
MULTI-USE PATHWAYS



Bicycle paths are physically separated from roadways. It is generally not advisable to locate a two-way bicycle path immediately adjacent to a roadway because of confusion at driveways and intersections.

DEFINITION

A multi-use pathway is physically separated from motor vehicle traffic, and can be either within the highway right-of-way or within an independent right-of-way. Multi-use pathways include bicycle paths, rail-trails or other facilities built for bicycle and pedestrian traffic.

WHEN TO CONSIDER THIS TYPE OF FACILITY

When properly located, multi-use pathways can be a safer type of facility for novice and child bicyclists because they do not have to share the path with motor vehicles. To be safe and enjoyable, multi-use pathways must be designed according to well-established design standards. These design standards include adequate width for two-directional use by both cyclists and pedestrians, provision of good sight distance, avoidance of steep grades and tight curves that force bicyclists to make awkward movements, and minimal cross-flow by motor vehicles. Multi-use pathways can serve a variety of purposes,

including recreation and transportation. For transportation purposes, a multi-use pathway should have a well-defined origin and destination. Multi-use pathways should not be located immediately adjacent to a roadway because of safety considerations at intersections with driveways and roads. The bicyclist and motorist each believes that he or she has the right of way; the result can be a bicycle/motor vehicle collision. Studies have shown that such parallel multi-use pathways are approximately twice as dangerous for bicyclists as riding in traffic with motor vehicles.

- A multi-use pathway should have well-defined origin and destination
- A multi-use pathway can be a safer type of facility for novice and child cyclists, if properly located and designed.
- Sidewalks should never be designated as multi-use pathways.



Two-way multi-use pathways located adjacent to a roadway may result in bicycle/motor vehicle conflicts at driveways

PRINCIPAL PLANNING CONCERNS WITH MULTI-USE PATHWAYS

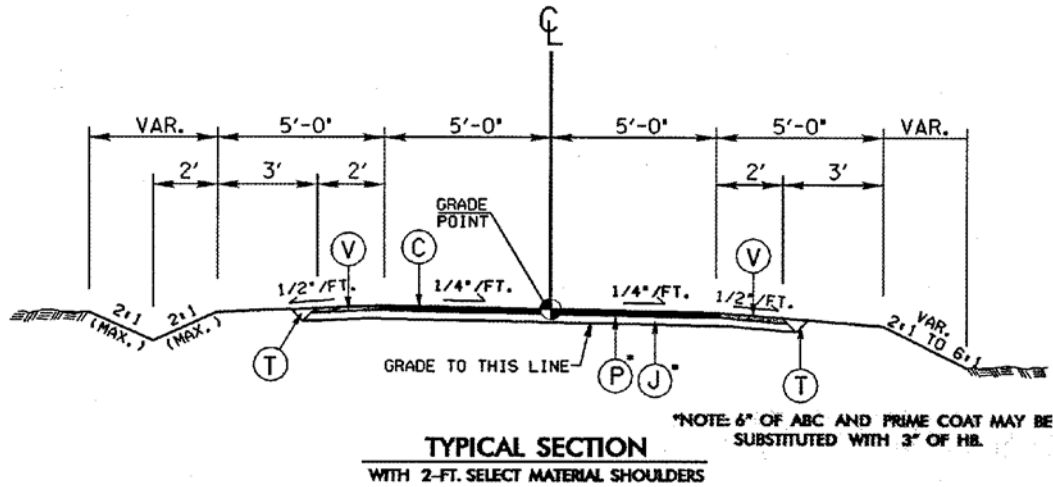
- An alignment with the fewest intersections with roadways should be chosen.
- Multi-use pathways need continuity with other facilities. A multi-use pathway should not just end, leaving bicyclists stranded with no nearby bikeway connection.
- Multi-use pathways are generally expensive to build because they are entirely separate facilities from the roadway. This is an important reason why a well-defined origin and destination would help in the implementation of a proposed multi-use pathway project. Multi-use pathways that are intended for transportation should be as direct as possible or many bicyclists will choose a shorter route, such as a nearby roadway.
- Multi-use pathways located adjacent to a highway may result in bicycle/motor vehicle conflicts at driveways and with turning traffic at intersections with roadways.
- Where significant pedestrian usage is anticipated, additional width should be provided.

PLANNING AND DESIGN CONSIDERATIONS

Addressing planning and design concerns for a multi-use pathway is very much like selecting a roadway functional design. Some similar design considerations include horizontal and vertical alignment, sight distance, grades and pavement structure. The minimum paved width for a two-directional multi-use pathway is 3 m (10 ft); however, a path wider than 3 m is very desirable when usage by both bicyclists and pedestrians is expected to be high. When a multi-use pathway must be located parallel to a highway due to a lack of an alternative location, a minimum separation of 1.5 m (5 ft.) should be provided between the roadway and multi-use pathways. If 1.5 m of separation cannot be obtained due to limited right-of-way, a suitable positive barrier between the roadway and multi-use pathway should be provided.

In addition, the pathway should function as a mode of transportation between well defined locations, such as schools, residential subdivisions, and shopping centers. The pathway should foremost have a transportation purpose, which does not exclude recreation.

RECOMMENDED TYPICAL SECTION OF 10-FT ASPHALT PATHWAY With 2-Ft Crushed Stone Shoulder



PAVEMENT SCHEDULE	
C	PROP. APPROX. 2" BIT. CONC. SURFACE COURSE, TYPE SF 9.5 A, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
J	PROP. 6" AGGREGATE BASE COURSE.
P	PRIME COAT AT THE RATE OF 0.35 GAL. PER SQ. YD.
T	EARTH MATERIAL
V	PROPOSED APPROXIMATE 2" OF SELECT GRANULAR MATERIAL.

NOTE: ALL PAVEMENT EDGE SLOPES ARE 1:1.