PROJECT 3
architects



Lower Campfield, Manchester
Lower Byrom Street, M3 4FP

Listed Building Consent Application Conditions
Condition 04

Listed Building Consent Application Condition 04

04) Prior to the commencement of works to install any relevant (internal and external) mechanical and electrical (M & E) installations (including CCTV and lighting) attached to any listed fabric, detailed plans, method statement and specification showing the location, profile, fixing, sections and suitable samples, where necessary shall be submitted for approval in writing by the City Council, as Local Planning Authority. This shall include details of the removal, alterations and repair of the historic fabric of the building.

The development shall then be carried out in accordance with the details approved and thereafter be retained as approved throughout the life of the development. Should the M & E no longer be required, they should be removed and the elevations should be made good following a scheme previously approved in writing by the City Council, as Local Planning Authority.

.

Attached information to satisfy LBC Condition 04

ELECTRICAL

***01** - PDF - Hayvern Electrical - Small Power Drawings - X*

***02** - PDF - Hayvern Electrical - Lighting and Emergency Lighting Drawings - X*

***03** - PDF - Hayvern Electrical - Fire Alarm and Security Drawings - X*

***04** - PDF - Hayvern Electrical - Method Statement & Risk Assessment - X*

***05** - PDF - Hayvern Electrical - Temporary on Site Electrical Plans - X*

***06** - PDF - Hayvern Electrical - Site Images - Cable Trays - X*

***07** - PDF - Hayvern Electrical - Site Images - Floor Gully - X*

***08** - PDF - Hayvern Electrical / Solutions - Site Images - Fixings / Gripple Kits / Flange Clamps - X*

MECHANICAL

***09** - PDF - Solutions - Heating and Cooling High Level Drawings - X*

***10** - PDF - Solutions - Ventilation Drawings - X*

***11** - PDF - Solutions - M&E Installation Heights Specification Drawing - X*

***12** - PDF - Solutions - Specification - Airmax 400 - X*

***13** - PDF - Solutions - Method Statement - X*

***14** - PDF - Solutions - Site Images - 650mm Ducting - X*

***15** - PDF - Solutions - Site Images -High Level Actuated Louvres - X*

***16** - PDF - Solutions - Site Images - De-stratification Fans - X*

***17** - PDF - Solutions - Site Images - Fixings / Gripple Kits / Flange Clamps - X*

***18** - PDF - Solutions - Site Images - Kitchen Extract - X*

CCTV

***19** - PDF - Hayvern Electrical - Fire Alarm and Security Drawings - X*

***20** - PDF - CLiCK Fire & Security Maintenance - Lower Campfield Proposed CCTV - X*

LIGHTING RIG

***21** - PDF - Project 3 Architects - Lighting Rig Drawing - X*

***22** - PDF - dbn audible - Lighting Rig Drawing - X*

***23** - PDF - Lindapter ALP Information - X*

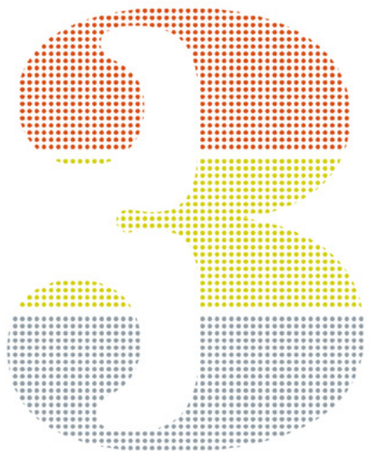
***24** - PDF - Site Images of Lighting Rig - X*

EXTERNAL LIGHTING

***25** - PDF - LDL Lighting - Lighting Specification Overview - X*

***26** - PDF - ColourZone - Multizone LED Colour Controller - X*

***27** - PDF - External Lighting Sample Photos - X*



ELECTRICAL
Sections 01-08

This section includes Hayvern Electrical's Small Power Drawings, Lighting and Emergency Drawings, Fire Alarm and Security Drawings along with their method statement and risk assessment. It also included an electrical plan for temporary works. Furthermore there are site photos outlining all electrical fixings that are related to the existing listed structure.



SMALL POWER & DATA LEGEND

- SINGLE UNSWITCHED SOCKET OUTLET.
- SINGLE SWITCHED SOCKET OUTLET 'CL' DENOTES CLEANERS SOCKET OUTLET.
- DOUBLE SWITCHED SOCKET OUTLET. 'USB' DENOTES C/W DOUBLE USB OUTLETS.
- T1 SINGLE NTE5 OR RJ45 TELEPHONE OUTLET.
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- D1 SINGLE RJ45 DATA OUTLET. 'SALTO' DENOTES FOR SALTO WIRELESS ROUTERS (DOOR ACCESS CONTROL TO OFFICES).
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- SWITCHED FUSED CONNECTION UNIT.
- UNSWITCHED FUSED CONNECTION UNIT.
- FLEX OUTLET FRONT PLATE.
- ROTARY LOCKABLE ISOLATOR SIZED AS SHOWN.
- BS60309 COMMANDO SOCKET OUTLET SIZED AS SHOWN.
- DADO TRUNKING.
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- 3 COMPARTMENT FLOOR DUCT FOR POWER & DATA WIRING.
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- FB1 2 COMPARTMENT FLOOR BOX WITH DOUBLE SWITCHED SOCKET OUTLET & 2No. DATA OUTLETS.
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- WHITE NOISE SPEAKER (SEE NOTE 5).

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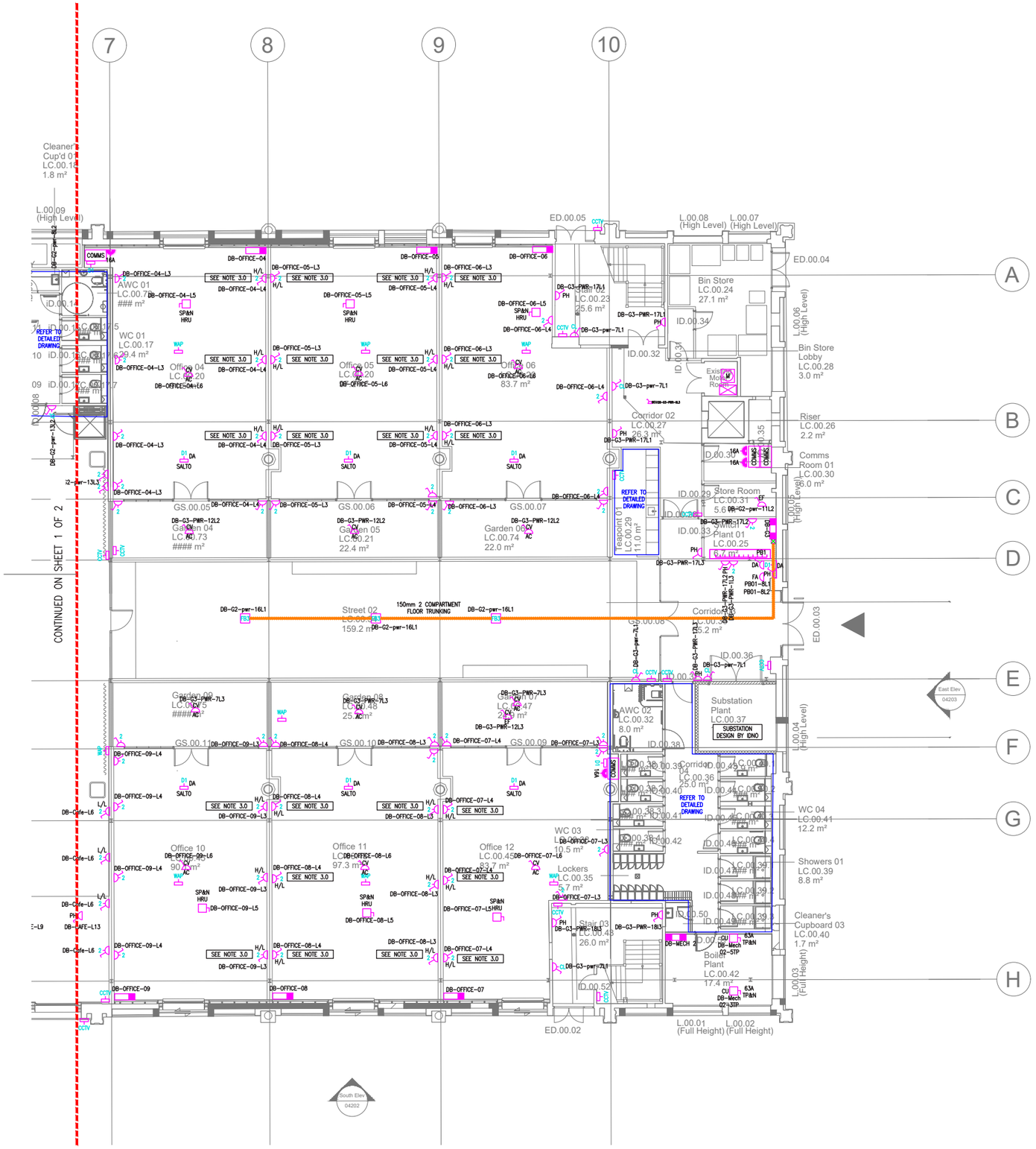
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SUPPLIES TO WATER SHUT OFF SOLENOID VALVES TBC

Revisions	Description	Ref	Eng	Date
C1	UPDATED INLINE WITH NEW LAYOUT COMMENTS RECEIVED & AMENDED HOT WATER STRATEGY, C1 ISSUE	–	SB	09.10.24
P3	REVISED FOLLOWING COMMENTS	–	SB	16.08.24
P2	REVISED FOLLOWING COMMENTS	–	SB	12.07.24

HAYVERN ELECTRICAL LTD
INDUSTRIAL • COMMERCIAL • DOMESTIC
56 QUEEN STREET, FARNWORTH, BOLTON, 01204 579975

Client	AMSPEC
Project Title	LOWER CAMPFIELD
Drawing Title	SMALL POWER GROUND FLOOR – SHEET 1 OF 2
In Association with	–
Drawn by	HCE
Checked by	DC
Date	25.04.24
Scales	1:100 (work to figured dimensions)
DRG No.	C4488/E002
Rev.	C1



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SUPPLIES TO WATER SHUT OFF SOLENOID VALVES TBC

Revisions	Description	Ref	Eng	Date
C1	UPDATED INLINE WITH NEW LAYOUT COMMENTS RECEIVED & AMENDED HOT WATER STRATEGY, C1 ISSUE	–	SB	09.10.24
P2	REVISED FOLLOWING COMMENTS	–	SB	12.07.24

HAYVERN ELECTRICAL LTD
• INDUSTRIAL • COMMERCIAL • DOMESTIC

56 QUEEN STREET, FARNWORTH, BOLTON, 01204 579975

Client	AMSPEC
Project Title	LOWER CAMPFIELD
Drawing Title	SMALL POWER GROUND FLOOR – SHEET 2 OF 2
In Association with	–
Drawn by	HCE
Checked by	DC
Date	25.04.24
Scales	1:100 (work to figured dimensions)
DRG No.	C4488/E003
Rev.	C1

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LIGHTING LEGEND

A	METAL LED HIGH BAY 2500LM CASAMBI 3K
A1	METAL LED HIGH BAY 5000LM CASAMBI 3K
B2	MILLIE SUSPENDED 1.9M MP 200mA CASAMBI BLK 4K
B2E	CASAMBI / EMERGENCY
B3	MILLIE SUSPENDED 1.13M MP 200mA CASAMBI
C	CROOKES L 2 2600lm 3K
CE	EMERGENCY
C1	CROOKES 3 2000LM 3K
C1E	EMERGENCY
C2	CROOKES 2 1400LM 3K
C2E	EMERGENCY
DE	WPZ 4' 4880LM 4K EMR
D1E	WPZ 4' 3580LM 4K EMR
EOS	LED3/CIR/BLK/OA/ST
E2	LED3/OA/ST
EXIT	EXIT SIGN - MOUNT AND DIRECTION ON ORDER
EX3	EXIT BULKHEAD SELF-TEST
F	DOM M 1535LM 60D 3K CASAMBI C/W SUSPENSIONS & CEILING PLATE
FE	CASAMBI / EMERGENCY
F1	DOM M 1152LM 60D 3K CASAMBI C/W SUSPENSIONS & CEILING PLATE
F1E	CASAMBI / EMERGENCY
H	CROOKES 3 2000LM 3K CASAMBI
HE	CASAMBI / EMERGENCYTWPZ 5' 3650LM 4K
IE	WPZ 4' 3580LM 4K EMR
J	DOM M 1152LM 60D 3K CASAMBI SUSPENDED
JE	CASAMBI / EMERGENCY
J1	DOM M 1535LM 60D 3K CASAMBI SUSPENDED
J1E	CASAMBI / EMERGENCY
ME	LDB/EMR
N	LED TAPE & EXTRUSION 2700K CASAMBI
P1	MILLIE 600MM OPAL SUSPENDED 3000K CASAMBI RAL3016 200mA
P2	TALIA 400MM 2700K CASAMBI
Q	SURFACE MOUNTED LEILA 1600LM 60D 3000K CASAMBI
R	CROOKES L 2 2600LM 3K CASAMBI
RE	CASAMBI / EMERGENCY
T	JOHN CULLEN VORSA FIX 40
CL6	MUUTO UNFOLD PENDANT TERRACOTTA - EXTENDED CABLE DROP3000K CASAMBI
W1	CREATIVE CABLES - ESSE 14 500MM 3000K CASAMBI
W3	MILOOX - FUJI WALL 2700K CASAMBI
W4	CREATIVE CABLES - ESSE 14 500MM 2700K CASAMBI
W5	MUUTO - TIP WALL - COPPER BROWN - 2700K CASAMBI
X2	RGB EXTERNAL LINAEAR WINDOW LIGHTING - HORIZONTAL MOUNTAPPROX 2M

GENERAL NOTES

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LIGHTING LEGEND

/E DENOTES C/W 3 HOUR EMERGENCY BATTERY BACK-UP & LED INDICATOR

LIGHT SWITCH. 'xg' – DENOTES No. OF GANGS.

TWO WAY LIGHT SWITCH. 'xg' – DENOTES No. OF GANGS.

INTERMEDIATE LIGHT SWITCH. 'xg' – DENOTES No. OF GANGS.

DIMMABLE LIGHT SWITCH. 'R' – DENOTES RETRACTIVE ELECTRONIC ON/OFF & DIMMING SWITCH FOR CASAMBI / DALI SYSTEMS. 'xg' –DENOTES NO. OF GANGS.

/R RETRACTIVE LIGHT SWITCH. 'xg' –DENOTES NO. OF GANGS.

/K EMERGENCY LIGHTING KEY TEST SWITCH. LABELLED FOR EACH SWITCH WITH DESCRIPTION OF CIRCUIT. ELECTRICAL SUB-CONTRACTOR TO PROVIDE REQUIRED NUMBER OF GANGS TO TEST EACH LOCAL CIRCUIT.

/PS LIGHTING CONTROL MANUAL PARTITION SWITCH.

SURFACE MOUNTED DROP DOWN MICROWAVE DETECTOR. 'DIM' – DENOTES DIMMABLE TYPE.

LCM LIGHTING CONTROL MODULE (LCM).

SCS LIGHTING CONTROL SCENE CONTROLLER. 'xg' – DENOTES No. OF GANGS.

5A UNSWITCHED ROUND PIN 5A SOCKET OUTLET ENGRAVED "FOR LIGHTING USE ONLY".

PHOTOELECTRIC CELL.

PROGRAMMABLE TIMECLOCK.

DIM RGB AMPLIFIER & DRIVER.

EXIT 3 HOUR SELF CONTAINED, NON-MAINTAINED EMERGENCY EXIT SIGN WHERE ARROW DENOTES DIRECTION OF LEGEND PANEL.

EXIT 3 HOUR SELF CONTAINED, NON-MAINTAINED DOUBLE SIDED EMERGENCY EXIT SIGN WHERE ARROW DENOTES DIRECTION OF LEGEND PANEL.

CP Lighting Controls Legend

Subject	Label
CB/1G	EN-1G-SM-W
CB/2G	EN-2G-SM-W
CB/P1	EBDSPIR-CB-NN
CB/P4D	EBDMR-CB-DD
GEFL	GEFL

EXTERNAL RGB LIGHTING CONTROLLER.

LED STRIP MOUNTED TO UNDERSIDE OF TOP CUPBOARDS.

COLUMN SPOTLIGHTS ON/OFF CONTROL FROM RECEPTION SCENE CONTROLLER.

HORIZONTAL RGB LINEAR LIGHTS INSTALLED AT EACH COLUMN. LIGHTING CONTROL TO ALLOW FOR PROGRAMMING CUSTOM MODES INCLUDING DYNAMIC COLOUR CHANGES.

CONTINUED ON SHEET 2 OF 2

Revisions	Description	Ref	Eng	Date
C2	LIGHTING SCHEME AMENDED	–	SB	29.11.24
C1	UPDATED INLINE WITH NEW LAYOUT COMMENTS RECEIVED & AMENDED HOT WATER STRATEGY, C1 ISSUE	–	SB	12.09.24

HAYVERN ELECTRICAL LTD
• INDUSTRIAL • COMMERCIAL • DOMESTIC
56 QUEEN STREET, FARNWORTH, BOLTON, 01204 579975

Client	AMSPEC
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Drawing Title	LIGHTING AND EMERGENCY LIGHTING GROUND FLOOR – SHEET 1 OF 2
In Association with	–
Drawn by	HCE
Checked by	DC
Date	25.04.24
Scales	1:100 (work to figured dimensions)
DRG No.	C4488/E010
Rev.	C2



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A1	METAL LED HIGH BAY 5000LM CASAMBI 3K
B2	MILLIE SUSPENDED 1.9M MP 200mA CASAMBI BLK 4K
B2E	CASAMBI / EMERGENCY
B3	MILLIE SUSPENDED 1.13M MP 200mA CASAMBI
C	CROOKES L 2 2600lm 3K
CE	EMERGENCY
C1	CROOKES 3 2000LM 3K
C1E	EMERGENCY
C2	CROOKES 2 1400LM 3K
C2E	EMERGENCY
DE	WPZ 4' 4880LM 4K EMR
D1E	WPZ 4' 3580LM 4K EMR
EOS	LED3/CIR/BLK/OA/ST
E2	LED3/OA/ST
EXIT	EXIT SIGN - MOUNT AND DIRECTION ON ORDER
EX3	EXIT BULKHEAD SELF-TEST
F	DOM M 1535LM 60D 3K CASAMBI C/W SUSPENSIONS & CEILING PLATE
FE	CASAMBI / EMERGENCY
F1	DOM M 1152LM 60D 3K CASAMBI C/W SUSPENSIONS & CEILING PLATE
F1E	CASAMBI / EMERGENCY
H	CROOKES 3 2000LM 3K CASAMBI
HE	CASAMBI / EMERGENCY1WPZ 5' 3650LM 4K
IE	WPZ 4' 3580LM 4K EMR
J	DOM M 1152LM 60D 3K CASAMBI SUSPENDED
JE	CASAMBI / EMERGENCY
J1	DOM M 1535LM 60D 3K CASAMBI SUSPENDED
J1E	CASAMBI / EMERGENCY
ME	LDB/EMR
N	LED TAPE & EXTRUSION 2700K CASAMBI
P1	MILLIE 600MM OPAL SUSPENDED 3000K CASAMBI RAL3016 200mA
P2	TALIA 400MM 2700K CASAMBI
Q	SURFACE MOUNTED LEILA 1600LM 60D 3000K CASAMBI
R	CROOKES L 2 2600LM 3K CASAMBI
RE	CASAMBI / EMERGENCY
T	JOHN CULLEN VORSA FIX 4Q
CL6	MUUTO UNFOLD PENDANT TERRACOTTA - EXTENDED CABLE DROP3000K CASAMBI
W1	CREATIVE CABLES - ESSE 14 500MM 3000K CASAMBI
W3	MILOOX - FUJI WALL 2700K CASAMBI
W4	CREATIVE CABLES - ESSE 14 500MM 2700K CASAMBI
W5	MUUTO - TIP WALL - COPPER BROWN - 2700K CASAMBI
X2	RGB EXTERNAL LINAEAR WINDOW LIGHTING - HORIZONTAL MOUNTAPPROX 2M

GENERAL NOTES

1.0 THE DRAWING SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION & ALL OTHER RELEVANT DOCUMENTS

2.0 DIMENSIONS SHALL NOT BE SCALED FROM THE DRAWING

LIGHTING LEGEND

- /E — DENOTES C/W 3 HOUR EMERGENCY BATTERY BACK-UP & LED INDICATOR
- LIGHT SWITCH. 'xg' – DENOTES No. OF GANGS.
- TWO WAY LIGHT SWITCH. 'xg' – DENOTES No. OF GANGS.
- INTERMEDIATE LIGHT SWITCH. 'xg' – DENOTES No. OF GANGS.
- DIMMABLE LIGHT SWITCH. 'R' – DENOTES RETRACTIVE ELECTRONIC ON/OFF & DIMMING SWITCH FOR CASAMBI / DALI SYSTEMS. 'xg' –DENOTES NO. OF GANGS.
- /R — RETRACTIVE LIGHT SWITCH. 'xg' –DENOTES NO. OF GANGS.
- /K — EMERGENCY LIGHTING KEY TEST SWITCH. LABELLED FOR EACH SWITCH WITH DESCRIPTION OF CIRCUIT. ELECTRICAL SUB-CONTRACTOR TO PROVIDE REQUIRED NUMBER OF GANGS TO TEST EACH LOCAL CIRCUIT.
- /PS — LIGHTING CONTROL MANUAL PARTITION SWITCH.
- SURFACE MOUNTED DROP DOWN MICROWAVE DETECTOR. 'DIM' – DENOTES DIMMABLE TYPE.
- LCM — LIGHTING CONTROL MODULE (LCM).
- SC — LIGHTING CONTROL SCENE CONTROLLER. 'xg' – DENOTES No. OF GANGS.
- 5A — UNSWITCHED ROUND PIN 5A SOCKET OUTLET ENGRAVED "FOR LIGHTING USE ONLY".
- PC — PHOTOELECTRIC CELL.
- TC — PROGRAMMABLE TIMECLOCK.
- DIM — RGB AMPLIFIER & DRIVER.
- EXIT — 3 HOUR SELF CONTAINED, NON-MAINTAINED EMERGENCY EXIT SIGN WHERE ARROW DENOTES DIRECTION OF LEGEND PANEL.
- EXIT — 3 HOUR SELF CONTAINED, NON-MAINTAINED DOUBLE SIDED EMERGENCY EXIT SIGN WHERE ARROW DENOTES DIRECTION OF LEGEND PANEL.

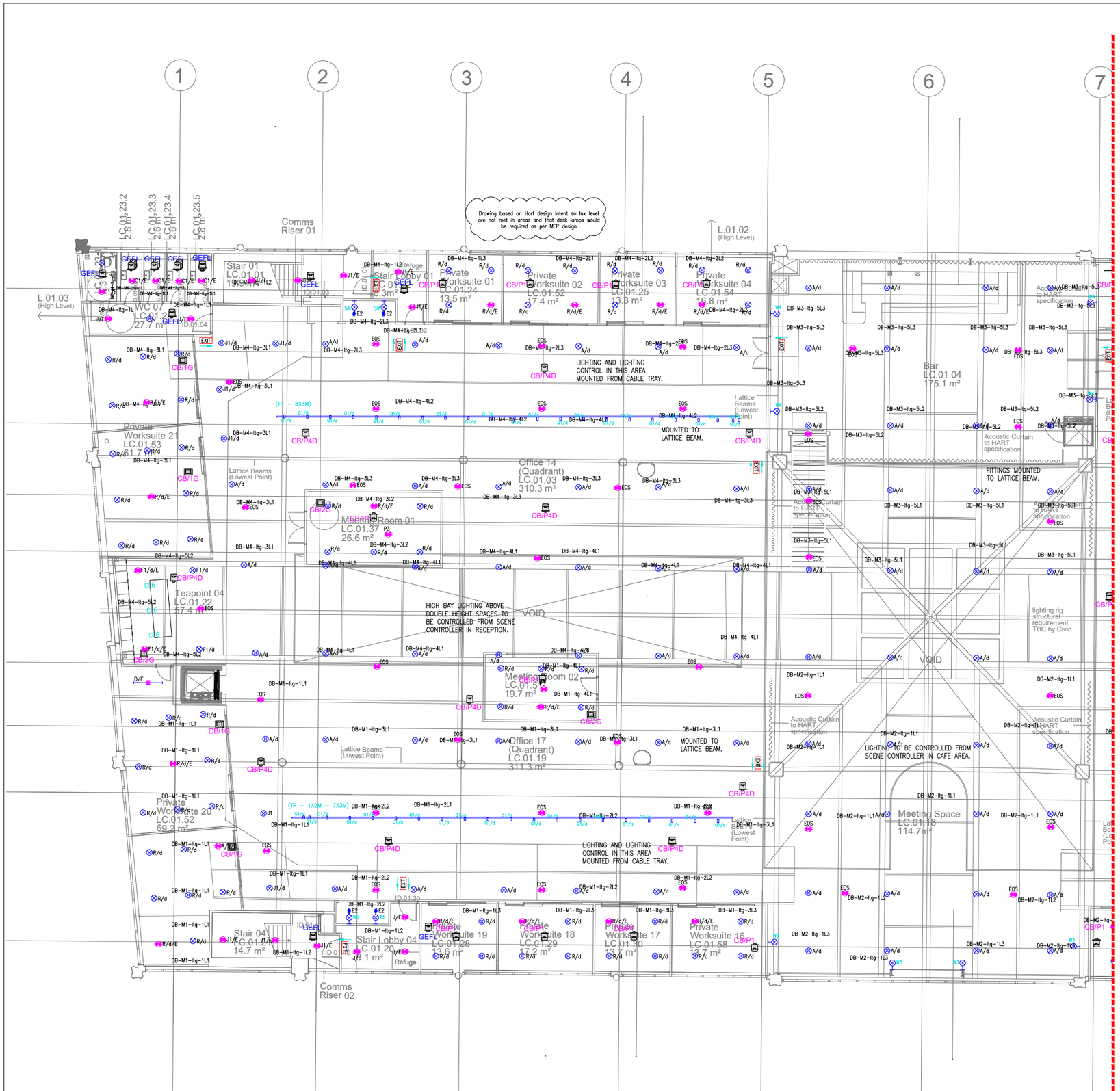
CP Lighting Controls Legend

Subject	Label
CB/1G	EN-1G-SM-W
CB/2G	EN-2G-SM-W
CB/P1	EBDSPIR-CB-NN
CB/P4D	EBDMR-CB-DD
GEFL	GEFL

C2	LIGHTING SCHEME AMENDED	–	SB	29.11.24
C1	UPDATED INLINE WITH NEW LAYOUT COMMENTS RECEIVED & AMENDED HOT WATER STRATEGY, C1 ISSUE	–	SB	12.09.24
Revisions	Description	Ref	Eng	Date

HAYVERN ELECTRICAL LTD
• INDUSTRIAL • COMMERCIAL • DOMESTIC
56 QUEEN STREET, FARNWORTH, BOLTON, 01204 579975

Client	AMSPEC
Project Title	LOWER CAMPFIELD
Drawing Title	LIGHTING AND EMERGENCY LIGHTING GROUND FLOOR – SHEET 2 OF 2
In Association with	–
Drawn by	HCE
Checked by	DC
Date	25.04.24
Scales	1:100 (work to figured dimensions)
DRG No.	C4488/E011
Rev.	C2



NOTICE

THIS DRAWING INCLUDING THE PRINCIPLES OF DESIGN, REMAINS THE PROPERTY OF HAYVERN ELECTRICAL LTD. AND IS ISSUED ON THE UNDERSTANDING THAT IT IS NOT REPRODUCED OR LOANED IN PART OR WHOLE EXCEPT WITH THE OWNERS WRITTEN CONSENT. IT IS NOT TO BE USED IN ANY MANNER THAT MAY BE DETRIMENTAL TO HAYVERN ELECTRICAL LTD. ACCEPTANCE OF THIS DRAWING WILL BE CONSTRUED AS AN AGREEMENT OF THE ABOVE.

GENERAL LEGEND

L/L	ITEM MOUNTED AT LOW LEVEL.
H/L	ITEM MOUNTED AT HIGH LEVEL.
C/V	ITEM MOUNTED IN CEILING VOID.
R/V	ITEM MOUNTED IN ROOF VOID.
F/V	ITEM MOUNTED IN FLOOR VOID.
W/T	ITEM MOUNTED AT WORKTOP LEVEL.
WP	DENOTES WEATHERPROOF IP65 TYPE SUITABLE FOR EXTERNAL USE.
EX	DENOTES EXISTING TO BE RETAINED.
R	DENOTES EXISTING TO BE RELOCATED.
R.T.A.	RISE TO ABOVE.
R.F.B.	RISE FROM BELOW.
D.F.A.	DROP FROM ABOVE.
D.T.B.	DROP TO BELOW.

LIGHTING LEGEND

A	METAL LED HIGH BAY 2500LM CASAMBI 3K
A1	METAL LED HIGH BAY 5000LM CASAMBI 3K
B2	MILLIE SUSPENDED 1.9M MP 200mA CASAMBI BLK 4K
B2E	CASAMBI / EMERGENCY
B3	MILLIE SUSPENDED 1.13M MP 200mA CASAMBI
C	CROOKES L2 2600lm 3K
CE	EMERGENCY
C1	CROOKES 3 2000LM 3K
C1E	EMERGENCY
C2	CROOKES 2 1400LM 3K
C2E	EMERGENCY
DE	WPZ 4' 4880LM 4K EMR
D1E	WPZ 4' 3580LM 4K EMR
EOS	LED3/CIR/BLK/OA/ST
E2	LED3/OA/ST
EXIT	EXIT SIGN - MOUNT AND DIRECTION ON ORDER
EX3	EXIT BULKHEAD SELF-TEST
F	DOM M 1535LM 60D 3K CASAMBI C/W SUSPENSIONS & CEILING PLATE
FE	CASAMBI / EMERGENCY
F1	DOM M 1152LM 60D 3K CASAMBI C/W SUSPENSIONS & CEILING PLATE
F1E	CASAMBI / EMERGENCY
H	CROOKES 3 2000LM 3K CASAMBI
HE	CASAMBI / EMERGENCYWPZ 5' 3650LM 4K
IE	WPZ 4' 3580LM 4K EMR
J	DOM M 1152LM 60D 3K CASAMBI SUSPENDED
JE	CASAMBI / EMERGENCY
J1	DOM M 1535LM 60D 3K CASAMBI SUSPENDED
J1E	CASAMBI / EMERGENCY
ME	LDB/EMR
N	LED TAPE & EXTRUSION 2700K CASAMBI
P1	MILLIE 600MM OPAL SUSPENDED 3000K CASAMBI RAL3016 200mA
P2	TALIA 400MM 2700K CASAMBI
Q	SURFACE MOUNTED LEILA 1600LM 60D 3000K CASAMBI
R	CROOKES L 2 2600LM 3K CASAMBI
RE	CASAMBI / EMERGENCY
T	JOHN CULLEN VORSA FIX 40
CL6	MULTO UNFOLD PENDANT TERRACOTTA - EXTENDED CABLE DROP3000K CASAMBI
W1	CREATIVE CABLES - ESSE 14 500MM 3000K CASAMBI
W3	MILOOX - FUJI WALL 2700K CASAMBI
W4	CREATIVE CABLES - ESSE 14 500MM 2700K CASAMBI
W5	MUUTO - TIP WALL - COPPER BROWN - 2700K CASAMBI
X2	RGB EXTERNAL LINEAR WINDOW LIGHTING - HORIZONTAL MOUNTAPPROX 2M

GENERAL NOTES

1.0 THE DRAWING SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION & ALL OTHER RELEVANT DOCUMENTS

2.0 DIMENSIONS SHALL NOT BE SCALED FROM THE DRAWING

LIGHTING LEGEND

/E	DENOTES C/W 3 HOUR EMERGENCY BATTERY BACK-UP & LED INDICATOR
	LIGHT SWITCH. 'xg' – DENOTES No. OF GANGS.
	TWO WAY LIGHT SWITCH. 'xg' – DENOTES No. OF GANGS.
	INTERMEDIATE LIGHT SWITCH. 'xg' – DENOTES No. OF GANGS.
	DIMMABLE LIGHT SWITCH. 'R' – DENOTES RETRACTIVE ELECTRONIC ON/OFF & DIMMING SWITCH FOR CASAMBI / DALI SYSTEMS. 'xg' –DENOTES NO. OF GANGS.
R	RETRACTIVE LIGHT SWITCH. 'xg' –DENOTES NO. OF GANGS.
K	EMERGENCY LIGHTING KEY TEST SWITCH. LABELLED FOR EACH SWITCH WITH DESCRIPTION OF CIRCUIT. ELECTRICAL SUB-CONTRACTOR TO PROVIDE REQUIRED NUMBER OF GANGS TO TEST EACH LOCAL CIRCUIT.
PS	LIGHTING CONTROL MANUAL PARTITION SWITCH.
	SURFACE MOUNTED DROP DOWN MICROWAVE DETECTOR. 'DIM' – DENOTES DIMMABLE TYPE.
LCM	LIGHTING CONTROL MODULE (LCM).
SC	LIGHTING CONTROL SCENE CONTROLLER. 'xg' – DENOTES No. OF GANGS.
5A	UNSWITCHED ROUND PIN 5A SOCKET OUTLET ENGRAVED "FOR LIGHTING USE ONLY".
PC	PHOTOELECTRIC CELL.
TC	PROGRAMMABLE TIMECLOCK.
DIM	RGB AMPLIFIER & DRIVER.
EXIT	3 HOUR SELF CONTAINED, NON-MAINTAINED EMERGENCY EXIT SIGN WHERE ARROW DENOTES DIRECTION OF LEGEND PANEL.
EXIT	3 HOUR SELF CONTAINED, NON-MAINTAINED DOUBLE SIDED EMERGENCY EXIT SIGN WHERE ARROW DENOTES DIRECTION OF LEGEND PANEL.

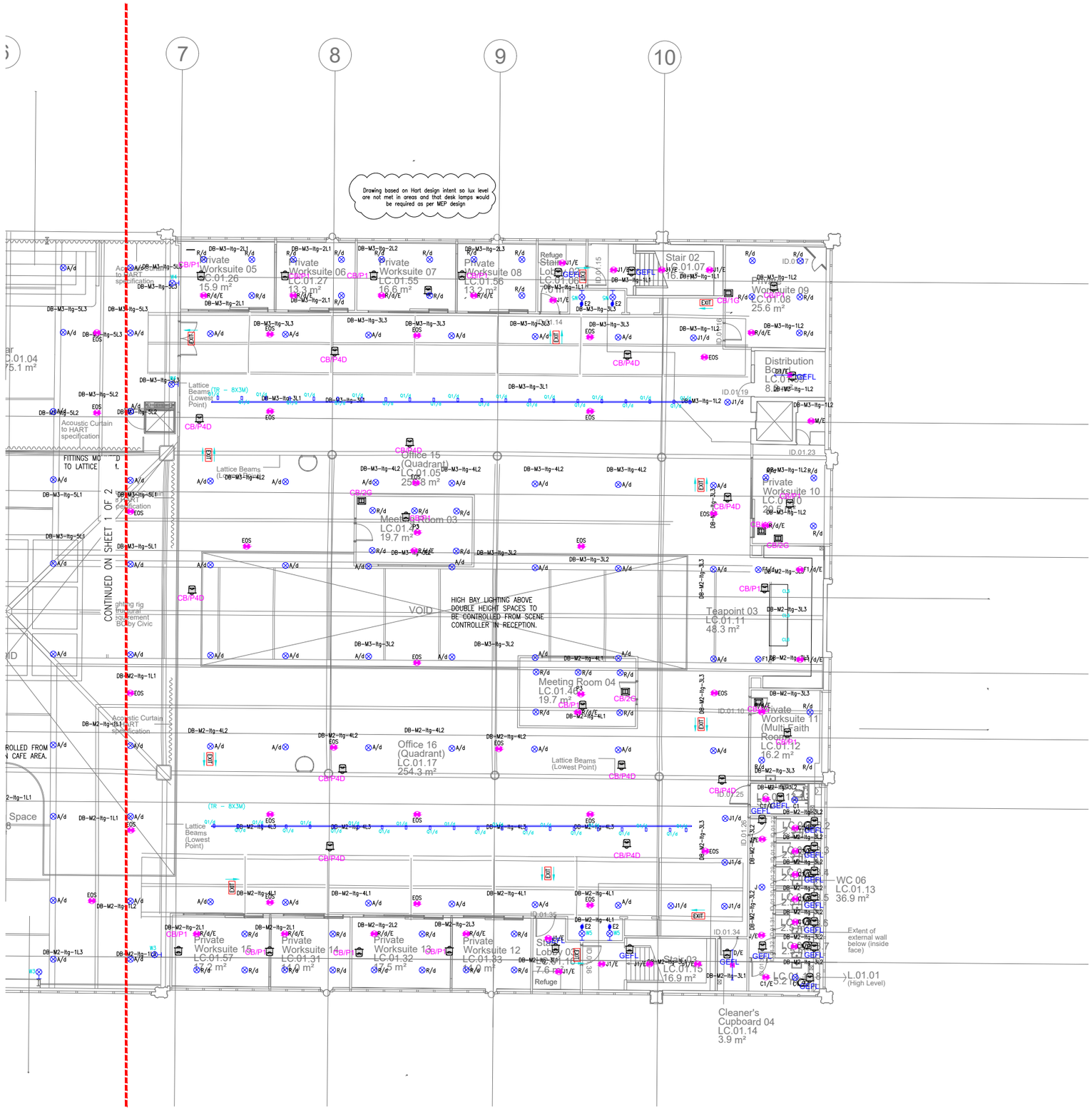
CP Lighting Controls Legend

Subject	Label
CB/1G	EN-1G-SM-W
CB/2G	EN-2G-SM-W
CB/P1	EBDSPIR-CB-NN
CB/P4D	EBDMR-CB-DD
GEFL	GEFL

Revisions	Description	Ref	Eng	Date
C1	UPDATED INLINE WITH NEW LAYOUT COMMENTS RECEIVED & AMENDED HOT WATER STRATEGY, C1 ISSUE	–	SB	12.09.24

HAYVERN ELECTRICAL LTD
• INDUSTRIAL • COMMERCIAL • DOMESTIC
56 QUEEN STREET, FARNWORTH, BOLTON, 01204 579975

Client	AMSPEC
Project Title	LOWER CAMPFIELD
Drawing Title	LIGHTING AND EMERGENCY LIGHTING HIGH LEVEL MEZZANINE – SHEET 1 OF 2
In Association with	–
Drawn by	HCE
Checked by	DC
Date	25.04.24
Scales	1:100 (work to figured dimensions)
DRG No.	C4488/E014
Rev.	C1



NOTICE

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GENERAL LEGEND

L/L	ITEM MOUNTED AT LOW LEVEL.
H/L	ITEM MOUNTED AT HIGH LEVEL.
C/V	ITEM MOUNTED IN CEILING VOID.
R/V	ITEM MOUNTED IN ROOF VOID.
F/V	ITEM MOUNTED IN FLOOR VOID.
W/T	ITEM MOUNTED AT WORKTOP LEVEL.
WP	DENOTES WEATHERPROOF IP65 TYPE SUITABLE FOR EXTERNAL USE.
EX	DENOTES EXISTING TO BE RETAINED.
R	DENOTES EXISTING TO BE RELOCATED.
R.T.A.	RISE TO ABOVE.
R.F.B.	RISE FROM BELOW.
D.F.A.	DROP FROM ABOVE.
D.T.B.	DROP TO BELOW.

GENERAL NOTES

1.0 THE DRAWING SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION & ALL OTHER RELEVANT DOCUMENTS

2.0 DIMENSIONS SHALL NOT BE SCALED FROM THE DRAWING

LIGHTING LEGEND

- DENOTES C/W 3 HOUR EMERGENCY BATTERY BACK-UP & LED INDICATOR
- LIGHT SWITCH. 'x' – DENOTES No. OF GANGS.
- TWO WAY LIGHT SWITCH. 'x' – DENOTES No. OF GANGS.
- INTERMEDIATE LIGHT SWITCH. 'x' – DENOTES No. OF GANGS.
- DIMMABLE LIGHT SWITCH. 'R' – DENOTES RETRACTIVE ELECTRONIC ON/OFF & DIMMING SWITCH FOR CASAMBI / DALI SYSTEMS. 'x' –DENOTES NO. OF GANGS.
- RETRACTIVE LIGHT SWITCH. 'x' –DENOTES NO. OF GANGS.
- EMERGENCY LIGHTING KEY TEST SWITCH. LABELLED FOR EACH SWITCH WITH DESCRIPTION OF CIRCUIT. ELECTRICAL SUB-CONTRACTOR TO PROVIDE REQUIRED NUMBER OF GANGS TO TEST EACH LOCAL CIRCUIT.
- LIGHTING CONTROL MANUAL PARTITION SWITCH.
- SURFACE MOUNTED DROP DOWN MICROWAVE DETECTOR. 'DIM' – DENOTES DIMMABLE TYPE.
- LCM — LIGHTING CONTROL MODULE (LCM).
- SC — LIGHTING CONTROL SCENE CONTROLLER. 'x' – DENOTES No. OF GANGS.
- 5A — UNSWITCHED ROUND PIN 5A SOCKET OUTLET ENGRAVED "FOR LIGHTING USE ONLY".
- PC — PHOTOELECTRIC CELL.
- TC — PROGRAMMABLE TIMECLOCK.
- DIM — RGB AMPLIFIER & DRIVER.
- EXIT — 3 HOUR SELF CONTAINED, NON-MAINTAINED EMERGENCY EXIT SIGN WHERE ARROW DENOTES DIRECTION OF LEGEND PANEL.
- LEXIT — 3 HOUR SELF CONTAINED, NON-MAINTAINED DOUBLE SIDED EMERGENCY EXIT SIGN WHERE ARROW DENOTES DIRECTION OF LEGEND PANEL.

CP Lighting Controls Legend

Subject	Label
CB/1G	EN-1G-SM-W
CB/2G	EN-2G-SM-W
CB/P1	EBDSPIR-CB-NN
CB/P4D	EBDMR-CB-DD
GEFL	GEFL

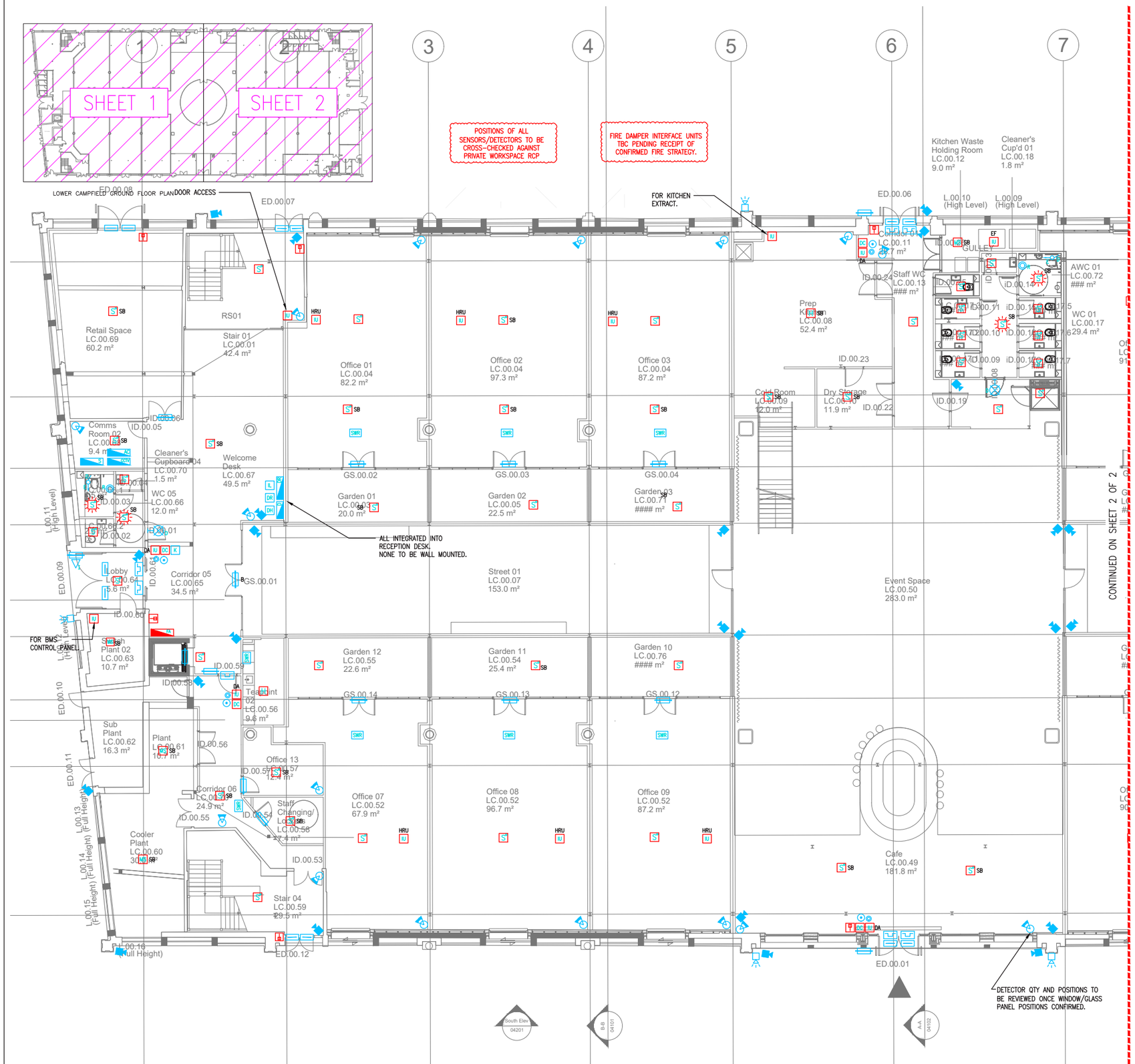
LIGHTING LEGEND

	METAL LED HIGH BAY 2500LM CASAMBI 3K
	METAL LED HIGH BAY 5000LM CASAMBI 3K
	MILLIE SUSPENDED 1.9M MP 200mA CASAMBI BLK 4K
E	CASAMBI / EMERGENCY
	MILLIE SUSPENDED 1.13M MP 200mA CASAMBI
	CROOKES L 2 2600M 3K EMERGENCY
	CROOKES 3 2000LM 3K
E	EMERGENCY
	CROOKES 2 1400LM 3K
E	EMERGENCY
	WPZ 4' 4880LM 4K EMR
E	WPZ 4' 3580LM 4K EMR
S	LED3/CIR/BLK/OA/ST
	LED3/OA/ST
IT	EXIT SIGN - MOUNT AND DIRECTION ON ORDER
3	EXIT BULKHEAD SELF-TEST
	DOM M 1535LM 60D 3K CASAMBI C/W SUSPENSIONS & CEILING PLATE
	CASAMBI / EMERGENCY
	DOM M 1152LM 60D 3K CASAMBI C/W SUSPENSIONS & CEILING PLATE
E	CASAMBI / EMERGENCY
	CROOKES 3 2000LM 3K CASAMBI
	CASAMBI / EMERGENCYTWPZ 5' 3650LM 4K
	WPZ 4' 3580LM 4K EMR
	DOM M 1152LM 60D 3K CASAMBI SUSPENDED
	CASAMBI / EMERGENCY
	DOM M 1535LM 60D 3K CASAMBI SUSPENDED
E	CASAMBI / EMERGENCY
	LDB/EMR
	LED TAPE & EXTRUSION 2700K CASAMBI
	MILLIE 600MM OPAL SUSPENDED 3000K CASAMBI RAL3016 200mA
	TALIA 400MM 2700K CASAMBI
	SURFACE MOUNTED LEILA 1600LM 60D 3000K CASAMBI
	CROOKES L 2 2600LM 3K CASAMBI
	CASAMBI / EMERGENCY
	JOHN CULLEN VORSA FIX 40
6	MUUTO UNFOLD PENDANT TERRACOTTA - EXTENDED CABLE DROP3000K CASAMBI
1	CREATIVE CABLES - ESSE 14 500MM 3000K CASAMBI
3	MILOOX - FUJI WALL 2700K CASAMBI
4	CREATIVE CABLES - ESSE 14 500MM 2700K CASAMBI
5	MUUTO - TIP WALL - COPPER BROWN - 2700K CASAMBI
	RGB EXTERNAL LINEAR WINDOW LIGHTING - HORIZONTAL MOUNTAPPROX 2M

Revisions	Description	Ref	Eng	Date
C1	UPDATED INLINE WITH NEW LAYOUT COMMENTS RECEIVED & AMENDED HOT WATER STRATEGY, C1 ISSUE	–	SB	12.09.24

HAYVERN ELECTRICAL LTD
• INDUSTRIAL • COMMERCIAL • DOMESTIC
56 QUEEN STREET, FARNWORTH, BOLTON, 01204 579975

Client	AMSPEC
Project Title	LOWER CAMPFIELD
Drawing Title	LIGHTING AND EMERGENCY LIGHTING HIGH LEVEL MEZZANINE – SHEET 2 OF 2
In Association with	–
Drawn by	HCE
Checked by	DC
Date	25.04.24
Scales	1:100 (work to figured dimensions)
DRG No.	C4488/E015
Rev.	C1





DISABLED WC WALL MOUNTED REPEAT ALARM LAMP UNIT
FINISH TO BE CONFIRMED BY INTERIOR DESIGNER

NOTICE

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FIRE ALARMS LEGEND

- MAIN FIRE ALARM PANEL.
- FIRE ALARM REPEATER PANEL.
- MANUAL CALL POINT.
- INTERFACE UNIT. 'DC' DENOTES DOOR CLOSER IN CEILING VOID. 'DH' DENOTES DOOR HOLD OPEN IN CEILING VOID. 'DA' DENOTES FOR DOOR ACCESS. 'EF' – DENOTES EXTRACT FAN. 'HRU' – HEAT RECOVERY UNIT.
- OPTICAL SMOKE DETECTOR.
- OPTICAL SMOKE DETECTOR C/W SOUNDER BASE.
- OPTICAL SMOKE DETECTOR C/W SOUNDER BASE & FLASHING BEACON.
- HEAT DETECTOR.
- HEAT DETECTOR C/W SOUNDER BASE.
- HEAT DETECTOR C/W SOUNDER BASE & FLASHING BEACON.
- MULTI-SENSOR DETECTOR.
- MULTI-SENSOR DETECTOR C/W SOUNDER BASE.
- MULTI-SENSOR DETECTOR C/W SOUNDER BASE & FLASHING BEACON.
- OPTICAL SMOKE DETECTOR MOUNTED IN CEILING VOID WITH REMOTE INDICATOR MOUNTED DIRECTLY BELOW.
- REMOTE INDICATOR UNIT.
- BEAM DETECTOR TRANSMITTER AT H/L.
- BEAM DETECTOR RECEIVER AT H/L.
- ELECTRONIC SOUNDER.
- ELECTRONIC SOUNDER & FLASHING BEACON.

INTRUDER ALARM LEGEND

- INTRUDER ALARM PANEL.
- DOOR/WINDOW CONTACT.
- KEYPAD.
- DUALTECH DETECTOR.
- SOUNDER & FLASHING BEACON.

CCTV LEGEND

- CCTV SYSTEM CONTROL EQUIPMENT & MONITOR.
- FIXED CCTV CAMERA.

GENERAL NOTES

1.0 THE DRAWING SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION & ALL OTHER RELEVANT DOCUMENTS & DRAWINGS PROVIDED BY MEP DESIGN.

2.0 DIMENSIONS SHALL NOT BE SCALED FROM THE DRAWING

SERVICES SPECIFIC NOTES

1.0 COLOUR/FINISH OF ALL VISIBLE MEP/ACCESS CONTROL/FIRE/CCTV ITEMS IS TBC BY INTERIOR DESIGNER.

2.0 DATASHEETS OF ALL VISIBLE ITEMS ARE REQUIRED FOR REVIEW AND APPROVAL BY INTERIOR DESIGNER.

GENERAL LEGEND

L/L	ITEM MOUNTED AT LOW LEVEL.
H/L	ITEM MOUNTED AT HIGH LEVEL.
C/V	ITEM MOUNTED IN CEILING VOID.
R/V	ITEM MOUNTED IN ROOF VOID.
F/V	ITEM MOUNTED IN FLOOR VOID.
W/T	ITEM MOUNTED AT WORKTOP LEVEL.
WP	DENOTES WEATHERPROOF IP65 TYPE SUITABLE FOR EXTERNAL USE.
EX	DENOTES EXISTING TO BE RETAINED.
R	DENOTES EXISTING TO BE RELOCATED.
R.T.A.	RISE TO ABOVE.
R.F.B.	RISE FROM BELOW.
D.F.A.	DROP FROM ABOVE.
D.T.B.	DROP TO BELOW.

ACCESS CONTROL LEGEND

- ACCESS CONTROL PANEL/HEAD END P.C.
- ELECTRONIC KEYPAD/PROXIMITY READER/SWIPE CARD READER FOR DOOR RELEASE. 'B' DENOTES BATTERY OPERATED WIRELESS SMART DOOR LOCK.
- THUMB TURN CYLINDER LOCK C/W INTEGRATED CARD REA
- GREEN BREAKGLASS.
- GREEN REQUEST TO EXIT BUTTON.
- DOOR CONTROLLER.
- INTERCOM.
- DOOR INTERCOM HANDSET.
- REMOTE DOOR RELEASE BUTTON.
- SALTO WIRELESS ROUTER.
- MAGLOCK.

DISABLED WC ALARM LEGEND

- DISABLED WC ALARM INDICATOR PANEL.
- DISABLED WC EMERGENCY PULL CORD.
- DISABLED WC RESET BUTTON.
- DISABLED WC WALL MOUNTED REPEAT ALARM LAMP UNIT.

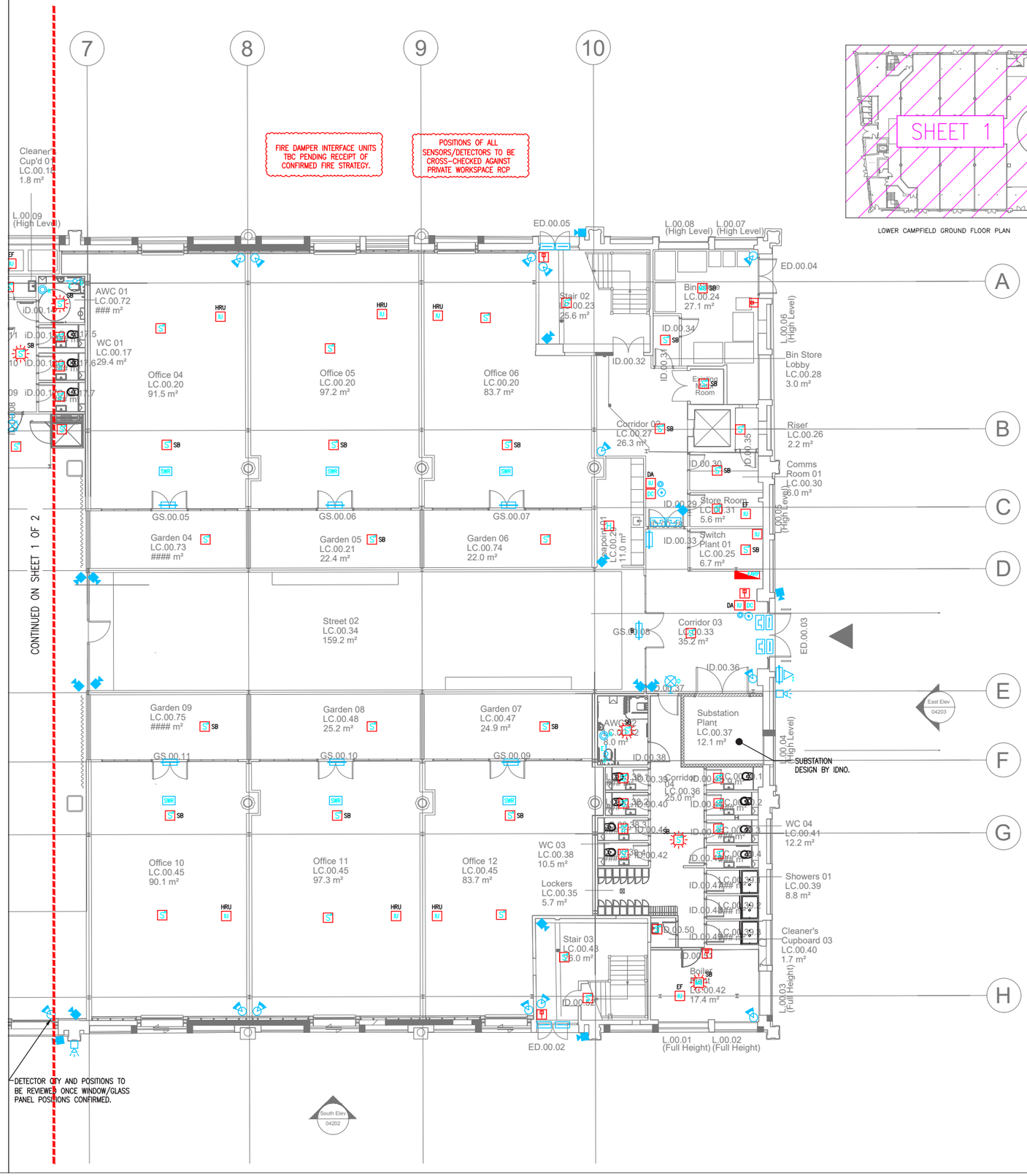
DISABLED REFUGE LEGEND

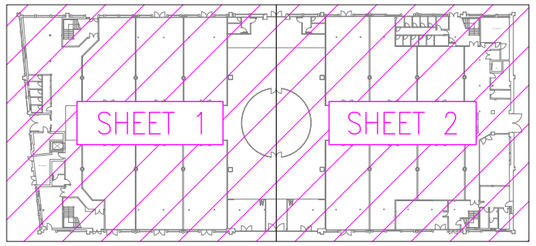
- DISABLED REFUGE ALARM PANEL.
- DISABLED REFUGE ALARM CALL POINT.

Revisions	Description	Ref	Eng	Date
C2	REVISED FOLLOWING COMMENTS	–	SB	13.11.24
C1	UPDATED INLINE WITH NEW LAYOUT & COMMENTS RECEIVED	–	SB	09.10.24

HAYVERN ELECTRICAL LTD
• INDUSTRIAL • COMMERCIAL • DOMESTIC
56 QUEEN STREET, FARNWORTH, BOLTON, 01204 579975

Client	AMSPEC
Project Title	LOWER CAMPFIELD
Drawing Title	FIRE ALARM AND SECURITY GROUND FLOOR – SHEET 1 OF 2
In Association with	–
Drawn by	HCE
Checked by	DC
Date	25.04.24
Scales	1:100 (work to figured dimensions)
DRG No.	C4488/E016
Rev.	C2





LOWER CAMPFIELD GROUND FLOOR PLAN

FIRE ALARMS LEGEND

- MAIN FIRE ALARM PANEL.
- FIRE ALARM REPEATER PANEL.
- MANUAL CALL POINT.
- INTERFACE UNIT. 'DC' DENOTES DOOR CLOSER IN CEILING VOID. 'DH' DENOTES DOOR HOLD OPEN IN CEILING VOID. 'DA' DENOTES FOR DOOR ACCESS. 'EF' – DENOTES EXTRACT FAN. 'HRU' – HEAT RECOVERY UNIT.
- OPTICAL SMOKE DETECTOR.
- OPTICAL SMOKE DETECTOR C/W SOUNDER BASE.
- OPTICAL SMOKE DETECTOR C/W SOUNDER BASE & FLASHING BEACON.
- HEAT DETECTOR.
- HEAT DETECTOR C/W SOUNDER BASE.
- HEAT DETECTOR C/W SOUNDER BASE & FLASHING BEACON.
- MULTI-SENSOR DETECTOR.
- MULTI-SENSOR DETECTOR C/W SOUNDER BASE.
- MULTI-SENSOR DETECTOR C/W SOUNDER BASE & FLASHING BEACON.
- OPTICAL SMOKE DETECTOR MOUNTED IN CEILING VOID WITH REMOTE INDICATOR MOUNTED DIRECTLY BELOW.
- REMOTE INDICATOR UNIT.
- BEAM DETECTOR TRANSMITTER AT H/L.
- BEAM DETECTOR RECEIVER AT H/L.
- ELECTRONIC SOUNDER.
- ELECTRONIC SOUNDER & FLASHING BEACON.

INTRUDER ALARM LEGEND

- INTRUDER ALARM PANEL.
- DOOR/WINDOW CONTACT.
- KEYPAD.
- DUALTECH DETECTOR.
- SOUNDER & FLASHING BEACON.

CCTV LEGEND

- CCTV SYSTEM CONTROL EQUIPMENT & MONITOR.
- FIXED CCTV CAMERA.



DISABLED WC WALL MOUNTED REPEAT ALARM LAMP UNIT
FINISH TO BE CONFIRMED BY INTERIOR DESIGNER

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F/V	ITEM MOUNTED IN FLOOR VOID.
W/T	ITEM MOUNTED AT WORKTOP LEVEL.
WP	DENOTES WEATHERPROOF IP65 TYPE SUITABLE FOR EXTERNAL USE.
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R	DENOTES EXISTING TO BE RELOCATED.
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R.F.B.	RISE FROM BELOW.
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- INTERCOM.
- DOOR INTERCOM HANDSET.
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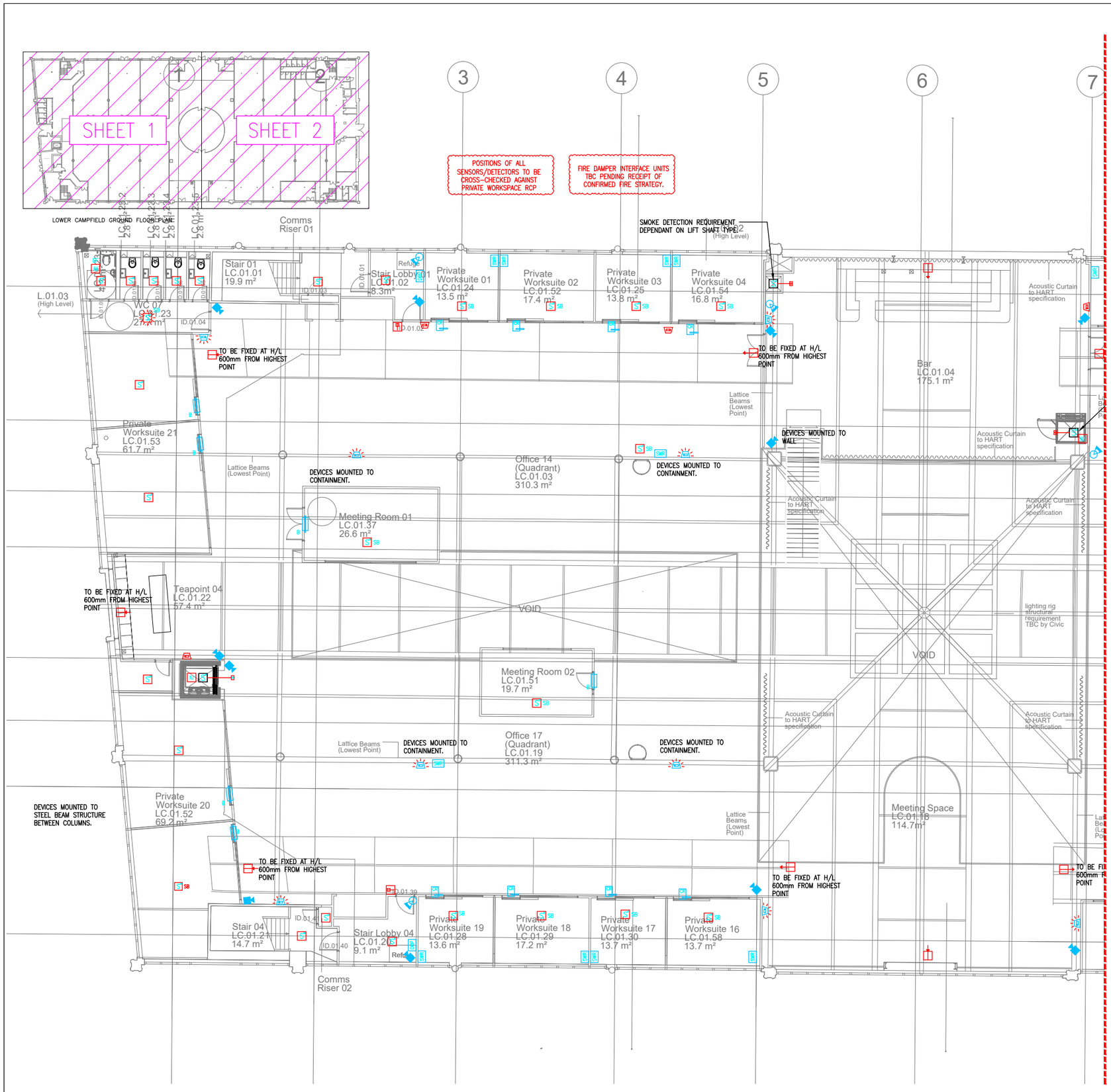
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Revisions	Description	Ref	Eng	Date
C2	REVISED FOLLOWING COMMENTS	–	SB	13.11.24
C1	UPDATED INLINE WITH NEW LAYOUT & COMMENTS RECEIVED	–	SB	09.10.24

HAYVERN ELECTRICAL LTD
• INDUSTRIAL • COMMERCIAL • DOMESTIC
56 QUEEN STREET, FARNWORTH, BOLTON, 01204 579975

Client	AMSPEC
Project Title	LOWER CAMPFIELD
Drawing Title	FIRE ALARM AND SECURITY GROUND FLOOR – SHEET 2 OF 2
In Association with	–
Drawn by	HCE
Checked by	DC
Date	25.04.24
Scales	1:100 (work to figured dimensions)
DRG No.	C4488/E017
Rev.	C2



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DISABLED WC WALL MOUNTED REPEAT ALARM LAMP UNIT
FINISH TO BE CONFIRMED BY INTERIOR DESIGNER

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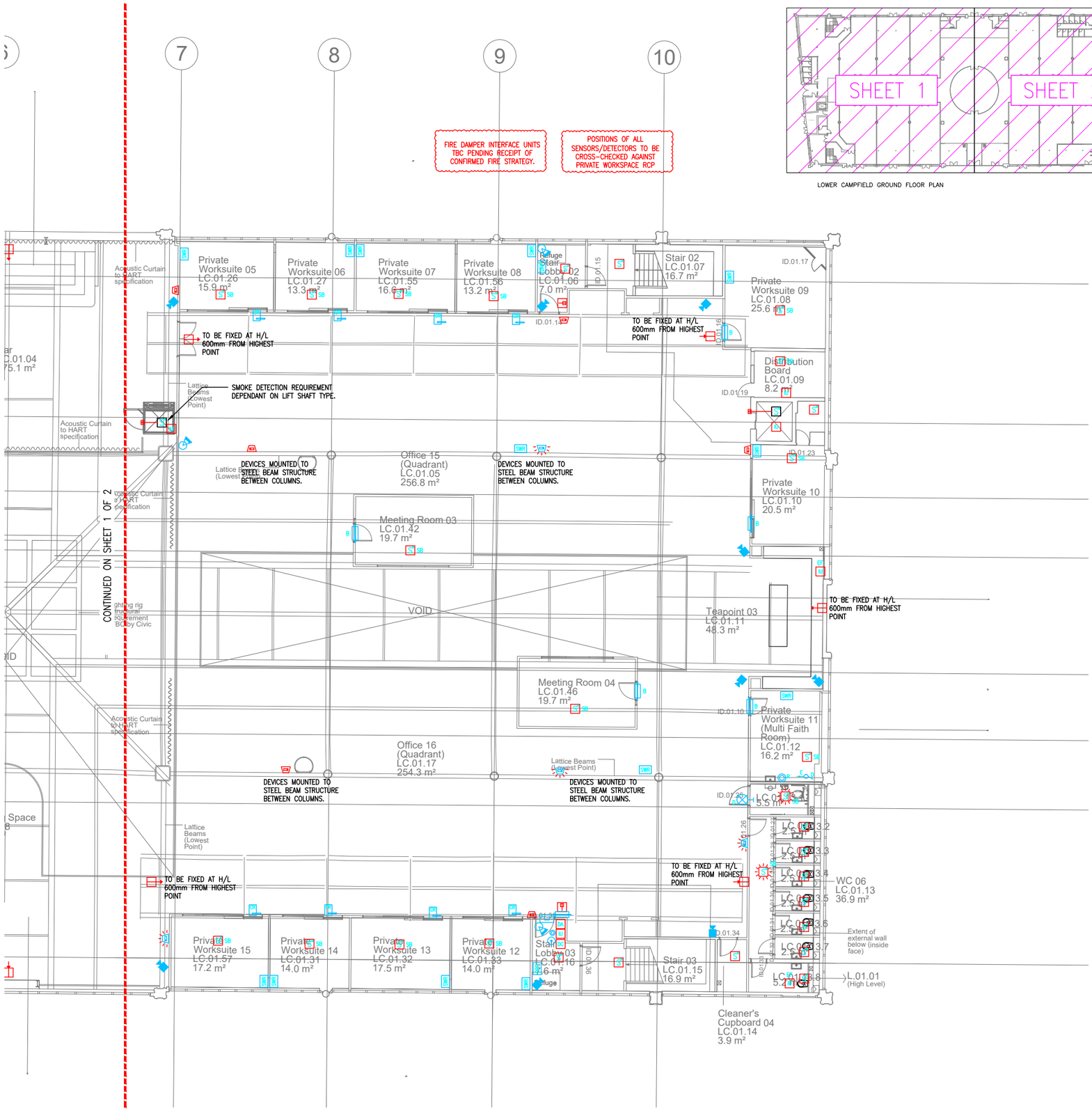
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• INDUSTRIAL • COMMERCIAL • DOMESTIC
56 QUEEN STREET, FARNWORTH, BOLTON, 01204 579975

Client	AMSPEC
Project Title	LOWER CAMPFIELD
Drawing Title	FIRE ALARM AND SECURITY MEZZANINE – SHEET 1 OF 2
In Association with	–
Drawn by	HCE
Checked by	DC
Date	25.04.24
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LOWER CAMPFIELD GROUND FLOOR PLAN

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HAYVERN ELECTRICAL LTD
• INDUSTRIAL • COMMERCIAL • DOMESTIC
56 QUEEN STREET, FARNWORTH, BOLTON, 01204 579975

Client	AMSPEC
Project Title	LOWER CAMPFIELD
Drawing Title	FIRE ALARM AND SECURITY MEZZANINE – SHEET 2 OF 2
In Association with	–
Drawn by	HCE
Checked by	DC
Date	25.04.24
Scales	1:100 (work to figured dimensions)
DRG No.	C4488/E019
Rev.	C2

HAYVERN ELECTRICAL LIMITED
56 QUEEN STREET
FARNWORTH
BOLTON
BL4 7DX

Tel : 01204 579975
Fax : 01204 571845

METHOD STATEMENT

&

RISK ASSESSMENT

ELECTRICAL INSTALLATIONS

LOCATION : Lower Campfield Market
Lower Byrom Street
Manchester
M3 4FP

HAYVERN ELECTRICAL LIMITED
56 Queen Street, Farnworth, Bolton, Lancs BL4 7DX
Tel : 01204 579975 Fax : 01204 571845

Ref : HE MS C4488 Date : 18/04/2024

Lower Campfield Market
Internal Alterations
Method Statement

This method statement details the sequence of works to carry out the electrical installation work in connection with the internal alterations within Lower Campfield Market, Lower Byrom Street, Manchester M3 4FP.

Commencement Date : 24/04/2024
Completion Date : TBC

1. Services to be provided within the Electrical Installation:
   - (a) Installation of Site Temporary services
   - (b) Installation of new General, Emergency & External Lighting
   - (c) Installation of new Small Power
   - (d) Strip Out / Isolations
   - (e) Installation of new Fire Alarm Devices & Disabled Refuge System
   - (f) Installation of new Containment Systems
   - (g) Installation of new LV Distribution
   - (h) Installation of new Data
   - (i) Installation of new Intruder Alarm
   - (j) Installation of new Door access
   - (k) Installation of new CCTV
   - (f) Testing

2. All Hayvern Electrical & any relevant sub-contractors working for Hayvern Electrical will comply with the appropriate legislation & codes of practice with particular reference to:-
   - CDM Regulations 2015
   - H&S At Work Act 1974
   - Management of H&S at Work Regulations 1999
   - All Client Site Rules & Procedures
   - All relevant Hayvern Electrical Limited Codes of Practice
   - The Electricity at Work Regulations 1989
   - RIDDOR 2013
   - COSHH

3. Description of Works :

   This Project entails the Strip Out and new installation works to the Ground and Mezzanine levels of Lower Campfield Market, Lower Byrom St, in Manchester to carry out the new installation of the Electrical Services to the building on behalf of Allied London.
   Works include the reconfiguration of the existing electrical building services systems and installation of new systems in-line with the Electrical Design Drawings.
   Works will include the installation of new Distribution Equipment that all the new Lighting & Power Circuits will be fed from..
   A digital multifunction meter will be installed on the main incoming switch of the new main switchboard and similar metering shall be provided on each of the outgoing ways to separate sub-metering for the building.

   New Lighting, Power Supplies, Data requirements CCTV & Door Access Systems, Containment & fire alarm cabling to be installed to Ground and mezzanine levels of the building.

The lighting will comprise of LED Luminaires :
Level 1 Ground and mezzanine : LED Surface Luminaires suspended on chains
External :LED Lighting controlled by timeclock & photocells

Installation of Supplies to Mechanical Services/Equipment.
CCTV, Door Access & Fire Alarm Systems will be installed throughout the Building.

The main fire alarm panel will be located within the entrance area from Lower Byrom Street and additional repeater panel Byrom St will be installed at the entrance from . The Security installations will be undertaken by specialist contractors to supply, install & commission the systems.

All Circuits that are to be altered/adapted will be isolated at source by a competent approved Electrician. The Circuit will be locked off with a Padlock or the MCB will be removed and retained with operative at all times. This will then be tested to ensure all live parts are "DEAD"
NO LIVE WORKING WILL TAKE PLACE.
We will isolate the Circuit's, by "locking off" the MCB/Isolator and then installing appropriate Warning Notices stating:
"Men working – DO NOT SWITCH ON".
Once the Circuit has been isolated and locked off, we will establish that no voltage is present utilising a test lamp plug-in device so works will commence only when it has been confirmed that no voltage is present at the existing sockets and the fused connection units.

We will use the following hand tools and test equipment.

a) Insulated screw drivers
b) Cable croppers
c) Proving meter
d) Multifunctional Tester
e) Voltage tester

On completion of our works the existing and new circuits will be tested in accordance with BS7671 IEE 18th Edition Wiring Regulations and all results reported on NICEIC Test Sheets. On satisfaction of all test results the circuits will be re-energised.

All isolation to be agreed with the Client before work will commence.

Podium Steps/Mobile Towers/Hop-Ups will be used for the installation where works not possible from ground position. Competent operatives only to undertake high level work and wearing appropriate PPE/Harness equipment. If necessary, Scissor Lift may be required which will only be operated by qualified operatives. Stepladders will be used when other access equipment not possible in particular work areas and that are unsuitable for the task in hand.

4.0 Arrival on Site
- Leave work access areas clean and tidy at all times
- Upon completion of operations, advise Client
- Report to Client's Site Agent – Sign in & Out
- Delivery to Site all necessary materials/equipment
- Carry out works in accordance with job specification
- PPE will be worn at all times

5.0 Personal Protective Equipment
- Safety boots & Hi-Visibility vest/jacket are to be worn at all times
- Gloves to be worn for safe unloading of steel tray work, trunking, brackets, conduit, steel tray work etc
- Safety gloves will be worn by all operatives whilst on site.
- Hard hats to be worn at all times
- Facial masks, dust masks or goggles are to be used when task specific.

6.0 Site Induction
Prior to commencing on site, all operatives are to attend a site induction.
HEL Site Supervisor to oversee and communicate the Assessment & safe system of work to all site operatives in Toolbox Talks prior to works commencing and will monitor & review the Assessment throughout the Contract. Any relevant Covid-19 Risks will be advised within the initial Induction administered by the Main Contractor and our RAMS have been updated to include the required control measures that HEL Operatives are to adhere to. Any necessary additions/amendments to the RAMS will be made as and when required and then approved by the MC.

7.0 Site Deliveries
Deliveries of materials to site will be controlled and arranged for morning arrival with 48hours prior notice given. Hayvern Electrical Ltd Site Supervisor will give supervision of delivery vehicles when they enter site and will also ensure safe movement of vehicle and safe removal of materials.
All materials will be stored in an designated area agreed with the site agent.

8.0 Site Rules
All employees, sub-contractors and site visitors will be informed of their responsibility with regard to Health & Safety, both to themselves and fellow workers and the public in general. The Site Manager will observe the compliance of the site rules by Site Operatives, Sub Contractors, Drivers and Visitors. All operatives found to be not complying will be asked to leave.

Matters arising resulting from variation instruction will be added to the rules when and if appropriate.

All visitors, drivers and operatives will be inducted in the site rules and will sign to acknowledge their understanding.

The following rules will apply :

All visitors will comply with the recommendations for accessing and egressing the site all in accordance with the agreed routes from the Induction.

All visitors must report immediately to the site manager.
Unauthorized persons will be excluded from the site. Site personnel will be informed of the close proximity of general public & staff at all times.

The 5mph compound speed limit is to be observed and adhered to by all operatives, visitors & drivers.

Fire fighting equipment will be provided within the designated working area and on-site welfare facilities will be equipped with sufficient & appropriate fire extinguishers. A safety zone will be established whenever welding or "hot works" occur.

All operatives on site must wear identification at all times.

Visitors to the site must read the Health & Safety Plan and they will be requested to observe the Site Safety Rules.

The site will be designated a **hardhat and protective footwear area** and they **must** be worn at all times.

Manual handling will be carried out all in accordance with the Manual Handling Operation Regulations 1992.

All ladders and tools are to be locked away or removed when not in use.

Where undertaking service connections or other work outside the defined boundary of the site, the work areas will be clearly identified and securely protected.
All the statutory regulations will be observed.

No Smoking on Site.
No radios or personal audio equipment allowed on site.
The use of drugs or the consumption of alcohol is strictly forbidden.

There will be no burning allowed on site at any time (STRICTLY FORBIDDEN)

Hot working will only be carried out on a strict permit to work policy issued by the site manager.

Site personnel are required to inform the site manager immediately if there is an accident involving personal injury. Site Supervisor is competent in administering First Aid and a basic First Aid Kit is retained in all Company Vehicles. In the event of a serious/major injury, Site Manager to inform Head Office (William Newsome) and call for the Emergency/Ambulance Services if necessary, if not, transport the casualty to the nearest A&E Department (if safe to do so). Salford Royal Hospital, Stott Lane, Salford, Manchester, M6 8HD. Tel : 0161 789 7373
All appropriate report details as per Reporting Procedures.

All appropriate report details as per Reporting Procedures.
Site personnel are required to inform the site manager immediately if there is any damage to plant and equipment.

Due to the works being within close proximity to public areas the use of foul, abusive or racist language will not be tolerated and offenders will be removed from site.

9.0 Contact Details of the Organisations associated with the Contract.

Principal Contractor : Amspec Limited
Kilshaw Street
Pemberton
Wigan
WN5 8EA
Tel : 01942 621342

HSE : Health & Safety Executive
Grove House
Skelton Road
Manchester
M16 ORB
Tel : 0161 952 8200

Contact Details :

Amspec-	Andrew Maxwell	-	CEO
	Mobile Number	-	07702 569321
	David Hare	-	Head of Projects
	Mobile Number	-	0773 322431
	Carl Barber	-	Project Manager
	Mobile Number	-	07949 936572
Hayvern	Billy Newsome	-	Managing Director
	Mobile No	-	07815 749602
	Neil Openshaw	-	Site Supervisor
	Mobile No		07762 478265
	Dave Cross	-	Contracts Manager
	Mobile No	-	07966 841928

10.0 Continuing Liaison

The Client / Main Contractor will be notified immediately of any implications to Health & Safety if there are any unforeseen eventualities during the execution of this project.

Should there be an accident/reportable incident on site Hayvern Electrical Limited will report this immediately to the Principal Contractor who will inform the HSE.

Hayvern Electrical Limited will attend regular site meetings to discuss any Health & Safety issues and to discuss any relevant changes to works that been provided through Hayvern Electrical Limited offices. This would be in the format of a Contract Instruction or confirmation of verbal instructions from site via the client/designer and subsequently would be exchanged with the site supervisor for Hayvern Electrical Limited.

Hayvern Electrical Limited will assume responsibility for further development of Hayvern Electrical Limited Health & Safety Plan and will update it where and when necessary.

11.0 General Information

11.1 Fire Evacuation / Emergency Procedures
The Site Manager will inform all operatives, sub-contractors, etc., on site of the appropriate fire evacuation procedures. The Site Manager will ensure that all relevant personnel are made fully aware & are clear/concise in regards to the fire assembly points as agreed in Induction with Amspec Limited.

11.2 Production of Risk Assessments & Method Statements
All necessary Risk Assessments & Method Statements must be issued to the Site Supervisor prior to commencement on site.
Any further revisions & alterations must be agreed with the Site Manager for approval and subsequent inclusion with the H&S Plan retained on site.

11.3 Welfare Facilities
Haywern Electrical operatives to utilise the agreed facilities.

11.4 Asbestos
Should asbestos be found present in any of the associated working areas, all works will immediately cease and the CDM Co-ordinator, Client & Contract Administrator must be informed.
Only upon receipt of written confirmation that areas are "clean" & "clear" of the substance, will works be resumed.

12.0 COVID-19 : Preventative Controls & Measures you **MUST** adhere to following the release of Revision 9.1 of the Construction Leadership Council Guidelines.

12.1 Anyone with symptoms of high temperature (37.8c) or more / hot to the touch on back or chest) and/or a new persistent cough will be sent home to self-isolate.

12.2 Wash hands regularly with soap and water for 20seconds and always wash your hands when going into and out of different areas or if you have left the workplace and returned

Signed : .....D.CROSS.....

Date : .....18/04/2024.....

Issue 1
18/04/2024

Company Registration No. 4443376 VAT No. 787 727563
NICEIC Approved Contractor ENROL No. 19861
Director : W.NEWSOME

HAYVERN ELECTRICAL LIMITED
56 QUEEN STREET, FARNWORTH, BOLTON, LANCS BL4 7DX
Tel : 01204 579975 Fax : 01204 571845

RISK ASSESSMENT

Contract: **Lower Campfield Manchester**
Date: **18/04/2024**
Work : **Internal Refurbishment**

Hazard, Hazardous event & Who may be Harmed	Risk	Assessment of Risk after Risk Controls (1-5)			Risk Controls
		L Level	C Level	R Level	
Entry/Exit to Site Site Operatives	Slip/Trip/Fall	1	3	3	(a) Prior to entering site all operatives/personnel will be inducted and the relevant access & egress routes will be confirmed by Amspec. These will be followed and monitored at all times to reduce the risk of unauthorised access. (b) These routes will be kept clear at all times and all equipment removed away on daily basis.
Working on Stepladders Site Operatives/High Level Operatives	Falls (Persons & Objects) Fractures /Fatalities	2	2	4	(a) Visual inspection prior to use, tagged/labelled and defects reported. (b) Stepladders will only be utilised whereupon works cannot be accessed from the ground and only used on a flat base. (c) Only used for light and short periods (20mins/10kg) (d) Ensure 3 points of contact at all times. (e) Never use top 3 rungs and ensure all steps are clean/dry. (f) Competent and trained operatives wearing appropriate PPE. (g) Exclusion zone to be clearly identified. (h) Non-conductive equipment to be used if working near "LIVE" equipment.
Storage of Materials / Equipment Site Operatives	Falling Materials/Cuts	1	3	3	(a) The storage location will be agreed with the Main Contractors Site Manager and will remain in a tidy orderly nature throughout the Contract period. (b) Equipment will be locked away on a daily basis to reduce trips/falls. (c) Exclusion zone to be clearly identified.
Scaffold / Work at Height High Level Operatives/ Sub-Contractors	Falls from height, cuts, Fractures, fatality	1	3	3	(a) For works requiring a platform height greater than 1.0m MST/Podium must be used by trained competent operatives with IPAF/PASMA Qualifications. (b) Appropriate safety wear/harness and PPE will be worn at all times. (c) Scaff Tags will be utilised and no tools or materials will be left on the scaffold when in motion to reduce the risk of falling items. (d) Scaffold Tower MUST be erected on solid flat base by trained competent Operative and visual inspection undertaken prior to use.

Hazard, Hazardous event & Who May be Harmed	Risk	Assessment of Risk after Risk Controls (1-5)			Risk Controls
		L Level	C Level	R Level	
Portable Electric Tools (Drills, Grinders, etc) Site Operatives	Trip/Fall/Fire/ Electrocution	2	2	4	(a) All Portable Equipment is tested & inspected, and a visual inspection will be carried out prior to each use. (b) Only equipment operating 110v or less to be permitted on site. (c) All Guards must be used and under no circumstances should they be removed or interfered with. (d) Leads/Extension cables must not trail across walkways/floors and should be routed along perimeter walls to prevent trips. (e) All leads to be fully extended to reduce overheating & electrical fires. (f) Grinders only used in a clear area away from flammable liquid/materials, within a limited user time and commenced only upon receipt of Hot Work Permit issued from Main Contractor (g) Power Tools to be used by competent and trained operatives wearing appropriate PPE (Eye Masks, Face Masks, Ear Defenders, etc)
Electric Shock Electricians	Electrocution/ Fire/Fatality	2	2	4	(a) All Circuits/Boards to be worked on will be locked off by removal of MCB or Padlocked at the Board. Isolation undertaken ONLY by competent qualified Electrician using isolation methods in accordance with Electricity At Work – Safe Working Practices (HSG85) (Third Edition) Published 2013 (b) Tested appropriately prior to re-energising again by Qualified Electrician. (c) NO LIVE WORKS will be carried out. (d) Walls screened & checked for presence of cables by competent operative. (e) All tools and equipment visually inspected. (f) Signage displayed to warn of working on system.
Delivery/Off Loading Materials Site Operatives/Public/ Sub Contractors	Crushing/Cuts/M H Injury	2	2	4	(a) Operatives will wear hard hat, boots, HI vis vest & Gloves for off-loading to reduce injury of cuts from trunking/tray etc., and any falling items. (b) The Traffic Management system will be agreed at induction with MC Site Manager for the correct procedures to adhere to for all delivery vehicles.
Use of Hop Ups High Level Operatives/ Sub-Contractors	Falls from height, cuts, Fractures, fatality	2	2	4	(a) For the works access up to a 2.5m height Hop-Ups are required. (b) Ensure the hop-ups are fully & correctly erected on a flat and stable base and have been inspected for any defects. (c) Check your hop-up for the weight limit and never exceed this with any combination of your weight and materials. (d) Works to be undertaken by trained and competent operatives wearing appropriate harness/PPE. (e) Work duration on Hop-Ups to be minimised to a 20minute working time.

Hazard, Hazardous event & Who may be Harmed	Risk	Assessment of Risk after Risk Controls (1-5)			Risk Controls
		L Level	C Level	R Level	
Manual Handling Site Operatives	Back Injuries, Strains, etc	2	2	4	(a) 2No operatives must carry out moving of larger electrical equipment (b) Correct PPE to be provided and worn at all times (Boots, Gloves, etc) (c) Utilise trolley/Mobile Device wherever practical (d) Ensure work areas are clear prior to relocation/movement of equipment (e) Manual Handling Techniques to be administered at all times
Exposure to Hand Vibration & Noise Site Operatives / Clients / Staff / General Public	HAVS, Hearing Problems/Loss, Tinnitus, etc	3	2	6	(a) Utilise Vibration & Noise Damped equipment wherever possible. (b) Ensure tools & equipment are checked and tested and defects reported (c)Time Limits on usage per operative – kept to a minimum (d) Wear relevant PPE – Ear Defenders & Gloves (e)Make clients/staff fully aware of times when noisy activities will be carried Out to protect their workers. (Usually arranged for early mornings)
Exposure to Dust Site Operatives / Clients / Staff	Breathing Difficulties, Eye Irritation	3	3	9	(a) Ensure appropriate PPE worn at all times of Dust Exposure works (b) Dust to be vacuumed as opposed to swept (c)Close off room to be worked in to reduce risk of dust spread together with use of dust sheets or dust guards (d) Ventilate the room by open windows where possible (e)Restrict personnel from entering work area at all times
Falling Debris Site operatives / General Public	Falling Materials, Bumps, Bruises, Cuts, etc	2	3	6	(a) Work areas to be kept tidy (b) Operatives to ensure objects cannot fall outside the site boundary (c) On scaffolds utilise toe-boards, brick guards and netting (d) Display warning signs / exclusion zones / Barriers in public areas
COVID-19 Spread of Virus through droplets of saliva or discharge from the nose (sneeze of cough) Site Operatives & Visitors	Infection passed from infected person – could cause severe illness or death	3	3	9	(a) Wash Hands regularly with soap and water and utilise on-site hand sanitisers when moving from area to area (b) Co-ordinate & consider with other occupiers/contractors/staff/public (c) Staggered Breaktimes to be administered to reduce quantity of people (d) Ventilate areas of works if possible. (e) Stay at home if tested positive

Company Registration No. 4443376 VAT No. 787 7275 63
NICEIC Approved Contractor ENROL No. 19861
Director : W.NEWSOME

Project Title : C4488	Lower Campfield
Method / Risk Statement and Title:	RAMS
Date:	18/04/2024

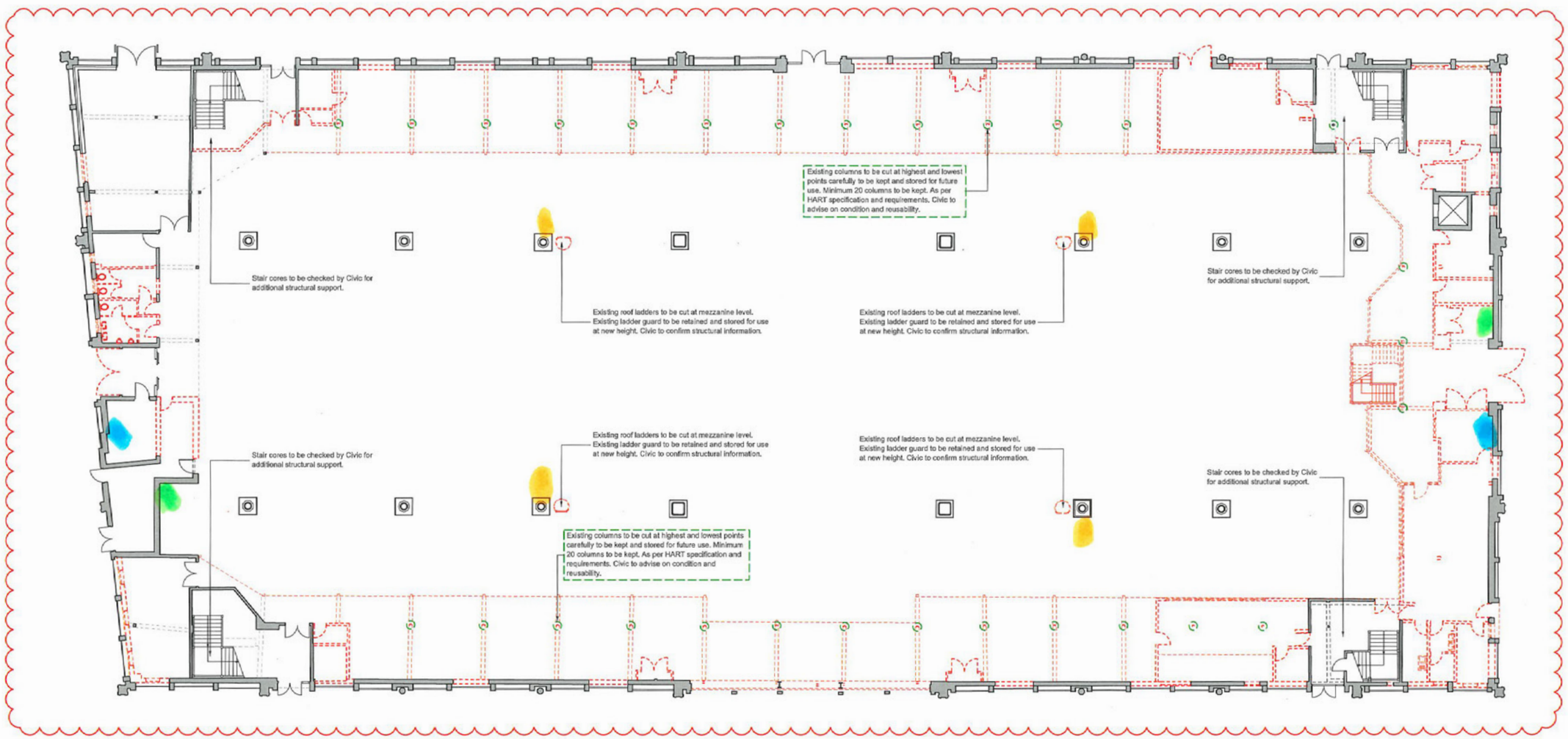
I confirm I have had an explanation and have been provided with the relevant copies of the Method Statement / Risk Assessment and understand the safe systems of work employed.

Name	Signature	Company	Date

I confirm the above have had a detailed method statement / risk assessment incorporating the necessary safe systems of work explained and issued to them for the safe completion of this phase of work

Signed: Name: Date:

IF IN DOUBT ASK – NEVER ASSUME



Notes:

Adjoining existing areas or disrupted areas to be patched and repaired as adjacent areas suitable for proposed finish.

The contractor shall not consider demolition and alteration notes to be all-inclusive. It is the contractors responsibility to inspect and assess each area and fulfil the design intent.

The contractor shall review all items to be demolished with the Architect to identify any items or accessories to be stored / reused.

The contractor is to provide a method statement for SE approval.

The contractor is to provide a method statement for ME approval.

The contractor shall verify all conditions and dimensions within the identified areas, and notify the Architect immediately in writing of any deviation necessitated by on site conditions or items not covered.

Please note any findings of Asbestos survey. Unless stated otherwise all existing services are to be removed back to incoming mains position.

All fixtures and fittings on walls to be demolished and terminated as MEP requirements.

Refer to structural drawings for any structure to be retained.

Wall types to be removed are subject to intrusive survey by the contractor or others.

This drawing is to be read in conjunction MEP engineer's and structural engineer's demolition drawings.

Key:

- Existing retaining walls to be retained. Refer to SE details for extent.
- Dashed line denotes demolition extent including all walls, doors, windows, sanitary fittings, soffits, ceilings and casework etc.
- Hatch denotes structural slab demolition extent.

Existing columns to be cut at highest and lowest points carefully to be kept and stored for future use. Minimum 20 columns to be kept. As per HART specification and requirements. Civic to advise on condition and reusability.

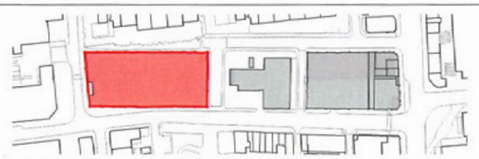
- 10 KVA TRANSFORMERS
- TEMP DB'S.
- Charging Stations

Demolition Plan - Ground Floor

Notes:

Do not scale from this drawing.
All dimensions are in millimetres unless otherwise noted.
All dimensions to be checked on site before proceeding with work.
All omissions and discrepancies to be reported in writing to Project 3 Architects Ltd.
Areas indicated on this drawing are approximate and indicative only.
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Rev:	Date:	Description:	By:
P01	14/07/23	First Issue	ko
P02	16/08/23	Issue Update	ko
P03	21/08/23	Design Update	ko
P04	30/08/23	Layout Change Update	ko
T01	03/11/23	Issue for Tender	JG
T02	28/11/23	Amends	JG



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mail@project3architects.com
www.project3architects.com

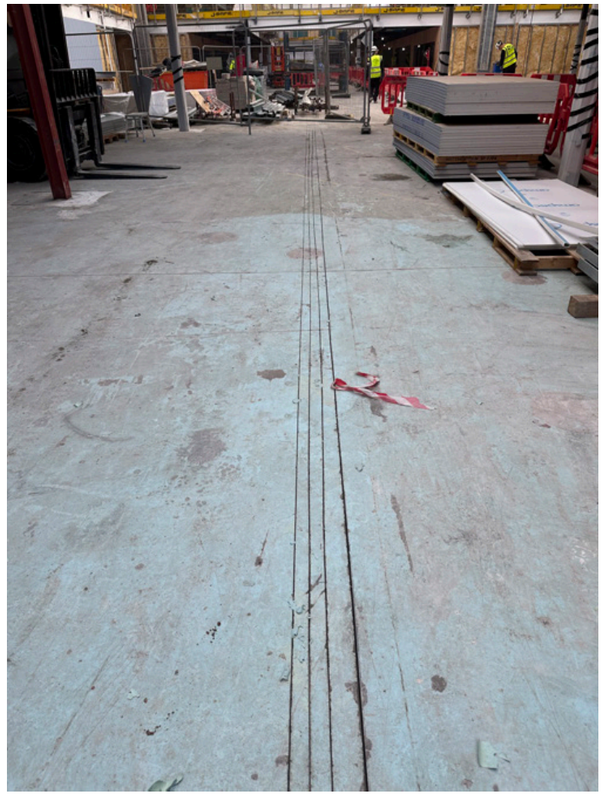
Project:
Lower Campfield
Liverpool Road, Manchester

Title:
Demolition Floor Plans
Ground Floor

Status: PLANNING
Scale @ ISO A: 1:12
Drawing Number: 0774-P3A-XX-X-DR-A-03001
Revisio: T0





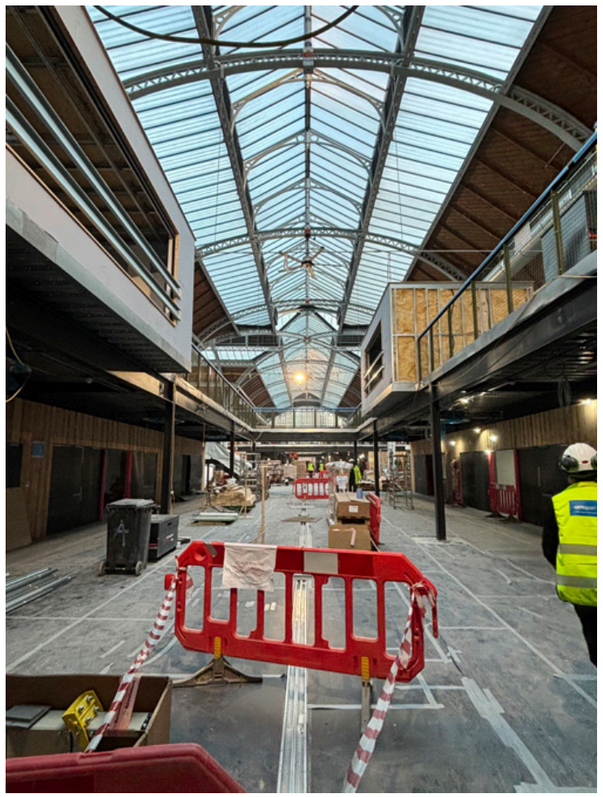













Gripple Loop End Fixing

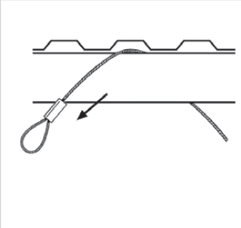
End fixing that is ideal for looping around purlins, beams, roof trusses and other accessible building features.

ADVANTAGES

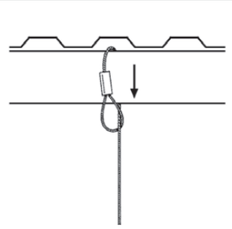
- Quick, simple choke-knot installation.
- No need for nuts, bolts, clamps or other accessories.
- Up to 6 times faster installation compared with threaded rod or chain.
- Available in No.1 - No.5
- Supplied in a ready-to-use kit with a length of wire and a Gripple.
- Also available in a Stainless Steel version.



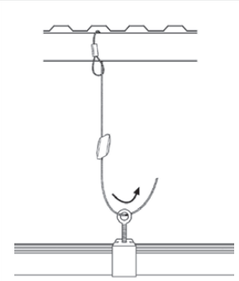
INSTALLATION



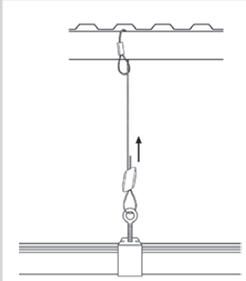
1. Pass the loop end over the building feature.



2. Thread the tail wire through the loop to create a choke knot.

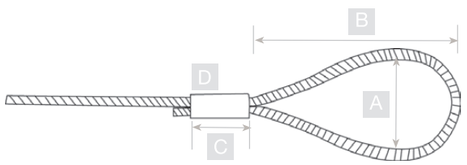


3. Use Gripple to attach the service to the loop and adjust the height.



4. The completed installation.

LOOP SPECIFICATION



	A (Nominal) mm	B (Nominal) mm	C mm	D mm
No.1	30	60	11	6
No.2	30	60	13	8
No.3	25	60	15	12
No.4	45	85	24	16
No.5	45	90	28	20

Important Information

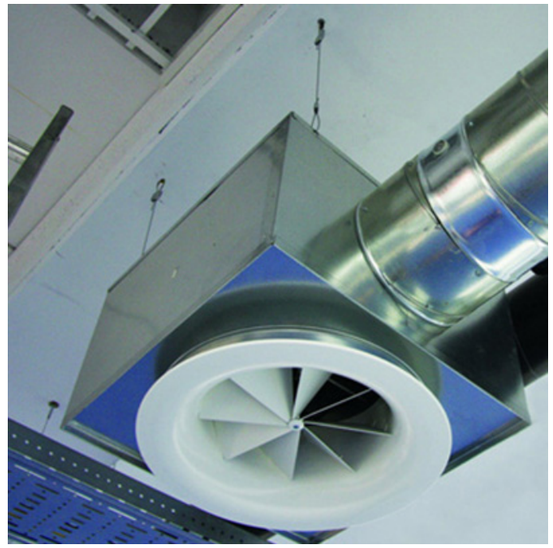
1. Construction materials and conditions vary on different sites. If it suspected that the base material has insufficient strength to achieve a suitable fixing, contact Gripple Ltd. The responsibility for judgement of base material strength lies with the installer, and not with Gripple Ltd.

2. The information and recommendations given herein are believed to be correct at time of writing. The data has been obtained from tests done under laboratory, or other controlled conditions and it is the users responsibility to use the data given in light of conditions on site, taking account of the intended use of the products concerned.

3. Whilst Gripple Ltd can give general guidance and advice, the nature of Gripple products means that the ultimate responsibility for selecting the correct product for a particular application must lie with the customer.

4. All products must be used, handled and applied in accordance with current product instructions and manufacturers recommendations for use, published by Gripple Ltd.

5. Gripple's policy is one of continuous development and innovation. We, therefore reserve the right to alter specifications, etc. without notice.

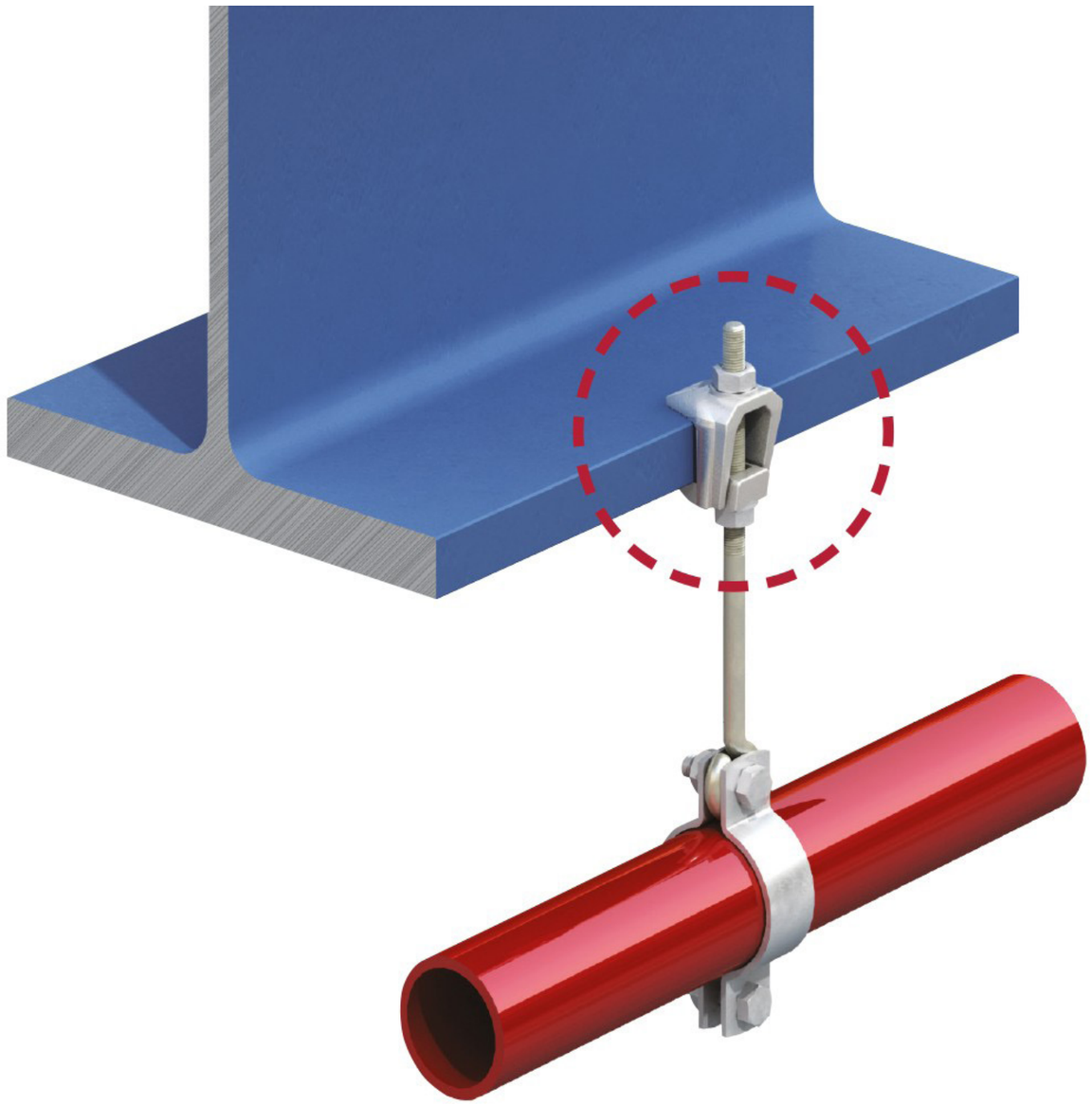


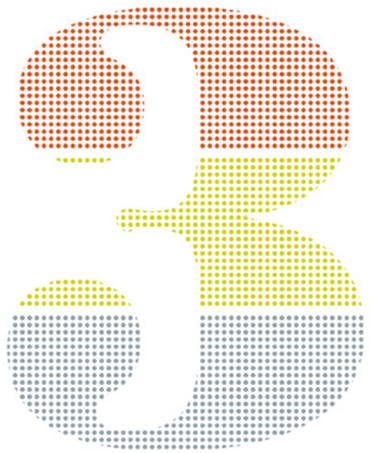






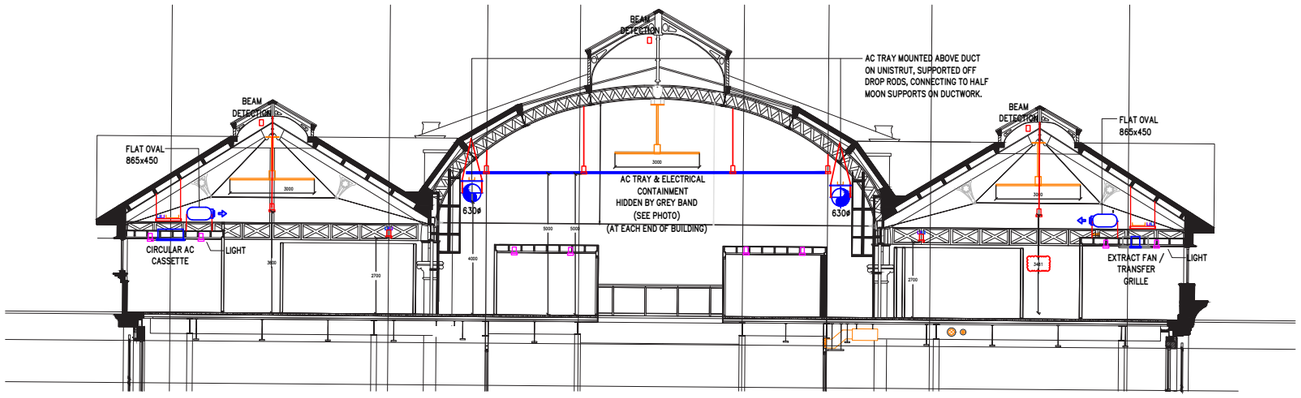


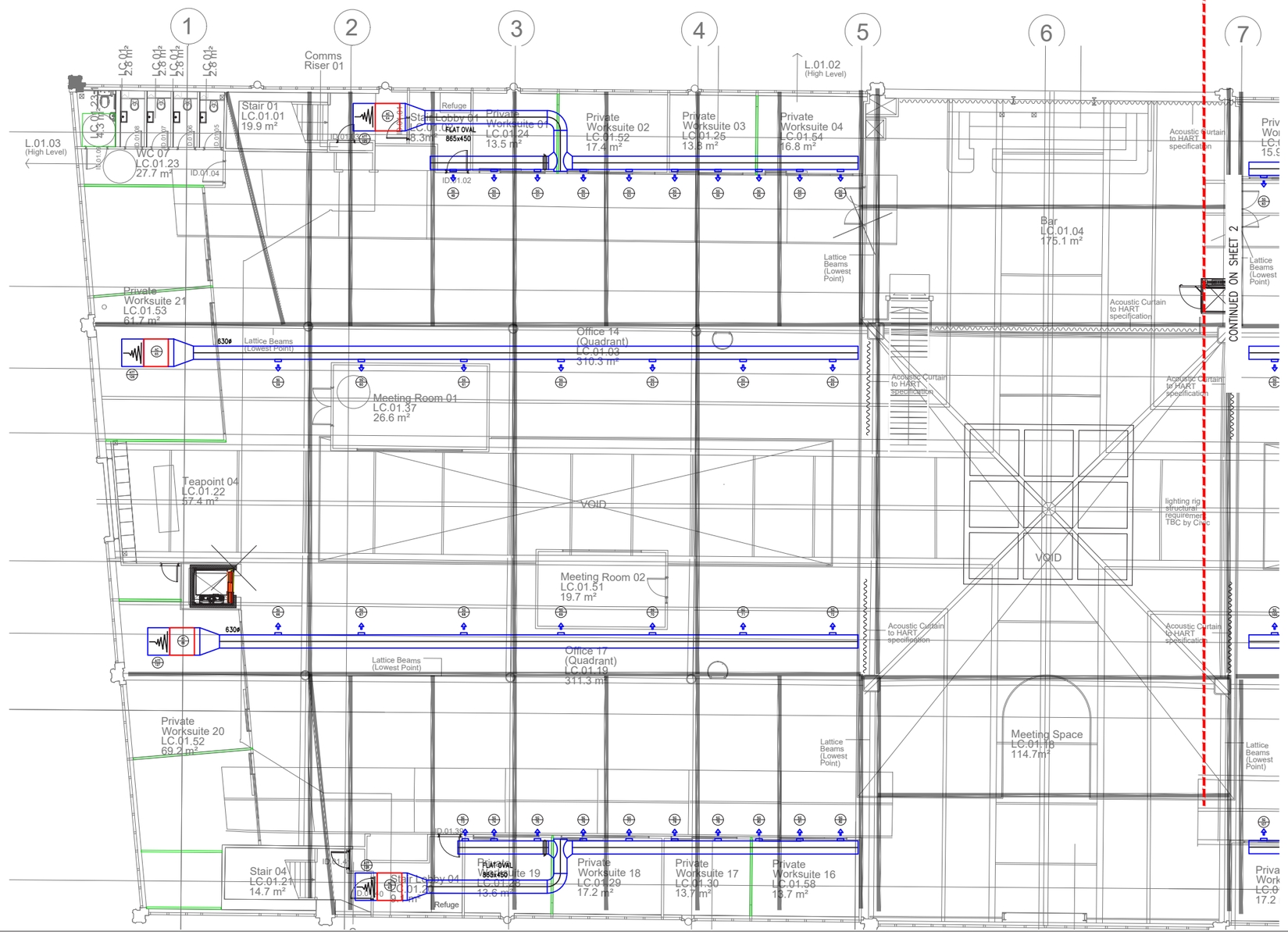




MECHANICAL
Sections 09-18

This section includes Solutions Heating and Cooling, Ventilation and installations height drawings. Specification of the de stratification fans and Solutions method statement. It includes site images of the 650mm spiral ducitng, high level actuated louvres, de stratification fans, fixings, gripple kits, flange clamps and kitchen extract.





LEGEND

- AC — VRF AC UNIT
- ATTENUATOR TO REAR OF VRF UNIT
- DUCTWORK
- VOLUME CONTROL DAMPER (VCD)
- JET NOZZLE GRILLE
- SIDEWALL GRILLE
- GRIPPLE WIRE FOR HANGING/SUPPORTING DUCTWORK
- E — ELECTRICAL CONTAINMENT
- LIGHT FITTING
- C — AC CONTAINMENT



CONSTRUCTION

CONSTRUCTION ISSUE — 07.10.24 — K.H — A.M

Revision description — Date — Drawn by — Checked by

Client: Amspec

Project: Lower Campfield

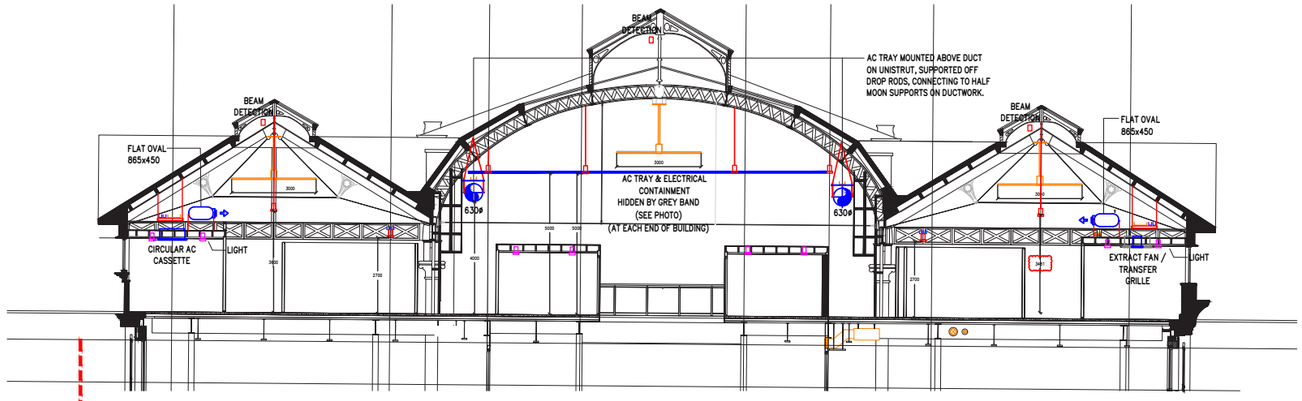
Title: Heating and Cooling
High Level Mezzanine - Sheet 1 of 2

Solution environmental services

Pure Office, Brooks Drive,
Cheadle Royal Business Park, Cheadle, SK8 3TD
Tel: 0161 532 9460
www.solution-es.co.uk

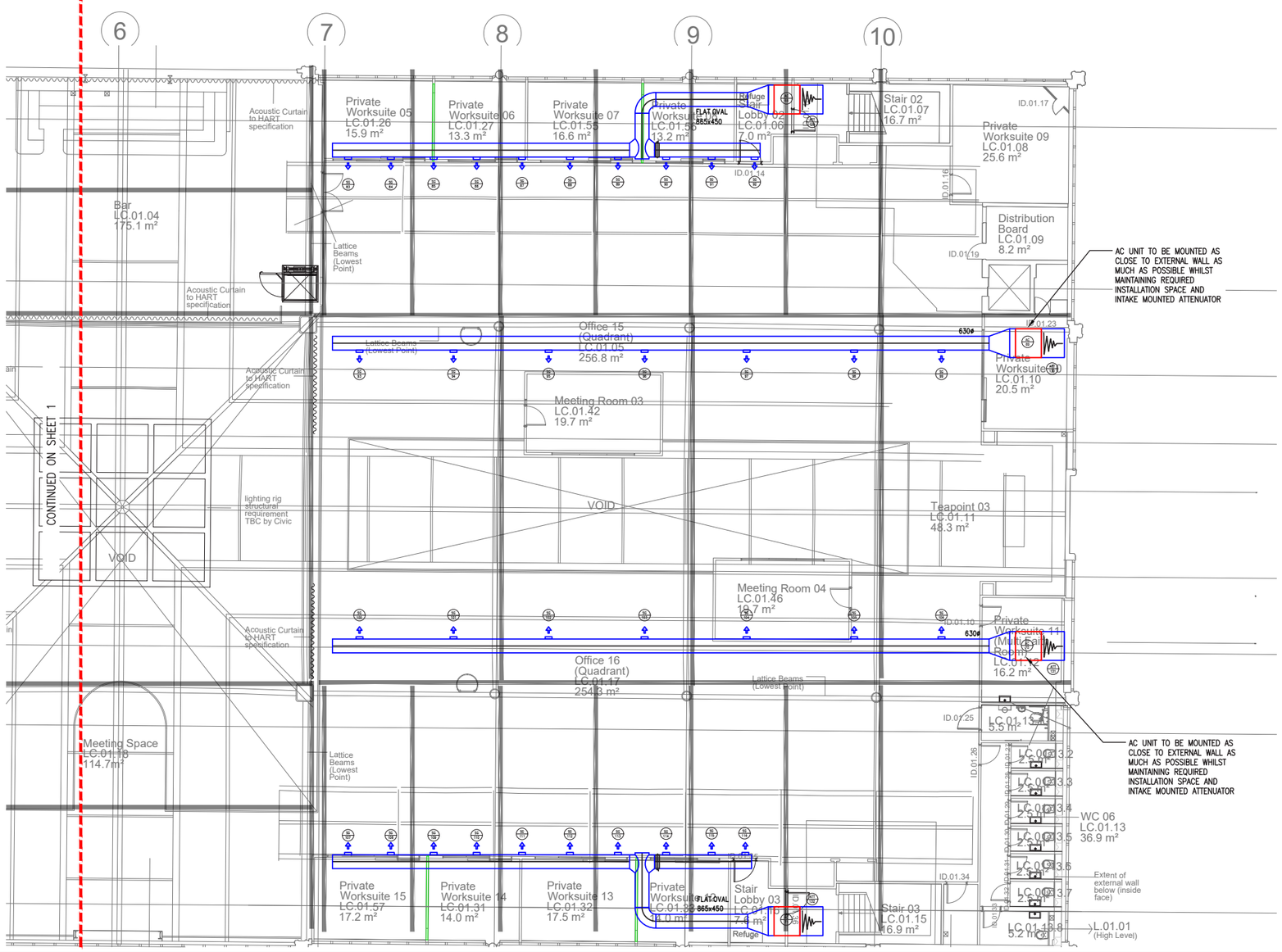
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K.H	A.M	1:100	A1	07.10.24

Drawing No.: SE4704/AM/M17 — Revision: C1



LEGEND

- AC — VRF AC UNIT
- ATTENUATOR TO REAR OF VRF UNIT
- DUCTWORK
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- JET NOZZLE GRILLE
- SIDEWALL GRILLE
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- LIGHT FITTING
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CONSTRUCTION

C4	CONSTRUCTION ISSUE	07.10.24	K.H	A.M
Revision	Revision description	Date	Drawn by	Checked by

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Project: Lower Campfield

Title: Heating and Cooling
High Level Mezzanine - Sheet 2 of 2

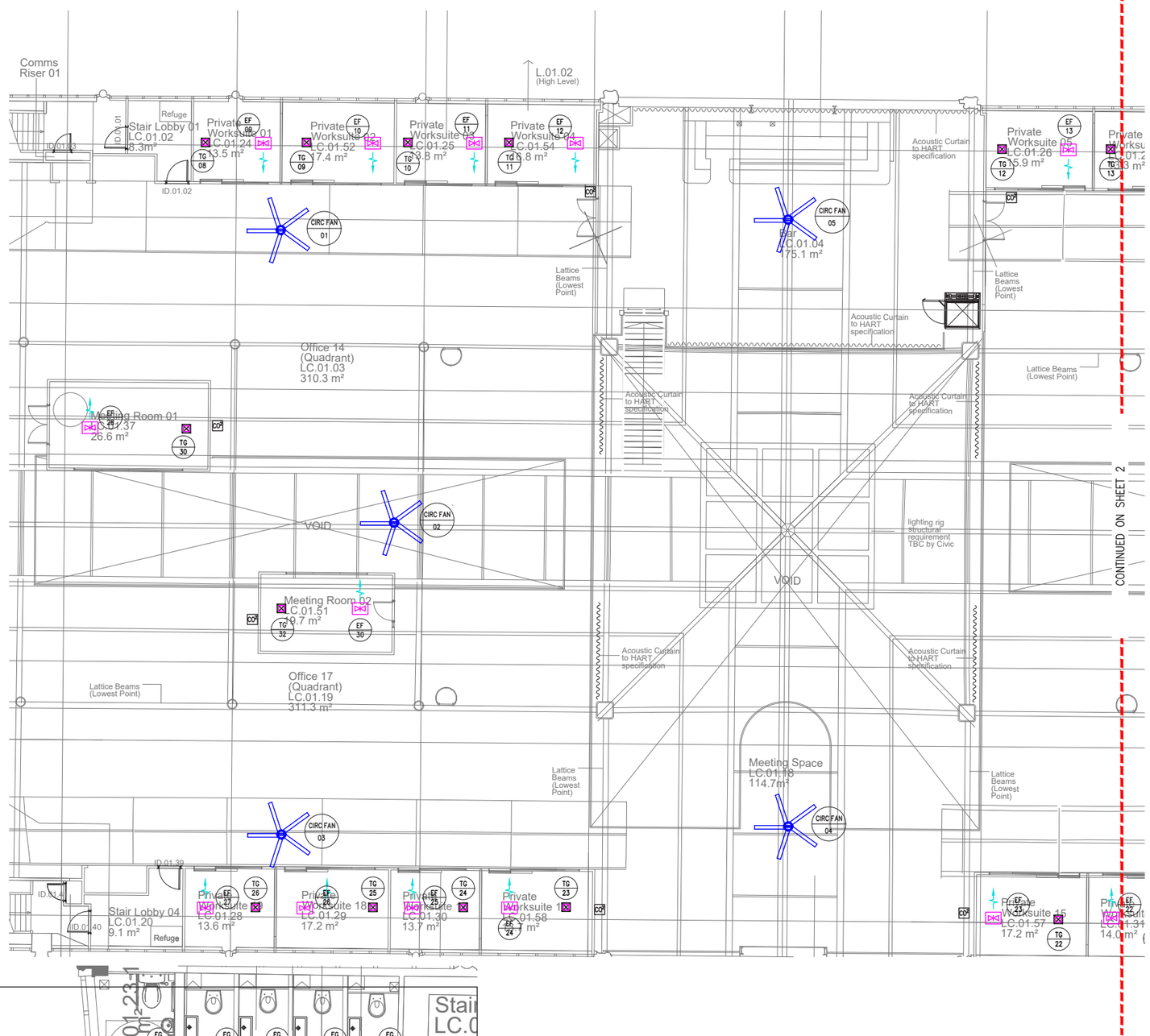
Solution environmental services

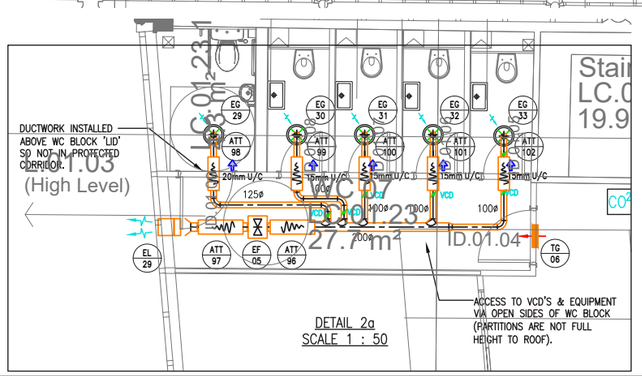
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Tel: 0161 532 9460
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Drawn by	Checked by	Scale	Sheet Size	Date
K.H	A.M	1:100	A1	07.10.24

Drawing No. SE4704/AM/M18

Revision C01





DETAIL 2a
SCALE 1 : 50

NOTES

1.0 ALL GRILLES AND DIFFUSERS BRANCHES TO HAVE OPPOSED BLADE DAMPERS.

2.0 ALL DUCTWORK TO DW144/DW172 (WHERE APPLICABLE).

3.0 FLEX TO BE USED ONLY STRAIGHT-ALL BENDS TO BE RIGID.

4.0 FIRE DAMPERS TO BE LOCATED IN ACCORDANCE WITH FIRE STRATEGY DRAWING REQUIREMENTS.

5.0 ACCESS DOORS TO BE LOCATED ADJACENT TO FIRE DAMPERS AND EVERY 3M.

6.0 ALL BRANCH CONNECTIONS SHALL HAVE VCD'S.

7.0 ALL DIFFUSERS AND GRILLES TO BE SUPPORTED BY STRUCTURE.

8.0 IN POSITIONS OF RESTRICTED HEADROOM, DUCTS MAY BE SUPPORTED WITH FLAT BAR FORMED TO DUCT SHAPE WITH FIXINGS AT SIDES ON BENT LUGS.

9.0 ALL DUCTWORK BRACKETS TO HAVE AN ACOUSTIC SOFT RUBBER OR NEOPRENE INTERFACE LAYER TO THE DUCT.

10.0 ALL SUPPLY DUCTWORK, INCLUDING SUPPLY PLENUM BOXES TO BE THERMALLY INSULATED.

11.0 SMOKE FIRE DAMPERS SHALL BE INSTALLED WHERE DUCTWORK PASSES THROUGH AN ESCAPE ROUTE AND THESE SHALL BE CONTROLLED VIA A PROPRIETARY SMOKE DAMPER CONTROL SYSTEM. THE CONTROL PANEL FOR THIS SYSTEM SHALL BE INSTALLED ADJACENT THE FIRE ALARM PANEL AND EACH SMOKE FIRE DAMPER SHALL HAVE A 240V POWER SUPPLY PROVIDED ADJACENT TO POWER THE CONTROL ACTUATOR FOR THE DAMPER. EACH DAMPER SHALL BE POWER OPEN/FAIL CLOSE.

MECHANICAL VENTILATION LAYOUT LEGEND

- EXISTING SERVICES
- SA — SUPPLY DUCTWORK
- EA — EXTRACT DUCTWORK
- DE — DIRTY EXTRACT DUCTWORK
- SUPPLY GRILLE
- EXTRACT GRILLE
- DIRTY EXTRACT GRILLE
- AIR VALVE
- ATTENUATOR/CROSS-TALK ATTENUATOR
- VCD — VOLUME CONTROL DAMPER
- MD — MOTORISED DAMPER
- LOUVRE
- FD — FIRE DAMPER
- AH — ACCESS HATCH
- FLEXIBLE DUCT CONNECTION
- PIR — PASSIVE INFRARED SENSOR
- HEAT RECOVERY UNIT
- DUCTED FAN COIL UNIT
- SUPPLY/EXTRACT FAN
- PLANT REFERENCE
- 15mm U/C — 15mm DOOR UNDERCUT
- TRANSFER GRILLE

C1	UPDATED INLINE WITH COMMENTS RECEIVED AND NEW BUILDING LAYOUT, CONSTRUCTION ISSUE	07.10.24	K.H	A.M
P4	UPDATED INLINE WITH NEW BUILDING LAYOUT	19.08.24	K.H	A.M
P3	UPDATED INLINE WITH COMMENTS RECEIVED AND NEW BUILDING LAYOUT	03.07.24	K.H	A.M
P2	UPDATED INLINE WITH COMMENTS RECEIVED	09.05.24	K.H	A.M
P1	PRELIMINARY	23.04.24	K.H	A.M

Revision description — Date — Drawn by — Checked by — Drawing Status

CONSTRUCTION

Client: Amspec

Project: Lower Campfield

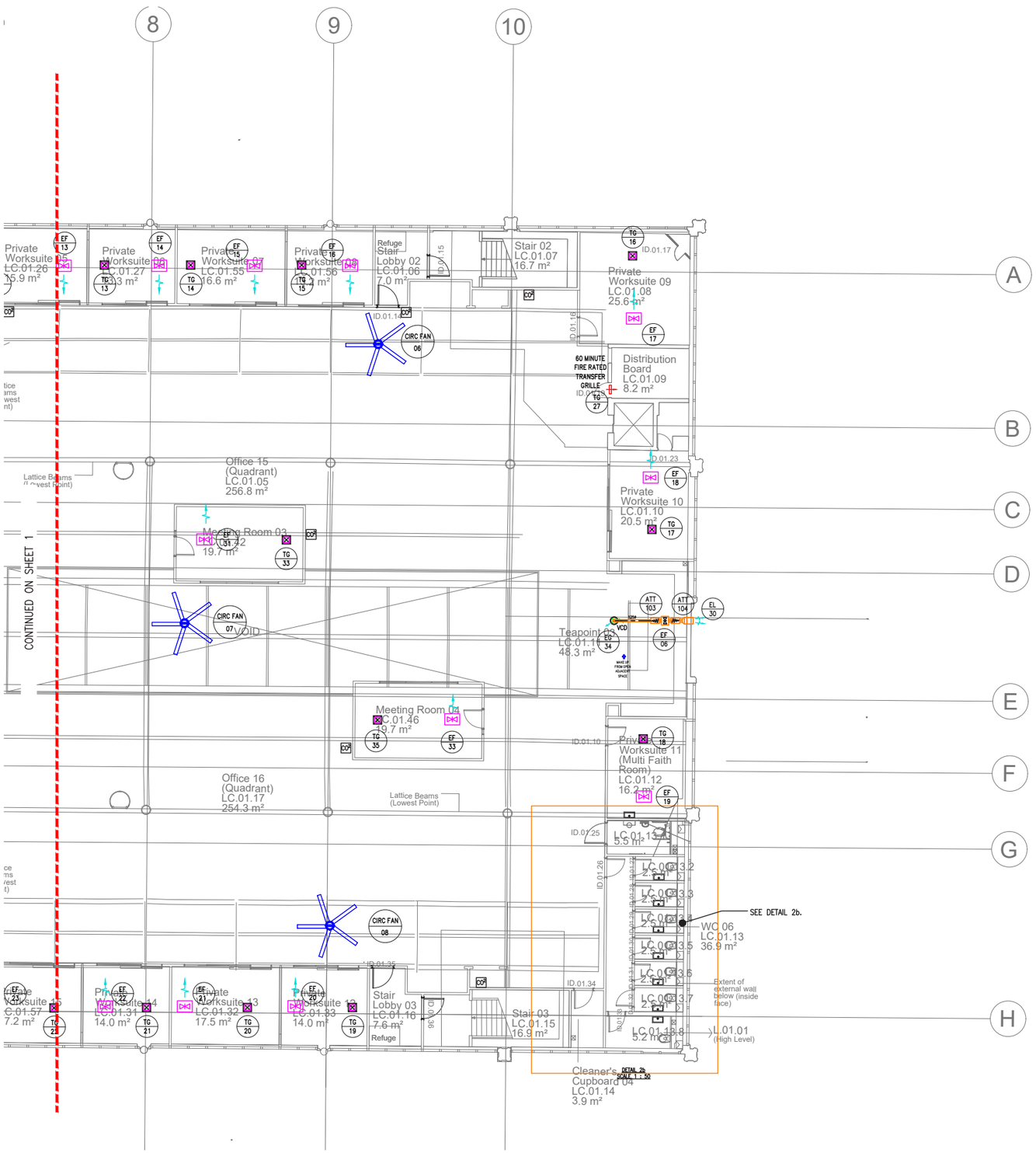
Title: Ventilation Mezzanine - Sheet 1 of 2

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Drawing No.: SE4704/AM/M21 — Revision: C1



NOTES

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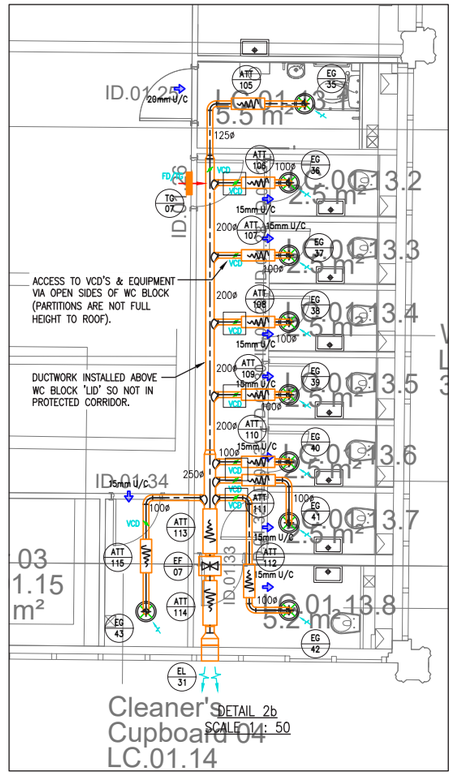
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- EA — EXTRACT DUCTWORK
- DE — DIRTY EXTRACT DUCTWORK
- SUPPLY GRILLE
- EXTRACT GRILLE
- DIRTY EXTRACT GRILLE
- AIR VALVE
- ATTENUATOR/CROSS-TALK ATTENUATOR
- VCD — VOLUME CONTROL DAMPER
- MD — MOTORISED DAMPER
- LOUVRE
- FD — FIRE DAMPER
- AH — ACCESS HATCH
- FLEXIBLE DUCT CONNECTION
- PIR — PASSIVE INFRARED SENSOR
- HEAT RECOVERY UNIT
- DUCTED FAN COIL UNIT
- SUPPLY/EXTRACT FAN
- PLANT REFERENCE
- 15mm U/C — 15mm DOOR UNDERCUT
- TRANSFER GRILLE



CONSTRUCTION

	Revision description	Date	Drawn by	Checked by	Dwg Status
C4	UPDATED INLINE WITH COMMENTS RECEIVED AND NEW BUILDING LAYOUT, CONSTRUCTION ISSUE	07.10.24	K.H	A.M	PRELIMINARY CONSTRUCTION
P4	UPDATED INLINE WITH NEW BUILDING LAYOUT	19.08.24	K.H	A.M	PRELIMINARY
P3	UPDATED INLINE WITH COMMENTS RECEIVED AND NEW BUILDING LAYOUT	03.07.24	K.H	A.M	PRELIMINARY
P2	UPDATED INLINE WITH COMMENTS RECEIVED	09.05.24	K.H	A.M	PRELIMINARY
P1	PRELIMINARY	23.04.24	K.H	A.M	PRELIMINARY

Client: Amspec

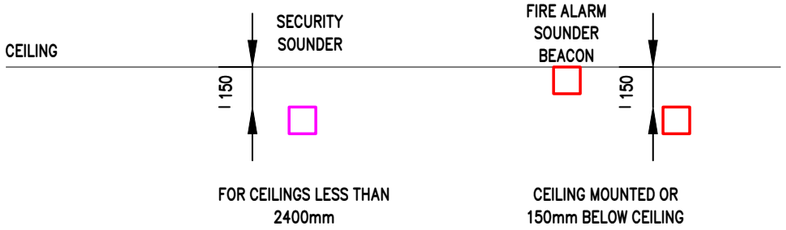
Project: Lower Campfield

Title: Ventilation Mezzanine - Sheet 2 of 2

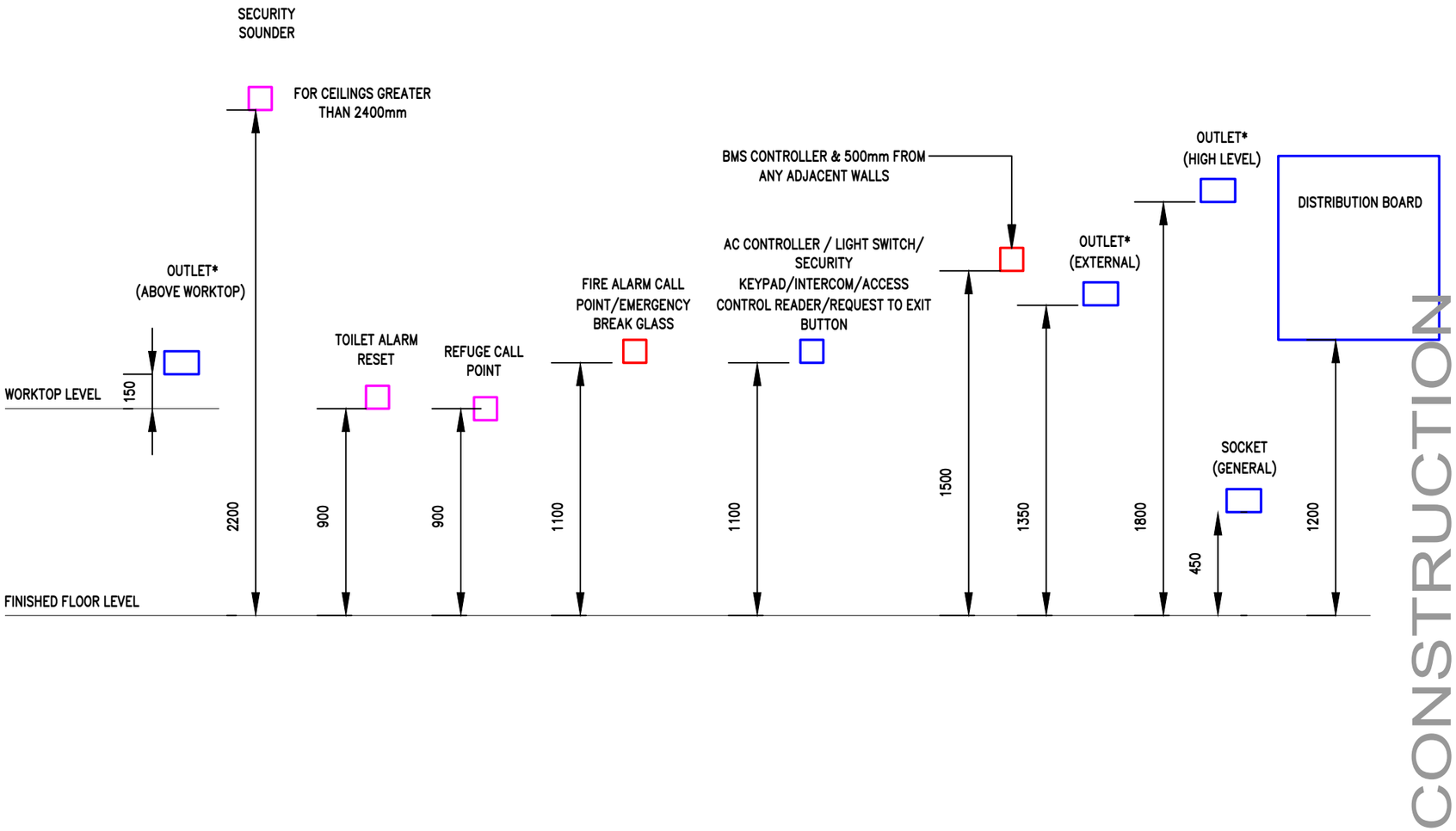
Solution environmental services
Pure Office, Brooks Drive,
Cheadle Royal Business Park, Cheadle, SK8 3TD
Tel: 0161 532 9460
www.solution-es.co.uk

Drawn by	Checked by	Scale	Sheet Size	Date
K.H	A.M	1:100	A1	07.10.24

Drawing No. SE4704/AM/M22 Revision C4



OUTLET*	APPLIES TO:
	SOCKET OUTLETS FUSED CONNECTION UNITS DATA/TELEPHONE OUTLETS



CONSTRUCTION

Revision	Description	Date	Drawn by	Checked by	Dwg. Status
C1	UPDATED INLINE WITH COMMENTS RECEIVED AND NEW BUILDING LAYOUT, CONSTRUCTION ISSUE	07.10.24	K.H.	J.H.	CONSTRUCTION
P1	PRELIMINARY	17.07.24	K.H.	A.M	PRELIMINARY

Client: Amspec

Project: Lower Campfield

Title: Service Height Installation

HAYVERN ELECTRICAL LTD
• INDUSTRIAL • COMMERCIAL • DOMESTIC

Solution
environmental services

Pure Office, Brooks Drive,
Cheadle Royal Business Park, Cheadle, SK8 3TD
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Drawn by	Checked by	Scale	Sheet Size	Date
K.H	A.M	1:100	A3	07.10.24

Drawing No.: SE4704/AM/M30

Revision: C1

MegaFan Technologies™

AIRMAX

> Low energy consumption

> Maximize HVAC systems efficiency

> Very attractive ROI

> Lower installation costs

> Simplified infrastructure equipment

> Healthier internal condition





Model	Fan Diameter	Max speed	Power	Airflow	Coverage**	Maximum current	Operation Voltage	Protection	Sound Level	Weight
AirMax 300	3m	140rpm	1KW	134 130 m^3/h	626m^2	2 A	400VAC	IP65	57 dBA	88kg
AirMax 400	4m	110rpm	1KW	228 721 m^3/h	1067m^2	2 A	400VAC	IP65	54 dBA	91kg
AirMax 500	5m	70rpm	1kW	390 836 m^3/h	1401 m^2	2.2 A	400VAC	IP65	50 dBA	119 kg
AirMax 600	6m	46rpm	1KW	390 836 m^3/h	1824 m^2	2.2 A	400VAC	IP65	47 dBA	139 kg

mark@megafans.co.uk | megafans.co.uk

Solution environmental services

Project Risk Assessments & Method Statements

Client: Amspec Limited

Contract Name: Lower Campfield, Manchester

Location: Ground & Mezannine floors refurbishment

Job No: SE4704

Validity period: These risk assessments & method statements are only valid between:
02/09/24 - 02/02/25

Description of Works to be carried out:

SE(RA).01/01	Strip/ Alteration of Mechanical Services
SE(MS).01/01	Strip/ Alteration of Mechanical Services
SE(RA).02/01	Air Conditioning Installation Services
SE(MS).02/01	Air Conditioning Installation Services
SE(RA).04/01	Ventilation/ Ductwork Installation Services
SE(MS).04/01	Ventilation/ Ductwork Installation Services
SE(RA).05/01	Plumbing Pipework Installation Services
SE(MS).05/01	Plumbing Pipework Installation Services

Supervision

This will be by - Solution Environmental Services:
John Hall 07891 036160

Statements prepared and issued by: John Hall

Signed: John Hall.

Date: 02/09/2024

SE(RA).02/01

Solution environmental services

Strip/ Alteration of Mechanical Services

Site/Contract:	**Lower Campfield, Manchester**						Contract No.:	**SE4704**	
Activity:	**Strip/ Alteration of Mechanical Services**								
Are these risks and the type of work within the scope of your knowledge and experience? q Yes q No – See ⇨	Contact your H&S Advisor if the work is outside your scope of knowledge or experience.								
Assessment made by: **John Hall**	Assessment date: **02/09/2024**	Assessment No. **1**	Review Frequency: **2** month(s)		Copy to:	Site	**Yes**	Office	**Yes**

1. Persons Exposed **X** - If Applicable

SES Personnel						Non SES Personnel					
✕	General Employees	☐	Pregnant Workers	☐	Young Workers	☐	Other Workers	☐	Members of Public	✕	Client's Employees

NB – due to recent occurrence of COVID 19 virus please refer to Social Distancing section before commencing any works.

2. Hazard Checklist

Adverse weather (e.g. wind/rain) ✕	Hazardous Substances ✕	Wet surfaces
Assault / violence	Ionising radiation	Working outside ✕
Bacteria / Virus/ Sharps	Lone working	**Other Hazards**
Being hit by falling objects **X**	Social Distancing **X**	If you identify a hazard not on this list
Burns & Scalds ✕	Moving materials (e.g. crane loads)	please make sure you include it in the
Confined spaces	Moving parts of machines	risk assessment – Do not just ignore it!
Contact with mobile plant	Noise	**CONTACT WITH CLIENTS STAFF AND CUSTOMERS**
Cuts ✕	Overhead working	
Difficult access	Poor lighting / darkness	
Driving (e.g. vehicles & plant)	Portable equipment	
Dust / Fumes / Vapours ✕	Pressurised systems ✕	
Electricity	Slips, trips, falls ✕	
Excavations / pits	Temperature extremes ✕	
Explosion	Ventilation	
Exposure to sun/UV light	Vermin / Disease	
Falls from heights ✕	Very hot or cold objects ✕	
Fire ✕	Vibration	
Handling of loads ✕	Water (Risk of drowning)	

Solution environmental services

3. Risk Evaluation **Refer to Section 2 for hazard checklist & Section 5 for risk rating table**

Hazards Identified Using the hazards from the checklist or others that have been identified. Use the table below to help you decide what action should be taken.		**Likelihood of injury** 1. Unlikely (probably will not occur) 2. Low (may occur) 3. Medium (could occur) 4. High (probable) 5. Certain (above probable)			**Severity of injury** 1. Incident - (non first aid injury) 2. Minor Injury - (first aid or minor illness) 3. Moderate (over 3 day injury) 4. Serious - (major injury/illness as defined under RIDDOR) 5. Fatality – (death)			**Risk Rating** Scores Multiplied Likelihood x Severity	
		BEFORE	AFTER		BEFORE	AFTER		BEFORE	AFTER
Falls from heights		4	1		5	5		20	5
Fire		4	2		5	1		20	2
Contact with Clients Staff and Customers		4	1		4	2		16	2
Cuts		3	2		3	2		9	4
Handling of loads		4	1		4	2		16	2
Being Hit by Falling Objects		3	1		4	3		12	3
Slips, Trips & Falls		4	2		4	3		16	6
Portable Equipment/Tools		4	1		4	2		16	2
Adverse weather		3	1		2	1		6	1
Dust/ fumes		3	2		3	2		9	4
Pressurised systems		4	1		4	2		16	2
Temperature extremes		4	1		3	2		12	2
Very hot or cold objects		4	1		4	3		16	3
Social Distancing		3	1		4	3		12	3
Working outside		4	1		2	1		8	1

***BEFORE/AFTER ratings must be completed to demonstrate that control measures have reduced the risk of injury whilst carrying out the task.**

Remember to consider all aspects of the task and the surrounding environment when carrying out the risk evaluation. Also remember to consider that conditions may change between when the assessment is initially carried out and the work taking place; therefore remember to address what actually happens.

SE(RA).02/01

Solution environmental services

4. Hazards **(Identified)** **Workplace Precautions to be applied;**

Use the risk ratings – deal with the highest scores first	**Precautions**	**By Who:**
Falls from heights	Scaffold systems to be used wherever possible. Competent person (PASMA) to supervise the erection of all mobile scaffolds and to carry out inspections. Ensure floor surface is level. Ladders only to be used where scaffold systems cannot be used and only for short duration works. Any mobile platforms to be operated by currently trained IPAF operative.	JH
Fire	Hot Work Permits and extinguishers to be in place for all hot works. Works to be checked for smouldering prior to leaving site. Exit routes to be kept clear at all times and good housekeeping to be maintained. Ensure all waste is transported to refuse area.	JH
Contact with Clients Staff and Customers	Barriers and signage to be placed around working area.	JH
Cuts	Competent persons to carry out work. Correct PPE to be worn at all times (Steel toe cap Boots, Hi Viz Vest, Hard Hat and Gloves)	JH
Handling of loads	Manual handling to be avoided where possible. Mechanical aids to be used where possible for all loads over 20kg. Where manual handling is unavoidable the load should be reduced as much as possible. Correct PPE to be worn when lifting.	JH
Being Hit by Falling Objects	Work area to be segregated where possible. Signage to be in place. Mobile towers to have toe boards fitted.	JH
Slips, Trips & Falls	Good housekeeping standards to be maintained at all times. Battery drills to be used where possible to prevent trailing leads. Storage areas to be used correctly. Prevent fluids or rubbish accumulating on floor. Keep walkways clear of rubbish, parts or trailing leads from equipment. Any spillages to cleaned correctly and promptly. Ensure floor surface for working is level and suitable footwear is worn.	JH
Portable Equipment/Tools	Check equipment visually prior to use, including power cables. Do not use damaged or faulty equipment, remove from use without delay. Ensure any trailing leads are kept tidy and any electrical tools have a current PAT test certificate. All plant and equipment to be maintained correctly to aid in preventing vibration type injury's. Tools to be stored correctly at all times. PPE to be worn as detailed above. **UNDER NO CIRCUMSTANCES ARE TOOLS AND PLANT TO BE LEFT UNATTENDED. ALL OPERATIVES TO BE COMPETENT.**	JH
Adverse weather	Obtain detailed weather forecasts prior to external works and call off works if unsuitable weather including excess rain/ ice, extremes of temperature and high wind. Check external areas to ensure no ice formation in work areas/ walkways.	JH
Dust/ fumes	Competent engineers to carry out all work. All equipment to be checked and tested on a regular basis. Area of works to be kept well ventilated. PPE including goggles to be worn for works that may produce dust.	JH
Pressurised systems	Only trained staff who have undergone training to use the equipment. Gas cyclinders to be obtained from reputable industry suppliers, numbers kept to a minimum required. Cylinders to be moved and stored correctly away from any heat sources in an upright position with valves closed.	JH
Temperature extremes	Ensure suitable work patterns in extreme temperature conditions along with suitable clothing as per working outside assessment.	JH
Very hot or cold objects	Ensure protective clothing incl. correct gloves worn to deal with handling of extremely cold or hot objects that may lead to burns.	JH

Social Distancing	Due to recent COVID 19 disease occurrence, please ensure distancing of 2 metres is maintained and refer back to site manager/ SES supervisor if this is not achievable; 1) Government guidelines must be followed and reviewed daily for any updates to control measures. 2) Government guidelines on social distancing methods must be followed at all times- operatives must keep a minimum distance of 2 metres from others at all times. 3) Operatives should travel to site alone where possible. 4) Operatives should wear gloves when undertaking work tasks- avoid contact with eyes, nose and mouth. Avoid touching face. 5) Once tasks are completed, operatives should wash their hands for a minimum of 20 seconds. Hands should be washed more frequently than usual and prior to eating/ drinking. 6) On returning home, operatives should wash their hands immediately for a minimum of 20 seconds. 7) If operatives show any symptoms of Covid19, they should self isolate, inform their supervisor and call the NHS advice line on 111 for further information. 8) Any suspected symptoms or cases of Covid19 MUST be reported to the SES management team & the PC site team immediately.				JH
Working outside	Ensure appropriate clothing and footwear worn to suit the external conditions. Provide sun cream protection for conditions as required.				JH
Site:	Lower Campfield, Manchester	Contract No:	SE4704	Assessment No.	1

5. Risk Rating Table

Severity of Injury						
	5	5	10	15	20	25
	4	4	8	12	16	20
	3	3	6	9	12	15
	2	2	4	6	8	10
	1	1	2	3	4	5
		1	2	3	4	5
		Likelihood of Injury				

WHITE SQUARES = Low Significance (1-4)

GREY SQUARES = Medium Significance (4-9)

BLACK SQUARES = Major Significance (10-25)

Notes:	**Statement:**	(reviewed with no change):		
1. If possible avoid the risk altogether 2. Where possible combat risk at source 3. Give priority to measures which protect the whole workplace 4. Wherever possible, adapt the work to the individual 5. Take advantage of technological & technical progress **Personal protective equipment (PPE) should only be used to minimise risk as a last resort.**	Having reviewed the hazards and risks, the level of risk and the key risks, I believe that if the control measures identified are applied Solution Environmental Services Ltd will, so far as is reasonably practicable, have met the requirements of this assessment. Assessment made by: Name: John Hall Signature: Date: 02/09/2024			
		Name:	Signed:	Date:
		Name:	Signed:	Date:
		Name:	Signed:	Date:
		Name:	Signed:	Date:
		Name:	Signed:	Date:
		Name:	Signed:	Date:

SE(RA).02/01

RISK ASSESSMENT ACKNOWLEDGEMENT

Contract Name:- **Lower Campfield, Manchester**

Client:- **Amspec Limited**

RISK ASSESSMENT REFERENCE;
SE(RA).02/01 Strip/ Alteration of Mechanical Services

I have given the operatives under my control the above Method Statement and any required Risk Assessments.

Please complete this form to acknowledge that you have read and understand the above Method Statement.

Print Name	Position	Date	Signature

Supervisor name:- _____

Signed by Supervisor:- _____

Date:- _____

SE(MS).02/01

Strip/ Alteration of Mechanical Services

Client: Amspec Limited

Contract Name: Lower Campfield, Manchester

Location: Ground & Mezannine floors refurbishment

Job No: SE4704

Validity period: This method statement is only valid between: 02/09/24 - 02/02/25

Description of Works to be carried out:

Stripout of existing mechanical services

Schedule of equipment:

Items being worked on: Existing 4-pipe heating & chilled water system & fan coil units

NOTE - COVID 19/ Social Distancing measures

Due to the recent occurrence of COVID 19 virus please refer to Social Distancing section in accompanying Risk Assessment and ensure the below guidance is followed before commencing any works;

1) Government guidelines must be followed and reviewed daily for any updates to control measures.

2) Government guidelines on social distancing methods must be followed at all times- operatives must keep a minimum distance of 2 metres from others at all times.

3) Operatives should travel to site alone where possible.

4) Operatives should wear gloves when undertaking work tasks- avoid contact with eyes, nose and mouth. Avoid touching face.

5) Once tasks are completed, operatives should wash their hands for a minimum of 20 seconds. Hands should be washed more frequently than usual and prior to eating/ drinking.

6) On returning home, operatives should wash their hands immediately for a minimum of 20 seconds.

7) If operatives show any symptoms of Covid19, they should self isolate, inform their supervisor and call the NHS advice line on 111 for further information.

8) Any suspected symptoms or cases of Covid19 MUST be reported to the SES management team & the PC site team immediately.

Tools:	Pipe cutter, hand tools, 110V extension lead and transformer, 110v hammer drill, refrigerant manifold gauges, refrigerant recovery machine, 230v electrical tester, oxy-acetylene set.
Testing/ calibration of equipment:	Full PAT test certificate to be undertaken for 110V drill, extension lead and transformer. Full in-date calibration to be undertaken prior to using refrigerant manifold gauges and electrical tester. Flashback arrestor to be tested prior to utilising oxy-acetylene torch and cylinders to be stored off site, chained in upright position while being used.

Sequence of Works:

Check work area is clear and ready for modification work to commence, check scaffold has been certified ready for use by certificate holder, post signage around work area warning other trades to keep out. Transport plant and equipment from storage compound to installation site along pre surveyed route. Stack plant and equipment in orderly manner so they do not encroach on access and egress routes or create tripping hazards for staff and clients.

Begin installation works as per the following detailed method procedure (overleaf) ensuring that all waste and used equipment is removed on an ongoing basis and the work area is kept in a safe condition.

SE(MS).02/01

Method of works includes;

a) Check work area is clear and ready for modification/ stripout work to commence. Transport plant, tools and equipment from storage compound (vehicle) to works area along pre-surveyed access route. Access and egress of tools and plant being removed will be undertaken out of normal working hours to ensure no safety implications to the working staff in the live building environment.

b)Ensure the existing floor surfaces are fully protected from equipment being removed during the removal works.

c) Stack plant and equipment in orderly manner so they do not encroach on access and egress routes or create tripping hazards for staff and any visitors.

d)Access to the works area is via ground floor site entrance fenced area and onto floorplate.

e)Assemble tools, equipment & materials in work area and commence use of PPE as per Risk Assessment.

f) Check with site asbestos register prior to any works commencing and do not remove/ distureb any items suspected of containing asbestos containing materials.

g) All services to the heating & domestic water pipework to be isolated and physically disconnected including the LTHW & DWS water, BMS controls, electrics – these to be undertaken by others but to be checked for isolation visually and using electrical testers prior to any works).

h) Begin works ensuring that all waste is removed on an ongoing basis and work area is kept in a safe condition and well ventilated throughout the works.

i)Check that lthw heating pipework , chilled piepwork are fully drained down and vented before commencing any works on the systems.

j) Ensure hot works permit filled out for any hot works required and any smoke detection equipment taken off watch/ capped accordingly during works and reinstated following smolder check period.

,Remove pipe work connections and store safely ready for disposal.

m)Remove any redundant lagging and plant casings and store in “lay down” area paying attention not to block any fire escape routes.

n)Unbolt plant equipment into manageable sections and remove into a safe zone ready for disposal.

o)Heavier items of plant will be placed on a sack barrow and transported to the external “lay down area” before being transported from site.

p)Remove pipe work and valve connections and store safely ready for disposal.

q)Remove the existing low level pipework and associated flanges.

r)These will be cut into smaller sections and bagged, labelled and removed safely.

s)Remove to external “lay down area” for removal from site by others.

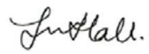
t)Adjust pipe work and any end caps as required and reconnect services that are to be retained.

u)Remove tools, redundant / surplus equipment & materials from site and leave in a clean & tidy condition.

v) REFRIGERANT DE-GAS - Utilise refrigerant recovery machine, refrigerant bottle and service gauges to connect to refrigerant system service ports and turn machine on when connected to bottle and lines open. Weigh refrigerant out into bottle and when 0psig reached close lines off and undertake rise test to ensure system pressure does not rise. Upon confirmation of no refrigerant left in the system close machine off and turn off bottle and disconnect. Clealry label system safe and de-gassed, fill out F-Gas information and dispose of refriegerant via a registered handler, obtiaining waste tranfer note.

SE(MS).02/01

Statement prepared and issued by: John Hall

Signed: 

Date: 02/09/2024

Supervision

This will be by - Solution Environmental Services Ltd;
John Hall 07891 036160

Supervision duties will include making routine checks to make sure that good working practices are being maintained and that appropriate PPE is being used. Check tools at intervals (day to day checks are the responsibility of individual operatives). A qualified competent operative must supervise the work.

Permit to Work

Hot works, Roof permits, to be arranged with main contractor.

Key Risks

Falls from height, Fire, Contact with staff and clients, Minor physical injuries from tools and Manual Handling.
Refer to the Risk Assessments attached for specific risks.

Access

Access to the working demise is via the dedicated route advised by main contractor's site personnel, as detailed in the site induction and above. These routes are to be kept free of materials, tools and rubbish.

Emergency Systems

In the event of an emergency the Site emergency rules are to be followed as instructed when inducted.

Personal Protection Equipment

Hard hats, Hi-Viz, protective footwear (and eye protection where required), gloves and overalls will be worn as detailed in the site specific Risk Assessment. Gloves will be worn at all times and will be of a type to suit the tasks being undertaken to protect your hands from any sharp metal edges or burns.

Special training required

PASMA for works at height on scaffold.
Attend an induction on safe site working.
Understand good working practices with tools.
You must understand the ways of minimising the manual handling of access equipment.

General safety

Make workers at ground or on lower levels aware of the high level work that is being done.
No tools, work equipment or materials to be left unattended at any time.

Waste disposal

Make sure that rubbish is not left lying about by cleaning up packing materials, etc as the work progresses – do not allow rubbish to accumulate. Take it to the designated refuse disposal point.

SE(MS).02/01

METHOD STATEMENT ACKNOWLEDGEMENT

Contract Name:- **Lower Campfield, Manchester**

Client:- **Amspec Limited**

METHOD STATEMENT REFERENCE;
SE(MS).02/01 Strip/ Alteration of Mechanical Services

I have given the operatives under my control the above Method Statement and any required Risk Assessments.

Please complete this form to acknowledge that you have read and understand the above Method Statement.

Print Name	Position	Date	Signature

Supervisor name:- _____

Signed by Supervisor:- _____

Date:- _____

SE(RA).02/01

Risk Assessment for air conditioning installation works

Site/Contract:	**Lower Campfield, Manchester**	Contract No.:	**SE4704**
Activity:	**Air Conditioning Installation Services**		
Are these risks and the type of work within the scope of your knowledge and experience? q Yes q No – See ⇨	Contact your H&S Advisor if the work is outside your scope of knowledge or experience.		

Assessment made by:	Assessment date:	Assessment No.	Review Frequency:		Copy to:	Site		Office	
John Hall	**02/09/2024**	**1**	**2** month(s)			**Yes**			**Yes**

1. Persons Exposed **X** - If Applicable

SES Personnel				Non SES Personnel			
✕	General Employees	☐	Pregnant Workers	☐	Young Workers	☐	Other Workers	☐	Members of Public	✕	Client's Employees
---	---	---	---	---	---	---	---	---	---	---	---

NB – due to recent occurrence of COVID 19 virus please refer to Social Distancing section before commencing any works.

2. Hazard Checklist

Adverse weather (e.g. wind/rain) ✕	Hazardous Substances ✕	Wet surfaces
Assault / violence	Ionising radiation	Working outside ✕
Bacteria / Virus/ Sharps	Lone working	**Other Hazards**
Being hit by falling objects X	Social Distancing **X**	If you identify a hazard not on this list
Burns & Scalds ✕	Moving materials (e.g. crane loads)	please make sure you include it in the
Confined spaces	Moving parts of machines	risk assessment – Do not just ignore it!
Contact with mobile plant	Noise	**CONTACT WITH CLIENTS STAFF AND CUSTOMERS**
Cuts ✕	Overhead working	
Difficult access	Poor lighting / darkness	
Driving (e.g. vehicles & plant)	Portable equipment	
Dust / Fumes / Vapours ✕	Pressurised systems ✕	
Electricity	Slips, trips, falls ✕	
Excavations / pits	Temperature extremes ✕	
Explosion	Ventilation	
Exposure to sun/UV light	Vermin / Disease	
Falls from heights ✕	Very hot or cold objects ✕	
Fire ✕	Vibration	
Handling of loads ✕	Water (Risk of drowning)	

Solution environmental services

3. Risk Evaluation **Refer to Section 2 for hazard checklist & Section 5 for risk rating table**

Hazards Identified Using the hazards from the checklist or others that have been identified. Use the table below to help you decide what action should be taken.		**Likelihood of injury** 1. Unlikely (probably will not occur) 2. Low (may occur) 3. Medium (could occur) 4. High (probable) 5. Certain (above probable)			**Severity of injury** 1. Incident - (non first aid injury) 2. Minor Injury - (first aid or minor illness) 3. Moderate (over 3 day injury) 4. Serious - (major injury/illness as defined under RIDDOR) 5. Fatality – (death)			**Risk Rating** Scores Multiplied Likelihood x Severity	
		BEFORE	AFTER		BEFORE	AFTER		BEFORE	AFTER
Falls from heights		4	1		5	5		20	5
Fire		4	2		5	1		20	2
Contact with Clients Staff and Customers		4	1		4	2		16	2
Cuts		3	2		3	2		9	4
Handling of loads		4	1		4	2		16	2
Being Hit by Falling Objects		3	1		4	3		12	3
Slips, Trips & Falls		4	2		4	3		16	6
Portable Equipment/Tools		4	1		4	2		16	2
Adverse weather		3	1		2	1		6	1
Dust/ fumes		3	2		3	2		9	4
Pressurised systems		4	1		4	2		16	2
Temperature extremes		4	1		3	2		12	2
Very hot or cold objects		4	1		4	3		16	3
Social Distancing		3	1		4	3		12	3
Working outside		4	1		2	1		8	1

***BEFORE/AFTER ratings must be completed to demonstrate that control measures have reduced the risk of injury whilst carrying out the task.**

Remember to consider all aspects of the task and the surrounding environment when carrying out the risk evaluation. Also remember to consider that conditions may change between when the assessment is initially carried out and the work taking place; therefore remember to address what actually happens.

SE(RA).02/01

Solution environmental services

4. Hazards **(Identified)** **Workplace Precautions to be applied;**

Use the risk ratings – deal with the highest scores first	**Precautions**	**By Who:**
Falls from heights	Scaffold systems to be used wherever possible. Competent person (PASMA) to supervise the erection of all mobile scaffolds and to carry out inspections. Ensure floor surface is level. Ladders only to be used where scaffold systems cannot be used and only for short duration works. Any mobile platforms to be operated by currently trained IPAF operative.	JH
Fire	Hot Work Permits and extinguishers to be in place for all hot works. Works to be checked for smouldering prior to leaving site. Exit routes to be kept clear at all times and good housekeeping to be maintained. Ensure all waste is transported to refuse area.	JH
Contact with Clients Staff and Customers	Barriers and signage to be placed around working area.	JH
Cuts	Competent persons to carry out work. Correct PPE to be worn at all times (Steel toe cap Boots, Hi Viz Vest, Hard Hat and Gloves)	JH
Handling of loads	Manual handling to be avoided where possible. Mechanical aids to be used where possible for all loads over 20kg. Where manual handling is unavoidable the load should be reduced as much as possible. Correct PPE to be worn when lifting.	JH
Being Hit by Falling Objects	Work area to be segregated where possible. Signage to be in place. Mobile towers to have toe boards fitted.	JH
Slips, Trips & Falls	Good housekeeping standards to be maintained at all times. Battery drills to be used where possible to prevent trailing leads. Storage areas to be used correctly. Prevent fluids or rubbish accumulating on floor. Keep walkways clear of rubbish, parts or trailing leads from equipment. Any spillages to cleaned correctly and promptly. Ensure floor surface for working is level and suitable footwear is worn.	JH
Portable Equipment/Tools	Check equipment visually prior to use, including power cables. Do not use damaged or faulty equipment, remove from use without delay. Ensure any trailing leads are kept tidy and any electrical tools have a current PAT test certificate. All plant and equipment to be maintained correctly to aid in preventing vibration type injury's. Tools to be stored correctly at all times. PPE to be worn as detailed above. **UNDER NO CIRCUMSTANCES ARE TOOLS AND PLANT TO BE LEFT UNATTENDED. ALL OPERATIVES TO BE COMPETENT.**	JH
Adverse weather	Obtain detailed weather forecasts prior to external/ plantroom works and call off works if unsuitable weather including excess rain/ ice, extremes of temperature and high wind. Check external areas to ensure no ice formation in work areas/ walkways.	JH
Dust/ fumes	Competent engineers to carry out all work. All equipment to be checked and tested on a regular basis. Area of works to be kept well ventilated. PPE including goggles to be worn for works that may produce dust.	JH
Pressurised systems	Only trained staff who have undergone training to use the equipment. Gas cyclinders to be obtained from reputable industry suppliers, numbers kept to a minimum required. Cylinders to be moved and stored correctly away from any heat sources in an upright position with valves closed.	JH
Temperature extremes	Ensure suitable work patterns in extreme temperature conditions along with suitable clothing as per working outside assessment.	JH
Very hot or cold objects	Ensure protective clothing incl. correct gloves worn to deal with handling of extremely cold or hot objects that may lead to burns.	JH

Social Distancing	Due to recent COVID 19 disease occurrence, please ensure distancing of 2 metres is maintained and refer back to site manager/ SES supervisor if this is not achievable; 1) Government guidelines must be followed and reviewed daily for any updates to control measures. 2) Government guidelines on social distancing methods must be followed at all times- operatives must keep a minimum distance of 2 metres from others at all times. 3) Operatives should travel to site alone where possible. 4) Operatives should wear gloves when undertaking work tasks- avoid contact with eyes, nose and mouth. Avoid touching face. 5) Once tasks are completed, operatives should wash their hands for a minimum of 20 seconds. Hands should be washed more frequently than usual and prior to eating/ drinking. 6) On returning home, operatives should wash their hands immediately for a minimum of 20 seconds. 7) If operatives show any symptoms of Covid19, they should self isolate, inform their supervisor and call the NHS advice line on 111 for further information. 8) Any suspected symptoms or cases of Covid19 MUST be reported to the SES management team & the PC site team immediately.				JH
Working outside	Ensure appropriate clothing and footwear worn to suit the external conditions. Provide sun cream protection for conditions as required.				JH
Site:	Lower Campfield, Manchester	Contract No:	SE4704	Assessment No.	1

5. Risk Rating Table

Severity of Injury						
	5	5	10	15	20	25
	4	4	8	12	16	20
	3	3	6	9	12	15
	2	2	4	6	8	10
	1	1	2	3	4	5
		1	2	3	4	5
		Likelihood of Injury				

WHITE SQUARES = Low Significance (1-4)

GREY SQUARES = Medium Significance (4-9)

BLACK SQUARES = Major Significance (10-25)

Notes:

1. If possible avoid the risk altogether
2. Where possible combat risk at source
3. Give priority to measures which protect the whole workplace
4. Wherever possible, adapt the work to the individual
5. Take advantage of technological & technical progress

Personal protective equipment (PPE) should only be used to minimise risk as a last resort.

Statement:

Having reviewed the hazards and risks, the level of risk and the key risks, I believe that if the control measures identified are applied Solution Environmental Services Ltd will, so far as is reasonably practicable, have met the requirements of this assessment.

Assessment made by:

Name: John Hall

Signature:

Date: 02/09/2024

(reviewed with no change):

Name:	Signed:	Date:
Name:	Signed:	Date:
Name:	Signed:	Date:
Name:	Signed:	Date:
Name:	Signed:	Date:
Name:	Signed:	Date:
Name:	Signed:	Date:

SE(RA).02/01

RISK ASSESSMENT ACKNOWLEDGEMENT

Contract Name:- **Lower Campfield, Manchester**

Client:- **Amspec Limited**

RISK ASSESSMENT REFERENCE;
SE(RA).02/01 Air Conditioning Installation Services

I have given the operatives under my control the above Method Statement and any required Risk Assessments.

Please complete this form to acknowledge that you have read and understand the above Method Statement.

Print Name	Position	Date	Signature

Supervisor name:- _____

Signed by Supervisor:- _____

Date:- _____

SE(MS).02/01

Method Statement for air conditioning installation works

Client: Amspec Limited

Contract Name: Lower Campfield, Manchester

Location: Ground & Mezannine floors refurbishment

Job No: SE4704

Validity period: This method statement is only valid between:
02/09/24 - 02/02/25

Description of Works to be carried out:

Installation of VRF/ split-type air conditioning units and pipework

Schedule of equipment:

Items being worked on: VRF & Split indoor/ outdoor units, system refriegerant and condensate pipework

NOTE - COVID 19/ Social Distancing measures

Due to the recent occurrence of COVID 19 virus please refer to Social Distancing section in accompanying Risk Assessment and ensure the below guidance is followed before commencing any works;

1) Government guidelines must be followed and reviewed daily for any updates to control measures.

2) Government guidelines on social distancing methods must be followed at all times- operatives must keep a minimum distance of 2 metres from others at all times.

3) Operatives should travel to site alone where possible.

4) Operatives should wear gloves when undertaking work tasks- avoid contact with eyes, nose and mouth. Avoid touching face.

5) Once tasks are completed, operatives should wash their hands for a minimum of 20 seconds. Hands should be washed more frequently than usual and prior to eating/ drinking.

6) On returning home, operatives should wash their hands immediately for a minimum of 20 seconds.

7) If operatives show any symptoms of Covid19, they should self isolate, inform their supervisor and call the NHS advice line on 111 for further information.

8) Any suspected symptoms or cases of Covid19 MUST be reported to the SES management team & the PC site team immediately.

Tools:	Pipe cutter, hand tools, 110V extension lead and transformer, 110v hammer drill, refrigerant manifold gauges, refrigerant recovery machine, 230v electrical tester, oxy-acetylene set.
Testing/ calibration of equipment:	Full PAT test certificate to be undertaken for 110V drill, extension lead and transformer. Full in-date calibration to be undertaken prior to using refrigerant manifold gauges and electrical tester. Flashback arrestor to be tested prior to utilising oxy-acetylene torch and cylinders to be stored off site, chained in upright position while being used.

Sequence of Works:

Check work area is clear and ready for modification work to commence, check scaffold has been certified ready for use by certificate holder, post signage around work area warning other trades to keep out. Transport plant and equipment from storage compound to installation site along pre surveyed route. Stack plant and equipment in orderly manner so they do not encroach on access and egress routes or create tripping hazards for staff and clients.

Begin installation works as per the following detailed method procedure (overleaf) ensuring that all waste and used equipment is removed on an ongoing basis and the work area is kept in a safe condition.

SE(MS).02/01

Method of works includes;

1. Mark out bracket positions using and make sound fixings in wall/ ceilings using suitable approved fixings (Multi-Wedge fixings to be used in web decked overhead area). Existing structure is a listed building - do not drill the existing steel/ building structure under any circumstances for fixing points.

2.Utilise suitably selected Genie Lift to raise units up to working height and locate onto pre-fixed wall/ ceiling frames.

3. Obtain hot works permit prior to commencing any refrigerant pipework install works and ensure fire alarm taken off watch (if works are indoors or near to combustible material).

4.Where brazing required to connect pipes ensure working fire extinguisher at hand throughout works and fire-watch present.

5.Ensure area is kept ventilated while works are ongoing and correct PPE worn inc. gloves, ear defenders and goggles.

6.Thoroughly degrease and clean parts and joints to be brazed and cut to size.

7.Ensure joints of pipes fit closely.

8.Use oxy-acetylene set to heat the joint evenly to the recommended temperature. Oxy-acetylene equipment to have flashback arrestors.

9.Apply the brazing alloy to the heated joint, do not melt the alloy with the torch.

10.Allow the joint to cool.

11.Pass oxygen free nitrogen (OFN) through the pipework being joined while the brazing operation is taking place via service port.

12. All refrigerant pipework must be fully insulated with the correct sized insulation material in order to prevent ice and condensation forming on the pipework. Feed this down over the pipework as required during works.

13. Continue works as indicated on construction issue drawings on floor plate repeating steps 3-12 above over to external area ground floor condenser unit.

14. Undertake full nitrogen pressure test of the pipework to manufacturer recommendations (to ensure leak and strength test integrity) using oxygen-free nitrogen (OFN) along with nitrogen gauge and correct manifold- check before commencing.

15. Upon completion of requirement for hot works ensure all work areas are clear and no smouldering occurring of installed lines or surrounding area before liaising again with PC to sign hot works completion form.

16. Upon checking of pressure with OFN release and evacuate the moisture from the pipework using a suitable two-stage pump (refrigerant pipework only).

17. Break the vacuum by opening the refrigerant lines on the condenser unit and add any additional refrigerant required into system as per manufacturer's recommendations via service valves and check performance via refrigerant gauges.

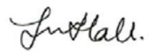
18.Commission systems.

19. (Electrical installation / testing by others)

20.Upon completion ensure that all waste is removed and work area is left in a safe condition.

SE(MS).02/01

Statement prepared and issued by: John Hall

Signed: 

Date: 02/09/2024

Supervision

This will be by - Solution Environmental Services Ltd;
John Hall 07891 036160

Supervision duties will include making routine checks to make sure that good working practices are being maintained and that appropriate PPE is being used. Check tools at intervals (day to day checks are the responsibility of individual operatives). A qualified competent operative must supervise the work.

Permit to Work

Hot works, Roof permits, to be arranged with main contractor.

Key Risks

Falls from height, Fire, Contact with staff and clients, Minor physical injuries from tools and Manual Handling.
Refer to the Risk Assessments attached for specific risks.

Access

Access to the working demise is via the dedicated route advised by main contractor's site personnel, as detailed in the site induction and above. These routes are to be kept free of materials, tools and rubbish.

Emergency Systems

In the event of an emergency the Site emergency rules are to be followed as instructed when inducted.

Personal Protection Equipment

Hard hats, Hi-Viz, protective footwear (and eye protection where required), gloves and overalls will be worn as detailed in the site specific Risk Assessment. Gloves will be worn at all times and will be of a type to suit the tasks being undertaken to protect your hands from any sharp metal edges or burns.

Special training required

C&G 2079 refrigerant handling.
PASMA for works at height on scaffold.
Attend an induction on safe site working.
Understand good working practices with tools.
You must understand the ways of minimising the manual handling of access equipment.

General safety

Make workers at ground or on lower levels aware of the high level work that is being done.
No tools, work equipment or materials to be left unattended at any time.

Waste disposal

Make sure that rubbish is not left lying about by cleaning up packing materials, etc as the work progresses – do not allow rubbish to accumulate. Take it to the designated refuse disposal point.

SE(MS).02/01

METHOD STATEMENT ACKNOWLEDGEMENT

Contract Name:- **Lower Campfield, Manchester**

Client:- **Amspec Limited**

METHOD STATEMENT REFERENCE;
SE(MS).02/01 Air Conditioning Installation Services

I have given the operatives under my control the above Method Statement and any required Risk Assessments.

Please complete this form to acknowledge that you have read and understand the above Method Statement.

Print Name	Position	Date	Signature

Supervisor name:- _____

Signed by Supervisor:- _____

Date:- _____

SE(RA).04/01

Risk Assessment for ventilation/ ductwork installation works

Site/Contract:	**Lower Campfield, Manchester**	Contract No.:	**SE4704**
Activity:	**Ventilation/ Ductwork Installation Services**		
Are these risks and the type of work within the scope of your knowledge and experience? q Yes q No – See ⇨	Contact your H&S Advisor if the work is outside your scope of knowledge or experience.		

Assessment made by:	Assessment date:	Assessment No.	Review Frequency:		Copy to:	Site		Office	
John Hall	**02/09/2024**	**1**	**2** month(s)			**Yes**			**Yes**

1. Persons Exposed **X** - If Applicable

SES Personnel				Non SES Personnel			
X	General Employees		Pregnant Workers		Young Workers		Other Workers		Members of Public	X	Client's Employees

NB – due to recent occurrence of COVID 19 virus please refer to Social Distancing section before commencing any works.

2. Hazard Checklist

Adverse weather (e.g. wind/rain)	Hazardous Substances	Wet surfaces
Assault / violence	Ionising radiation	Working outside
Bacteria / Virus/ Sharps	Lone working	**Other Hazards**
Being hit by falling objects X	Social Distancing **X**	If you identify a hazard not on this list
Burns & Scalds ✕	Moving materials (e.g. crane loads)	please make sure you include it in the
Confined spaces	Moving parts of machines	risk assessment – Do not just ignore it!
Contact with mobile plant	Noise X	**CONTACT WITH CLIENTS STAFF AND CUSTOMERS**
Cuts ✕	Overhead working	
Difficult access	Poor lighting / darkness	
Driving (e.g. vehicles & plant)	Portable equipment	
Dust / Fumes / Vapours ✕	Pressurised systems	
Electricity	Slips, trips, falls ✕	
Excavations / pits	Temperature extremes ✕	
Explosion	Ventilation	
Exposure to sun/UV light	Vermin / Disease	
Falls from heights ✕	Very hot or cold objects ✕	
Fire ✕	Vibration X	
Handling of loads ✕	Water (Risk of drowning)	

Solution environmental services

3. Risk Evaluation **Refer to Section 2 for hazard checklist & Section 5 for risk rating table**

Hazards Identified Using the hazards from the checklist or others that have been identified. Use the table below to help you decide what action should be taken.		**Likelihood of injury** 1. Unlikely (probably will not occur) 2. Low (may occur) 3. Medium (could occur) 4. High (probable) 5. Certain (above probable)			**Severity of injury** 1. Incident - (non first aid injury) 2. Minor Injury - (first aid or minor illness) 3. Moderate (over 3 day injury) 4. Serious - (major injury/illness as defined under RIDDOR) 5. Fatality – (death)			**Risk Rating** Scores Multiplied Likelihood x Severity	
		BEFORE	AFTER		BEFORE	AFTER		BEFORE	AFTER
Falls from heights		4	1		5	5		20	5
Fire		4	2		5	1		20	2
Being Hit by Falling Objects		4	1		4	2		16	2
Cuts		3	2		3	2		9	4
Handling of loads		4	1		4	2		16	2
Slips, Trips & Falls		4	2		4	3		16	6
Portable Equipment/Tools		4	1		4	2		16	2
Noise		3	1		2	1		6	1
Dust/ fumes		3	2		3	2		9	4
Vibration		4	1		4	2		16	2
Temperature extremes		4	1		3	2		12	2
Social Distancing		3	1		4	3		12	3
Very hot or cold objects		4	1		4	3		16	3

***BEFORE/AFTER ratings must be completed to demonstrate that control measures have reduced the risk of injury whilst carrying out the task.**

Remember to consider all aspects of the task and the surrounding environment when carrying out the risk evaluation. Also remember to consider that conditions may change between when the assessment is initially carried out and the work taking place; therefore remember to address what actually happens.

SE(RA).04/01

Solution environmental services

4. Hazards **(Identified)** **Workplace Precautions to be applied;**

Use the risk ratings – deal with the highest scores first	**Precautions**	**By Who:**
Falls from heights	Scaffold systems to be used wherever possible. Competent person (PASMA) to supervise the erection of all mobile scaffolds and to carry out inspections. Ensure floor surface is level. Ladders only to be used where scaffold systems cannot be used and only for short duration works. Any mobile platforms to be operated by currently trained IPAF operative.	JH
Fire	Hot Work Permits and extinguishers to be in place for all hot works. Works to be checked for smouldering prior to leaving site. Exit routes to be kept clear at all times and good housekeeping to be maintained. Ensure all waste is transported to refuse area.	JH
Vibration	Ensure stout gloves worn and any cutting works kept to short duration.	JH
Cuts	Competent persons to carry out work. Correct PPE to be worn at all times (Steel toe cap Boots, Hi Viz Vest, Hard Hat and Gloves)	JH
Handling of loads	Manual handling to be avoided where possible. Mechanical aids to be used where possible for all loads over 20kg. Where manual handling is unavoidable the load should be reduced as much as possible. Correct PPE to be worn when lifting.	JH
Being Hit by Falling Objects	Work area to be segregated where possible. Signage to be in place. Mobile towers to have toe boards fitted.	JH
Noise	Ensure work area segregated and ensure ear protection worn by all operatives as required during cutting works. Works to be short duration.	JH
Slips, Trips & Falls	Good housekeeping standards to be maintained at all times. Battery drills to be used where possible to prevent trailing leads. Storage areas to be used correctly. Prevent fluids or rubbish accumulating on floor. Keep walkways clear of rubbish, parts or trailing leads from equipment. Any spillages to cleaned correctly and promptly. Ensure floor surface for working is level and suitable footwear is worn.	JH
Portable Equipment/Tools	Check equipment visually prior to use, including power cables. Do not use damaged or faulty equipment, remove from use without delay. Ensure any trailing leads are kept tidy and any electrical tools have a current PAT test certificate. All plant and equipment to be maintained correctly to aid in preventing vibration type injury's. Tools to be stored correctly at all times. PPE to be worn as detailed above. **UNDER NO CIRCUMSTANCES ARE TOOLS AND PLANT TO BE LEFT UNATTENDED. ALL OPERATIVES TO BE COMPETENT.**	JH
Dust/ fumes	Competent engineers to carry out all work. All equipment to be checked and tested on a regular basis. Area of works to be kept well ventilated. PPE including goggles to be worn for works that may produce dust.	JH
Temperature extremes	Ensure suitable work patterns in extreme temperature conditions along with suitable clothing as per working outside assessment.	JH

Social Distancing	Due to recent COVID 19 disease occurrence, please ensure distancing of 2 metres is maintained and refer back to site manager/ SES supervisor if this is not achievable; 1) Government guidelines must be followed and reviewed daily for any updates to control measures. 2) Government guidelines on social distancing methods must be followed at all times- operatives must keep a minimum distance of 2 metres from others at all times. 3) Operatives should travel to site alone where possible. 4) Operatives should wear gloves when undertaking work tasks- avoid contact with eyes, nose and mouth. Avoid touching face. 5) Once tasks are completed, operatives should wash their hands for a minimum of 20 seconds. Hands should be washed more frequently than usual and prior to eating/ drinking. 6) On returning home, operatives should wash their hands immediately for a minimum of 20 seconds. 7) If operatives show any symptoms of Covid19, they should self isolate, inform their supervisor and call the NHS advice line on 111 for further information. 8) Any suspected symptoms or cases of Covid19 MUST be reported to the SES management team & the PC site team immediately.				JH
Very hot or cold objects	Ensure protective clothing incl. correct gloves worn to deal with handling of extremely cold or hot objects that may lead to burns.				JH
Site:	Lower Campfield, Manchester	Contract No:	SE4704	Assessment No.	1

5. Risk Rating Table

Severity of Injury						
	5	5	10	15	20	25
	4	4	8	12	16	20
	3	3	6	9	12	15
	2	2	4	6	8	10
	1	1	2	3	4	5
		1	2	3	4	5
		Likelihood of Injury				

WHITE SQUARES = Low Significance (1-4)

GREY SQUARES = Medium Significance (4-9)

BLACK SQUARES = Major Significance (10-25)

Notes:

1. If possible avoid the risk altogether
2. Where possible combat risk at source
3. Give priority to measures which protect the whole workplace
4. Wherever possible, adapt the work to the individual
5. Take advantage of technological & technical progress

Personal protective equipment (PPE) should only be used to minimise risk as a last resort.

Statement:

Having reviewed the hazards and risks, the level of risk and the key risks, I believe that if the control measures identified are applied Solution Environmental Services Ltd will, so far as is reasonably practicable, have met the requirements of this assessment.

Assessment made by:

Name: John Hall

Signature:

Date: 02/09/2024

(reviewed with no change):

Name:	Signed:	Date:
Name:	Signed:	Date:
Name:	Signed:	Date:
Name:	Signed:	Date:
Name:	Signed:	Date:
Name:	Signed:	Date:
Name:	Signed:	Date:

SE(RA).04/01

RISK ASSESSMENT ACKNOWLEDGEMENT

Contract Name:- **Lower Campfield, Manchester**

Client:- **Amspec Limited**

RISK ASSESSMENT REFERENCE;
SE(RA).04/01 Ventilation/ Ductwork Installation Services

I have given the operatives under my control the above Method Statement and any required Risk Assessments.

Please complete this form to acknowledge that you have read and understand the above Method Statement.

Print Name	Position	Date	Signature

Supervisor name:- _____

Signed by Supervisor:- _____

Date:- _____

SE(MS).04/01

Method Statement for ventilation/ ductwork installation works

Client: Amspec Limited

Contract Name: Lower Campfield, Manchester

Location: Ground & Mezannine floors refurbishment

Job No: SE4704

Validity period: This method statement is only valid between:
02/09/24 - 02/02/25

Description of Works to be carried out:

Installation of UPVC, mild-steel supply & extract ductwork into internal areas.

NOTE - COVID 19/ Social Distancing measures

Due to the recent occurrence of COVID 19 virus please refer to Social Distancing section in accompanying Risk Assessment and ensure the below guidance is followed before commencing any works;

1) Government guidelines must be followed and reviewed daily for any updates to control measures.

2) Government guidelines on social distancing methods must be followed at all times- operatives must keep a minimum distance of 2 metres from others at all times.

3) Operatives should travel to site alone where possible.

4) Operatives should wear gloves when undertaking work tasks- avoid contact with eyes, nose and mouth. Avoid touching face.

5) Once tasks are completed, operatives should wash their hands for a minimum of 20 seconds. Hands should be washed more frequently than usual and prior to eating/ drinking.

6) On returning home, operatives should wash their hands immediately for a minimum of 20 seconds.

7) If operatives show any symptoms of Covid19, they should self isolate, inform their supervisor and call the NHS advice line on 111 for further information.

8) Any suspected symptoms or cases of Covid19 MUST be reported to the SES management team & the PC site team immediately.

Schedule of equipment:

Items being worked on: UPVC, Mild steel rectangular and spiral ductwork plus associated supports, dampers and fixings.

Tools: Hand tools, 110V extension lead and transformer, 110v chop-saw.

Testing/ calibration of equipment: Full PAT test certificate to be undertaken for 110V drill, extension lead and transformer.

Sequence of Works:

Check work area is clear and ready for modification work to commence, check scaffold has been certified ready for use by certificate holder, post signage around work area warning other trades to keep out. Transport plant and equipment from storage compound to installation site along pre surveyed route. Stack plant and equipment in orderly manner so they do not encroach on access and egress routes or create tripping hazards for staff and clients.

Begin installation works as per the following detailed method procedure (overleaf) ensuring that all waste and used equipment is removed on an ongoing basis and the work area is kept in a safe condition.

SE(MS).04/01

Solution environmental services

Method of works includes;

1.Check work area is clear and ready for work to commence.

2.Check tools are in good working order, ensure trailing leads kept to a minimum.

3.Confirm exact locations of supply/ extract air ductwork as noted on construction issue drawings.

4. Install bracket supports within ceiling void using screwed rods/ unistrut/ gripple wires (Multi-Wedge fixings to be used in overhead webdecked area). Existing structure is a listed building - do not drill the existing steel/ building structure under any circumstances for fixing points.

5.Duct sections to be measured and cut to size, deburred and installed in position.
Ensure chop-saw has suitable sized wheel for purpose, guard fitted and checked prior to using chop-saw.
Never tamper with the guard.

6.Install new VCDs, Fire Dampers and check the dampers works correctly.

7.Install supply side of ductwork to damper and attach grille diffusers.

8.Remove any excess materials back to storage area or skips.

9.Repeat process until all ductwork and fire dampers and VCD's are in position.

10.Upon installation of ceiling grid connect grille box to 1st fix ductwork until complete.

SE(MS).04/01

Supervision

This will be by - Solution Environmental Services Ltd;
John Hall 07891 036160

Supervision duties will include making routine checks to make sure that good working practices are being maintained and that appropriate PPE is being used. Check tools at intervals (day to day checks are the responsibility of individual operatives). A qualified competent operative must supervise the work.

Permit to Work

Hot works, Roof permits, to be arranged with main contractor.

Key Risks

Falls from height, Fire, Contact with staff and clients, Minor physical injuries from tools and Manual Handling.
Refer to the Risk Assessments attached for specific risks.

Access

Access to the working demise is via the dedicated route advised by main contractor's site personnel, as detailed in the site induction and above. These routes are to be kept free of materials, tools and rubbish.

Emergency Systems

In the event of an emergency the Site emergency rules are to be followed as instructed when inducted.

Personal Protection Equipment

Hard hats, Hi-Viz, protective footwear (and eye protection where required), gloves and overalls will be worn as detailed in the site specific Risk Assessment. Gloves will be worn at all times and will be of a type to suit the tasks being undertaken to protect your hands from any sharp metal edges or burns.

Special training required

PASMA for works at height on scaffold.
Attend an induction on safe site working.
Understand good working practices with tools.
You must understand the ways of minimising the manual handling of access equipment.

General safety

Make workers at ground or on lower levels aware of the high level work that is being done.
No tools, work equipment or materials to be left unattended at any time.

Waste disposal

Make sure that rubbish is not left lying about by cleaning up packing materials, etc as the work progresses – do not allow rubbish to accumulate. Take it to the designated refuse disposal point.

Statement prepared and issued by: John Hall

Signed: 

Date: 02/09/2024

SE(MS).04/01

Solution environmental services

METHOD STATEMENT ACKNOWLEDGEMENT

Contract Name:- **Lower Campfield, Manchester**

Client:- **Amspec Limited**

METHOD STATEMENT REFERENCE;
SE(MS).04/01 Ventilation/ Ductwork Installation Services

I have given the operatives under my control the above Method Statement and any required Risk Assessments.

Please complete this form to acknowledge that you have read and understand the above Method Statement.

Print Name	Position	Date	Signature

Supervisor name:- _____

Signed by Supervisor:- _____

Date:- _____

SE(RA).05/01

Solution environmental services

Risk Assessment for plumbing installation works

Site/Contract:	**Lower Campfield, Manchester**						Contract No.:	**SE4704**	
Activity:	**Plumbing Pipework Installation Services**								
Are these risks and the type of work within the scope of your knowledge and experience? q Yes q No – See ⇨	Contact your H&S Advisor if the work is outside your scope of knowledge or experience.								
Assessment made by: **John Hall**	Assessment date: **02/09/2024**	Assessment No. **1**	Review Frequency: **2** month(s)		Copy to:	Site	**Yes**	Office	**Yes**

1. Persons Exposed **X** - If Applicable

SES Personnel						Non SES Personnel					
✕	General Employees	☐	Pregnant Workers	☐	Young Workers	☐	Other Workers	☐	Members of Public	✕	Client's Employees

2. Hazard Checklist

Adverse weather (e.g. wind/rain) ✕	Hazardous Substances ✕	Wet surfaces
Assault / violence	Ionising radiation	Working outside ✕
Bacteria / Virus/ Sharps	Lone working	**Other Hazards**
Being hit by falling objects X	Social Distancing X	If you identify a hazard not on this list
Burns & Scalds ✕	Moving materials (e.g. crane loads)	please make sure you include it in the
Confined spaces	Moving parts of machines	risk assessment – Do not just ignore it!
Contact with mobile plant	Noise	**CONTACT WITH CLIENTS STAFF AND CUSTOMERS**
Cuts ✕	Overhead working	
Difficult access	Poor lighting / darkness	
Driving (e.g. vehicles & plant)	Portable equipment	
Dust / Fumes / Vapours ✕	Pressurised systems ✕	
Electricity	Slips, trips, falls ✕	
Excavations / pits	Temperature extremes ✕	
Explosion	Ventilation	
Exposure to sun/UV light	Vermin / Disease	
Falls from heights ✕	Very hot or cold objects ✕	
Fire ✕	Vibration	
Handling of loads ✕	Water (Risk of drowning)	

Solution environmental services

3. Risk Evaluation **Refer to Section 2 for hazard checklist & Section 5 for risk rating table**

Hazards Identified Using the hazards from the checklist or others that have been identified. Use the table below to help you decide what action should be taken.		**Likelihood of injury** 1. Unlikely (probably will not occur) 2. Low (may occur) 3. Medium (could occur) 4. High (probable) 5. Certain (above probable)			**Severity of injury** 1. Incident - (non first aid injury) 2. Minor Injury - (first aid or minor illness) 3. Moderate (over 3 day injury) 4. Serious - (major injury/illness as defined under RIDDOR) 5. Fatality – (death)			**Risk Rating** Scores Multiplied Likelihood x Severity	
		BEFORE	AFTER		BEFORE	AFTER		BEFORE	AFTER
Falls from heights		4	1		5	5		20	5
Fire		4	2		5	1		20	2
Contact with Clients Staff and Customers		4	1		4	2		16	2
Cuts		3	2		3	2		9	4
Handling of loads		4	1		4	2		16	2
Being Hit by Falling Objects		3	1		4	3		12	3
Slips, Trips & Falls		4	2		4	3		16	6
Portable Equipment/Tools		4	1		4	2		16	2
Adverse weather		3	1		2	1		6	1
Dust/ fumes		3	2		3	2		9	4
Pressurised systems		4	1		4	2		16	2
Temperature extremes		4	1		3	2		12	2
Very hot or cold objects		4	1		4	3		16	3
Social Distancing		3	1		4	3		12	3
Working outside		4	1		2	1		8	1

***BEFORE/AFTER ratings must be completed to demonstrate that control measures have reduced the risk of injury whilst carrying out the task.**

Remember to consider all aspects of the task and the surrounding environment when carrying out the risk evaluation. Also remember to consider that conditions may change between when the assessment is initially carried out and the work taking place; therefore remember to address what actually happens.

SE(RA).05/01

Solution environmental services

4. Hazards **(Identified)** **Workplace Precautions to be applied;**

Use the risk ratings – deal with the highest scores first	**Precautions**	**By Who:**
Falls from heights	Scaffold systems to be used wherever possible. Competent person (PASMA) to supervise the erection of all mobile scaffolds and to carry out inspections. Ensure floor surface is level. Ladders only to be used where scaffold systems cannot be used and only for short duration works. Any mobile platforms to be operated by currently trained IPAF operative.	JH
Fire	Hot Work Permits and extinguishers to be in place for all hot works. Works to be checked for smouldering prior to leaving site. Exit routes to be kept clear at all times and good housekeeping to be maintained. Ensure all waste is transported to refuse area.	JH
Contact with Clients Staff and Customers	Barriers and signage to be placed around working area.	JH
Cuts	Competent persons to carry out work. Correct PPE to be worn at all times (Steel toe cap Boots, Hi Viz Vest, Hard Hat and Gloves)	JH
Handling of loads	Manual handling to be avoided where possible. Mechanical aids to be used where possible for all loads over 20kg. Where manual handling is unavoidable the load should be reduced as much as possible. Correct PPE to be worn when lifting.	JH
Being Hit by Falling Objects	Work area to be segregated where possible. Signage to be in place. Mobile towers to have toe boards fitted.	JH
Slips, Trips & Falls	Good housekeeping standards to be maintained at all times. Battery drills to be used where possible to prevent trailing leads. Storage areas to be used correctly. Prevent fluids or rubbish accumulating on floor. Keep walkways clear of rubbish, parts or trailing leads from equipment. Any spillages to cleaned correctly and promptly. Ensure floor surface for working is level and suitable footwear is worn.	JH
Portable Equipment/Tools	Check equipment visually prior to use, including power cables. Do not use damaged or faulty equipment, remove from use without delay. Ensure any trailing leads are kept tidy and any electrical tools have a current PAT test certificate. All plant and equipment to be maintained correctly to aid in preventing vibration type injury's. Tools to be stored correctly at all times. PPE to be worn as detailed above. **UNDER NO CIRCUMSTANCES ARE TOOLS AND PLANT TO BE LEFT UNATTENDED. ALL OPERATIVES TO BE COMPETENT.**	JH
Adverse weather	Obtain detailed weather forecasts prior to external works and call off works if unsuitable weather including excess rain/ ice, extremes of temperature and high wind. Check external areas to ensure no ice formation in work areas/ walkways.	JH
Dust/ fumes	Competent engineers to carry out all work. All equipment to be checked and tested on a regular basis. Area of works to be kept well ventilated. PPE including goggles to be worn for works that may produce dust.	JH
Pressurised systems	Only trained staff who have undergone training to use the equipment. Gas cyclinders to be obtained from reputable industry suppliers, numbers kept to a minimum required. Cylinders to be moved and stored correctly away from any heat sources in an upright position with valves closed.	JH
Temperature extremes	Ensure suitable work patterns in extreme temperature conditions along with suitable clothing as per working outside assessment.	JH
Very hot or cold objects	Ensure protective clothing incl. correct gloves worn to deal with handling of extremely cold or hot objects that may lead to burns.	JH

Social Distancing	Due to recent COVID 19 disease occurrence, please ensure distancing of 2 metres is maintained and refer back to site manager/ SES supervisor if this is not achievable; 1) Government guidelines must be followed and reviewed daily for any updates to control measures. 2) Government guidelines on social distancing methods must be followed at all times- operatives must keep a minimum distance of 2 metres from others at all times. 3) Operatives should travel to site alone where possible. 4) Operatives should wear gloves when undertaking work tasks- avoid contact with eyes, nose and mouth. Avoid touching face. 5) Once tasks are completed, operatives should wash their hands for a minimum of 20 seconds. Hands should be washed more frequently than usual and prior to eating/ drinking. 6) On returning home, operatives should wash their hands immediately for a minimum of 20 seconds. 7) If operatives show any symptoms of Covid19, they should self isolate, inform their supervisor and call the NHS advice line on 111 for further information. 8) Any suspected symptoms or cases of Covid19 MUST be reported to the SES management team & the PC site team immediately.				JH
Working outside	Ensure appropriate clothing and footwear worn to suit the external conditions. Provide sun cream protection for conditions as required.				JH
Site:	Lower Campfield, Manchester	Contract No:	SE4704	Assessment No.	1

Solution environmental services

5. Risk Rating Table

Severity of Injury						
	5	5	10	15	20	25
	4	4	8	12	16	20
	3	3	6	9	12	15
	2	2	4	6	8	10
	1	1	2	3	4	5
		1	2	3	4	5
		Likelihood of Injury				

WHITE SQUARES = Low Significance (1-4)

GREY SQUARES = Medium Significance (4-9)

BLACK SQUARES = Major Significance (10-25)

Notes:	**Statement:**	(reviewed with no change):		
1. If possible avoid the risk altogether 2. Where possible combat risk at source 3. Give priority to measures which protect the whole workplace 4. Wherever possible, adapt the work to the individual 5. Take advantage of technological & technical progress **Personal protective equipment (PPE) should only be used to minimise risk as a last resort.**	Having reviewed the hazards and risks, the level of risk and the key risks, I believe that if the control measures identified are applied Solution Environmental Services Ltd will, so far as is reasonably practicable, have met the requirements of this assessment. Assessment made by: Name: John Hall Signature: Date: 02/09/2024			
		Name:	Signed:	Date:
		Name:	Signed:	Date:
		Name:	Signed:	Date:
		Name:	Signed:	Date:
		Name:	Signed:	Date:
		Name:	Signed:	Date:

SE(RA).05/01

Solution
environmental services

RISK ASSESSMENT ACKNOWLEDGEMENT

Contract Name:- **Lower Campfield, Manchester**

Client:- **Amspec Limited**

RISK ASSESSMENT REFERENCE;
SE(RA).05/01 Plumbing Pipework Installation Services

I have given the operatives under my control the above Method Statement and any required Risk Assessments.

Please complete this form to acknowledge that you have read and understand the above Method Statement.

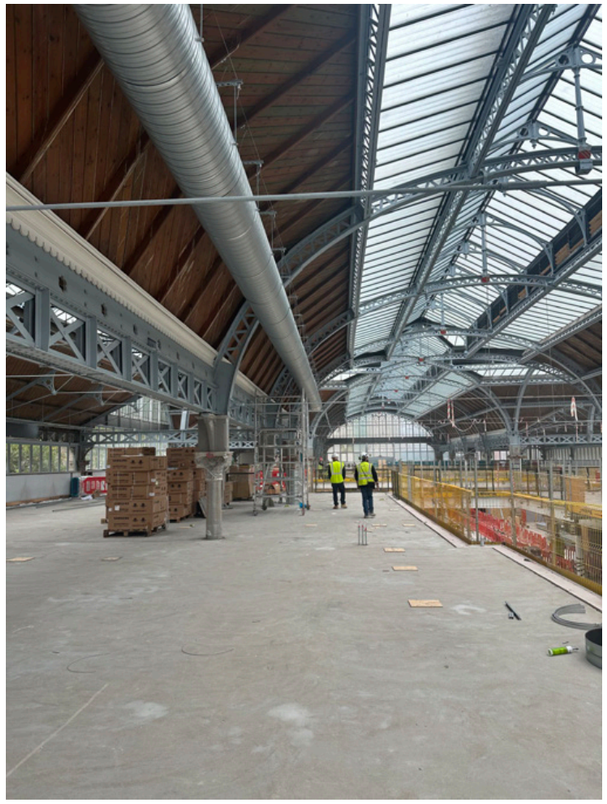
Print Name	Position	Date	Signature

Supervisor name:- _____

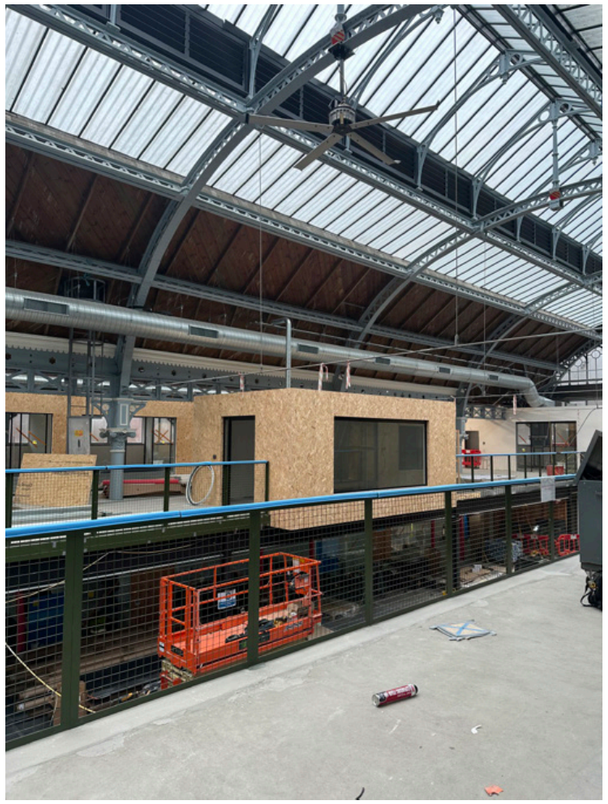
Signed by Supervisor:- _____

Date:- _____







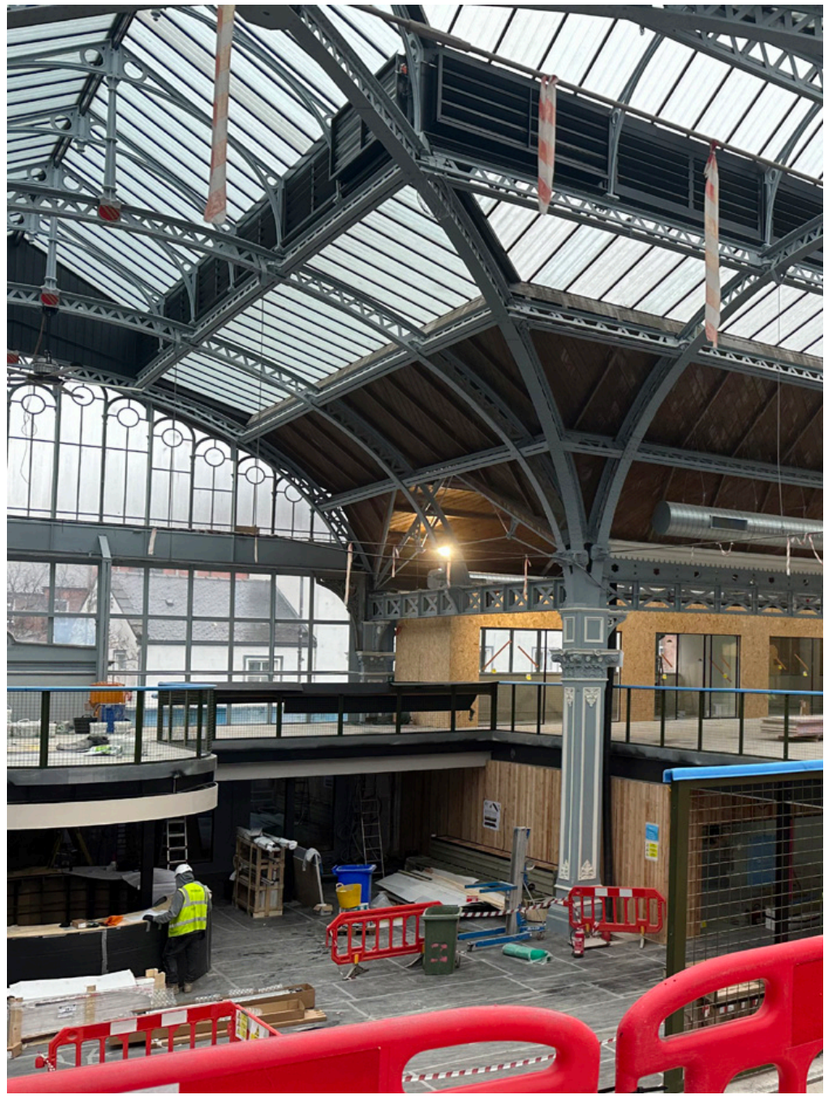




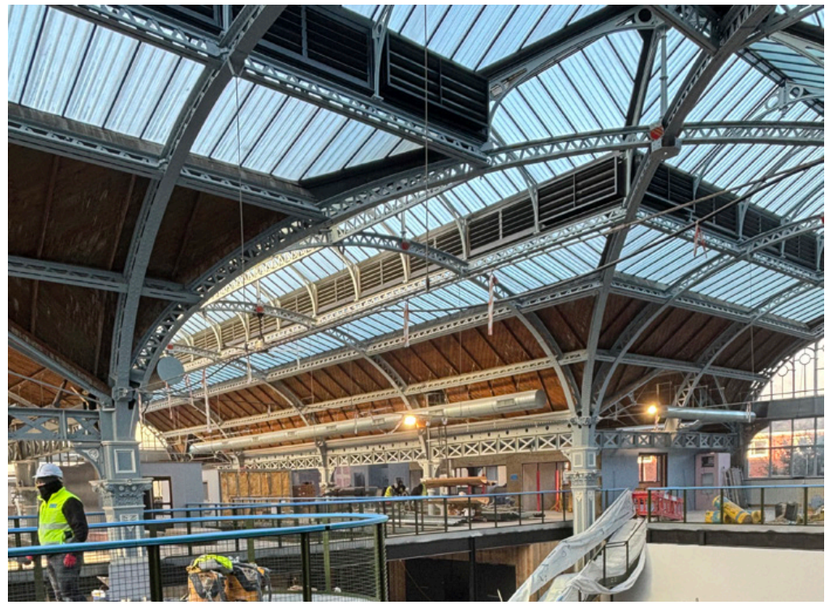




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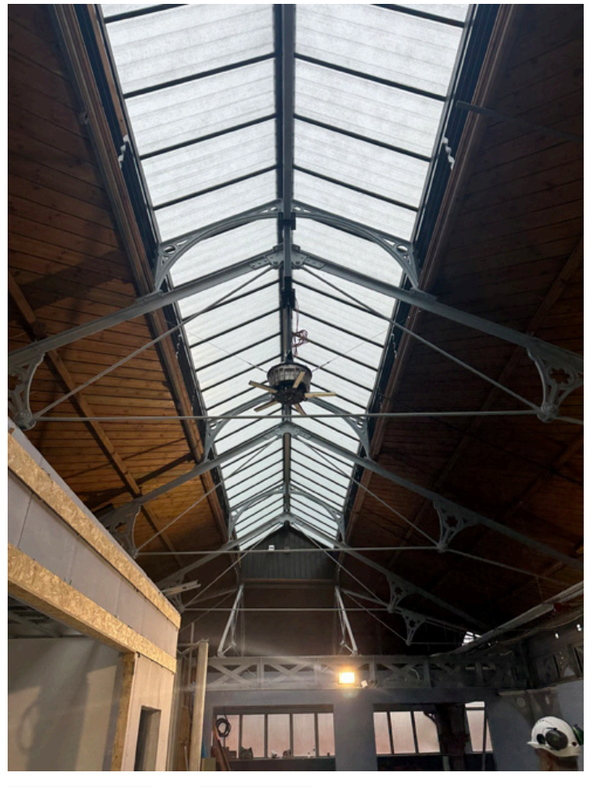


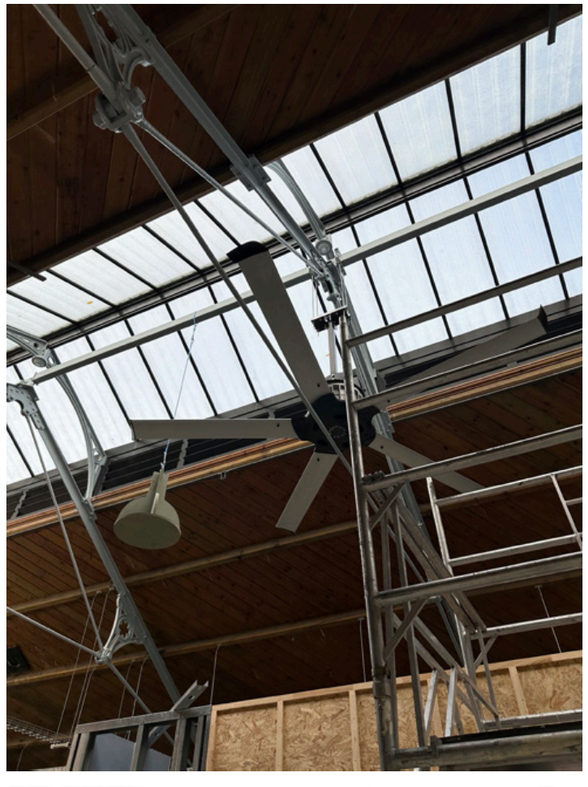
Post-paint application









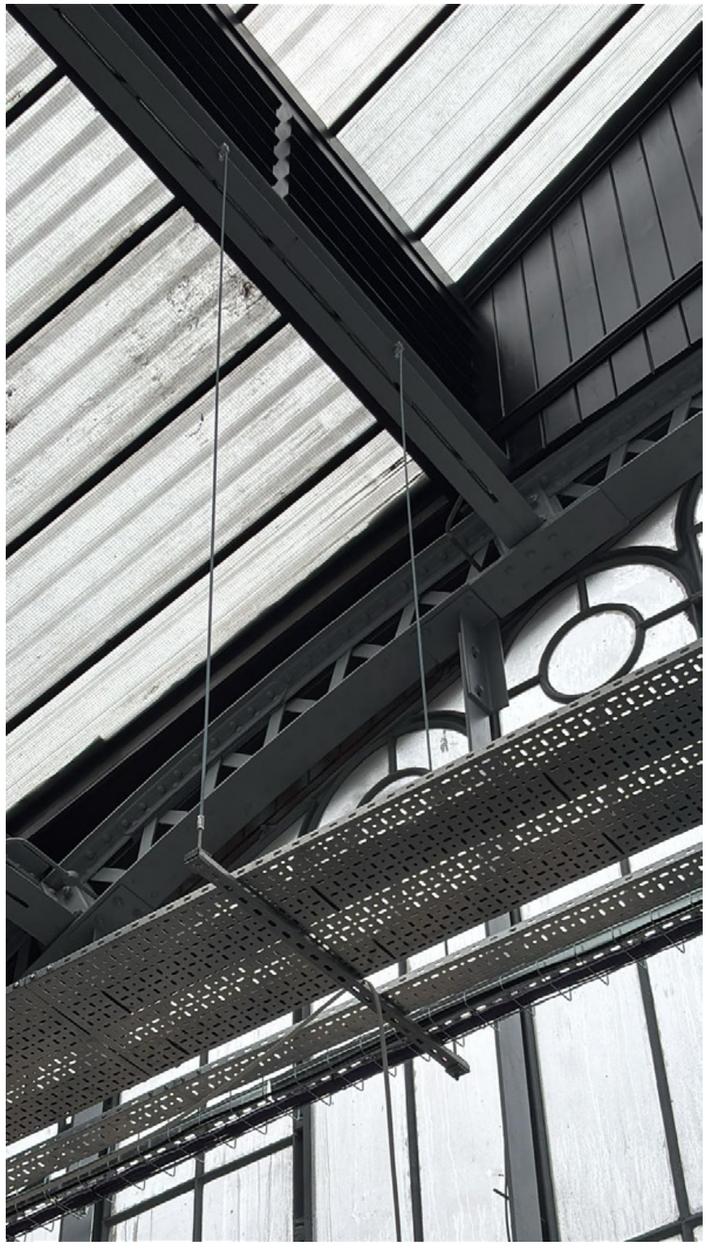



MegaFans.co.uk







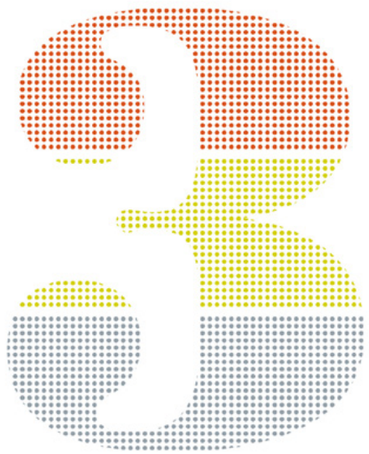






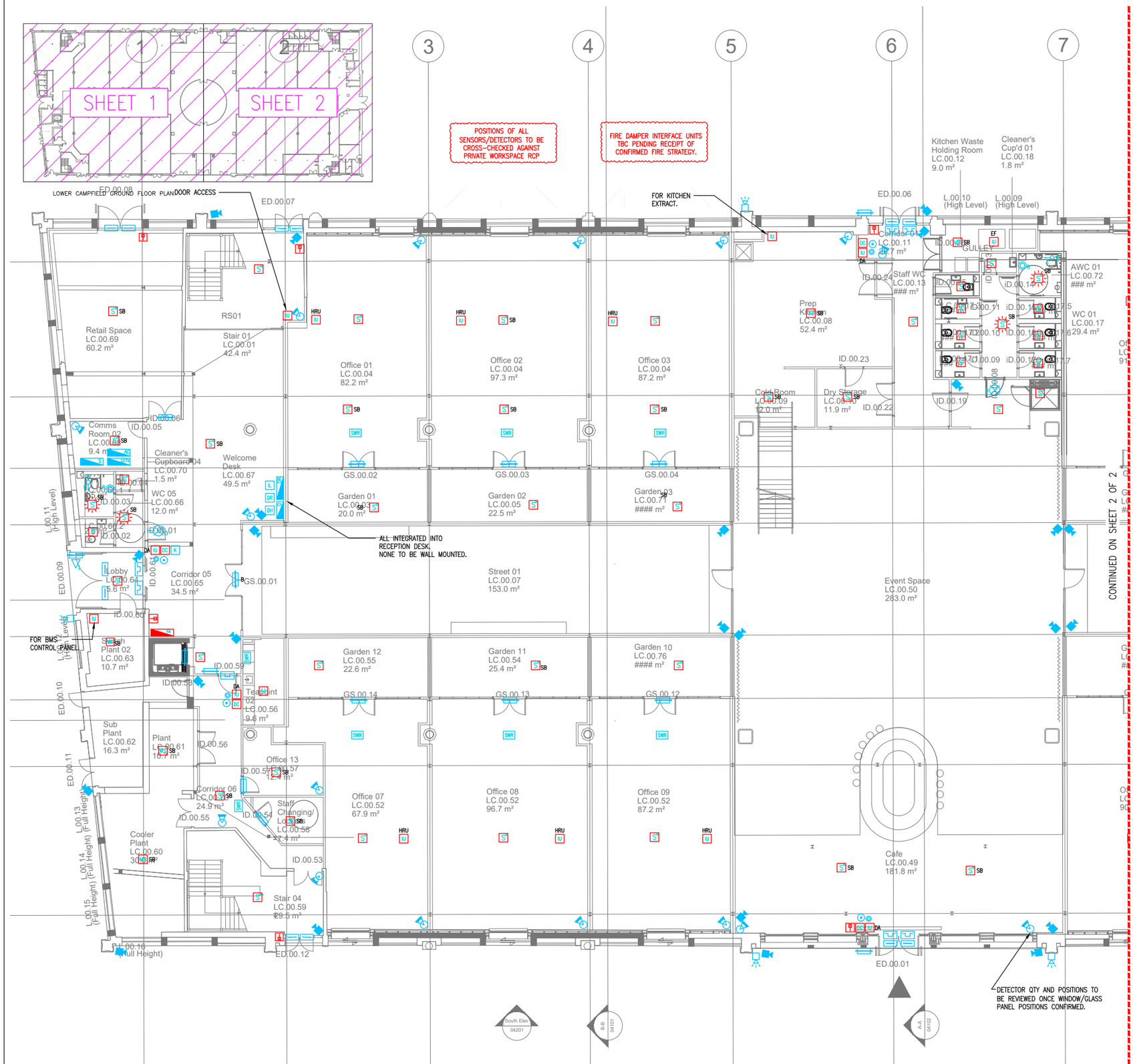






CCTV
Sections 19-20

This section includes Hayvern Electric Fire alarm and security drawings to outline the location of the Internal CCTV. Along with CLiCK fire and Security managements document outlining the proposed locations for the external CCTV.



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FIRE ALARMS LEGEND

- MAIN FIRE ALARM PANEL.
- FIRE ALARM REPEATER PANEL.
- MANUAL CALL POINT.
- INTERFACE UNIT. 'DC' DENOTES DOOR CLOSER IN CEILING VOID. 'DH' DENOTES DOOR HOLD OPEN IN CEILING VOID. 'DA' DENOTES FOR DOOR ACCESS. 'EF' – DENOTES EXTRACT FAN. 'HRU' – HEAT RECOVERY UNIT.
- OPTICAL SMOKE DETECTOR.
- OPTICAL SMOKE DETECTOR C/W SOUNDER BASE.
- OPTICAL SMOKE DETECTOR C/W SOUNDER BASE & FLASHING BEACON.
- HEAT DETECTOR.
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- OPTICAL SMOKE DETECTOR MOUNTED IN CEILING VOID WITH REMOTE INDICATOR MOUNTED DIRECTLY BELOW.
- REMOTE INDICATOR UNIT.
- BEAM DETECTOR TRANSMITTER AT H/L.
- BEAM DETECTOR RECEIVER AT H/L.
- ELECTRONIC SOUNDER.
- ELECTRONIC SOUNDER & FLASHING BEACON.

INTRUDER ALARM LEGEND

- INTRUDER ALARM PANEL.
- DOOR/WINDOW CONTACT.
- KEYPAD.
- DUALTECH DETECTOR.
- SOUNDER & FLASHING BEACON.

CCTV LEGEND

- CCTV SYSTEM CONTROL EQUIPMENT & MONITOR.
- FIXED CCTV CAMERA.



DISABLED WC WALL MOUNTED REPEAT ALARM LAMP UNIT
FINISH TO BE CONFIRMED BY INTERIOR DESIGNER

GENERAL NOTES

1.0 THE DRAWING SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION & ALL OTHER RELEVANT DOCUMENTS & DRAWINGS PROVIDED BY MEP DESIGN.

2.0 DIMENSIONS SHALL NOT BE SCALED FROM THE DRAWING

SERVICES SPECIFIC NOTES

1.0 COLOUR/FINISH OF ALL VISIBLE MEP/ACCESS CONTROL/FIRE/CCTV ITEMS IS TBC BY INTERIOR DESIGNER.

2.0 DATASHEETS OF ALL VISIBLE ITEMS ARE REQUIRED FOR REVIEW AND APPROVAL BY INTERIOR DESIGNER.

GENERAL LEGEND

- L/L ITEM MOUNTED AT LOW LEVEL.
- H/L ITEM MOUNTED AT HIGH LEVEL.
- C/V ITEM MOUNTED IN CEILING VOID.
- R/V ITEM MOUNTED IN ROOF VOID.
- F/V ITEM MOUNTED IN FLOOR VOID.
- W/T ITEM MOUNTED AT WORKTOP LEVEL.
- WP DENOTES WEATHERPROOF IP65 TYPE SUITABLE FOR EXTERNAL USE.
- EX DENOTES EXISTING TO BE RETAINED.
- R DENOTES EXISTING TO BE RELOCATED.
- R.T.A. RISE TO ABOVE.
- R.F.B. RISE FROM BELOW.
- D.F.A. DROP FROM ABOVE.
- D.T.B. DROP TO BELOW.

ACCESS CONTROL LEGEND

- ACCESS CONTROL PANEL/HEAD END P.C.
- ELECTRONIC KEYPAD/PROXIMITY READER/SWIPE CARD READER FOR DOOR RELEASE. 'B' DENOTES BATTERY OPERATED WIRELESS SMART DOOR LOCK.
- THUMB TURN CYLINDER LOCK C/W INTEGRATED CARD REA
- GREEN BREAKGLASS.
- GREEN REQUEST TO EXIT BUTTON.
- DOOR CONTROLLER.
- INTERCOM.
- DOOR INTERCOM HANDSET.
- REMOTE DOOR RELEASE BUTTON.
- SALTO WIRELESS ROUTER.
- MAGLOCK.

DISABLED WC ALARM LEGEND

- DISABLED WC ALARM INDICATOR PANEL.
- DISABLED WC EMERGENCY PULL CORD.
- DISABLED WC RESET BUTTON.
- DISABLED WC WALL MOUNTED REPEAT ALARM LAMP UNIT.

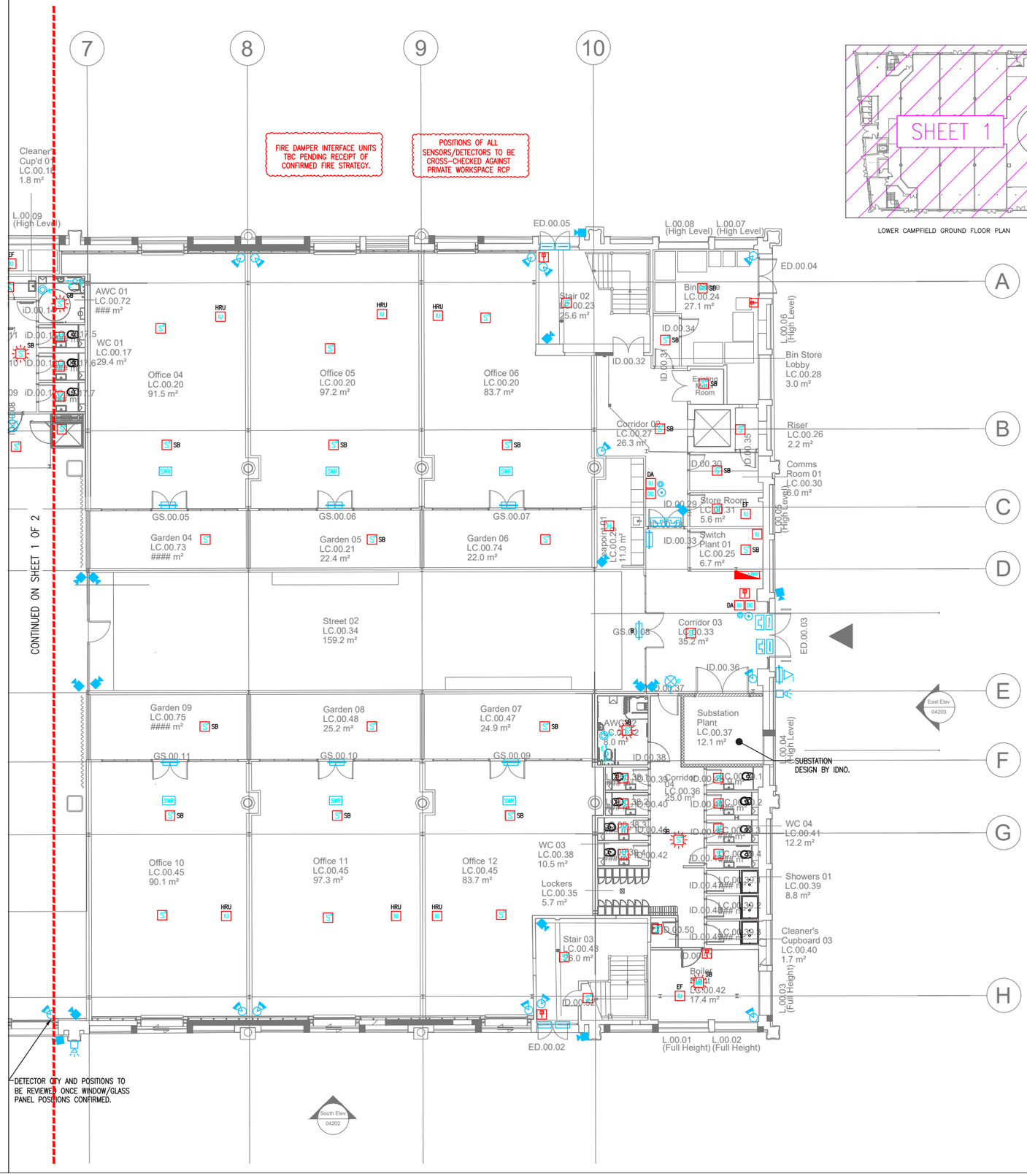
DISABLED REFUGE LEGEND

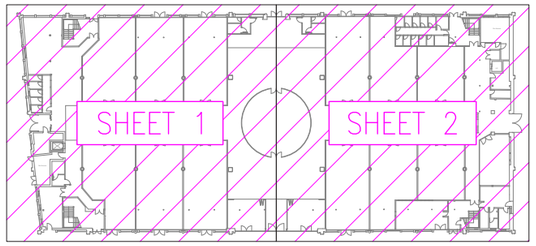
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- DISABLED REFUGE ALARM CALL POINT.

Revisions	Description	Ref	Eng	Date
C2	REVISED FOLLOWING COMMENTS	–	SB	13.11.24
C1	UPDATED INLINE WITH NEW LAYOUT & COMMENTS RECEIVED	–	SB	09.10.24

HAYVERN ELECTRICAL LTD
• INDUSTRIAL • COMMERCIAL • DOMESTIC
56 QUEEN STREET, FARNWORTH, BOLTON, 01204 579975

Client	AMSPEC
Project Title	LOWER CAMPFIELD
Drawing Title	FIRE ALARM AND SECURITY GROUND FLOOR – SHEET 1 OF 2
In Association with	–
Drawn by	HCE
Checked by	DC
Date	25.04.24
Scales	1:100 (work to figured dimensions)
DRG No.	C4488/E016
Rev.	C2





LOWER CAMPFIELD GROUND FLOOR PLAN

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CCTV LEGEND

- CCTV SYSTEM CONTROL EQUIPMENT & MONITOR.
- FIXED CCTV CAMERA.



DISABLED WC WALL MOUNTED REPEAT ALARM LAMP UNIT
FINISH TO BE CONFIRMED BY INTERIOR DESIGNER

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- DISABLED WC RESET BUTTON.
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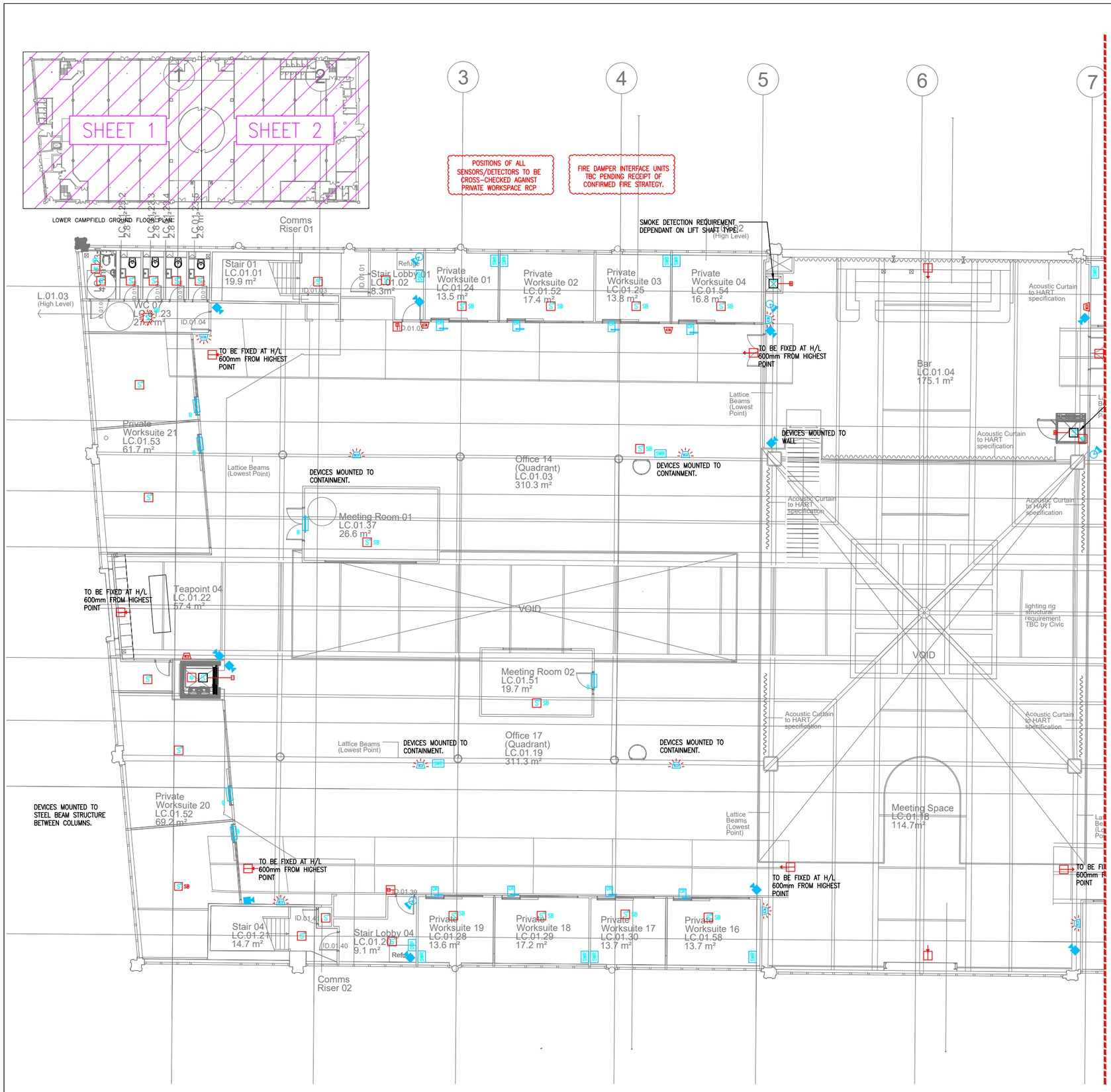
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Revisions	Description	Ref	Eng	Date
C2	REVISED FOLLOWING COMMENTS	–	SB	13.11.24
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HAYVERN ELECTRICAL LTD
• INDUSTRIAL • COMMERCIAL • DOMESTIC
56 QUEEN STREET, FARNWORTH, BOLTON, 01204 579975

Client	AMSPEC
Project Title	LOWER CAMPFIELD
Drawing Title	FIRE ALARM AND SECURITY GROUND FLOOR – SHEET 2 OF 2
In Association with	–
Drawn by	HCE
Checked by	DC
Date	25.04.24
Scales	1:100 (work to figured dimensions)
DRG No.	C4488/E017
Rev.	C2



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- FIXED CCTV CAMERA.



DISABLED WC WALL MOUNTED REPEAT ALARM LAMP UNIT
FINISH TO BE CONFIRMED BY INTERIOR DESIGNER

GENERAL NOTES

1.0 THE DRAWING SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION & ALL OTHER RELEVANT DOCUMENTS & DRAWINGS PROVIDED BY MEP DESIGN.

2.0 DIMENSIONS SHALL NOT BE SCALED FROM THE DRAWING

SERVICES SPECIFIC NOTES

1.0 COLOUR/FINISH OF ALL VISIBLE MEP/ACCESS CONTROL/FIRE/CCTV ITEMS IS TBC BY INTERIOR DESIGNER.

2.0 DATASHEETS OF ALL VISIBLE ITEMS ARE REQUIRED FOR REVIEW AND APPROVAL BY INTERIOR DESIGNER.

GENERAL LEGEND

L/L	ITEM MOUNTED AT LOW LEVEL.
H/L	ITEM MOUNTED AT HIGH LEVEL.
C/V	ITEM MOUNTED IN CEILING VOID.
R/V	ITEM MOUNTED IN ROOF VOID.
F/V	ITEM MOUNTED IN FLOOR VOID.
W/T	ITEM MOUNTED AT WORKTOP LEVEL.
WP	DENOTES WEATHERPROOF IP65 TYPE SUITABLE FOR EXTERNAL USE.
EX	DENOTES EXISTING TO BE RETAINED.
R	DENOTES EXISTING TO BE RELOCATED.
R.T.A.	RISE TO ABOVE.
R.F.B.	RISE FROM BELOW.
D.F.A.	DROP FROM ABOVE.
D.T.B.	DROP TO BELOW.

ACCESS CONTROL LEGEND

- ACCESS CONTROL PANEL/HEAD END P.C.
- ELECTRONIC KEYPAD/PROXIMITY READER/SWIPE CARD READER FOR DOOR RELEASE. 'B' DENOTES BATTERY OPERATED WIRELESS SMART DOOR LOCK.
- THUMB TURN CYLINDER LOCK C/W INTEGRATED CARD RE
- GREEN BREAKGLASS.
- GREEN REQUEST TO EXIT BUTTON.
- DOOR CONTROLLER.
- INTERCOM.
- DOOR INTERCOM HANDSET.
- REMOTE DOOR RELEASE BUTTON.
- SALTO WIRELESS ROUTER.
- MAGLOCK.

DISABLED WC ALARM LEGEND

- DISABLED WC ALARM INDICATOR PANEL.
- DISABLED WC EMERGENCY PULL CORD.
- DISABLED WC RESET BUTTON.
- DISABLED WC WALL MOUNTED REPEAT ALARM LAMP UNIT.

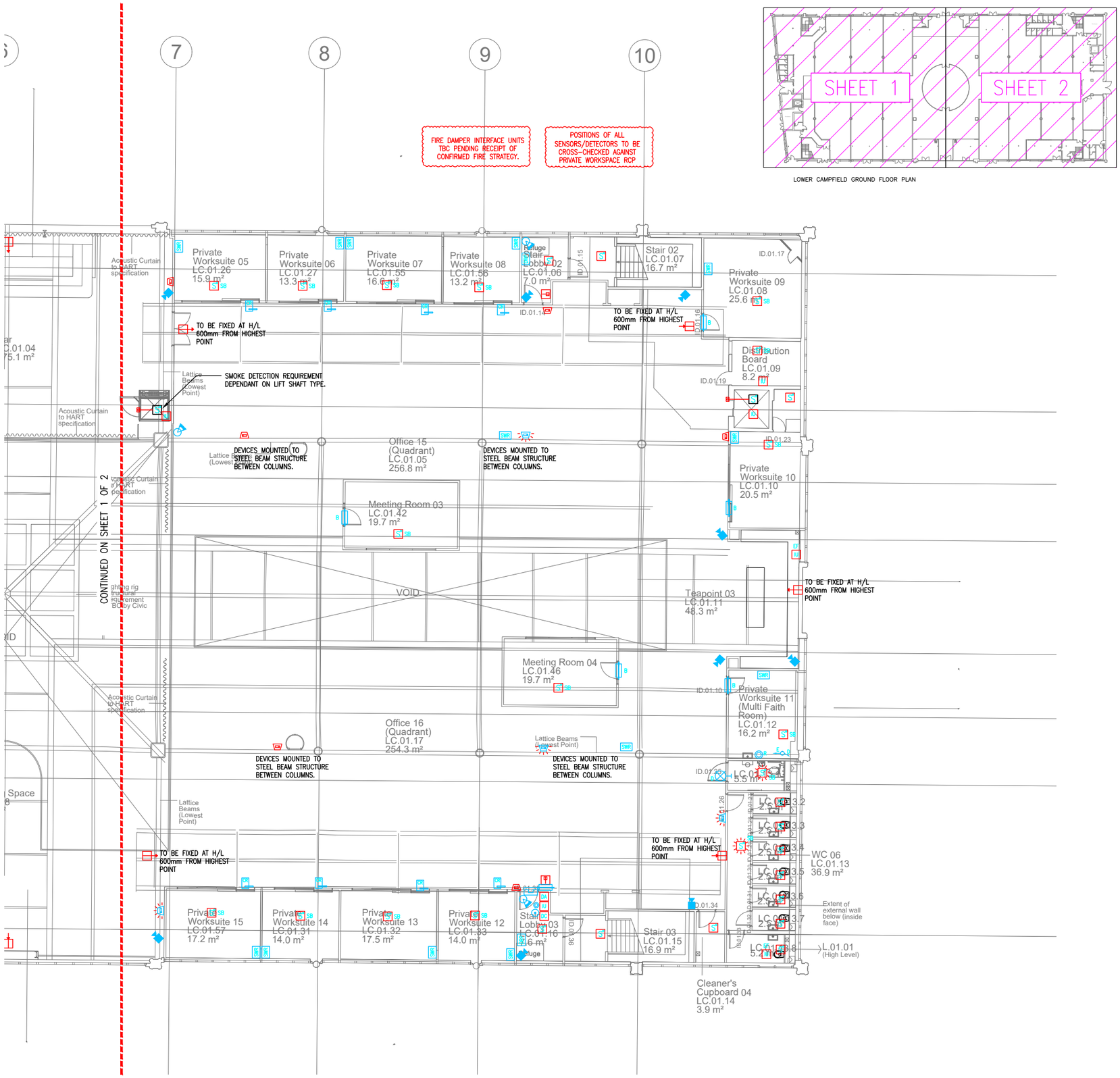
DISABLED REFUGE LEGEND

- DISABLED REFUGE ALARM PANEL.
- DISABLED REFUGE ALARM CALL POINT.

Revisions	Description	Ref	Eng	Date
C2	REVISED FOLLOWING COMMENTS	–	SB	13.11.24
C1	UPDATED INLINE WITH NEW LAYOUT & COMMENTS RECEIVED	–	SB	09.10.24

HAYVERN ELECTRICAL LTD
• INDUSTRIAL • COMMERCIAL • DOMESTIC
56 QUEEN STREET, FARNWORTH, BOLTON, 01204 579975

Client	AMSPEC
Project Title	LOWER CAMPFIELD
Drawing Title	FIRE ALARM AND SECURITY MEZZANINE – SHEET 1 OF 2
In Association with	–
Drawn by	HCE
Checked by	DC
Date	25.04.24
Scales	1:100 (work to figured dimensions)
DRG No.	C4488/E018
Rev.	C2



LOWER CAMPFIELD GROUND FLOOR PLAN

NOTICE

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FIRE ALARMS LEGEND

- MAIN FIRE ALARM PANEL.
- FIRE ALARM REPEATER PANEL.
- MANUAL CALL POINT.
- INTERFACE UNIT. 'DC' DENOTES DOOR CLOSER IN CEILING VOID. 'DH' DENOTES DOOR HOLD OPEN IN CEILING VOID. 'DA' DENOTES FOR DOOR ACCESS. 'EF' – DENOTES EXTRACT FAN. 'HRU' – HEAT RECOVERY UNIT.
- OPTICAL SMOKE DETECTOR.
- OPTICAL SMOKE DETECTOR C/W SOUNDER BASE.
- OPTICAL SMOKE DETECTOR C/W SOUNDER BASE & FLASHING BEACON.
- HEAT DETECTOR.
- HEAT DETECTOR C/W SOUNDER BASE.
- HEAT DETECTOR C/W SOUNDER BASE & FLASHING BEACON.
- MULTI-SENSOR DETECTOR.
- MULTI-SENSOR DETECTOR C/W SOUNDER BASE.
- MULTI-SENSOR DETECTOR C/W SOUNDER BASE & FLASHING BEACON.
- OPTICAL SMOKE DETECTOR MOUNTED IN CEILING VOID WITH REMOTE INDICATOR MOUNTED DIRECTLY BELOW.
- REMOTE INDICATOR UNIT.
- BEAM DETECTOR TRANSMITTER AT H/L.
- BEAM DETECTOR RECEIVER AT H/L.
- ELECTRONIC SOUNDER.
- ELECTRONIC SOUNDER & FLASHING BEACON.

INTRUDER ALARM LEGEND

- INTRUDER ALARM PANEL.
- DOOR/WINDOW CONTACT.
- KEYPAD.
- DUALTECH DETECTOR.
- SOUNDER & FLASHING BEACON.

CCTV LEGEND

- CCTV SYSTEM CONTROL EQUIPMENT & MONITOR.
- FIXED CCTV CAMERA.



DISABLED WC WALL MOUNTED REPEAT ALARM LAMP UNIT
FINISH TO BE CONFIRMED BY INTERIOR DESIGNER

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- THUMB TURN CYLINDER LOCK C/W INTEGRATED CARD REA
- GREEN BREAKGLASS.
- GREEN REQUEST TO EXIT BUTTON.
- DOOR CONTROLLER.
- INTERCOM.
- DOOR INTERCOM HANDSET.
- REMOTE DOOR RELEASE BUTTON.
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- DISABLED WC RESET BUTTON.
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Revisions	Description	Ref	Eng	Date
C2	REVISED FOLLOWING COMMENTS	–	SB	13.11.24
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HAYVERN ELECTRICAL LTD
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Client	AMSPEC
Project Title	LOWER CAMPFIELD
Drawing Title	FIRE ALARM AND SECURITY MEZZANINE – SHEET 2 OF 2
In Association with	–
Drawn by	HCE
Checked by	DC
Date	25.04.24
Scales	1:100 (work to figured dimensions)
DRG No.	C4488/E019
Rev.	C2

Lower Campfield Proposed CCTV

Wednesday, 22 January 2025

Prepared For Hayvern Electrical

12 Issues Identified



Cam1

Assigned To 1

Proposed Black camera to be Installed onto brickwork to view door and approach.



Drawing 2

Assigned To Drawing 2

Camera reference in red



Cam3

Assigned To 3

Proposed black camera installed onto brickwork to view across doors and path



Cam9

Assigned To 9

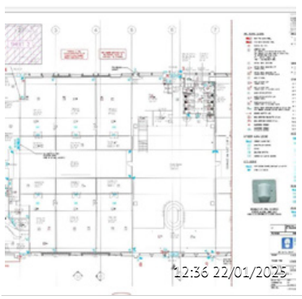
Propose to install white camera onto facia board to view across main doors and approach(overlapping camera 8)



Cam8

Assigned To 8

Propose to install white camera onto facia board to view across main doors and approach (overlapping camera 9)



Drawing 1

Assigned To Drawing 1

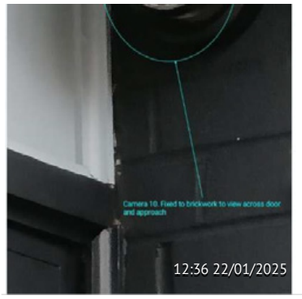
Camera reference in red



Cam2

Assigned To 2

Proposed black camera to fixed onto brickwork adjacent door to view door and surrounding path/area



Cam 10

Assigned To 10

Propose to install black camera onto brickwork adjacent door to view across door.



Cam5

Assigned To 5

Proposed black camera to be installed onto brickwork to view across doors and approach



Cam7

Assigned To 7

Propose to relocate cam 7 on corner of building (nowhere to fit as building is listed) to doorway brickwork(black camera). This will give a better view of the door but will loose any coverage of pavement upto phone box.



Cam4

Assigned To 4

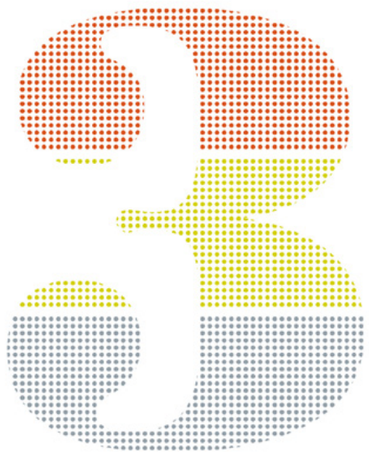
Proposed black camera to be installed onto brickwork to view across door



Cam6

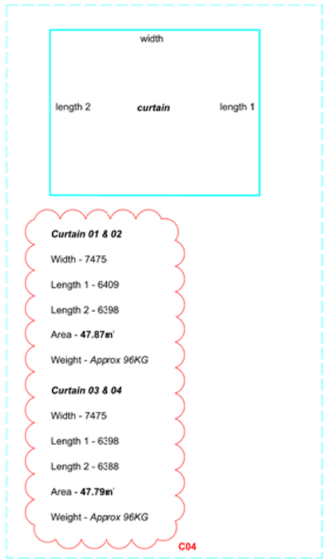
Assigned To 6

Proposed black camera to be installed above doors on brickwork to view surrounding area



LIGHTING RIG
Sections 21-24

This section includes Project 3 Architects section outlining the location of the lighting rig, DBN Audibles technical drawing outling the plan and design of the rig, Lindapters information regarding clamps to the existing structure and site images of the lighting rigs fixings and the lighting rig in situ.



Notes:

Do not scale from this drawing.
All dimensions are in millimetres unless otherwise noted.
All dimensions to be checked on site before proceeding with work.
All omissions and discrepancies to be reported in writing to Project 3 Architects Ltd.
Areas indicated on this drawing are approximate and indicative only.
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Mounting points show are indicative. All mounting pcits to be decided by structural engineer.

All heights and widths of curtain to be site checked. Curtain bottom should sit 50mm above FFL.

Curtain track should align with underside of lattice truss so when curtain is in open posistion there is continues site line at undeside of existing truss.

Rev:	Date:	Description:	By:
C04	16/12/24	Curtain Height	JG
C03	18/10/24	Curtain and Lighting Rig	JG
C02	05/07/24	Tencer 02 Amend	JG
C01	01/05/24	Construction Issue	JG
T04	11/04/24	Additional Amends	JG
T03	28/03/24	HART Changes	JG
T02	29/11/23	Updated as per comments	ws
T01	27/10/23	First Issue	ws

2 m 0 2 4 6 m

Key:

01 Proposed Mezzanine Deck; Concrete metal and mezzanine structure to SE detail and specification. 75mm screed topping to deck. Floor finishes to HART specification (HART FF drawing series).

02 Existing ground floor slab. Leveling compound spec in office spaces to SE recommendation. Floor finishes to HART specification.

03 Existing roof access ladded to be cut back and made accessible from mezzanine level.

04 Proposed internal walls. Refer to (22) Series for further details.

05 Proposed metal guarding with mesh infill. Refer to (20) and (29) Series for further details,

~~06 Indicative proposed lighting. Design and specification by HART (HART CL drawing series and Lighting Schedule LC-sL).~~

07 Foundations assumed. Refer to SE for further details.

08 Mechanical services to underside of slab. Web openings to steel beams for services to be coordinated with SE and MEP.

09 Proposed external windows. Refer to (31) Series for further details.

10 Proposed louvres. Refer to (30) Series for further details.

11 Proposed external doors. Refer to (31) Series for further details.

12 Proposed internal doors. Refer to (32) Series for further details.

13 Proposed internal glazing. Refer to (23) Series for further details.

~~14 Bleacher seating to Event Space by HART (I ART drawing LC-dJ-04).~~

15 Proposed metal staircase. Refer to (24) Series for further details.

16 Proposed acoustic curtains. Structural support to SE detail and design.

17 Proposed cantilevered 'pods' at mezzanine level. Detail and Design by HART (HART KS drawing series).

18 Proposed platform lift to HART specification.

19 Kitchen design and details by HART (HART KI drawing series).

20 Access control by HART.

21 Proposed ceiling layouts by HART (HART CL drawing series).

22 Overdoor air curtain to MEP design and specification.

23 Destratification fans to MEP design and specification. Locations shown indicatively on the sections.

~~24 Radiant panels to MEP design and specification. Locations shown indicatively on the sections.~~

Drawing References:

This drawing is to be read in conjunction with the following drawing series:

(00) Series Site Information
(03) Series Demolition Drawings
(04) Series GA Plans, Sections & Elevations
(09) Series Acoustic Plans
(12) Series FS & BR Plans
(20) Series Mezzanine Deck Details
(22) Series Internal Partition Details
(23) Series Glazed Screen Details
(24) Series Stair Details
(29) Series Architectural Metalwork Details
(30) Series External Louvre Details
(31) Series External Window & Door Details
(32) Series Internal Door Details

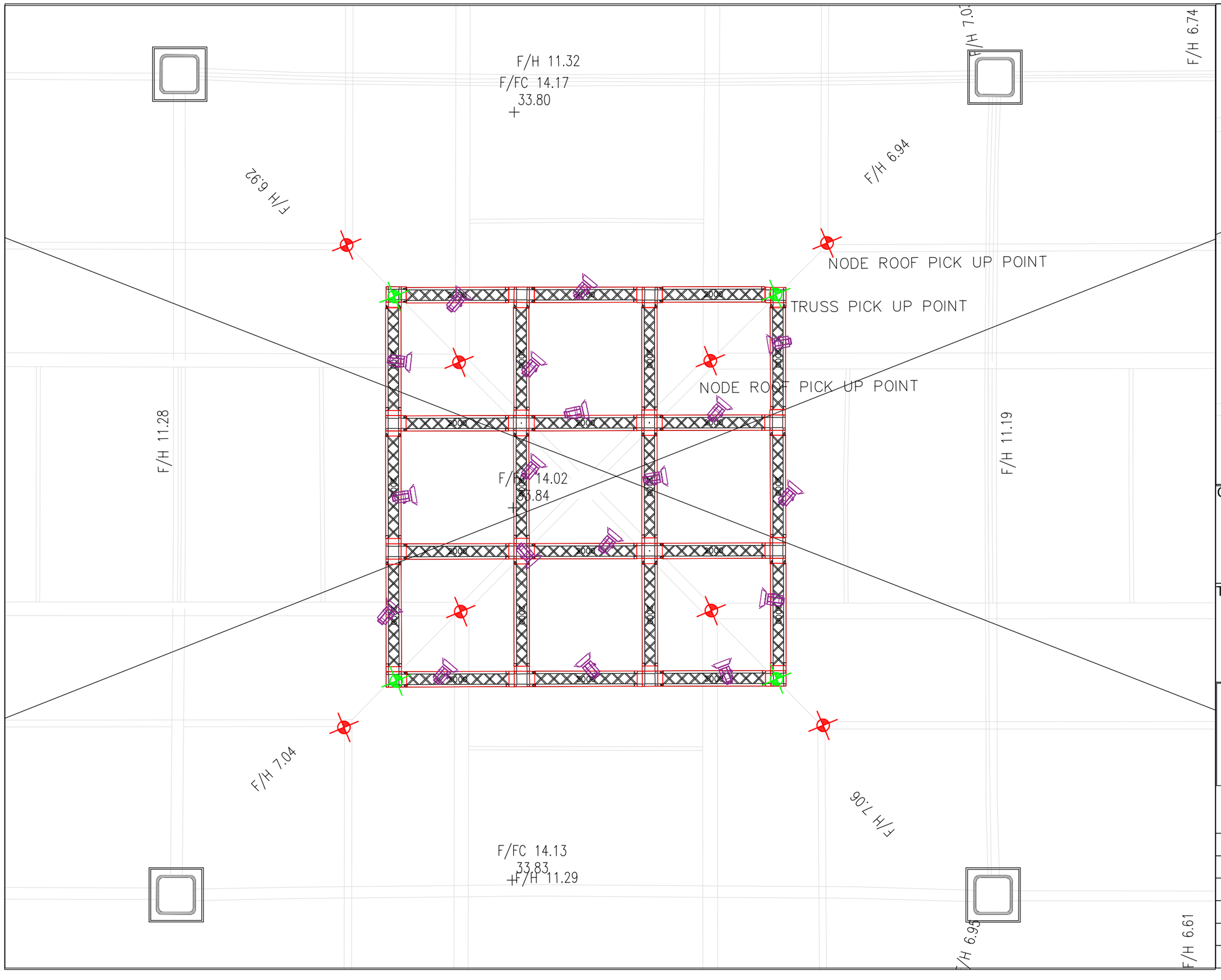
Notes:

-All drawings subject to Building Control approval
-All dimensions shown to be site checked

Proposed Section A-A: Short section through event space

PROJECT 3 architects
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www.project3architects.com

Project:
Lower Campfield
Liverpool Rd, Manchester
Title:
Proposed GA Section
A-A
Status: CONSTRUCTION
Scale @ ISO A1: 1:100
Drawing Number: 0774-P3A-XX-XX-DR-A-04101
Revision: C04



Notes

MP 120 LED Fresnel WW

Truss Corner Block

Truss Corner Block

Truss Pick Up Point

Building Pick Up Point

Client

ALLIED LONDON

Title

LowerCampfield

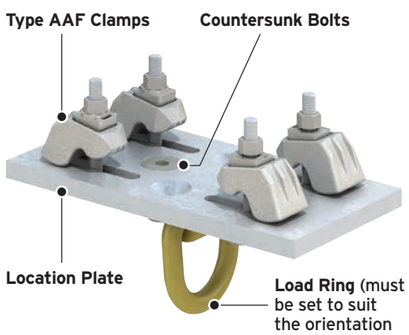
dbnAudile

Unit 4 The Redwing Centre
Mosley Rd, Trafford Park
Manchester M17 1RJ
0161 273 4297

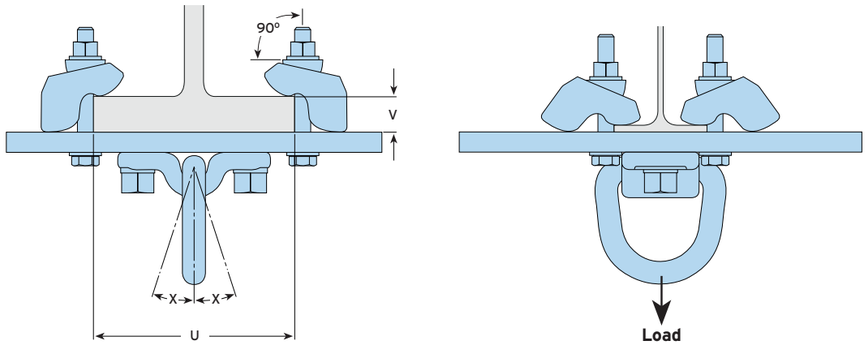
Drawing No:	
Revision:	
Issued for:	SA09310 QV1
Drawn By:	Nick Walton
Date:	01/10/24
Scale:	NTS

Type ALP

Lindapter's standard rigging and lifting solution adjusts to suit the beam width, flange thickness and orientation of the lift. Safely supports loads up to three metric tonnes.







- Available 'off-the-shelf' with a safe working load up to 3t (29.4kN).
- Large load ring can be set to suit the lift orientation.
- Adjusts to suit different sized beams and can be easily repositioned.
- Suitable for parallel and tapered beams up to and including 10°.

- **Suitable for supporting the lifting and rigging of equipment only.**
- **The ALP assembly must be regularly inspected for signs of wear or damage, in accordance with the standards / regulations of the country of use.**
- **Static Safe Working Load values are subject to the capacity of the supporting sections. Please refer to the ALP user guide for guidance.**

Material: Type AAF clamps (low temperature SG iron, hot dip galvanised), Location Plate (mild steel, hot dip galvanised) and Load Ring (forged steel, painted).

Product Code	Torque Figures*				Clamping Range		Safe Working Loads (FOS 4:1)	Max Angle of Load X
	Load Ring Countersunk Bolts		Type AAF Set Screws		Flange Thickness V	Beam Width U		
	10.9 Bolt	Torque Nm	8.8 Bolt	Torque Nm	mm	mm		
ALP 3T-1	M16	100	M12	90	5 - 26	70 - 210	3t (29.4kN)	18°
ALP 3T-2	M16	100	M12	90	5 - 26	190 - 330	3t (29.4kN)	18°
ALP 3T-3	M16	100	M12	90	5 - 26	310 - 450	3t (29.4kN)	18°

** Torque figures based on bolts / setscrews in an unlubricated condition as supplied. For further information on lubricated fasteners see page 76.*

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Ref: LindUKApr24

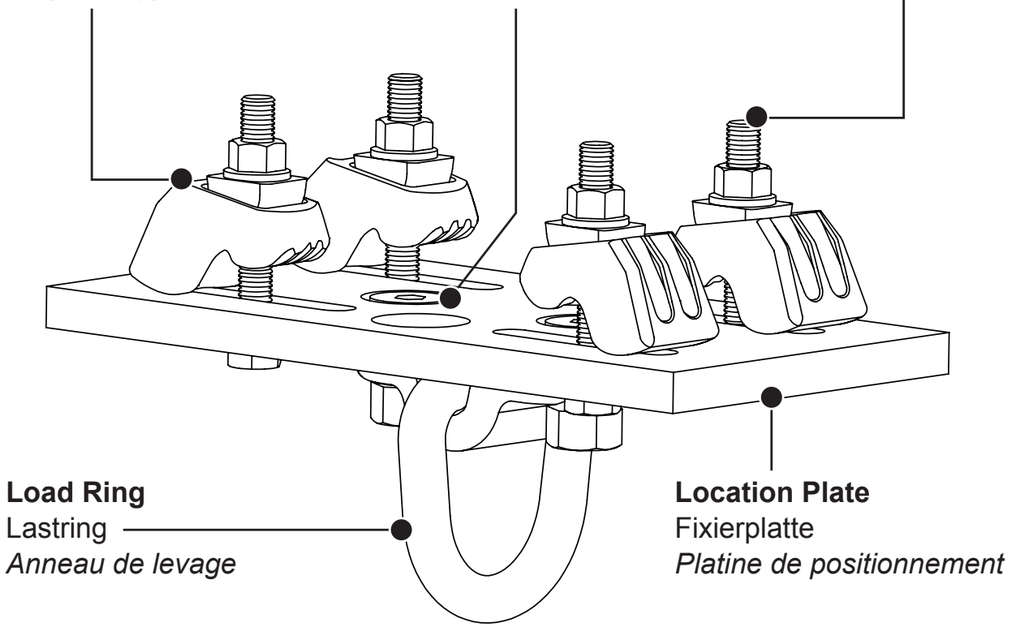
USER GUIDE / ANWENDERLEITFADEN / GUIDE DE L'UTILISATEUR

Type / Typ ALP

The Type ALP (Adjustable Lifting Point) can be used in a variety of industries to support the lifting and rigging of equipment.

Typ ALP (Adjustable Lifting Point, verstellbare Hebeöse) eignet sich für Montage- und Hebeanwendungen in einer Vielzahl von Einsatzbereichen.

Le Type ALP (Adjustable Lifting Point, point de levage réglable) peut être utilisé dans divers secteurs industriels pour des applications de levage et d'accrochage de matériels.



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USER GUIDE / ANWENDERLEITFADEN / GUIDE DE L'UTILISATEUR

Type / Typ ALP

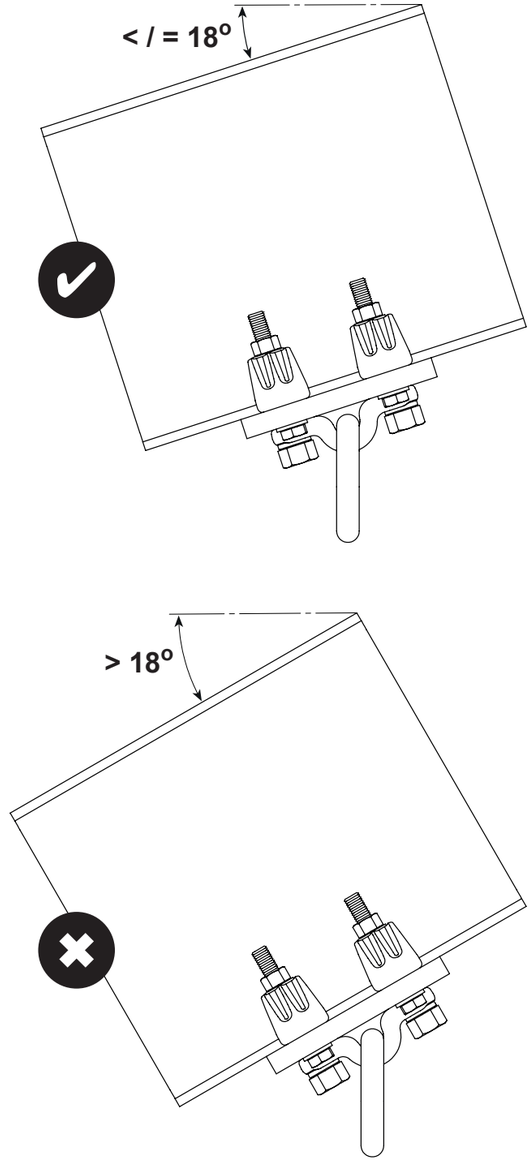
Notes / Hinweise

The maximum lifting load is 3t (29.4kN) but is subject to the capacity of the supporting steelwork.
Die maximale Hublast beträgt 3 t (29,4 kN), ist jedoch abhängig von der Tragfähigkeit der Stahlkonstruktion.
Charge de levage maximum : 3 t (29,4 kN), sous réserve des capacités des structures.

The maximum angle of load is 18° (two diagrams right).
Der maximale Belastungswinkel beträgt 18° (siehe Abbildungen rechts).
Angle maximum de la charge : 18° (cf. deux diagrammes à droite).

The ALP can be used on both parallel and tapered beams (up to 10°).
Typ ALP eignet sich sowohl für Träger mit parallelen als auch mit geneigten Flanschen (bis 10°).
Le Type ALP peut être utilisé sur des poutres à ailes parallèles et à ailes inclinées (jusqu'à 10°).

The ALP can be installed onto a range of flange widths and thicknesses (refer to table overleaf).
Typ ALP eignet sich für unterschiedliche Flanschbreiten und -dicken (siehe umseitige Tabelle).
Le Type ALP peut être installé sur une gamme d'épaisseurs et de largeurs d'ailes (cf. tableau au verso).



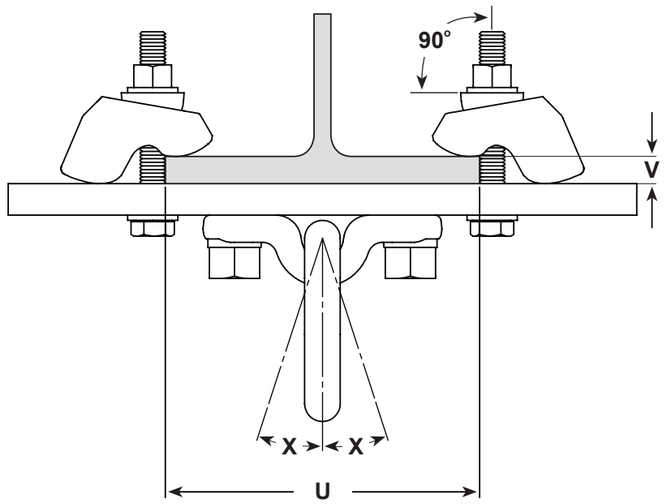
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Tel: +44 (0) 1274 521444 | Fax: +44 (0) 1274 521130 | www.Lindapter.com

Type / Typ ALP

Notes / Hinweise

The maximum angle of the load must take into account the angle of an inclined beam.
Beim maximalen Belastungswinkel zählt eine eventuelle Neigung des Trägers mit.
L'angle maximum de la charge doit tenir compte de l'angle de la poutre inclinée.

The safe working loads are subject to the capacity of the supporting steelwork.
Die zulässigen Belastungen sind abhängig von der Tragfähigkeit des Stahltragwerks.
Les charges utiles maximales sont fonction de la capacité des structures supports.



Product Code Artikelnummer *Code Produit*	Torque Figures Anziehmomente *Couple de serrage* Load Ring Countersunk Bolts Lastring Senkkopfschrauben *Boulons fraisés de l'anneau de levage*		Type AAF Set Screws Typ AAF Stellschrauben *Type AAF Vis*		Clamping Range Klemmbereich *Plage de serrage* Flange Thickness Flanschdicke *Épaisseur d'aile*	Beam Width Trägerbreite *Largeur poutrelle*	Safe Working Load (4:1 Factor of Safety) Zulässige Belastung (4:1 Sicherheitsfaktor) *Charges utiles (coefficient de sécurité 4:1)*	Max Angle of Load Max. Belastungswinkel *Angle de charge max.*
	10.9 Bolt Schraube 10.9 *Boulon 10.9*	Torque Anziehmoment *Couple* Nm	8.8 Bolt Schraube 8.8 *Boulon 8.8*	Torque Anziehmoment *Couple* Nm	V mm	U mm		X
ALP3T-1	M16	100	M12	90	5 - 26	70 - 210	3t (29.4kN)	18°
ALP3T-2	M16	100	M12	90	5 - 26	190 - 330	3t (29.4kN)	18°
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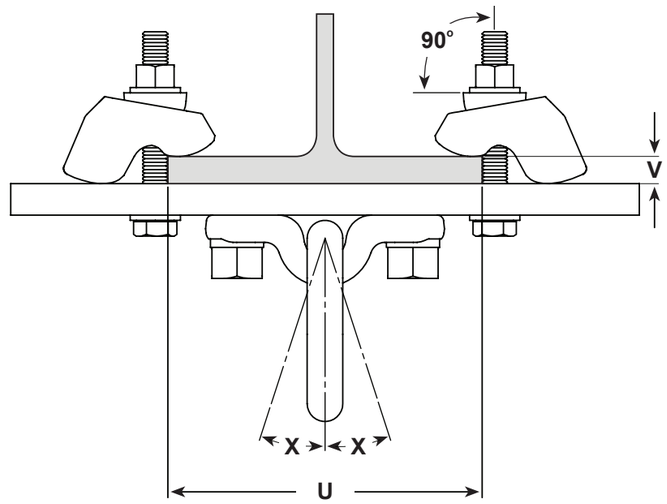
USER GUIDE / ANWENDERLEITFADEN / GUIDE DE L'UTILISATEUR

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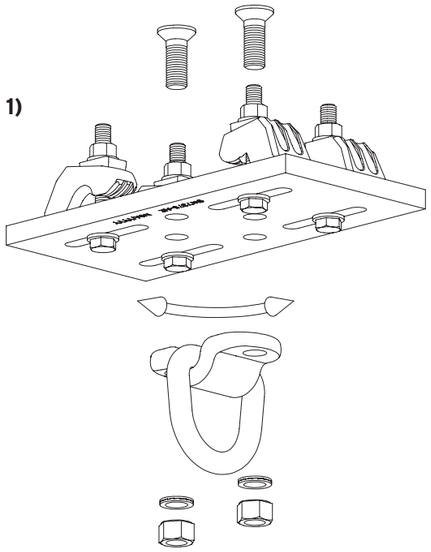
Product Code	Torque Figures Load Ring Countersunk Bolts*		Type AAF Set Screws*		Clamping Range Flange Thickness	Beam Width	Safe Working Load (4:1 Factor of Safety)	Max Angle of Load
	A490 Bolt	Torque ft lb	Grd. 5 / A325 Bolt	Torque ft lb	V	U		X
LALP3T-1	M16 (5/8")	74	M12 (1/2")	66	3/16" - 1"	2 3/4" - 8 1/4"	6600	18°
LALP3T-2	M16 (5/8")	74	M12 (1/2")	66	3/16" - 1"	7 1/2" - 13"	6600	18°
LALP3T-3	M16 (5/8")	74	M12 (1/2")	66	3/16" - 1"	12 3/16" - 17 3/4"	6600	18°

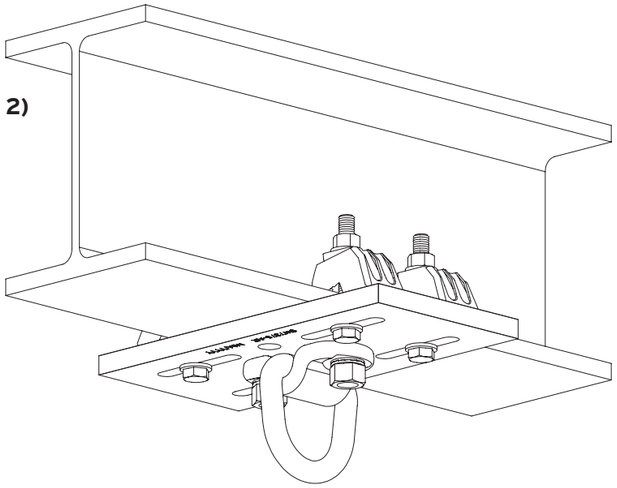
** Metric bolts, nearest imperial / UNC equivalent shown in brackets.*

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USER GUIDE / ANWENDERLEITFADEN / GUIDE DE L'UTILISATEUR

Type / Typ ALP





Installation / Montage

1) Fix the load ring in the orientation required with the supplied countersunk setscrews and anti-vibration washers then use a calibrated torque wrench to tighten to 100Nm / 74 ft lb.
2) Offer lifting point assembly up to the beam ensuring the plate is located centrally to the beam, loosely secure the clamps then, when happy with the alignment, use a calibrated torque wrench to tighten to 90Nm / 66 ft lb.

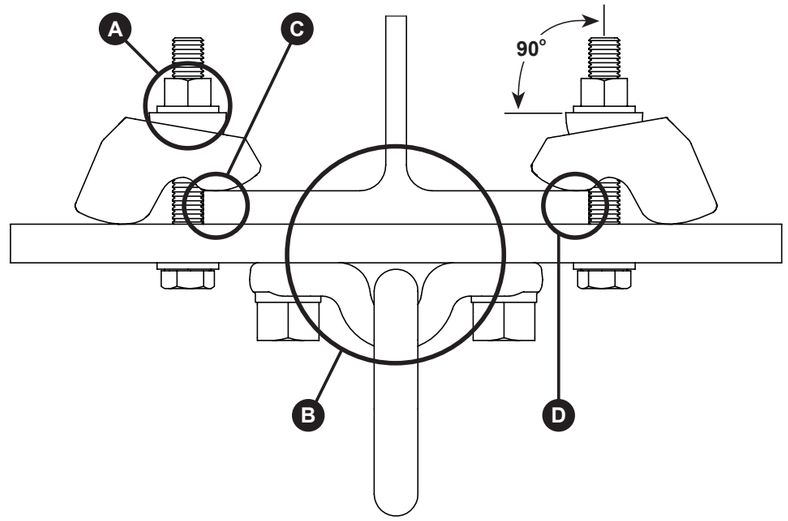
1) Befestigen Sie den Lastring in der gewünschten Ausrichtung mit den mitgelieferten Senkschrauben und Antivibrationsscheiben an der Fixierplatte und ziehen Sie die Schrauben mit einem kalibrierten Drehmomentschlüssel auf 100Nm fest.
2) Platzieren Sie den vormontierten Anschlagpunkt unter dem Träger und richten Sie die Platte mittig zum Träger aus. Ziehen Sie die Schrauben der Klemmen lose an. Wenn Sie mit der Ausrichtung zufrieden sind, ziehen Sie sie mit einem kalibrierten Drehmomentschlüssel auf 90 Nm an.

1) Fixer l'anneau de levage, suivant l'orientation souhaitée, avec les boulons fraisés et les rondelles anti-vibration fournis, puis serrer avec une clé dynamométrique au couple de 100Nm.
2) Positionnez l'ensemble sur la poutre en vous assurant que la platine est bien centrée, serrez légèrement les boulons des crapauds, puis, une fois que vous êtes satisfait de l'alignement, et en utilisant une clé dynamométrique, serrez les boulons au couple de 90Nm.

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USER GUIDE / ANWENDERLEITFADEN / GUIDE DE L'UTILISATEUR

Type / Typ ALP



Notes / Hinweise

A. Ensure the top surface of the AAF rocking washer is at 90° to the bolt before it is secured.
B. Location plate should be central to the beam.
C. Each set screw should be close to or in contact with the edge of the beam flange before tightening.
D. The nose of the AAF clamp must be sat on the flange of the beam before final tightening.

The ALP assembly must be regularly inspected for signs of wear or damage, in accordance with the standards / regulations of the country of use. Safe working load values are subject to the capacity of the supporting section.

A. Stellen Sie sicher, dass die Oberseite des AAF-Winkelausgleichs vor dem Festziehen rechtwinklig zur Schraube ist.
B. Die Fixierplatte muss mittig am Träger anliegen.
C. Die Schrauben der Klemmen müssen vor dem Festziehen jeweils nah am Trägerflansch liegen oder diesen berühren.
D. Die Nase der AAF-Klemme muss vor dem endgültigen Festziehen auf dem Trägerflansch sitzen.

Die ALP-Baugruppe muss regelmäßig auf Anzeichen von Verschleiß oder Beschädigung gemäß den Normen / Vorschriften des Verwendungslandes überprüft werden. Die Werte für die zulässigen Belastungen hängen von der tragenden Stahlkonstruktion ab.

A. Avant le serrage, assurez-vous que le dessus de la rondelle à bascule du AAF est perpendiculaire au boulon.
B. La platine de positionnement doit être centrée par rapport à la poutre.
C. Avant le serrage, chaque boulon doit être le plus proche possible, et de préférence en contact avec l'aile de la poutre.
D. Le nez du crapaud AAF doit reposer sur l'aile de la poutre avant le serrage final.

L'ensemble ALP doit être régulièrement inspecté pour tout signe d'usure ou d'altération, conformément aux normes / réglementations du pays où l'assemblage est installé. Les valeurs des charges utiles sont aussi fonction des capacités de la structure support.

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USER GUIDE / ANWENDERLEITFADEN / GUIDE DE L'UTILISATEUR

Type / Typ ALP

Inspection after installation / Kontrolle nach der Installation / *Inspection post-installation*

Before each use, a visual inspection should be carried out for signs of wear or damage, examples are (but not limited to): damage to finish coating, corrosion, bent, nicked, worn or elongated components, a visible gap between the location plate and beam. Additional advice for inspecting the Gunnebo LP can be found at the back of this guide.

It is recommended that the visual inspection is recorded. If signs of wear or damage are visible to any part of the Type ALP during the visual inspection then it must not be used and the whole assembly replaced. In service thorough inspections should be carried out by a competent person in line with the site general maintenance schedule and regulatory requirements but should as a minimum be carried out in the first six months after installation and then at regular intervals.

In addition to the visual inspection checks listed above, the tightening torques of the bolts should be checked and re-tightened if necessary. It is recommended that the in service inspection is recorded. If signs of wear or damage are visible to any part of the Type ALP during the in service inspection then it must not be used and the whole assembly replaced.

Vor jedem Gebrauch ist eine Sichtprüfung auf Anzeichen von Verschleiß oder Beschädigung durchzuführen. Beispiele für Mängel (unvollständige Liste): Schäden an der Oberflächenbeschichtung, Korrosion, verbogene, eingekerbte, abgenutzte oder gedehnte Komponenten, ein sichtbarer Spalt zwischen Fixierplatte und Träger. Weitere Inspektionshinweise für den Gunnebo-Anschlagpunkt finden Sie am Ende dieser Anleitung.

Es wird empfohlen, die Sichtprüfung zu protokollieren. Sind bei der Sichtprüfung an irgendeinem Teil des Typ ALP Anzeichen von Verschleiß oder Beschädigung zu erkennen, darf dieser nicht mehr verwendet werden und die gesamte Baugruppe muss ausgetauscht werden. Während des Betriebs sollten gründliche Inspektionen durch kompetentes Personal in Übereinstimmung mit dem allgemeinen Wartungsplan des Standorts und den gesetzlichen Vorschriften durchgeführt werden, mindestens jedoch in den ersten sechs Monaten nach der Montage und danach in regelmäßigen Abständen.

Zusätzlich zu den oben genannten Sichtprüfungen sind die Anziehmomente der Schrauben zu kontrollieren und die Schrauben gegebenenfalls nachzuziehen. Es wird empfohlen, die Inspektion während des Betriebes zu protokollieren. Sind bei der Inspektion an irgendeinem Teil des Typ ALP Anzeichen von Verschleiß oder Beschädigung zu erkennen, darf dieser nicht mehr verwendet werden und die gesamte Baugruppe muss ausgetauscht werden.

Avant chaque utilisation, procéder à une inspection visuelle à la recherche de traces d'usure ou d'altération, y compris (liste non exclusive) : altération du revêtement de finition, corrosion, courbure, entaille, usure ou élongation des composants, espacement visible entre la platine de positionnement et la poutre. Pour plus de conseils relatifs à l'inspection du point de levage Gunnebo, voir au dos de ce guide.

Il est recommandé que les inspections visuelles soient consignées. Si l'inspection visuelle relève des signes d'usure ou d'altération d'une partie quelconque du Type ALP, ne pas l'utiliser et remplacer l'ensemble intégralement. Des inspections complètes en cours d'exploitation doivent être réalisées par une personne compétente, conformément au planning de maintenance générale du site et aux exigences réglementaires, et au minimum dans les six mois suivant l'installation, puis à intervalles réguliers par la suite.

Outre les contrôles et inspections visuelles listés ci-dessus, procéder au contrôle des couples de serrage des boulons et, le cas échéant, les re-serrer. Il est recommandé que les inspections en cours d'exploitation soient consignées. Si l'inspection en cours d'exploitation relève des signes d'usure ou d'altération d'une partie quelconque du Type ALP, ne pas l'utiliser et remplacer l'ensemble intégralement.

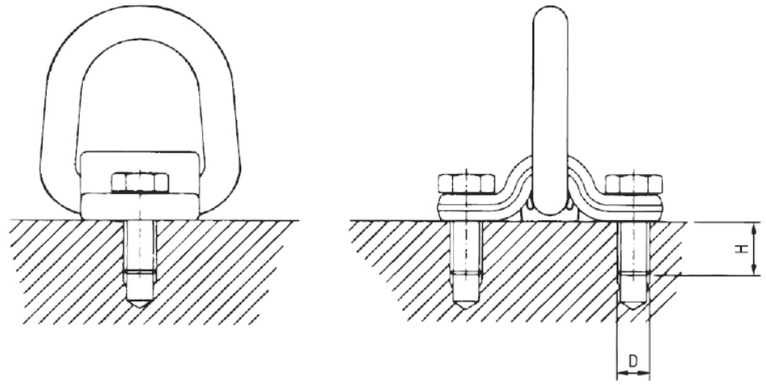
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Lindapter's Type ALP product includes a Load Ring component (Screwable Lifting Point) that is manufactured by Gunnebo Industries. Information about this component is reproduced below with permission from Gunnebo Industries.

GUNNEBO Industries

USER´S INSTRUCTION

SCREWABLE LIFTING POINT, SLP



Screw dimensions SLP	Recommended tightening torque	The screw effective thread length H
SLP-1T = M 14 (quality 10.9)	70 Nm ± 10%	Steel = Min. 1.5 x D
SLP-3T = M 16 (quality 10.9)	100 Nm ± 10%	Cast iron = Min. 2.0 x D
SLP-5T = M 20 (quality 10.9)	170 Nm ± 10%	Aluminium = Min. 2.5 x D

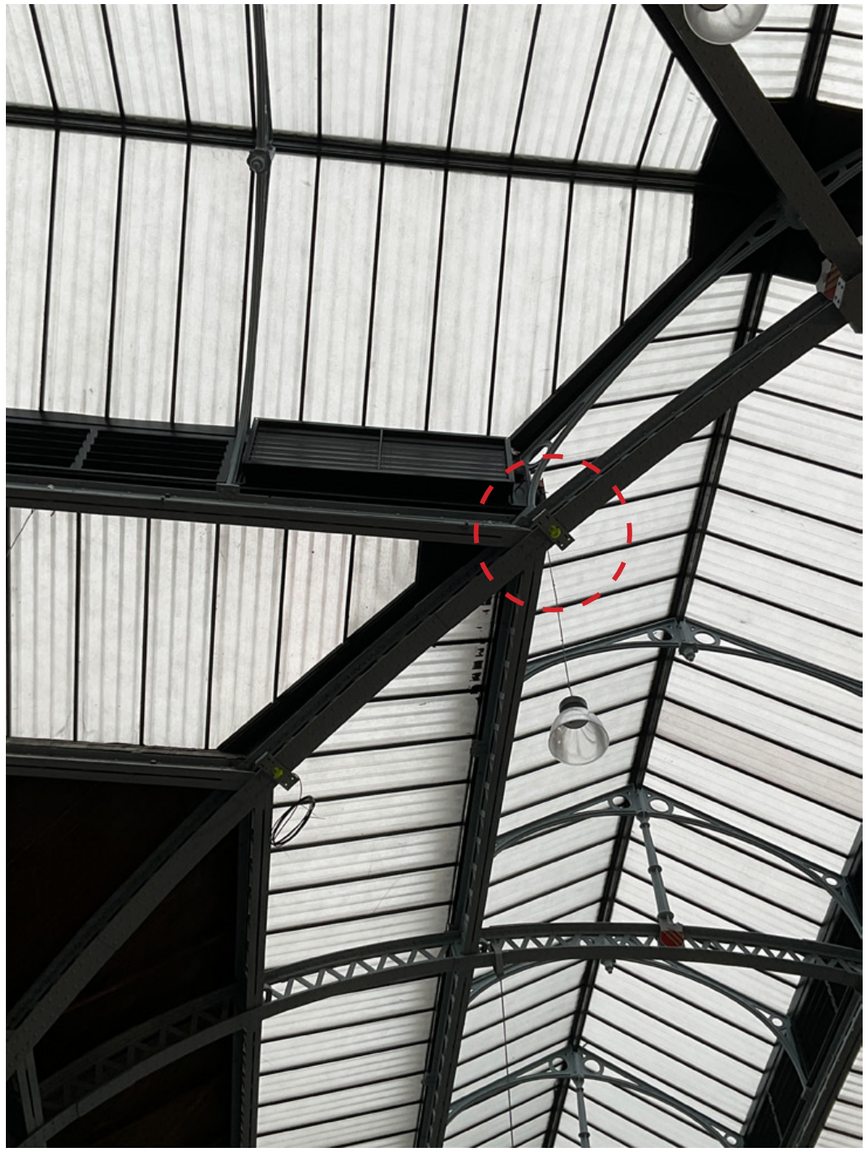
- Use screws of at least 10.9 quality
- Use screws with sufficient thread length
- The surfaces must be clean and flat
- Check the screws regularly to make sure they are securely tightened
- Check the lifting point regularly to detect deformations
- Renew the link if permanent elongation > 5%
- Renew bent screws

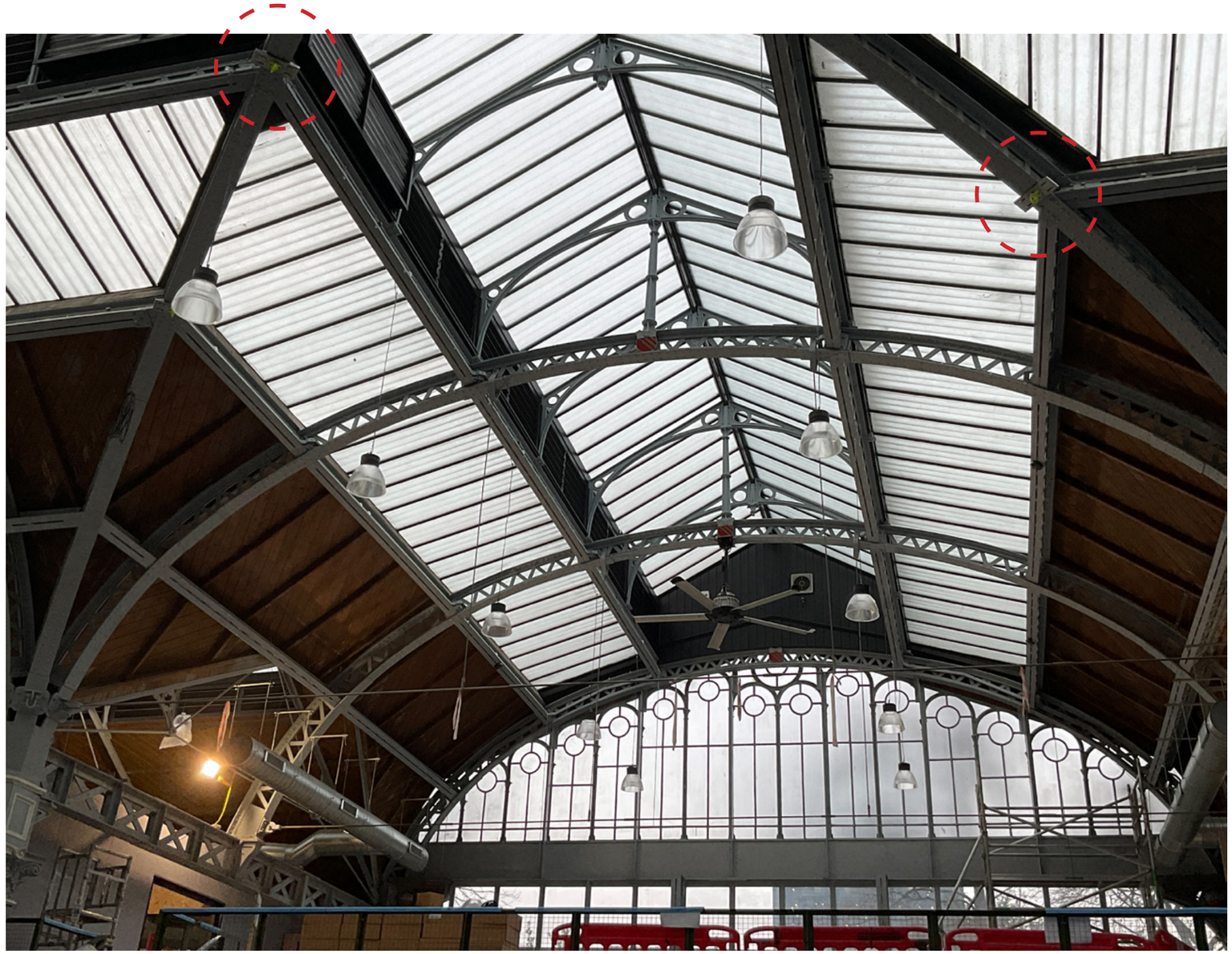
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Phone: +46-470 757500
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www.gunneboindustries.com

Ref: ALP_NOV22

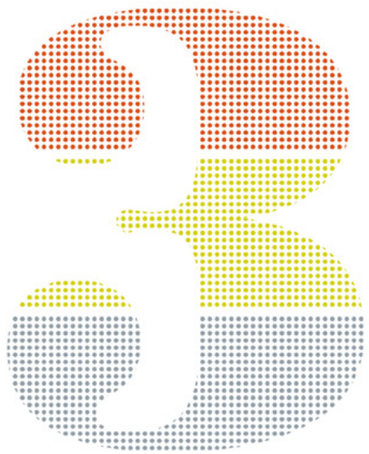
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Genie GS-3232





EXTERNAL LIGHTING
Sections 25-27

This section includes LDL lighting lighting plan for external lighting, lighting control box and lighting specification. It also includes ColourZones lighting controller specification for the external lighting. Finally there are photos of the mock up for the external lighting.

Lower Campfield - RGBW "KAL" LED Linear Lights, 1 Zone of Control - Provisional Wiring Overview

This drawing shows the typical wiring for 1 ZONE of control. There are 94x 1040mm "KAL" LEDs on the project. Each "KAL" length is fitted with RGBW (4000K) LEDs and Elliptical (45°x16°) Optics. The lights are powered by 8x Control Boxes located near the window features. The control boxes are fitted with a 500W, 24VDC PSUs, 2x 1-Zone (4-channel) DMX512 interface modules and SELV fused output terminals. The lighting is controlled by a DMX512 ColourZone Controller with 12 customisable lighting scenes.

Drawing No./Status:
27491 Rev.A
Provisional
09/08/2024

LDL lighting

This drawing shows the system configured as 1 Zone of control.

All Lighting Control Box locations are TBC

Part No. **"KAL1040-PS-RGBW40-EL-C-24-1M"**
Linear LED with RGBW (4000K) LEDs, Elliptical Optics and a 1 metre tail.

Control Box 1
7VDC Input
230VAC Input
1 2 3
3x LED Outputs to KAL LEDs

12x KAL LEDs
24VDC, 15A, 360W

12x KAL LEDs (6x Window Features)

Each "KAL" LED unit is 24VDC, 1.25A, 30W max.

3x Feedlines (5-core, 2.5mm² CSA) based on a 20m feedline run

DMX512 signal

Suitable joint box

DMX512 signal from ColourZone Controller to Control Box

Control Box Serial No. ***TBC***
Ref: **"Box 1"**
Part No. **"CB25-500-24-1DMX4-OP3"**
600x400x200mm

500W, 24VDC

500W Switch Mode PSU.
Output Voltage TBC
This is pre-set at the factory.

2x 4-channel DMX512 Interface Modules.

DMX Input/Output Terminals

3x Fused LED outputs

Mains Input has 4A fuse here

230VAC Input

3x Feedlines (5-core, 2.5mm² CSA) based on a 20m feedline run

DMX512 Output signal to the next lighting control box

LED lighting controller
Part No. **"COLOURZONE-1/12"**

PSU

12W, 7VDC Switch Mode PSU

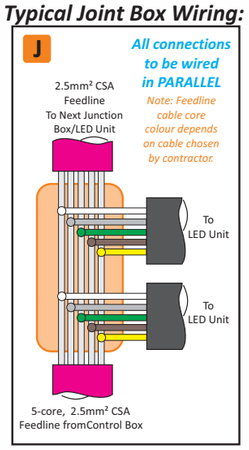
230VAC Input


"KAL" LED Unit

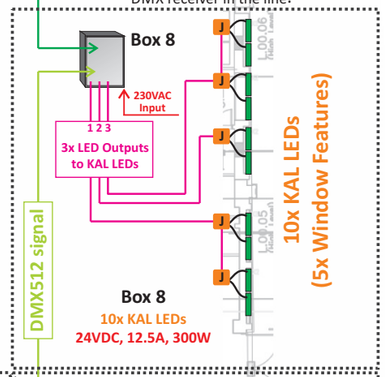

Typical Control Box

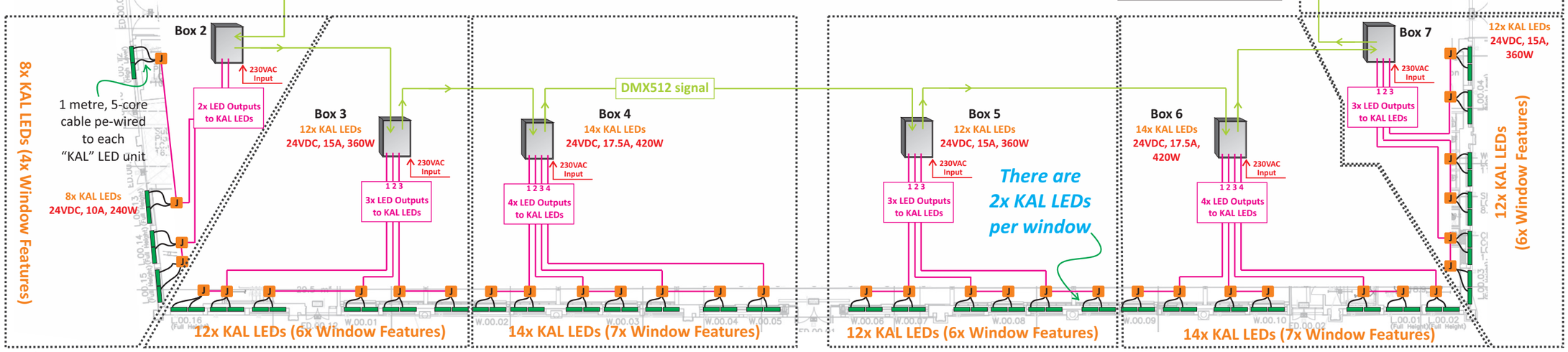

ColourZone Controller

Typical Joint Box Wiring:



120R Terminator
120R DMX line terminator - leave this in place if this is the last DMX receiver in the line.





Equipment Summary:

Product Image	Qty	Part No:	Electrical Details		
			Operating Voltage	Max. Current Per Unit	Max. Wattage Per Unit
	94	KAL1040-PS-RGBW40-EL-C-24-1M	24VDC typ.	1.25A	30W
	1	COLOURZONE-1/12	7VDC.	-	-
	8	CB25-500-24-1DMX4-OPx	230VAC	4A	500W

Cable Key:

Image	Function	Type	Supplied By
	DMX512 Data Cable	2-core screened	Installation Contractor
	Feedline	5-core feedline, size 2.5mm² CSA	Installation Contractor
	230VAC Input Cable	L, E, N	Installation Contractor
J	Junction Box	Feedline Junction Box	Installation Contractor
	Luminaire Cable	1 metre cable, 5-cores, 0.34mm² CSA , 4.9mm O.D. njo Ref. W503	Pre-wired to LED

All connections to be wired in PARALLEL

These LED lights operate from a Low Voltage source and must not be Connected to a Mains Voltage supply. WARNING! Reverse Polarity damages LEDs

					Drawing No. 27491	
					Batch No:	TBC
					Drawn By:	SI
					Approved By:	MR
A	Drawn	SI	MR	09/08/24	Date:	09/08/2024
Rev.	Change	Drawn	App'd.	Date	Print A3	Page 1 of 1

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Lower Campfield - RGBW "KAL" LED Linear Lights, 1 Zone of Control - Provisional Control Box Overview

The "CB25" control box is a 600x400x200mm, IP66 steel enclosure, powder-coated light grey (RAL7032). They are fitted with high efficiency 500W, low voltage 24VDC switch mode power supply units, DMX512 interface modules, DIN rail mounted output terminals and fuseholders, a set of DMX Input/Output terminals and LEN 230VAC Mains Input. All control boxes are supplied with a set of 4 wall mounting brackets, a door key, non-drilled gland plate and spare fuses. Every control box is fully labelled internally to aid in installation and has an annotated photograph ("Information Sheet") fitted to the inside of the door to help identify each part of the control box and its function. The Lower Campfield project uses 8x "CB25" boxes, each to power and control up to 14x RGBW KAL LED lights (7x window features).

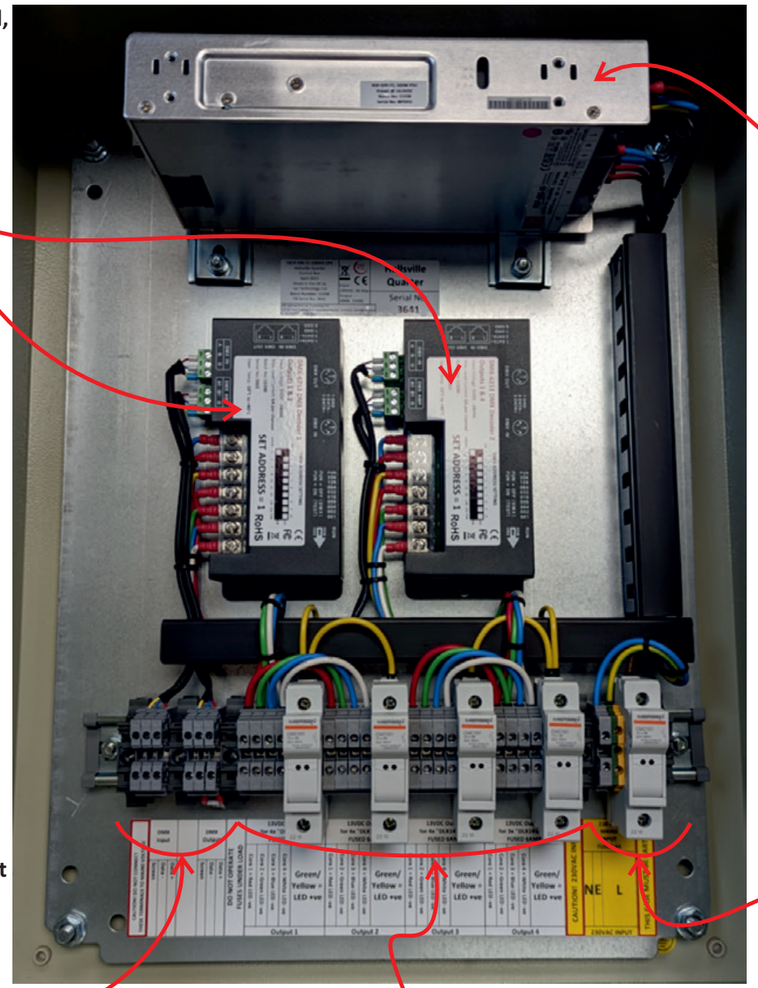
Drawing No./Status:
27492 Rev.A
Provisional
09/08/2024

LDL lighting

Control Box Part No. **"CB25-500-24-1DMX4-OP4"**
600x400x200mm

2x 4-Channel, Constant Voltage DMX512 Decoders.

500W, 24VDC PSU
Output Voltage TBC
This is pre-set at the factory.



DMX512 Input/Output Terminals

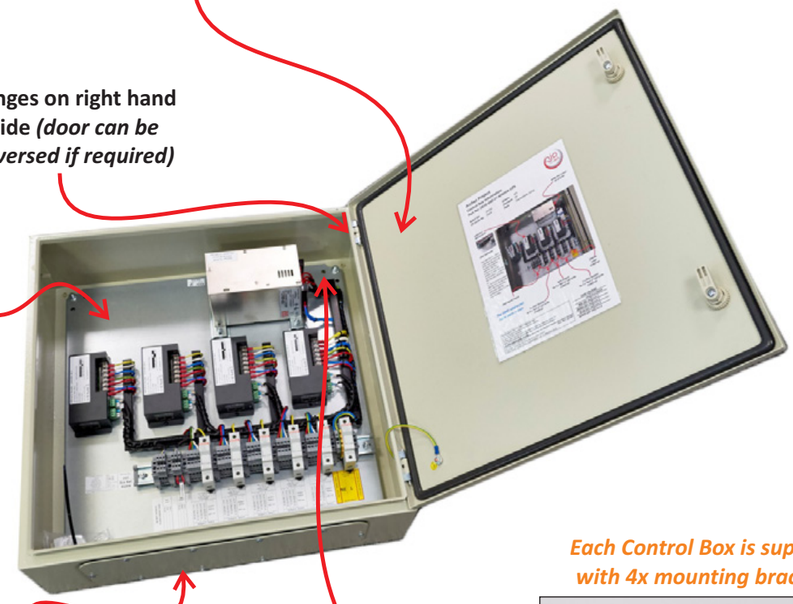
230VAC Input Fused 4A

4x 24VDC Constant Voltage RGBW LED Outputs FUSED 6A
(Up to 4x "KAL" LEDs per Output)

i, The control box is fully wired and tested, ready for the installation contractor to connect Mains and DMX512 cables and LED output feedlines.
ii, Care should be taken during installation to prevent impact/damage to the DMX interface modules.
iii, Ensure no wire croppings are allowed to enter the PSU casing or DMX modules.
iv, Finally remove any wire croppings and swarf prior to energising the box.
v, The control box requires a regular inspection to check for moisture and internal dust accumulation, which should be removed.
Note: If this box is at the end of the DMX line a 120R resistor must be used across the DMX output, Data + and Data -

The "CB25" Control Box is 600x400x200mm, IP66, RAL7032, total weight approx. 15kg.

Hinges on right hand side *(door can be reversed if required)*



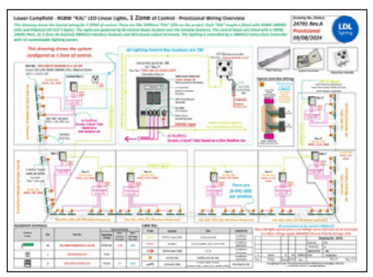
Internal contents of box for representative purposes only

Gland plate supplied undrilled.

4 x Ø8.5mm holes (one each corner), for mounting directly to wall or for brackets.

Each Control Box is supplied with 4x mounting brackets





Please see drg. no. 27492 for the previsional wiring layout

All connections to be wired in PARALLEL
These LED lights operate from a Low Voltage source and must not be Connected to a Mains Voltage supply. WARNING! Reverse Polarity damages LEDs

					Drawing No. 27492	
					Batch No:	TBC
					Drawn By:	SI
					Approved By:	MR
A	Drawn	SI	MR	09/08/24	Date:	09/08/2024
Rev.	Change	Drawn	App'd.	Date	Print A3	Page 1 of 1

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Lower Campfield - RGBW “KAL” LED Sample - August 2024

This sample set comprises 1x "KAL540" RGBW (3000K) LED, 15W (30W per metre), IP40 linear LED fitting, 24VDC power supply and a colour change controller.
The production "KAL" LEDs will be 1040mm in length, fitted with RGBW (4000K) LEDs and will be sealed to IP65.

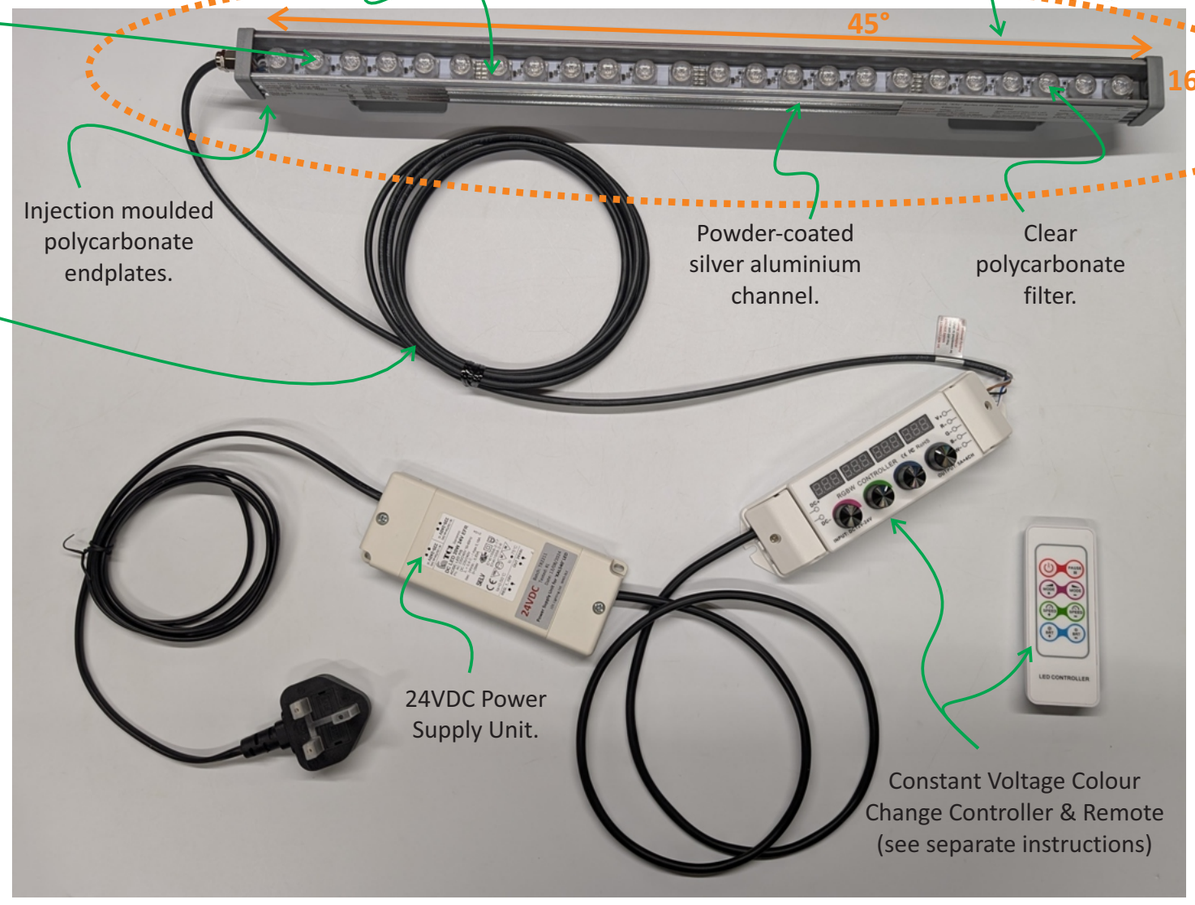
Drawing No./Status:
27494 Rev.A
Provisional
13/08/2024

Sample LED Part No. “KAL540-PS-RGBW30-EL-C-24-3M”

This sample is IP40.
Production units will be IP65 with an internal silicone fill.

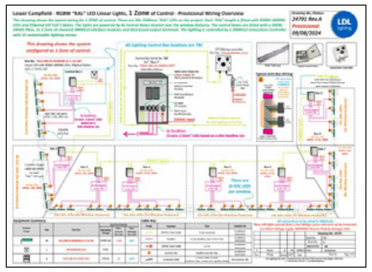
Supplied with adjustable mounting brackets

Fitted with RGBW (3000K) LEDs with elliptical output (45°x16°) wall washing optics,
Production units will be fitted with RGBW (4000K) LEDs

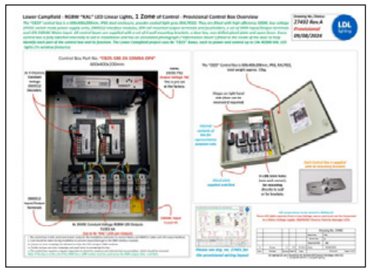


KAL LED Core Colours

Core Identification	Function
Black	24VDC LED +ve
Brown	Red LED -ve
Grey	Green LED -ve
Blue	Blue LED -ve
White	White LED -ve



Please see drg. no. 27491 for the provisional wiring layout



Please see drg. no. 27492 for the provisional Contol Box overview

All connections to be wired in PARALLEL
These LED lights operate from a Low Voltage source and must not be Connected to a Mains Voltage supply.
WARNING! Reverse Polarity damages LEDs

Electrical Details:
Voltage = 24VDC
Current = 1.25A Max per metre.
Total power = 30W Max per metre.
Above data is for P1041.PCB.
Termination = 5-core PUR, 0.34mm² CSA, O.D. 405mm *(ref: W509)*.

Optical Details:
This sample uses 48x Integrated RGBW LEDs per metre

Colour	nm/CCT	Output Per Metre
Red	620nm	222lm/m
Green	520nm	310lm/m
Blue	455nm	67lm/m
White	3000K	270lm/m
White	4000K	303lm/m

Optic = Elliptical (45°x16°)

Mechanical Details:
Housing = Powder-coated aluminium
Filter = Silk Satin polycarbonate
End Plates = Injection moulded polycarbonate
Mounting Brackets = Stainless steel
IP Rating = IP40 *(production units will be IP65)*
Product Weight = 0.9kg per metre

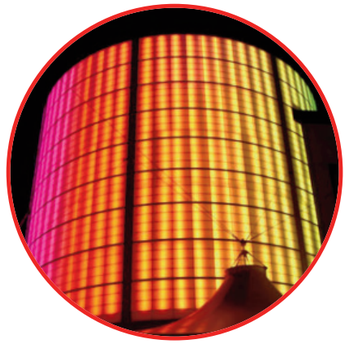
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Rev.	Change	Drawn	App’d.	Date	Print A3	Page 1 of 1

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ColourZone

Multizone LED Colour Controller, DMX512 Output

- Suitable for multizone schemes of all sizes
- Produces 6 Zones of DMX512
- Vivid colour rendition and smooth colour change
- Customisable scene, USB2.0 compatible
- 12 scenes available
- Scene speed control
- Dimming adjustment function
- Microsoft Windows compatible
- 1-gang brushed stainless steel plate



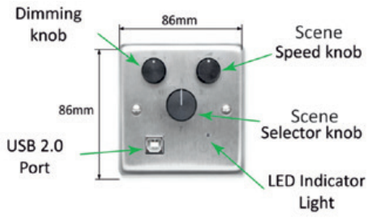
Description

ColourZone is a DMX512 colour change LED controller suitable for controlling multiple Zones of lighting. It allows RGBW control for up to 6 Zones of lighting using 12 programmable scenes. These scenes are fully customisable using the ColourZone software provided. The ColourZone controller has speed & dimming functions, allowing the user to fine tune the speed & brightness of the selected scene.

The ColourZone software allows the user to program specific colour sequences for each Zone of lighting within one scene. The software enables the programmer to select a wide range of colours using a very simple colour picker. The speed and hold settings for each scene can be adjusted in the software, providing a wide range of flexibility of control for the project lighting. Please refer to ColourZone Programming Guide for more information.

The ColourZone is supplied with a 1.2m USB cable, 12W 7VDC power supply, metal or plastic 1-gang back box and a ColourZone Software CD.

Controller Operation Guide



Scene Selecting:
Use the Scene Selector Knob to select a specific program. The controller is pre-programmed with 12 routines.

Dimming:
The light output can be dimmed & brightened using the Dimming knob. Turn clockwise to increase the brightness and anti-clockwise to dim the lights.

Speed:
The speed of any running program can be increased or decrease using the Scene Speed knob. Turn clockwise to increase the speed and anti-clockwise to decrease the speed of the selected scene.

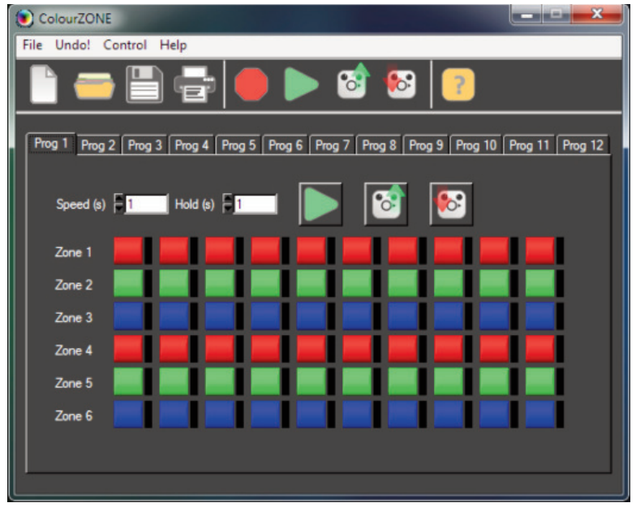
USB Port:
USB 2.0 port allows connection to a PC via a USB cable. This allows the user to customise and create scenes within the ColourZone software. For more information see ColourZone Programming Guide.

LED Indicator:
Blue LED light indicates scene selection change, scene upload and software initialisation during power on.

ColourZone

Multizone LED Colour Controller, DMX512 Output

ColourZone Software - Sample Screen



ColourZone Software Screen - Program 1
(this is a preset program on the controller)



Colour Picker

See ColourZone Programming Guide for software set up and custom program instructions.

ColourZone Accessories & Wiring

ColourZone Accessories
(Supplied with Controller)



- USB Lead



- 7VDC, 12W, Power Supply

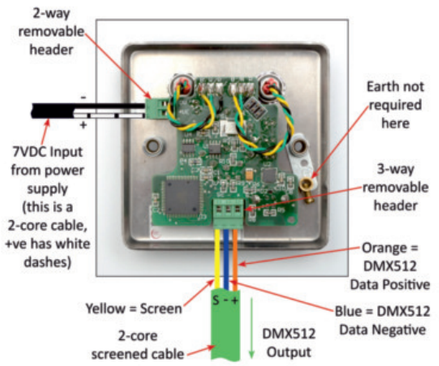


- 2 metre Figure 8 power lead



- ColourZone Programming Software CD

Wiring - Internal Rear View of Controller




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