

Key

- Existing highway lighting using LED lantern to remain
- Proposed steel galvanised 6m column with Cardiff embellishment kit, DW Windsor lantern (Windsor Street -LX3- 16LED-3k-A1 250mA) with warm white LED with 1480 lumen output, DALI Extreme ballast, and Telensa 2 part telecel and twig antenna (see note 8 & 10) All finished RAL9005 Black Finish
- Proposed steel galvanised 6m column with DW Windsor Kirium Pro mini (KIRIUM PRO MINI 16LED 3k D1 200mA) with warm white LED with 1310 lumen output, DALI Extreme ballast, 7 pin nema and Telensa 5 pin nema with GPS product code TZE1N G-3 (see note 8 & 10)
- Project column number
- 2.0 lux iso-contour line
- 0.4 lux iso-contour line
- New DNO supply
- Wattage:14w
Charge Code: 42 0014 0000 100
Switching Regime: 821
Burning hours 4150
- Wattage:10w
Charge Code: 42 0010 0000 100
Switching Regime: 821
Burning hours 4150

Notes

1. All equipment shall be supplied and installed in accordance with Northamptonshire County Council specification and drawings.
2. All Columns and illuminated signs shall be serviced by DNO supplies from Western Power Distribution. The column shall be fitted with secondary isolation above the DNO cut out. The Unit shall be as Northamptonshire specification i.e. Charles Endirect LSI-02 with a 32A Double pole isolator and 6A BS88 Fuse Carrier. Fuse discrimination shall comply with BS7171 between the DNO cut out and the secondary isolation. 6mm² tails to be provided between the secondary isolator and DNO cut-out. 3-core flexible cable with white coloured outer sheathing to be used for connection of lantern.
3. Prior to any excavation the contractor shall have reviewed the existing services in the area of the excavation. Residual risks where known have been indicated. They have been based upon design drawing and may have changed at construction stage. Where there are known services in the vicinity of excavations the Contractor shall ensure hand digging is carried out with care. The Contractor shall arrange for statutory undertakers plant to be marked on site prior to excavation.
4. In this instance the use of 3 dimensional masking has not been used to take into consideration the actual position of high sided objects such as buildings and the like. Trees and shrubs etc have not been considered as their masking ability will vary with seasonal conditions.
5. Iso contours produced in this drawing have been created using a conventional symmetrical grid. This does not take into account the spacing or weightings as detailed in BS5489 or BS EN 13201-3:2015
6. Equipment shown on this drawing is available through most specialist street lighting electrical distributors like Maclean Electrical (www.maclean.co.uk) or Marwood Electrical (www.marwoodelectrical.co.uk)
7. Copies of the original Lighting Reality design files are available upon request.
8. Contact must be made before installation with Balfour Beatty to allow commissioning of the Telensa equipment on to the system. Lighting will not function unless this occurs. For details of the exact requirements please contact: Mr Neil Platt, CMS Manager | Balfour Beatty Living Places T 01332 576 368 | M 07886357113 E-mail: Neil.Platt@bblivingplaces.com Contractor must contact Neil Platt at least three months prior to commencement of works for details of the Telensa system to be installed.
9. This design has been prepared in accordance with BS5489-1:2020 the use of S/P ratios has not been used.
10. Lantern ballast to be pre-programmed to provide light output dimmed to 60% from 22.00 Hrs to 06.00 Hrs.
11. All new columns to be cabled and terminated into isolators in 1.5mm² 3 core flex.

COL. NO.	POSITION OF COLUMN		COL. ROT'N
	X	Y	
Off site			
R1	498792.53	275108.02	282
R2	498784.42	275068.58	287
R3	498776.75	275023.62	284
S1	498901.95	275115.70	200
On site			
A1	498899.76	275100.97	298
A2	498874.31	275071.87	300
A3	498856.94	275041.06	19
B1	498783.88	275027.76	12
B2	498805.25	274997.50	104
B3	498832.00	274998.00	196
C1	498812.75	275043.75	110
C2	498810.50	275081.50	102



Comparable Level of Lighting Classes from EN13201-2:2015										
M Class	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10
C Class	C0	C1	C2	C3	C4	C5	C6	C7	C8	C9
P Class	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10

Summary of Lighting P Classes from EN13201-2:2015			
Class	Eave	E Min	E Ave Max
P1	1.0 lux	0.10 lux	2.3 lux
P2	1.5 lux	0.15 lux	3.5 lux
P3	2.0 lux	0.20 lux	4.7 lux
P4	2.5 lux	0.25 lux	5.9 lux
P5	3.0 lux	0.30 lux	7.1 lux
P6	2.00 lux	0.40 lux	3.00 lux

Road 1 Results - Horizontal Illuminance (lux)
 Eave= 2.24
 Emin= 0.48
 Emax= 5.72
 Emin/Emax= 0.08
 Emin/Eave= 0.22
 Emax/Eave= 2.56

Road 2 Results - Horizontal Illuminance (lux)
 Eave= 2.07
 Emin= 0.41
 Emax= 5.83
 Emin/Emax= 0.07
 Emin/Eave= 0.20
 Emax/Eave= 2.82

Road 3 Results - Horizontal Illuminance (lux)
 Eave= 2.35
 Emin= 0.52
 Emax= 5.53
 Emin/Emax= 0.09
 Emin/Eave= 0.22
 Emax/Eave= 2.35

Spencer Street Results - Horizontal Illuminance (lux)
 Eave= 2.50
 Emin= 0.49
 Emax= 11.64
 Emin/Emax= 0.04
 Emin/Eave= 0.20
 Emax/Eave= 4.66

Raunds Road Results - Horizontal Illuminance (lux)
 Eave= 2.35
 Emin= 0.49
 Emax= 10.14
 Emin/Emax= 0.05
 Emin/Eave= 0.21
 Emax/Eave= 4.32



REV	DETAILS	DWN	DATE
Drawing Number		Revision	
2985-D-01		-	
Client			
Paul Newman Homes			
Project			
Raunds Road / Spencer Street Ringstead, Kettering, Northamptonshire			
Drawing Title			
Proposed Road Lighting and Illuminance Layout			
Scale at A1		Sheet 1 of 1	
1:500		Date	
Drawn		Date	
NWS		17.10.2023	

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