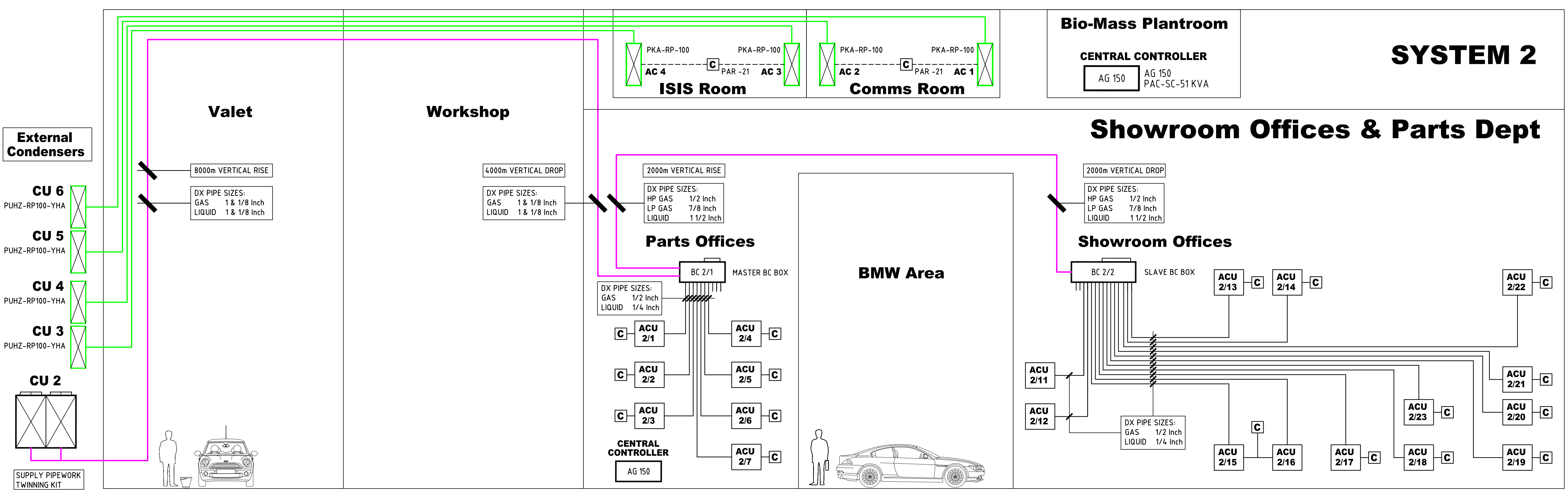


THIS DRAWING IS THE PROPERTY OF MK CE Ltd AND AS SUCH MAY NOT BE COPIED OR COMMUNICATED TO A THIRD PARTY WITHOUT WRITTEN AUTHORISATION



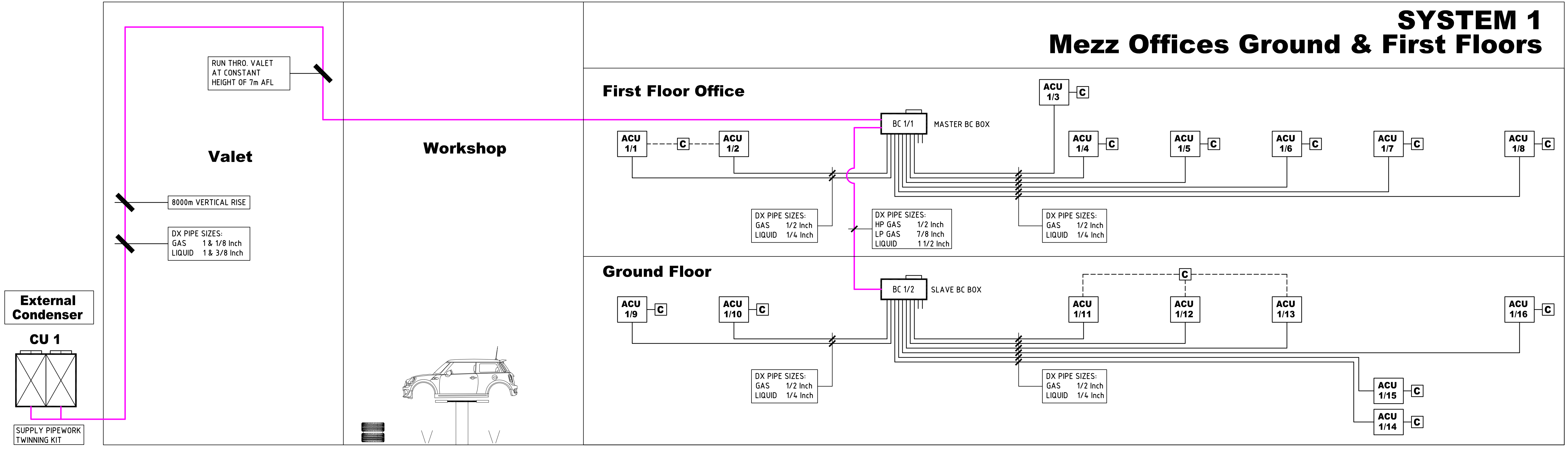
- LEGEND :**
- CEILING RECESSED SIMULTANEOUS HEATING & COOLING AIR CONDITIONING UNIT. 4 WAY BLOW. WITH CONDENSATE PUMP.
 - WALL MOUNTED SIMULTANEOUS HEATING & COOLING AIR CONDITIONING UNIT. WITH CONDENSATE PUMP.
 - CEILING CONCEALED DUCTED, SIMULTANEOUS HEATING AND COOLING AIR CONDITIONING UNIT. CONTRACTOR TO FABRICATE AND SUPPLY DISCHARGE PLENUM BOX AND SPIGOTS WITH VCD's
 - SUPPLY AIR DIFFUSER - 4 WAY BLOW 159x59mm LAY IN GRID, WITH BACK PLENUM BOX 250* CONNECTION
 - RETURN AIR DIFFUSER - 4 WAY BLOW 159x59mm OPEN TO VOID
 - SIMULTANEOUS HEATING AND COOLING SYSTEM PIPEWORK BC CONNECTION BOX WITH CEILING VOID
 - DX PIPEWORK (GAS & LIQUID LINES) ON CONTINUOUS SUPPORT TRAY
 - WALL MOUNTED CONTROLLER TYPE: PAR-F 27 - ME

- NOTES :**
- THE CONTRACTOR SHALL VISIT SITE DURING TENDER
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CO-ORDINATION, THE DESIGN OF ALL BRACKETS & SUPPORT WORK, AND BUILDERSWORK DETAILS
 - FLEXIBLE DUCTS SHALL BE STRAIGHT NOT USED AS BENDS AND 600mm MAX LENGTH FAN COIL SUPPLY DUCTS SHALL BE INSULATED
 - THE CONTRACTOR SHALL ALLOW FOR CONDENSATE DRAINAGE IN HIS TENDER. ON SITE THE CONTRACTOR SHALL ESTABLISH ROUTES AND RUN CONDENSATE PIPEWORK DRAINS ON SITE FROM EACH FAN COIL UNIT TO DRAIN
 - DX PIPEWORK TO BE RUN ON ON SUPPORT TRAY
 - THE NUMBER OF SPARE WAYS ON THE BC BOXES ARE FOR FUTURE EXPANSION OF THE SYSTEM. THE CONTRACTOR SHALL NOT REDUCE THE BC BOX CONNECTION CAPACITY SPECIFIED
 - THE MECHANICAL CONTRACTOR SHALL SET TO WORK THE WHOLE OF THE INSTALLATIONS - INCLUDING CONTROLS AND CONTROLS WIRING - AND FULLY COMMISSION AND BALANCE THE SYSTEMS, IN ACCORDANCE WITH ALL INDUSTRY STANDARDS, BUILDING CONTROL REQUIREMENTS, WAYSIDE REQUIREMENTS AND GOOD PRACTICE
 - INSTALL THE WORKS IN ACCORDANCE WITH ALL STANDARD INDUSTRY HEALTH & SAFETY & BUILDING CONTROL REQUIREMENTS
 - THE CONTRACTOR SHALL SUBMIT RISK ASSESSMENTS AND METHOD STATEMENTS TO CS2 FOR ALL ELEMENTS OF THE WORKS PRIOR TO WORKS TAKING PLACE

- WIRING & CONTROLS:**
- THE CONTRACTOR SHALL SUPPLY, INSTALL, TEST AND COMMISSION ONE MITSUBISHI DIRECT L14 AG 150 CONTROL SYSTEM PER SYSTEM, COMPLETE WITH ALL NECESSARY INTERFACE CARDS AND WIRING.
 - THE CONTRACTOR SHALL ALLOW FOR ALL AC SYSTEMS CONTROLS WIRING AND INTERCONNECTING WIRING FROM EXTERNAL UNIT TO INDOOR UNITS
 - POWER WIRING TO EXTERNAL CONDENSER AND INDOOR AC UNITS SHALL BE BY THE APPOINTED ELECTRICAL CONTRACTOR
 - SUPPLY AND INSTALL CONDENSER PIPEWORK TWINNING KITS

Note: Contractors' Coordination Responsibility
THE INFORMATION ON THIS DRAWING IS FOR DESIGN PURPOSES ONLY. THE CONTRACTOR SHALL PRODUCE EXPANDED AND FULLY COORDINATED WORKING DRAWINGS FOR INSTALLATION FOR APPROVAL PRIOR TO PROCUREMENT. THE CONTRACTOR SHALL COORDINATE MECHANICAL, ELECTRICAL, STRUCTURAL, ARCHITECTURAL ELEMENTS OF THE PROJECT, AS WELL AS COORDINATE THE CEILING LAYOUT AND INSTALLATION.

Important Note:
IMPORTANT NOTE: READ ALL NOTES, SCHEDULES AND INSTALLATION INSTRUCTIONS ON DRAWING - THEY FORM PART OF THE SPECIFICATION, WHICH MAY NOT BE REPEATED IN THE WRITTEN DOCUMENTATION.



SYSTEM 1 - Mezz Offices Ground & First Floors

AC Plant Schedule

| REF | DUTY Uk Cooling | INDOOR UNIT MODEL | SIZE |
|---------|-----------------|-------------------|------|
| ACU 1/1 | 5.0 kW | PLFY-P-VMB E | 50 |
| ACU 1/2 | 5.0 kW | PLFY-P-VMB E | 50 |
| ACU 1/3 | 3.0 kW | PLFY-P-VCM E | 32 |
| ACU 1/4 | 7.0 kW | PLFY-P-VMB E | 80 |
| ACU 1/5 | 5.0 kW | PLFY-P-VMB E | 50 |
| ACU 1/6 | 5.0 kW | PLFY-P-VMB E | 50 |
| ACU 1/7 | 5.0 kW | PLFY-P-VMB E | 50 |
| ACU 1/8 | 7.0 kW | PLFY-P-VMB E | 80 |

BC Connection Box Schedule

| REF | MODEL | Box Status | Total No. Connections | No. spare Connections |
|--------|------------------|------------|-----------------------|-----------------------|
| BC 1/1 | CMB-P 10106 V-ha | Master | 16 | 8 |
| BC 1/2 | CMB-P 1008 V-GB | Slave | 8 | 0 |

AC Plant Schedule - Outdoor

| REF | OUTDOOR UNIT MODEL | ELECTRICAL DATA (Amps) PH SC RC FUSE | DIMS (mm) L D Ht | Wt (kg) |
|------|--------------------|--------------------------------------|-------------------|---------|
| CU 1 | PURY P 700 YSHM-A | 3ph 8/8 38 40/25 | 1220-920 760 1710 | 265-265 |

ALL UNITS TO BE SUPPLIED WITH INTEGRAL CONDENSATE PUMP

SUPPLIED AND INSTALLED WITH PIPEWORK TWINNING KIT

SYSTEM 2 - Showroom Offices & Parts Dept

AC Plant Schedule

| REF | DUTY Uk Cooling | INDOOR UNIT MODEL | SIZE |
|----------|-----------------|-------------------|------|
| ACU 2/1 | 3.4 kW | PLFY-P-VCM E | 32 |
| ACU 2/2 | 3.4 kW | PLFY-P-VCM E | 32 |
| ACU 2/3 | 3.4 kW | PLFY-P-VCM E | 32 |
| ACU 2/4 | 3.4 kW | PLFY-P-VCM E | 32 |
| ACU 2/5 | 3.4 kW | PLFY-P-VCM E | 32 |
| ACU 2/6 | 3.4 kW | PLFY-P-VCM E | 32 |
| ACU 2/7 | 3.4 kW | PLFY-P-VCM E | 32 |
| ACU 2/8 | 3.4 kW | FUTURE CAPACITY | - |
| ACU 2/9 | 3.4 kW | FUTURE CAPACITY | - |
| ACU 2/10 | 3.4 kW | FUTURE CAPACITY | - |

BC Connection Box Schedule

| REF | MODEL | Box Status | Total No. Connections | No. spare Connections |
|--------|-----------------|------------|-----------------------|-----------------------|
| BC 2/1 | CMB-P 1010 V-GA | Master | 10 | 3 |
| BC 2/2 | CMB-P 1016 V-HB | Slave | 16 | 3 |

AC Plant Schedule - Outdoor

| REF | OUTDOOR UNIT MODEL | ELECTRICAL DATA (Amps) PH SC RC FUSE | DIMS (mm) L D Ht | Wt (kg) |
|------|--------------------|--------------------------------------|-------------------|---------|
| CU 2 | PURY P 650 YSHM-A | 3ph 8/8 35 32/25 | 1220-920 760 1710 | 265-240 |

ALL UNITS WITH INTEGRAL CONDENSATE PUMP - NUMBERS DO NOT EXIST ON DRAWING

SUPPLIED AND INSTALLED WITH PIPEWORK TWINNING KIT

VRF Systems
Scale: NTS @ A0

MAIN SPECIFICATION:

- SUPPLY AND INSTALL 2 No. MITSUBISHI ELECTRIC Ltd SIMULTANEOUS HEATING & COOLING, HEAT RECOVERY AIR CONDITIONING SYSTEMS.
- EACH AC UNIT TO BE INSTALLED COMPLETE WITH CONDENSATE PUMP
- INSTALLED BY ACCREDITED INSTALLER
- PROVIDE 5 YEAR WARRANTY ON HANDOVER
- INSTALL COMMS ROOM AC AS SPECIFIED ON THIS DRAWING

| Rev | Description | Date |
|-----|----------------|------|
| C | CONTRACT ISSUE | - |
| T | TENDER ISSUE | - |

client
WAYSIDE GROUP

project manager
CS2 Ltd

project architect
MDG

project title
BMW & MINI NORTHFIELD DRIVE, NORTHFIELD, MILTON KEYNES

MK
MK Consulting Engineers Ltd
Building Services Engineering Design & Draughting
Tel: 07702 364 607 Email: mkca99@aol.com

Drawing Title
MECHANICAL SERVICES OFFICE AREAS & COMMS ROOMS VRF & DX SYSTEMS SCHEMATIC

| Scale | NTS @ A0 | Drawn | AK |
|-------|----------|---------|----|
| Date | - | Checked | AK |

Drawing Number
MK/600/AC 03

Revision
C

Drawing Status
CONTRACT ISSUE