

Stelrad Compact Radiators/Towel Rail Straight Chrome				
Emitter Number	Room Name	Type	Height mm	Length mm
1	Bedroom 1/Dressing	Compact K1	450	700
2	Bedroom 1/Dressing	Compact K1	450	700
3	Bedroom 1/Dressing	Compact K1	450	400
4	Bedroom 2	Compact K1	450	900
5	Bedroom 3	Compact K1	450	800
6	Bedroom 4	Compact K1	450	700
7	Landing	Compact K1	600	600
8	Bathroom	Towel Rail Straight Chrome	1800	500
9	En-Suite	Towel Rail Straight Chrome	1800	600

ANCILLARY EQUIPMENT LOGIC HEAT ZONED	
Boiler	Ideal Heat only HE 18 [SAP Ref: 16399]
Boiler	Rated output 18 kW
Plastic Pipe-work	Pipe-work & fittings by Hepworth Hep 20.
Cylinder	Ideal thermstore 210 Litre un-vented cylinder
Heating pump	Grundfos Alpha 2 15-60.
Pressurisation Unit	Flamco cubexpak 18/05 type B
Programmable 'stat	Honeywell CM707.
Time clock	Honeywell ST9100C time clock
Motorised Valves	Honeywell V4043H 22mm Heating Zone Valve X 2
T.R.V.s	Honeywell VT117E to rooms as listed below
T.R.V.s	To all radiators except room stat rooms.
Radiator Valves	Peglers Terrier with D.O.C.
Cleaner & Inhibitor	Suitable Adey, Fernox or Sentinel to be added in Accordance with the manufacturers instructions and BS7593:1992.
Scale Inhibitor	Ideal electrolytic scale inhibitor (if required)
Additional kits	Honeywell DU145 Automatic by-pass valve (if required)
	Honeywell frost pipe stat (If Required)
	Adey Magnaclean Filter (If Approved)

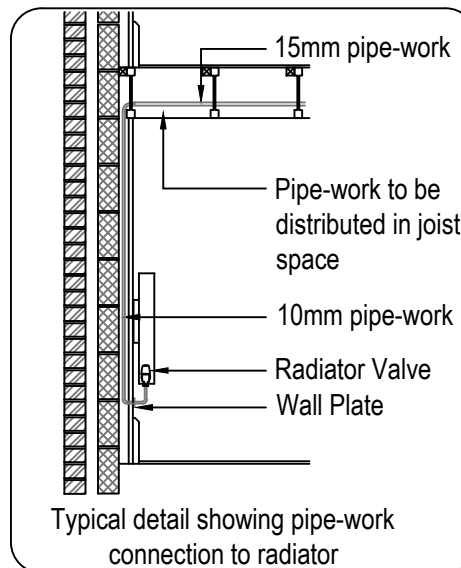
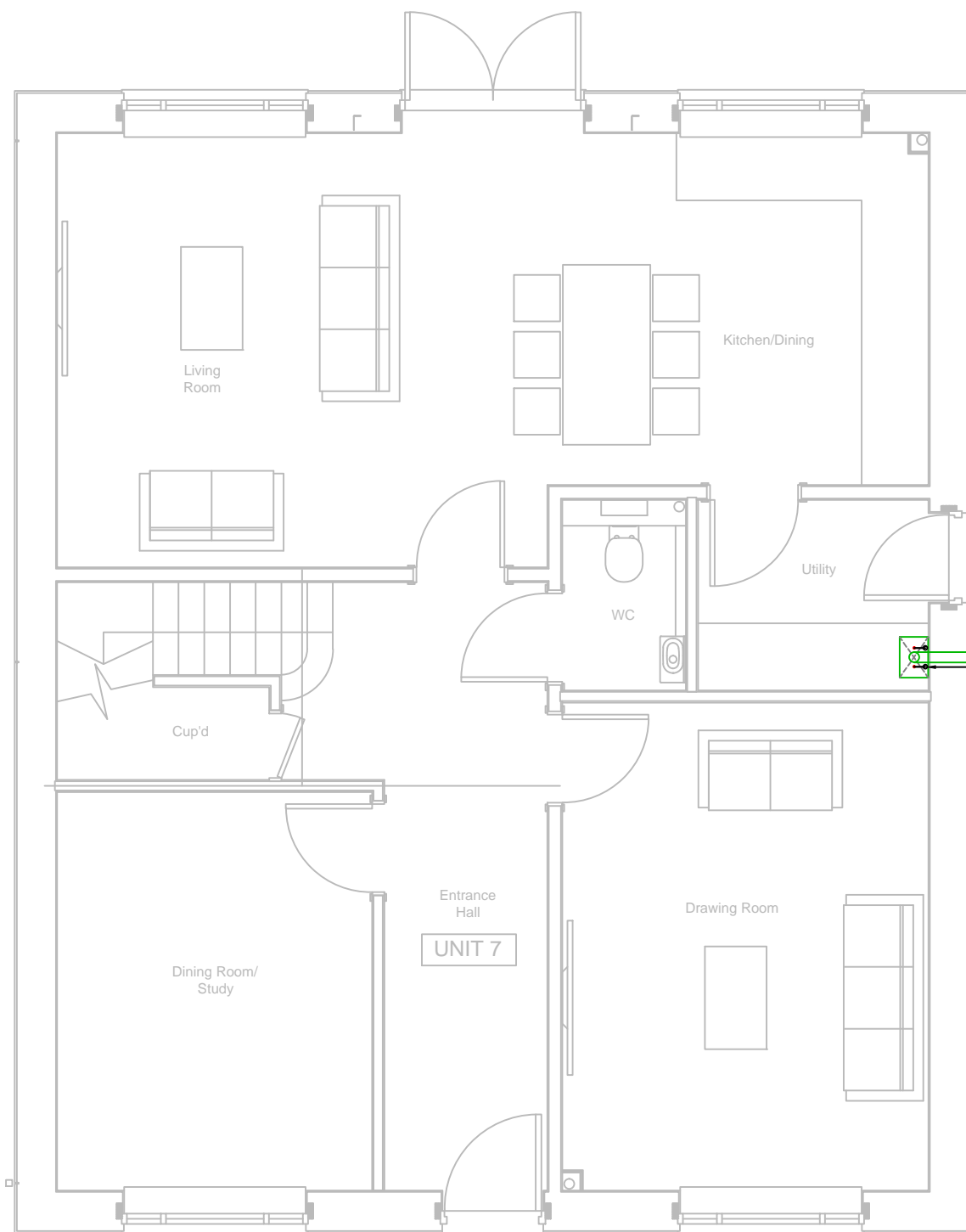
Underfloor Heating and Ancillary Equipment to be specified and designed by others

SCHEDULE & SPECIFICATION MUST BE CHECKED WITH CLIENT PRIOR TO INSTALLATION.

IDEAL DESIGN OFFICE PO BOX 103 NATIONAL AVENUE KINGSTON UPON HULL HU5 4JN Tel 01482 498305	<u>CLIENTS NAME</u> Howarth Homes Ltd	<u>DEVELOPMENT INFORMATION</u> DEVELOPMENT TYPE- Slough Road, Datchet DWELLING TYPE - Units 7,8 & 9	<u>DRAWING TITLE</u> Schedule of Equipment	SCALE - N/A	DATE - 16.12.16	
	CLIENTS ADDRESS: 54 Oxford Road Uxbridge UB9 4DN			DRAWN BY - R.W.	CHECKED BY - PM / GT	
				DRAWING No.	11167-05	SHEET 1 of 7

1. This system has been designed in accordance with CIBSE, BS Standards, The Building Regulations, NHBC Technical Standards and the clients own specification, where applicable, at the time of design to the temperatures specified and operating under continuous operation. However, to maintain these temperatures during extreme conditions it may be necessary to provide a supplementary heat source.
2. It is the responsibility of the installer to fully complete the Ideal Group Benchmark Installation, Commissioning and Servicing Record Log Book provided with the boiler.
3. The installation MUST comply with the current edition of the Building Regulations, all Codes of Practice, British Standards & the boiler installations instructions provided with the boiler.
4. The Design is based upon drawings and information received and therefore it's accuracy and performance is dependant on that information being correct.
5. Where boilers are to be located in cupboards / kitchen units these may have to be ventilated. See the specific boiler installation instructions and the British Standard 5440 : Part 2 :2000.
6. The flues shown on the drawing are to be used as a guide only with the terminal positions to comply with British Standard and Building Regulations. Where twin pipe flue and / or extended runs of flue are to be used the types & exact runs are to be determined by the installer on site with special attention being taken to ensure the correct gradient of the flue is maintained.
7. All radiators / towel rails to be securely fitted with the brackets provided & with a minimum clearance beneath the emitter of at least 100mm and 50mm above. All Radiators with an output exceeding 1500W MUST have a 15mm supply, this will generally be indicated on the drawing.
8. Where applicable, a pre-insulated indirect cylinder manufactured to the relevant British Standards, and a capacity of at least that indicated on the drawing shall be positioned all as shown on the drawing.
9. All pipework to be laid to fall to allow ease of draining and venting with air vents at all high points and drain cocks at all low points.
10. The design for the DHW is based upon sufficient mains cold water flow and pressure to enable correct operation of the system. If this is insufficient then a suitable accumulator and pressure booster pump may need to be fitted. A water softener may also need to be fitted and this needs to be checked on commissioning and installation of the system.
11. When the system requires a pressurisation unit the size and type shall be as indicated on the drawing. All the equipment shall be installed in accordance with the manufacturers specific installation instructions to ensure the correct operation of the equipment.
12. All pipework to be insulated in accordance with the Building Regulations & British Standard with specific attention being given to pipework in unheated areas such as roof spaces and garages.
13. Boilers that are to be used in the high efficiency mode must have the condensate pipework and safety discharge pipe installed in accordance with the installation instructions provided with the boiler.
14. All the ancillary equipment specified must be installed to the manufacturers own installation instructions.
15. All Plumbing fittings & outlets to be fitted in accordance with the manufacturers instruction and be fitted with isolating / regulating valves.
16. All notching & drilling of floor joists to be carried out in accordance with B.S. 12828 : 2003, Figure NA.1 - Limitations on notching and drilling in structural joists.
17. The Ideal Design Service recommend all joints that are to be soldered should be made using a flux that is sparingly applied and any residue flushed out of the system before commissioning using, if necessary, a chemical cleanser. All as required by British Gas Specification for Wet Central Heating Systems.
18. It is recommended that the heating system be cleansed and treated with a corrosion inhibitor. The Ideal Design Service recommend the use of Adey, Sentinel or Fernox water treatment products & these should only be used in accordance with their own specific instructions.
19. The boiler shall be commissioned all in accordance with the installation instructions provided with the boiler. The system shall be balanced by regulating the flow rate to ensure a 20 C difference across the boiler. On each radiator the lockshield valve is to be adjusted to give a 20 C drop across the emitter.
20. As some of these items may be heavy, reference should be made to the installers own CDM requirements for lifting and installing of this equipment. Care should also be taken when handling the boiler insulation panels which may cause irritation to the skin. No asbestos, mercury or CFCs are included in any part of the boiler or its manufacture.
21. This drawing has been prepared by Ideal Group and remains their sole copyright and it must not be altered or amended in any form without the written consent of the Ideal Group. It is also supplied on the understanding that it will be treated as confidential and will only be used by our client or their nominees for the purpose of installing the equipment specified.

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	CLIENTS ADDRESS: 54 Oxford Road Uxbridge	DWELLING TYPE - Units 7,8 & 9		DRAWN BY - R.W.	CHECKED BY - PM / GT
	UB9 4DN			DRAWING No. 11167-05	SHEET 2 of 7



BUILDING NOTES

All plumbing fitting and outlets must be fitted in accordance with manufactures instructions and have isolating flow rate and pressure reducing valves as required. The installation must be in accordance with all relevant regulations.

The first meter of pipework from the boiler to be copper all pipework in airing cupboard to be copper all exposed pipework to be copper

System to be balanced to achieve 80°C flow 60°C return with 20°C temperature drop across the boiler and radiators

Flow and Return	-	F&R
Hot Water Supply	-	H.W.S
Cold Water Supply	-	C.W.S
Mains Cold Water	-	M.C.W.S
To Above	-	T.A
To Below	-	T.B
From Above	-	F.A
From Below	-	F.B
Zone 1 F&R Pipes	-	
Zone 2 F&R Pipes	-	
Domestic Hot	-	
Domestic Cold	-	
Pipes in Floor Space	-	
Pipes at Low Level	-	
Pipes at High Level	-	
Pipes in Roof Space	-	

Underfloor Heating and Ancillary Equipment to be specified and designed by others

ALL DROPS TO GROUND FLOOR RADIATORS TO BE 10mm F&R TB
UNLESS OTHERWISE STATED WITH 15mm TO POINT OF DROP

Balanced flue to outside wall. The flue terminal must not be positioned less than 300mm form a window air vent or other ventilation opening, and must be fitted in accordance with the installation instructions.

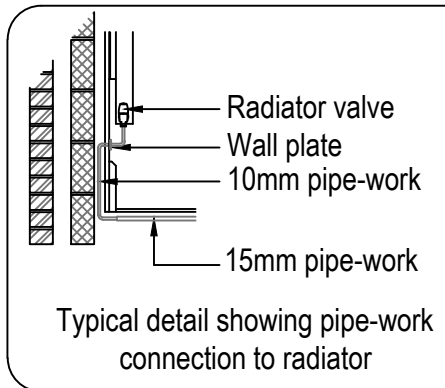
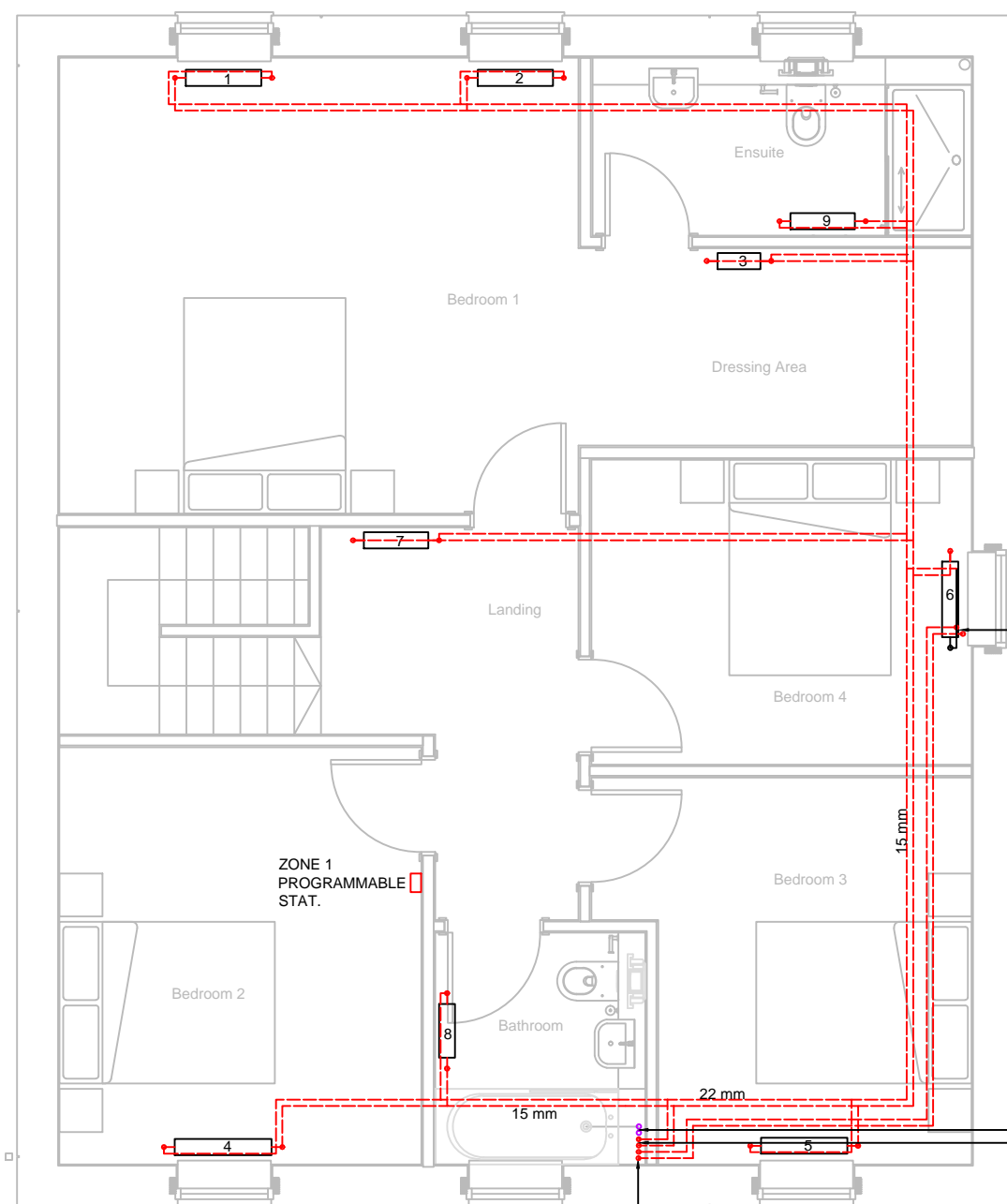
IDEAL DESIGN OFFICE
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Tel 01482 498305

CLIENTS NAME
Howarth Homes Ltd
CLIENTS ADDRESS:
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Uxbridge
UB9 4DN

DEVELOPMENT INFORMATION
DEVELOPMENT TYPE -
Slough Road, Datchet
DWELLING TYPE -
Units 7,8 & 9

DRAWING TITLE
Ground Floor Heating Layout

SCALE - NTS	DATE - 16.12.16
DRAWN BY - R.W.	CHECKED BY - PM / GT
DRAWING No. 11167-05	SHEET 3 of 7



BUILDING NOTES

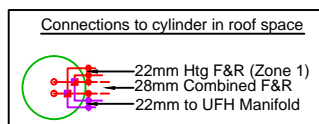
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To Below	-	T.B
From Above	-	F.A
From Below	-	F.B

Zone 1 F&R Pipes	-	
Zone 2 F&R Pipes	-	
Domestic Hot	-	
Domestic Cold	-	
Pipes in Floor Space	-	
Pipes at Low Level	-	
Pipes at High Level	-	
Pipes in Roof Space	-	



Roof space to be made good for the installation of Cylinder and accompanying products, all must be in accordance with current regulations to ensure safe access when work is to be carried out.

Underfloor Heating and Ancillary Equipment to be specified and designed by others

PIPEWORK ROUTES SHOULD BE CONFIRMED AS BEING COMPATIBLE WITH JOIST LAYOUTS

ALL FIRST FLOOR RADIATORS TO BE 15mm F&R UNDER FLOOR WITH THE LAST 300mm-10mm

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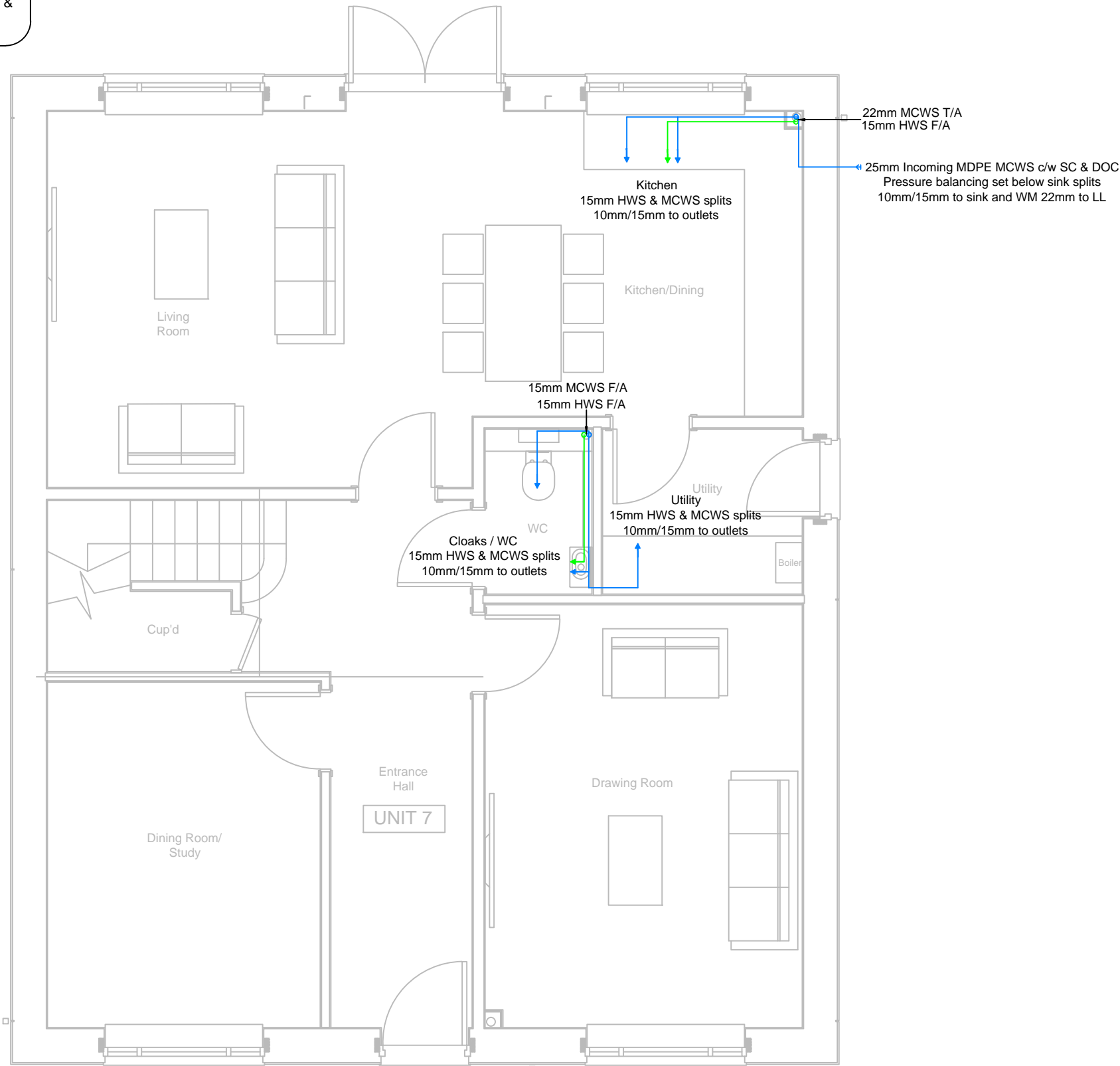
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Uxbridge
UB9 4DN

DEVELOPMENT INFORMATION
DEVELOPMENT TYPE -
Slough Road, Datchet
DWELLING TYPE -
Units 7,8 & 9

DRAWING TITLE
First Floor Heating Layout

SCALE - NTS	DATE - 16.12.16
DRAWN BY - R.W.	CHECKED BY - PM / GT
DRAWING No. 11167-05	SHEET 4 of 7

All Hot & Cold Pipe-work Go Be Installed In Accordance With All Current Regulations & BS 8558:20011 & BSEN 806: 1-5



BUILDING NOTES

All plumbing fitting and outlets must be fitted in accordance with manufactures instructions and have isolating flow rate and pressure reducing valves as required. The installation must be in accordance with all relevant regulations.

The first meter of pipework from the boiler to be copper all pipework in airing cupboard to be copper all exposed pipework to be copper

System to be balanced to achieve 80°C flow 60°C return with 20°C temperature drop across the boiler and radiators

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To Below	-	T.B
From Above	-	F.A
From Below	-	F.B
Zone 1 F&R Pipes	-	
Zone 2 F&R Pipes	-	
Domestic Hot	-	
Domestic Cold	-	
Pipes in Floor Space	-	
Pipes at Low Level	-	
Pipes at High Level	-	
Pipes in Roof Space	-	

NOTE:
All baths & bidets must be fitted with a suitable in-line blending valve to limit the supply water temperature to a maximum of 48°C. All As part 'G' of The Building Regulations (2009) Sections 3.64-3.37 inclusive.

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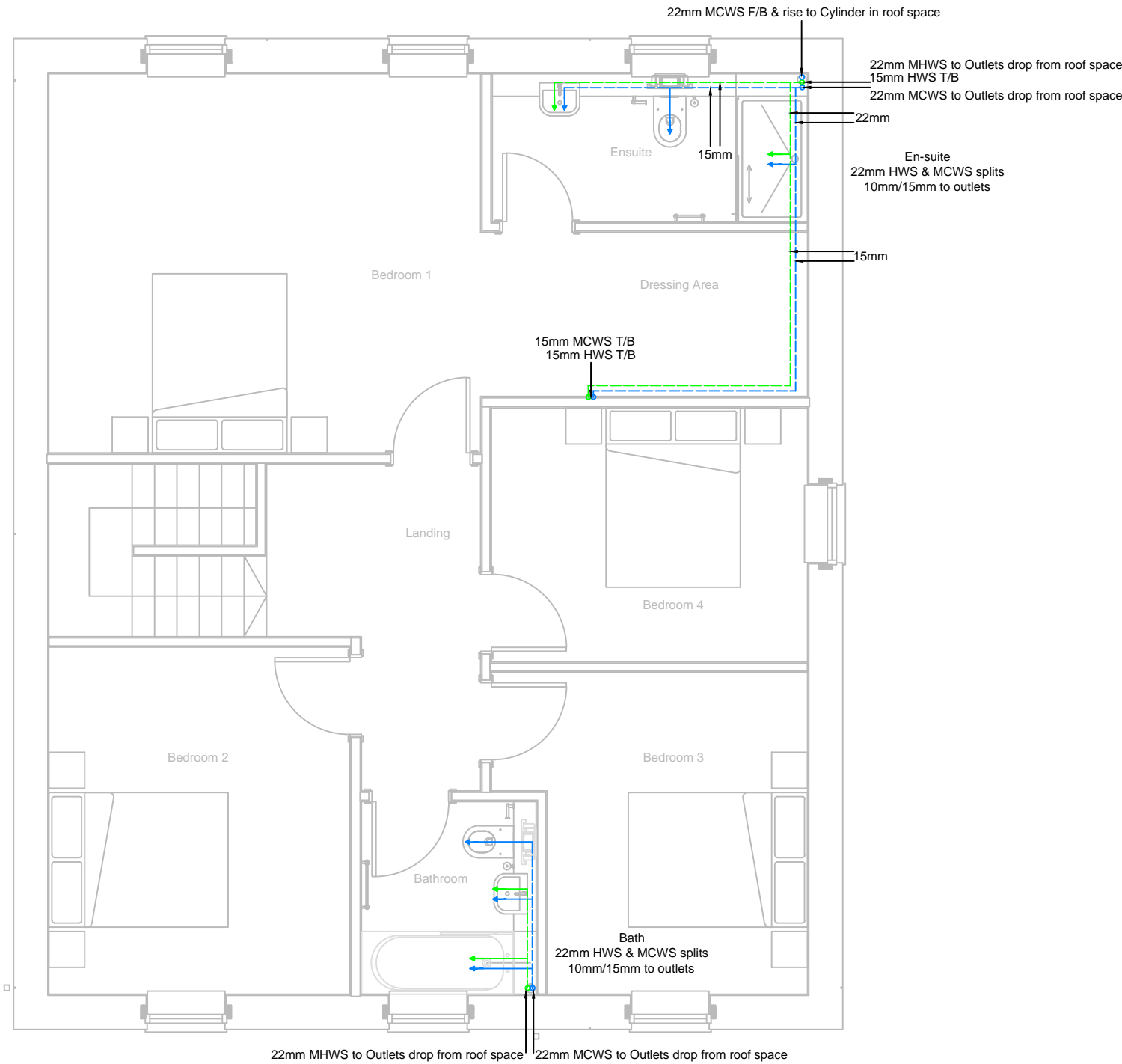
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Uxbridge
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DEVELOPMENT INFORMATION
DEVELOPMENT TYPE -
Slough Road, Datchet
DWELLING TYPE -
Units 7,8 & 9

DRAWING TITLE
Ground Floor Domestic Layout

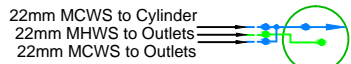
SCALE - NTS	DATE - 16.12.16
DRAWN BY - R.W.	CHECKED BY - PM / GT
DRAWING No. 11167-05	SHEET 5 of 7

All Hot & Cold Pipe-work Go Be Installed In Accordance With All Current Regulations & BS 8558:20011 & BSEN 806: 1-5



Roof space to be made good for the installation of Cylinder and accompanying products, all must be in accordance with current regulations to ensure safe access when work is to be carried out.

Connections to cylinder in roof space



NOTE:

All baths & bidets must be fitted with a suitable in-line blending valve to limit the supply water temperature to a maximum of 48°C. All As part 'G' of The Building Regulations (2009) Sections 3.64-3.37 inclusive.



BUILDING NOTES

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Domestic Hot	-	
Domestic Cold	-	
Pipes in Floor Space	-	
Pipes at Low Level	-	
Pipes at High Level	-	
Pipes in Roof Space	-	

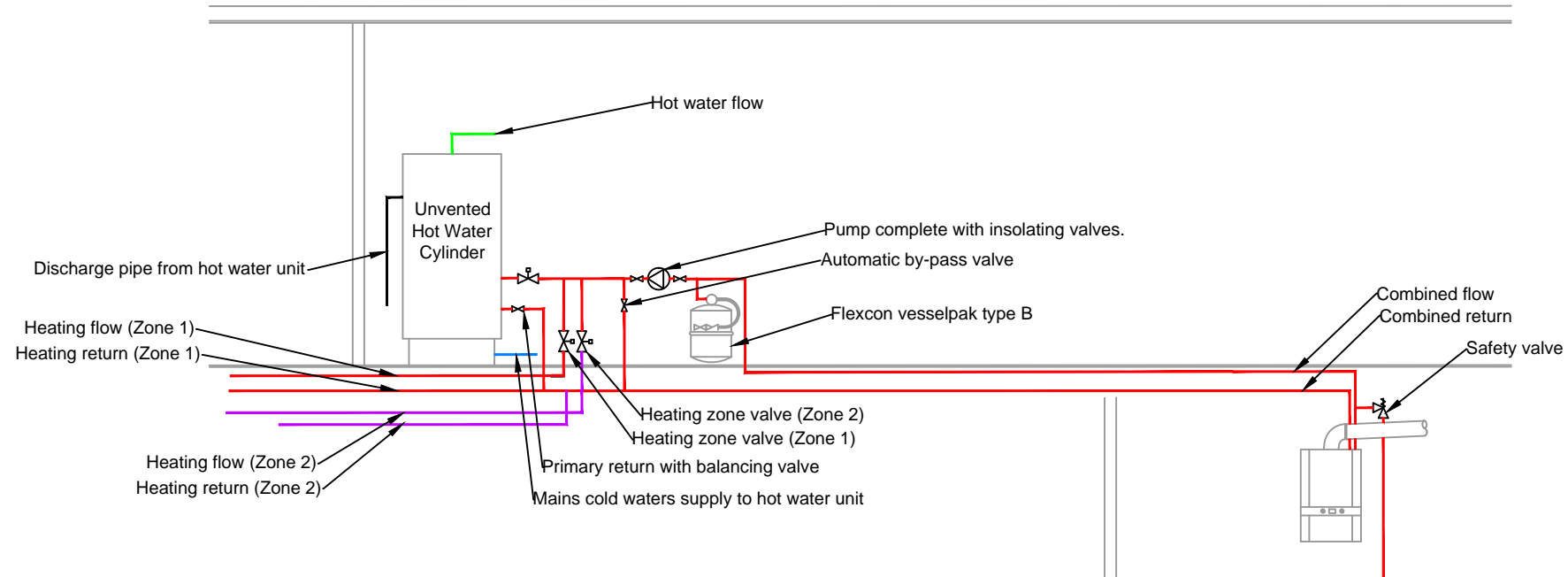
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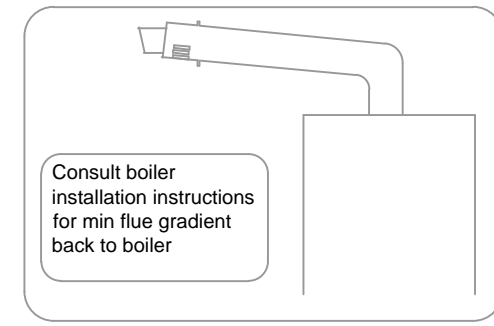
DEVELOPMENT INFORMATION
DEVELOPMENT TYPE -
Slough Road, Datchet
DWELLING TYPE -
Units 7,8 & 9

DRAWING TITLE
First Floor Domestic Layout

SCALE - NTS	DATE - 16.12.16
DRAWN BY - R.W.	CHECKED BY - PM / GT
DRAWING No. 11167-05	SHEET 6 of 7



NOTE:
 The safety, pressure and temperature relief valves are intended to discharge water only under fault conditions; under normal conditions water will not be discharged. In the event of a temperature fault condition the discharge will consist of scalding water, therefore, it must be conveyed to where it is visible but will not cause danger to persons or damage to materials.
 THIS IS A MANDATORY REQUIREMENT OF PART 3 OF SCHEDULE 1 OF THE BUILDING REGULATIONS 1991.



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	CLIENTS ADDRESS: 54 Oxford Road Uxbridge UB9 4DN				DRAWN BY - R.W.	CHECKED BY - PM / GT
					DRAWING No. 11167-05	SHEET 7 of 7