



### Discussion

#### Why This Number Of Lanterns?

This layout is needed to achieve the British standard lighting level and uniformity requirements. The lighting must also extend away from the junction not less than the stopping site distance.

#### Why Use An 8m Mounting Height?

This is the most efficient design. Additional column positions are required for a 6m solution to achieve the same uniformity, however this also produces a higher average lighting level for the junction, resulting in over lighting.

## What Measures Have Been taken

TO Reduce Lighting Pollution
A full cut-off lantern has been specified which produces no upward lighting component and reduces 'Sky Glow'. Spill light has been reduced to a minimum by:
Using the most efficient tentern optic technology and

Redesigning the scheme with zero lantern inclination

# Contour Key Information

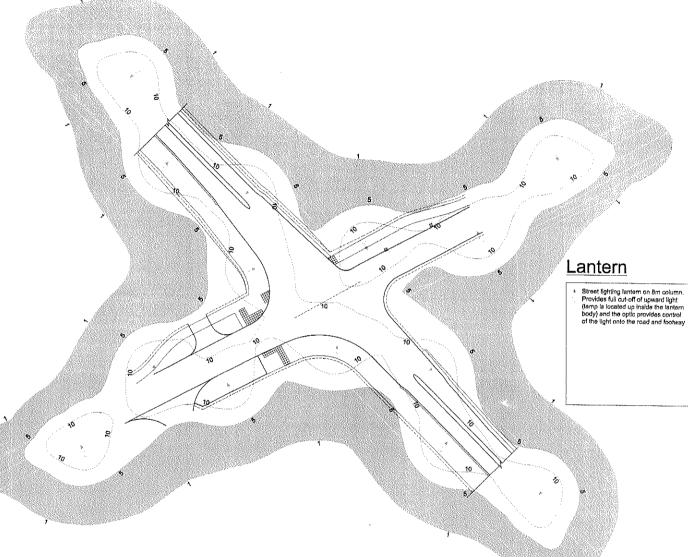
Light level contours produced by software modelling

1 - 1 Lux lighting level contour.
Not discernable from moonlight.

5 Lux lighting level contour.
 5 - Shows significant reduction in light at back of footpath (As we move outside the target area).

10 Lux lighting level contour.

The minimum average lighting level on the road and footway for compliance with the British Standard requirements.



ARUP





· ARCHECT

Girton Junction Lighting Contours Showing Focussed Control of Light onto the Road and Footway \* our 17/01/08 MOOLOGED BY AJT \* <sup>8044</sup> 1:250 DECKED SK A.CSK1109

Proposed Lantern

A.CSK1109