Shared Use Path/Trail Design Standards

Design Element	Design Value[1]
Design Speed	18 mph for level terrain
Path Width[2]	10 ft minimum
Shoulder Width	3 - 5 ft 5 ft desirable adjacent to 1:3 slope or steeper
Horizontal Clearance	2 ft minimum from lateral obstructions 1 ft minimum from railings (or "smooth" features)
Separation between Path and Roadway[3]	5 ft minimum
Path Cross Slope[4]	1.0% recommended, 2.0% maximum
Shoulder Cross Slope	1:6 maximum
Grade[5]	5% maximum, or grade of adjacent roadway
Vertical Clearance	8 ft minimum, 10 ft desirable
Horizontal Curvature[6]	60 ft minimum @ 18 mph design speed
Stopping Sight Distance[7]	135 ft minimum @ 18 mph design speed
Pedestrian Accommodations	See Americans with Disabilities Act Accessibility Guidelines (ADAAG) and Proposed Accessibility Guidelines for Ped. Facilities in the Public Right-of-Way (PROWAG)
Railing Height[8]	42 in minimum

[1] Source: American Association of State Highway and Transportation Officials (AASHTO) Guide for the Development of Bicycle Facilities 2012 - 4th Edition.

[2] A reduced width of 8 ft may be used in rare circumstances such as: bicycle traffic is expected to be low, even on peak days or during peak hours; pedestrian use of the facility is not expected to be more than occasional; horizontal and vertical alignments provide frequent, well-designed passing and resting opportunities; the path will not be regularly subjected to maintenance vehicle loading conditions that would cause pavement edge damage; or the width is constrained by a physical feature over a short distance. An 11 ft path width is needed for passing in the same direction.

[3] A physical barrier or railing should be provided between the path and roadway where the separation is less than 5 ft. Where shared use paths are adjacent to a high-speed highway, a separation greater than 5 ft is desirable. If greater separation cannot be provided, use of a crashworthy barrier should be considered.

[4] Transition Rate: 1% in 5 ft

[5] Exceptions:
Steeper than 1:20 (5%) But not Steeper than 1:12 - Maximum Length of Segment: 200 ft
Steeper than 1:12 But not Steeper than 1:10 - Maximum Length of Segment: 30 ft
Steeper than 1:10 But not Steeper than 1:8 - Maximum Length of Segment: 10 ft
* No more than 30% of the total length of a path shall have a running slope steeper than 1:12 (Access Board Trail Guidelines).

[6] Radii at approaches to road crossings may be reduced to discourage high speed crossings.

[7] Refer to AASHTO Guide for the Development of Bicycle Facilities 2012 - 4th Edition, for additional stopping sight distances based on grade and design speed.

[8] A 48 in railing should be considered at locations such as bridge approaches where high-speed, steep angle impacts may occur between bicyclists and the railing, and on bridges.