Chapter 4 Pathway design outside the road corridor

Contents

4.1 Introduction
4.2 Types of pathways
4.3 Design standards
4.4 Termination of paths
4.5 Intersection of paths with roads
4.6 Other infrastructure

4.1 Introduction

(1) This chapter outlines the following for pathways that are located outside the road corridor:
   (a) design and construction standards;
   (b) advice about satisfying assessment criteria in the City Plan.

(2) Pathways outside the road corridor are generally located in open space, waterway corridors, utility corridors and flood prone land.

Note—The design standards for pathways in the road reserve are set out in Chapter 3 of this planning scheme policy.

(3) A pathway with a fully constructed hard wearing surface providing pedestrian access in high use areas. Cyclists may use paths with care but unlike bikeways they are not designated for cyclist use.

(4) In addition to this planning scheme policy, a pathway is planned, designed and constructed in accordance with:
   (a) Standard drawings;
   (b) Manual of uniform traffic control devices (Queensland Department of Transport and Main Roads);
   (c) Austroads guide to road design part 6A: pedestrian and cycle paths.

(5) If there is a conflict in the design parameters between these references, the document listed first prevails over others in descending order.

4.2 Types of pathways

The types of pathways that are located outside the road corridor comprise the following:
   (a) a footpath, which is intended and designed to accommodate pedestrian and wheelchair movement;
   (b) a bicycle path, which is intended to solely accommodate cycling movements and is designed to provide for higher speed cycling (over 20km/h) (i.e. is not suitable for low speed cycling and pedestrian movements);
   (c) a shared path, which is intended for use by pedestrians, cyclists, wheelchairs, roller bladers and other non-motorised personal transport modes, and designed to accommodate a range of concurrent users;
   (d) a separated path, which provides individual paths for pedestrians and cyclists within a single pathway corridor, achieved by physical separation or lane markings;
(e) a local access path, which is a short link within a park and to residential properties, primarily designed for pedestrian movements but also able to carry low volumes of cyclists (i.e. are not intended for high volume or high speed bicycle movements).

4.3 Design standards

4.3.1 General

(1) The design standards in this section apply to pathways in new development.

(2) Pathway design may be varied by the design standards for the bicycle or streetscape networks.

(3) The width of pathway corridors and the formed paths varies depending on:
   (a) pathway classification identified by the bicycle or streetscape hierarchy;
   (b) pathway type;
   (c) anticipated level of pedestrian and cyclist usage;
   (d) proximity to centres and major trip generations;
   (e) space availability;
   (f) topography and landform;
   (g) existing buildings and land uses.

Note–Parts of the existing pathway network might not comply with all of the current specified design parameters.

4.3.2 Pathway corridor

(1) The pathway corridor width for each type of pathway is shown in Table 4.3.2.A, unless specified in Chapter 5 of this planning scheme policy, according to:
   (a) type of pathway;
   (b) the bicycle hierarchy route type;
   (c) whether or not the corridor is constrained.

(2) The bicycle route type is shown on the Bicycle network overlay map.

(3) Unconstrained corridors are generally those in open space areas, waterway corridors and in areas prone to flooding, and corridor widths may be increased to greater than 9m if the wider corridor will provide improved sightlines, casual surveillance and safety for cyclists.

(4) Constrained corridors are those in built up areas or locations constrained by topography, landform or surrounding buildings and land uses.

(5) In constrained corridors special attention needs to be taken to ensure crime prevention through environmental design principles are applied and corridors do not create unsafe environments.

(6) Infrastructure and amenities that may be located in a pathway corridor include:
   (a) lighting;
   (b) signage;
   (c) shade trees;
   (d) drinking fountains;
   (e) entry and exit structure;
   (f) bicycle racks;
   (g) bicycle shelters.

(7) If a path is not constructed at the time of development, an identified pathway corridor is still preserved.
(8) The corridor width of shared paths on primary and secondary routes identified by the bicycle network is wide enough to accommodate a future upgrade to a separated path if necessary.

Table 4.3.2A—Pathway corridor width

<table>
<thead>
<tr>
<th>Pathway type</th>
<th>Primary cycle route or secondary cycle route corridor width</th>
<th>Local route corridor width</th>
<th>Corridor width of a pathway not identified in the bicycle network</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Un-constrained</td>
<td>Constrained</td>
<td>Un-constrained</td>
</tr>
<tr>
<td>Footpath</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Bicycle path</td>
<td>9m</td>
<td>7m</td>
<td>N/A</td>
</tr>
<tr>
<td>Shared path</td>
<td>9m</td>
<td>7m</td>
<td>6m</td>
</tr>
<tr>
<td>Separated path</td>
<td>9m</td>
<td>7m</td>
<td>N/A</td>
</tr>
<tr>
<td>Local access path</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

4.3.3 Pathway

(1) The pathway width for each type of pathway is shown in Table 4.3.3A, unless specified in Chapter 5 of this planning scheme policy, according to:

- (h) type of pathway;
- (i) the bicycle hierarchy route type;
- (j) whether or not the corridor is constrained.

(2) The bicycle route type is shown on the Bicycle network overlay map.

(3) Unconstrained corridors are generally those in open space, waterway corridors and in areas prone to flooding, and corridor widths may be increased to greater than 9m if the wider corridor will provide improved sightlines, casual surveillance and safety for cyclists.

(4) Constrained corridors are those in built up areas or locations constrained by topography, landform or surrounding buildings and land uses.

Table 4.3.3A—Path width

<table>
<thead>
<tr>
<th>Pathway type</th>
<th>Primary bicycle route or secondary cycle route pathway route pathway width</th>
<th>Corridor width of a pathway not identified in the bicycle network</th>
</tr>
</thead>
<tbody>
<tr>
<td>Footpath</td>
<td>2m-4m</td>
<td>2m</td>
</tr>
<tr>
<td>Bicycle path</td>
<td>2.5m-5m</td>
<td>2.5m</td>
</tr>
<tr>
<td>Shared path</td>
<td>3m-6m</td>
<td>3m</td>
</tr>
<tr>
<td>Separated path</td>
<td>N/A</td>
<td>6m</td>
</tr>
<tr>
<td>- Bicycle path</td>
<td>2.5m-6m</td>
<td>4m</td>
</tr>
<tr>
<td>- Pedestrian path</td>
<td>2m-4m</td>
<td>2m</td>
</tr>
<tr>
<td>Local access path</td>
<td>N/A</td>
<td>2m</td>
</tr>
</tbody>
</table>
4.3.4 Surface treatments

(1) A smooth riding surface is provided for bicycle paths, shared paths and the bicycle path section of a separated path.

(2) Riding surfaces are constructed in concrete and comply with UMS 252.

(3) The edges of the pathway are at the same level of the pathway, flat and free from obstruction.

(4) At designated motor vehicle crossover points:
   (a) pavement design (material, thickness and strength) is designed to accommodate low speed and low volume traffic equivalent to a class 1, short vehicle;
   (b) control facilities are installed to ensure vehicles cross the pathway at designated locations.

4.3.5 Signage, line marking and pavement markings

(1) Pathway intersections, way finding signs and shared path pavement markings comply with UMS 258.

Note—Additional guidance on signage can be found in Brisbane City Council’s Bikeway Signage.

(2) Colour and textural surface treatment is required:
   (a) for separated pedestrian and bicycle paths complying with the relevant UMS;
   (b) to indicate vehicle crossover points as described in section 4.5.

4.3.6 Pathway lighting

(1) Overhead lighting is provided:
   (a) for pathways identified as primary and secondary routes shown on the Bicycle network overlay map;
   (b) in locations that have potential hazards, such as difficult grades or geometry, for travel in the dark;
   (c) on pathways that will have high usage outside daylight hours;
   (d) where there are potential conflict points such as path intersections and intersections with roads;
   (e) in locations, such as under bridges or tunnels and long pathways, that are not under visual surveillance and where personal safety of travellers after dark might be compromised.

(2) Timing or sensor devices may be appropriate in some locations that have low use at night.

(3) Continuous level P3 lighting is be provided for all new pathways identified as primary and secondary routes on the Bicycle network overlay map.

(4) Level 4 semi-continuous lighting will be provided:
   (a) for minor changes to existing paths and local routes identified by the bicycle network;
   (b) on local access paths;
   (c) in locations not identified as a primary and secondary route on the Bicycle network overlay map where lighting should be provided;
   (d) in locations where P3 lighting may have detrimental impacts on surrounding uses (e.g. residential areas, natural areas).

(5) The type of lighting used on pathways should be determined:
   (a) in accordance with crime prevention through environmental design principles;
(b) taking into consideration potential environmental impacts.

(6) Lighting is provided to comply with UMS 259 and UMS 260.

4.4 Termination of paths

(1) If geometry permits, a ‘reverse curve’ bicycle path entrance is constructed to comply with UMS 253.

(2) If the geometry does not permit, an ‘offset chicane’ bicycle path entrance is provided to comply with UMS 255.

(3) The standard entrance for low volume and high volume paths are shown on UMS 251 (low volume), UMS 257/1 (high volume) and UMS 257/2 (high volume), respectively.

(4) If restricted vehicle access entry points are required on or connecting to primary or secondary cycle routes, bicycle paths are constructed to comply with UMS 257/1 or UMS 257/2.

(5) Rest rail and sign posts are provided to comply with UMS 256.

4.5 Intersection of paths with roads

(1) A pathway that crosses a road complies with section 4.4.

(2) A kerb ramp for a pathway crossing complies with UMS 213.

(3) The concrete footpath in the pathway is extended to the kerb and channel with a kerb ramp, or to the existing concrete footpath in the street.

4.6 Other infrastructure

4.6.1 Stormwater structures

(1) Stormwater drainage inlets and outlets are located a minimum 1m from a bicycle path. If the bicycle path is within 2 m of the edge of the drainage inlets and outlets it must be identified by delineator posts complying with UMS 131.

(2) Gullies are positioned on the uphill side of the crossing, not in the kerb and channel where a bikeway meets a road.

(3) If circumstances necessitate the use of an inlet directly adjacent to a bicycle path, it is provided with a bike-safe grate complying with UMS 332.

(4) A bicycle-safe grate has bars in two directions (longitudinal and transverse). Stormwater inlets are not to be located adjacent to the curved section of a bicycle path.

(5) The minimum setback from the invert of the kerb and channel to edge of a bicycle path is 1 m.

4.6.2 Bridges

Bicycle and shared path bridge structures are 1 m wider (between handrails) than the approach pathway and comply with Chapter 8 of this planning scheme policy.

4.6.3 Mid-trip facilities

(1) Mid-trip facilities are supporting infrastructure for pathways and include:
(a) shade trees;
(b) rest areas;
(c) water fountains;
(d) bicycle parking.

(2) Types of bicycle parking includes bicycle racks and rails, and bicycle shelters.

(3) Bicycle rack and rails are suitable for short and medium term parking.

(4) Bicycle shelters are secure shared enclosures that provide a medium level of security and are suitable for locations where a high volume of cyclists park their bicycles for long periods of time.

(5) The location of bicycle parking must not:
(a) restrict pedestrian movement along pathways and footpaths;
(b) impede the opening of doors of parked cars.