# LiAS Design Notes

This preliminary design is produced by the Lighting Application Specialist (LiAS) team of Signify UK 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, as this design does not purport to eliminate health and safety risks as a CDM Regulation 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 (which is not Signify UK) during the detailed design phase.

### Project Specific Assumptions

- Where 'Lighting Classes' have not been provided/specified, the calculations have been produced using Lidl Specification lighting classes.
- Where column heights have not been provided/specified, these have been assumed to be 3.25m and 6m.
- It has been assumed that luminaires will be mounted post-top, on 0.5m outreach brackets, wall mounted and ceiling mounted.

### Generic Assumptions (unless specifically informed differently)

- 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.

# Luminaire Schedule



LL-E
Emergency version

1 lamp(s) per luminaire, 2300 initial lumens per lamp
Maintenance Factor = 0.800, watts per luminaire = 17
Outreach (from mounting axis to photometric center)= 0 mm
tilt angle= 10 deg
mounting height= 3.25 m
number locations= 9, number luminaires= 9
kw all locations= 0.2



LL-C

1 lamp(s) per luminaire, 7500 initial lumens per lamp
Maintenance Factor = 0.760, watts per luminaire = 0
Outreach (from mounting axis to photometric center)= 900 mm
tilt angle= 5 deg
mounting height= 6 m
number locations= 8, number luminaires= 16
kw all locations= 0.0



LL-C

1 lamp(s) per luminaire, 7500 initial lumens per lamp
Maintenance Factor = 0.760, watts per luminaire = 0
Outreach (from mounting axis to photometric center)= 400 mm
tilt angle= 5 deg
mounting height= 6 m
number locations= 4, number luminaires= 4
kw all locations= 0.0



LL-A

1 lamp(s) per luminaire, 4900 initial lumens per lamp
Maintenance Factor = 0.760, watts per luminaire = 0
Outreach (from mounting axis to photometric center)= 400 mm
tilt angle= 5 deg
mounting height= 6 m
number locations= 11, number luminaires= 11
kw all locations= 0.0



LL-E

1 lamp(s) per luminaire, 2300 initial lumens per lamp
Maintenance Factor = 0.800, watts per luminaire = 17
Outreach (from mounting axis to photometric center)= 0 mm
tilt angle= 10 deg
mounting height= 3.25 m
number locations= 11, number luminaires= 11
kw all locations= 0.2



LL-Canopy
Emergency version

1 lamp(s) per luminaire, 2100 initial lumens per lamp
Maintenance Factor = 0.800, watts per luminaire = 18
Outreach (from mounting axis to photometric center)= 0 mm
mounting height= 3.25 m
number locations= 3, number luminaires= 3
kw all locations= 0.1



LL-Canopy

1 lamp(s) per luminaire, 2100 initial lumens per lamp
Maintenance Factor = 0.800, watts per luminaire = 18
Outreach (from mounting axis to photometric center)= 0 mm
mounting height= 3.25 m
number locations= 12, number luminaires= 12
kw all locations= 0.2

# Philips Lighting Contacts


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**Lighting Proposal Terms and Conditions of Use**

These terms apply to the use of this preliminary proposal produced by Signify UK. This "**Proposal**" is understood to mean this document, a CAD drawing, lighting calculations, written documents, verbal conversations or any medium used to demonstrate or communicate the proposed lighting scheme using products from Signify's brands. A "**Customer**" is the person or organisation for whom the Proposal is intended. The "**CDM Regulations**" means The Construction, Design and Management Regulations 2015, the Safety, Health & Welfare at Work Act 2005, The Construction (Design & Management) Regulations (Northern Ireland) 2015.

This Proposal is for guidance only and cannot be relied upon for purposes of installation or Health and Safety.

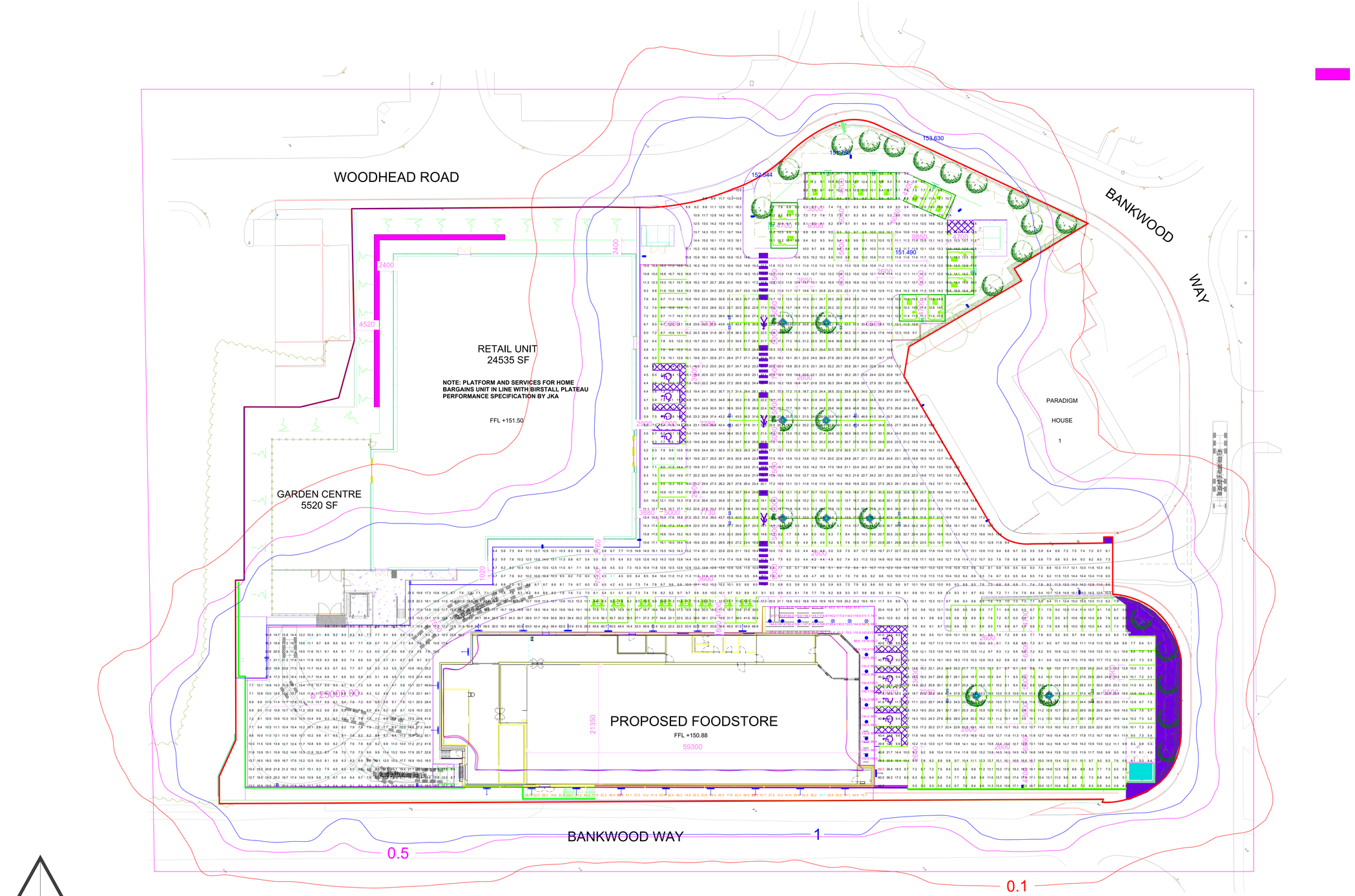
The supply and installation of this lighting scheme are subject to a contract being agreed between Customer and Signify.


**PROPOSAL**
(NOT FOR CONSTRUCTION)

| Rev | DSR no. | Comment | Date | LiAS | KAM |
|---|---|---|---|---|---|
| 0 | D-383261 | Initial proposal. | 11/12/20 | MD | RF |
| 1 | D-417492 | Initial proposal. | 11/12/20 | MD | RF |
| 2 | D-508038 | New layout | 21/04/23 | CBJ | RF |

Project Number: 0400554022
Scale & Sheet Size: NTS @ A3
Sheet No: DWG 00

Project Name: Lidl Birstall
Drawing Name: LiAS DESIGN NOTES & LUMINAIRE SCHEDULE




# Key:

LL-E
Emergency version

1 lamp(s) per luminaire, 2300 initial lumens per lamp
Maintenance Factor = 0.800, watts per luminaire = 17
Outreach (from mounting axis to photometric center)= 0 mm
tilt angle= 10 deg
mounting height= 3.25 m
number locations= 9, number luminaires= 9
kw all locations= 0.2

LL-C

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kw all locations= 0.0

LL-C

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LL-A

1 lamp(s) per luminaire, 4900 initial lumens per lamp
Maintenance Factor = 0.760, watts per luminaire = 0
Outreach (from mounting axis to photometric center)= 400 mm
tilt angle= 5 deg
mounting height= 6 m
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kw all locations= 0.0

LL-E

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Maintenance Factor = 0.800, watts per luminaire = 17
Outreach (from mounting axis to photometric center)= 0 mm
tilt angle= 10 deg
mounting height= 3.25 m
number locations= 11, number luminaires= 11
kw all locations= 0.2

LL-Canopy
Emergency version

1 lamp(s) per luminaire, 2100 initial lumens per lamp
Maintenance Factor = 0.800, watts per luminaire = 18
Outreach (from mounting axis to photometric center)= 0 mm
mounting height= 3.25 m
number locations= 3, number luminaires= 3
kw all locations= 0.1

LL-Canopy

1 lamp(s) per luminaire, 2100 initial lumens per lamp
Maintenance Factor = 0.800, watts per luminaire = 18
Outreach (from mounting axis to photometric center)= 0 mm
mounting height= 3.25 m
number locations= 12, number luminaires= 12
kw all locations= 0.2

Car Park
3309 points at z=0, sp 1.5m by 1.5m
HORIZONTAL LUX
Average 15.9
Maximum 69.1
Minimum 0.0
Min/Avg(Uo) 0.257
Min/Max 0.000
Coef Var 0.590
Uni/Grad 3.04

Walkway
41 points
HORIZONTAL LUX
Average 39.2
Maximum 55.1
Minimum 14.7
Min/Avg(Uo) 0.375
Min/Max 0.267
Coef Var 0.376

Canopy
83 points at z=0, sp 1.5m by 1.5m
HORIZONTAL LUX
Average 101.8
Maximum 147.5
Minimum 45.5
Min/Avg(Uo) 0.447
Min/Max 0.308
Coef Var 0.315
Uni/Grad 2.51

signify
PHILIPS interact PHILIPS hue
MODULAR LIGHTING INSTRUMENTS
COLORKINETICS

Notes:

1) Unless agreed otherwise, the lighting proposal produced by the Lighting Application Specialist (LiAS) team of Philips Lighting UK&I is not intended for construction purposes, as it does not take into account the elimination of health and safety risks at this stage. For further details please refer to sheet number **DWG 00**

2) Do not scale for this drawing

**PROPOSAL**
(NOT FOR CONSTRUCTION)

| Rev | DSR no. | Comment | Date | LiAS | KAM |
|---|---|---|---|---|---|
| 0 | D-383261 | Initial proposal. | 11/12/20 | MD | RF |
| 1 | D-417492 | Initial proposal. | 11/12/20 | MD | RF |
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Project Number
0400554022

Scale & Sheet Size
1:250 @ A0

Sheet No
DWG 01

Project Name
Lidl Birstall

Drawing Name
PROPOSED LIGHTING LAYOUT