

NI2.MH

Mansion house • row 1

building and site lighting scheme

document control

project:

NI2.MH mansion house • row 1

document title:

building and site lighting scheme

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author:

ashley franklin

approver:

alan ross

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01 introduction

01.01 about this document

This document is to be presented to the City Council as Local Planning Authority in or to discharge condition 27 of planning permission 111587/FO/2016/N1.

01.02 condition 27

"The development hereby approved shall include a building and site lighting scheme during the period between dusk and dawn. Full details of such a scheme shall be submitted for approval in writing by the City Council, as Local Planning Authority before the first occupation of the development hereby approved. The approved scheme shall be implemented in full prior to the first use of the development and shall remain in operation for so long as the development is occupied.

Reason - In the interests of amenity, crime reduction and the personal safety of those using the proposed development in order to comply with the requirements of policies SP1 and DM1 of the Core Strategy."

01.03 lighting design approach

The mansion house row 1 project has been designed, developed and constructed for integration into a wider masterplan focused on the regeneration of the New Islington Marina, Cotton Field Park and surrounding area of Ancoats.

Construction on the project started following the completion of 2 key projects: New Islington Phase 1 - a residential development bound by Lockyard Lane, Keepers Quay and mansion house row 1 - and major regeneration works to the canal promenade carried out by the City Council.

During development of these two key projects, consideration was given to a site wide lighting scheme. As such, the provision for external mansion house row 1 lighting is provided by the neighbouring developments. The main purpose of this document is to prove that pre-installed street and security lighting suitably meets the requirements of the Local Planning Authority and Secure By Design.

Where lighting calculations have identified areas of low or insufficient lux levels, additional lighting has been added. The additional lighting is in keeping with the surrounding schemes and aims to boost lighting levels in key areas in order to reduce the opportunity for crime and increase personal safety through the day and night.

02 secure car parking

Mansion house has a small car parking facility to the north side of the main building. The car park is accessible via the adjacent tase 1 site and utilises pre-exisitng access gateway, access road and street lighting. The following pages set out the lighting design for the access road, parking bays and egress gate within the curtilage of this development.

New Islington Phase 2 R6

CALC1

Using ED13 69.6cW 9860lm) on 7mtr columns. No Tilt to lantern.

Zones compliant with P1 (4000K sources) @ 16Lux Eav 4.05Emin

MF0.8

Partner for Contact:

Order No.:

Company:

Customer No.:

Date: 02.02.2021

Operator:

Operator
Telephone
Fax
e-Mail

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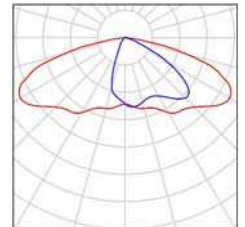
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Operator
Telephone
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New Islington Phase 2 R6 / Luminaire parts list

2 Pieces IGUZZINI ED13 Archilede HP 69.6W
Article No.: ED13
Luminous flux (Luminaire): 9860 lm
Luminous flux (Lamps): 9860 lm
Luminaire Wattage: 69.6 W
Luminaire classification according to CIE: 100
CIE flux code: 35 72 97 100 100
Fitting: 1 x A22X (Correction Factor 1.000).

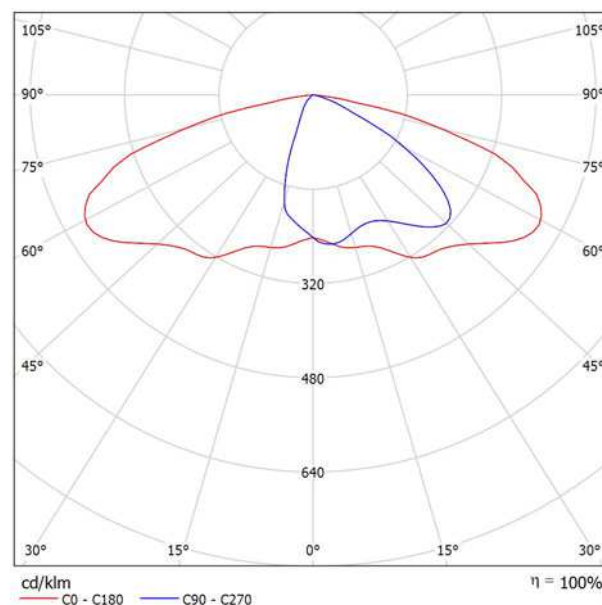


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IGUZZINI ED13 Archilede HP 69.6W / Luminaire Data Sheet



Luminous emittance 1:



Luminaire classification according to CIE: 100
CIE flux code: 35 72 97 100 100

ED13 :

Outdoor luminaire with direct light street optic for a high level of visual comfort (G4), designed to use LED lamps. The optical assembly and the pole attachment system are made of EN1706AC 46100LF aluminium alloy and subjected to a multi-step, pre-treatment process, in which the main phases are: degreasing, fluorozirconation (a protective surface film) and sealing (with a nano-structured silane layer). The painting stage consists of a primer and a liquid acrylic paint, cured at 150 °C, with a high level of weather resistance. Option of also adjusting, with a graduated scale, the inclination in relation to the road surface of +15°/-10° (in 5° steps) for a pole-top installation and +5°/20° (in 5° steps) for a lateral installation. 5 mm thick tempered sodium-calcium closure glass. The glass secured to the frame closes the led optical assembly which is secured to the components assembly with a hinge and 2 screws. The high IP rating is guaranteed by the silicone gasket placed between the two elements. Complete with circuit featuring monochrome LEDs and silver aluminium reflectors. LED assembly can be replaced directly on site.

Possibility of replacing the LEDs in groups of 12 in the laboratory. Middle of the Night (100%-70%) electronic control gear. Dali or Bi-energy mode without external programming operation. Customised Midnight programming, fixed dimming and compatibility with flow regulators via a special programming interface. Control gear connected with quick-coupling connectors. Driver with automatic internal temperature control system. Tool-free removable control gear plate unit. The optical assembly is fixed to the wall-mounted or pole-top attachment with two clamping screws and two safety grub screws facilitate assembly. The light flow emitted in the upper hemisphere of the system in the horizontal position is null (in conformity with the strictest standards for the prevention of light pollution). All external screws are made of stainless steel.

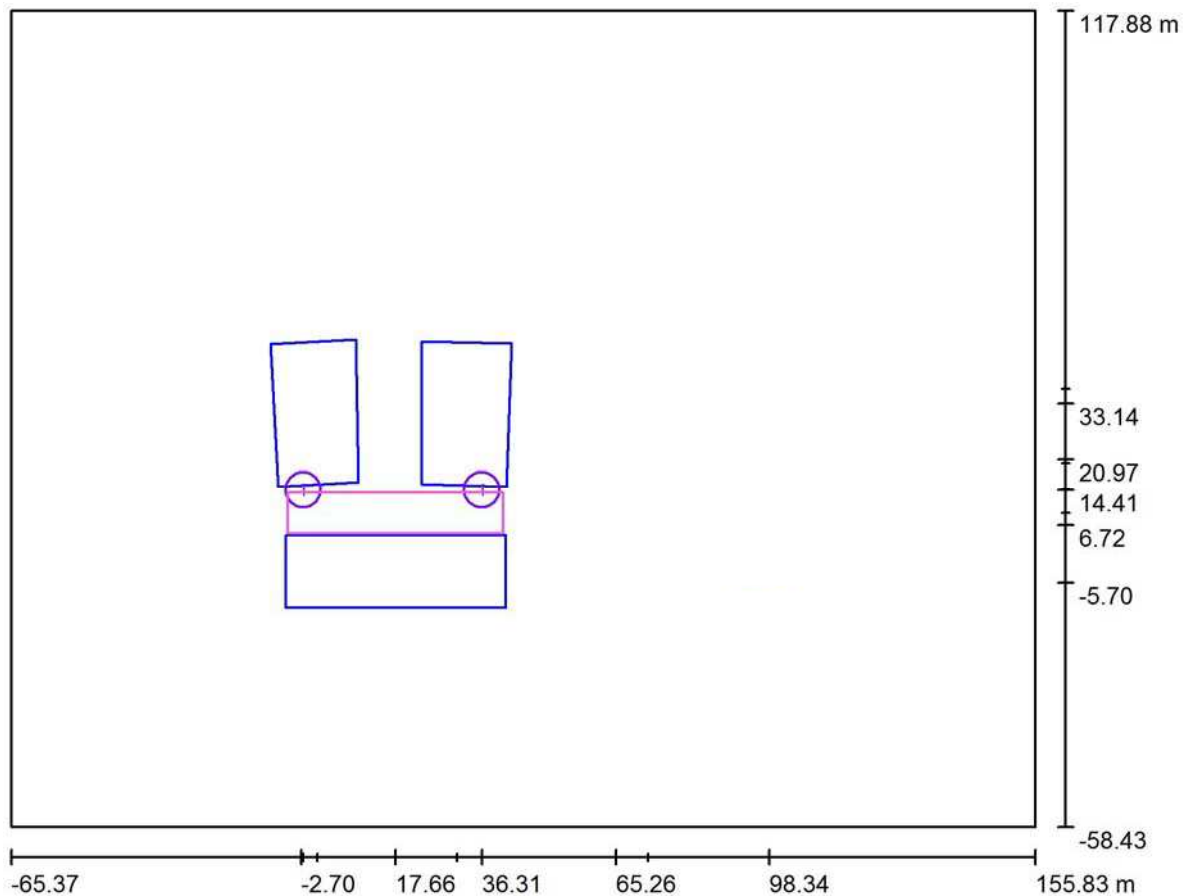
ED13.015 - Pole-mounted system – ST1.2 optic – Neutral White – Middle of the Night - ø46–60–76mm - 69.6W 9860lm - 4000K - Grigio
A22X - Lamp LED Neutral White

Due to missing symmetry properties, no UGR table can be displayed for this luminaire.



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New Islington Phase 2 R6 / Planning data



Maintenance factor: 0.80, ULR (Upward Light Ratio): 0.0%

Scale 1:1635

CALC1

Using ED13 69.6cW 9860lm) on 7mtr columns. No Tilt to lantern.

Zones compliant with P1 (4000K sources) @ 16Lux Eav 4.05Emin

MF0.8

Luminaire Parts List

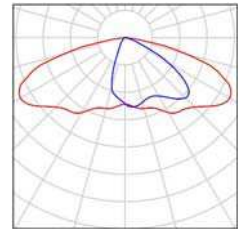
No.	Pieces	Designation (Correction Factor)	Φ (Luminaire) [lm]	Φ (Lamps) [lm]	P [W]
1	2	IGUZZINI ED13 Archilede HP 69.6W (1.000)	9860	9860	69.6
Total:			19720	19720	139.2



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New Islington Phase 2 R6 / Luminaire parts list

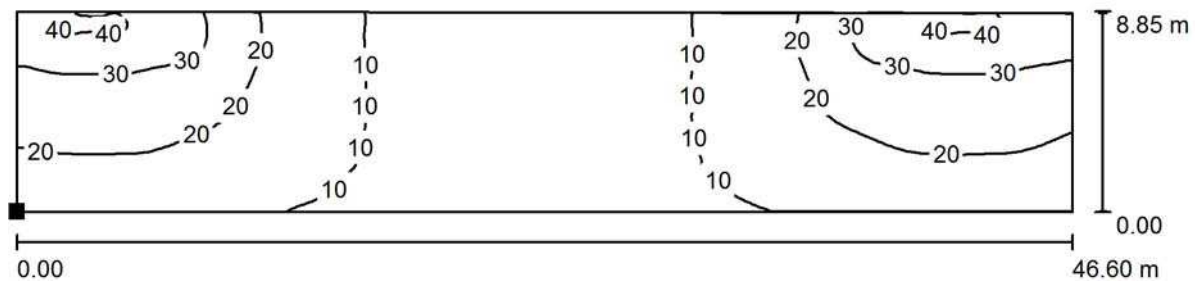
2 Pieces IGUZZINI ED13 Archilede HP 69.6W
Article No.: ED13
Luminous flux (Luminaire): 9860 lm
Luminous flux (Lamps): 9860 lm
Luminaire Wattage: 69.6 W
Luminaire classification according to CIE: 100
CIE flux code: 35 72 97 100 100
Fitting: 1 x A22X (Correction Factor 1.000).





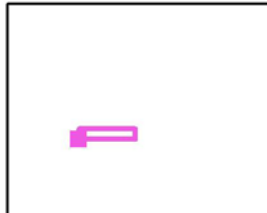
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New Islington Phase 2 R6 / Row 1 road & car parking / Isolines (E, Perpendicular)



Values in Lux, Scale 1 : 334

Position of surface in external scene:
Marked point:
(-5.603 m, 5.018 m, 0.000 m)



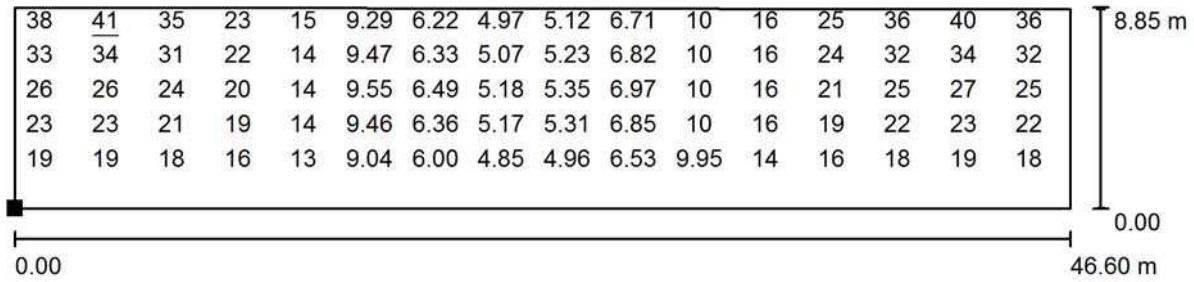
Grid: 128 x 64 Points

E_{av} [lx]	E_{min} [lx]	E_{max} [lx]	$u0$	E_{min} / E_{max}
16	4.05	41	0.250	0.098



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New Islington Phase 2 R6 / Row 1 road & car parking / Value Chart (E, Perpendicular)



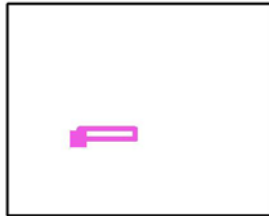
Values in Lux, Scale 1 : 334

Not all calculated values could be displayed.

Position of surface in external scene:

Marked point:

(-5.603 m, 5.018 m, 0.000 m)



Grid: 128 x 64 Points

E_{av} [lx]
16

E_{min} [lx]
4.05

E_{max} [lx]
41

u_0
0.250

E_{min} / E_{max}
0.098

03 entrance lighting

The mansion house building has three residential entrances serving four blocks of apartments:

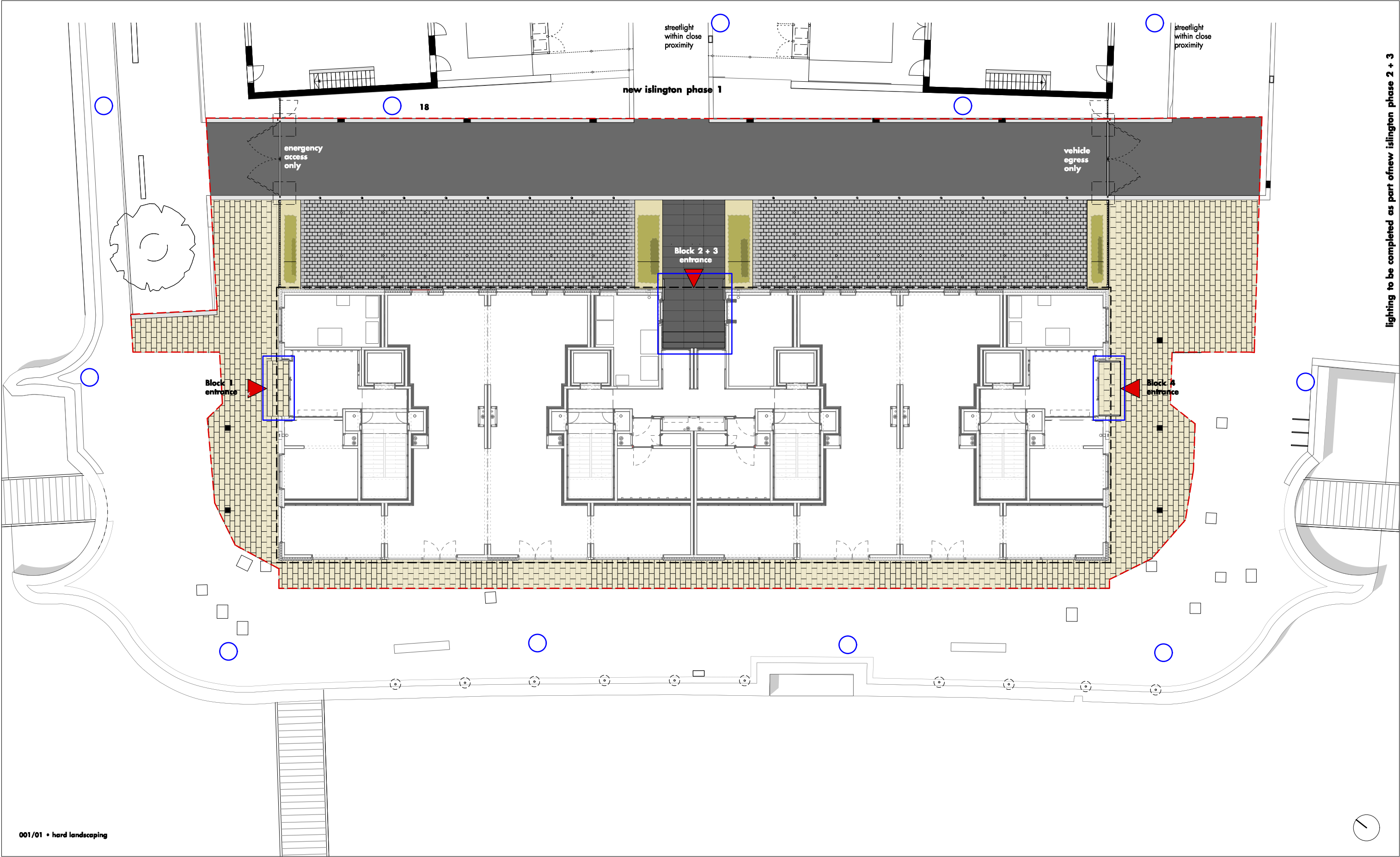
- 1 accessible from the secure car park noted previously
- 2 located on the SE gable facing Lockyard Lane and the promenade
- 3 located to the NW gable facing Keepers Quay and the promenade

All 3 entrances benefit from well designed street lighting installed as part of previous developments however in order to ensure the safety of all residents and visitors to the building several additional measures have been taken.

- The building has been designed to ensure that entrances front onto popular residential streets and pedestrian walkways
- Entrances have been installed with a glazed facade covering the full width and height of the entrance lobby thus increasing visibility between inside and outside as well as allowing light to emanate out of the building illuminating the surrounding area and people approaching the building.
- Entrance canopies have been finished with bright yellow decorative features which both reflect light and draw public attention
- Each entrance canopy has integrated lighting to ensure high visibility at all times
- All entrance doors have audio and visual access control cameras that work at night as well as in the day

03 street and surrounding lighting

Neighbouring streets and promenade lighting ensure that the mansion house building is sufficiently lit throughout it's entire perimeter. All lighting operates on day-light sensors to ensure they operate from dusk till dawn all year round. Lighting contributing to amenity, safety and crime reduction has been identified.



001/01 • hard landscaping

- existing street lighting
- areas illuminated by building/ canopy lighting

lighting to be completed as part of new islington phase 2 + 3

shedkm

+44 (0)151 709 8211
+44 (0)207 253 8881

project	new islington 2 • mansion house
client	urban splash
drawing number	NI2.MH (90) 100
scale	1:200 @ a3
status	information

external lighting design

do not scale from this drawing - all dimensions are to be set out and checked on site prior to starting construction - any discrepancy found between information given on this drawing and that given elsewhere or recorded on site shall be brought to the attention of the project architect immediately