

4023 MPP2 – Mount Pleasant Phase 2

External Lighting Luminaire Schedule





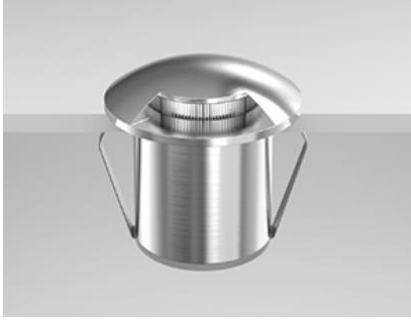

Project No. 4023
Electrical Services Installation
External Lighting Luminaire Schedule
18th Feb 2021



Caldwell

Schedule of External Lighting Fittings

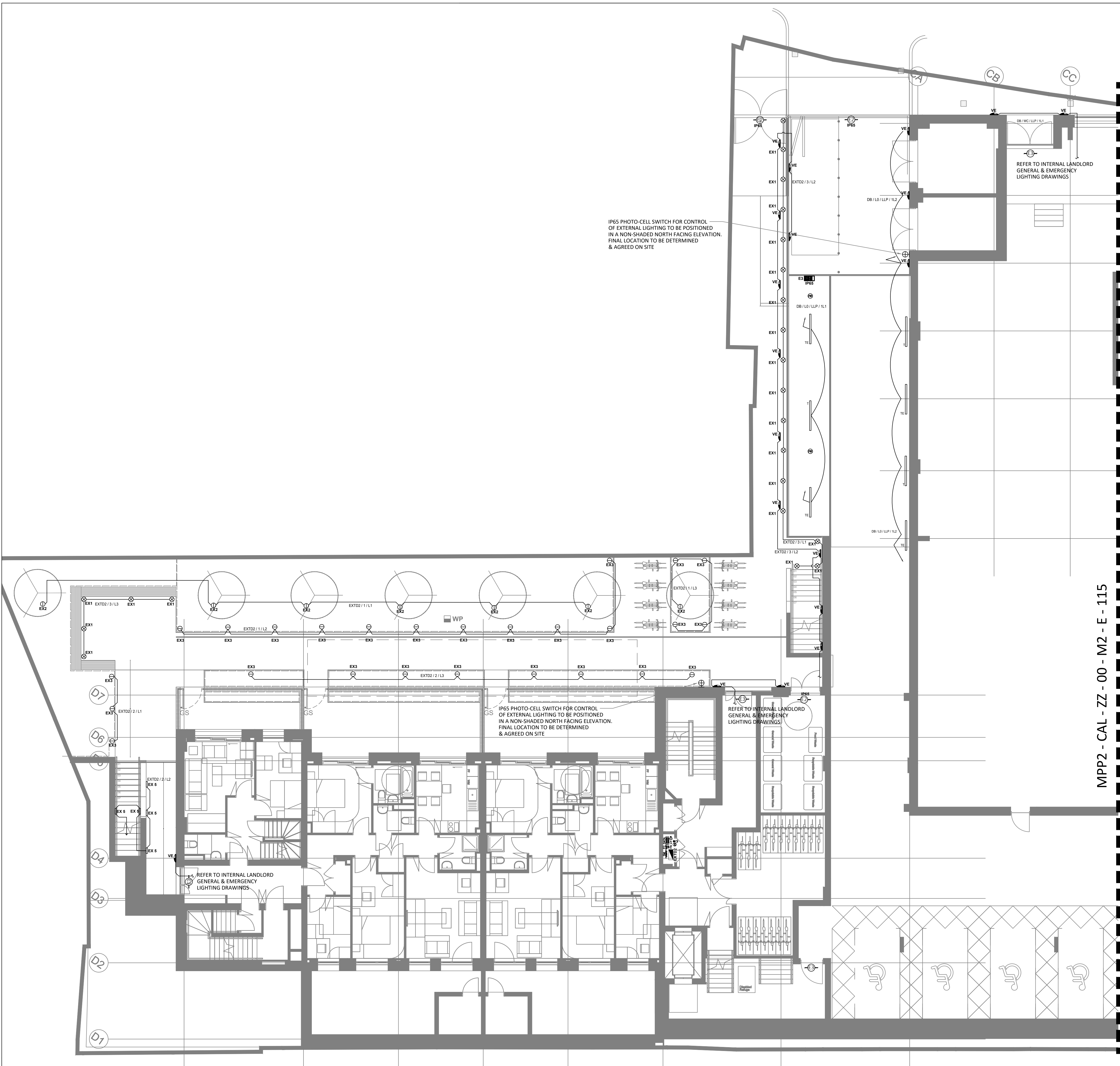
REF	LAMP	DESCRIPTION	PRODUCT	IMAGE
EX1	3W, 240lm, 3000K (TBC) , LED	Marin grade 316 stainless steel in-ground uplighter with asymmetric distribution, IP68 Rated Colour Temp: 3000K, CRI >85, Efficacy: 80lm/w	Orlight ORLLM88-1- SS	EXTERNAL LANDSCAPE 
EX2	3W, 235lm, 3000K (TBC), LED	Marine grade 316 stainless steel in-ground spike fixture with polished reflector 15 degree beam Colour Temp: 3000K CRI: >80 Efficacy 78lm/w IP65 Rated	Orlight ORLLM66	EXTERNAL LANDSCAPE 
EX3	28W, 1300lm, 3000K (TBC), LED	LED Architectural bollard, extruded aluminium with a powder coated finish. Driver integral to fixture.	Orlight ORLLUNAR	EXTERNAL LANDSCAPE 

		Colour Temp: 3000K 1M height CRI: >85 Efficacy: 47lm/w IP65 Rated		
EX4	24V, 3000K	Marine Grade 316 stainless steel recessed linear fixture, Integrated CREE XPE LED chipset, anti-glare recess with 115 degree light distribution. IP67 Rated Colour Temp: 3000K	Orlight LUNGO	EXTERNAL LANDSCAPE 
EX5	20W, 1054lm, 3000K, LED	Stainless Steel, Sold State Chipset with downward light emission with wide beam distribution wall light fixture. Finish: Polished Stainless Steel Power:20w IP54 Rated	Orlight LUCIA-350	EXTERNAL LANDSCAPE 
EX6	3W, 240lm, 3000K, LED	Miniature recessed fixture complete with integral CREE LED package	Orlight ORLLM44-1-SS	EXTERNAL LANDSCAPE

		and 30 degree beam option. Marine Grade 316 Stainless Steel with construction rated to IP68 & Eye-Lid design for asymmetric light emission. Product footprint of 44mm diameter ensures versatile application.		
IE	<p>Lumens: 4800lm</p> <p>Colour Temp: 4000K</p> <p>Power: 31W</p> <p>Efficacy: 155lm/w</p> <p>IP65 Rated</p> <p>Dimensions: 1578x84 mm</p>	<p>LED weatherproof luminaire, UV stabilized flat diffuser and linear prisms to achieve uniform lit appearance, stainless steel diffuser clips.</p> <p>3hr Non - maintained Emergency IP65 Rated</p>	Sylvania Concord Sylproof Superia LED G3	
VE	<p>14W, 1008lm (220lm emergency), 4000k, LED</p>	<p>KOLO IP65 HOOD – Surface mounted IP65 LED circular luminaire with covered top diffuser to limit and control upward light. Black</p>	Whitecroft KOLO IP65 HOOD	External Entrances

		<p>Colour Temp: 4000k Power 14W 3hr maintained Emergency IP65 Rated</p>		
SE	<p>24W, 1790lm (244lm emergency), 4000K, LED</p>	<p>Wall mounted LED luminaire for building perimeter applications. Black polycarbonate body with UV stabilised prismatic polycarbonate diffuser producing a wide, forward throw lighting distribution. High quality fixed output or DALI driver and LED module. 3hr non-maintained Emergency IP65 Rated IP65 Rated Efficacy: 74 lm/cw</p>	<p>Whitecroft Centurion L65</p>	<p>Amenty Spaces</p> 
T	<p>47W, 7100lm, 4000K, LED</p>	<p>LED weatherproof luminaire, UV stabilized flat diffuser and linear prisms to achieve</p>	<p>Sylvania Concord Sylproof Superia LED G3</p>	

		<p>uniform lit appearance, stainless steel diffuser clips.</p> <p>Lumens: 6800lm Colour Temp: 4000K Power: 47W Effucacy: 145 lm/w IP65 Rated</p> <p>Dimensions: 1578x84 mm</p>		
EX7	<p>BeamLite II</p> <p>Wide 800</p> <p>800 lm</p>	<p>IP65 LED 3 HR Non-Maintained High flux Luminaire with Configuration of two directional LED Lamp heads. Locking mechanism of light head preventing accidental change of light heat configuration</p>	<p>Eaton Beam LiteII</p> <p>Wide 800</p>	<p>BeamLite II</p>  <p>Dimensions in mm</p> 



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THE LIGHTING INSTALLATION SHALL COMPLY IN FULL WITH THE REQUIREMENTS OF BS 7671 18 EDITION.

THE INTERNAL OVER DOOR EMERGENCY LUMINAIRES SHALL BE WIRED TO OPERATE WHEN LOCAL LIGHTING IS ON (MAINTAINED).

THE LIGHTING CONTROLS MANUFACTURER, WITH ASSISTANCE FROM THE ELECTRICAL CONTRACTOR SHALL CARRY OUT THE COMMISSIONING OF THE SYSTEM.

EACH EMERGENCY LUMINAIRE SHOULD BE COMPLETE WITH A STICK ON REFERENCE LABEL THAT SHOULD CORRELATE WITH THE AS INSTALLED RECORD DRAWINGS.

THE CEILING GRID LAYOUT IS INDICATIVE ONLY AND LIGHTING INSTALLATION SHOULD BE CO-ORDINATED FULLY ON SITE PRIOR TO INSTALLATION.

THE ELECTRICAL CONTRACTOR SHALL PROCURE, SUPPLY, INSTALL, TEST, COMMISSION AND SET TO WORK A COMPLETE, FULLY OPERATIONAL LIGHTING AND LIGHTING CONTROL SYSTEM, IN-LINE WITH THE ASPIRATIONS AND DETAIL OF ALL NOTES AND DRAWINGS.

ALL LIGHTING SHALL HAVE CLEARANCE FROM ANY INSULATION AS AUTOMATICALLY SWITCHED OFF BETWEEN 2300 HRS AND 0700 HRS. THIS IS ACHIEVED VIA TIMER FOR ALL EXTERNAL LIGHTING SET TO THE APPROPRIATE HOURS, ADJUSTABLE TIMSWITCH AND DAYLIGHT SENSOR - SCENE SETTING PLATE AND 365/24/7 TIMER AD PHOTOCELL. PIR CONTROLS SHALL BE AFFORDED TO THE CAR PARK LIGHTING

THE LUMINARE HEAT DISSIPATING AREAS SHALL NOT HAVE THE AIR FLOW OBSTRUCTED IN ANY WAY.

ALL REFLECTORS, COVERS OR VISUAL AREAS SHALL BE CLEAN AND FREE FROM DIRT PRIOR TO LIGHTING LEVELS COMMISSIONED.

THE ELECTRICAL CONTRACTOR IS TO INCLUDE FOR ALL LUMINAIRES, ACCESSORIES, PLUG-INS, MOUNTING KITS AND POWER SUPPLIES WERE NECESSARY COMPLYING TO CURRENT BUILDING REGULATIONS, SO AS TO ENSURE A COMPLETE AND OPERATIONAL INSTALLATION.

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THE EMERGENCY LIGHTING INSTALLATION, SUPPLIED, INSTALLED AND COMMISSION UNDER THE ELECTRICAL CONTRACT SHALL BE SELF CONTAINED INDEPENDENT EMERGENCY LIGHTING LUMINAIRES CONSISTING OF EITHER RECESSED OR SURFACE MOUNTED TO SUIT CEILING MAKE UP, 3 HOUR NON-MAINTAINED MICROPOINT LED DOWN LIGHTS, WALL MOUNTED BEAM LUMINAIRES AS NOTED WITHIN THE LUMINAIRE SCHEDULE CONNECTED TO THE LOCAL LIGHTING CIRCUITS

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LIGHTING IS TO BE CONTROLLED VIA A TIME CLOCK/ PHOTOCELL AND HOA. WIRED CIRCUITS FOR LANDSCAPE LIGHTING SHALL BE IN XLPE/SWA CABLES.

WIRED CIRCUITS SERVING LUMINAIRES FIXED TO THE BUILDING ARE TO BE IN SINGLE CORE LOW SMOKE ZERO HALOGEN (LSZH) CABLES ENCLOSED WITHIN A METALLIC CONDUIT AND TRUNKING SYSTEM, CONTROLLED VIA TIMECLOCK WITH PHOTOCELL (DUST TO DAWN) AND HAND/OFF/AUTO SWITCHING LOCATED ADJACENT TO THE RELEVANT EXTERNAL LIGHTING BOARD (LOCATION TO BE AGREED). INTERPOSING MULTI-POLE CONTACTORS SHALL BE PROVIDED AS NECESSARY.

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CODE FOR SUSTAINABLE HOME CREDIT EN66 EXTERNAL LIGHTING IS TO BE SOUGHT INCLUDING COMPLIANCE WITH CIBSE LIGHTING GUIDE 6 - "THE OUTDOOR ENVIRONMENT"

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ALL EXTERNAL LIGHT FITTINGS FOR SIGNS AND UPLIGHTING ARE TO HAVE A LUMINOUS EFFICACY OF AT LEAST 60 LAMP LUMENS/CIRCUIT WATT WHEN THE LAMP WATTAGE IS GREATER THAN OR EQUAL TO 25W OR MIN 50 LAMP LUMENS/CIRCUIT WATT WHEN THE LAMP WATTAGE IS LESS THAN 25W.

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MPP2 - CAL - ZZ - 00 - M2 - E - 115

Scale 1:100

B	FEB.21	TENDER ISSUE	CS	LW
A	DEC.20	ISSUED FOR REVIEW	CS	LW
REV	DATE	DESCRIPTION	DR	CK

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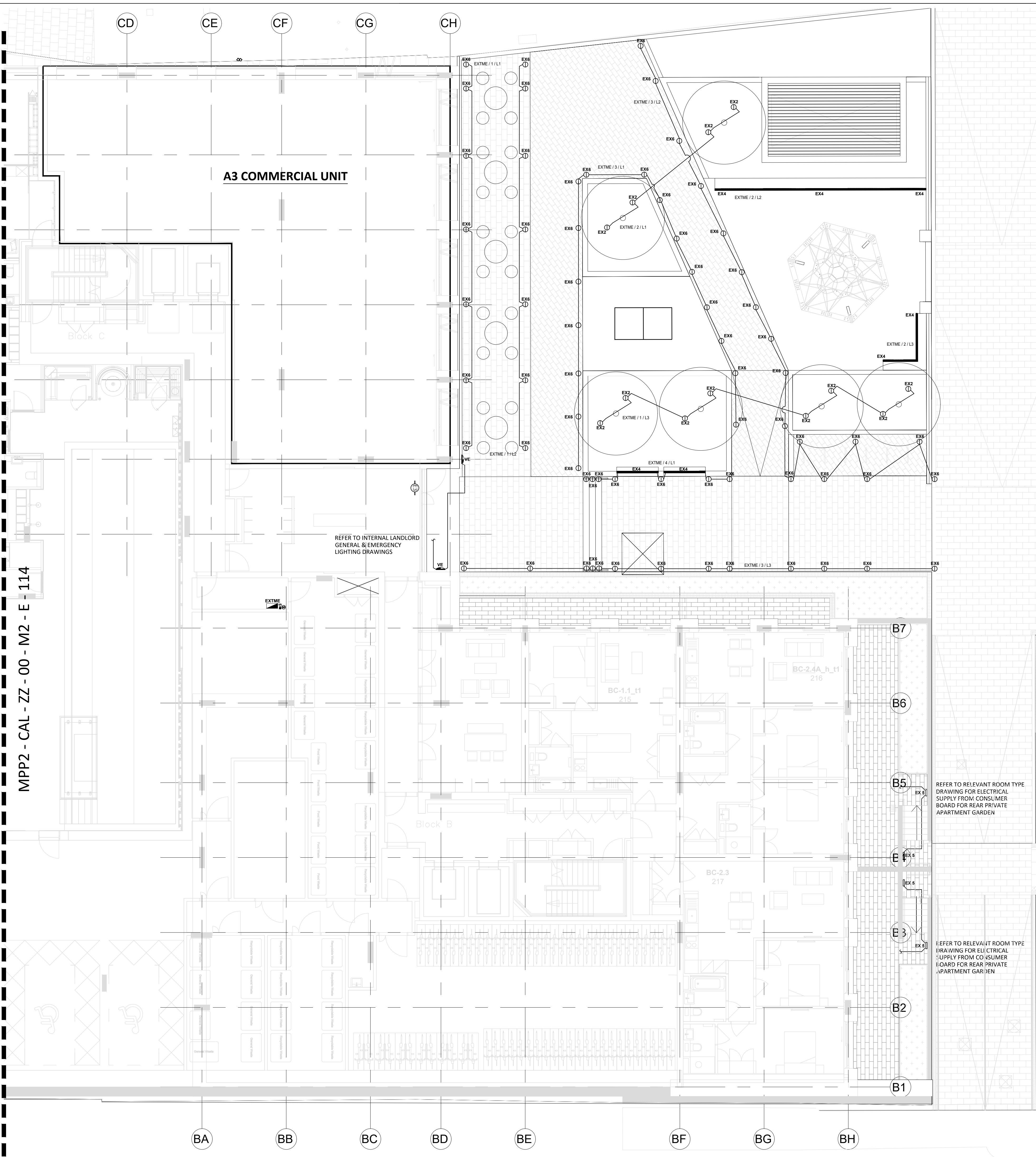
DRAWING
ELECTRICAL SERVICES INSTALLATION
LEVEL 00
EXTERNAL LIGHTING
BLOCK D1 & D2

DRAWING NO./REVISION

MPP2 - CAL - ZZ - 00 - M2 - E - 114 - B

SCALE / PRINTED AT 1:100@A1	DATE NOV'20	DRAWN CS	CHECKED LW
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UNIT 6 FOREST GROVE BUSINESS PARK
NEWTOWNBRED A BELFAST BT8 6AW
TEL: 02890699720 FAX: 02890641625
E-MAIL: admin@caldwellconsulting.net



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Caldwell

ARCHITECT
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DRAWING
ELECTRICAL SERVICES INSTALLATION
LEVEL 00
EXTERNAL LIGHTING
BLOCK B & C

DRAWING NO./REVISION
MPP2 - CAL - ZZ - 00 - M2 - E - 115 - C

SCALE/PRINTED AT
1:100@A1

DATE
NOV'20

DRAWN
CS

CHECKED
LW

UNIT 6 FORESTGROVE BUSINESS PARK
NEWTONBREDRA BELFAST BT8 6AW

TEL: 02890699720 FAX: 02890641625
E-MAIL: admin@caldwellconsulting.net

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THE ELECTRICAL CONTRACT IS TO PROVIDE AN EXTERNAL LIGHTING INSTALLATION COMPRISING FLICKER FREE LED FEATURE LIGHTING VIA BOLLARDS AND RECESSED UPLIGHTS ETC AS INDICATED ON THE DRAWINGS AND LUMINAIRE SCHEDULES. (MEETING EN6 6 - CAPABLE OF ONLY ACCEPTING LAMPS HAVING A LUMINOUS EFFICACY GREATER THAN 40 LUMENS PER CIRCUIT WATT CONTROLLED BY PUSH BUTTON TIME SWITCHES/PIR SENSORS OR EQUIVALENT)

LIGHTING IS TO BE CONTROLLED VIA A TIME CLOCK/ PHOTOCELL AND HOA. WIRED CIRCUITS FOR LANDSCAPE LIGHTING SHALL BE IN XLPE/SWA CABLES.

WIRED CIRCUITS SERVING LUMINAIRES FIXED TO THE BUILDING ARE TO BE IN SINGLE CORE LOW SMOKE ZERO HALOGEN (LSZH) CABLES ENCLOSED WITHIN A METALLIC CONDUIT AND TRUNKING SYSTEM, CONTROLLED VIA TIMECLOCK WITH PHOTOCELL (DUST TO DAWN) AND HAND/OFF/AUTO SWITCHING LOCATED ADJACENT TO THE RELEVANT EXTERNAL LIGHTING BOARD (LOCATION TO BE AGREED). INTERPOSING MULTI-POLE CONTACTORS SHALL BE PROVIDED AS NECESSARY.

ALL EXTERNAL LIGHTING IS TO BE ZONED SO THAT CERTAIN CIRCUITS CAN BE SWITCHED OFF AT PRE-DETERMINED TIMES TO PROVIDE A CURFREW PERIOD AS REQUIRED BY THE END USER.

TYPE A DISTRIBUTION BOARDS SHALL BE USED FOR THE EXTERNAL LIGHTING SUPPLIES.

CONDUIT ROUTES SHALL BE PROVIDED THROUGHOUT THE BUILDING STRUCTURE TO THE EXTERNAL FACADES TO SUPPORT THE EXTERNAL LIGHTING SCHEME. CONDUITS SHALL BE GALVANISED STEEL AND BE ROUTED BACK TO THE RELEVANT EXTERNAL LIGHTING BOARD, WHERE LIGHTING IS GROUND MOUNTED AROUND THE EXTERNAL PERIMETER OF THE BUILDING, ARMoured CABLING SHALL BE ROUTED AT APPROPRIATE DEPTHS AND PROTECTED AS REQUIRED UNDER CURRENT REGULATIONS. CAST IN CABLE DUCTS / SLEEVES SHALL BE PROVIDED WHERE CABLES EXIT THE BUILDING. DUCTED CABLE ROUTES SHALL BE PROVIDED TO SERVE EXTERNAL LIGHTING.

THE ELECTRICAL CONTRACTOR IS TO INSTALL ADEQUATE LIGHTING FOR THE SAFE PASSAGE OF PEOPLE TO AND FROM THE BUILDING AND ENHANCE THE SECURITY OF THE BUILDING IN ACCORDANCE WITH THE LANDSCAPE DESIGNERS ASPIRATIONS. THE INSTALLATION SHALL COMPRISE LED LUMINAIRES, ASSOCIATED CIRCUITS, CONTAINMENT AND CONTROL DEVICES TO ILLUMINATE THE FOLLOWING EXTERNAL AREAS

- MAIN BUILDING ENVELOPE,
- MAIN BUILDING ENTRANCE - AVERAGE 100 LUX,
- ROOF TERRACE & AMENITY AREAS - AVERAGE 30 LUX,
- UNDERGROUND CAR PARKING AREAS - AVERAGE 30 LUX,
- COURTYARD SPACE,
- MAIN ENTRANCE DOOR,
- SECONDARY ACCESS DOORS AND ALL FIRE EXITS

CODE FOR SUSTAINABLE HOME CREDIT EN66 EXTERNAL LIGHTING IS TO BE SOUGHT INCLUDING COMPLIANCE WITH CIBSE LIGHTING GUIDE 6 - "THE OUTDOOR ENVIRONMENT"

ALL EXTERNAL LIGHTING (EXCEPT FOR SAFETY AND SECURITY LIGHTING) CAN BE AUTOMATICALLY SWITCHED OFF BETWEEN 2300 HRS AND 0700 HRS. THIS IS ACHIEVED VIA TIMER FOR ALL EXTERNAL LIGHTING SET TO THE APPROPRIATE HOURS. ADJUSTABLE TIMSWITCH AND DAYLIGHT SENSOR - SCENE SETTING PLATE AND 365/24/7 TIMER AD PHOTOCELL. PIR CONTROLS SHALL BE AFFORDED TO THE CAR PARK LIGHTING

ALL EXTERNAL LUMINAIRES SHALL HAVE A LUMINOUS EFFICACY OF AT LEAST 50 LAMP LUMENS/CIRCUIT WATT WHEN THE LAMP HAS A COLOUR RENDERING INDEX (Ra) GREATER THAN OR EQUAL TO 60 OR MIN 60 LAMP LUMENS/CIRCUIT WATT WHEN LAMP HAS A COLOUR RENDERING INDEX (Ra) LESS THAN 60.

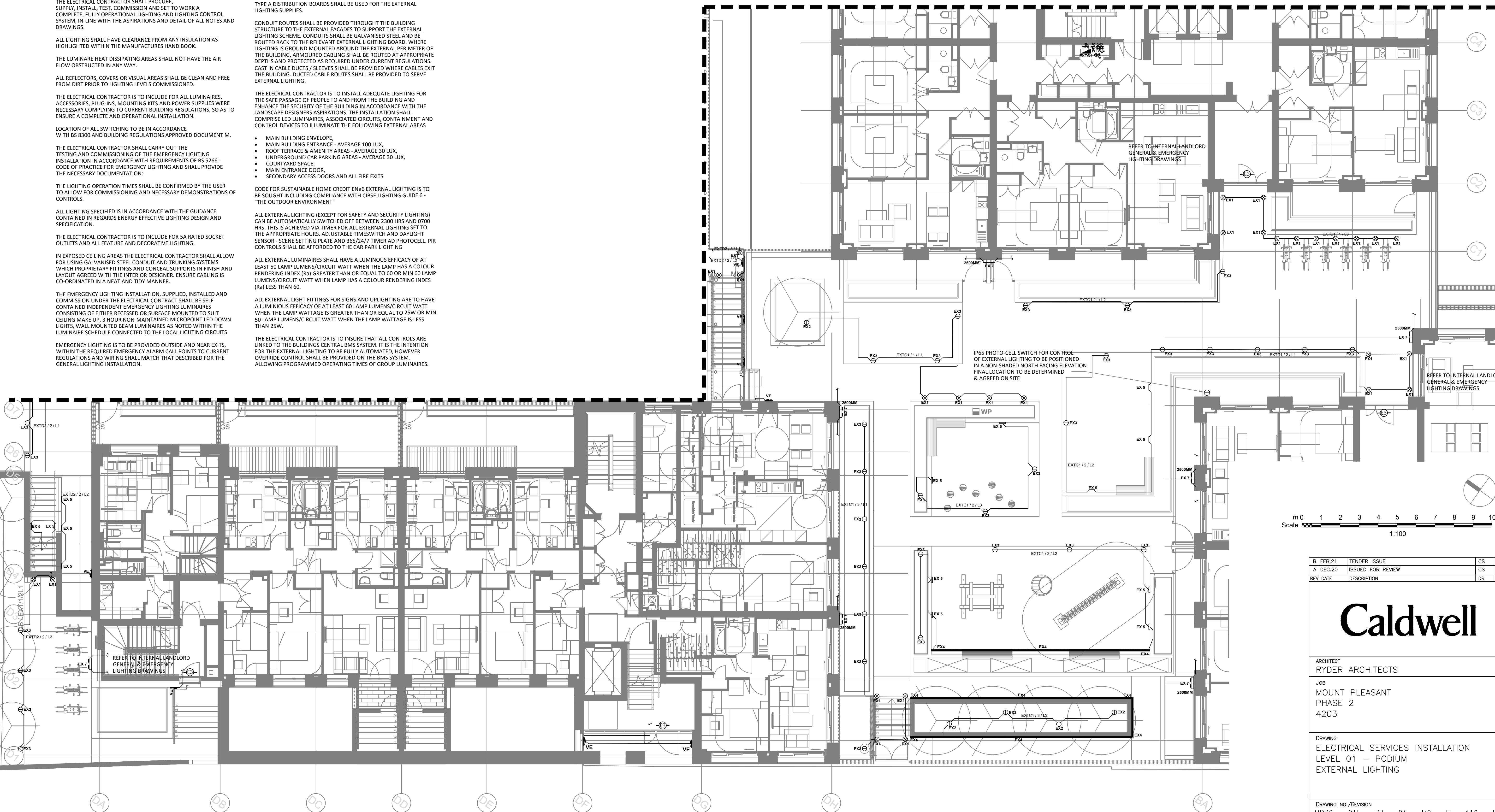
ALL EXTERNAL LIGHT FITTINGS FOR SIGNS AND UPLIGHTING ARE TO HAVE A LUMINOUS EFFICACY OF AT LEAST 60 LAMP LUMENS/CIRCUIT WATT WHEN THE LAMP WATTAGE IS GREATER THAN OR EQUAL TO 25W OR MIN 50 LAMP LUMENS/CIRCUIT WATT WHEN THE LAMP WATTAGE IS LESS THAN 25W.

THE ELECTRICAL CONTRACTOR IS TO INSURE THAT ALL CONTROLS ARE LINKED TO THE BUILDINGS CENTRAL BMS SYSTEM. IT IS THE INTENTION FOR THE EXTERNAL LIGHTING TO BE FULLY AUTOMATED, HOWEVER OVERRIDE CONTROL SHALL BE PROVIDED ON THE BMS SYSTEM. ALLOWING PROGRAMMED OPERATING TIMES OF GROUP LUMINAIRES.

ALL LIGHTING SHALL BE PROVIDED IN ACCORDANCE WITH THE ARCHITECTS DETAILS AND FINISHES AND SHALL BE INSTALLED SO TO ALLOW FUTURE ACCESS TO ALL POWER SUPPLIES AND LAMPS FOR FUTURE MAINTENANCE.

THE CONTRACTOR SHALL ENSURE THAT ALL EXTERNAL LIGHTING, CONTAINMENT, SWITCHGEAR, LUMINAIRES, CABLING AND ACCESSORIES ARE INCLUDED FOR WITHIN THEIR TENDER QUOTATION.

MPP2 - CAL - ZZ - 00 - M2 - E - 114



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REV	DATE	DESCRIPTION	DR	CK

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4203

DRAWING
ELECTRICAL SERVICES INSTALLATION
LEVEL 01 – PODIUM
EXTERNAL LIGHTING

DRAWING NO./REVISION
MPP2 - CAL - ZZ - 01 - M2 - E - 116 - B

SCALE/PRINTED AT 1:100@A1	DATE NOV'20	DRAWN CS	CHECKED LW
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UNIT 6 FORESTROVE BUSINESS PARK
NEWTOWNBRED A BELFAST BT8 6AW
TEL : 02890699720 FAX: 02890641625
E.MAIL : admin@caldwellconsulting.net

GENERAL & EMERGENCY LIGHTING NOTES

THE EMERGENCY / ESCAPE LIGHTING INSTALLATION SHALL COMPLY IN FULL WITH THE REQUIREMENTS OF BS 5266-1: 2016, BS 1838: 2013

THE LIGHTING INSTALLATION SHALL COMPLY IN FULL WITH THE REQUIREMENTS OF BS 7671 18 EDITION.

THE INTERNAL OVER DOOR EMERGENCY LUMINAIRES SHALL BE WIRED TO OPERATE WHEN LOCAL LIGHTING IS ON (MAINTAINED).

THE LIGHTING CONTROLS MANUFACTURER, WITH ASSISTANCE FROM THE ELECTRICAL CONTRACTOR SHALL CARRY OUT THE COMMISSIONING OF THE SYSTEM.

EACH EMERGENCY LUMINAIRE SHOULD BE COMPLETE WITH A STICK ON REFERENCE LABEL THAT SHOULD CORRELATE WITH THE AS INSTALLED RECORD DRAWINGS.

THE CEILING GRID LAYOUT IS INDICATIVE ONLY AND LIGHTING INSTALLATION SHOULD BE CO-ORDINATED FULLY ON SITE PRIOR TO INSTALLATION.

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ALL LIGHTING SHALL HAVE CLEARANCE FROM ANY INSULATION AS HIGHLIGHTED WITHIN THE MANUFACTURES HAND BOOK.

THE LUMINAIRE HEAT DISSIPATING AREAS SHALL NOT HAVE THE AIR FLOW OBSTRUCTED IN ANY WAY.

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THE LIGHTING OPERATION TIMES SHALL BE CONFIRMED BY THE USER TO ALLOW FOR COMMISSIONING AND NECESSARY DEMONSTRATIONS OF CONTROLS.

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THE ELECTRICAL CONTRACTOR IS TO INCLUDE FOR 5A RATED SOCKET OUTLETS AND ALL FEATURE AND DECORATIVE LIGHTING.

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CODE FOR SUSTAINABLE HOME CREDIT Ene6 EXTERNAL LIGHTING IS TO BE SOUGHT INCLUDING COMPLIANCE WITH CIBSE LIGHTING GUIDE 6 - "THE OUTDOOR ENVIRONMENT"

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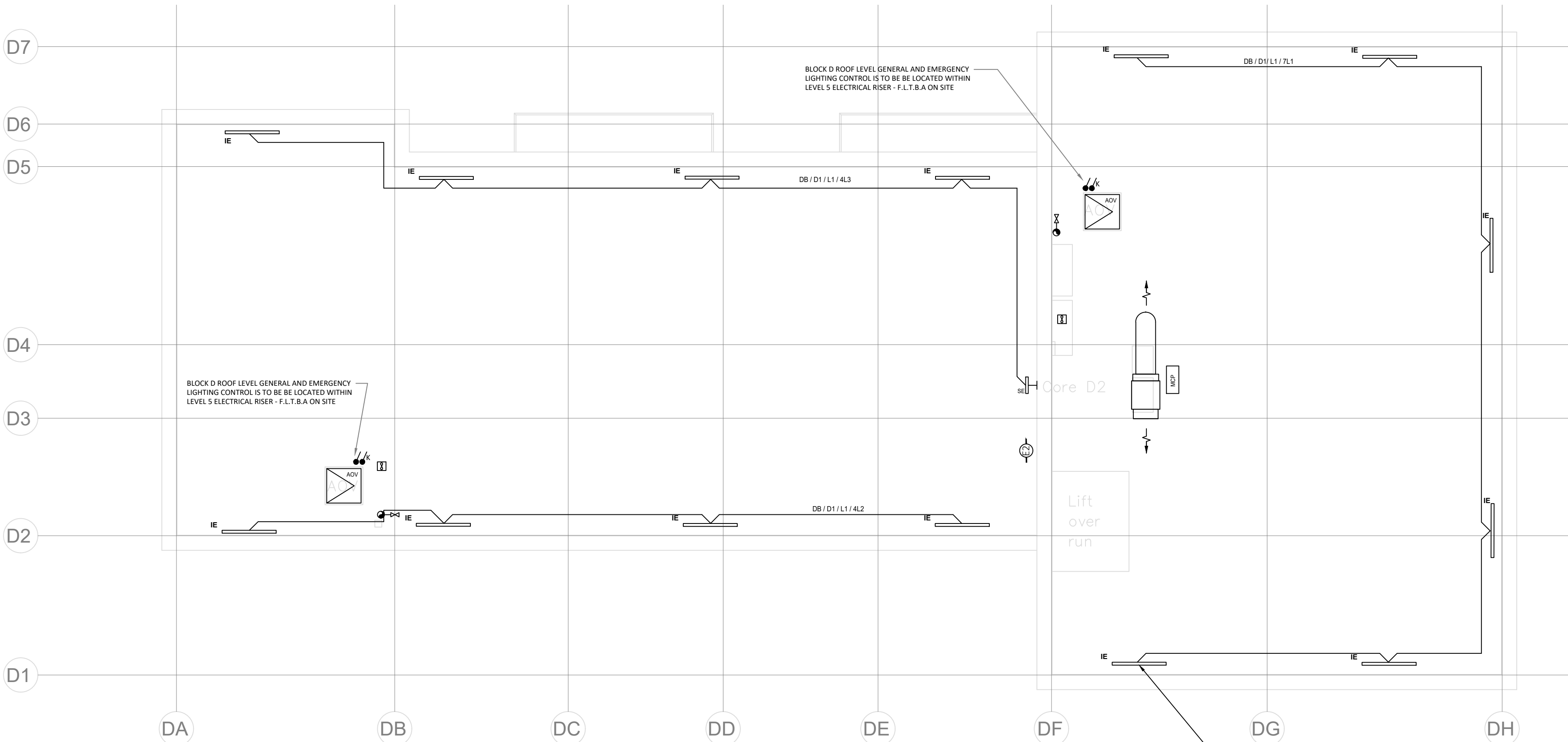
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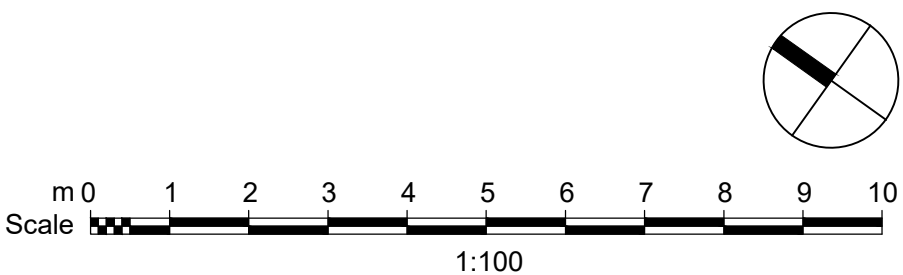
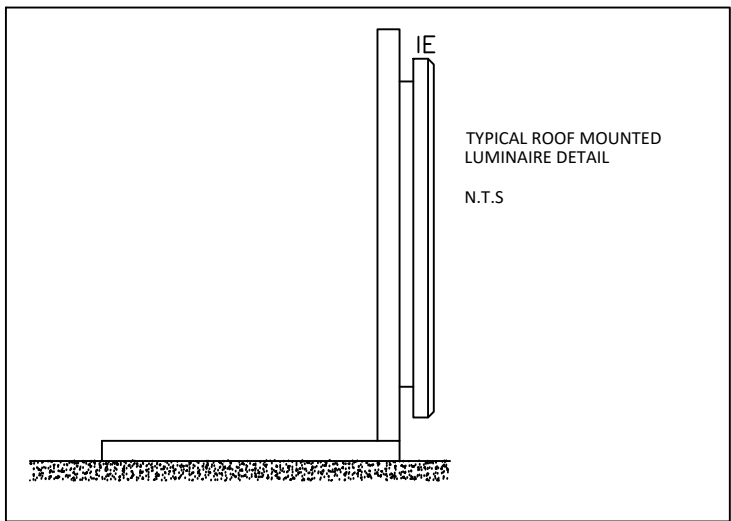
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THE CONTRACTOR SHALL ENSURE THAT ALL EXTERNAL LIGHTING, CONTAINMENT, SWITCHGEAR, LUMINAIRES, CABLING AND ACCESSORIES ARE INCLUDED FOR WITHIN THEIR TENDER QUOTATION.



LIGHTING ALONG ROOF TO BE MOUNTED ON ANGLE IRON SUPPORTS FIXED TO PAVING SLABS 500mm A.F.F.L.



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DRAWING
ELECTRICAL SERVICES INSTALLATION
BLOCK D – LEVEL 06
ROOF LEVEL EXTERNAL LIGHTING

DRAWING NO./REVISION
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UNIT 6 FORESTOROVE BUSINESS PARK
NEWTOWNBREDABELFAST BT8 6AW
TEL: 02890699720 FAX: 02890641625
E.MAIL: admin@caldwellconsulting.net

GENERAL & EMERGENCY LIGHTING NOTES

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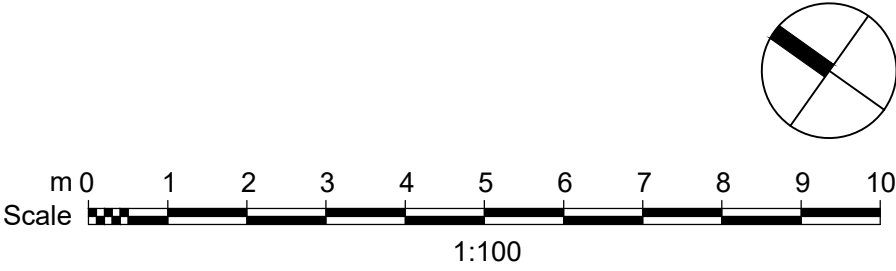
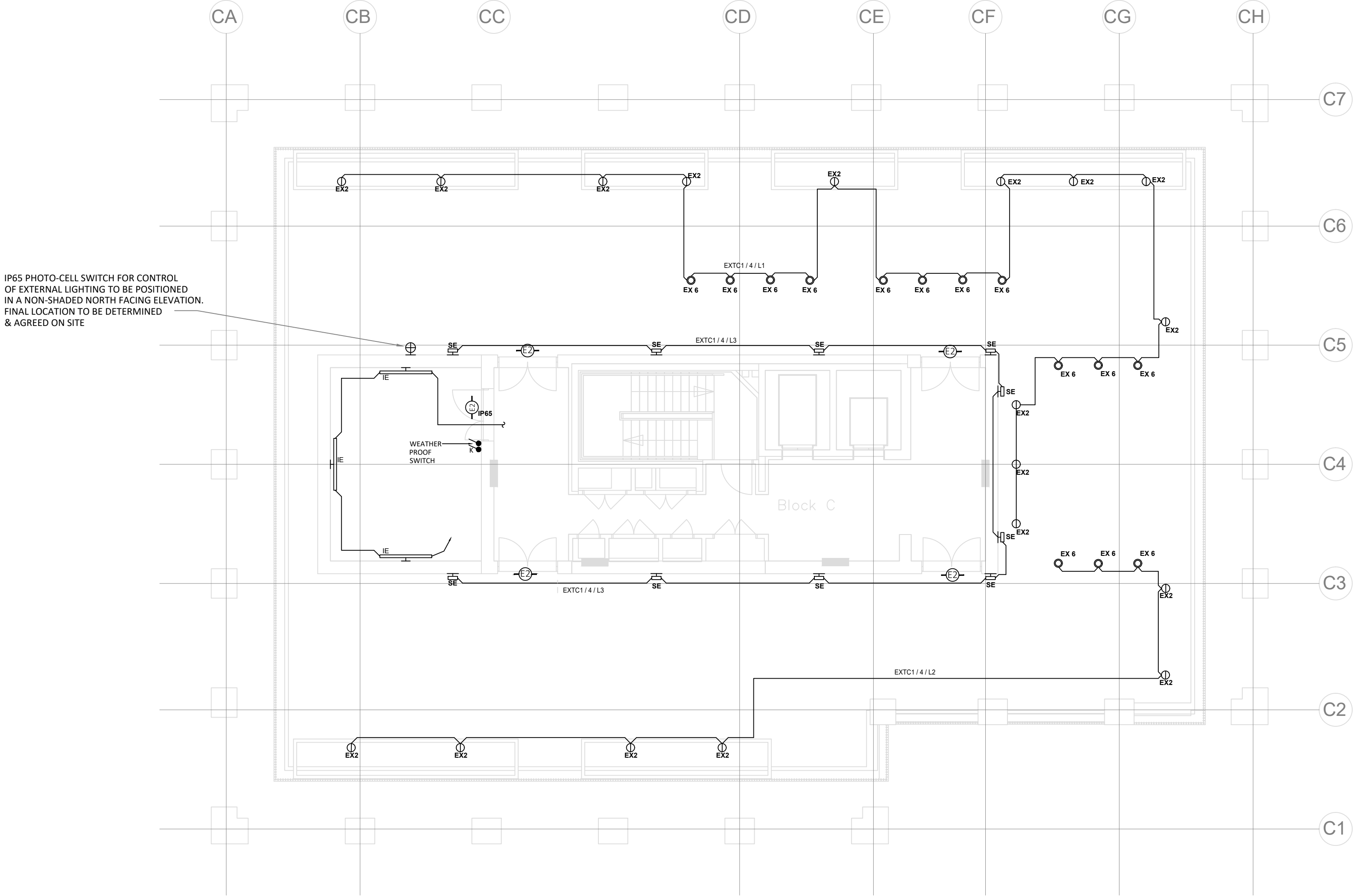
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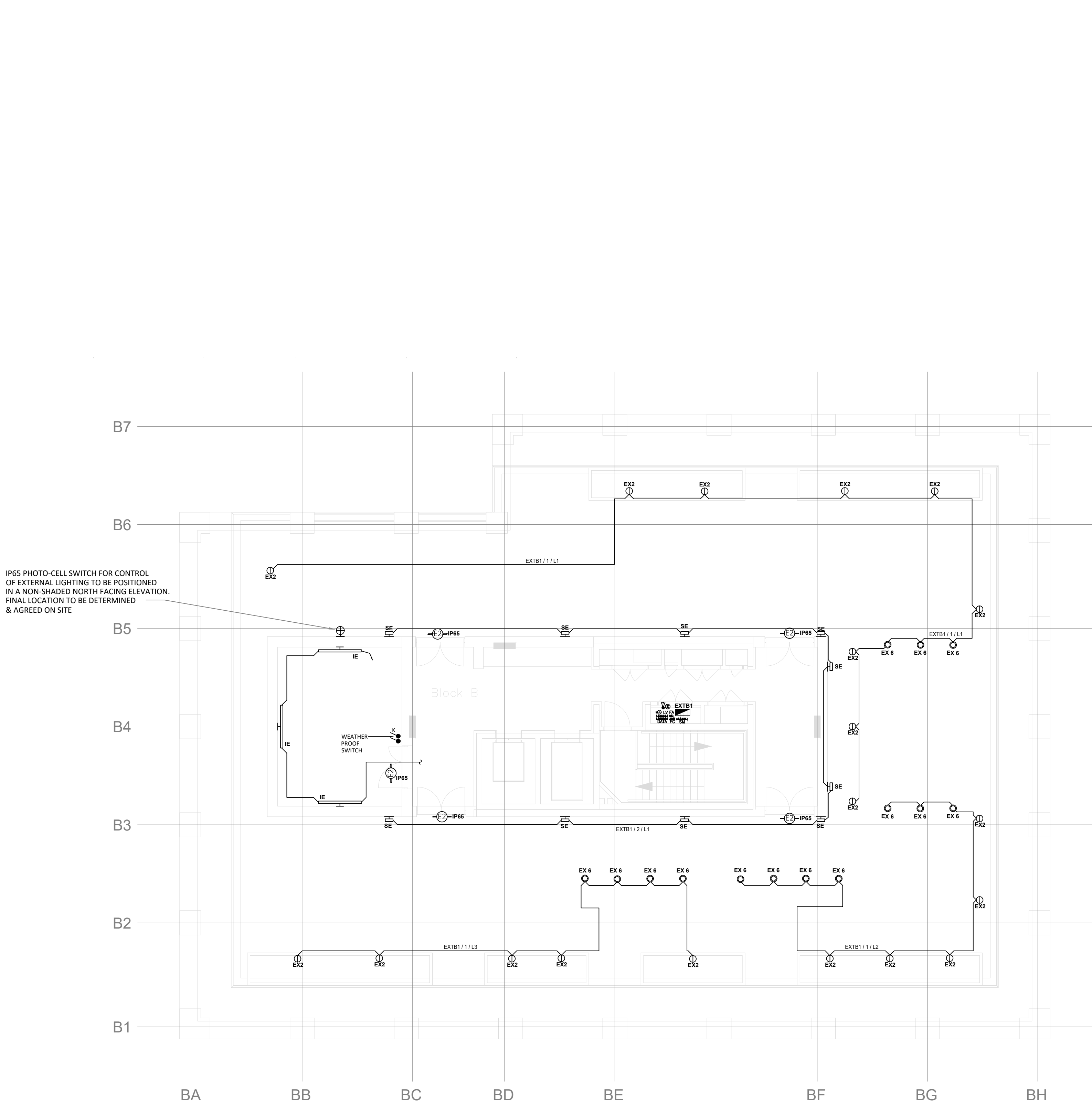
JOB
MOUNT PLEASANT
PHASE 2
4023

DRAWING
ELECTRICAL SERVICES INSTALLATION
LEVEL 08 BLOCK C
EXTERNAL LIGHTING

DRAWING NO./REVISION
MPP2 - CAL - ZZ - 08 - M2 - E - 118 - B

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UNIT 6 FORESTROVE BUSINESS PARK
NEWTOWNBRED A BELFAST BT8 6AW
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THE EMERGENCY / ESCAPE LIGHTING INSTALLATION SHALL COMPLY IN FULL WITH THE REQUIREMENTS OF BS 5266-1: 2016, BS 1838: 2013

THE LIGHTING INSTALLATION SHALL COMPLY IN FULL WITH THE REQUIREMENTS OF BS 7671 18 EDITION.

THE INTERNAL OVER DOOR EMERGENCY LUMINAIRES SHALL BE WIRED TO OPERATE WHEN LOCAL LIGHTING IS ON (MAINTAINED).

THE LIGHTING CONTROLS MANUFACTURER, WITH ASSISTANCE FROM THE ELECTRICAL CONTRACTOR SHALL CARRY OUT THE COMMISSIONING OF THE SYSTEM.

EACH EMERGENCY LUMINAIRE SHOULD BE COMPLETE WITH A STICK ON REFERENCE LABEL THAT SHOULD CORRELATE WITH THE AS INSTALLED RECORD DRAWINGS.

THE CEILING GRID LAYOUT IS INDICATIVE ONLY AND LIGHTING INSTALLATION SHOULD BE CO-ORDINATED FULLY ON SITE PRIOR TO INSTALLATION.

THE ELECTRICAL CONTRACTOR SHALL PROCURE, SUPPLY, INSTALL, TEST, COMMISSION AND SET TO WORK A COMPLETE, FULLY OPERATIONAL LIGHTING AND LIGHTING CONTROL SYSTEM, IN-LINE WITH THE ASPIRATIONS AND DETAIL OF ALL NOTES AND DRAWINGS.

ALL LIGHTING SHALL HAVE CLEARANCE FROM ANY INSULATION AS HIGHLIGHTED WITHIN THE MANUFACTURES HAND BOOK.

THE LUMINARE HEAT DISSIPATING AREAS SHALL NOT HAVE THE AIR FLOW OBSTRUCTED IN ANY WAY.

ALL REFLECTORS, COVERS OR VISUAL AREAS SHALL BE CLEAN AND FREE FROM DIRT PRIOR TO LIGHTING LEVELS COMMISSIONED.

THE ELECTRICAL CONTRACTOR IS TO INCLUDE FOR ALL LUMINAIRES, ACCESSORIES, PLUG-INS, MOUNTING KITS AND POWER SUPPLIES WERE NECESSARY COMPLYING TO CURRENT BUILDING REGULATIONS, SO AS TO ENSURE A COMPLETE AND OPERATIONAL INSTALLATION.

LOCATION OF ALL SWITCHING TO BE IN ACCORDANCE WITH BS 8300 AND BUILDING REGULATIONS APPROVED DOCUMENT M.

THE ELECTRICAL CONTRACTOR SHALL CARRY OUT THE TESTING AND COMMISSIONING OF THE EMERGENCY LIGHTING INSTALLATION IN ACCORDANCE WITH REQUIREMENTS OF BS 5266 - CODE OF PRACTICE FOR EMERGENCY LIGHTING AND SHALL PROVIDE THE NECESSARY DOCUMENTATION:

THE LIGHTING OPERATION TIMES SHALL BE CONFIRMED BY THE USER TO ALLOW FOR COMMISSIONING AND NECESSARY DEMONSTRATIONS OF CONTROLS.

ALL LIGHTING SPECIFIED IS IN ACCORDANCE WITH THE GUIDANCE CONTAINED IN REGARDS ENERGY EFFECTIVE LIGHTING DESIGN AND SPECIFICATION.

THE ELECTRICAL CONTRACTOR IS TO INCLUDE FOR SA RATED SOCKET OUTLETS AND ALL FEATURE AND DECORATIVE LIGHTING.

IN EXPOSED CEILING AREAS THE ELECTRICAL CONTRACTOR SHALL ALLOW FOR USING GALVANISED STEEL CONDUIT AND TRUNKING SYSTEMS WHICH PROPRIETARY FITTINGS AND CONCEAL SUPPORTS IN FINISH AND LAYOUT AGREED WITH THE INTERIOR DESIGNER. ENSURE CABLING IS CO-ORDINATED IN A NEAT AND TIDY MANNER.

THE EMERGENCY LIGHTING INSTALLATION, SUPPLIED, INSTALLED AND COMMISSION UNDER THE ELECTRICAL CONTRACT SHALL BE SELF CONTAINED INDEPENDENT EMERGENCY LIGHTING LUMINAIRES CONSISTING OF EITHER RECESSED OR SURFACE MOUNTED TO SUIT CEILING MAKE UP: 3 HOUR NON-MAINTAINED MICROPOINT LED DOWN LIGHTS, WALL MOUNTED BEAM LUMINAIRES AS NOTED WITHIN THE LUMINAIRE SCHEDULE CONNECTED TO THE LOCAL LIGHTING CIRCUITS

EMERGENCY LIGHTING IS TO BE PROVIDED OUTSIDE AND NEAR EXITS, WITHIN THE REQUIRED EMERGENCY ALARM CALL POINTS TO CURRENT REGULATIONS AND WIRING SHALL MATCH THAT DESCRIBED FOR THE GENERAL LIGHTING INSTALLATION.

THE ELECTRICAL CONTRACT IS TO PROVIDE AN EXTERNAL LIGHTING INSTALLATION COMPRISING FLICKER FREE LED FEATURE LIGHTING VIA BOLLARDS AND RECESSED UPLIGHTS ETC AS INDICATED ON THE DRAWINGS AND LUMINAIRE SCHEDULES. (MEETING ENe 6 - CAPABLE OF ONLY ACCEPTING LAMPS HAVING A LUMINOUS EFFICACY GREATER THAN 40 LUMENS PER CIRCUIT WATT CONTROLLED BY PUSH BUTTON TIME SWITCHES/PIR SENSORS OR EQUIVALENT)

LIGHTING IS TO BE CONTROLLED VIA A TIME CLOCK/ PHOTOCELL AND HOA. WIRED CIRCUITS FOR LANDSCAPE LIGHTING SHALL BE IN XLPE/SWA CABLES.

WIRED CIRCUITS SERVING LUMINAIRES FIXED TO THE BUILDING ARE TO BE IN SINGLE CORE LOW SMOKE ZERO HALOGEN (LSZH) CABLES ENCLOSED WITHIN A METALLIC CONDUIT AND TRUNKING SYSTEM, CONTROLLED VIA TIMECLOCK WITH PHOTOCELL (DUST TO DAWN) AND HAND/OFF/AUTO SWITCHING LOCATED ADJACENT TO THE RELEVANT EXTERNAL LIGHTING BOARD (LOCATION TO BE AGREED), INTERPOSING MULTI-POLE CONTACTORS SHALL BE PROVIDED AS NECESSARY.

ALL EXTERNAL LIGHTING IS TO BE ZONED SO THAT CERTAIN CIRCUITS CAN BE SWITCHED OFF AT PRE-DETERMINED TIMES TO PROVIDE A CURFEW PERIOD AS REQUIRED BY THE END USER.

TYPE A DISTRIBUTION BOARDS SHALL BE USED FOR THE EXTERNAL LIGHTING SUPPLIES.

CONDUIT ROUTES SHALL BE PROVIDED THROUGH THE BUILDING STRUCTURE TO THE EXTERNAL FACADES TO SUPPORT THE EXTERNAL LIGHTING SCHEME. CONDUITS SHALL BE GALVANISED STEEL AND BE ROUTED BACK TO THE RELEVANT EXTERNAL LIGHTING BOARD. WHERE LIGHTING IS GROUND MOUNTED AROUND THE EXTERNAL PERIMETER OF THE BUILDING, ARMoured CABLING SHALL BE ROUTED AT APPROPRIATE DEPTHS AND PROTECTED AS REQUIRED UNDER CURRENT REGULATIONS. CAST IN CABLE DUCTS / SLEEVES SHALL BE PROVIDED WHERE CABLES EXIT THE BUILDING. DUCTED CABLE ROUTES SHALL BE PROVIDED TO SERVE EXTERNAL LIGHTING.

THE ELECTRICAL CONTRACTOR IS TO INSTALL ADEQUATE LIGHTING FOR THE SAFE PASSAGE OF PEOPLE TO AND FROM THE BUILDING AND ENHANCE THE SECURITY OF THE BUILDING IN ACCORDANCE WITH THE LANDSCAPE DESIGNERS ASPIRATIONS. THE INSTALLATION SHALL COMPRISE LED LUMINAIRES, ASSOCIATED CIRCUITS, CONTAINMENT AND CONTROL DEVICES TO ILLUMINATE THE FOLLOWING EXTERNAL AREAS

- MAIN BUILDING ENVELOPE,
- MAIN BUILDING ENTRANCE - AVERAGE 100 LUX,
- ROOF TERRACE & AMENITY AREAS - AVERAGE 30 LUX,
- UNDERGROUND CAR PARKING AREAS - AVERAGE 30 LUX,
- COURTYARD SPACE,
- MAIN ENTRANCE DOOR,
- SECONDARY ACCESS DOORS AND ALL FIRE EXITS

CODE FOR SUSTAINABLE HOME CREDIT ENe6 EXTERNAL LIGHTING IS TO BE SOUGHT INCLUDING COMPLIANCE WITH CIBSE LIGHTING GUIDE 6 - "THE OUTDOOR ENVIRONMENT"

ALL EXTERNAL LIGHTING (EXCEPT FOR SAFETY AND SECURITY LIGHTING) CAN BE AUTOMATICALLY SWITCHED OFF BETWEEN 2300 HRS AND 0700 HRS. THIS IS ACHIEVED VIA TIMER FOR ALL EXTERNAL LIGHTING SET TO THE APPROPRIATE HOURS. ADJUSTABLE TIMESWITCH AND DAYLIGHT SENSOR - SCENE SETTING PLATE AND 365/24/7 TIMER AD PHOTOCCELL. PIR CONTROLS SHALL BE AFFORDED TO THE CAR PARK LIGHTING

ALL EXTERNAL LUMINAIRES SHALL HAVE A LUMINOUS EFFICACY OF AT LEAST 50 LAMP LUMENS/CIRCUIT WATT WHEN THE LAMP HAS A COLOUR RENDERING INDEX (Ra) GREATER THAN OR EQUAL TO 60 OR MIN 60 LAMP LUMENS/CIRCUIT WATT WHEN LAMP HAS A COLOUR RENDERING INDEX (Ra) LESS THAN 60.

ALL EXTERNAL LIGHT FITTINGS FOR SIGNS AND UPLIGHTING ARE TO HAVE A LUMINOUS EFFICACY OF AT LEAST 60 LAMP LUMENS/CIRCUIT WATT WHEN THE LAMP WATTAGE IS GREATER THAN OR EQUAL TO 25W OR MIN 50 LAMP LUMENS/CIRCUIT WATT WHEN THE LAMP WATTAGE IS LESS THAN 25W.

THE ELECTRICAL CONTRACTOR IS TO INSURE THAT ALL CONTROLS ARE LINKED TO THE BUILDINGS CENTRAL BMS SYSTEM. IT IS THE INTENTION FOR THE EXTERNAL LIGHTING TO BE FULLY AUTOMATED, HOWEVER OVERRIDE CONTROL SHALL BE PROVIDED ON THE BMS SYSTEM. ALLOWING PROGRAMMED OPERATING TIMES OF GROUP LUMINAIRES.

ALL LIGHTING SHALL BE PROVIDED IN ACCORDANCE WITH THE ARCHITECTS DETAILS AND FINISHES AND SHALL BE INSTALLED SO TO ALLOW FUTURE ACCESS TO ALL POWER SUPPLIES AND LAMPS FOR FUTURE MAINTENANCE.

THE CONTRACTOR SHALL ENSURE THAT ALL EXTERNAL LIGHTING, CONTAINMENT, SWITCHGEAR, LUMINAIRES, CABLING AND ACCESSORIES ARE INCLUDED FOR WITHIN THEIR TENDER QUOTATION.

B	FEB.21	TENDER ISSUE	CS	LW
A	DEC.20	ISSUED FOR REVIEW	CS	LW
REV	DATE	DESCRIPTION	DR	CK

Caldwell

ARCHITECT
RYDER ARCHITECTS

JOB
MOUNT PLEASANT
PHASE 2
4023

DRAWING
ELECTRICAL SERVICES INSTALLATION
LEVEL 10
EXTERNAL LIGHTING

DRAWING NO./REVISION
MPP2 - CAL - ZZ - 10 - M2 - E - 119 - B

SCALE/PRINTED AT 1:50@A1	DATE NOV'20	DRAWN CS	CHECKED LW
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UNIT 6 FORESTROVE BUSINESS PARK
NEWTOWNBRED A BELFAST BT8 6AW
TEL : 02890699720 FAX:02890641625
E.MAIL: admin@caldwellconsulting.net

