

KING'S CROSS CENTRAL – COAL DROPS YARD

EXTERNAL LIGHTING REPORT

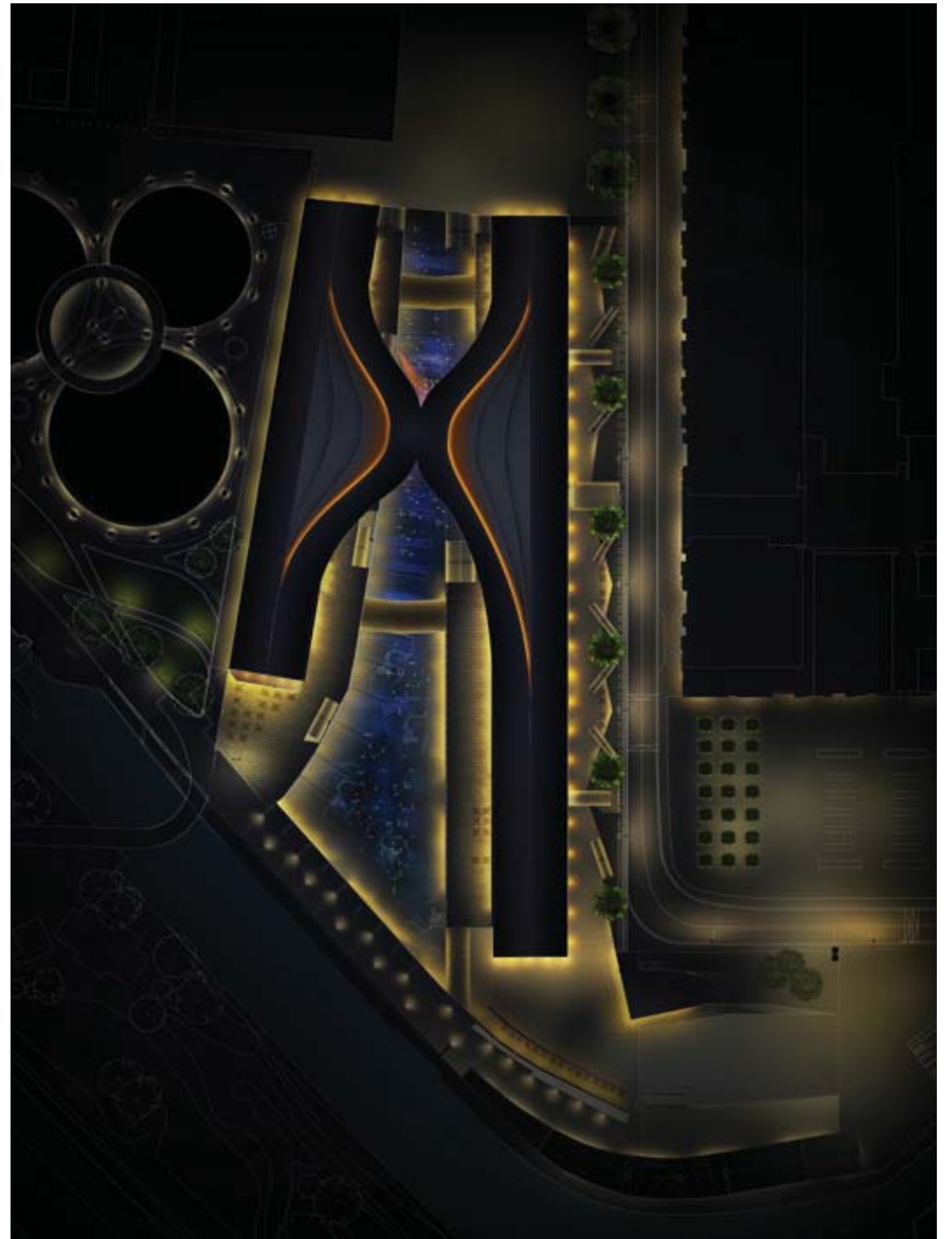
Information required to discharge Condition no. 6 of the Coal Drops Yard, Reserved Matters dated 19 January 2016, ref 2015/6018/P, namely:

" 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. The building shall not be occupied until the relevant approved details have been implemented. These works shall be permanently retained and maintained thereafter".

Note: Supersedes KXC-M0-001-S M10793-J-63-901-02; Coal Drops Yard, King's Cross Central, London/Specialist Lighting/Employer's Requirements/Stage 3 Report/Revision 02/31/05/16 submitted 29th March 2017 Planning Portal Reference : PP-05959199

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Indicative plan render of Coal Drops Yard and surrounding context after dark

1.1 Overarching Concept

The lighting of Coal Drops Yard requires the careful balancing of two aims:

On one hand, the development of the area as a retail destination requires the use of lighting to contribute to the creation of a safe environment, to improve people's sense of security and to help make the site legible and accessible after dark.

On the other hand, there is a strong desire to retain the atmospheric, historic and industrial character of Coal Drops Yard. This approach will help to maintain the integrity of the area and in doing so will help to create a unique retail experience.

In response to these two aims, lighting will be used judiciously and sensitively, applying light where it is needed and preserving comparative darkness where it is not. Light levels will be carefully set and controlled to support the safe use of the site and to contribute to people's enjoyment of the buildings.

An understated approach will be used to the architectural application of light: it will be used to describe the massing of the buildings and to influence the character and ambience of the area in preference to highlighting the architectural detailing. The quality and colour temperature of light will be chosen to compliment the historic materials and the brick in particular.

Where light fittings need to be attached to the buildings, care will be taken with the fixings, cabling and containment to conceal them as far as possible and to conserve the historic fabric.

1.2 Key Design Principles

The lighting concept for Coal Drops Yard has been developed upon a foundation of key design principles as follows:

- Celebrate Coal Drops' unique industrial heritage through the use of shadow play, high contrast and drama.
- Define layers of light to establish holistic strategy and appropriate technique for each layer.
- Avoid the use of lighting techniques typically associated with shopping malls including cove lighting, high degree of uniformity and the use of luminaire 'families'.

Given the complex relationship between the historical heritage of Coal Drops and the needs of the retailers to ensure a commercial success, the lighting scheme aims to strike the right balance between what are often conflicting design criteria. The following section of the report sets out the design information including a short description of the design approach and technical requirements

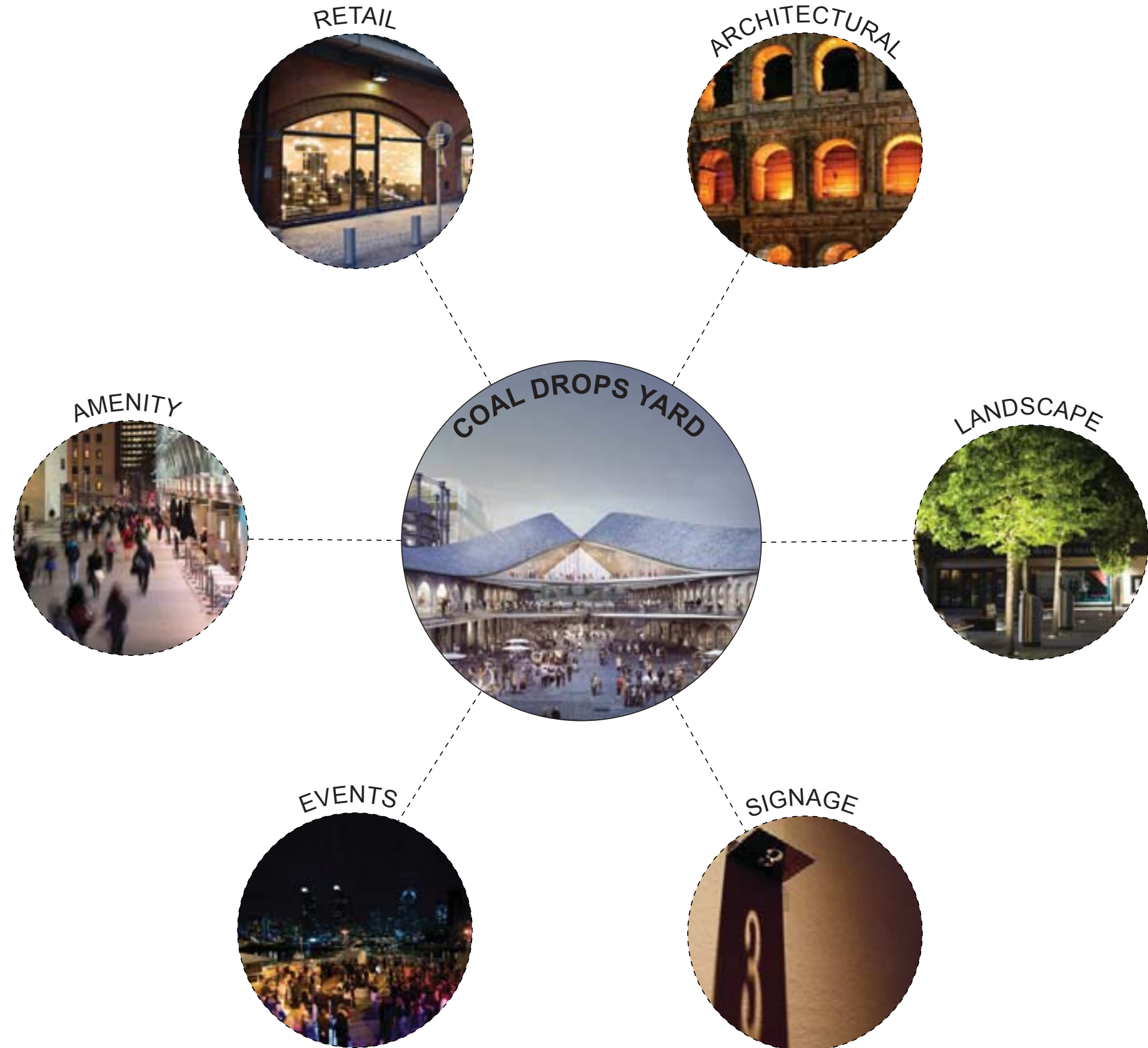


Diagram indicating layers of light for Coal Drops Yard

2.0 STABLE STREET, LOWER STABLE STREET, MAIN RAMP, ENTRANCE STAIRS + RAMP

2.1 Stable Street Pavement + Landscape

Description

The pavement along the western edge of Stable Street is already illuminated by the existing street lighting fixtures which include rearward facing pedestrian luminaires. This illumination should be adequate to illuminate up to the edge of Lower Stable Street without modification.

The trees along the western edge shall be illuminated by ground-recessed uplights in warm white light (3000K) to complete the illuminated 'green spine' running from Tapper Walk down to Granary Square.

2.2 Lower Stable Street

Description

The intent is that Lower Stable Street should have a different lit character to the yard area. This is to be achieved through the use of expressed luminaires with industrial aesthetics mounted onto the eastern elevation of the Eastern Coal Drops building. The diffuse distribution from these fixtures will both light the street and cast some light onto each elevation, which will mitigate the 'lower ground' nature of the space. Warm white light (3000K) shall be used to create a welcoming environment and to compliment the colour of the brickwork.

It will be important for the eastern elevation of Lower Stable Street to appear very active. This appearance will in part be provided by the internal illumination of the kiosks, and that the finish of the walls making the rest of the elevation should be fairly light or, perhaps, diffusely reflective.



Early concept sketch of Lower Stable Street

2.3 Main Ramp

Description

The main ramp runs from Granary Square down to the southern gable of the Eastern Coal Drops.

At the base of the ramp the area widens. Here additional illumination shall be provided by wall-mounted fixtures mounted on the Wharf Road Viaduct (see section 4.2) and a continuation of the wall-mounted fixtures from Lower Stable Street (see Section 3.2) on the southern gable of the Eastern Coal Drops building.

The southern gable of the Eastern Coal Drops building will be given gentle additional emphasis to create a visual draw down the ramp through soft uplighting from ground recessed fittings.

All illumination shall be in warm white (3000K).

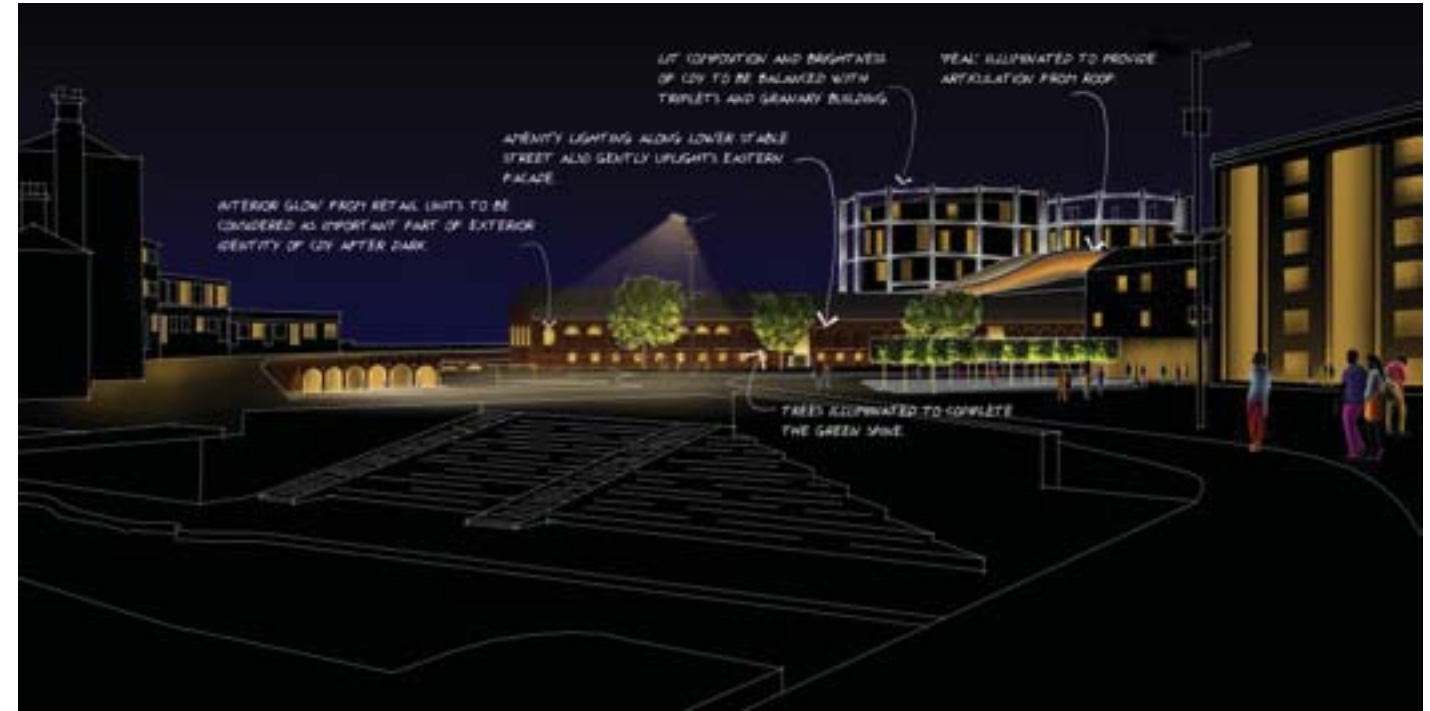
2.4 Entrance Stairs + Ramp

Description

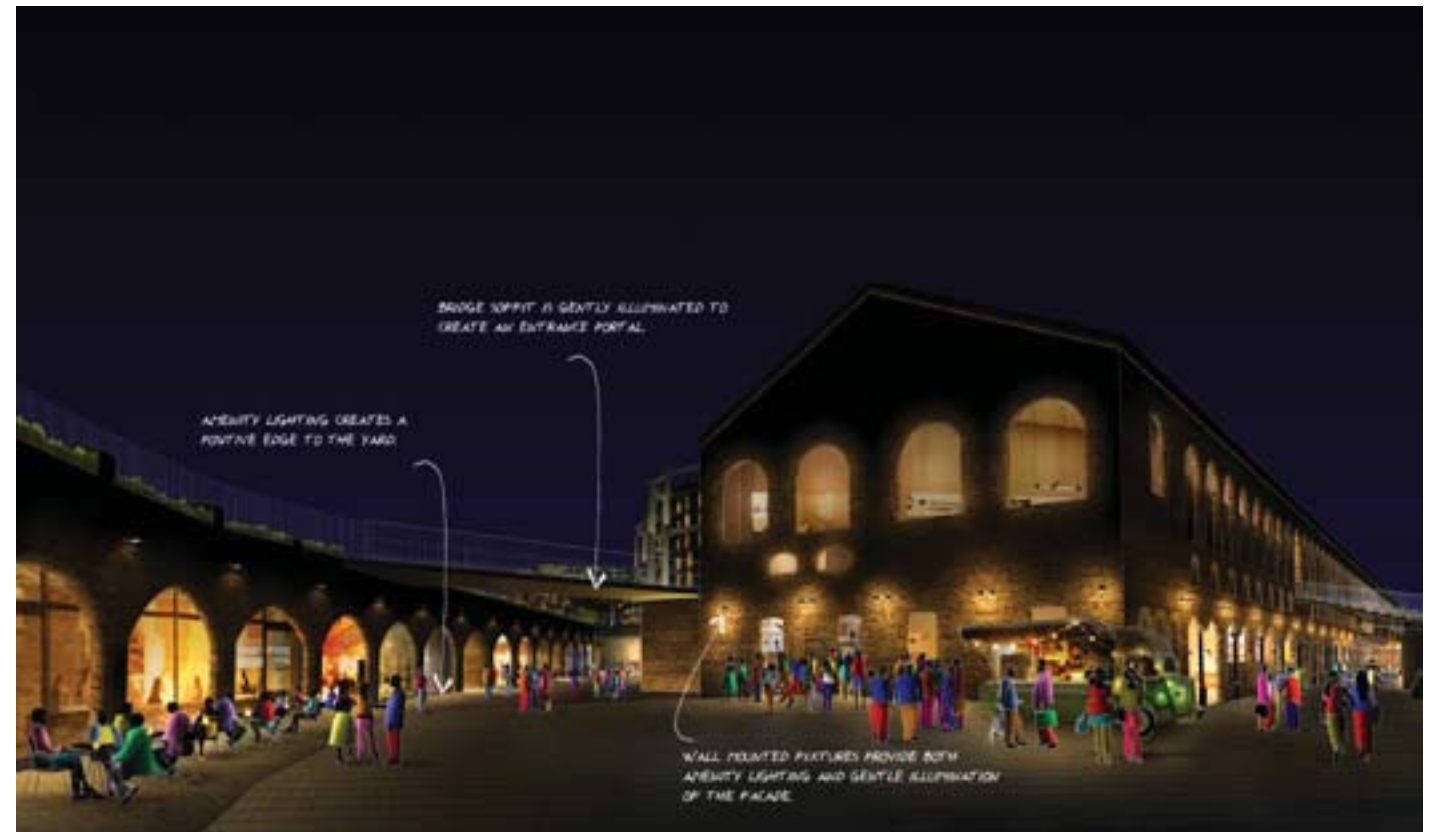
All entrance stairs and the ramp from Stable Street to Eastern Coal Drops and from Stable Street down to Lower Stable Street will require supplementary local illumination both to ensure their safe use and to help make the entrances to the building clearly visible from Granary Square.

LED modules will be integrated into the handrails. LED points will be used rather than linear systems to make the sources as discrete as possible. Care must be taken to avoid back spill or scalloping onto adjacent walls.

All illumination shall be in warm white (3000K).



Early concept sketch showing principle of additional lighting to the rear of Granary Square mast



Early concept sketch of open area at the base of ramp

3.0 YARD, VIADUCTS, STAIRS, BRIDGES + TOWPATH ENTRANCES

3.1 Yard + Viaducts

Description

The yard is to be lit from its edges so that the amenity lighting will have a similar distribution to the spill lighting from the retail units: brightest adjacent to the buildings where most people will walk, with illumination levels diminishing further away from the buildings. This technique is to be used along the eastern edge of the Western Coal Drops, the western edge of the Eastern Coal Drops and the northern edge of the Wharf Road Viaduct.

The fixtures are to be wall mounted to avoid the addition of lighting columns. Small flood lights with forward throw, low glare optics are to be used to achieve the light distribution required. These should also have minimal back spill / back spill protection accessories in order to minimise the amount of light split onto the building facades. On the viaduct level, the main beam of light must not extend beyond the edge of the viaduct as this will result in unacceptable glare at yard level. The aim is to keep the brickwork as dark as possible to create a contrast with the retail interiors. The fixtures are to have a simple, contemporary aesthetic so that they attract as little attention as possible.

The same type of fittings will also be installed along the edge of the viaduct along the western edge of the southern half of the yard. This will allow further amenity light to be provided where the yard is at its widest.

Despite this, the very centre of the yard in the wider area to the south will not achieve a defined lighting standard. That said, the lit retail windows around the perimeter of the yard will ensure that the space feels safe and there will be well illuminated routes around the perimeter of the yard for people to choose if they wish.

The deep area under the viaduct along the western edge of the yard has the potential to be gloomy and unattractive by day and night. Additional amenity lighting will be provided attached to the columns, together with uplighting throughout the area to ensure that the soffits appear light.

Amenity lighting to the area outside anchor F&B unit at the southern end of Western Coal Drops shall be provided through the use of expressed luminaires mounted onto the southern elevation of the Western Coal Drops building on both levels. On viaduct level, additional column mounted luminaires are required to provide supplementary illumination to the southern end of the open area where the Coal Drops scheme interfaces with the High Line. The luminaire and column specification shall match that of equipment specified as part of Triplets Park lighting scheme (by Hoare Lea / Townshend Landscape Architects) to promote a consistent equipment palette.

In the same manner to the Eastern Coal Drops building, the southern gable of the Western Coal Drops building will be given gentle additional emphasis to create a visual draw through soft uplighting from ground recessed fittings.

All illumination shall be in warm white (3000K).



Reference images indicating brighter perimeter conditions within retail environments.

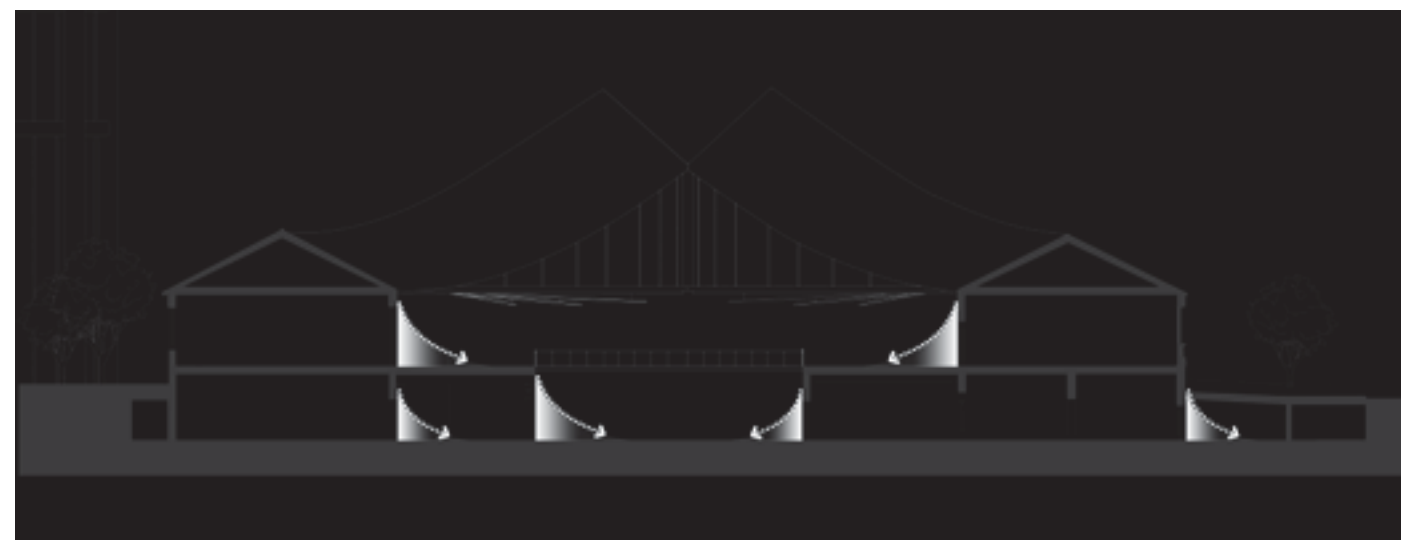


Diagram indicating proposed intensity of amenity lighting

3.2 Stairs

Description

As with the steps running from Stable Street, all of the stairs within the yard area will require supplementary local illumination to ensure their safe use and to highlight them to assist with wayfinding.

The same lighting detail should be implemented using discrete LED modules integrated into the handrails.

All illumination shall be in warm white (3000K).

3.3 Bridges

Description

As with the stairs, all bridges will require supplementary local illumination to ensure their safe use and to highlight them to assist with wayfinding.

The same lighting detail should be implemented using discrete LED modules integrated into the handrails.

All illumination shall be in warm white (3000K).

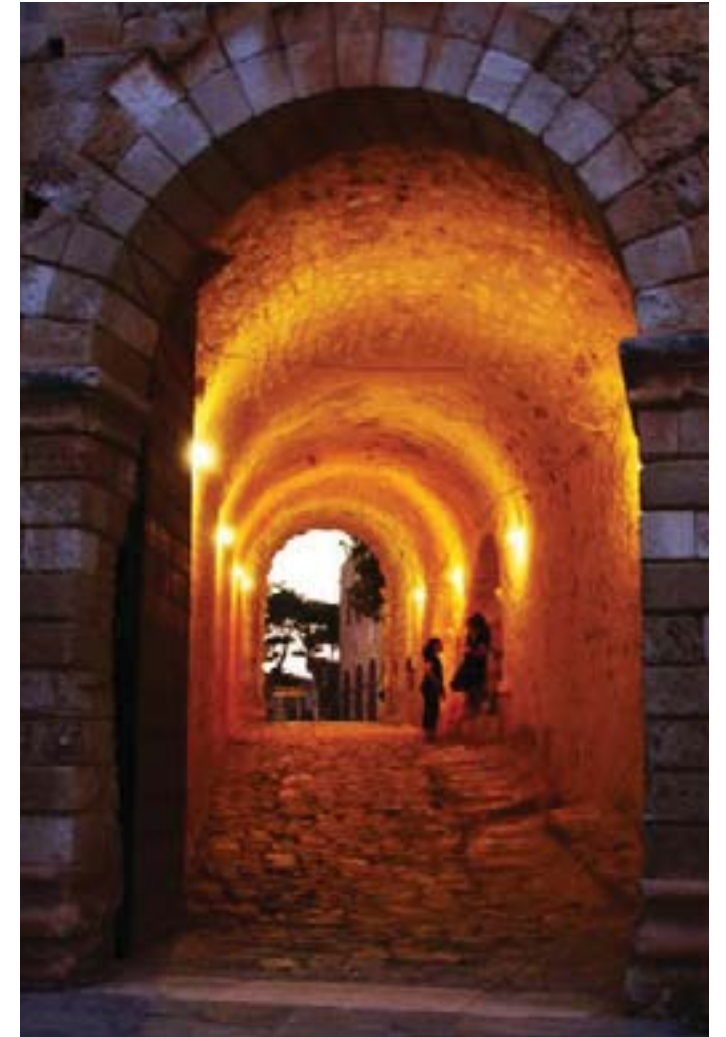
3.4 Towpath Entrances

Description

The towpath entrances need to be gently illuminated to provide a transition between the unlit towpath and the subdued illumination of the yard. Their vaulted structure also needs to be highlighted to identify them as an entry/exit point and to ensure that they have a positive presence.

A series of expressed wall lights shall be used to provide both the amenity and architectural lighting. The fixtures shall be of the same style used on Lower Stable Street.

All illumination shall be in warm white light (3000K).



Reference images of illuminated vault



Reference images of integrated handrail lighting



4.0 ENTRANCES TO CIRCULATION CORES

Description

There are two distinctive entrance conditions to the cores; 'reveals' and 'vaults'. For the reveals where the depth of the entrance arch is shallow, it is proposed that ground recessed luminaires are introduced to provide soft uplighting to clearly define the core entrances. For the vaults, the use of expressed luminaires surface mounted on brick walls will gently fill the space with light, allowing the vault to glow from within.

All illumination shall be in warm white light (3000K).



Diagram indicating typical core lighting scheme

NOTE: ONLY THOSE LIGHTS ON THE EXTERNAL ELEVATION FORMS PART OF THIS SUBMISSION.

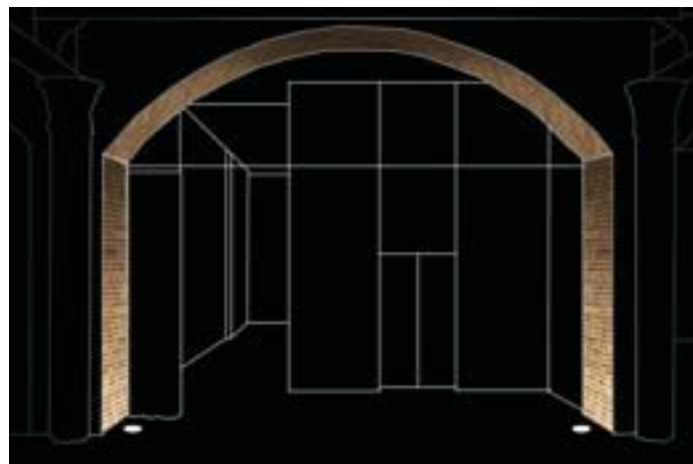
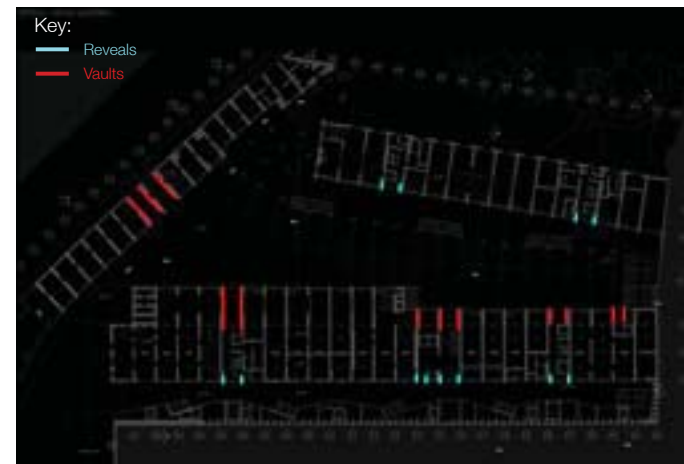


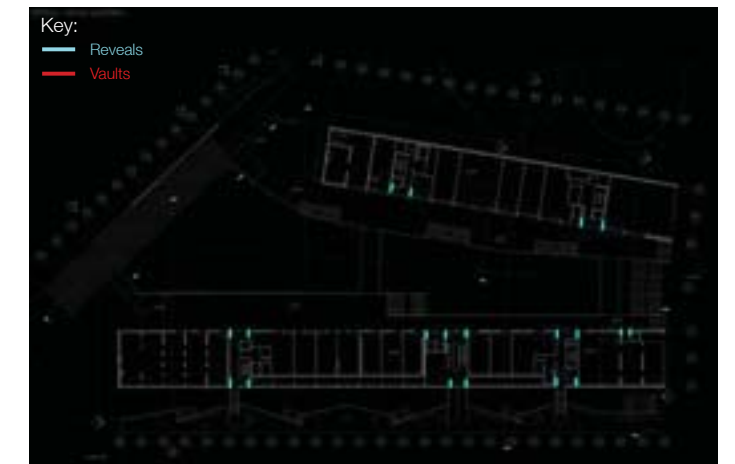
Diagram indicating 'reveal' entrance condition and the use of ground recessed uplighters.



Diagram indicating 'vault' entrance condition and the use of wall mounted luminaires.



'Reveals' vs 'Vaults': location plan - Yard level



'Reveals' vs 'Vaults': location plan - Viaduct level

5.0 ANCHOR UNIT + ROOF PEEL

5.1 Roof Peel

Description

The roof peel is the major architectural statement of the development, and is likely to become the image of the development.

Careful illumination of the peel will compliment and reinforce this architectural statement so that it will have even greater impact after dark.

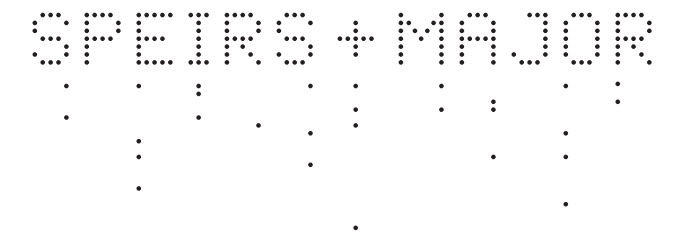
The design of the peel and the fact that it integrates with a skylight part way means that the outside and inside of the peel must be lit separately. The available mounting positions and differing viewing angles means that the internal and external illumination requires different lighting techniques.

On the exterior, the peel shall be uplit using linear LED fixtures. The continually varying width of the skylight means that the offset distance of the luminaires will also vary along the length of the roof. A high power linear LED system with wide beam optic shall be mounted on vertical return of the top roof 'cheek' panel to gently wash the inner surface of peeling roof 'ribbon' with warm white light. The surface of the ribbon cladding is intended to scatter light to ensure that it is visible from all directions (rather than reflect the light in a single direction as a mirror or highly polished surface would).

Lighting details will use warm white light (2700-3000K) to compliment the material finishes of the peel. The exact colour temperature of the LED is to be determined by a full scale mock up.



Early concept sketch of anchor unit seen from yard



Lighting Equipment Specification/

Project:	Coal Drops Yard, King's Cross London, UK
Project Number:	10793
Document Number:	KXC-M0-001-S+M10793-J-63-850
Revision:	04

General lighting to Yard + Viaduct Level

LUMINAIRE REF.

XA

LUMINAIRE

Manufacturer: iGuzzini
Product: iTeka variant
Catalogue Number: 3.TJL0.715.0
Note: Standard product to be modified specially for CDY project

Description:

Exterior quality IP66 rated wall mounted fixed focus low glare surface washer to provide general illumination. 220-240V 22W warm white LED 3000K CCT with 1910lm output and CRI 80+. Asymmetrical light distribution. Dimmable 0-100% DALI control protocol. Vertically adjustable by +45°/-60° and horizontally adjustable by 337° with a mechanical locking. Housing constructed of die-cast aluminium with silver aluminium reflectors. To be supplied with integral DALI dimmable driver.

Accessories:

- Custom anti-glare longitudinal louvre with back spill shield to be developed via testing/mock-up (Catalogue Number B995.13161)
- Accessory frame

Luminaire Colour:

RAL finish TBC by Architect prior to order

Drivers:

Integral dimmable 0-100% DALI driver. All control gear/drivers to be compatible with architectural lighting control system.

Specific Project Requirements:

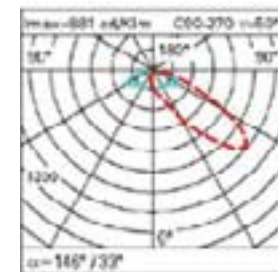
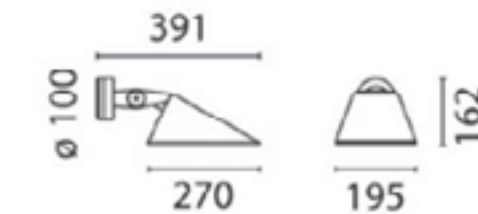
- Luminaires to be supplied with 3000K warm white LEDs and integral DALI dimmable driver.
- Mounting detail to be further developed by Contractor's design team during Stage 4.

Refer To Drawings:

Lighting arrangement: KXC-M0-001-S+M10793-J-63-GF002, KXC-M0-001-S+M10793-J-63-00002
Lighting detail: KXC-M0-001-S+M10793-J-63-5002, KXC-M0-001-S+M10793-J-63-5003

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Length: 391mm
Width: 195mm
Height: 162mm
Weight: 2.2Kg

SOURCE

Manufacturer: iGuzzini
Type: LED
Colour Temperature: 3000K
Colour Rendering: Ra 80+
Watts: 22W
Lumens: 1910lm
Efficacy: 86.8lm/w
Base: n/a
Rated Life: 10,000 hrs

Generic Notes:

- For all set out dimensions please refer architectural drawing package.
- All cable, conduit and containment to electrical consultants/contractors detail and specification.
- All fixings, mountings and bracketry to architects detail and specification.
- For installation details please refer manufacturers own information
- All luminaires to be linked to specialist architectural lighting control system. For all control channel and protocol information please refer S+M Preliminary Logical Control Channel Schedule.
- External luminaires to be installed in dry conditions only. Contractor to ensure min 300mm aggregate drainage (to land drain) to all inground luminaires. Inground luminaires must never sit in standing water at any time.
- All details to be coordinated by architect in conjunction with specialist consultants/contractors and subject to client witnessed and approved, off site prototypes and comprehensive (prolonged) on site lighting mock ups and full scale lighting trials.

Manufacturers Information

Manufacturer:
iGuzzini
www.iguzzini.com

Local Supplier:
iGuzzini
Astolat Business Park
Astolat Way
Off Old Portsmouth Road
GU3 1NE Guildford

Project Contact:
Name: Terence Goode
Tel: 0 7710 824 429
Email: Terence.Goode@iguzzini.co.uk

General lighting to Lower Stable Street + Canal towpath entrance

LUMINAIRE REF.

XB

LUMINAIRE

Manufacturer: Davey Lighting
Product: Bulkhead fitting
Catalogue Number: 8138 variant
Note: Standard product to be modified specially for CDY project

Description:

Exterior quality IP65 rated surface mounted bulkhead luminaire to provide general lighting and soft uplighting to facade. Luminaire to be fitted with warm white LED 3000K CCT with 3500lm initial output and CRI 80+. Nominal wattage of 50W. Frosted glass diffuser to provide homogenous glow without visible nodes of LEDs. To be supplied with integral 0-100% DALI dimmable driver. Driver to be located away from light source to avoid visible silhouetting through diffuser. Housing and cross blade guard constructed of die-cast aluminium. Finish to be confirmed by Architect prior to order.

Accessories:

n/a

Luminaire Colour:

TBC by Architect prior to order

Drivers:

Integral dimmable 0-100% DALI driver. All control gear/drivers to be compatible with architectural lighting control system.

Specific Project Requirements:

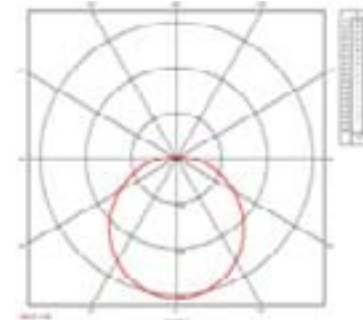
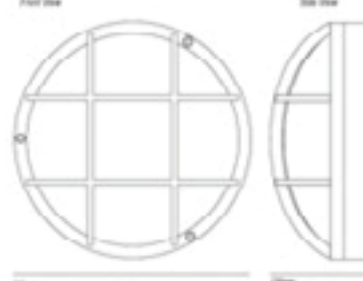
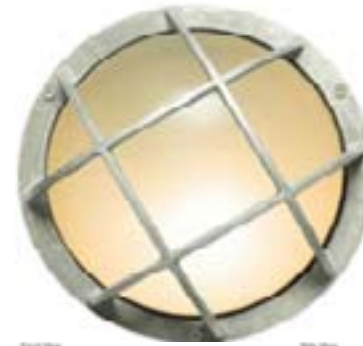
- This is a bespoke fitting based on the aesthetics of a standard product. Details to be further developed by Contractor's design team during Stage 4. Working prototype to be presented by Contractor to Design Team's approval prior to order.

Refer To Drawings:

Lighting arrangement: KXC-M0-001-S+M10793-J-63-00001, KXC-M0-001-S+M10793-J-63-GF001

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Diameter: ø 260mm
 Height: 130mm nominal
 Weight: TBC

SOURCE

Manufacturer: TBC by manufacturer
Type: LED
Colour Temperature: 3000K
Colour Rendering: Ra 80+
Watts: 50W nominal
Lumens: 3500lm
Efficacy: 70lm/w
Base: n/a
Rated Life: 50,000 hrs

Generic Notes:

- For all set out dimensions please refer architectural drawing package.
- All cable, conduit and containment to electrical consultants/contractors detail and specification.
- All fixings, mountings and bracketry to architects detail and specification.
- For installation details please refer manufacturers own information
- All luminaires to be linked to specialist architectural lighting control system. For all control channel and protocol information please refer S+M Preliminary Logical Control Channel Schedule.
- External luminaires to be installed in dry conditions only. Contractor to ensure min 300mm aggregate drainage (to land drain) to all inground luminaires. Inground luminaires must never sit in standing water at any time.
- All details to be coordinated by architect in conjunction with specialist consultants/contractors and subject to client witnessed and approved, off site prototypes and comprehensive (prolonged) on site lighting mock ups and full scale lighting trials.

Manufacturers Information

Manufacturer:
 Davey Lighting
www.davey-lighting.co.uk

Local Supplier:
 Davey Lighting
 UNIT 21 / 22
 AVENUE ONE STATION LANE
 WITNEY
 OX28 4XZ

Project Contact:
 Name: Charlie Bowles
 Tel: 020 73512130
 Email: charlie@originalbtc.com

Exterior lighting to Roof Ribbon

LUMINAIRE REF.

XF

LUMINAIRE

Manufacturer: Philip ColorKinetics
Product: ColorGraze MX Powercore
Catalogue Number: ColorGraze MX Powercore variant 2700K 90°x60° 305mm DMX
Note: Standard product to be modified specially for CDY project

Description:

Exterior quality IP 66 rated surface mounted, adjustable, lockable linear LED luminaire to illuminate copper finish exterior roof ribbon. 100-277VAC 15W warm white LED 2700K CCT with 694 lm output and CRI 80+. Symmetrical lighting distribution of 90°x60°. Dimmable 0-100% DMX control protocol. Housing constructed of extruded aluminium. To be supplied with adjustable hinge bracket and remote DMX Data Enabler. All details including luminaire specification, colour temperature, beam distribution and accessories to be confirmed by 1:1 scale mock-up prior to order.

Accessories:

- Adjustable hinge bracket
- DMX Data Enabler

Luminaire Colour:

Silver

Drivers/Control Gear:

Integral DMX dimmable driver. All control gear/drivers to be compatible with architectural lighting control system.

Specific Project Requirements:

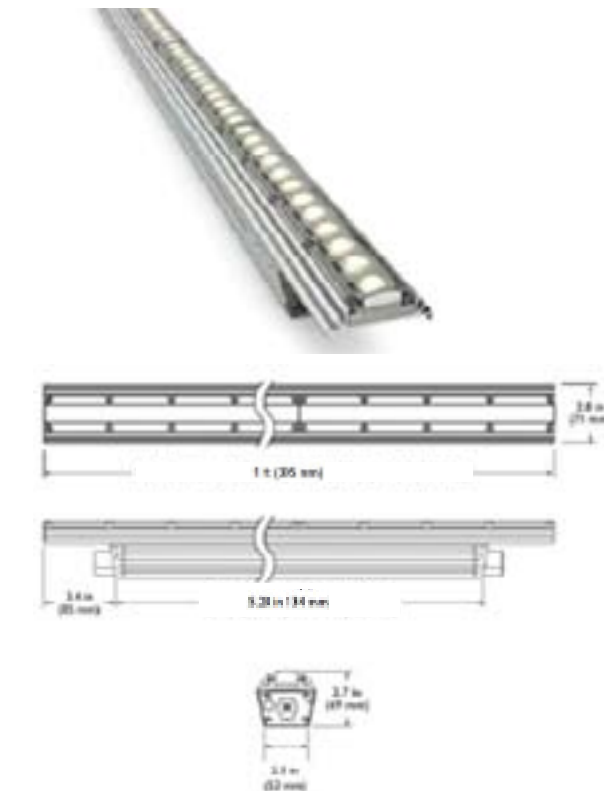
- 305mm luminaire modules to be installed continuously end-to-end with no visible shadow gaps. Each luminaire requires individual control via DMX protocol to achieve different intensities along the curved roof structure due to varying offset distances. All details including luminaire specification, colour temperature, beam distribution and accessories to be further developed by Contractor's design team during Stage 4 and confirmed by 1:1 scale mock-up to Client and Design Team approval prior to order.

Refer To Drawings:

Lighting arrangement: KXC-M0-001-S+M10793-J-63-102
 Lighting detail: KXC-M0-001-S+M10793-J-63-5001

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Length: 305mm
 Width: 71mm
 Height: 69mm
 Weight: 1.0kg

SOURCE

Manufacturer: Philip ColorKinetics
Type: LED
Colour Temperature: 2700K (TBC)
Colour Rendering: Ra 80+
Watts: 49W per linear meter
Lumens: 2361lm per linear meter
Efficacy: 48.2lm/w
Base: n/a
Rated Life: 50,000 hrs

Generic Notes:

- For all set out dimensions please refer architectural drawing package.
- All cable, conduit and containment to electrical consultants/contractors detail and specification.
- All fixings, mountings and bracketry to architects detail and specification.
- For installation details please refer manufacturers own information
- All luminaires to be linked to specialist architectural lighting control system. For all control channel and protocol information please refer S+M Preliminary Logical Control Channel Schedule.
- External luminaires to be installed in dry conditions only. Contractor to ensure min 300mm aggregate drainage (to land drain) to all inground luminaires. Inground luminaires must never sit in standing water at any time.
- All details to be coordinated by architect in conjunction with specialist consultants/contractors and subject to client witnessed and approved, off site prototypes and comprehensive (prolonged) on site lighting mock ups and full scale lighting trials.

Manufacturers Information

Manufacturer:
 Philips ColorKinetics
 www.colorkinetics.com

Local Supplier:
 Architainment Lighting
 Roundwood House
 134-136 Lane End Road
 High Wycombe
 Buckinghamshire HP12 4HX

Tel: +44 1494 471340

Project Contact:
 Name: Neil Gamble
 Tel: 0 7508 094131
 Email: neil.gamble@architainment.co.uk

Uplighting to core entrance reveals

LUMINAIRE REF.

XH

LUMINAIRE

Manufacturer: Simes
Product: PLANO
Catalogue Number: S.5444W
Note:

Description:

Exterior quality IP67 rated ground recessed LED luminaire to uplight core entrance reveals. 230V 9.1W warm white LED 3000K CCT 710lm initial output and CRI 90+. Medium beam 28deg light distribution. Lamp ±10° adjustable. Dimmable 0-100% DALI Control Protocol. Housing constructed of die cast aluminium with high resistance against corrosion, pre treated silicone gaskets and toughened semiacid-etched solidic calcic Weiss glass. Luminaire to be supplied with integral DALI driver and anti glare honeycomb louvre.

Accessories:

- Installation blackout
- Honeycomb louvre

Luminaire Colour:

TBC by architect prior to order

Drivers:

Integral 0 - 100% DALI dimmable driver. All control gear/drivers to be compatible with architectural lighting control system.

Specific Project Requirements:

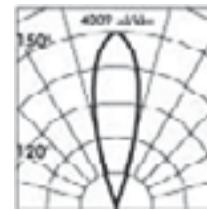
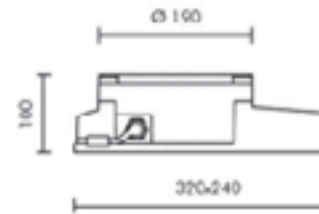
- Lighting Detail to be fully coordinated with landscape proposals.

Refer To Drawings:

Lighting arrangement: KXC-M0-001-S+M10793-J-63-00001, KXC-M0-001-S+M10793-J-63-GF001

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Diameter: ø 190mm
Recessed depth: 100mm

SOURCE

Manufacturer: SIMES
Type: LED
Colour Temperature: 3000K
Colour Rendering: Ra 90+
Watts: 9.1W
Lumens: 710lm
Efficacy: 78lm/w
Base: n/a
Rated Life: 50,000 hrs

Generic Notes:

- For all set out dimensions please refer architectural drawing package.
- All cable, conduit and containment to electrical consultants/contractors detail and specification.
- All fixings, mountings and bracketry to architects detail and specification.
- For installation details please refer manufacturers own information
- All luminaires to be linked to specialist architectural lighting control system. For all control channel and protocol information please refer S+M Preliminary Logical Control Channel Schedule.
- External luminaires to be installed in dry conditions only. Contractor to ensure min 300mm aggregate drainage (to land drain) to all inground luminaires. Inground luminaires must never sit in standing water at any time.
- All details to be coordinated by architect in conjunction with specialist consultants/contractors and subject to client witnessed and approved, off site prototypes and comprehensive (prolonged) on site lighting mock ups and full scale lighting trials.

Manufacturers Information

Manufacturer:
Simes
www.simes.com

Local Supplier:
Havells Sylvania Fixtures UK Ltd
Incorporating Concord
Longbow House
20 Chiswell Street
London EC1Y 4TW

Tel: +44 207 011 9700
Email: info.uk@havells-sylvania.com

Project Contact:
Name: Daniel Kyle
Tel: 07976-737344
Email: daniel.kyle@havells-sylvania.com

Lighting Equipment Specification
www.speirsandmajor.com

Uplighting to trees

LUMINAIRE REF.

XH2

LUMINAIRE

Manufacturer: Simes
Product: PLANO
Catalogue Number: S.5468W
Note:

Description:

Exterior quality IP67 rated ground recessed LED luminaire to uplight trees on Stable Street. 230V 10.5W warm white LED 3000K CCT 945lm initial output and CRI 90+. Medium beam 28deg light distribution. Lamp ±10° adjustable. Dimmable 0-100% DALI Control Protocol. Housing constructed of die cast aluminium with high resistance against corrosion, pre treated silicone gaskets and toughened semiacid-etched solidic calcic Weiss glass. Luminaire to be supplied with integral DALI driver and anti glare honeycomb louvre.

Accessories:

- Installation blackout
- Honeycomb louvre

Luminaire Colour:

TBC by architect prior to order

Drivers:

Integral 0 - 100% DALI dimmable driver. All control gear/drivers to be compatible with architectural lighting control system.

Specific Project Requirements:

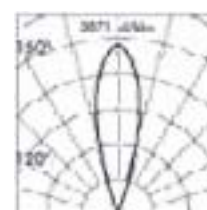
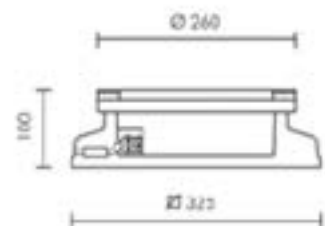
- Provisional place holder specification until height of trees are confirmed. Lighting specification and installation detail to be fully coordinated with landscape proposals.

Refer To Drawings:

Lighting arrangement: KXC-M0-001-S+M10793-J-63-00001, KXC-M0-001-S+M10793-J-63-GF001

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Diameter: ø 260mm
Recessed depth: 100mm

SOURCE

Manufacturer: SIMES
Type: LED
Colour Temperature: 3000K
Colour Rendering: Ra 90+
Watts: 10.5W
Lumens: 945lm
Efficacy: 90lm/w
Base: n/a
Rated Life: 50,000 hrs

Generic Notes:

- For all set out dimensions please refer architectural drawing package.
- All cable, conduit and containment to electrical consultants/contractors detail and specification.
- All fixings, mountings and bracketry to architects detail and specification.
- For installation details please refer manufacturers own information
- All luminaires to be linked to specialist architectural lighting control system. For all control channel and protocol information please refer S+M Preliminary Logical Control Channel Schedule.
- External luminaires to be installed in dry conditions only. Contractor to ensure min 300mm aggregate drainage (to land drain) to all inground luminaires. Inground luminaires must never sit in standing water at any time.
- All details to be coordinated by architect in conjunction with specialist consultants/contractors and subject to client witnessed and approved, off site prototypes and comprehensive (prolonged) on site lighting mock ups and full scale lighting trials.

Manufacturers Information

Manufacturer:
Simes
www.simes.com

Local Supplier:
Havells Sylvania Fixtures UK Ltd
Incorporating Concord
Longbow House
20 Chiswell Street
London EC1Y 4TW

Tel: +44 207 011 9700
Email: info.uk@havells-sylvania.com

Project Contact:
Name: Daniel Kyle
Tel: 07976-737344
Email: daniel.kyle@havells-sylvania.com

Integrated handrail Lighting

LUMINAIRE REF.

XJ

LUMINAIRE

Manufacturer: WILA
Product: Puck
Catalogue Number: MP1201002-70-30
Note:

Description:

Exterior quality IP66 rated handrail recessed adjustable spotlight to provide general illumination. Utilising 1W warm white LED 3000K CCT with 127lm initial output and CRI 80+. One-side symmetric beam angle 80° with the handrail and 60° crosswise. Dimmable 0-100% DALI Control Protocol. Housing constructed of stainless steel, lens made of polycarbonate. Requires remote DALI dimmable driver. Remote distance between driver and luminaire, cable diameter and housing locations to be confirmed by electrical consultant/contractor prior to order.

Accessories:

- Remote DALI dimmable driver

Luminaire Colour:

TBC by architect prior to order

Drivers:

Remote 0 - 100% DALI dimmable driver. All control gear/drivers to be compatible with architectural lighting control system. Remote distance between driver and luminaire, cable diameter and housing locations to be confirmed by electrical consultant/contractor prior to order.

Drivers to be mounted in accessible, clean, dry, well ventilated/conditioned environment within manufacturers specified maximum distances. 1no.driver can typically operate up to 20 Pucks. Exact qtys, specifications and schematics to be confirmed by electrical engineer/contractor. Exact mechanical and fire rating of cable between luminaire and driver to be confirmed by electrical engineer/contractor. Driver locations and schematics to be coordinated by architect in conjunction with electrical engineer/contractor.

Specific Project Requirements:

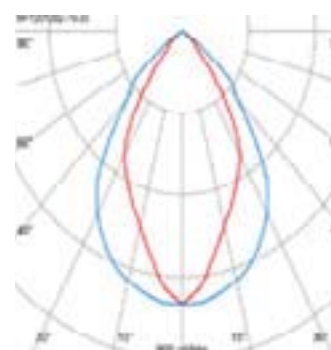
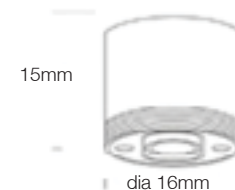
- Lighting detail to be fully coordinated with handrail design. Lighting integration detail to be further developed by Contractor's design team during Stage 4 and confirmed by 1:1 scale mock-up to Client and Design Team approval prior to order.

Refer To Drawings:

Lighting arrangement: KXC-M0-001-S+M10793-J-63-GF001
Lighting detail: KXC-M0-001-S+M10793-J-63-5013

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Diameter: ø 16mm
Installation Depth: 15mm
Weight: 0.2kg

SOURCE

Manufacturer: WILA
Type: LED
Colour Temperature: 3000K
Colour Rendering: Ra 80+
Watts: 1W
Lumens: 127lm
Efficacy: 127lm/w
Base: n/a
Rated Life: 50,000 hrs

Generic Notes:

- For all set out dimensions please refer architectural drawing package.
- All cable, conduit and containment to electrical consultants/contractors detail and specification.
- All fixings, mountings and bracketry to architects detail and specification.
- For installation details please refer manufacturers own information
- All luminaires to be linked to specialist architectural lighting control system. For all control channel and protocol information please refer S+M Preliminary Logical Control Channel Schedule.
- External luminaires to be installed in dry conditions only. Contractor to ensure min 300mm aggregate drainage (to land drain) to all inground luminaires. Inground luminaires must never sit in standing water at any time.
- All details to be coordinated by architect in conjunction with specialist consultants/contractors and subject to client witnessed and approved, off site prototypes and comprehensive (prolonged) on site lighting mock ups and full scale lighting trials.

Manufacturers Information

Manufacturer:
WILA
www.wila.com

Local Supplier:
WILA Lighting Limited
8-10 The Quadrangle
Grove Technology Park
Downsview Road
Wantage, Oxfordshire
OX12 9FA

Tel: +44 1235 773500

Project Contact:
Name: Othman Kaghat
Tel: 0 7827 938 684
Email: othman.kaghat@wila.co.uk

Lighting to route between Triplets and Western Coal Drops (by Hoare Lea)

LUMINAIRE REF.

XP

LUMINAIRE

Manufacturer: We-ef
Product: VFL530 Street and Area Lighting
Catalogue Number: VFL530 108-1171 (TBC by Hoare Lea)
Note: Specification to be coordinated with Triplets Park lighting by Hoare Lea

Description:

Exterior IP66 rated wall-mounted street lighting lantern to illuminate routes between Triplets and Western Coal Drops. 48W warm white LED array (24no.) module 3000K CCT with a minimum initial light output of 5530lm with a side throw asymmetrical beam (S70) distribution. Housing from die cast aluminium housing with clear lens. Fitting to be supplied with custom integral DALI dimmable LED driver.

Accessories:

- Wall mounted bracket

Luminaire Colour:

TBC by architect prior to order

Drivers:

Integral 0-100% Dimmable DALI driver. All drivers to be compatible with architectural lighting control system.

Specific Project Requirements:

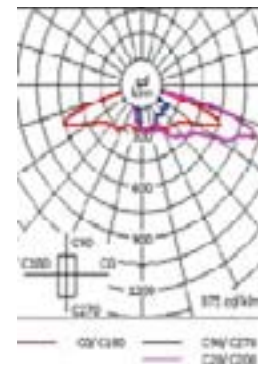
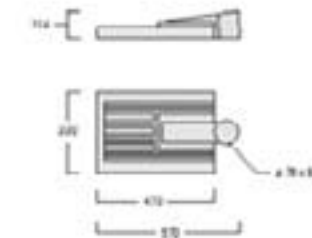
Final details of specification to be confirmed by Hoare Lea as part of Triplets Park lighting scheme.

Refer To Drawings:

Lighting arrangement: KXC-M0-001-S+M10793-J-63-GF002

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Length: 570mm
 Width: 330mm
 Height: 114mm

SOURCE

Manufacturer: We-ef
Type: LED
Colour Temperature: 3000K
Colour Rendering: Ra 80+
Watts: 48W
Lumens: 5530lm
Efficacy: 115lm/W
Base: n/a
Rated Life: 50,000 hrs

Generic Notes:

- For all set out dimensions please refer architectural drawing package.
- All cable, conduit and containment to electrical consultants/contractors detail and specification.
- All fixings, mountings and bracketry to architects detail and specification.
- For installation details please refer manufacturers own information
- All luminaires to be linked to specialist architectural lighting control system. For all control channel and protocol information please refer S+M Preliminary Logical Control Channel Schedule.
- External luminaires to be installed in dry conditions only. Contractor to ensure min 300mm aggregate drainage (to land drain) to all inground luminaires. Inground luminaires must never sit in standing water at any time.
- All details to be coordinated by architect in conjunction with specialist consultants/contractors and subject to client witnessed and approved, off site prototypes and comprehensive (prolonged) on site lighting mock ups and full scale lighting trials.

Manufacturers Information

Manufacturer:
 We-ef
 www.we-ef.com

Local Supplier:
 WE-EF LIGHTING Ltd
 Suite 2c, East Bridgford Business Park
 Kneeton Road, East Bridgford, Nottingham NG13 8PJ
 UK
 Tel: +44 844 880 5346
 Email: info.uk@we-ef.com

Project Contact:
 Name: Charles Dunbar
 Tel: 0 7768 766 119
 Email: c.dunbar@we-ef.com

Uplighting to gable ends

LUMINAIRE REF.

XQ

LUMINAIRE

Manufacturer: We-ef
Product: ETC330-GB LED ASC
Catalogue Number: 185-2694
Note:

Description:

Exterior quality IP67 rated ground recessed LED luminaire to uplight gable ends. 230V 12W warm white LED 3000K CCT 1242lm initial output and CRI 80+. Wide beam light distribution. Luminaire rotation range +/- 360° and 30° tilt. Dimmable 0-100% DALI Control Protocol. Housing constructed of stainless steel, silicone rubber gasket and safety glass lens with Anti-Slip ceramic Coating (ASC). Requires remote DALI driver. LED driver-luminaire distance, cable diameter and housing locations to be confirmed by electrical consultant/contractor prior to order.

Accessories:

- Remote DALI dimmable driver
- Installation blockout
- Flood Lens

Luminaire Colour:

TBC by architect prior to order

Drivers:

Remote 0 - 100% DALI dimmable driver. All control gear/drivers to be compatible with architectural lighting control system. Remote distance between driver and luminaire, cable diameter and housing locations to be confirmed by electrical engineer/contractor prior to order.

Drivers to be mounted in accessible, clean, dry, well ventilated/conditioned environment within manufacturers specified maximum distances. Multiple drivers may be required, exact qtys, specifications and schematics to be confirmed by electrical engineer/contractor. Exact mechanical and fire rating of cable between luminaire and driver to be confirmed by electrical engineer/contractor. Driver locations and schematics to be coordinated by architect in conjunction with electrical engineer/contractor.

Specific Project Requirements:

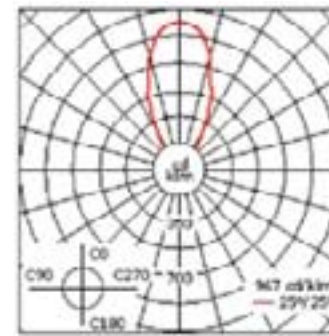
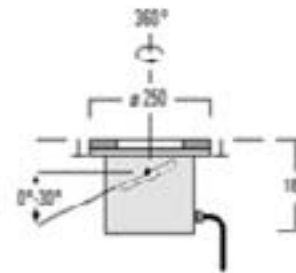
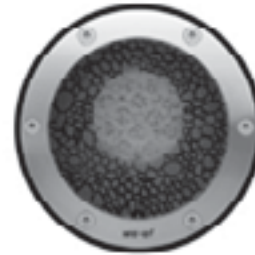
- Lighting Detail to be fully coordinated with landscape proposals.

Refer To Drawings:

Lighting arrangement: KXC-M0-001-S+M10793-J-63-00001

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Diameter: ø 250mm
Height: 180 mm

SOURCE

Manufacturer: We-ef
Type: LED
Colour Temperature: 3000K
Colour Rendering: Ra 80+
Watts: 12W
Lumens: 1242lm
Efficacy: 103lm/w
Base: n/a
Rated Life: 50,000 hrs

Generic Notes:

- For all set out dimensions please refer architectural drawing package.
- All cable, conduit and containment to electrical consultants/contractors detail and specification.
- All fixings, mountings and bracketry to architects detail and specification.
- For installation details please refer manufacturers own information
- All luminaires to be linked to specialist architectural lighting control system. For all control channel and protocol information please refer S+M Preliminary Logical Control Channel Schedule.
- External luminaires to be installed in dry conditions only. Contractor to ensure min 300mm aggregate drainage (to land drain) to all inground luminaires. Inground luminaires must never sit in standing water at any time.
- All details to be coordinated by architect in conjunction with specialist consultants/contractors and subject to client witnessed and approved, off site prototypes and comprehensive (prolonged) on site lighting mock ups and full scale lighting trials.

Manufacturers Information

Manufacturer:
We-ef
www.we-ef.com

Local Supplier:
WE-EF LIGHTING Ltd
Suite 2c, East Bridgford Business Park
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