

SERVICE REPORT. SHEET 1 OF 8

TOTAL CONTROL

<input type="checkbox"/> Survey	<input checked="" type="checkbox"/> Commissioning	<input checked="" type="checkbox"/> Trend DDC Controls
<input type="checkbox"/> Service Contract	<input type="checkbox"/> Demonstration	<input type="checkbox"/> Other DDC Controls
<input type="checkbox"/> Breakdown	<input checked="" type="checkbox"/> Panel Mod's	<input type="checkbox"/>

STRAWBERRY VALE
TONBRIDGE
KENT
TN9 1SJ
Tel 01732 770773
Fax 01732 770206

Date of Request :- 12th Feb 06
Request From :- Marcus Allen
Customer :-
 MITIE Eng Services (South East) Ltd
 1st Floor
 The Counting House
 53 Tooley Street
 London
 SE1 2QN
Tel :- 020 7022 8400 **Fax :-** 020 7022 8401

Date of visit **Start date :-** 1st March 06
Order N° :- LN/SE3186/26516
Site :-
 Overbury Site
 Norwich Union
 New Broad Street
 London
 EC2
Site Contact :- Joe Stewart
Tel :- **Mobile :-** 07920 071###

Is visit chargeable? Yes No
Estimated site time :- As Necessary
Method of charge :- Lump Sum

TCS Job No :- J6491
Engineers :- AJB, DC, IR, JB

Purpose of visit / Any special instructions: -

To carry out panel modifications to existing control panels and Trend outstation enclosures, check existing and commission new HVAC control systems generally as per our quotation dated 31st August 2005 and any subsequent instructions.

Report Summary :-

Control system commissioned as per the attached details

Date	Travel Time	Working time	Waiting Time	Total Time	Total Mileage	Engineer	Materials Used
March 06	LUMP SUM PRICE					AJB, DC, IR, JB	New IQ223
April 06						AJB, IR	
	Hrs	Hrs	Hrs	Hrs	Miles		
	Hrs	Hrs	Hrs	Hrs	Miles		
	Hrs	Hrs	Hrs	Hrs	Miles		
Further Action Required				Customer	TCS	Report forwarded to customer on 2nd May 2006 Invoice under separate cover Signature	
See report for details				<input checked="" type="checkbox"/>	<input type="checkbox"/>		
				<input type="checkbox"/>	<input type="checkbox"/>		
				<input type="checkbox"/>	<input type="checkbox"/>		
				<input type="checkbox"/>	<input type="checkbox"/>		
				<input type="checkbox"/>	<input type="checkbox"/>		

SERVICE REPORT. SHEET 4 OF 8

TOTAL CONTROL

Site : Norwich Union, New Broad Street	
Period Covered: March/April 2006	
Engineer: AJB, DC, IR, JB	Job N° J6491

Ref.	Description	Part N°.	Function	Measurements & Settings				Note
				R	Y	B	O/L	
8	Existing AHU No 4 (N/E)							
	Supply Fan		Yes	Inv	Drive			
	Supply Fan Inverter		Yes	Set	3.5mB			
	Extract Fan		Yes	Inv	Drive			
	Extract Fan Inverter		Yes	Slave	to	Sup	Fan	
	Fresh Air Damper		Yes					
	Recirculation Damper		Yes					
	Extract Air Damper		Yes					
	Cooling Valve		Yes					
	Fire Alarm Interlock		Yes					
	Supply Air Sensor		Yes					
9	Existing AHU No 5 (S/E)							
	Supply Fan		Yes	Inv	Drive			
	Supply Fan Inverter		Yes	Set	3.5mB			
	Extract Fan		Yes	Inv	Drive			
	Extract Fan Inverter		Yes	Slave	to	Sup	Fan	
	Fresh Air Damper		Yes					
	Recirculation Damper		Yes					
	Extract Air Damper		Yes					
	Cooling Valve		Yes					
	Fire Alarm Interlock		Yes					
	Supply Air Sensor		Yes					
10	Chiller Plant							
	Pressurisation Unit		Yes					
	Chiller No 1		Yes					
	Chiller No 2		Yes					
	Chiller No 3		Yes					
	No 1 Ch W Butt. Valve		Yes					
	No 1 Cond W Butt. Valve		Yes					
	No 2 Ch W Butt. Valve		Yes					
	No 2 Cond W Butt. Valve		Yes					
	No 3 Ch W Butt. Valve		Yes					
	No 3 Cond W Butt. Valve		Yes					
	Ch W Primary Pump No 1	35 KW	Yes					
	Pressure Control	0-6 BAR	Yes	Set	155	KPA		
	Ch W Primary Pump No 2	35 KW	Yes					
	Pressure Control	0-6 BAR	Yes	Set	155	KPA		
	Ch W Secondary Pump No 1	55 KW	Yes					
	Pressure Control	0-4 BAR	Yes	Set	275	KPA		
	Ch W Secondary Pump No 2	55 KW	Yes					
	Pressure Control	0-4 BAR	Yes	Set	275	KPA		

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Period Covered: March/April 2006	
Engineer: AJB, DC, IR, JB	Job N° J6491

Note.	Comment
	<u>Adjustable Setpoints:</u>
1	AHU Nos 1 to 5
	Supply Static Pressure Control 3.5mB
	Supply Air Temperature 14°C
	Minimum Fresh Air 10%
2	AHU No 1 Serving Conference Room
	Supply Air Temperature 18°C
3	AHU No 2 Serving I.O.D. Area
	Supply Static Pressure Control 16°C
4	Chilled Water
	Common Return Temperature 8°C
	Condenser Water Temperature 28°C
	Condenser Water Low Limit 20°C
5	Boiler Primary
	Common Flow (Lag Boiler On) 65°C
	Common Flow (Lag Boiler Off) 70°C
6	LPHW Secondary (Common for all 3 Circuits)
	Flow Temp at 0°C Outside Flow Temperature 80°C
	Flow Temp at 20°C Outside, Flow Temperature 40°C
7	Optimum off (Heating)
	Outside Air Temperature 18°C
	Room Temperature 22°C
8	Chilled Water Hold Off
	Outside Air Temperature 5°C
9	Floor Terminal Units
	Return Air Temperature (Where Applicable) 21°C
	Room Temperature (Where Applicable) 21°C
	<u>Timeschedules:</u>
	A schedule is allowed per floor. These have all been set at 07:00 on, 18:00 off Mon - Fri
	Chiller duty alternates on a daily basis at Midnight (1,2/2,3/3,1)
	Cooling Tower fan duty alternates on a weekly basis (Sunday at Midnight)