## CHAPTER TEN

## FENCING

#### FENCING OF FULL CONTROL & PARTIAL CONTROL OF ACCESS 10-1

All full control and partial control of access projects will be fenced along the right of way or in the outer separation when frontage roads are present, unless the terrain prohibits access to the roadway by either vehicles or pedestrians by natural means. Each project shall be studied individually to determine if the fence can be eliminated at such things as rivers, streams, deep cuts or high fills. Questionable areas should be discussed at the Final Design Inspection and recommendations included in the Field Inspection Report from the Division Engineer. See Policy and Procedure Manual, 19/3.

### FENCING OF REST AREAS & WELCOME CENTERS 10-2

The type fence to be used at each rest area or welcome center shall be determined on an individual basis through coordination with the Roadside Environmental Unit.

FENCING OF TRUCK WEIGH STATIONS	10-3
	102

The type fence to be used at each truck weigh station will be determined on an individual basis through coordination with the Special Design Section Engineer of the Roadway Design Unit.

FENCING IN PROXIMITY TO AIRPORTS	10-4
----------------------------------	------

Fencing in proximity to airports shall be discussed with the Federal Aviation Administration to determine if nonmetallic fencing should be used. Contact can be made through the DOT Director of Aviation.

## FENCE LOCATIONS AT RIVERS AND STREAMS 10-5

The proposed method of fencing at streams shall be detailed in the plans and discussed at the field inspection. At stream crossings, the fence should be installed under the structure. The fence should be tied into the wingwall at box culverts.

FENCE LOCATIONS AT 54" PIPES AND ABOVE	10-6
At pipes 54" and above, the fence should be tied into the end walls.	
FENCE LOCATIONS AT OVERPASSES	10-7

PART II

Fencing at overpasses shall be installed in accordance with one of the suggested treatments shown in Figure 1 and 2. In locations where the fence is tied into the bridge, extreme caution shall be taken to assure that sight distances are not obstructed.

TYPES OF FENCE 10-8
---------------------

Either woven wire or chain link fence may be used for establishing control of access. Unusual conditions may justify the use of a special type fence, which must be approved by the State Roadway Design Engineer and FWHA if applicable.

The type of fence to be used shall be discussed at the Final Design Field Inspection and recommendations included in the Field Inspection Report from the Division Engineer. If there are differences of opinion, they shall be resolved prior to distribution of the right of way plans.

# (A) <u>WOVEN WIRE FENCE</u>

**ROADWAY DESIGN MANUAL** 

Woven wire fence shall be used except where there is a specific need for chain link fence or a special type of fence. When chain link or a special type fence is being considered, actual land usage at the time the project is in the design stage should be the determining factor, unless a change in land use is imminent. This decision should not be based on blanket categories such as anticipated development, zoning classifications, inside or outside city limits or rural-urban classifications.

See Roadway Standard Drawings, Std. No. 866.02 and 866.03

# (B) <u>CHAIN LINK FENCE</u>

Chain link fence shall be used in the following areas:

(1) A residential area where the average size of those lots adjacent to the right of way does not exceed one (1) acre.

(2) Any area where medium to heavy pedestrian activity will routinely occur closer than 150 feet to the proposed fence location. All developed land should be studied to determine if this type of activity is generated. Chain link fence shall not be used in institutional, commercial, office, or industrial areas that do not generate such activity. The presence

# REV. DATE NOEMBER 2007

### **ROADWAY DESIGN MANUAL**

**REV. DATE NOEMBER 2007** 

GATES

of buffer zones or park like areas adjacent to a developed area will often preclude the need for chain link fence.

Any area which the right of way agreement with the property owner requires that (3) chain link fence be installed by the Department of Transportation.

Where short sections of woven wire fence would be required to comply with the (4) policy.

See Roadway Standard Drawings, Std. No. 866.01.

#### (C) SPECIAL TYPE FENCE

Special type fences will be considered on an individual basis and discussed during the preliminary field inspection or during right of way negotiations. Special fences include security fences, masonry walls and different types of fences used for screening, landscape purposes, or sound barriers.

HEIGHT OF FENCING	10-9

Woven Wire Fence	47" Fabric
Chain Link Fence	48" Fabric

Where bikepaths are being separated from the roadway, a minimum 4.5-foot high fence is recommended.

Exceptions to the above heights or inclusion of a top rail on chain link fence must be considered on a project by project basis.

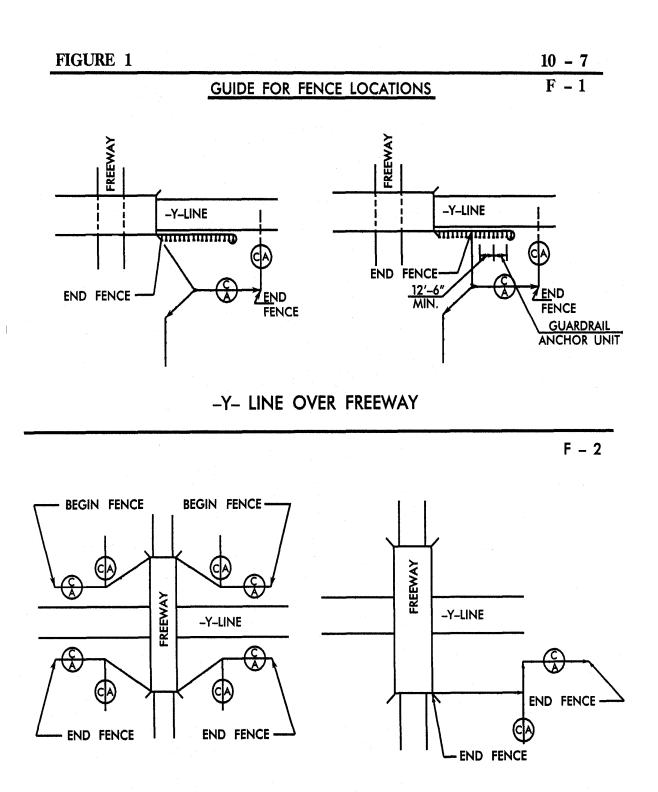
When it is necessary to gain access to utilities and drainage areas, locked gates shall be considered. Use of gates will be determined on a project by project basis, on Final Design Field Inspection and during right of way negotiations. After it has been determined that a gate is required, it will usually be stipulated in the right of way agreement, and shown on the Final Construction Plans.

See Roadway Standard Drawings, Std. Nos. 866.01, 866.02 and 866.03

TYPES OF FENCE (continued)

PART II

10-10



FREEWAY OVER -Y-LINE