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 HMM 09-15-05, 2.0. For the purposes of this policy, a list of these highways is provided in Table 1.

2.0 General Policy

Longitudinal utility installations on controlled-access highways are limited to communications and electric transmission facilities only. Cellular antennas and their associated equipment are included as longitudinal occupations. Other types of utility facilities may be allowed to longitudinally occupy controlled-access highways in rare circumstances. See 3.0 for details.

A utility may be charged a fee or provide WisDOT with communication services (typically dark fiber), or a combination of fees and services, for the right to locate its facilities longitudinally on controlled-access highways (see 2.3). If this is warranted, agreements shall be negotiated with the utility on a case-by-case basis, and are aimed at providing mutual benefits to all parties involved.

On highways not presently constructed as controlled-access but the R/W 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., installation and access must be 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 R/W line. Facilities located on private easements may be allowed to overhang the R/W 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, multiple installations through the same corridor, and the proliferation of cellular antennas, 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 HMM 09-15-45, 2.0 for additional requirements.

2.3 Longitudinal Occupation Fees and Applicable Controlled-Access Highways

Under Wis. Stats., 86.07(2) and 84.01(31), WisDOT has authority to require fees or receive communication services in exchange for the longitudinal occupation of controlled-access highway R/W. The current rates and applicable controlled-access highways are shown in Table 1. State trunk highways not listed in Table 1 are excluded from the fee/services requirement.

Table 1: Longitudinal R/W Occupancy Rates on Controlled-Access Highways*

Installation Length	Average Daily Traffic		
	Less than 100,000	**100,000 to 200,000**	**Over 200,000**
< 1/2 mile	$5,000	$7,500	$10,000
1/2 mile < 2 miles	$10,000/mile	$15,000/mile	$20,000/mile
2 miles < 25 miles	$8,000/mile	$12,000/mile	$16,000/mile
25 miles < 100 miles	$7,000/mile	$10,500/mile	$14,000/mile
≥ 100 miles	$6,000/mile	$9,000/mile	$12,000/mile

→ *Controlled-Access Highways are Interstates, freeways and expressways listed below.
→ These rates also apply to private utility installations on all state trunk highways.
→ Costs are for a 20-year period; add 25% times rate for each conduit over two for communications facilities.

HIGHWAY	FROM	TO
I-39	IL state line	WIS 29(E), Wausau
I-43	I-90, Beloit	US 41, Green Bay
I-90	IL state line	MN state line
I-94	IL state line	MN state line (includes bridges)
I-535	Superior	Duluth
I-794	I-43/94	WIS 794
I-894	I-94/US 45	I-43/94
US 10	US 41	~~WIS 34~~CTH J, Town of Stockton
US 10	I-39/USH 51	WIS 34(S)
US 12	IL state line	US 12/WIS 67 interchange, Elkhorn
US 12	CTH N, Cottage Grove	~~US 12/14 interchange, Middleton (University Ave)~~WIS 188
US 14	WIS 138, Oregon	US 12/14 interchange, Middleton (University Ave)
US 18	US 151, Dodgeville	CTH N, Cottage Grove
US 41	I-94	Lloyd Road, Milwaukee
US 41	US 45	~~CTH Y,~~Bus 41(E), Peshtigo
US 45	I-94/894	CTH D, West Bend
US 51	WIS 29(E)	US 8
US 53	I-90, La Crosse	CTH HD interchange, Holmen
US 53	I-94, Eau Claire	WIS 13, Superior
US 141	US 41, Green Bay	US 41/141 interchange, Abrams
US 151	IA state line (no bridge)	US 14, Madison (Park St)
US 151	Zeier Road, Madison	WIS 23, Fond du Lac
WIS 16	I-94, Waukesha	CTH P, Oconomowoc
WIS 23	I-43	CTH C, Plymouth
WIS 26	Bus 26(S), Fort Atkinson	I-94, Johnson Creek
WIS 29	I-94	US 41, Green Bay
WIS 145	WIS 181	US 41/45
WIS 172	I-43	US 41
WIS 312	I-94	US 53
WIS 441	US 41(S)	US 41(N)

When fees or services are warranted, WisDOT and a utility shall negotiate an agreement to determine these and other specific installation requirements (e.g., placement of handholes) prior to permit issuance. Fees or services agreed to by WisDOT and a utility for the longitudinal occupation of controlled-access highway R/W 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 if WisDOT requires the utility to move its facility off of the controlled-access highway R/W for an improvement project.

3.0 Occupation for Special Cases

WisDOT recognizes that a utility may need to longitudinally occupy controlled-access highway R/W 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 R/W 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 R/W 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 R/W 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 controlled-access 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 R/W 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 controlled-access 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 R/W 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 be approved by the Federal Highway Administration (FHWA). 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.