 67, Elkhorn				
US 12	JS 12 CTH N, Cottage Grove		WIS 188		\$25,000 – Yahara River		
US 14 WIS 138, Oregon		US 12/14, Middleton (University Ave)					
US 18 US 151, Dodgeville		CTH N, Cottage Grove					
US 41			Lloyd Road, Milwaukee				
US 41	41 US 45		Bus 41(E), Peshtigo				
US 45			CTH D, West Bend				
US 51 Larson Beach Rd, McFarland		Farland	US 151, Madison (E Washington Ave)				
US 51 CTH CV, Token Creek		Grinde Road, DeForest/Windsor					
US 51 WIS 29(E), Wausau		US 8		\$25,000 - All rive	er bridges > 500 feet		
US 53			CTH HD, Holmen				
US 53 I-94, Eau Claire		WIS 13, Superior		\$25,000 - All rive	er bridges > 500 feet		
US 141	US 141 US 41, Green Bay		WIS 64, Pound				
US 151	US 151 IA state line (no bridge)		US 14, Madison (Park St)				
US 151			WIS 23, Fond du Lac				
WIS 16	WIS 16 I-94, Waukesha		CTH P, Oconomowoc				
WIS 23			CTH C, Plymouth				
WIS 26	I-39, Janesville		WIS 16-60		\$25,000 – All Rock River bridges		
WIS 29	I-94		I-41, Green Bay		\$25,000 – All river bridges > 500 feet		
WIS 57	7		WIS 42/CTH MM				
WIS 145	/IS 145 WIS 181		US 41/45				
WIS 172	§ 172 I-43		I-41				
WIS 312	2 I-94		US 53		\$25,000 – Chippewa River		
WIS 441	I-41(S)		I-41(N)	I-41(N)		\$100,000 – Little Lake Butte des Morts	

When fees or infrastructure are warranted, WisDOT and a utility shall negotiate an agreement to determine these and other specific installation requirements (e.g., handhole placement) prior to permit issuance. Fees or services agreed to by WisDOT and a utility for the longitudinal occupation of controlled-access highway ROW are not part of the compensable/non-compensable policy regarding utility relocation unless noted in an agreement. Utilities may receive a prorated share of occupation fees paid if WisDOT requires the utility to move its facility off controlled-access highway ROW for an improvement project.

3.0 Occupation for Special Cases

WisDOT recognizes that a utility may need to longitudinally occupy controlled-access highway ROW in special or hardship situations. When longitudinal facility installations other than communications or electric transmission are requested, the utility shall show to WisDOT's satisfaction that:

- 1) Alternate locations are not available or cannot be implemented at reasonable cost from the standpoint of providing efficient utility services in a manner conducive to safety, durability and economy of maintenance and operations.
- 2) The accommodation will not adversely affect highway and traffic safety, and the design, construction, operation, maintenance or stability of the highway.
- 3) It will not interfere with or impair the present highway use or its future expansion.
- 4) Disapproval of using highway ROW would result in a loss of productive agricultural land, or loss of productivity of agricultural land. In this case, the utility must provide information on the direct and indirect environmental and economic effects of such loss. WisDOT will review and evaluate these effects.
- 5) The accommodation satisfies the conditions of 6.0 6.3.
- 6) The facility will be located at or as near as practical to the ROW line and in no case within the clear zone.

Utilities shall not be allowed to be installed longitudinally within the median area.

A longitudinal occupation fee shall also be charged to the utility to maintain consistent UAP application.

4.0 Existing Utilities

When a utility already exists within the ROW a proposed controlled-access highway and it can be serviced, maintained and operated without access from the traffic lanes or ramps, it may remain as long as it does not adversely affect the safety, design, construction, operation, maintenance, or stability of the highway. Otherwise, it shall be relocated.

5.0 Crossings

New utility installations and adjustments/relocations of existing utilities may be permitted to cross a controlledaccess highway. Where a utility follows a crossroad or street that is over or under a controlled-access highway, the utility owner shall provide a way for crossing the highway at a location on the crossroad or street such that the utility can be constructed and/or serviced without access from the highway traffic lanes or ramps.

5.1 Overhead

Install overhead utility lines crossing a controlled-access highway such that supporting structures are located outside of the access control lines. Do not install supporting poles within the clear zone. Where required, intermediate supporting poles may be placed in medians of sufficient width to provide the clear zone from the edges of both traveled ways provided the conditions of 6.0 - 6.3 are also met. If additional lanes are planned, the clear zone shall be determined from the ultimate edges of the traveled way.

When ROW lines and access control lines are not the same (e.g. when frontage roads are provided) supporting poles may be located in the area between them.

Supports for overhead utilities within interchanges are only allowed when all of the following conditions are met:

- 1) The appropriate clear zone is provided with respect to the traffic lanes,
- 2) The appropriate clear zone from edge of ramp is provided,
- 3) Essential sight distance is not impaired, and
- 4) The conditions of 6.0 6.3 are satisfied.

5.2 Underground

Handholes, vaults and other points of access to underground utilities may be permitted within a controlledaccess highway only when they are located beyond the clear zone of the traffic lanes or ramps and provided the conditions of 6.0 - 6.3 are satisfied. If additional lanes are planned, the clear zone shall be determined from the ultimate edges of the traveled way.

5.3 Irrigation Ditches and Water Canals

Irrigation ditches and water canals should be excluded from controlled-access highways. When a crossing is absolutely necessary, it may be made by underground siphon or through culverts or bridges as appropriate to the size of canal, topographic conditions, and highway safety aspects. Locations and structures are to be designed in the same manner as are facilities for natural transverse drainage.

All access and egress for servicing or patrolling such facilities shall be from outside the access control lines. Special ditch cleaning equipment may be allowed to cross the controlled-access highway in those cases where significant travel distance would otherwise be required to use grade separation structures provided a permit application containing an appropriate work zone traffic control plan is first obtained from the utility.

6.0 Right-of-Way Access

When permitted by WisDOT, access for constructing or servicing a utility along or across a controlled-access highway shall be limited to:

- 1) Frontage roads where provided.
- 2) Gates where permitted (see 6.3).
- 3) Nearby or adjacent public roads and streets.
- 4) Trails along or near the ROW line which connects only to an intersecting road.

Entry to the median area should be restricted to nearby grade separation structures, stream channel crossings, or other suitable locations not involving direct access from the highway traffic lanes or ramps.

Submit in the permit application the anticipated maintenance procedures for the proposed utility installation.

6.1 Special Cases: Direct Access from Highway/Ramp

When existing utility supports, manholes, or other appurtenances are located in medians, interchange areas, or otherwise inaccessible portions of the controlled-access highway, access to them from the traffic lanes or ramps may be permitted. A traffic lane closure may also be allowed to facilitate access provided the utility has an approved traffic control plan from WisDOT. Access would only be allowed in special cases and only by permits issued to the utility specifying the conditions that will ensure both motorist and worker safety.

6.2 Security Fence

WisDOT's security fence shall not be opened unless otherwise stated in a utility's permit. If the fence is damaged, the utility shall repair or replace the fence before concluding its work operations at the end of the day, or temporarily secure the fence in some manner to deter access by pedestrians and animals.

If the existing security fence must be opened to facilitate the utility operation, it shall be disassembled and, upon completion of the permitted work, reinstalled in its original location to a uniform profile. All fencing material, with the exception of the posts, may be reused. New posts shall be supplied by the utility. Any fencing material damaged during removal or reinstallation shall be replaced with new material.

During utility construction, the security of the controlled-access highway shall be maintained at all times by the installation of a temporary fence. The temporary fence shall be placed between the highway and the actual work area.

All work performed and the fencing and gate materials supplied shall conform to WisDOT's specifications.

6.3 Security Fence Gates

A utility may request to disassemble a portion of WisDOT's security fence and install a temporary or permanent gate in its location. A permanent gate in the security fence may be allowed, but only in rare cases. This type of access request must also be approved by the Federal Highway Administration (FHWA) when on an Interstate highway. When a gate is allowed, provisions to guard against unauthorized use are required.

Any gate should match the profile of the adjacent security fence. Wood posts may be substituted for the metal posts supporting the gate. Any fencing material damaged with the installation of the gate shall be replaced with new material. The gate and any other fencing material shall be supplied by the utility at its own expense.

Keep a gate locked whenever a utility work site is unattended. The utility shall keep all keys for a gate.

7.0 Vehicular Tunnels

Utilities shall not be permitted to occupy vehicular tunnels on controlled-access highway on new location except in extreme cases. Under no circumstances, however, shall a utility which transports a hazardous material be allowed to occupy a vehicular tunnel.

When a utility occupies space in an existing vehicular tunnel that is converted to a controlled-access highway, relocation of the utility may not be required. Utilities that have not previously occupied an existing vehicular tunnel that is incorporated in a controlled-access highway will not be permitted therein except in extreme cases.