## (S)ignify

## Lighting Application Specialists (LiAS) Preliminary Design

Project Name: Brewshill, Navan, Co Meath R0
LiAS Reference:D-469433
Key Account Manager: Seán Campbell
Email: Seán.Campbell@signify.com
Phone: +353 870629330
Address: Suite 12, Plaza 256, Blanchardstown
Corporate Park 2, Dublin 15, Dublin, D15 TR96

## Lighting Application Notes

This preliminary design is produced by the Lighting Application Specialist (LiAS) team of Signify based on information supplied by the Customer for the purpose of identifying suitable products and costing the proposal. This design cannot be used for Construction. This design does not purport to eliminate health and safety risks as a risk assessment has not been undertaken. Depending on the level of information received, a number of assumptions may have been applied in order to create an indicative lighting proposal and costing model, according to lighting industry guidelines and incorporating industry best practice methods. These assumptions are documented below and will require confirmation by the Principle Designer nor are we the PSDP (which is not Signify) during the detailed design phase.

## Project Specific Comments/Assumptions

- Lighting Calculation has been produced to achieve Lighting Class as specified by Client
- Where column heights have not been provided/specified, these have been assumed to be 6 m .
- It has been assumed that luminaires will be mounted post-top on outreach brackets).


## Generic Comments/Assumptions (unless otherwise stated above)

- Preliminary Design proposals produced by the Signify LiAS Team are not to be used for installation purposes. It is the responsibility of the Principle Designer and/or Principle Contractor to ensure all Installation and Maintenance can be done in a safe manner, carried out by competent persons, based on their agreed Risk Assessments and Method Statements.
- The Luminaire Maintenance Factors have been based on 6-year cleaning intervals within an E3/E4 Environmental Zone and it is assumed that lamp/luminaire failures will be replaced on a 'spot replacement'.
- Energy consumptions have been based on the luminaire/s having Constant Light Output (CLO) enabled and the quoted wattage/s are the average over 100,000 hours (without dimming).
- The design calculations produced by Signify do not account for the effect obstructions, such as trees, will cause.
- Signify has not been provided with utility plans showing Buried, Above Ground or Overhead utilities. Therefore, all column/ luminaire locations are indicative and are subject to review/verification by the Principle Designer.
- Unless stated otherwise, Signify has not visited site. Therefore, all column/luminaire locations are indicative and are subject to an onsite verification arranged/performed by the Principle Designer.
- Signify has not produced any Private Cable Network electrical calculations or reviewed the DNO network to confirm power supplies to the proposed lighting.
- Signify has not performed any asset condition testing and therefore assumes that any existing lighting columns/wall mounted brackets are structurally capable of supporting the weight \& windage of the proposed luminaire/s. This must be verified by the Principle Designer before installation works commence.
- Unless stated otherwise, Signify is not supplying the new lighting columns (including brackets etc) and therefore it is the responsibility of the Principle Designers to confirm that all proposed equipment is suitable for the intended locations (e.g. raise \& lower, ground condition, foundation type, saline environment, etc).
- Unless stated otherwise, luminaires will be supplied in their standard colour.
- WARNING - All proposed locations are only adversary and will need to be measured and set back from any ESBN low voltage assets 230 v , any larger ESBN assets such as 400 v or above. We advise you refer to the ESBN guidance docs on set back from ESBN assets before setting out the site or sending anyone to work. This will be down to the installation contractor to set out the column locations on site.

DATE:
DESIGNER:
4 August 2022
Seán Campbell

The meaning of light

## Brewshill, Navan, Co Meath R0

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## Seán Campbell

Key Account Manager - Road Lighting Ireland, BSc(Eng.), MSc, Interim CEng, MIEI, AMEI,

Signify Ireland +353 870629330
Suite 12, 2nd Floor, Plaza 256,
Blanchardstown Corporate Park,
Dublin, D15 TR96, Ireland
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Our global brands are
PHILIPS interact $\mathbb{C} \begin{aligned} & \text { color } \\ & \text { kinetics } \\ & \text { hue } \\ & =\end{aligned}$
Wiz BrightSites © trulifi NatureConnect
by (6)ignify by (1)ignify by (2)ignify

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## Layout Report

## General Data

Dimensions in Metres Angles in Degrees
Grid Origin 1927.8m x-361.3m
Area $87.0 \mathrm{~m} \times 88.4 \mathrm{~m}$
Sample Spacing $1.50 \mathrm{~m} \times 1.50 \mathrm{~m}$

## Luminaires

Luminaire A Data

| Supplier |  |
| :--- | :---: |
| Type | BGP291 DRM1 BL2 |
| Lamp(s) | LED-HB 5.2S 730 |
| Lamp Flux (klm) | 3.80 |
| File Name | LumiStreet Gen2 Micro_BGP291_DRM1 B <br> L2_380__20LED_5.2S_CLO_L90_730.es |
| Maintenance Factor | 0.76 |
| Imax70,80,90(cd/klm) | 30.9, 5.1, 0.0 |
| No. in Project | 2 |

Luminaire B Data

| Supplier | Philips |
| :--- | :---: |
| Type | BGP291 DX51 |
| Lamp(s) | LED-HB 5.2s 730 |
| Lamp Flux (klm) | 4.00 |
| File Name | Lumistreet Gen2 Micro_BGP291_DX51_40 <br> 00_20LED_5.2s_CLO_L90_730.ies |
| Maintenance Factor | 0.76 |
| Imax70,80,90(cd/klm) | 480.9, 32.0, 0.0 |
| No. in Project | 1 |

Luminaire C Data


| Supplier | Philips |
| :--- | :---: |
| Type | BGP291 DW50 |
| Lamp(s) | LED-HB 5.2S 730 |
| Lamp Flux (klm) | 4.00 |
| File Name | LumiStreet Gen2 Micro_BGP291_DW50_4 <br> 000_20LED_5.2S_CLO_L90_730.ies |
| Maintenance Factor | 0.76 |
| Imax70,80,90(cd/kIm) | 609.4, 39.0, 0.0 |
| No. in Project | 1 |

## Layout

| ID | Type | X | Y | Height | Angle | Tilt | Cant | Out- | Target <br> X | Target <br> Y | Target <br> Z |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | C | 1963.25 | -299.42 | 6.00 | 117.00 | 0.00 | 0.00 | 0.40 |  |  |  |
| 2 | A | 1986.43 | -320.07 | 6.00 | 205.00 | 0.00 | 0.00 | 0.40 |  |  |  |
| 3 | B | 1959.33 | -323.62 | 6.00 | 29.00 | 5.00 | 0.00 | 0.40 |  |  |  |
| 4 | A | 1977.91 | -302.09 | 6.00 | 205.00 | 0.00 | 0.00 | 0.40 |  |  |  |

## Horizontal Illuminance (lux)



Results

| Eav | 7.55 |
| :--- | ---: |
| Emin | 2.10 |
| Emax | 20.42 |
| Emin/Emax | 0.10 |
| Emin/Eav | 0.28 |
|  |  |


| DATE: $\mathbf{4}$ August 2022 | DESIGNER: $\quad$ Seán Campbell | S) ignify <br> PROJCT No: D-469433 |
| :--- | :--- | :--- |
| PROJECT NAME: Brewshill, Navan, Co Meath R0 |  |  |

Horizontal Illuminance (lux)
Grid 1

