

WESTERN GOODS YARD

KINGS CROSS CENTRAL

Applied Landscape Design

Lighting Tracker to Discharge:

Reserved Matter Condition 1,
Gas Holder Park & Canal Reach Kings Cross
Central 2014/3681/P

ALD Project Ref:	653 / 14
Document Ref:	ALD653_RP901
Document Revision:	P01
Current Issue Date:	17.07.2015
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Reason For Issue:	Approval

Prepared By: Applied Landscape Design Ltd
Landscape Architect

Client: Carillion



INTRODUCTION

This document has been prepared to discharge the following planning conditions as highlighted below:
 Under application 2014/3681/P, Gas Holder Park & Canal Reach, Kings Cross Central

CONDITION	DETAILS OF CONDITION	NOTES
1	Prior to commencement on the relevant part of the development hereby approved details of all external lighting to include location, design, specification, fittings and fixtures (including means of reducing light spillage) shall be submitted to and approved in writing by the local planning authority.	Refer to enclosed information
2 Approval of material finishes	Prior to commencement on the relevant part of the development hereby approved the following details shall be submitted and approved in writing by the local planning authority:	Refer to ALD653_RP902 - RP904
2a Paving approval	Detailed drawings and / or samples as appropriate of all paving materials and finishes (including but not limited to resin bonded gravel, sandstone paving, dutch clay pavers, granite setts, granite paving, natural stone steps, bricks) and other hard landscape surface treatments. The material under this condition shall be displayed in the form of a samples board to be retained on site for the duration of the relevant works.	Refer to ALD653_RP902
2b	Detailed drawings of all planters, benches and seats	Refer to ALD653_RP903
2c	Detailed drawings and / or samples of materials as appropriate of any balustrading	Refer to ALD653_RP904

NOTE: Refer to drawing ALD653_GA002 for public realm hard landscape and lighting layout

Lighting Equipment Specification

Project: Western Goods Yard
 Public Realm
 King's Cross, London, UK
Project Number: 10213
Document Number: 10213-C-LC-401
Revision: 04

Rev.	Date	By	Notes
00	28/03/14	BR	Initial Release
01	30/05/14	PR	Draft Employer's Requirements
02	30/07/14	PR	Stage E Employer's Requirements
03	21/08/14	PR	Updated Employer's Requirements
04	06/03/15	PR	Updated Employer's Requirements - Type XD updated & YG added

ISSUE FOR PLANNING APPROVAL
 To discharge condition 1 of reserved matters
 application 2014/3681/P - Gas Holder Park
 and Canal Reach, Kings Cross Central

**NOTE: ONLY LIGHTING OUTLINED IN RED
 IS RELEVANT FOR THIS APPLICATION**
 Refer to ALD653_GA002 for locations

1.0 General Conditions

- 1.1 A schedule of luminaires and associated equipment is enclosed, and should be read in conjunction with the Lighting Consultant's relevant drawings.
- 1.2 This specification supersedes all previous issues.

2.0 Samples and Prototypes

- 2.1 Should a sample of a standard, or prototype of a special luminaire or variant of a standard luminaire be ordered, its cost shall either be incorporated into a tender price, or shall be invoiced to the Client or his nominated representative separately, as agreed.
- 2.2 Any such sample prototype or variant shall be a sample of the luminaire type specified, and shall be submitted to the Lighting Consultant, together with full photometric and dimensional data if specifically requested, to enable both its accurate assessment and the detailing of any adjustments deemed necessary prior to the commencement of full production.

3.0 Standards of Compliance

- 3.1 For projects in the United Kingdom, all equipment supplied shall comply with the relevant BS and IEC requirements, and be capable of installation in accordance with the manufacturers' instructions, the current edition of the IEE Wiring Regulations and all relevant statutory and local authority requirements.
- 3.2 Notwithstanding the above, the following British Standards (and any which supersede them) in particular should be checked for compliance:
- BS 5266 Part 7/EN 1838 Emergency Lighting (where relevant – check Engineers information).
 - BS EN 60598 Luminaires
- 3.3 For projects outwith the United Kingdom, all equipment supplied shall comply with the relevant standards in force in the project's country of origin.
- 3.4 The cost of obtaining any necessary approvals and testing shall be included in any tender price, detailed as a separate item.

4.0 Protection


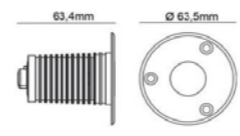
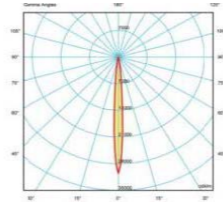

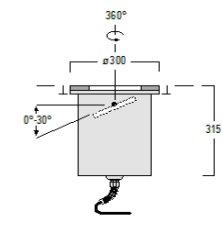
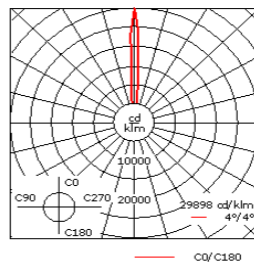


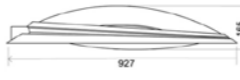
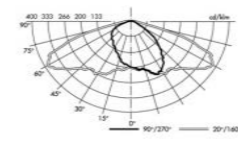


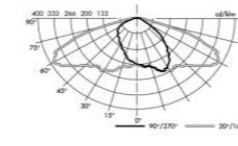
- 4.1 All equipment shall be supplied with adequate means of protection to ensure its preservation during transport to site and any subsequent storage prior to installation.
- 4.2 All vulnerable finished parts liable to scratching or other abrasion during handling and installation shall be further protected by a removable film applied prior to dispatch.

5.0 Guarantees

- 5.1 All equipment and components supplied shall be guaranteed against failure due to poor workmanship, materials, or luminaire design, for a period of not less than 18 months from the date of delivery to site or 12 months from the date of practical completion, whichever is the sooner, with the exception of lamps which shall be covered only by their manufacturer's normal assurances as to life expectancy and performance.

6.0 Technical Requirements

- 6.1 Luminaires
- 6.1.1 Equipment selected as a standard item from a particular manufacturer's range has been specified with a view to performance, optics, maintenance, quality, aesthetics, etc.
- 6.1.2 Should alternative equipment be offered, full technical and photometric data shall be supplied to Speirs and Major Associates in time to enable its accurate assessment. No substitutions or alterations to the specifications will be allowed without the written approval of the lighting consultant.
- 6.1.3 If any variants of standard luminaires are required, these shall be developed by the manufacturer of the standard luminaire, unless otherwise specifically stated, and shall be manufactured to the same quality as the equivalent standard luminaire.
- 6.1.4 Two copies of all working drawings of proposed variants, dimensioned in mm, shall be supplied to Speirs + Major for approval prior to fabrication.
- 6.1.5 Notwithstanding the above, the manufacturers shall remain responsible for ensuring compliance with relevant standards, the accuracy of the information shown on his drawings at all times

Ref.	Lighting Function	Luminaire Description	Lamp Type	Control Gear Type	Accessories (to be ordered seperately)	Image	Typical Dimensions	Typical Light Distribution	Fitting code/contact details
Gasholder No.8									
			see note 3.0	see note 4.0					
XA	Cool white uplight to canopy	Exterior quality IP68 rated ground recessed LED uplight with recessed 8 degree collimated lens for narrow beam lighting distribution. Utilising a single low voltage 24V/1W high output cold white LED with a colour temperature of 5500K CCT. Marine Grade 316L Stainless steel construction and bezel with a clear safety glass lens and integral DMX driver onboard. Fitting supplied with anti-vandal screws and IP68 rated glands. To be supplied with 4no. IP67 rated LED 100W DC 24V LED power supply manufacturer's detail and specification and IP67 rated DMX splitter.	LED	LED	To be supplied with 4no. IP67 rated LED 100W DC 24V LED power supplies ALI.0137.99 and 2no. IP67 rated DMX splitter to manufacturer's detail and specification.				Aldabra - Alcor Product code - ALC.024.28 / Aldabra Lighting Ltd Anova House, Wickhurst Lane Broadbridge Heath, Horsham West Sussex RH12 3LZ www.aldabra.co.uk Contact: Neil Partridge n.partridge@aldabra.co.uk +44 (0)7972 043103
XC	Uplighting to historic gasholder structure	Exterior quality IP68, IK10+ rated ground recessed adjustable LED uplight with 8 degree collimated lenses for narrow beam lighting distribution. Utilising a 230V/24W high out cool white LEDs (24no. in array) with a colour temperature of 4000K CCT (exact colour temperature to be determined during lighting mock-up to historic gasholder structure). Stainless steel construction with clear safety glass lens with max load of 5 tonnes. Gimbal mounted adjustable reflector tray with 360 degree rotation and 30 degree tilt. Housing supplied with factory sealed gland and 1.5m flexible cable. To be supplied with integral LED dimmable driver, exact dimming protocol to be determined. Exact dimming protocol to be determined	LED	LED	Installation blackout 185-0322 Sealable junction box SJB				We-ef - ETC-140-GB-LED Product code - 185-2727 We-ef Lighting Suite 2c, East Bridgford Business Park Kneeton Road, East Bridgford Nottingham NG13 8PJ www.we-ef.com Contact: Charles Dunbar c.dunbar@we-ef.com +44 (0)7768-766-119
XD	Handrail lighting to steps and ramps	Exterior quality IP66 rated surface mounted micro linear accent luminaire, with diffuse lighting distribution. Utilising an array of double density (5.5mm pitch) high brightness warm white 3000K CCT LEDs. 18W per linear metre. Constructed of anodized aluminium extruded profile with encapsulated acrylic diffuser and fitted with integral micro-louvre and asymmetrical shield to be ordered seperately.. To be supplied with remote IP65 rated electronic DMX LED dimmable drivers to suit.	LED	LED	Integral micro-louvre Asymmetrical shield To be supplied with remote IP65 rated electronic LED dimmable drivers to suit.				Mike Stoane Lighting - Exterior LED Channel Product code - LED Channel.Ext.high.3000K.TBC.ano.MICRO-LOURVE, ASYMMETRIC SHIELD Mike Stoane Lighting Ltd 20 Dryden Road Bilston Glen Industrial Estate Loanhead Midlothian, EH20 9LZ www.mikestoanelighting.com contact: sales@mikestoanelighting.com +44 (0)131 440 1313
Public Realm									
YA	Street Lighting Handyside Street	Exterior rated IP66 column-mounted streetlight, with a forward throw asymmetrical beam distribution, utilising 1 no. 240V/140W CPO-TW Cosmopolis lamp. Die-cast aluminium housing with flat glass finish and colour to match existing hestia luminaires on site. Luminaire to have a 5° inclination of the horizontal plane. Integral IP-44 dimm switch electronic ballast.	HID	EB	8m Column and bracketry to be specified by others to match existing columns on Handyside Street.				Urbis Schreder - Hestia Product code: Hes Mid/FG/1627/090/-25/26237A Finish/Colour to match hestia luminaires already on site Urbis Lighting Ltd Telford Road, Houndsmills Basingstoke Hampshire, RG21 6YW www.urbislighting.com Contact: sales@urbislighting.com +44 (0) 1256 354446
YB	Street Lighting to Handyside Street	Exterior rated IP66 column-mounted streetlight, with a forward throw asymmetrical beam distribution, utilising 1 no. 240V/45W CPO-TW Cosmopolis lamp. Die-cast aluminium housing with flat glass finish and colour to match existing hestia luminaires on site. Luminaire to have a 5° inclination of the horizontal plane. Integral IP-44 dimm switch electronic ballast.	HID	EB	8m Column and bracketry to be specified by others to match existing columns on Handyside Street.				Urbis Schreder - Hestia Product code: Hes Mini/FG/1914/080/-24/253881 Finish/Colour to match hestia luminaires already on site Urbis Lighting Ltd Telford Road, Houndsmills Basingstoke Hampshire, RG21 6YW www.urbislighting.com Contact: sales@urbislighting.com +44 (0) 1256 354446

Ref.	Lighting Function	Luminaire Description	Lamp Type	Control Gear Type	Accessories (to be ordered seperately)	Image	Typical Dimensions	Typical Light Distribution	Fitting code/contact details
YC	Street Lighting to Hodder Street	Exterior rated IP66 column-mounted streetlight, with a forward throw asymmetrical beam distribution, utilising 1 no. 240V/60W CPO-TW Cosmopolis lamp. Die-cast aluminium housing with flat glass finish and colour to match existing hestia luminaires on site. Luminaire to have a 5° inclination of the horizontal plane. Integral IP-44 dimm switch electronic ballast.	HID	EB	8m Column and bracketry to be specified by others to match existing columns on Handyside Street.				Urbis Schreder - Hestia Product code Hes-Midi/FG/1627/065/-16/27055C Finish/Colour to match hestia luminaires already on site Urbis Lighting Ltd Telford Road, Houndsmills Basingstoke Hampshire, RG21 6YW www.urbislighting.com Contact: sales@urbislighting.com +44 (0) 1256 354446
YD	Amenity Lighting to Canal Reach	Exterior rated IP676 bracket mounted adjustable spotlight with a symmetrical medium beam (30 degree) distribution, utilising a 700mA/10W 3000K warm white LED array (4no.) module with a minimum light output of 560lm. Die cast aluminium alloy housing with clear safety glass lens and supplied with integral 1-10V dimmable LED driver. Colour of finish to be standard aluminium to Landscape architect's detail and specification. Spotlights to be mounted on 6m high column timber column to Landscape Architects' detail and specification.	LED	LED	Honeycomb Louvre - HCl 6m high column to Landscape Architect's detail and specification				ACDC Lighting - Accento II Product code acdc1131/AAS/30/30R/DIM/HCl ACDC lighting Innovation Works Gisburn Road, Barrowford Lancashire BB9 8NB www.acdcighting.co.uk Contact: Liam Deards ldeards@acdcighting.co.uk 07730-522-636
YE	Under bench lighting	Exterior rated IP67 surface-mounted linear LED luminaire, with a wide symmetrical beam (60 degree) distribution utilising a 24V(constant voltage)/13.2W warm white 2900K linear LED array(50no.) per meter with a minimum light output of 880lm. Remote DMX dimmable LED-driver - exact distance between driver and luminaire to be confirmed by manufacturer.	LED	LED	Anti-tamper mounting clips				Lumino - Vector V20V20.2 Product code V20.3.IP67.2900K.LENGTH Lumino Limited Lumino House Lovet Road, Harlow Essex, CM19 5TB www.lumino.co.uk Contact: info@lumino.co.uk +44 (0) 1279 626101
YF	Lighting to specimen trees	Exterior rated IP66 surface mounted adjustable and lockable LED uplight with medium beam (30 degree) symmetrical light distribution utilising a 700mA/16W 4200K cool white LED array (8no.) with a minimum total light output of 1148lm and CRI of Ra >85. Colour temperature consistency of LEDs is within 2 MacAdam ellipses. Black powdercoated steel housing with silicone rubber gasket and toughened safety glass. All exposed screw fixings to be anti-tamper. Integral 1-10V dimmable driver.	LED	LED	Louvre - LVR Garden Spike 280mm - GAS				ACDC Lighting - Plaza 20 Product code acdc1185/20/TBL/42/30R/DIM/STD/LVR/GAS ACDC lighting Innovation Works Gisburn Road, Barrowford Lancashire BB9 8NB www.acdcighting.co.uk Contact: Liam Deards ldeards@acdcighting.co.uk 07730-522-636
YG	Handrail lighting to steps and ramps	Exterior qualaty IP66 rated surface mounted micc linear accent luminaire, with diffuse lighting distribution. Utilising an array of double desnity (5.5mm pitch) high brightness warm white 3000K CCT LEDES. 18W per linear metre. Constructed of anodized aluminium extruded profile with encapsulated acrylic diffuser and fitted with integral mirco-lourve to be ordered seperately.. To be supplied with remote IP65 rated electronic DMX LED dimmable drivers to suit.	LED	LED	Integrated Micro-lourve To be supplied with remote IP65 rated electronic LED dimmable drivers to suit.				Mike Stoane Lighting - Exterior LED Channel Product code - LED Channel.Ext.high.3000K.TBC.ano.MICRO-LOURVE Mike Stoane Lighting Ltd 20 Dryden Road Bilston Glen Industrial Estate Loanhead Midlothian, EH20 9LZ www.mikestoanelighting.com contact: sales@mikestoanelighting.com +44 (0)131 440 1313

- 1.0 The attached are preliminary estimated types and lamp loads only.
- 2.0 Electrical loads are nominal lamp loads only, and do not include ballast and transformer losses, motors, fans or any other loads which may exist within a luminaire. Detailed information on these loads cannot be provided until detailed specification is undertaken.
- 3.0 Lamp Types
- | | |
|------|---|
| T | Tungsten (Mains Voltage) |
| LV | Low-Voltage $\leq 24V$ (Tungsten Halogen/Xenon) |
| TH | Tungsten Halogen (Mains Voltage) |
| FLU | Linear Fluorescent |
| CFLU | Compact Fluorescent |
| HID | High Intensity Discharge |
| LED | Light Emitting Diode |
| C/C | Cold Cathode |
| NONE | None |
- 4.0 Gear Types
- | | |
|------|------------------------|
| MTX | Magnetic transformer |
| MB | Magnetic ballast |
| ETX | Electronic transformer |
| EB | Electronic ballast |
| LED | Electronic LED driver |
| NONE | None |
- 5.0 All electrical loads should be checked by Electrical Engineer.
- 6.0 Speirs + Major will not be held responsible for the content of electronic versions of this document if they are in any way changed by any other party.