



Highway Maintenance Manual
Chapter 06 Winter Maintenance
Section 15 Snow Removal
Subject 40 Drift Prevention

Bureau of Highway Maintenance
January 2026

1.0 General

1. Background

Blowing and drifting snow can cause significant problems for the highway user and highway maintenance personnel. Blowing snow:

- forms drifts on roads that stop traffic and cause crashes,
- increases snow removal costs because the quantity of snow that blows onto the road can be hundreds of times greater than the precipitation that falls directly onto the road,
- reduces driver visibility,
- reduces sight distance on curves and at intersections, and
- causes slush and ice to form on road surfaces.

2. Objectives

The objectives of controlling blowing snow include:

- collecting snow in drifts before it reaches the highway,
- improving visibility by reducing the concentration of snow in the air, and
- reducing snow removal and highway maintenance costs.

3. Benefits

Snow fences can be effective in preventing snowdrifts, improving visibility, and reducing slush and ice. Benefits include reductions in:

- snow removal costs,
- crashes,
- property damage,
- lane closures, and
- pavement maintenance costs.

While blowing snow can be controlled, control measures must be carefully thought out and designed. Improper designs can actually make a drifting problem worse.

Because properly placed snow fence can be so effective at controlling blowing and drifting snow, it is critical for adjoining counties and districts to coordinate their fence placement activities. When drift control is in place in one county but stops at the jurisdictional line despite benefits to be derived by extending the control, the unexpected change in drifting across the roadway could be very hazardous.

2.0 Snow Fences

1. Location

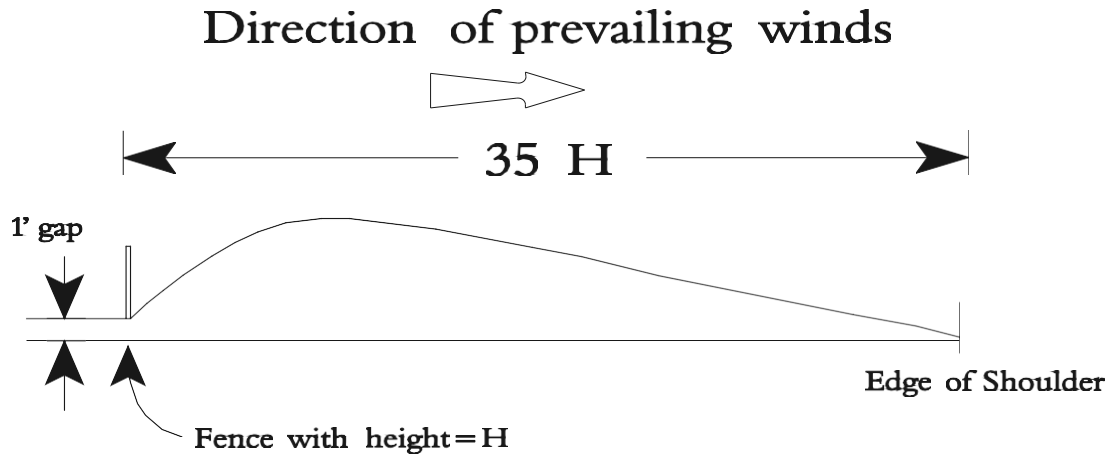
When practical, snow fences should be placed at those areas where drifting is a continuing problem. When a fence needs to be placed on private property, the county should contact the owner and gain approval - (see s. 83.015(2)(a), Stats).

2. Installation

The posts for snow fences should be put into place before the ground freezes. All fencing should be taut and hung after the ground freezes.

Snow fences should be placed one foot above the ground, leaving a gap between the fence material and the ground. The fence should be placed a distance of $35H$ (where H equals the height of the fence) from the edge of shoulder (see diagram below). Where appropriate and permissible, snow fences can be attached to right of way security fences and may remain there permanently.

The following diagram can be used as an illustration for typical snow fence placement.



Other methods should also be considered for areas of severe drifting. These methods include cornrows (see HMM 06-15-41), snow windrows placed by mechanical means in fields, or living snow fence i.e. shrubs and trees (see HMM 06-15-42).

3. Miscellaneous

Either wooden, metal or plastic snow fence may be used. When plastic is used, it should meet snow fence specifications as laid out in the Snow Fence Guide SHRP-W/FR-91-106. Payment shall be as per HMM 02-20-40.