

DATE: 27 January 2023

DESIGNER: Alex Naper

PROJECT No: SES 17022 Rev B

PROJECT NAME: Clonburris – Adamstown Extension - Clear Real Estate Holdings Limited



Residential area designed in accordance with EN13201-2:2015 Category P4.

Residential access road section designed in accordance with EN13201-2:2015 Category P3.

Residential access junction designed in accordance with EN13201-2:2015 Category C3.

Ramp/Step sections designed in accordance with I.S.EN17210-2021 with illuminance levels as per the recommendations of BS8300-1:2018 Table 5 Stairways and ramps (open) in the external environment.

MF derived from: $0.92 \times 0.90 \times 0.99$ (LMF (Low pollution environment & 72 month cleaning cycle) \times LLMF \times LSF) LLMF & LSF values @ 100,000 hours & 25 degrees C.

Rev A: Updated site layout.

Rev B: Updated site layout and updated as per comments.

Outdoor Lighting Report

PREPARED BY: Sabre Electrical Services Ltd.
Unit 11,
Bellview Industrial Estate,
Tolka Valley Road,
Dublin 11
Phone Number: 01 8110875
Contact: Graham Sheehan
eMail: graham@sabrelighting.ie

Layout Report

General Data

Dimensions in Metres Angles in Degrees

Calculation Grids

| ID | Grid Name | X | Y | X' Length | Y' Length | X' Spacing | Y' Spacing |
|----|---------------------------|-----------|-----------|-----------|-----------|------------|------------|
| 1 | Grid 1 | 702917.85 | 732591.18 | 238.00 | 156.00 | 1.50 | 1.50 |
| 2 | Grid 2 | 702917.19 | 732365.15 | 147.00 | 219.00 | 1.50 | 1.50 |
| 3 | Grid 3 | 703058.43 | 732404.48 | 208.00 | 219.00 | 1.50 | 1.50 |
| 4 | Grid 4 Ramp | 702942.29 | 732609.56 | 24.72 | 8.68 | 0.99 | 1.08 |
| 5 | Grid 5 Steps | 702968.33 | 732626.46 | 1.28 | 4.40 | 0.43 | 0.28 |
| 6 | Grid 6 Residential Access | 703035.52 | 732556.06 | 48.00 | 54.00 | 1.50 | 1.50 |
| 7 | Grid 7 Steps | 702902.95 | 732430.76 | 2.63 | 1.21 | 0.38 | 0.40 |
| 8 | Grid 8 Steps | 702897.62 | 732477.01 | 2.63 | 1.80 | 0.38 | 0.60 |
| 9 | Grid 9 Steps | 702894.45 | 732525.88 | 2.63 | 1.80 | 0.38 | 0.60 |
| 10 | Grid 10 | 703023.25 | 732602.19 | 48.00 | 24.00 | 1.50 | 1.50 |
| 11 | Grid 11 | 702935.04 | 732652.48 | 2.09 | 4.28 | 0.70 | 0.33 |
| 12 | Grid 12 | 702876.73 | 732410.17 | 33.00 | 182.44 | 1.50 | 1.50 |
| 13 | Grid 13 | 702962.19 | 732711.67 | 2.09 | 3.18 | 0.70 | 0.24 |

Luminaires

Luminaire A Data



| | |
|----------------------|-------------------------------|
| Supplier | C U Phosco |
| Type | E950-28-F2A-740-C600-16W |
| Lamp(s) | 740N |
| Lamp Flux (klm) | 2.21 |
| File Name | E950-28-F2A-740-C0600-16W.ies |
| Maintenance Factor | 0.82 |
| Imax70,80,90(cd/klm) | 623.6, 113.9, 0.3 |
| No. in Project | 33 |

Luminaire B Data



| | |
|----------------------|-------------------------------|
| Supplier | C U Phosco |
| Type | E950-28-P4A-740-C600-16W |
| Lamp(s) | 740N |
| Lamp Flux (klm) | 2.17 |
| File Name | E950-28-P4A-740-C0600-16W.ies |
| Maintenance Factor | 0.82 |
| Imax70,80,90(cd/klm) | 659.3, 183.1, 0.3 |
| No. in Project | 56 |

Luminaire C Data



| | |
|----------------------|-------------------------------|
| Supplier | C U Phosco |
| Type | E950-28-P4A-740-C350-10W |
| Lamp(s) | 740N |
| Lamp Flux (klm) | 1.32 |
| File Name | E950-28-P4A-740-C0350-10W.ies |
| Maintenance Factor | 0.82 |
| Imax70,80,90(cd/klm) | 659.3, 183.1, 0.3 |
| No. in Project | 25 |

Luminaire D Data



| | |
|----------------------|---|
| Supplier | Urbis Schreder |
| Type | ALINEA Handrail 5121 - 3 LED 350mA NW Profiled Poly Clear, 5m |
| Lamp(s) | 3 LEDs NW |
| Lamp Flux (klm) | 0.39 |
| File Name | ALINEA Handrail 5121 3 LED 350mA NW P rofiled Poly Clear Smooth W07314.lid |
| Maintenance Factor | 0.82 |
| Imax70,80,90(cd/klm) | 230.6, 22.2, 4.1 |
| No. in Project | 25 |

Luminaires



Luminaire E Data

| | |
|----------------------|---|
| Supplier | Urbis Schreder |
| Type | AXIA 3.3 5295 Integrated lenses 64 OSLO N SQUARE GIANT@500mA |
| Lamp(s) | 64 OSLO N SQUARE GIANT@500mA NW 740 230V |
| LampFlux(klm)/Colour | 14.38 NW 4000K/70 |
| File Name | AXIA 3.3 5295 64 OSLO N SQUARE GIANT 500mA NW 740 94W 441022 Integrated le... |
| Maintenance Factor | 0.82 |
| Imax70,80,90(cd/klm) | 753.3, 15.9, 0.0 |
| No. in Project | 4 |



Luminaire F Data

| | |
|----------------------|----------------------------|
| Supplier | TRT Lighting |
| Type | VIA ASY 160mA 4000K LED |
| Lamp(s) | 42 0005 0000 100 |
| Lamp Flux (klm) | 0.25 |
| File Name | VIA_ASY_160mA_250LM_4K.ies |
| Maintenance Factor | 0.82 |
| Imax70,80,90(cd/klm) | 615.1, 393.5, 54.6 |
| No. in Project | 10 |

Layout

| ID | Type | X | Y | Height | Angle | Tilt | Cant | Out-reach | Target X | Target Y | Target Z |
|----|------|-----------|-----------|--------|--------|------|------|-----------|----------|----------|----------|
| 1 | A | 703034.58 | 732631.70 | 6.00 | 19.00 | 0.00 | 0.00 | 0.40 | | | |
| 2 | A | 703042.54 | 732652.48 | 6.00 | 197.00 | 0.00 | 0.00 | 0.40 | | | |
| 3 | A | 703052.98 | 732655.82 | 6.00 | 103.00 | 0.00 | 0.00 | 0.40 | | | |
| 4 | A | 703081.65 | 732663.43 | 6.00 | 109.00 | 0.00 | 0.00 | 0.40 | | | |
| 5 | A | 703061.37 | 732676.76 | 6.00 | 280.00 | 0.00 | 0.00 | 0.40 | | | |
| 6 | A | 703089.26 | 732684.23 | 6.00 | 280.00 | 0.00 | 0.00 | 0.40 | | | |
| 7 | A | 703026.61 | 732660.70 | 6.00 | 18.00 | 0.00 | 0.00 | 0.40 | | | |
| 8 | A | 703020.90 | 732682.04 | 6.00 | 17.00 | 0.00 | 0.00 | 0.40 | | | |
| 9 | A | 703039.07 | 732687.69 | 6.00 | 203.00 | 0.00 | 0.00 | 0.40 | | | |
| 10 | A | 703027.71 | 732706.96 | 6.00 | 196.00 | 0.00 | 0.00 | 0.40 | | | |
| 11 | A | 703007.98 | 732728.89 | 6.00 | 17.00 | 0.00 | 0.00 | 0.40 | | | |
| 12 | A | 703023.19 | 732746.10 | 6.00 | 197.00 | 0.00 | 0.00 | 0.40 | | | |
| 13 | B | 703031.00 | 732756.12 | 6.00 | 107.00 | 0.00 | 0.00 | 0.40 | | | |
| 14 | B | 703061.51 | 732760.90 | 6.00 | 93.00 | 0.00 | 0.00 | 0.40 | | | |
| 15 | B | 703002.16 | 732744.00 | 6.00 | 156.00 | 0.00 | 0.00 | 0.40 | | | |
| 16 | B | 702992.96 | 732715.19 | 6.00 | 167.00 | 0.00 | 0.00 | 0.40 | | | |
| 17 | B | 702985.09 | 732687.87 | 6.00 | 158.00 | 0.00 | 0.00 | 0.40 | | | |
| 18 | B | 702969.73 | 732667.10 | 6.00 | 324.00 | 0.00 | 0.00 | 0.40 | | | |
| 19 | A | 702958.72 | 732680.51 | 6.00 | 327.00 | 0.00 | 0.00 | 0.40 | | | |
| 20 | B | 702964.25 | 732644.67 | 6.00 | 144.00 | 0.00 | 0.00 | 0.40 | | | |
| 21 | C | 702984.60 | 732636.72 | 6.00 | 106.00 | 0.00 | 0.00 | 0.40 | | | |
| 22 | C | 703013.16 | 732644.63 | 6.00 | 106.00 | 0.00 | 0.00 | 0.40 | | | |
| 23 | C | 703003.06 | 732666.05 | 6.00 | 196.00 | 0.00 | 0.00 | 0.40 | | | |
| 24 | C | 702996.53 | 732690.83 | 6.00 | 191.00 | 0.00 | 0.00 | 0.40 | | | |
| 25 | C | 702975.21 | 732646.31 | 6.00 | 150.00 | 0.00 | 0.00 | 0.40 | | | |
| 26 | C | 702991.03 | 732677.37 | 6.00 | 166.00 | 0.00 | 0.00 | 0.40 | | | |
| 27 | C | 702965.50 | 732612.13 | 6.00 | 276.00 | 0.00 | 0.00 | 0.40 | | | |
| 28 | C | 702950.60 | 732611.81 | 6.00 | 232.00 | 0.00 | 0.00 | 0.40 | | | |
| 29 | C | 702952.06 | 732628.13 | 6.00 | 153.00 | 0.00 | 0.00 | 0.40 | | | |
| 30 | C | 702969.72 | 732626.01 | 6.00 | 200.00 | 0.00 | 0.00 | 0.40 | | | |
| 31 | C | 702960.24 | 732624.42 | 6.00 | 281.00 | 0.00 | 0.00 | 0.40 | | | |
| 32 | C | 703107.38 | 732670.63 | 6.00 | 106.00 | 0.00 | 0.00 | 0.40 | | | |
| 33 | C | 703113.53 | 732661.21 | 6.00 | 12.00 | 0.00 | 0.00 | 0.40 | | | |
| 34 | C | 703109.48 | 732696.80 | 6.00 | 194.00 | 0.00 | 0.00 | 0.40 | | | |
| 35 | C | 703100.86 | 732728.44 | 6.00 | 196.00 | 0.00 | 0.00 | 0.40 | | | |
| 36 | B | 703090.20 | 732699.28 | 6.00 | 14.00 | 0.00 | 0.00 | 0.40 | | | |

Layout Continued

| ID | Type | X | Y | Height | Angle | Tilt | Cant | Out-reach | Target X | Target Y | Target Z |
|----|------|-----------|-----------|--------|--------|------|------|-----------|----------|----------|----------|
| 37 | B | 703085.16 | 732730.18 | 6.00 | 15.00 | 0.00 | 0.00 | 0.40 | | | |
| 38 | B | 703074.14 | 732752.72 | 6.00 | 13.00 | 0.00 | 0.00 | 0.40 | | | |
| 39 | C | 703091.86 | 732761.79 | 6.00 | 197.00 | 0.00 | 0.00 | 0.40 | | | |
| 40 | C | 702920.99 | 732584.90 | 6.00 | 350.00 | 0.00 | 0.00 | 0.40 | | | |
| 41 | C | 703006.85 | 732696.19 | 6.00 | 106.00 | 0.00 | 0.00 | 0.40 | | | |
| 42 | D | 702936.10 | 732615.69 | 1.00 | 330.00 | 0.00 | 0.00 | 0.10 | | | |
| 43 | D | 702937.90 | 732618.37 | 1.00 | 325.00 | 0.00 | 0.00 | 0.10 | | | |
| 44 | D | 702939.50 | 732620.89 | 1.00 | 325.00 | 0.00 | 0.00 | 0.10 | | | |
| 45 | D | 702941.04 | 732623.44 | 1.00 | 325.00 | 0.00 | 0.00 | 0.10 | | | |
| 46 | D | 702942.65 | 732625.96 | 1.00 | 325.00 | 0.00 | 0.00 | 0.10 | | | |
| 47 | D | 702937.08 | 732613.00 | 1.00 | 57.00 | 0.00 | 0.00 | 0.10 | | | |
| 48 | D | 702938.68 | 732615.52 | 1.00 | 325.00 | 0.00 | 0.00 | 0.10 | | | |
| 49 | D | 702943.49 | 732623.07 | 1.00 | 327.00 | 0.00 | 0.00 | 0.10 | | | |
| 50 | D | 702945.31 | 732625.78 | 1.00 | 328.00 | 0.00 | 0.00 | 0.10 | | | |
| 51 | D | 702948.52 | 732631.09 | 1.00 | 329.00 | 0.00 | 0.00 | 0.10 | | | |
| 52 | D | 702944.28 | 732628.52 | 1.00 | 325.00 | 0.00 | 0.00 | 0.10 | | | |
| 53 | D | 702945.84 | 732631.09 | 1.00 | 325.00 | 0.00 | 0.00 | 0.10 | | | |
| 54 | D | 702946.94 | 732628.65 | 1.00 | 324.00 | 0.00 | 0.00 | 0.10 | | | |
| 55 | D | 702941.90 | 732620.55 | 1.00 | 324.00 | 0.00 | 0.00 | 0.10 | | | |
| 56 | D | 702947.47 | 732633.58 | 1.00 | 325.00 | 0.00 | 0.00 | 0.10 | | | |
| 57 | D | 702940.34 | 732618.27 | 1.00 | 327.00 | 0.00 | 0.00 | 0.10 | | | |
| 58 | D | 702967.13 | 732630.35 | 1.00 | 16.00 | 0.00 | 0.00 | 0.10 | | | |
| 59 | D | 702968.15 | 732627.00 | 1.00 | 16.00 | 0.00 | 0.00 | 0.10 | | | |
| 60 | B | 703052.69 | 732607.77 | 6.00 | 203.00 | 0.00 | 0.00 | 0.40 | | | |
| 61 | B | 703047.52 | 732586.62 | 6.00 | 18.00 | 0.00 | 0.00 | 0.40 | | | |
| 62 | B | 703047.49 | 732567.24 | 6.00 | 17.00 | 0.00 | 0.00 | 0.40 | | | |
| 63 | A | 703064.34 | 732590.72 | 6.00 | 281.00 | 0.00 | 0.00 | 0.40 | | | |
| 64 | A | 703039.69 | 732583.96 | 6.00 | 282.00 | 0.00 | 0.00 | 0.40 | | | |
| 65 | A | 703074.15 | 732575.46 | 6.00 | 108.00 | 0.00 | 0.00 | 0.40 | | | |
| 66 | A | 703027.20 | 732561.84 | 6.00 | 109.00 | 0.00 | 0.00 | 0.40 | | | |
| 67 | A | 703020.49 | 732578.67 | 6.00 | 282.00 | 0.00 | 0.00 | 0.40 | | | |
| 68 | A | 703002.11 | 732555.00 | 6.00 | 107.00 | 0.00 | 0.00 | 0.40 | | | |
| 69 | A | 703088.40 | 732597.79 | 6.00 | 281.00 | 0.00 | 0.00 | 0.40 | | | |
| 70 | A | 703101.44 | 732582.58 | 6.00 | 101.00 | 0.00 | 0.00 | 0.40 | | | |
| 71 | A | 703116.76 | 732605.52 | 6.00 | 283.00 | 0.00 | 0.00 | 0.40 | | | |
| 72 | B | 703119.42 | 732566.48 | 6.00 | 2.00 | 0.00 | 0.00 | 0.40 | | | |

Layout Continued

| ID | Type | X | Y | Height | Angle | Tilt | Cant | Out-reach | Target X | Target Y | Target Z |
|-----|------|-----------|-----------|--------|--------|------|------|-----------|----------|----------|----------|
| 73 | B | 703129.64 | 732586.29 | 6.00 | 180.00 | 0.00 | 0.00 | 0.40 | | | |
| 74 | B | 703132.86 | 732550.19 | 6.00 | 184.00 | 0.00 | 0.00 | 0.40 | | | |
| 75 | B | 703122.55 | 732528.26 | 6.00 | 359.00 | 0.00 | 0.00 | 0.40 | | | |
| 76 | B | 703135.81 | 732515.73 | 6.00 | 186.00 | 0.00 | 0.00 | 0.40 | | | |
| 77 | B | 703152.52 | 732496.53 | 6.00 | 216.00 | 0.00 | 0.00 | 0.40 | | | |
| 78 | B | 703128.95 | 732494.37 | 6.00 | 47.00 | 0.00 | 0.00 | 0.40 | | | |
| 79 | B | 703148.65 | 732483.75 | 6.00 | 308.00 | 0.00 | 0.00 | 0.40 | | | |
| 80 | B | 703130.23 | 732465.97 | 6.00 | 316.00 | 0.00 | 0.00 | 0.40 | | | |
| 81 | B | 703110.09 | 732445.53 | 6.00 | 305.00 | 0.00 | 0.00 | 0.40 | | | |
| 82 | B | 703078.98 | 732436.73 | 6.00 | 191.00 | 0.00 | 0.00 | 0.40 | | | |
| 83 | B | 703083.09 | 732435.59 | 6.00 | 279.00 | 0.00 | 0.00 | 0.40 | | | |
| 84 | B | 703179.05 | 732515.50 | 6.00 | 310.00 | 0.00 | 0.00 | 0.40 | | | |
| 85 | B | 703191.64 | 732533.41 | 6.00 | 7.00 | 0.00 | 0.00 | 0.40 | | | |
| 86 | B | 703188.78 | 732566.73 | 6.00 | 3.00 | 0.00 | 0.00 | 0.40 | | | |
| 87 | C | 703181.36 | 732583.31 | 6.00 | 0.00 | 0.00 | 0.00 | 0.40 | | | |
| 88 | A | 703142.60 | 732610.49 | 6.00 | 280.00 | 0.00 | 0.00 | 0.40 | | | |
| 89 | A | 703170.18 | 732614.53 | 6.00 | 277.00 | 0.00 | 0.00 | 0.40 | | | |
| 90 | A | 703166.33 | 732595.38 | 6.00 | 103.00 | 0.00 | 0.00 | 0.40 | | | |
| 91 | A | 703136.92 | 732591.32 | 6.00 | 94.00 | 0.00 | 0.00 | 0.40 | | | |
| 92 | C | 703123.07 | 732621.34 | 6.00 | 185.00 | 0.00 | 0.00 | 0.40 | | | |
| 93 | B | 703066.82 | 732563.28 | 6.00 | 183.00 | 0.00 | 0.00 | 0.40 | | | |
| 94 | B | 703049.01 | 732544.83 | 6.00 | 3.00 | 0.00 | 0.00 | 0.40 | | | |
| 95 | B | 703064.14 | 732523.28 | 6.00 | 183.00 | 0.00 | 0.00 | 0.40 | | | |
| 96 | B | 703051.67 | 732513.44 | 6.00 | 6.00 | 0.00 | 0.00 | 0.40 | | | |
| 97 | B | 703070.59 | 732502.74 | 6.00 | 189.00 | 0.00 | 0.00 | 0.40 | | | |
| 98 | B | 703060.83 | 732476.20 | 6.00 | 7.00 | 0.00 | 0.00 | 0.40 | | | |
| 99 | B | 703057.36 | 732454.80 | 6.00 | 6.00 | 0.00 | 0.00 | 0.40 | | | |
| 100 | B | 703051.67 | 732439.02 | 6.00 | 255.00 | 0.00 | 0.00 | 0.40 | | | |
| 101 | A | 703177.65 | 732623.61 | 6.00 | 2.00 | 0.00 | 0.00 | 0.40 | | | |
| 102 | B | 703184.74 | 732631.48 | 6.00 | 6.00 | 0.00 | 0.00 | 0.40 | | | |
| 103 | B | 703187.38 | 732598.88 | 6.00 | 10.00 | 0.00 | 0.00 | 0.40 | | | |
| 104 | A | 703160.76 | 732503.81 | 6.00 | 310.00 | 0.00 | 0.00 | 0.40 | | | |
| 105 | B | 703075.44 | 732465.07 | 6.00 | 189.00 | 0.00 | 0.00 | 0.40 | | | |
| 106 | C | 702979.16 | 732578.70 | 6.00 | 15.00 | 0.00 | 0.00 | 0.40 | | | |
| 107 | A | 702969.60 | 732548.54 | 6.00 | 92.00 | 0.00 | 0.00 | 0.40 | | | |
| 108 | B | 702994.76 | 732547.71 | 6.00 | 188.00 | 0.00 | 0.00 | 0.40 | | | |

Layout Continued

| ID | Type | X | Y | Height | Angle | Tilt | Cant | Out-reach | Target X | Target Y | Target Z |
|-----|------|-----------|-----------|--------|--------|------|------|-----------|----------|----------|----------|
| 109 | B | 702985.06 | 732523.07 | 6.00 | 9.00 | 0.00 | 0.00 | 0.40 | | | |
| 110 | B | 702998.87 | 732506.46 | 6.00 | 184.00 | 0.00 | 0.00 | 0.40 | | | |
| 111 | B | 702988.41 | 732489.23 | 6.00 | 3.00 | 0.00 | 0.00 | 0.40 | | | |
| 112 | B | 703001.81 | 732473.34 | 6.00 | 193.00 | 0.00 | 0.00 | 0.40 | | | |
| 113 | B | 703027.21 | 732445.27 | 6.00 | 256.00 | 0.00 | 0.00 | 0.40 | | | |
| 114 | B | 702971.28 | 732451.38 | 6.00 | 275.00 | 0.00 | 0.00 | 0.40 | | | |
| 115 | B | 702940.56 | 732448.24 | 6.00 | 275.00 | 0.00 | 0.00 | 0.40 | | | |
| 116 | B | 702921.24 | 732450.49 | 6.00 | 4.00 | 0.00 | 0.00 | 0.40 | | | |
| 117 | B | 702917.80 | 732483.15 | 6.00 | 3.00 | 0.00 | 0.00 | 0.40 | | | |
| 118 | B | 702937.49 | 732467.29 | 6.00 | 183.00 | 0.00 | 0.00 | 0.40 | | | |
| 119 | B | 702934.44 | 732505.89 | 6.00 | 183.00 | 0.00 | 0.00 | 0.40 | | | |
| 120 | C | 702902.77 | 732524.97 | 6.00 | 82.00 | 0.00 | 0.00 | 0.40 | | | |
| 121 | B | 702915.46 | 732519.41 | 6.00 | 355.00 | 0.00 | 0.00 | 0.40 | | | |
| 122 | B | 702934.76 | 732544.02 | 6.00 | 173.00 | 0.00 | 0.00 | 0.40 | | | |
| 123 | B | 702917.72 | 732555.43 | 6.00 | 351.00 | 0.00 | 0.00 | 0.40 | | | |
| 124 | A | 702939.63 | 732568.70 | 6.00 | 262.00 | 0.00 | 0.00 | 0.40 | | | |
| 125 | A | 702966.59 | 732565.62 | 6.00 | 262.00 | 0.00 | 0.00 | 0.40 | | | |
| 126 | A | 702942.27 | 732550.30 | 6.00 | 84.00 | 0.00 | 0.00 | 0.40 | | | |
| 127 | C | 702907.63 | 732432.65 | 6.00 | 275.00 | 0.00 | 0.00 | 0.40 | | | |
| 128 | C | 702904.96 | 732477.25 | 6.00 | 92.00 | 0.00 | 0.00 | 0.40 | | | |
| 129 | B | 702991.34 | 732457.01 | 6.00 | 7.00 | 0.00 | 0.00 | 0.40 | | | |
| 130 | A | 702997.88 | 732572.39 | 6.00 | 282.00 | 0.00 | 0.00 | 0.40 | | | |
| 131 | D | 702904.14 | 732432.07 | 1.00 | 277.00 | 0.00 | 0.00 | 0.10 | | | |
| 132 | D | 702898.74 | 732478.88 | 1.00 | 277.00 | 0.00 | 0.00 | 0.10 | | | |
| 133 | D | 702895.90 | 732527.57 | 1.00 | 263.00 | 0.00 | 0.00 | 0.10 | | | |
| 134 | F | 702892.49 | 732514.49 | 1.13 | 96.00 | 0.00 | 0.00 | 0.00 | | | |
| 135 | F | 702892.49 | 732501.05 | 1.13 | 96.00 | 0.00 | 0.00 | 0.00 | | | |
| 136 | F | 702892.97 | 732487.48 | 1.13 | 96.00 | 0.00 | 0.00 | 0.00 | | | |
| 137 | E | 703053.20 | 732614.69 | 10.00 | 104.00 | 0.00 | 0.00 | 1.00 | | | |
| 138 | E | 703016.62 | 732604.84 | 10.00 | 104.00 | 0.00 | 0.00 | 1.00 | | | |
| 139 | E | 703085.96 | 732623.93 | 10.00 | 104.00 | 0.00 | 0.00 | 1.00 | | | |
| 140 | E | 702982.30 | 732595.23 | 10.00 | 104.00 | 0.00 | 0.00 | 1.00 | | | |
| 141 | C | 703002.57 | 732717.18 | 6.00 | 160.00 | 0.00 | 0.00 | 0.40 | | | |
| 142 | B | 703001.78 | 732451.31 | 6.00 | 260.00 | 0.00 | 0.00 | 0.40 | | | |
| 143 | D | 702932.50 | 732654.12 | 1.00 | 54.00 | 0.00 | 0.00 | 0.10 | | | |
| 144 | D | 702934.02 | 732653.17 | 1.00 | 57.00 | 0.00 | 0.00 | 0.10 | | | |

Layout Continued

| ID | Type | X | Y | Height | Angle | Tilt | Cant | Out-reach | Target X | Target Y | Target Z |
|-----|------|-----------|-----------|--------|--------|------|------|-----------|----------|----------|----------|
| 145 | F | 702898.37 | 732578.51 | 1.13 | 265.00 | 0.00 | 0.00 | 0.00 | | | |
| 146 | F | 702896.21 | 732563.67 | 1.13 | 84.00 | 0.00 | 0.00 | 0.00 | | | |
| 147 | F | 702894.80 | 732551.83 | 1.13 | 265.00 | 0.00 | 0.00 | 0.00 | | | |
| 148 | F | 702893.50 | 732538.35 | 1.13 | 265.00 | 0.00 | 0.00 | 0.00 | | | |
| 149 | F | 702895.14 | 732469.02 | 1.13 | 274.00 | 0.00 | 0.00 | 0.00 | | | |
| 150 | F | 702896.44 | 732455.65 | 1.13 | 274.00 | 0.00 | 0.00 | 0.00 | | | |
| 151 | F | 702897.62 | 732442.28 | 1.13 | 280.00 | 0.00 | 0.00 | 0.00 | | | |
| 152 | D | 702961.27 | 732712.05 | 1.00 | 75.00 | 0.00 | 0.00 | 0.10 | | | |
| 153 | D | 702959.96 | 732712.44 | 1.00 | 75.00 | 0.00 | 0.00 | 0.10 | | | |

Horizontal Illuminance (lux)

Grid 1



Results

| | |
|-----------------------|-------|
| Eav | 5.08 |
| Emin | 1.00 |
| E _{max} | 30.11 |
| Emin/E _{max} | 0.03 |
| Emin/Eav | 0.20 |
| | |

Horizontal Illuminance (lux)

Grid 2



Results

| | |
|-----------|-------|
| Eav | 5.51 |
| Emin | 1.08 |
| Emax | 53.44 |
| Emin/Emax | 0.02 |
| Emin/Eav | 0.20 |
| | |

Horizontal Illuminance (lux)

Grid 3



Results

| | |
|------------------------------------|-------|
| Eav | 5.75 |
| Emin | 1.12 |
| E _{max} | 20.26 |
| E _{min} /E _{max} | 0.06 |
| E _{min} /E _{av} | 0.20 |
| | |

Horizontal Illuminance (lux)

Grid 4 Ramp



Results

| | |
|-----------|-------|
| Eav | 46.82 |
| Emin | 17.67 |
| Emax | 82.94 |
| Emin/Emax | 0.21 |
| Emin/Eav | 0.38 |
| | |

Horizontal Illuminance (lux)

Grid 5 Steps

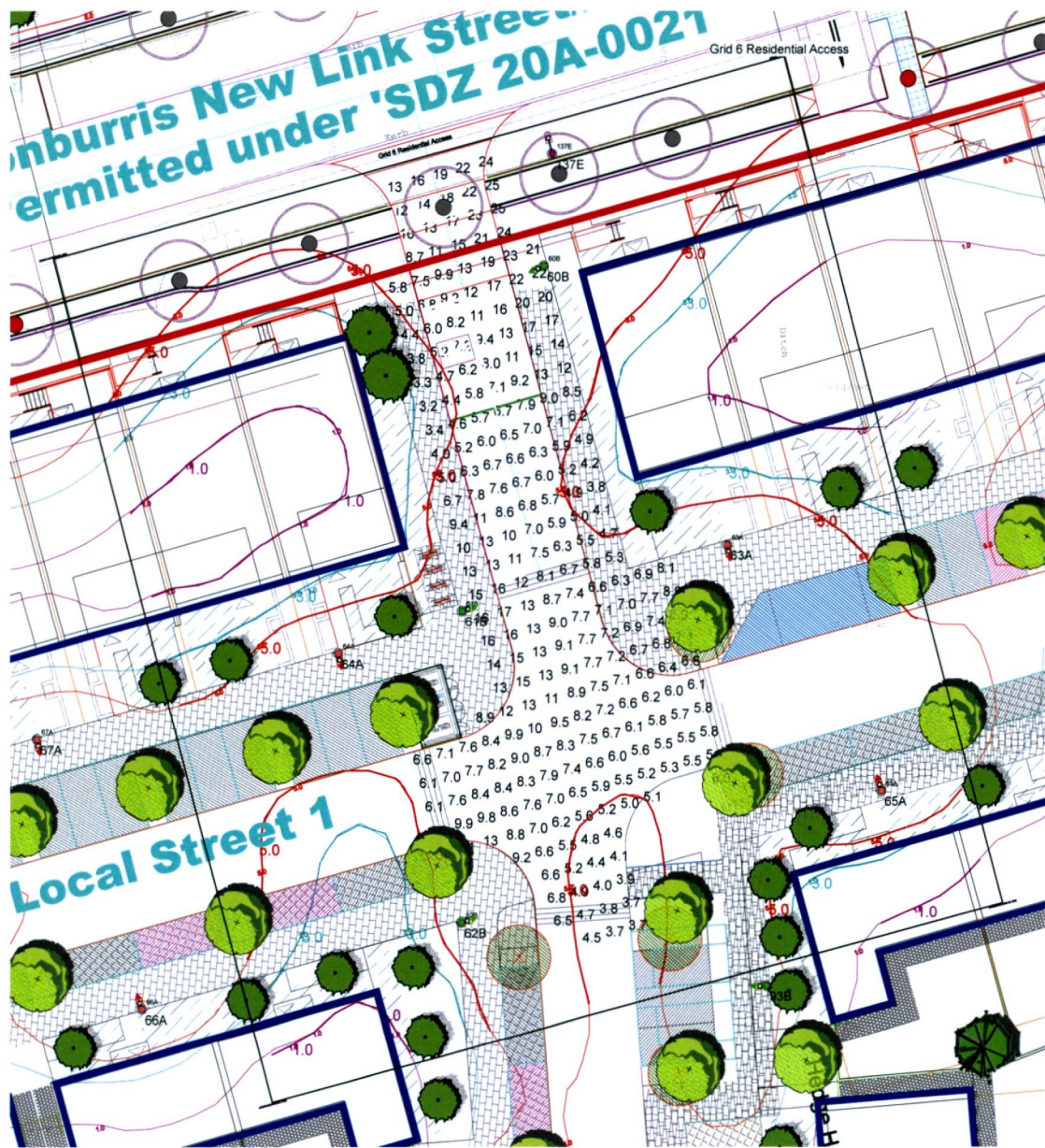


Results

| | |
|-----------|-------|
| Eav | 53.56 |
| Emin | 46.33 |
| Emax | 60.70 |
| Emin/Emax | 0.76 |
| Emin/Eav | 0.86 |
| | |

Horizontal Illuminance (lux)

Grid 6 Residential Access

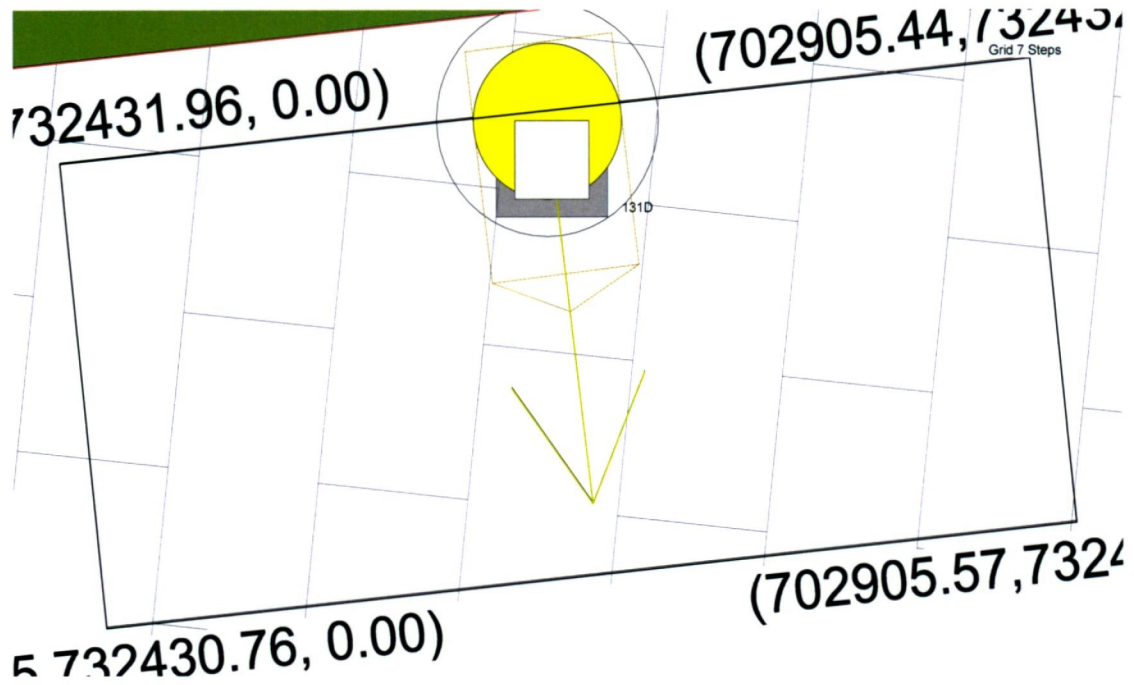


Results

| | |
|-----------|-------|
| Eav | 9.04 |
| Emin | 3.20 |
| Emax | 25.31 |
| Emin/Emax | 0.13 |
| Emin/Eav | 0.35 |
| | |

Horizontal Illuminance (lux)

Grid 7 Steps

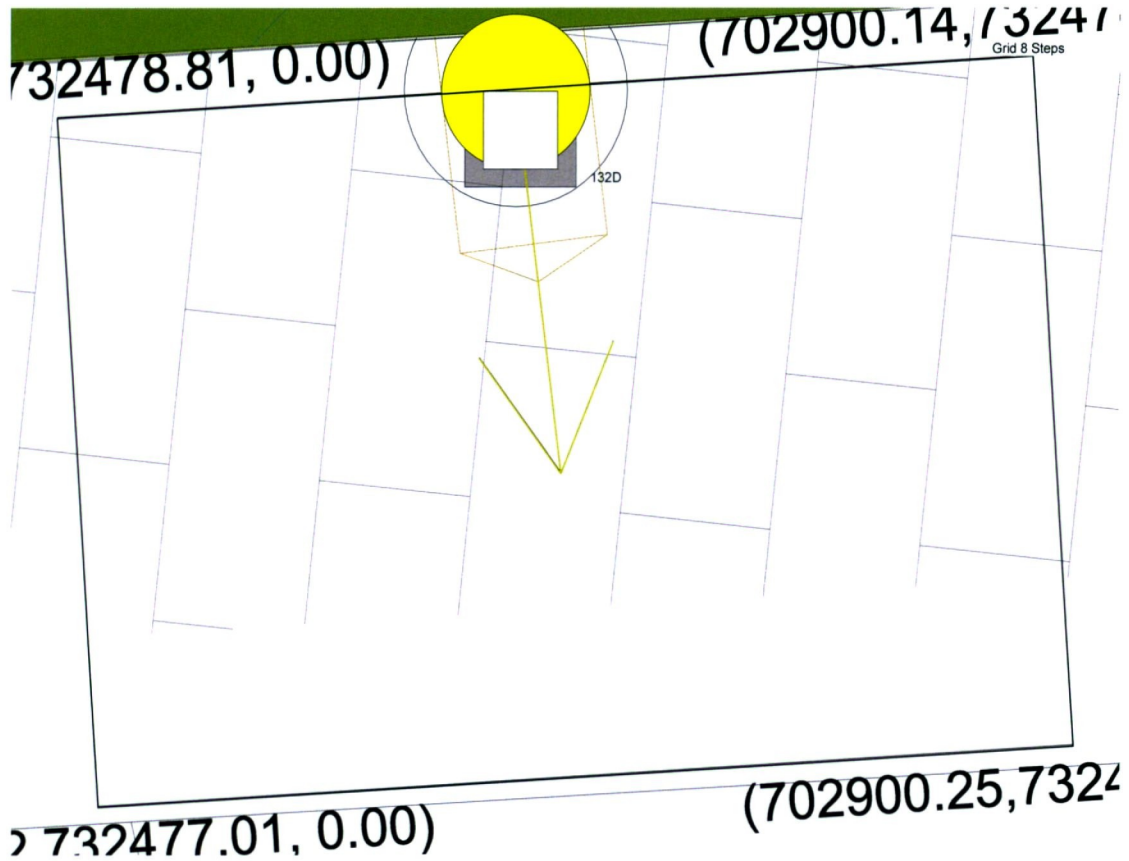


Results

| | |
|-----------|------|
| Eav | 0.00 |
| Emin | 0.00 |
| Emax | 0.00 |
| Emin/Emax | 0.00 |
| Emin/Eav | 0.00 |
| | |

Horizontal Illuminance (lux)

Grid 8 Steps

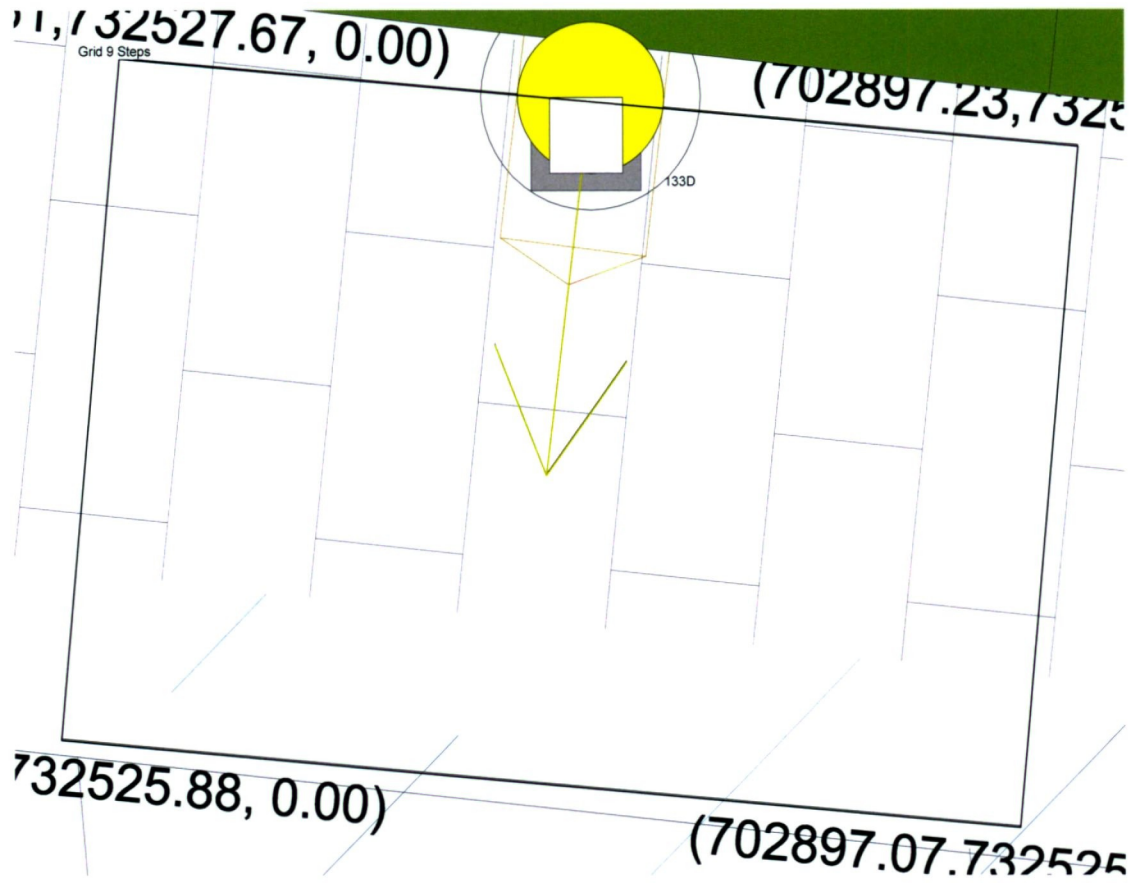


Results

| | |
|-----------|------|
| Eav | 0.00 |
| Emin | 0.00 |
| Emax | 0.00 |
| Emin/Emax | 0.00 |
| Emin/Eav | 0.00 |
| | |

Horizontal Illuminance (lux)

Grid 9 Steps

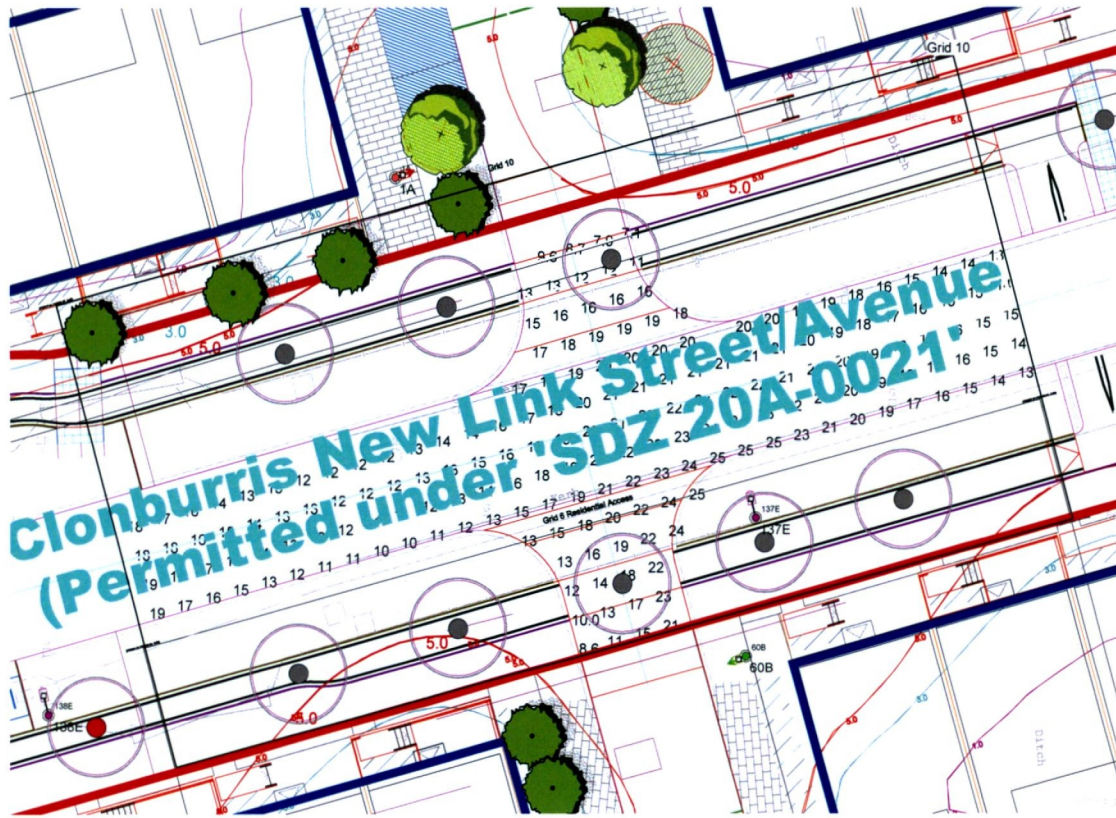


Results

| | |
|-----------|------|
| Eav | 0.00 |
| Emin | 0.00 |
| Emax | 0.00 |
| Emin/Emax | 0.00 |
| Emin/Eav | 0.00 |
| | |

Horizontal Illuminance (lux)

Grid 10

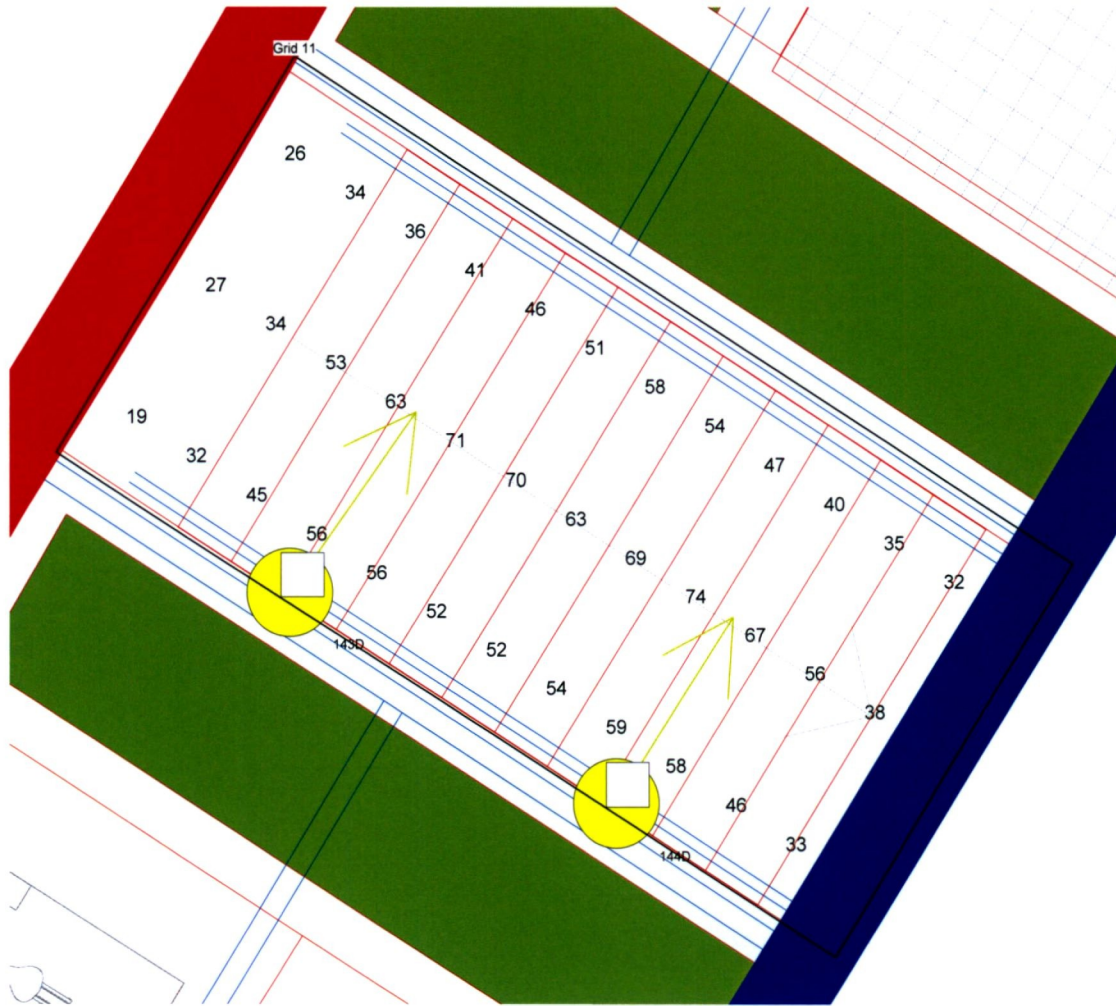


Results

| | |
|------------------------------------|-------|
| Eav | 16.87 |
| Emin | 7.11 |
| E _{max} | 25.15 |
| E _{min} /E _{max} | 0.28 |
| E _{min} /E _{av} | 0.42 |
| | |

Horizontal Illuminance (lux)

Grid 11

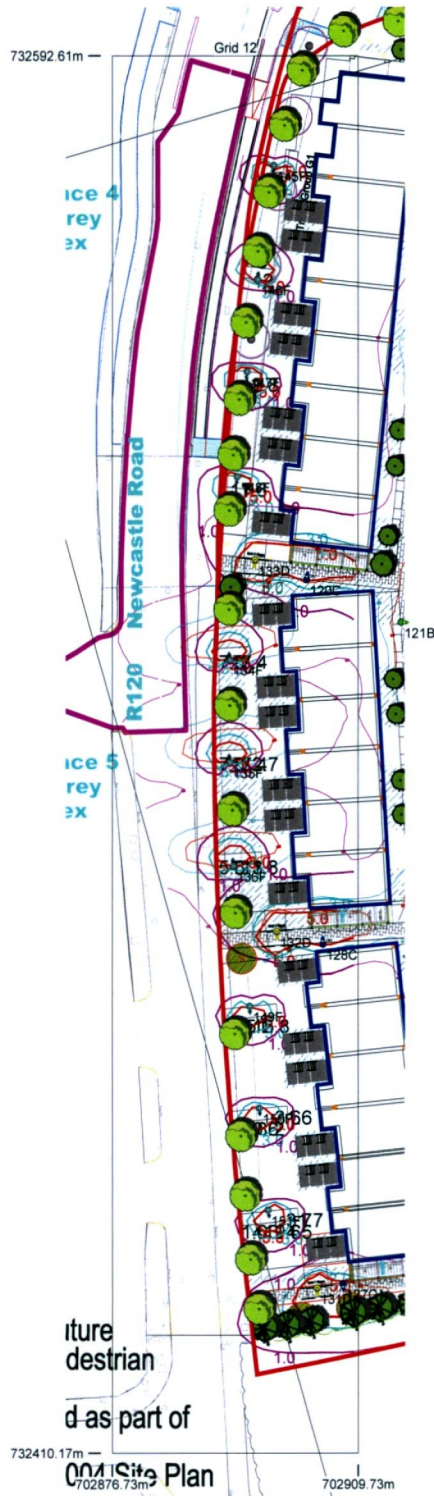


Results

| | |
|-----------------------|-------|
| Eav | 46.82 |
| Emin | 19.42 |
| E _{max} | 73.85 |
| Emin/E _{max} | 0.26 |
| Emin/Eav | 0.41 |
| | |

Horizontal Illuminance (lux)

Grid 12

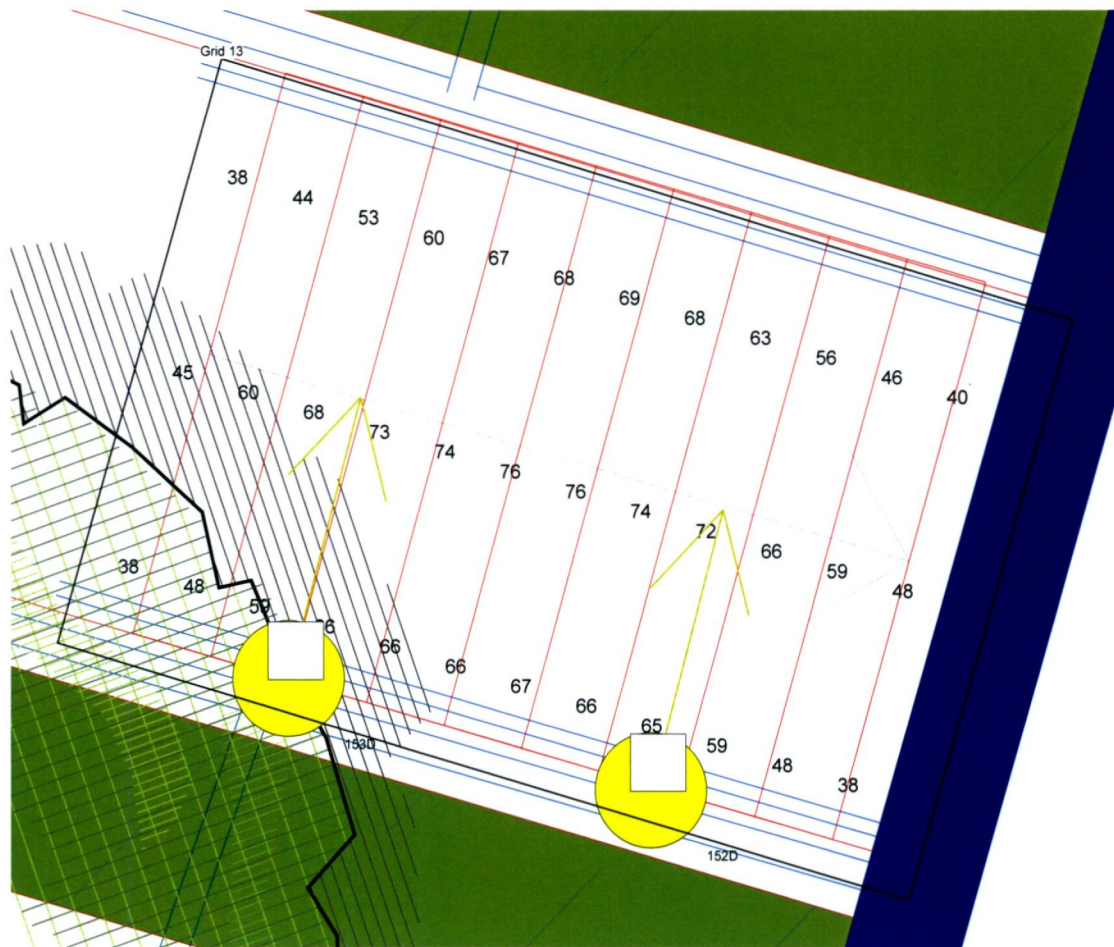


Results

| | |
|-----------|-------|
| Eav | 7.46 |
| Emin | 1.64 |
| Emax | 12.67 |
| Emin/Emax | 0.13 |
| Emin/Eav | 0.22 |
| | |

Horizontal Illuminance (lux)

Grid 13



Results

| | |
|-----------|-------|
| Eav | 57.64 |
| Emin | 27.41 |
| Emax | 75.92 |
| Emin/Emax | 0.36 |
| Emin/Eav | 0.48 |
| | |