

Inclusive Cycle Infrastructure Guide: Vehicle access restrictions

Bollards can be used when other measures to prevent dangerous vehicle access have proven ineffective:

All access controls including bollards are obstacles that make a path less safe and less accessible for legitimate users.

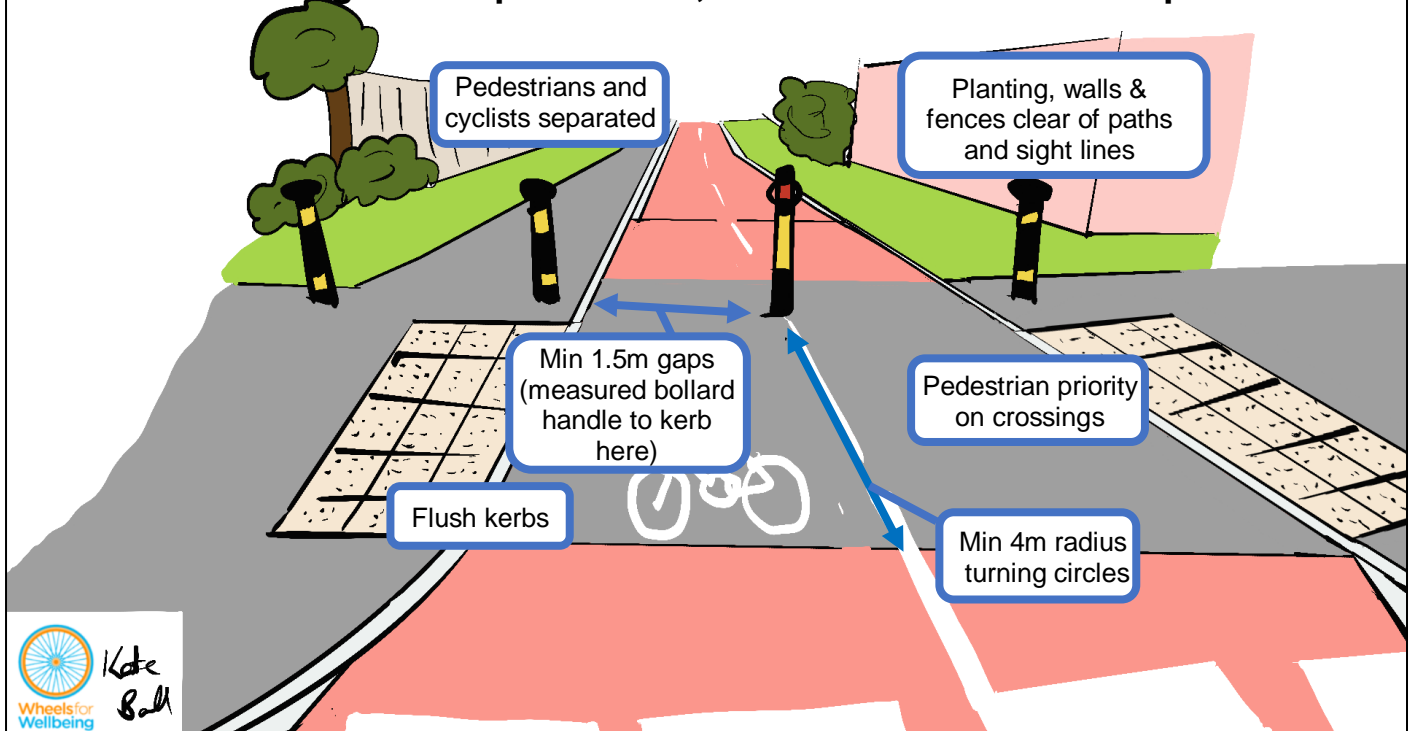
Bollards spaced with an absolute minimum air gap of 1.5m and straight approach will prevent vehicle access:

- All modern cars are over 1.6m wide.
- Cycles and other mobility aids can be up to 1.2m wide.
- People being guided by assistants or assistance dogs, people in groups (including accompanying children), with pushchairs and carrying shopping can need even more width.
- Design and maintenance (vegetation/litter) must ensure usable access widths never drop below 1.5m.
- Bollards should only ever be installed on straight, level, smooth, sealed surfaces.



- Bollards must be at least 1m high, contrast with their surroundings & have reflective bands for visibility.
- Bollards must have **minimum 1.5m straight-line access widths**, assuming 4m turning radius for larger cycles and mobility aids

Design concepts for safe, accessible active travel spaces:



Legal and guidance position on access controls including bollards:

Equality Act (2010):

These duties are anticipatory: it is a legal requirement that reasonable adjustments to make a space accessible for Disabled people must be undertaken without any Disabled person having to ask for them.

Section 20: Requires those responsible for a space to anticipate and make reasonable adjustments to enable Disabled people access with no substantial disadvantage compared to non-Disabled people. This explicitly includes including altering and removing physical features which would otherwise exclude Disabled people.

It is not permitted to require a Disabled person to go a longer way around, ask for assistance or traverse a space much more slowly than a non-Disabled person would have to due to a physical barrier that could be removed.

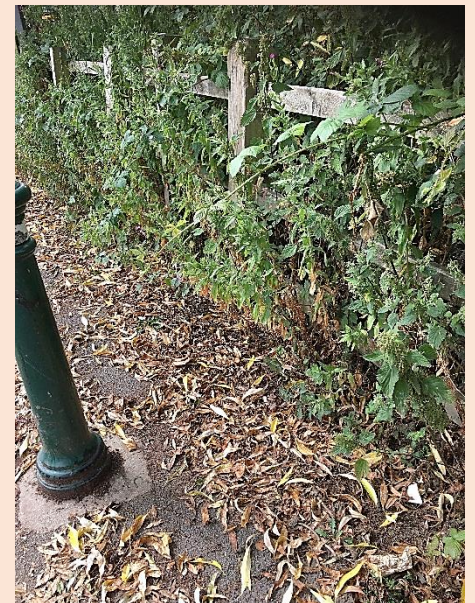
Section 149 Public Sector Equality Duty: Requires public authorities to advance equality of opportunity for all people with protected characteristics, including Disabled people. This goes beyond removing and minimising disadvantages, and additionally includes taking steps to promote equality by actively enabling Disabled people to participate in public life and activities, especially where Disabled participation is disproportionately low (e.g. active travel).

Cycle Infrastructure Design LTN 1/20:

Section 1.6 summary principle 16: "Access control measures... should not be used. They reduce the usability of a route for everyone, and may exclude people riding nonstandard cycles and cargo bikes. They reduce the capacity of a route as well as the directness and comfort. Schemes should not be designed in such a way that access controls, obstructions and barriers are even necessary".



Small bollards with low contrast and no reflective bands are hard to see, making them a dangerous obstacle for path users



Vegetation growth and debris on paths will block access without careful design and sufficient maintenance.

References/Further reading/Resources:

1. Equality Act (2010): <https://www.legislation.gov.uk/ukpga/2010/15/contents>
2. LTN 1/20 Cycle infrastructure design: <https://www.gov.uk/government/publications/cycle-infrastructure-design-ltn-120>
3. Wheels for Wellbeing Guide to Inclusive Cycling (4th edition, 2020): <https://wheelsforwellbeing.org.uk/campaigning/guide/>