

Appendix VI

NCN Design and Construction Checklist

Getting the details right will make the difference between NCN infrastructure working well or badly. The aim of this checklist is to encourage good detailed design by systematic reference to detailed design considerations

Design

- 1 Ensure that “effective” width of a cycle track is adequate with ref. to Figure 8.4 - that functional width is not constrained by walls or features alongside paths.
- 2 Ensure that gradients are no greater generally than 3% and no greater than 5% for lengths up to 100m.
- 3 Ensure need for lighting fully considered. There will be a presumption in favour of lighting on sections of the NCN used for commuting within urban areas.
- 4 Ensure that suitable segregation has been considered where the route has combined cycle/pedestrian flows > 100 per hour.
- 5 Ensure that there are connections with local cycle networks and adjacent developments.
- 6 Ensure that all opportunities have been examined for minimising sign clutter by eliminating superfluous signs, consolidating signs, and using the smallest appropriate sign size.
- 7 Ensure that construction design takes into account aesthetic considerations, construction and maintenance costs, suitability for purpose, and construction methods.
- 8 For cycle tracks alongside roads, ensure that minimum 0.5m margin is provided where practicable.
- 9 Do not specify access barriers on a path as a substitute for meeting design standards.
- 10 Consider the possibility of unauthorised motor vehicle access. Normally there will be a presumption against the provision of posts/access controls. See Figure 9.4.
- 11 Try to avoid specifying access controls or barriers which require cyclists to dismount or completely lose momentum.

12 Ensure that there is adequate visibility on the approach to junctions. (See Figure 8.6.) If not, specify signing as set out in Figure 8.6.

13 Ensure that as far as possible paths emerge at least 20m from any roundabout. See Figure 5.16.

14 Where paths or cycle lanes emerge onto roads (e.g. at road closure points) ensure that measures are taken to prevent parked vehicles from blocking exits from or entries to such points.

15 Ensure that measures to reduce traffic flows on the street e.g. through road closures or other traffic management measures, have been considered.

16 Where the NCN passes through roundabouts or mini-roundabouts, ensure that alternative junction forms have been fully considered. Where mini-roundabouts are retained, ensure single lane entries/exits and physical measures to reduce speeds on the approach to the junction.

17 Ensure that possibilities for changing priorities at junctions are fully considered, in order to give priority to the NCN.

18 Ensure that measures introduced to facilitate the NCN do not create physical problems for cyclists or pedestrians crossing the NCN, e.g. build-outs.

19 Ensure that speed reduction measures do not create problems for cyclists.

20 Ensure that general traffic management measures do not create problems for cyclists e.g. dedicated left turn lane approach to junctions.

Construction

21 Ensure that positions of posts, street furniture and ironwork are specified to be in verges and outside the cycle track wherever possible. If this is not possible, ensure that large road signs are supported by two posts close to each other, rather than straddling the path.

22 Ensure that there are good sightlines i.e. absolute minimum of 20m on flat sections and on slopes 40m.

- 23 Ensure that “tunnel” effects are avoided (e.g. as created by high fence or wall adjacent to the path).
- 24 Ensure that all angles are rounded (not squared) with an absolute minimum 6m radius of curvature on lengths.
- 25 Ensure that “machine” lay is specified on urban routes where total length of construction is more than 200m.
- 26 Ensure that adequate headroom at signing is specified i.e. 2.4m.
- 27 Ensure that flush dropped kerbs are specified. See Figure 8.6.
- 28 Ensure that gully covers do not coincide with junctions.
- 29 Ensure that drainage channels are in good condition and gullies do not present a problem for cyclists.
- 30 At mid-block signal controlled crossings, ensure the vehicle precedence time is not excessive.
- 31 At signalled crossings ensure that push buttons for cyclists are provided on left hand side (in addition to any loop detection).
- 32 Where side accesses with poor visibility cross NCN paths, raise awareness of drivers and cyclists to possible conflict. Give consideration to removing features which block inter-visibility.
- 33 Ensure that defects in the road surface particularly within 1.5m of the kerb have been identified and rectified.