

DESIGN DETAILS: Pedestrian Circulation Along Green Streets

SOURCE: KEVIN PERRY- CITY OF PORTLAND



Figure 5-10: This street utilizes stormwater planters adjacent to on-street parking. It provides a continuous 3-foot pedestrian egress zone and walkways that allow people to access the sidewalk and parking zone.

SOURCE: NEVUE NGAN ASSOCIATES



Figure 5-11: A series of “stormwater bridges” allows people to cross over a vegetated swale.

SOURCE: NEVUE NGAN ASSOCIATES



Figure 5-12: A perimeter concrete curb was installed around this urban rain garden to help protect both pedestrians and the stormwater facility.

SOURCE: NEVUE NGAN ASSOCIATES



Figure 5-13: Low-profile railing systems can be an aesthetically pleasing way to direct pedestrian traffic.

Providing adequate pedestrian circulation along streets should always be a priority and should not be compromised when considering stormwater facilities. Many green streets can offer solutions for better pedestrian circulation by providing more buffer against vehicular traffic, reducing pedestrian crossing distances, or improving sight angles at intersections. Most conflicts between pedestrian circulation and stormwater facilities stem from the need to provide on-street parking. There are, however, ways that stormwater facilities can be integrated into differing street conditions while still maintaining on-street parking and adequate pedestrian circulation.

When on-street parking is designed next to a stormwater facility, it is critical to consider where people will walk when they get out of their cars. People need adequate room and a place to step when they get out of their car that does not interfere with the stormwater facility. This is called an egress zone and this area should be a minimum of 3 feet wide adjacent to the street curb. Furthermore, pedestrians need to have sufficient access from the sidewalk to the parking zone. This can be provided by installing frequent walkways or bridges across stormwater facilities. Figure 5-10 illustrates how on-street parking can be accommodated with stormwater planters and still allow pedestrians to access parked vehicles and the sidewalk.

Another consideration for pedestrian circulation is assuring that people can safely detect where there is a drop in grade adjacent to walkways. Where there is a vertical grade change of more than 6 inches immediately adjacent to a sidewalk zone, an effort should be made to visually and/or physically denote this vertical drop in grade. There are several ways to accomplish this, such as installing a raised curb edge, a low-profile railing, or detectable warning/paver strips. These design elements give people, especially the visually-impaired, a means to safely navigate around any grade changes.