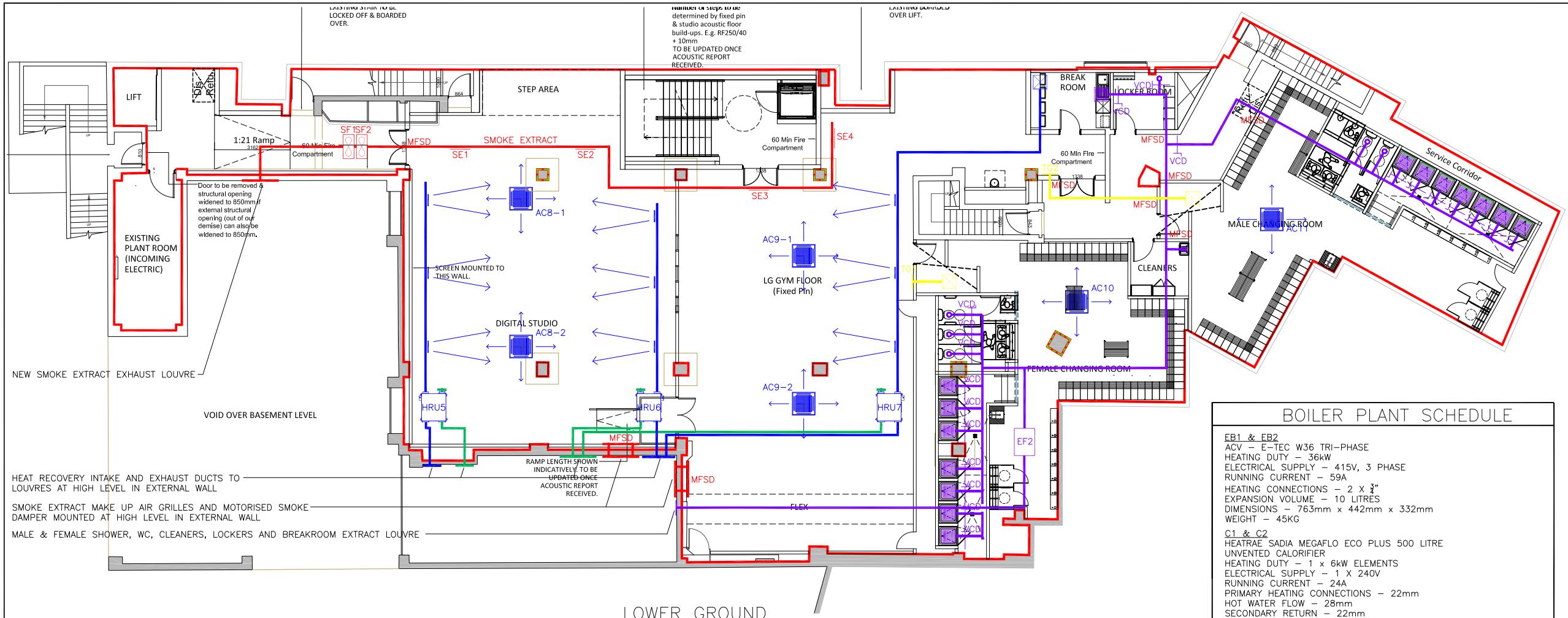
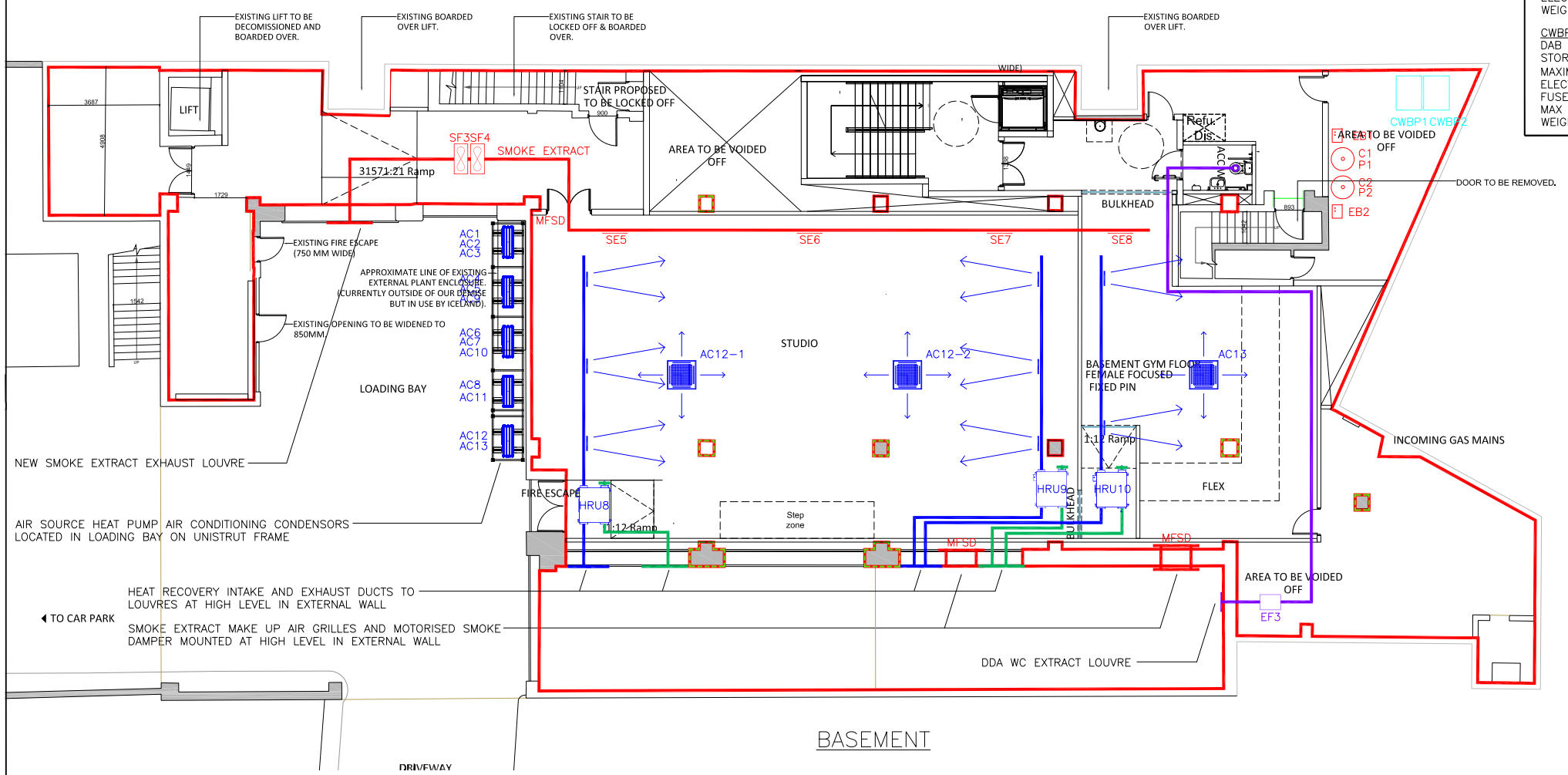


LOWER GROUND



BASEMENT

HVAC PLANT SCHEDULE

AC1–1 TO AC13
MITSUBISHI PLA–ZM125 HEAT PUMP CASSETTE UNIT
ELECTRICAL SUPPLY 240 V, 1 PHASE, FUSE RATING 6 A
POWER FROM OUTDOOR UNIT VIA INTERCONNECTING CABLE
WEIGHT 29 kG

CU1,3,4,5,6,7,8,9& CU12
MITSUBISHI PUZ–M250YKA STANDARD INVERTER CONDENSOR UNIT
ELECTRICAL SUPPLY 415 V, 3 PHASE, FUSE RATING 25 A
MAXIMUM RUNNING CURRENT 22.5 A
WEIGHT 138 kG, REFRIGERANT R32
SOUND POWER LEVEL SPECTRUM

HZ	63	125	250	1k	2k	4k	8k
dBw	68	62	60	58	50	42	38

CU2,10,11 & CU13
MITSUBISHI PUZ–M125YAR1 STANDARD INVERTER CONDENSOR UNIT
ELECTRICAL SUPPLY 415 V, 3 PHASE, FUSE RATING 16 A
SYSTEM RUNNING CURRENT HEATING/COOLING 5.6/6.3 A
MAXIMUM RUNNING CURRENT 11.5 A
WEIGHT 85 kG, REFRIGERANT R32
SOUND POWER LEVEL SPECTRUM

HZ	63	125	250	500	1k	2k	4k	8k
dB(A)	62	61	58	55	53	48	43	35

HRU 1 TO HRU3 & HRU 10
MITSUBISHI LOSSNAY LGH100 RVX
SUPPLY DUTY – 278l/s
EXTRACT DUTY – 278l/s
VOLTAGE 240V, 1 PHASE, 5 A
DIMENSIONS 1144mm(L)x1231mm(W)x404mm(H)
WEIGHT 54kG

HRU 4
SYSTEMAIR GENIOX CORE 14 HEAT RECOVERY AHU
SUPPLY DUTY – 1.72M³/S @ 150Pa
EXTRACT DUTY – 1.72M³/S @ 150Pa
VOLTAGE 415V, 3 PHASE, RUNNING CURENT 14.2A
DIMENSIONS 3482mm(L)x 1482mm(W)x 1482mm(H)
WEIGHT 1183kG

HRU 5 TO HRU 9
MITSUBISHI LOSSNAY LGH200RVX
SUPPLY DUTY – 556l/s
EXTRACT DUTY – 556l/s
VOLTAGE 240V, 1 PHASE, 10 A
DIMENSIONS 1144mm(L)x1231mm(W)x808mm(H)
WEIGHT 110kG

EF 1
SYSTEMAIR KVK SILENT 250 EC EXTRACT FAN
ELECTRICAL SUPPLY 240 V, 1 PHASE, 3.43 A
DUTY 0.14 M³/S @ 200Pa
WEIGHT 38 Kg
SOUND POWER LEVEL SPECTRUM

HZ	63	125	250	500	1k	2k	4k	8k
dB(A) OUTLET	45	59	58	55	57	55	49	41

EF 2
SYSTEMAIR KVK SILENT 500 EC EXTRACT FAN
ELECTRICAL SUPPLY 240 V, 1 PHASE, 2.82 A
DUTY 1.1 M³/S @ 250Pa
WEIGHT 94.9 Kg
SOUND POWER LEVEL SPECTRUM

HZ	63	125	250	500	1k	2k	4k	8k
dB(A) OUTLET	57	70	70	69	72	68	60	50

EF 3
SYSTEMAIR KVK SILENT 125 EC EXTRACT FAN
ELECTRICAL SUPPLY 240 V, 1 PHASE,
RUNNING CURRENT 0.23 A
DUTY 0.05 M³/S @ 125 Pa,
WEIGHT 11.7 kG
SOUND POWER LEVEL SPECTRUM

HZ	63	125	250	500	1k	2k	4k	8k
dB(A) OUTLET	50	53	61	58	59	54	43	37

BOILER PLANT SCHEDULE

EB1 & EB2
ACV – E–TEC W36 TRI–PHASE
HEATING DUTY – 36kW
ELECTRICAL SUPPLY – 415V, 3 PHASE
RUNNING CURRENT – 59A
HEATING CONNECTIONS – 2 X ¾"
EXPANSION VOLUME – 10 LITRES
DIMENSIONS – 763mm x 442mm x 332mm
WEIGHT – 45KG

C1 & C2
HEATRAE SADIA MEGAFLO ECO PLUS 500 LITRE
UNVENTED CALORIFIER
HEATING DUTY – 1 x 6kW ELEMENTS
ELECTRICAL SUPPLY – 1 X 240V
RUNNING CURRENT – 24A
PRIMARY HEATING CONNECTIONS – 22mm
HOT WATER FLOW – 28mm
SECONDARY RETURN – 22mm
COLD FEED – 22mm
T&P – 15mm

P1&P2 – HOT WATER SECONDARY RETURN PUMP
GRUNDFOS ALPHA 1 15–50 STAINLESS STEEL HWS RETURN PUMP
ELECTRICAL SUPPLY 240 V, 1 PHASE, 3 A
WEIGHT 4.5 kG

CWBP 1 & 2 – CWS TANKS & BOOSTER PUMPS
DAB E.SYTANK + E.SYBOX
STORAGE – 480L
MAXIMUM FLOW RATE – 120L/MIN
ELECTRICAL SUPPLY 240 V, 1 PHASE
FUSE RATING 5 A,
MAX CURRENT 1.5 A
WEIGHT 502 kG

PLANT SPECIFICATION

HEATING & COOLING TO BE PROVIDED THROUGHOUT VIA MITSUBISHI P SERIES AIR SOURCE HEAT PUMP (ASHP) SYSTEMS WITH CONDENSORS LOCATED IN THE REAR LOADING BAY AREA AND CEILING CASSETTE UNITS LOCATED INTERNALLY.

EXTRACT IS TO BE PROVIDED TO THE SHOWER AND WC AREAS VIA INLINE ACOUSTIC FANS.

HEAT RECOVERY VENTILATION IS TO BE INSTALLED TO PROVIDE FRESH AIR FOR OCCUPANCY VIA AIR HANDLING UNITS (MVHR) WITH CROSS PLATE HEAT EXCHANGERS.

FRESH AIR SUPPLY RATES TO MEET OCCUPANCY LEVEL AS BELOW @ 12L/S/PERSON :–
FIRST FLOOR – 60 OCCUPANTS – 0.72M3/S
GROUND FLOOR – 143 OCCUPANTS – 1.72M3/S
LOWER GROUND – 118 OCCUPANTS – 1.42M3/S
BASEMENT – 100 OCCUPANTS – 1.2M3/S

CONTROLS SPECIFICATION

ALL MECHANICAL SERVICES PLANT TO BE CENTRALLY CONTROLLED VIA A MASTER BMS PANEL LOCATED IN FIRST FLOOR PLANTROOM. OFF SITE MONITORING FACILITY TO BE PROVIDED VIA ETHERNET CONNECTION

ALL MITSUBISHI HEATING & COOLING EQUIPMENT SHALL BE TIME AND TEMPERATURE CONTROLLED VIA A MITSUBISHI AE200 CENTRALISED CONTROLLER.

SMOKE EXTRACT PLANT SCHEDULE

SF 1 – SF 4
SYSTEMAIR SMOKE EXTRACT FANS AX1000–5
DUTY 10 M³/S
ELECTRICAL SUPPLY – 415 V, 3 PHASE
FUSE RATING 16 A
FULL LOAD CURRENT 14.3 A
7.5 kW MOTORS
STAR/DELTA
WEIGHT – 193 KG EACH

Rev	Date	Amendments	By
A	3/6/21	Drawing Updated To Architects Revision	NPG

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Client: PUREGYM

Project Title: 177 FINCHLEY ROAD LONDON NW3 6LB

Drawing Title: BASEMENT + LWR GND AIR CONDITIONING & VENTILATION

Date:	Scale:
05th March 2021	1: 100 @ A1

Drawn:	Ref.	Approved:
N P Green	FMA	

Drawing Number: 9913/M/1
Revision: A