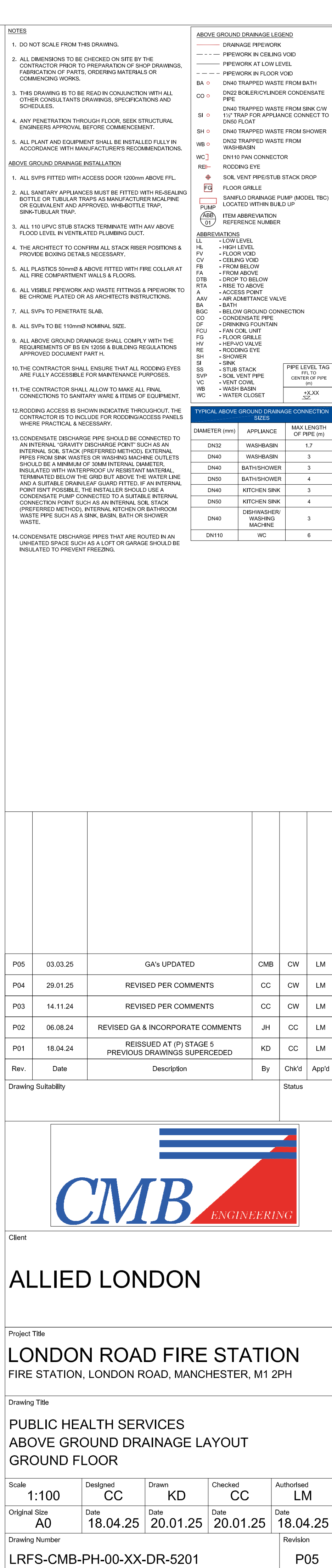
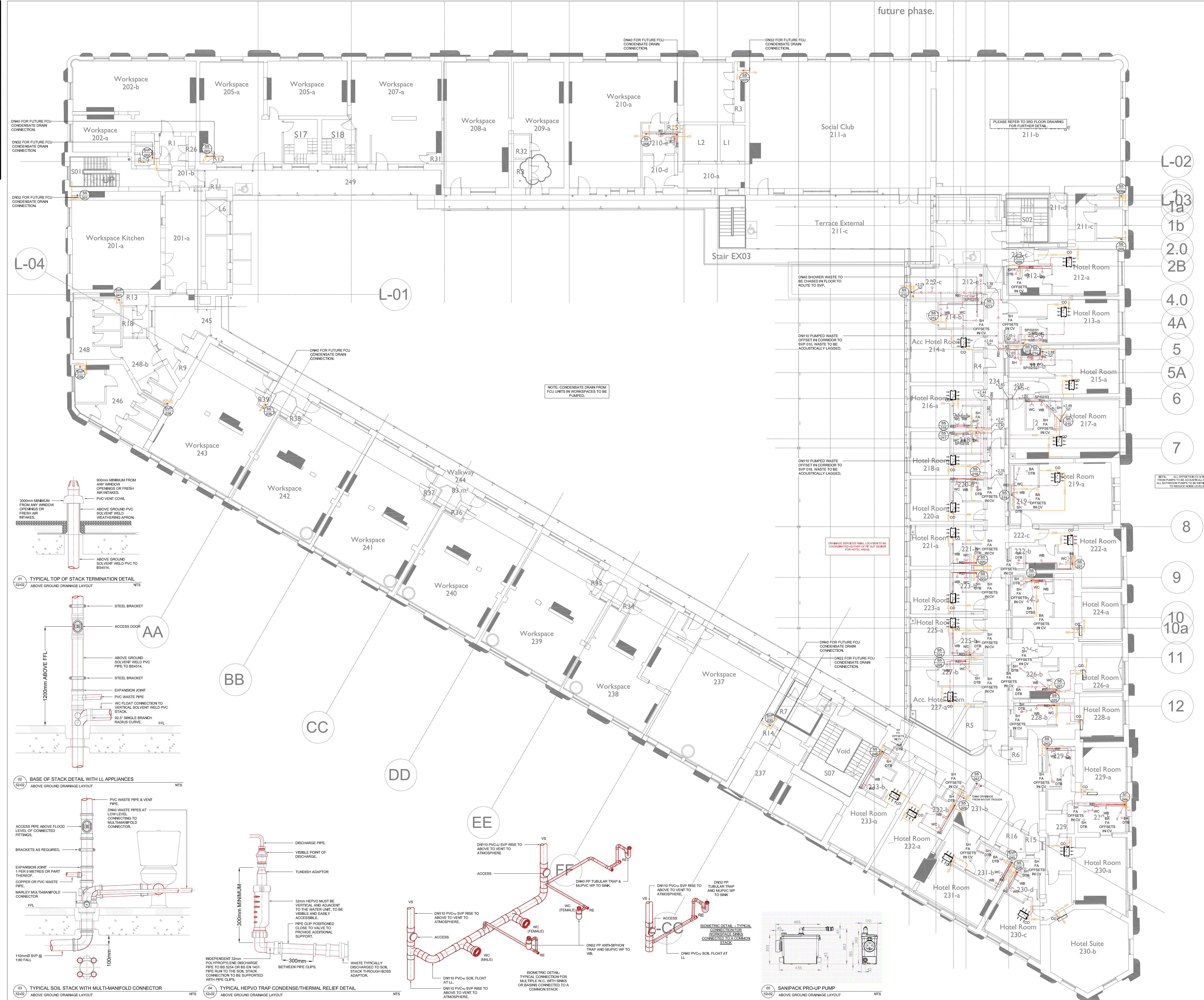




Client				
ALLIED LONDON				
Project Title				
LONDON ROAD FIRE STATION				
FIRE STATION, LONDON ROAD, MANCHESTER, M1 2PH				
Drawing Title				
PUBLIC HEALTH SERVICES				
ABOVE GROUND DRAINAGE LAYOUT				
GROUND FLOOR				
Scale	Designed	Drawn	Checked	Authorised
1:100	CC	KD	CC	LM
Original Size	Date	Date	Date	Date
A0	18.04.25	20.01.25	20.01.25	18.04.25
Drawing Number				Revision
LRFS-CMB-PH-00-XX-DR-5201				P05

Millimetres
0 10 100



NOTES

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- ALL PLANT AND EQUIPMENT SHALL BE INSTALLED FULLY IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

ABOVE GROUND DRAINAGE INSTALLATION

- ALL SVPS FITTED WITH ACCESS DOOR 1200mm ABOVE FFL.
- ALL SANITARY APPLIANCES MUST BE FITTED WITH RE-SEALING BOTTLE OR TUBULAR TRAPS AS MANUFACTURER'S RECOMMENDATION OR EQUIVALENT AND APPROVED. WASH-BOTTLE TRAP, SINK-TUBULAR TRAP.
- ALL 110 UPVC STUB STACKS TERMINATE WITH AAV ABOVE FLOOD LEVEL IN VENTILATED PLUMBING DUCT.
- THE ARCHITECT TO CONFIRM ALL STACK RISER POSITIONS & PROVIDE BOXING DETAILS NECESSARY.
- ALL PLASTICS 50mm/2" ABOVE FITTING WITH FIRE COLLAR AT ALL FIRE COMPARTMENT WALLS & FLOORS.
- ALL VISIBLE PIPEWORK AND WASTE FITTINGS & PIPEWORK TO BE CHROME PLATED OR AS ARCHITECT'S INSTRUCTIONS.
- ALL SVPS TO PENETRATE SLAB.
- ALL SVPS TO BE 110mm/4" NOMINAL SIZE.
- ALL ABOVE GROUND DRAINAGE SHALL COMPLY WITH THE REQUIREMENTS OF BS EN 12056 & BUILDING REGULATIONS APPROVED DOCUMENT PART 1.
- THE CONTRACTOR SHALL ENSURE THAT ALL ROOFING EYES ARE FULLY ACCESSIBLE FOR MAINTENANCE PURPOSES.
- THE CONTRACTOR SHALL ALLOW TO MAKE ALL FINAL CONNECTIONS TO SANITARY WASTE & ITEMS OF EQUIPMENT.
- ROOFING ACCESS IS SHOWN INDICATIVE THROUGHOUT. THE CONTRACTOR IS TO INCLUDE FOR ROOFING/ACCESS PANELS WHERE PRACTICAL & NECESSARY.
- CONDENSATE DISCHARGE PIPE SHOULD BE CONNECTED TO AN INTERNAL 'GRAVITY DISCHARGE POINT' SUCH AS AN INTERNAL SOIL STACK (PREFERRED METHOD). EXTERNAL PIPES FROM SINK WASTES OR WASHING MACHINE COUTLETS SHOULD BE A MINIMUM OF 30mm INTERNAL DIAMETER, INSULATED WITH WATERPROOF UN RESISTANT MATERIAL. TERMINATED BELOW THE GRID BUT ABOVE THE WATER LINE AND A SUITABLE DRAINAGE GUARD FITTED. IF AN INTERNAL CONNECTION POINT IS NOT POSSIBLE, THE INSTALLER SHOULD USE A CONDENSATE PUMP CONNECTED TO A SUITABLE INTERNAL CONNECTION POINT SUCH AS AN INTERNAL SOIL STACK (PREFERRED METHOD). INTERNAL KITCHEN OR BATHROOM WASTE PIPE SUCH AS A SINK, BATH, BATH OR SHOWER WASTE.
- CONDENSATE DISCHARGE PIPES THAT ARE ROUTED IN AN UNHEATED SPACE SUCH AS A LOFT OR GARAGE SHOULD BE INSULATED TO PREVENT FREEZING.

ABOVE GROUND DRAINAGE LEGEND

--- DRAINAGE PIPEWORK
--- PIPEWORK IN CEILING VOID
--- PIPEWORK IN FLOOR VOID
--- PIPEWORK IN FLOOR VOID
--- DRAIN TRAPPED WASTE FROM BATH
--- DN22 BOILER/CYLINDER CONDENSATE PIPE
--- DN40 TRAPPED WASTE FROM SINK COW
--- DN40 TRAP FOR APPLIANCE CONNECT TO
--- DN40 TRAP
--- DN40 TRAPPED WASTE FROM SHOWER
--- DN40 TRAPPED WASTE FROM WASH-BASIN
--- DN10 RAN CONNECTOR
--- ROOFING EYE
--- SOIL VENT PIPE/STUB STACK DROP
--- FLOOR GRILLE
--- SANITARY DRAINAGE PUMP (MODEL TRC)
--- LOCATED WITHIN BUILD-UP
--- ITEM ABBREVIATION
--- REFERENCE NUMBER

ABBREVIATIONS

LL	LOW LEVEL
HL	HIGH LEVEL
FL	FLOOR VOID
CV	CEILING VOID
FB	FROM BELOW
FA	FROM ABOVE
DTB	DROP TO BELOW
RTA	RISE TO ABOVE
A	ACCESS POINT
OF	AIR LIMITANCE VALVE
BA	BATH
BUC	BELOW GROUND CONNECTION
CO	CONDENSATE PIPE
FO	FLOOR GRILLE
FCU	FAN COIL UNIT
RE	ROOFING EYE
SH	SHOWER
SI	SINK
SS	STUB STACK
SVP	SOIL VENT PIPE
VC	VENT COIL
WB	WASH BASIN
WC	WATER CLOSET

PIPE LEVEL TAG

FL	FLOOR
CE	CEILING
SO	SOIL
XX	XX
XX	XX

TYPICAL ABOVE GROUND DRAINAGE CONNECTION SIZES

DIAMETER (mm)	APPLIANCE	MAX LENGTH OF PIPE (m)
DN22	WASH-BASIN	1.7
DN40	WASH-BASIN	3
DN40	BATH/SHOWER	3
DN40	BATH/SHOWER	4
DN40	KITCHEN SINK	3
DN50	KITCHEN SINK	4
DN40	DISHWASHER/ WASHING MACHINE	3
DN110	WC	6

01 TYPICAL TOP OF STACK TERMINATION DETAIL

ABOVE GROUND DRAINAGE LAYOUT NTS

900mm MINIMUM FROM ANY WINDOW OPENINGS OR FRESH AIR INTAKES.

PVC VENT COIL.

ABOVE GROUND PVC SOLVENT WELD WEATHERING APRON.

ABOVE GROUND SOLVENT WELD PVC TO BS4514.

02 BASE OF STACK DETAIL WITH LL APPLIANCES

ABOVE GROUND DRAINAGE LAYOUT NTS

PVC WASTE PIPE & VENT PIPE.

DN40 WASTE PIPES AT LOW LEVEL CONNECTING TO MULTIMANFOLD CONNECTOR.

ACCESS PIPE ABOVE FLOOD LEVEL OF CONNECTED FITTINGS.

BRACKETS AS REQUIRED.

EXPANSION JOINT 1 PER 9 METRES OR PART THEREOF.

COPPER OR PVC WASTE PIPE.

MARLEY MULTIMANFOLD CONNECTOR.

FFL

110mm/2 SVP @ 1/30 FALL

100mm

03 TYPICAL SOIL STACK WITH MULTI-MANFOLD CONNECTOR

ABOVE GROUND DRAINAGE LAYOUT NTS

DISCHARGE PIPE.

VISIBLE POINT OF DISCHARGE.

TUNDISH ADAPTOR.

32mm HEPVO MUST BE VERTICAL AND ADJACENT TO THE WATER UNIT, TO BE VISIBLE AND EASILY ACCESSIBLE.

PIPE CLIP POSITIONED CLOSE TO VALVE TO PROVIDE ADDITIONAL SUPPORT.

WASTE TYPICALLY DISCHARGED TO SOIL STACK THROUGH BOSS ADAPTOR.

300mm MINIMUM BETWEEN PIPE CLIPS.

INDEPENDENT 32mm POLYPROPYLENE DISCHARGE PIPE TO BS 3254 OR BS EN 1451 PIPE RUN TO THE SOIL STACK CONNECTION TO BE SUPPORTED WITH PIPE CLIPS.

04 TYPICAL HEPVO TRAP CONDENSE/THERMAL RELIEF DETAIL

ABOVE GROUND DRAINAGE LAYOUT NTS

DN10 PVC-U SVP RISE TO ABOVE TO VENT TO ATMOSPHERE.

DN40 PP TUBULAR TRAP & MUPVC WP TO SINK.

WC (FEMALE) RE

DN40 PP ANTI-SIPHON TRAP AND MUPVC WP TO WB.

WC (FEMALE) RE

DN10 PVC-U SVP RISE TO ABOVE TO VENT TO ATMOSPHERE.

DN10 PVC-U SVP RISE TO ABOVE TO VENT TO ATMOSPHERE.

DN40 PVC-U SOIL FLOAT AT LL.

ISOMETRIC DETAIL - TYPICAL CONNECTION FOR WORKSPACE SINKS CONNECTED TO A COMMON STACK.

ISOMETRIC DETAIL: TYPICAL CONNECTION FOR MULTIPLE W.C. WITH SINKS OR BASINS CONNECTED TO A COMMON STACK.

05 SANIPACK PRO-UP PUMP

ABOVE GROUND DRAINAGE LAYOUT NTS

465

170

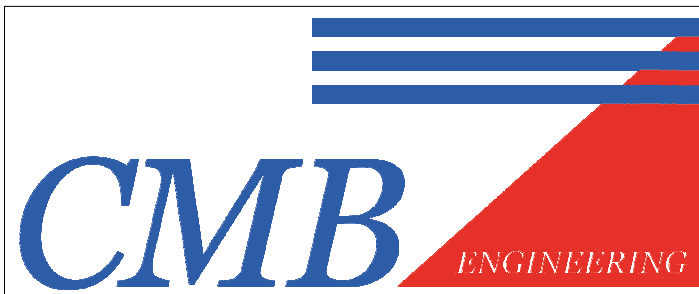
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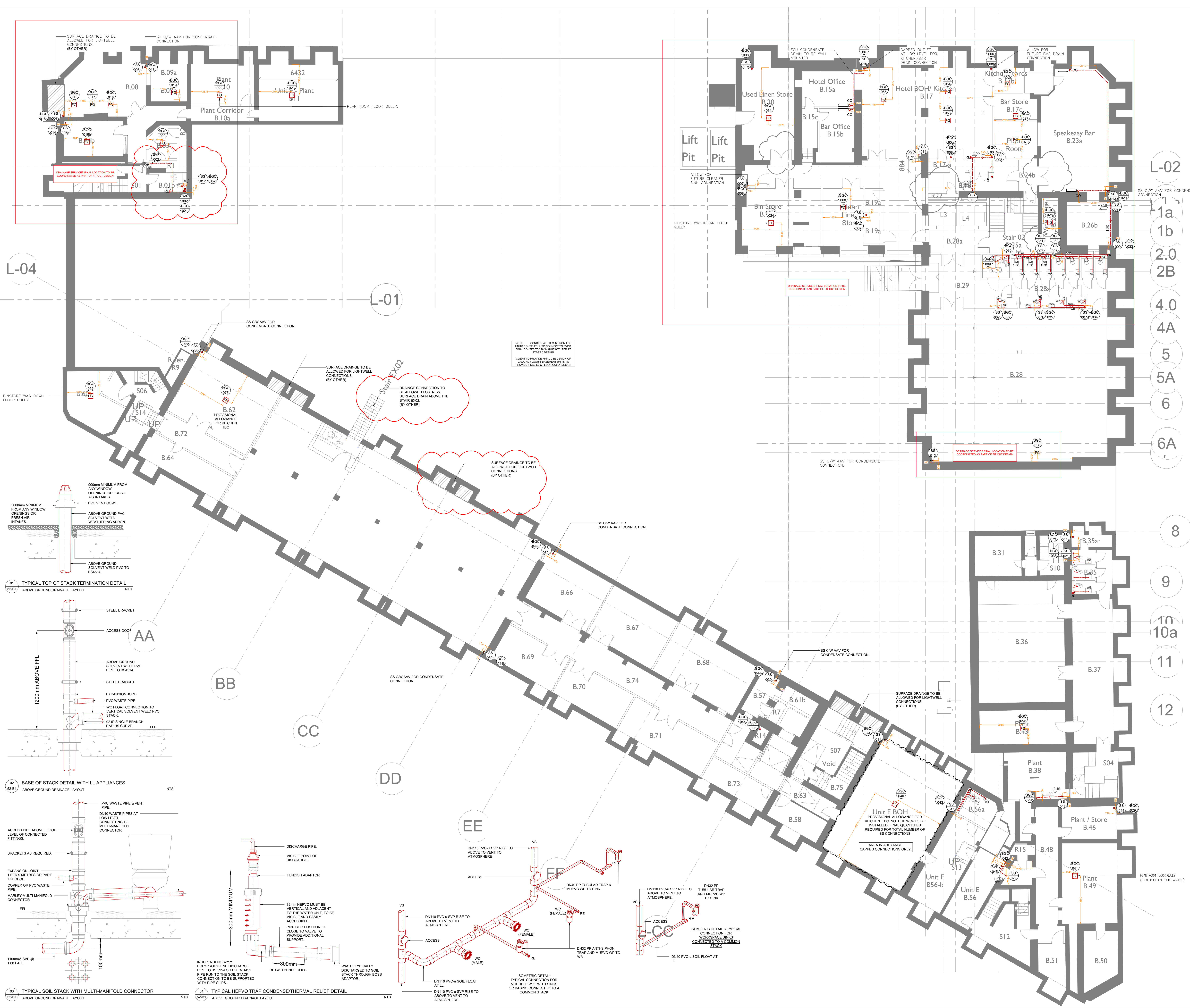
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185

124

C02	03.03.25	GA's UPDATED	CMB	CW	LM
C01	20.01.25	FOR CONSTRUCTION	CC	CW	LM
Rev.	Date	Description	By	Chk'd	App'd
Drawing Suitability				Status	
STAGE 5 - FOR CONSTRUCTION					
					
Client					
Project Title					
LONDON ROAD FIRE STATION					
FIRE STATION, LONDON ROAD, MANCHESTER, M1 2PH					
Drawing Title					
PUBLIC HEALTH SERVICES					
ABOVE GROUND DRAINAGE LAYOUT					
SECOND FLOOR					
Scale	1:100	Designed	CC	Drawn	KD
Original Size	A0	Date	20.01.25	Date	20.01.25
Drawing Number				Checked	CW
LRFS-CMB-PH-02-XX-DR-5201				Authorised	LM
				Revision	C02

100
0
10
Millimetres



NOTES

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5. ALL PLANT AND EQUIPMENT SHALL BE INSTALLED FULLY IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

ABOVE GROUND DRAINAGE INSTALLATION

1. ALL SVPS FITTED WITH ACCESS DOOR 1200mm ABOVE FFL.
2. ALL SANITARY APPLIANCES MUST BE FITTED WITH RE-SEALING BOTTLE OR TUBULAR TRAPS AS MANUFACTURER MOALPINE OR EQUIVALENT AND APPROVED. WHB-BOTTLE TRAP, SINK-TUBULAR TRAP.
3. ALL 110 UPVC BTUB STACKS TERMINATE WITH AAV ABOVE FLOOD LEVEL IN VENTILATED PLUMBING DUCT.
4. THE ARCHITECT TO CONFIRM ALL STACK RISER POSITIONS & PROVIDE ROOFING DETAILS-NCESSARY.
5. ALL PLASTICS 50mmØ & ABOVE FITTED WITH FIRE COLLAR AT ALL FIRE COMPARTMENT WALLS & FLOORS.
6. ALL VISIBLE PIPEWORK AND WASTE FITTINGS & PIPEWORK TO BE CHROME PLATED OR AS ARCHITECTS INSTRUCTIONS.
7. ALL SVPS TO PENETRATE SLAB.
8. ALL SVPS TO BE 110mmØ NOMINAL SIZE.
9. ALL ABOVE GROUND DRAINAGE SHALL COMPLY WITH THE REQUIREMENTS OF BS EN 12056 & BUILDING REGULATIONS APPROVED DOCUMENT PART H.
10. THE CONTRACTOR SHALL ENSURE THAT ALL RODDING EYES ARE FULLY ACCESSIBLE FOR MAINTENANCE PURPOSES.
11. THE CONTRACTOR SHALL ALLOW TO MAKE ALL FINAL CONNECTIONS TO SANITARY WARE & ITEMS OF EQUIPMENT.
12. RODDING ACCESS IS SHOWN INDICATIVE THROUGHOUT. THE CONTRACTOR IS TO INCLUDE FOR RODDING/ACCESS PANELS WHERE PRACTICAL & NECESSARY.
13. CONDENSATE DISCHARGE PIPE SHOULD BE CONNECTED TO AN INTERNAL 'GRAVITY DISCHARGE POINT' SUCH AS AN INTERNAL SOIL STACK (PREFERRED METHOD). EXTERNAL PIPES FROM SINK WASTES OR WASHING MACHINE OUTLETS SHOULD BE A MINIMUM OF 30mm INTERNAL DIAMETER, INSULATED WITH WATERPROOF UV RESISTANT MATERIAL, TERMINATED BELOW THE GROUND ABOVE THE WATER LINE AND A SUITABLE DRAINAGE GUARD FITTED. IF AN INTERNAL POINT ISNT POSSIBLE, THE INSTALLER SHOULD USE A CONDENSATE PUMP CONNECTED TO A SUITABLE INTERNAL CONNECTION POINT SUCH AS AN INTERNAL SOIL STACK (PREFERRED METHOD). INTERNAL KITCHEN OR BATHROOM WASTE PIPE SUCH AS A SINK, BASIN, BATH OR SHOWER WASTE.
14. CONDENSATE DISCHARGE PIPES THAT ARE ROUTED IN AN UNHEATED SPACE SUCH AS A LOFT OR GARAGE SHOULD BE INSULATED TO PREVENT FREEZING.

ABOVE GROUND DRAINAGE LEGEND

- DRAINAGE PIPEWORK
- - - PIPEWORK IN CEILING VOID
- - - PIPEWORK IN FLOOR VOID
- BA Ø DN22 BOLLER/CYLINDER CONDENSATE PIPE
- CO Ø DN22 TRAPPED WASTE FROM SINK CW 1/2" TRAP FOR APPLIANCE CONNECT TO DN25 FLOAT
- SI Ø DN40 TRAPPED WASTE FROM SHOWER
- WS Ø DN22 TRAPPED WASTE FROM WASH-BASIN
- DN15 FAN CONNECTOR
- REB RODDING EYE
- SOL VENT PIPE/STUB STACK DROP
- FLOOR GRILLE
- SAW/FLO DRAINAGE PUMP (MODEL TBC) LOCATED WITHIN BUILD UP
- PUMP (ABB 01)
- ITEM ABBREVIATION REFERENCE NUMBER

ABBREVIATIONS

LL	LOW LEVEL
HL	HIGH LEVEL
FV	FLOOR VOID
CV	CEILING VOID
FB	FROM BELOW
FA	FROM ABOVE
DTB	DROP TO BELOW
RTA	RISE TO ABOVE
A	ACCESS POINT
AAV	AIR ADMITTANCE VALVE
BA	BATH
BC	BELOW GROUND CONNECTION
CD	CONDENSATE PIPE
DF	DRAINING FLUENT
FCU	FAN COIL UNIT
HEV	HEAVY VALVE
RE	RODDING EYE
SH	SHOWER
SI	SINK
SS	STUB STACK
SVP	SOIL VENT PIPE
VC	VENT COWL
WB	WASH BASIN
WC	WATER CLOSET

PIPE LEVEL TAG CENTER OF PIPE (m)

XX	XX
XX	XX

TYPICAL ABOVE GROUND DRAINAGE CONNECTION SIZES

DIAMETER (mm)	APPLIANCE	MAX LENGTH OF PIPE (m)
DN32	WASHBASIN	1.7
DN40	WASHBASIN	3
DN40	BATH/SHOWER	3
DN50	BATH/SHOWER	4
DN40	KITCHEN SINK	3
DN50	KITCHEN SINK	4
DN40	DISHWASHER/ WASHING MACHINE	3
DN110	WC	6

P04	03.03.25	GA's UPDATED	CMB	CW	LM
P03	14.11.24	REVISED PER COMMENTS	CC	CW	LM
P02	06.08.24	REVISED GA & INCORPORATE COMMENTS	JH	CC	LM
P01	19.04.24	REISSUED AT (P) STAGE 5 PREVIOUS DRAWINGS SUPERCEDED	KD	CC	LM
Rev.	Date	Description	By	Chk'd	App'd
Drawing Suitability			Status		

Client

ALLIED LONDON

Project Title

LONDON ROAD FIRE STATION

FIRE STATION, LONDON ROAD, MANCHESTER, M1 2PH

Drawing Title

PUBLIC HEALTH SERVICES

ABOVE GROUND DRAINAGE LAYOUT

BASEMENT LEVEL

Scale

1:100	Designed CC	Drawn KD	Checked CC	Authorised LM
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Original Size

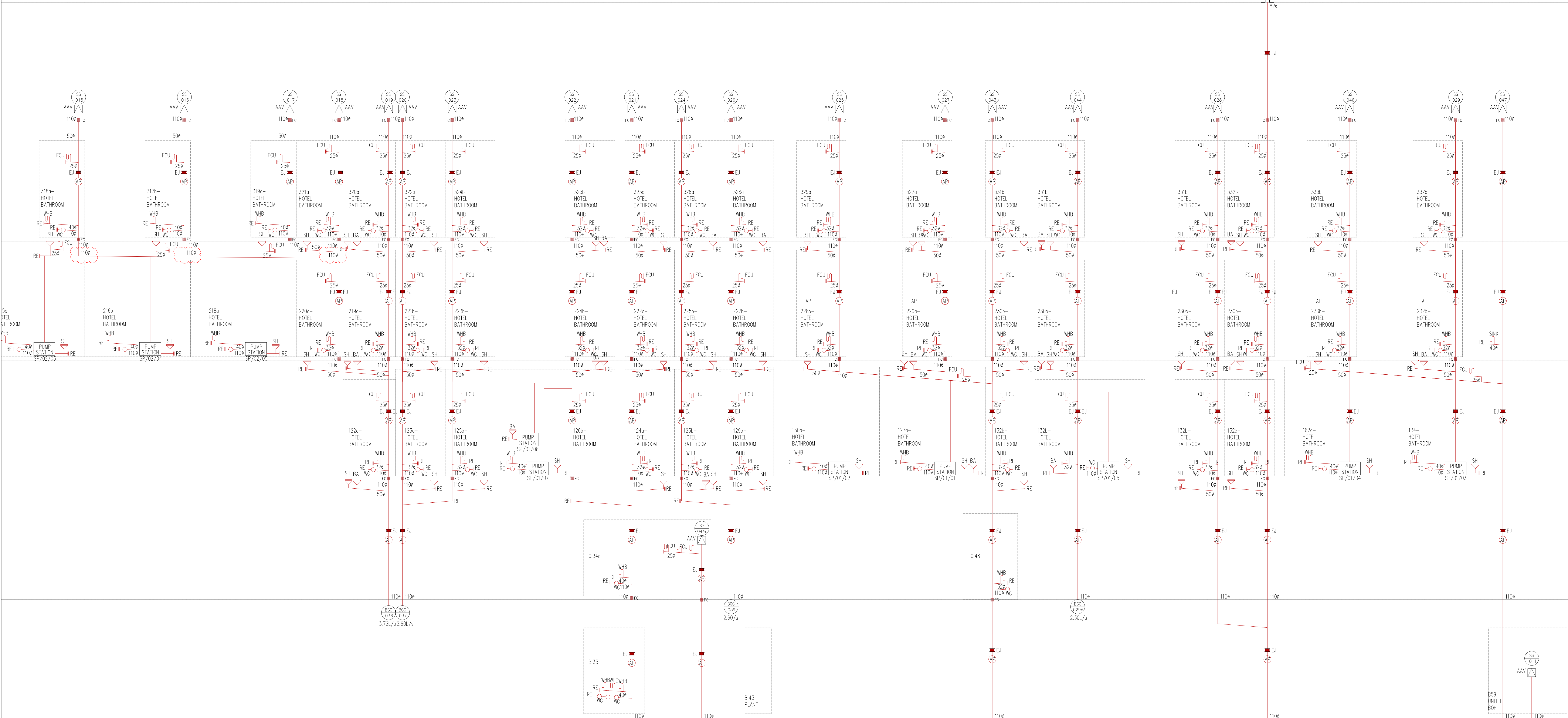
-	Date 19.04.24	Date 19.04.24	Date 19.04.24	Date 19.04.24
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Drawing Number

LRFS-CMB-PH-B1-XX-DR-5201

Revision

P04



- GENERAL NOTES
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 - ALL PLANT AND EQUIPMENT SHALL BE INSTALLED FULLY IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- ABOVE GROUND DRAINAGE INSTALLATION
- ALL SVPs FITTED WITH ACCESS DOOR 1200mm ABOVE FFL.
 - ALL SANITARY APPLIANCES MUST BE FITTED WITH RE-SEALING BOTTLE OR TUBULAR TRAPS AS MANUFACTURER RECOMMENDATION.
 - ALL 110 UPVC STUB STACKS TERMINATE WITH AAV ABOVE FLOOR LEVEL IN VENTILATED PLUMBING DUCT.
 - THE ARCHITECT TO CONFIRM ALL STACK RISER POSITIONS & PROVIDE BOXING DETAILS NECESSARY.
 - ALL PLASTICS 50mm & ABOVE FITTED WITH FIRE COLLAR AT ALL FIRE COMPARTMENT WALLS & FLOORS.
 - ALL ABOVE GROUND DRAINAGE SHALL COMPLY WITH THE REQUIREMENTS OF BS EN 12056 & BUILDING REGULATIONS APPROVED DOCUMENT PART 1L.
 - CONDENSATE DISCHARGE PIPES THAT ARE ROUTED IN AN UNHEATED SPACE SUCH AS A LOFT OR GARAGE SHOULD BE INSULATED TO PREVENT FREEZING.

KEY & LEGEND

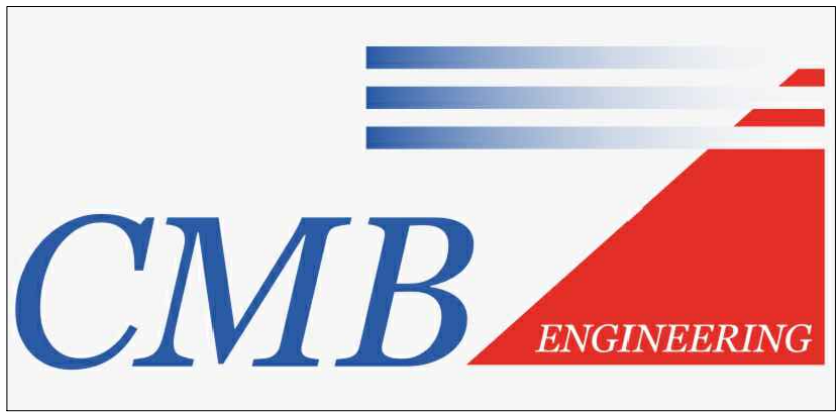
	BELOW GROUND CONNECTION REFERENCE
	SOIL VENT PIPE REFERENCE
	STUB STACK REFERENCE
	FLOOR GULLY
	ACCESS PANEL
	VENT COW
	FIRE COLLAR
	ROODING EYE
	AIR ADMITTANCE VALVE
	EXPANSION JOINT
	END CAP FOR CONDENSATE PIPE CLEANING PURPOSE
	PIPE REDUCER FITTING

WC	- TOILET
WB	- WASH BASIN
SH	- SHOWER
BA	- BATH
CS	- COMMERCIAL SERVICE
KS	- KITCHEN SINK
DW	- DISHWASHER
FC	- FLOOR GULLY
SS	- STUB STACK
AAV	- AIR ADMITTANCE VALVE
FCU	- FAN COIL UNIT
CD	- CONDENSATE DRAIN
MVR	- MVR UNIT
RE	- ROODING EYE

TYPICAL CONNECTION SIZES		
DIA (mm)	APPLIANCE	MAX LENGTH OF PIPE (m)
DN32	WASHBASIN	1.7
DN40	WASHBASIN	3
DN40	BATH/SHOWER	3
DN50	BATH/SHOWER	4
DN40	KITCHEN SINK	3
DN50	KITCHEN SINK	4
DN40	DISHWASHER/WASHING MACHINE	3
DN110	WC	6
DN20	FCU/CONDENSATE DRAIN	-

P03	14.11.24	REVISED PER COMMENTS	CC	CW	LM
P02	06.08.24	TO INCORPORATE COMMENT	KD	CC	LM
P01	19.04.24	REISSUED AT (P) STAGE 5 PREVIOUS DRAWINGS SUPERCEDED	KD	CC	LM
Rev.	Date	Description	By	Chk'd	App'd

Drawing Suitability	Status
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Client

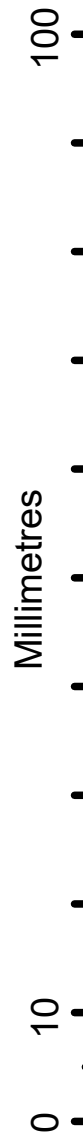
ALLIED LONDON

Project Title
LONDON ROAD FIRE STATION
FIRE STATION, LONDON ROAD, MANCHESTER, M1

Drawing Title
**MECHANICAL SERVICES,
ABOVE GROUND DRAINAGE SCHEMATIC,
SITE WIDE SCHEMATIC SHEET 2 OF 3**

Scale	N.T.S.	Designed	CC	Drawn	KD	Checked	CC	Authorised	LM
Original Size	A0	Date	19/04/24	Date	19/04/24	Date	19/04/24	Date	19/04/24

Drawing Number	LRFS-CMB-PH-XX-XX-SC-5202	Revision	P03
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- ### ABOVE GROUND DRAINAGE INSTALLATION

- KEY & LEGEND



Drawing Suitability	Status



Drawing Number LRFS-CMB-PH-XX-XX-SC-5203	Revision P03
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