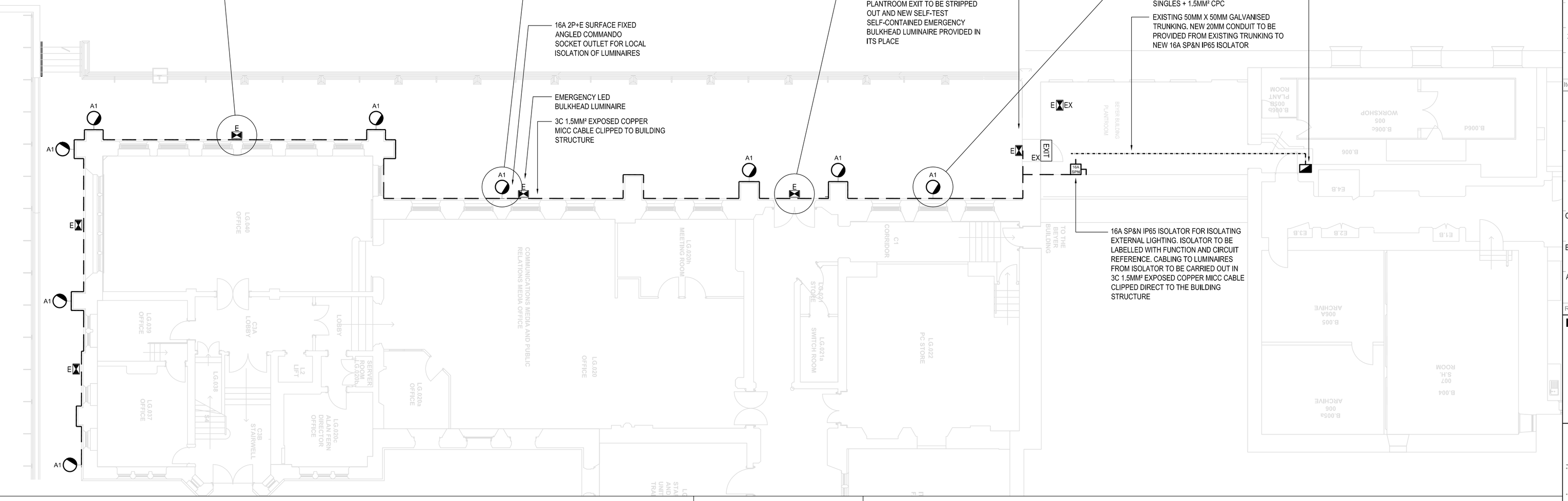


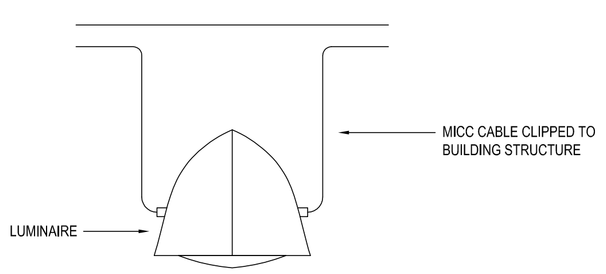




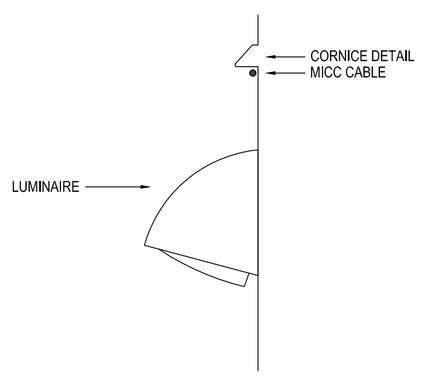




LUMINAIRE DETAIL
FRONT ELEVATION



LUMINAIRE DETAIL
SIDE ELEVATION



TYPE A1 LUMINAIRE



TYPE A1 LUMINAIRE



SPECIFICATION NOTES

THE WORKS SHALL BE INSTALLED IN ACCORDANCE WITH THE UNIVERSITY OF MANCHESTER STANDARD ELECTRICAL SPECIFICATION EMP PM8 (MAY 2016), AND THE REQUIREMENTS OF BS 7671 2008, INCORPORATING AMENDMENT NO.3 2015 OF THE REQUIREMENTS FOR ELECTRICAL INSTALLATIONS (IEE REGULATIONS 17TH EDITION), THE ELECTRICITY AT WORK REGULATIONS 1989, ALL BUILDING REGULATIONS AND HEALTH & SAFETY AT WORK REGULATIONS. THE CONTRACTOR IS TO BE NIC EIC APPROVED & MEMBER OF THE ECA.

AS PART OF PRODUCING THE COST TO CARRY OUT THE WORKS, THE CONTRACTOR IS TO ATTEND SITE TO REVIEW THE EXISTING AREA AND EXISTING INSTALLATION TO ASCERTAIN A BETTER UNDERSTANDING OF THE WORKS INVOLVED, THESE ARRANGEMENTS ARE TO BE MADE VIA THE UNIVERSITY OF MANCHESTER PROJECT MANAGER.

THE CONTRACTOR SHALL INCLUDE FOR THE COMPLETE REMOVAL OF ALL REDUNDANT MATERIALS FROM THE AREA I.E. REDUNDANT WIRING AND ACCESSORIES AND THE LIKES ON COMPLETION OF THE WORKS.

ALL NEW ACCESSORIES ARE TO BE OF THE SAME MANUFACTURER AND TYPE THROUGHOUT THE INSTALLATION AS MK COMMANDO AND MK SAFETYSWITCH OR EQUAL AND APPROVED. THE CONTRACTOR SHALL ISSUE A SAMPLE OF EACH OF THE ACCESSORIES PRIOR TO COMMENCEMENT OF THE INSTALLATION FOR SIGN OFF AND APPROVAL FROM THE ARCHITECT, ENGLISH HERITAGE AND ALL RELEVANT PARTIES OF THE UNIVERSITY OF MANCHESTER.

REFERENCE SHALL BE MADE TO ALL ARCHITECTURAL DRAWINGS AND COORDINATION WITH THE ARCHITECTURAL SCOPE OF WORKS SHALL BE CARRIED OUT. THE CONTRACTOR SHALL ALSO NOTE THE LISTED STATUS OF THE BUILDING.

PRIOR TO COMMENCEMENT OF THE WORKS ON SITE A SITE MEETING IS TO BE HELD WITH ALL RELEVANT PARTIES TO DISCUSS AND CONFIRM ALL ELEMENTS OF THE WORKS, COORDINATION ETC.

THE CABLING INSTALLATION IS TO UTILZE 1.5MM² PVC SINGLES AND 1.5MM² EXPOSED COPPER MICC CABLES. THE WIRING SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH ALL PARTS OF BS 7671 IN RESPECT TO PROTECTION SELECTION AND INSTALLATION METHODS.

THE NEW EXTERNAL GENERAL LIGHTING LUMINAIRES ARE TO BE FROM THE THORLUX LIGHTING REALTA LED RANGE (PRODUCT REF: RL17581L). THE EXTERNAL LUMINAIRES ARE TO BE FITTED WITH INTEGRAL PHOTOCELLS AND SHALL UTILIZE LED TECHNOLOGY (1X32W 4000K). THE LUMINAIRES ARE TO BE OF THE OPTION AREA LIGHTING DISTRIBUTION AND SHALL BE FITTED WITH A IK10++ POLYCARBONATE COVER. THE FINISH OF THE LUMINAIRE IS TO BE CONFIRMED BY THE ARCHITECT.

THE CONTRACTOR IS TO PROVIDE A SAMPLE LUMINAIRE PRIOR TO THE COMMENCEMENT OF THE INSTALLATION FOR SIGN OFF AND APPROVAL FROM THE ARCHITECT, ENGLISH HERITAGE AND ALL RELEVANT PARTIES OF THE UNIVERSITY OF MANCHESTER.

THE SUPPLY TO THE EMERGENCY LIGHTING SELF-CONTAINED SELF-TEST BULKHEAD LUMINAIRES IS TO BE DERIVED FROM THE NEW EXTERNAL LIGHTING CIRCUIT.

THE CONTRACTOR IS TO EMPLOY THE SERVICES OF UNIVERSITY OF MANCHESTER MAINTENANCE SERVICES UNIT (MSU) TO AID THEM IN ALL ISOLATIONS AND SHUTDOWNS. ALL ISOLATIONS AND SHUTDOWNS ARE TO BE IN ACCORDANCE WITH UNIVERSITY OF MANCHESTER EPM HS16 - ELECTRICAL SHUTDOWN PROCEDURE SEP 2016.

ON COMPLETION OF THE WORKS, THE INSTALLATION SHALL BE INSPECTED AND TESTED IN COMPLIANCE WITH BS 7671 AND THE UNIVERSITY OF MANCHESTER STANDARD SPECIFICATION WITH REGARDS TO INSULATION RESISTANCE, BREAKER TRIPPING TIME AND EARTH LOOP IMPEDANCE. A COMPLETION CERTIFICATE SHALL BE ISSUED ON COMPLETION.

The University of Manchester

NOTES

1. DO NOT SCALE FROM THIS DRAWING.
2. ALL MEASUREMENTS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.
3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE SPECIFICATION AND ALL RELEVANT ARCHITECTURAL, ELECTRICAL, MECHANICAL AND STRUCTURAL DRAWINGS.
4. ALL PHOTOS AND MARK UPS ARE INDICATIVE AND NEED TO BE CONFIRMED ON SITE

LEGEND

A1	THORLUX LIGHTING REALTA LED EXTERNAL LUMINAIRE (1X32W)
16A SP&N	16 AMP SINGLE PHASE AND NEUTRAL IP65 ISOLATOR
HO	COOPER 4 WAY HOLD OFF RELAY
E	HOSTWAVE LOGICA LED IP65 BULKHEAD SELF CONTAINED SELF TEST LUMINAIRE
	16A 2P+E ANGLED COMMANDO SOCKET
	DISTRIBUTION BOARD
	EXISTING 50MM X 50MM TRUNKING
	1.5MM² EXPOSED COPPER MICC CABLING (LV)
	1.5MM² EXPOSED COPPER MICC CABLING (EM LTG)
	MICC CABLING (TO BE STRIPPED OUT)
'EX'	'EX' DENOTES EXISTING INSTALLATION

IN ADDITION TO THE HAZARDS/RISKS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, NOTE THE FOLLOWING SIGNIFICANT RESIDUAL RISKS :-

Item	Hazard	Risk
4	DRILLING OF HOLES THROUGH BRICKWORK AND PLASTERED WALLS	
3	FIRE STOPPING OF PENETRATIONS THROUGH FIRE WALLS	
2	MANUAL HANDLING OF MATERIALS UP/DOWN STAIRS	
1	WORKING AT HIGH OFF A SCAFFOLD	

Rev	Description	By	Date	Chk'd	Auth
C	COMMANDO SOCKETS OMITTED FOR LISTED BUILDING CONCENT	MR	MAR 17	SW	SW
B	50V EMERGENCY LUMINAIRES OMITTED AND REPLACED WITH SELF CONTAINED SELF TEST	MR	JAN 17	SW	SW
A	DRAWING REVISED FOLLOWING ARCHITECTS COMMENTS	MR	NOV 16	SW	SW

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Drawing Status
FOR COMMENT

Project
UNIVERSITY OF MANCHESTER
STONE RESTORATION

Building Name
JOHN OWENS BUILDING

Sub Site Name
JOHN OWNS BUILDING

Site Name
SOUTH CAMPUS

Drawing Title
JOHN OWENS LIGHTWELL
GENERAL AND EMERGENCY LIGHTING
ELECTRICAL SERVICES LAYOUT

PM	Drawn	Checked	Authorised
ME	MR	SW	SW
Scale	Date	Date	Date
1:100 @A1	NOV 16	NOV 16	NOV 16

Drawing No.
M4218-DSSR-JO-00-DR-MEP-63001

Revision
C