

Highways England

M4 Smart Motorway (Junctions 3 to 12)

Deadline V

Explanatory Note to clarify the position on lighting columns

1. Preliminary lighting design for the Scheme was based on the use of 12m high columns. Where the columns are positioned in the central reserve it was assumed that the columns would be mounted on top of the rigid concrete barrier ("RCB").
2. The visual impact assessment, as part of the Environmental Impact Assessment ("EIA"), for the Scheme commenced prior to completion of the preliminary design. Whilst the majority of the length of the M4 motorway comprised in the Scheme already uses lighting columns of 12m, some of the existing lighting columns are taller than 12m. For instance, the majority of existing columns between junction 10 and junction 11 are 15m tall. In order to ensure that the visual impact assessment was based on the worst case scenario it was based on the assumption that the new lighting would be at least as high as the existing lighting columns.
3. The Engineering Design Report (Application Document Reference 7.3) (paragraph 6.3.44) states "*Lighting Columns will be mounted on top of the RCB to carry LED luminaires 12m above the carriageway.*" However, given that some of the existing columns are 15m tall, this statement is not correct. The intention is to use 12m columns mounted on a 0.9m high RCB which puts the luminaires at 12.9m above the carriageway.
4. This error was repeated in Highways England's response to 1st written question 4.7.10 in which Highways England responded that luminaires would be 12.0m above the carriageway and an upward limit of deviation of 0.5m was requested. However, this combination previously sought would not permit the reuse of existing columns or the use of new standard 12m columns mounted on a 0.9m high RCB. Instead, it would require bespoke columns to be ordered for the Scheme, thereby increasing costs to the public purse.
5. To allow for flexibility in detailed design, to maximise the opportunity to reuse existing infrastructure and to enable the use of standard lighting columns mounted on the RCB, the following revised limits of deviation on the height of the luminaires are proposed. These have been considered by the landscape architect for the Scheme in terms of their visual impact and are considered to have no perceptible change to the visual impact:
 - 5.1 in the central reserve (where it is assumed the columns will be mounted on top of the

RCB), to a maximum height of 1m higher than the existing lighting; and

5.2 in other locations to a maximum height of 0.5m higher than the existing lighting.

6. It is therefore proposed to change the wording of the DCO as follows:

6.1 in Schedule 1, in the list of authorised development at the end of the Schedule, paragraph (c) will be amended to include "*lighting icnlduing the mounting of lighting columns on the rigid concrete barrier, subject to requirement 19*"; and

6.2 requirement 22 in Schedule 2, a new sub-paragraph (3): "*Lighting installed as part of the authorised development must not be more than 1m higher than the existing lighting columns.*"

DLA Piper UK LLP

On behalf of Highways England

7 January 2016