

**DATE:** 9 March 2020  
**DESIGNER:** Ian Whitehead  
**PROJECT No:** 5167214 - A1  
**PROJECT NAME:** Bicester Rd, Bicester



Lighting scheme designed to BS 5489-1:2013  
Table A.3 – Lighting classes for traffic route (v = 40 mph)

Single Carriageway with a High Junction Density & Moderate to Low  
Traffic Flow

Class – M4

Eav = 10 lux (Average illuminance)  
Emin = 4 lux (Minimum illuminance)

## Outdoor Lighting Report

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## Layout Report

### General Data

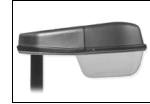
Dimensions in Metres Angles in Degrees  
Grid Origin 176935.1m x 141550.5m  
Area 132.9m x 217.6m  
Sample Spacing 1.49m x 1.49m

### Luminaires



#### Luminaire A Data

|                    |   |
|--------------------|---|
| Supplier           | D W Windsor   |
| Type               | KIRIUM PRO2 48LED 3k A2 CLO 500mA U<br>MSUG 42 0064 0000 100    |
| Lamp(s)            | 48 x 3k LED   |
| Lamp Flux (klm)    | 9.64  |
| File Name          | KIRIUM PRO2 48LED 3k A2 CLO_500mA<br>UMSUG 42 0064 0000 100.ies |
| Maintenance Factor | 0.75  |
| Lum. Int. Class    | G3  |
| Lamp S/P Ratio     | 1.30  |
| No. in Project     | 9   |



#### Luminaire B Data

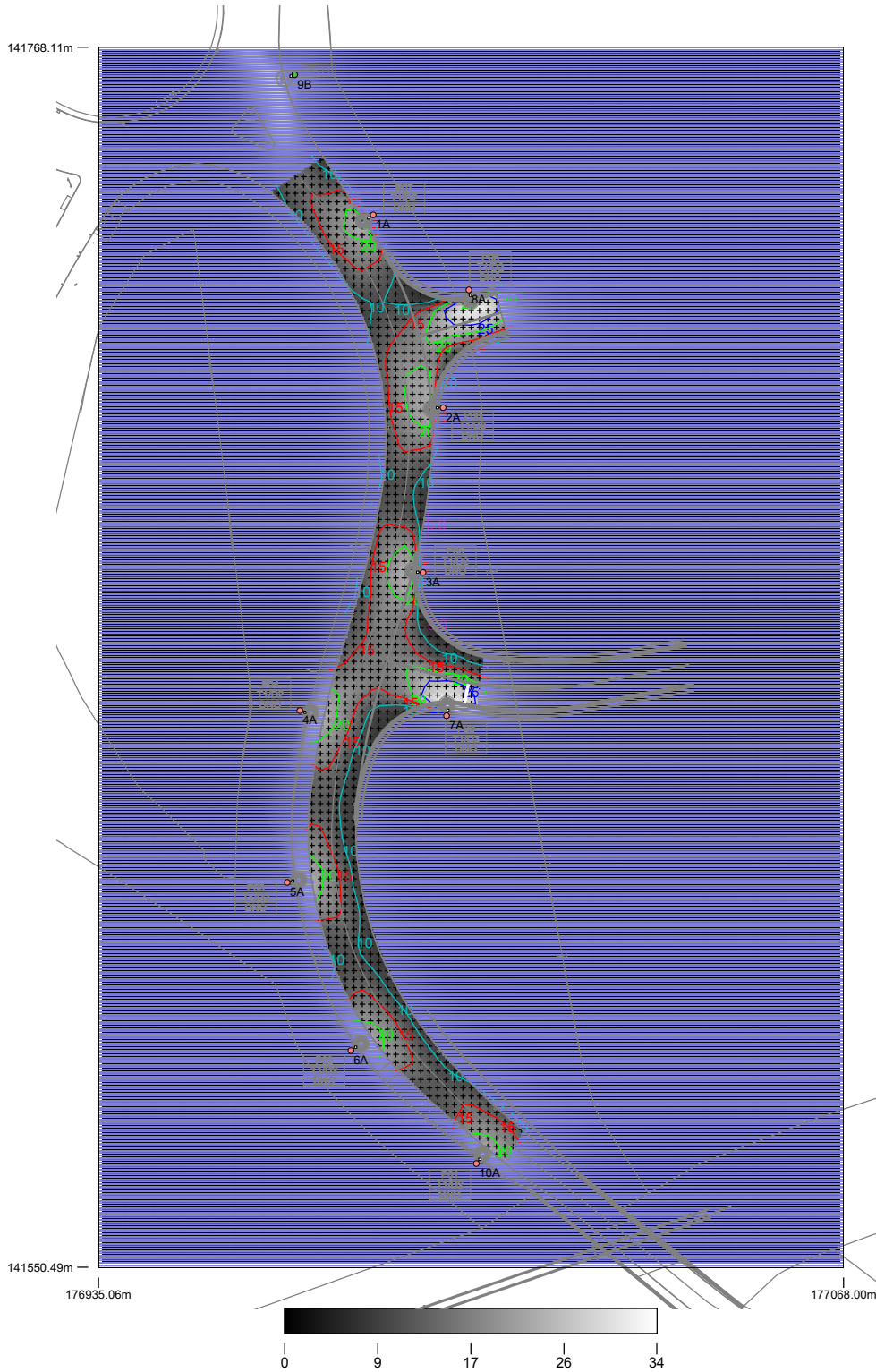
|                    |  |
|--------------------|--|
| Supplier           | _Historic Lanterns                                       |
| Type               | ZX3/Clear_P/1289/120/-41x/922305*                        |
| Lamp(s)            | 150W-SONT+   |
| Lamp Flux (klm)    | 18.00  |
| File Name          | ZX3_Clear Poly_1289_SON-T+_150_120#<br>-41x_922305TX.ltd |
| Maintenance Factor | 0.75   |
| Lum. Int. Class    | G1   |
| Lamp S/P Ratio     | 0.00   |
| No. in Project     | 1  |

### Layout

| ID | Type | X         | Y         | Height | Angle  | Tilt | Cant | Out-reach | Target X | Target Y | Target Z |
|----|------|-----------|-----------|--------|--------|------|------|-----------|----------|----------|----------|
| 1  | A    | 176984.07 | 141738.19 | 10.00  | 212.00 | 0.00 | 0.00 | 1.00      |          |          |          |
| 2  | A    | 176996.50 | 141703.83 | 10.00  | 181.00 | 0.00 | 0.00 | 1.00      |          |          |          |
| 3  | A    | 176992.96 | 141674.45 | 10.00  | 178.00 | 0.00 | 0.00 | 1.00      |          |          |          |
| 4  | A    | 176970.97 | 141649.83 | 10.00  | 342.00 | 0.00 | 0.00 | 1.00      |          |          |          |
| 5  | A    | 176968.75 | 141619.15 | 10.00  | 15.00  | 0.00 | 0.00 | 1.00      |          |          |          |
| 6  | A    | 176980.10 | 141589.19 | 10.00  | 35.00  | 0.00 | 0.00 | 1.00      |          |          |          |
| 7  | A    | 176997.15 | 141648.88 | 8.00   | 77.00  | 0.00 | 0.00 | 1.00      |          |          |          |
| 8  | A    | 177001.13 | 141724.83 | 8.00   | 285.00 | 0.00 | 0.00 | 1.00      |          |          |          |
| 9  | B    | 176970.04 | 141763.22 | 10.00  | 204.00 | 5.00 | 0.00 | 0.70      |          |          |          |
| 10 | A    | 177002.43 | 141569.03 | 10.00  | 52.00  | 0.00 | 0.00 | 1.00      |          |          |          |

# Horizontal Illuminance (lux)

Grid 1



## Results

|           |       |
|-----------|-------|
| Eav       | 15.18 |
| Emin      | 6.21  |
| Emax      | 34.05 |
| Emin/Emax | 0.18  |
| Emin/Eav  | 0.41  |