

graded berms and vegetation can effectively separate incompatible uses or undesirable views.

Taller berms or changes of grade are useful in sound control (Fig. 3.6). When considering earth berms or grade changes for purposes of sound control, it is important to remember that in most instances, the closer to the source of the noise, the more effective the berm. Berms should be designed so that the source of the noise is visually isolated from the receiver, and the berm should be continuous. Although a series of hummocks might be more interesting to see, they will not be as effective as a sound barrier for noise reduction. The length of the barrier should be at least as long, but preferably twice as long, as the distance from the source to the barrier. Planted berms should use plant materials of varying heights to create a dense buffer. The use of simple screening plantings may visually screen the source, but such plantings are not as effective as a dense mixed planting. The effectiveness of the mixed planting is a function of its depth and the various textures and surfaces that act to deflect and absorb sound. Vegetated screens are discussed more fully in Chap. 9.

Designers should also consider the location of proposed buildings and other site features to effectively screen sound or to create distance from sources of sound. For example, buildings should be located so that they back up to the sources of sound and act as a sound barrier, and parking areas should be located so that they are a buffer from the sound sources. Sources of noise associated with site development should be considered as either temporary construction noise or postconstruction noise. Some communities have noise ordinances that



Figure 3.6 Photograph of a berm used for sound control.