

## B.06 Flush kerbs

### Key Principle

**FLUSH** kerbs, i.e. with no upstand between abutting surfaces, should be provided at all transition points, with channel blocks and increased drainage provision used if necessary. Flush kerbs at crossings should be wide enough to allow cyclists to turn on/off the carriageway without the need to pull out into the path of vehicles going in the same direction (see also [B01 Connections and Links](#), [B02 Road Crossings – Side Roads](#), [B03 Road Crossings – Mid-link](#), [B05 Footway Crossings and Tactile Paving](#) and [B07 Cycle Track Junctions](#)).

### Dropped Kerbs at Crossings

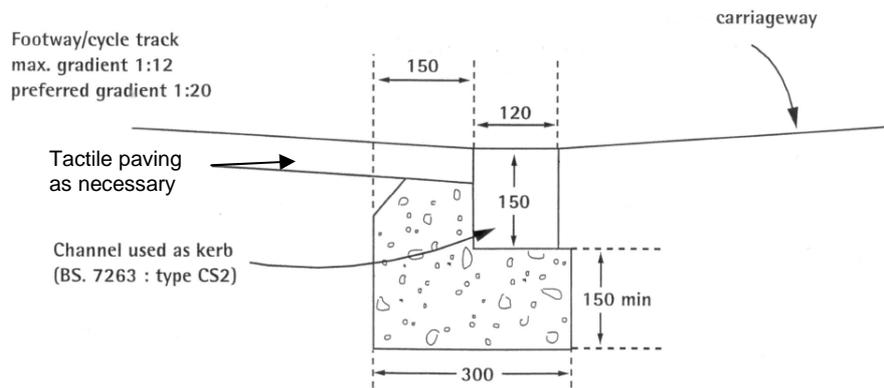
The transition from cycle track to carriageway is one of the most critical design details for cyclists' safety and comfort. The presence of any upstand, especially when crossed at a narrow angle or when combined with loose debris in the channel, can result in cyclists skidding or losing control. Any difference in level is also a real disadvantage to wheelchair users at the crossing points of shared use facilities. The transition between surfaces should, therefore, be flush i.e. without any difference in level between abutting materials.

In many circumstances the best option is to omit kerbs altogether, providing a continuous surface. Where edge restraint is required, square-edged kerbs, purpose-made if necessary, or channel blocks should be used. An upstand is not acceptable on the grounds of being required for drainage purposes. Ponding should be prevented by quality design, adequate surface water drainage facilities and properly supervised construction techniques.

Gully gratings should be located clear of the crossing point and of a cycle-friendly design or orientated so that the gratings are at right angles to the direction of cyclists' flow. The width of the crossing at the carriageway edge should be wide enough to accommodate all cyclist turning movements without the need to pull out into the carriageway in order to join or leave the cycle track.



Picture: Alex Sully, ERCDT

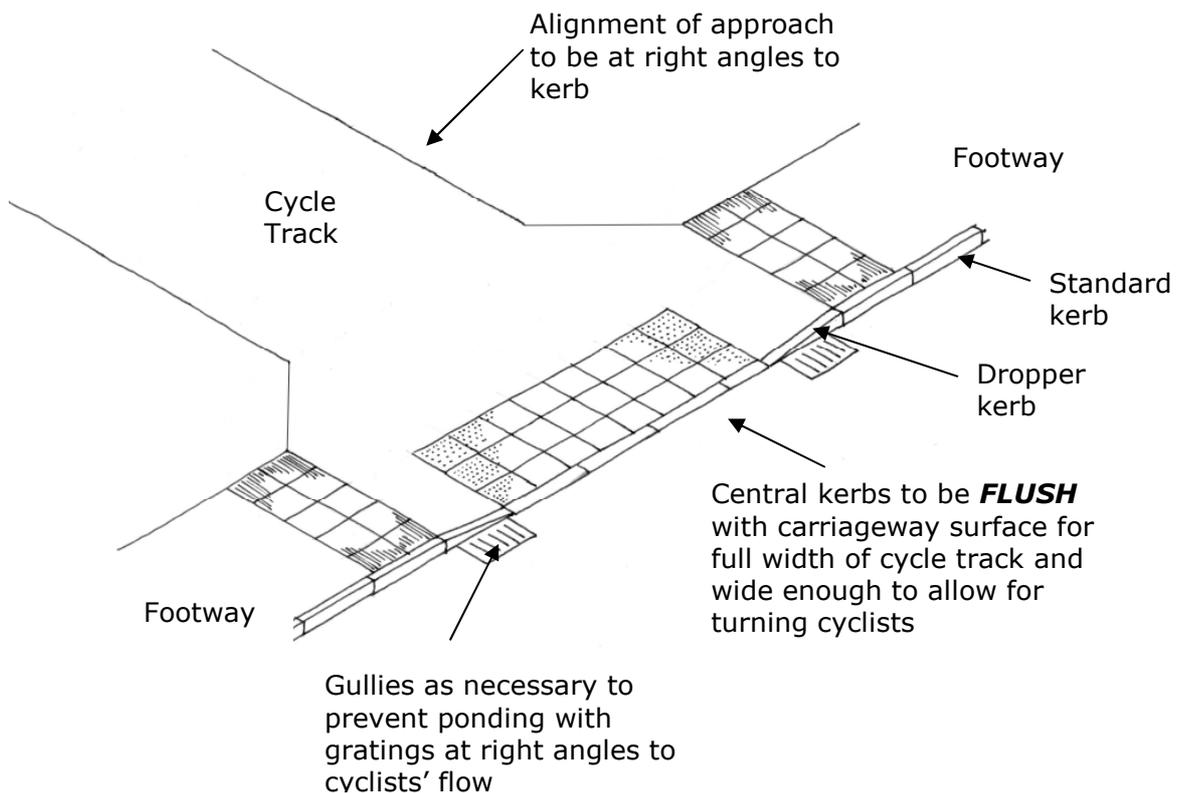


**Notes:**

- 1 There is no evidence to suggest that properly designed and constructed flushed surfaces cause problems with accumulation of water and/or detritus.
- 2 Even a minimal vertical upstand can be a hazard to wheelchair users and can cause discomfort to cyclists.
- 3 It is essential that the installation of dropped kerbs is carefully supervised in order to ensure they are flush.
- 4 All dimensions in millimetres.

Indicative cross section  
Not to scale

Source: Sustrans



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## References

[LTN 2/08 Cycle Infrastructure Design](#) DfT 2008

[Traffic Signs Regulations and General Directions](#) DfT 2002

[Cycling England Gallery](#) pictorial examples

[London Cycling Design Standards – A guide to the design of a better cycling environment](#) (Sections 3.4, 3.5, and 3.6) TfL 2005

*Lancashire - The Cyclists' County* ([part 1](#), [part 2](#)) – creating pleasant road conditions Lancashire County Council, 2005

[CTC Benchmarking](#) – Best practice case studies

## Other references

[National Cycle Network – Guidelines and Practical details, Issue 2](#) Sustrans 1997

[Cycle Friendly Infrastructure - Guidelines for Planning and Design](#) Bicycle Association et al 1996