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

- External Roadway & Storgae Area - 20lux average. External Roadway West Elevation 20lux average.
- Floodlights BVP125 A LED80 mounted at 9.7m. 2 deg tilt.

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



Coreline Tempo BVP120 A LED80
BVP120 A LED80/- NO
lamp(s): LED80/NW/-
candela file 'BVP120 1xLED80_NW A.ldt'
1 lamp(s) per luminaire, 8000 initial lumens per lamp
Maintenance Factor = 0.740, watts per luminaire = 80
Outreach (from mounting axis to photometric center)= 400 mm
tilt angle= 2 deg
mounting height= 9.7 m
number locations= 10, number luminaires= 10
kw all locations= 0.8



eW Graze EC Powercore 1219mm
BCS428 L1219 LED-HB NO
lamp(s): LED-HB-90x90--4000
candela file 'BCS428 L1219 1xLED-HB-90x90--4000.ldt'
1 lamp(s) per luminaire, 984 initial lumens per lamp
Maintenance Factor = 0.740, watts per luminaire = 20
Outreach (from mounting axis to photometric center)= 0 mm
mounting height= 10 m
number locations= 10, number luminaires= 10
kw all locations= 0.2

External Roadway & Storage Area
306 points at z=0, sp 1.5m by 1.5m
HORIZONTAL LUX

Average	28.4
Maximum	59.4
Minimum	3.3
Min/Avg(Uo)	0.116
Min/Max	0.056
Coef Var	0.554
UnifGrad	2.17

External Road West Elevation
270 points at z=0, sp 1.5m by 1.5m
HORIZONTAL LUX

Average	26.6
Maximum	58.2
Minimum	8.7
Min/Avg(Uo)	0.327
Min/Max	0.149
Coef Var	0.421
UnifGrad	1.42

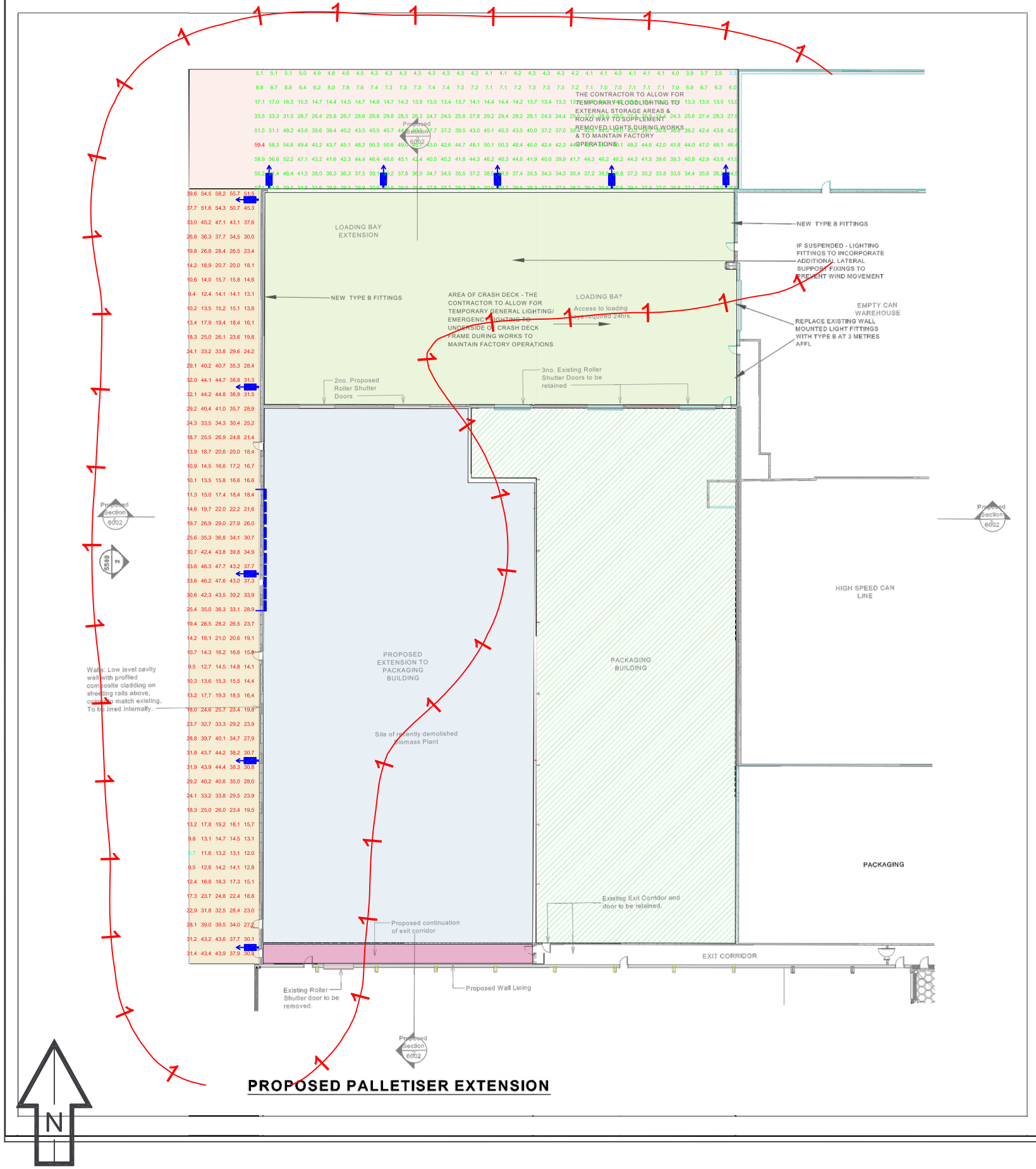
Lighting Proposal Terms and Conditions of Use
These terms apply to the use of this preliminary proposal produced by Signify UK. This "**Proposal**" is understood to mean this document, a CAD drawing, lighting calculations, written documents, verbal conversations or any medium used to demonstrate or communicate 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-300924	INITIAL PROPOSAL	30.04.19	CBJ	SG
1	D-303339	AMEND MOUNTING HEIGHT	15.05.19	CBJ	SG
2	D-307025	AMEND MOUNTING HEIGHT ON FLOODS TO 9.7M	10.06.19	CBJ	SG

Project Number: 0400062030
Scale & Sheet Size: NTS @ A3
Sheet No: DWG 00

Project Name: Heineken Manchester
Drawing Name: LiAS DESIGN NOTES & LUMINAIRE SCHEDULE



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TYPE A
PHILIPS GENTLE SPACE 2



TYPE B
PHILIPS WATERPROOF CORELINE



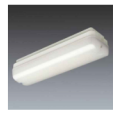
TYPE C
PHILIPS CORELINE TEMPO



TYPE D
PHILIPS EW GRAZE EC POWERCORE (TBC BY PHILIPS)



TYPE E1
THORN LIGHTING VOYAGER E LED EXIT



TYPE E1
THORN LIGHTING VOYAGER E LED



TYPE E2
VOYAGER TWINSPOT LED

LIGHTING STRATEGY

NEW LOADING BAY EXTENSION AREA

LIGHTING:
LIGHTING STRATEGY: 50 LUX AT 0.5 AVERAGE TO FFL
LUMINAIRE: TYPE 'A' SUSPENSION MOUNTED.
LUMINAIRE: TYPE 'B' WALL MOUNTED.
CONTROL METHOD: INTEGRAL LIGHT FITTING PIR, PHOTOCELL DAYLIGHT LINKING IN MASTER/SLAVE ARRANGEMENT WITH LOCAL MANUAL SWITCH OVERRIDE.
SPECIAL NOTE: DESIGN TO ALLOW FOR LIGHTING LEVELS BETWEEN PARKED HGV & TRAILER AND TO WALKWAYS.

EMERGENCY LIGHTING:
TO BE PROVIDED IN ACCORDANCE WITH BS5266.
LUMINAIRE: TYPE 'A', 'B' EMERGENCY VERSION, TYPE E1.

NEW PALLETISER EXTENSION AREA

LIGHTING:
LIGHTING STRATEGY: 200 LUX AT 0.5 AVERAGE TO FFL
100 LUX LIGHTING REQUIRED TO ILLUMINATE PROPOSED INTERNAL STAIRWAYS & PLATFORM LEVELS
LUMINAIRE: TYPE 'A' SUSPENDED.
CONTROL METHOD: INTEGRAL LIGHT FITTING PIR, DAYLIGHT LINKING PHOTOCELL & GROUP CONTROL ARRANGEMENT WITH MANUAL SWITCH OVERRIDE.

EMERGENCY LIGHTING:
TO BE PROVIDED IN ACCORDANCE WITH BS5266.
LUMINAIRE: TYPE 'A' & TYPE 'B' EMERGENCY VERSION, TYPE E1.

EXTERNAL ROAD WAY & STORAGE AREA

LIGHTING:
LIGHTING STRATEGY: 20 LUX AVERAGE
LUMINAIRE: TYPE 'C' INSTALLED TO FRONT ELEVATION
CONTROL METHOD: PHOTOCELL & 5+2 DAY TIMECLOCK WITH MANUAL OVERRIDE SWITCH

EMERGENCY LIGHTING:
TO BE PROVIDED IN ACCORDANCE WITH BS5266 TO EXIT ROUTES.
LUMINAIRE: TYPE E2

EXTERNAL ROAD WAY WEST ELEVATION

LIGHTING:
LIGHTING STRATEGY: 20 LUX AVERAGE TO PATHWAY & ROADS LUX SIGNAGE
LUMINAIRE: TYPE C WALL MOUNTED AT TOP OF DOOR HEIGHT TO BRICK WORK.
TYPE 'D' MOUNTED AT HIGH LEVEL (ROOF) TO DOWNWARD ILLUMINATE PROPOSED DECAL & HEINEKEN LOGO CONTROL METHOD: PHOTOCELL & 5+2 DAY TIMECLOCK WITH MANUAL OVERRIDE SWITCH
SPECIAL NOTE: FITTINGS NOT TO INTERFERE WITH SIGNAGE

EMERGENCY LIGHTING:
TO BE PROVIDED IN ACCORDANCE WITH BS5266 TO EXTERNAL DOORS & EXIT ROUTES.
LUMINAIRE: TYPE E1

INTERNAL CORRIDOR

LIGHTING:
LIGHTING STRATEGY: 100 LUX AVERAGE
LUMINAIRE: TYPE B WALL MOUNTED
CONTROL METHOD: INTEGRAL LIGHT FITTING PIR WITH MANUAL OVERRIDE SWITCH

EMERGENCY LIGHTING:
TO BE PROVIDED IN ACCORDANCE WITH BS5266 TO EXIT ROUTES.
LUMINAIRE: TYPE E1

EXISTING PALLETISER HALL

LIGHTING:
LIGHTING STRATEGY: EXISTING LIGHTING ARRANGEMENT

THIS DRAWING IS PRIMARILY INTENDED TO PROVIDE GUIDANCE OF THE PROPOSED SYSTEMS TO BE INSTALLED. IT IS NOT INTENDED TO BE EXHAUSTIVE OR DEFINITIVE AND IT WILL BE NECESSARY FOR THE DESIGN AND BUILD ELECTRICAL SUB-CONTRACTOR TO PRODUCE FULLY DETAILED DESIGN DRAWINGS IN ACCORDANCE WITH THE EMPLOYERS REQUIREMENTS.

Notes :

1) Drawing shows conceptual design information. Detailed design and installation drawings to be produced by Electrical services contractor in accordance with the performance specification.

2) Drawing to be read in conjunction with specification.

rev.	description	date	drawn	approved
A	Tender Issue	JAN '19	AW	NR

information ☐ approval ☐ tender ☒ contract ☐ construction ☐

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client
HEINEKEN

project
MANCHESTER BREWERY
PALLETISER EXTENSION

drawing
PROPOSED LIGHTING CONCEPTUAL DESIGN

drawn	approved	date	scale
AW	NR	JAN' 2019	1:200 @ A1

drawing ref. AX1767/E/05
revision A

Key:



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Notes:

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2) Do not scale for this drawing

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Project Number: 0400062030
Scale & Sheet Size: 1:500 @ A3
Sheet No: DWG 01

Project Name: Heineken Manchester
Drawing Name: PROPOSED LIGHTING LAYOUT