

ESTATES & FACILITIES

Document Title

As Built Documentation

Document Number

ES/ 013-B

1.0 INTRODUCTION

‘As Built Documentation’ is a fundamental part of the Works Contract, without these documents the Contract will not be deemed as complete. The amount of monies contained within the tender submission shall not limit the University of Southampton retention should the Contractor fail to provide the ‘As Built Documentation’ in the manner required.

An advance copy of the ‘As Built Documentation’ shall be submitted to the Engineer at least 2 weeks prior to the proposed completion of the works.

The Engineer will appraise the submission and return the copy to the Contractor together with any comments. The Contractor shall ensure that the comments submitted by the Engineer are incorporated into the final ‘As Built Documentation’.

The Contractor shall supply, upon completion of the works, 2 sets of As Built Documentation within individual loose leaf ring binders, detailing the following:

2.0 EXTERNAL OF THE BINDER

The front of the binder shall be titled to reflect:-

The client		Primary title
The project title		Primary title
The project order number		Secondary title
The Contractor -	Including the address and telephone number	Secondary title
The date of the document		Secondary title

The spine of the binder shall be titled to reflect:-

The project title
The date of the document

3.0 BINDER CONTENTS

The internal of the binder shall contain a front sheet, which is a copy of the binder front.

Followed by an index sheet detailing the various sections and their contents.

The remainder of the binder shall be divide into sections;

3.1 Section 1

Detail all parties to the project;

3.1.1 The Client - including the Engineer responsible for the project,

Address

Telephone numbers

E-mail Address

Fax numbers

University of Southampton order number

Project start and finish dates

3.1.2 The Contractor - including the Senior Member of staff responsible for the project,

Address

Telephone numbers

E-mail Address

Fax numbers

Contractors project / job number

Emergency Telephone Number ,24 hour, for the Duration of the Defects Liability period.

3.1.3 The Sub-Contractors - including the Senior Member of staff responsible for the project,

Address

Telephone numbers

E-mail Address

Fax numbers

Contractors project / job number

Emergency Telephone Number ,24 hour, for the Duration of the Defects Liability period.

3.2 Section 2

Brief description of the project, the use of all or part of the 'Particular Specification' shall only be included if relevant.

3.3 Section 3

Maintenance Instructions and Schedules

This section shall contain maintenance schedules indicating;

- a. Recommended Periods Between Testing, Servicing and Inspection for all Systems and Equipment based upon a 5 year period.
- b. Spares requirements for the Installation and Equipment based upon a 5 year period
- c. Reference shall be included to relevant British Standards, Codes of Practice and Manufacturers requirements.

Included in this section shall be a brief description of operation and maintenance procedures for;

- | | |
|--|---|
| i. Fire Alarm Systems | vii Ventilation systems , including Controls |
| ii. Security Systems, including Card Access | viii Comfort cooling , including Controls |
| iii. Lighting Systems, including Controls | ix Process chilled water systems and controls |
| iv. Heating Systems, including Controls | x Compressed air systems |
| v. Power Systems, including Controls | xi Soil and drainage |
| vi. any miscellaneous systems and equipment. | xii |

3.4 Section 4

Equipment details;

The section shall start with a schedule of all M & E equipment used on the project sub-divided into;

a.	Switchgear	l	Boilers
b.	Sub Distribution Boards	m	Supply & Extract AHU
c.	Power Systems	n	Chillers
d.	Luminaires	o	Noise attenuation
e.	Electrical Accessories	p	Valve/strainers etc
f.	Data Equipment and Accessories	q	Filters
g.	Cables / Wiring	r	Lagging
h.	Fire Alarm Equipment	s	Pumps
j.	Security Equipment	t	Filters
k.	Miscellaneous Electrical Equipment	u	Pipes

The remainder of this section shall contain manufactures data sheets / catalogue extracts for the items as contained and in the order of the schedule.

Where a manufactures sheet contain more than one component the Contractor shall ensure that the individual item(s) are clearly indicated on the sheet.

Manufacturers warranty details, i.e. duration and any conditions applicable.

3.5 Section 5

Project drawings;

The hard copies of the drawings shall be submitted within individual plastic pocket style inserted within the ring binders.

Drawings shall be ordered as follows;

Electrical

- a. Single Line Diagram of Primary / Secondary Distribution
- b. Power Layouts of each level / area
- c. Lighting Layouts of each level / area
- d. Data / Telecommunications / Security Layouts of each level
- e. Fire Alarm Layouts of each level
- f. Miscellaneous Electrical Equipment

Mechanical

- g. Duct layouts
- h. Pipe layouts including HWS & CWS
- i. Schematic layouts
- j. Drainage
- k. Miscellaneous equipment

Drawings Scale (1:1) of the installation and arrangements on re-writable CD ROM or 3.5 inch disc, created using AutoCAD Lt2000, or AutoCAD release 2000, later versions of AutoCAD may be used with prior agreement with the Engineer. The disc(s) shall be installed within a purpose made ring binder disc pocket.

Drawings shall be saved as **unlocked .dwg** (suitable for incorporation into the Universities system for future editing)

NOTE 'xref' drawings shall not be submitted.

Ensure that all drawings are 'purged' before compression, zipping or sending.

3.6 Section 6

The hard copies of the Test and Completion Certificates plus Commissioning Schedules shall be submitted within individual plastic pocket style inserts within the ring binders.

Original copies of all test certificates -

i.	Electrical Test Certificates	vi.	Emergency Lighting Test Certificates
ii.	Electrical Completion Certificates	vii.	Emergency Lighting Completion Certificate
iii.	Fire Alarm Test Certificates, including Audibility Schedule	viii.	Data / Telecommunication Test Schedules
iv.	Fire Alarm Cabling Test Result Schedule	ix.	Data / Telecommunication Completion Certificate
v.	Fire Alarm Completion Certificate	x.	Commissioning + Test Schedules & Certificates for Miscellaneous Systems and Equipment
xi.	Air flow rates & Pressure drops	xvi.	Vibration data/static deflections
xii.	Water flow rates & Pressure drops		

xiii	Static pressure tests		
xiv	Building leakage test results		
xv	Noise level data		

3.7 Section 7

Copy of the Project CDM Safety File.

Only relevant extracts from the file should be included.