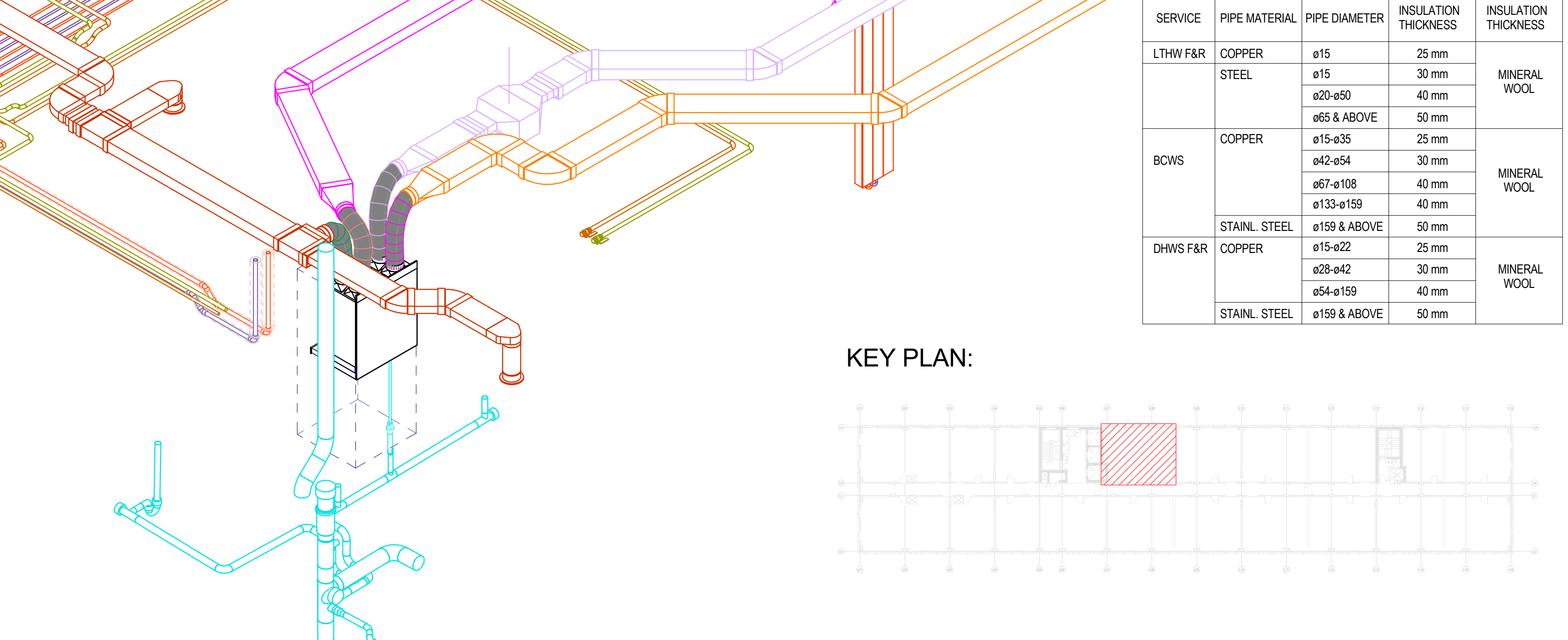
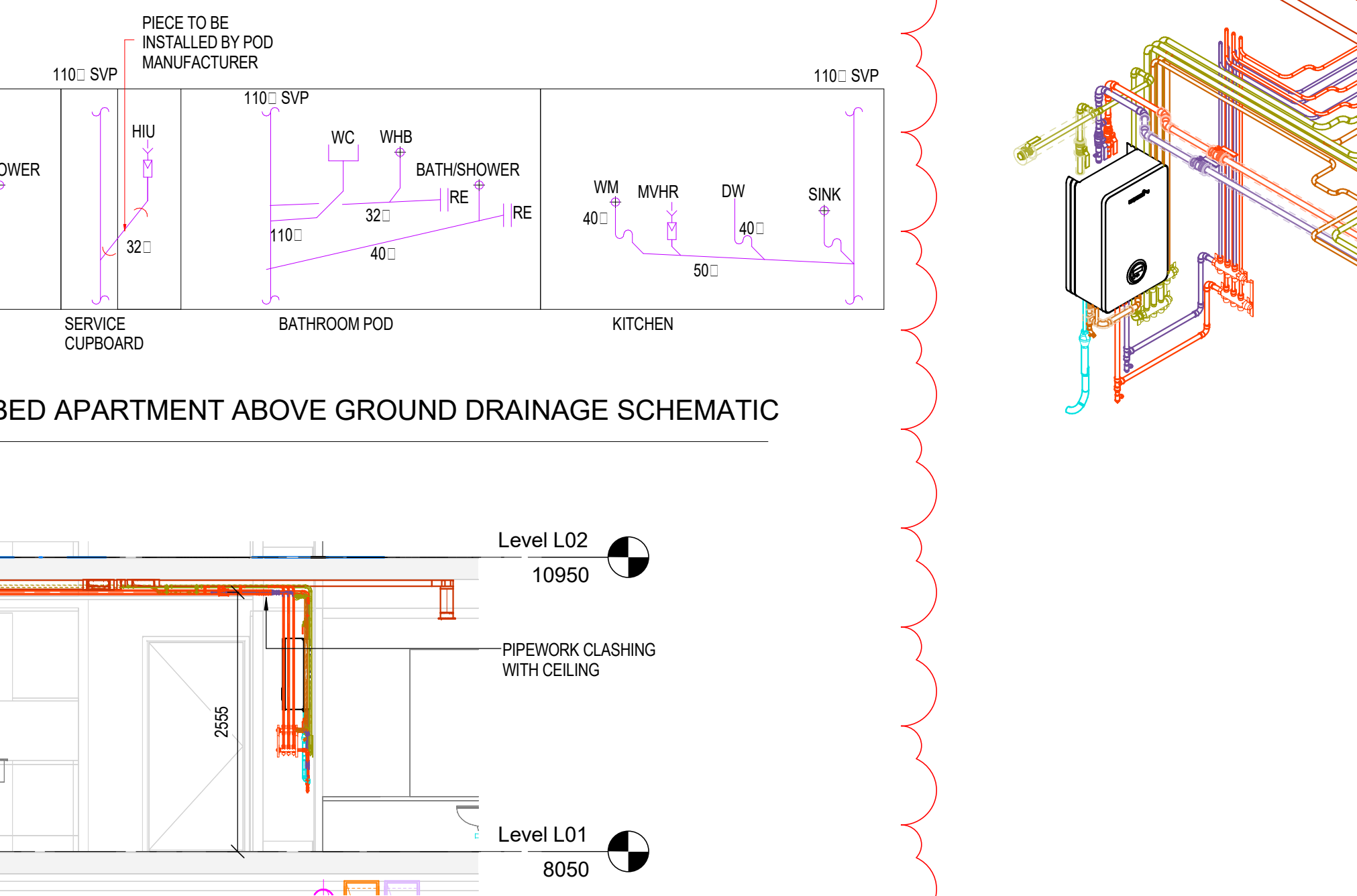
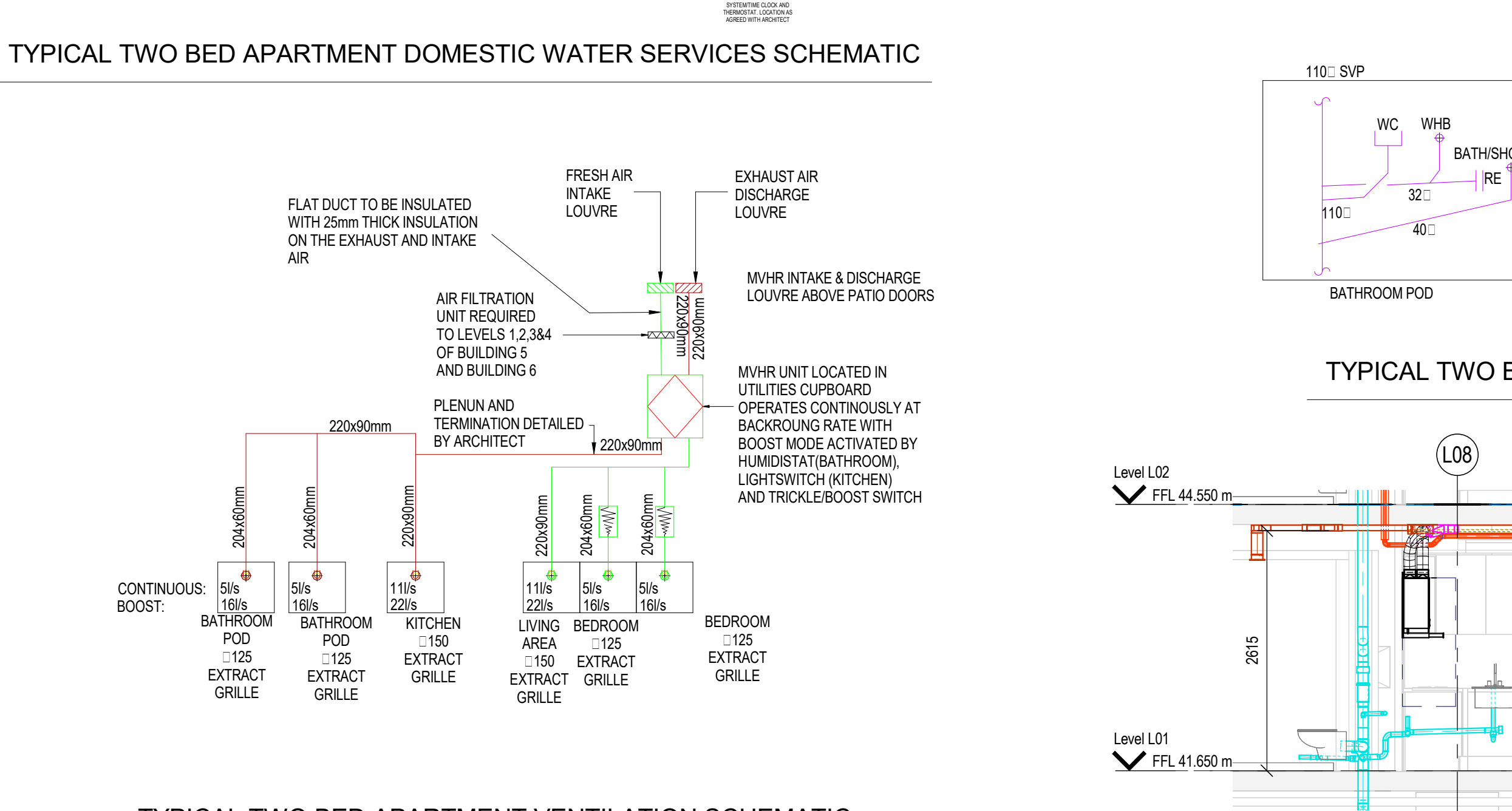
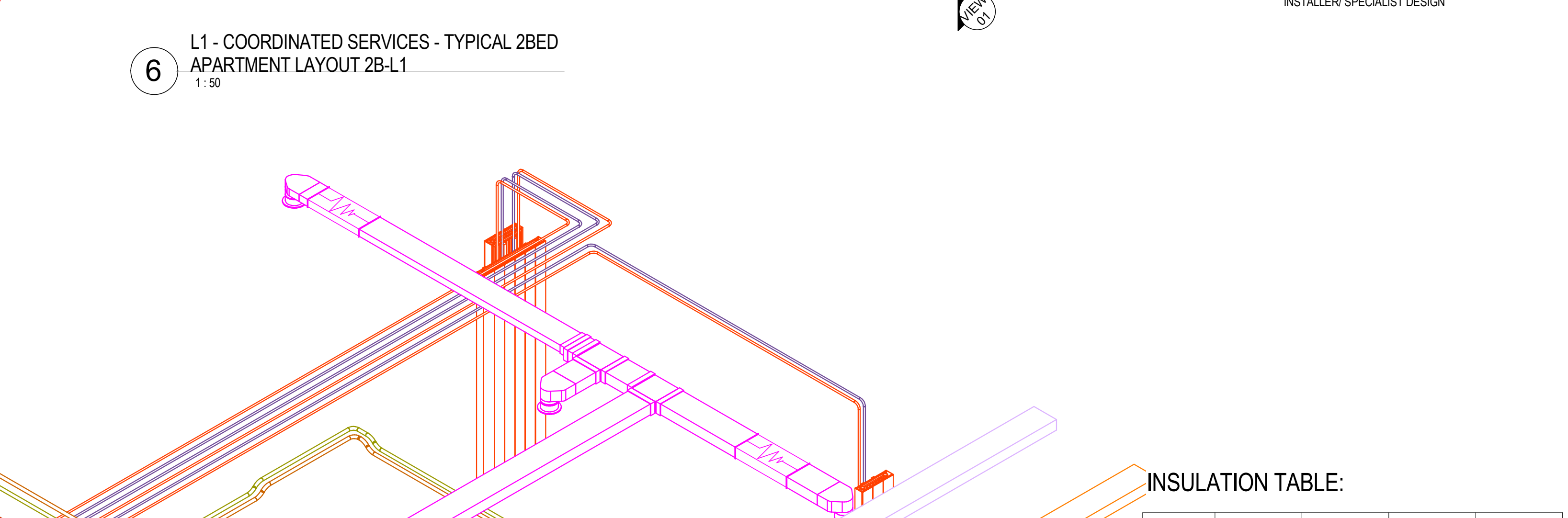
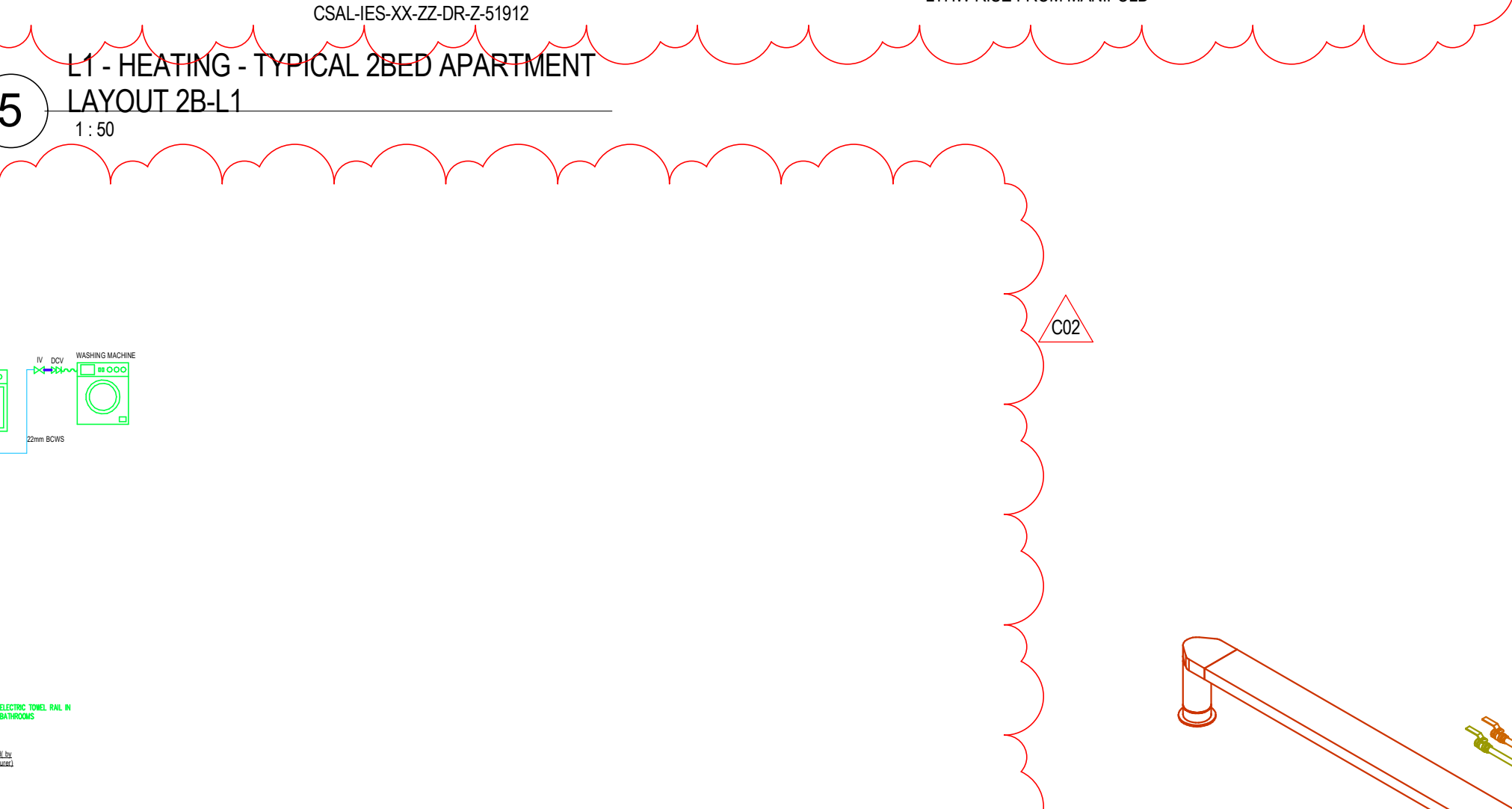
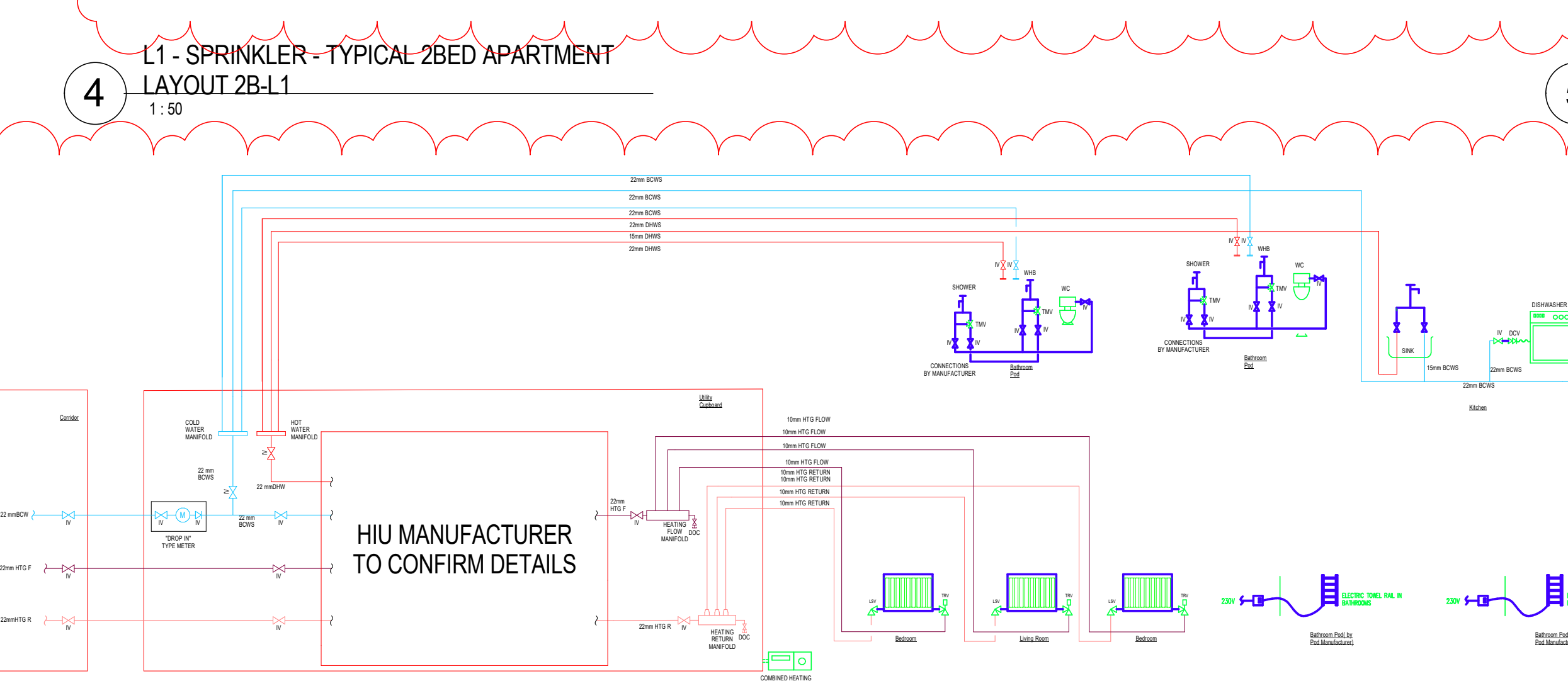
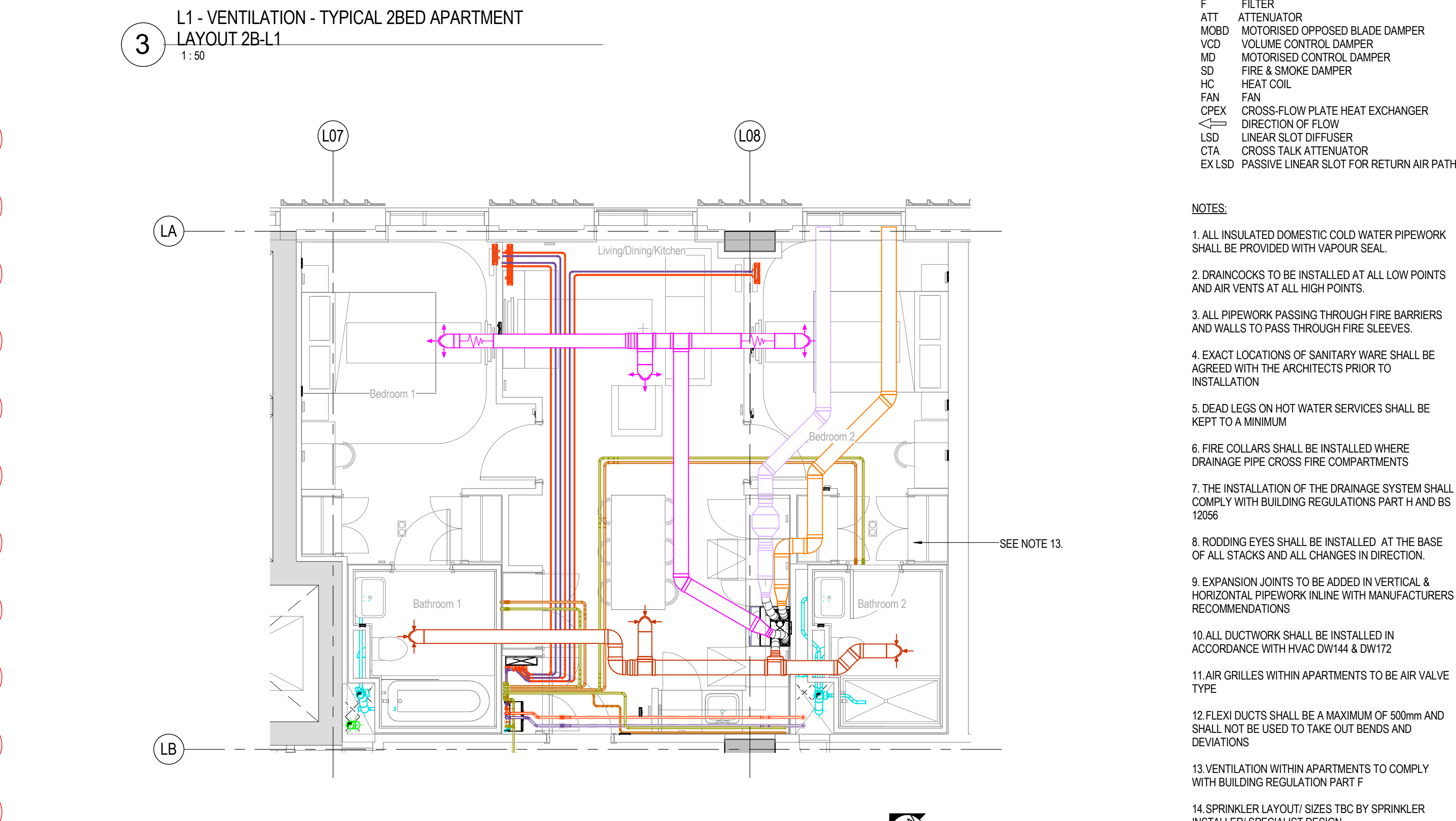
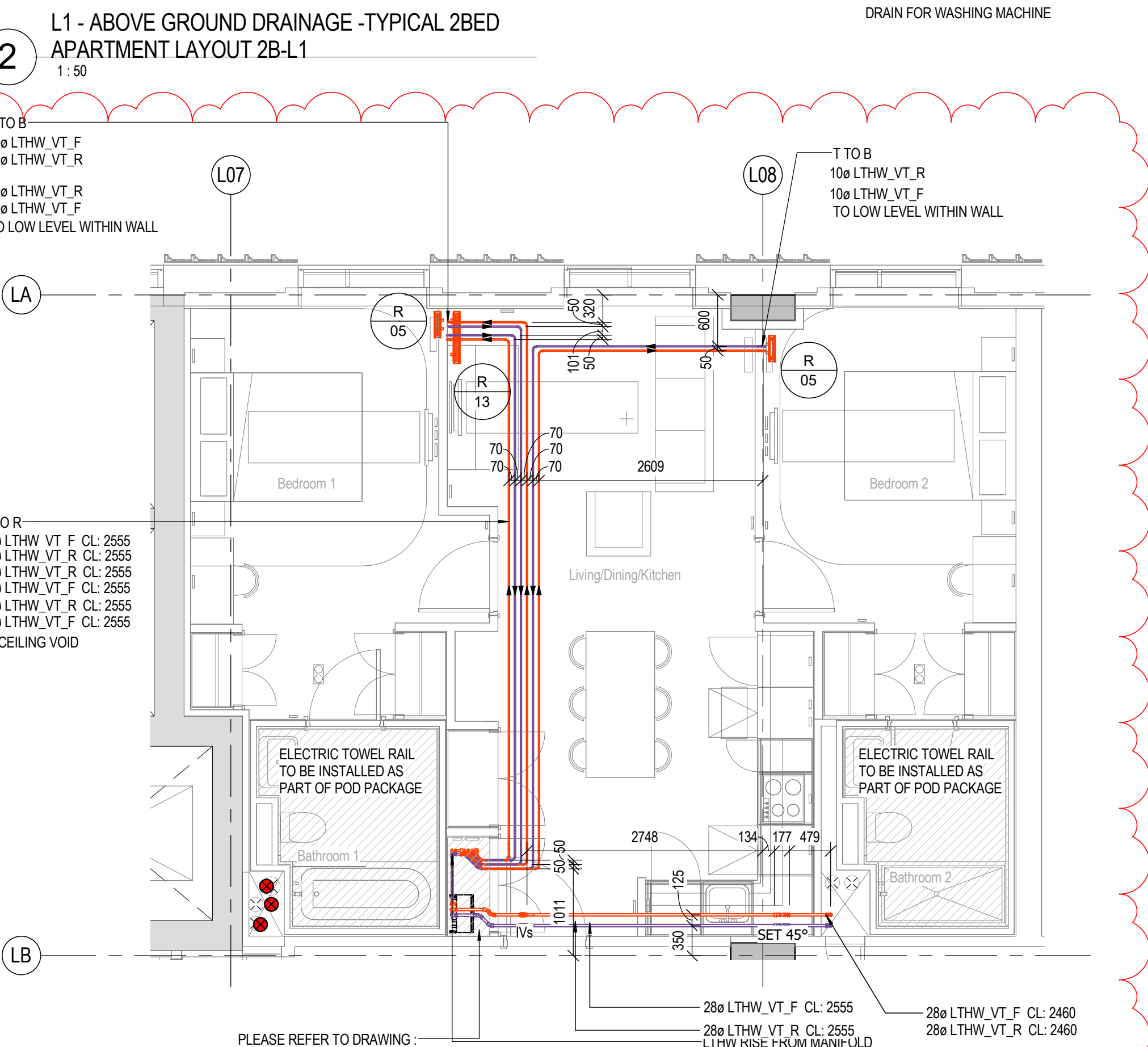
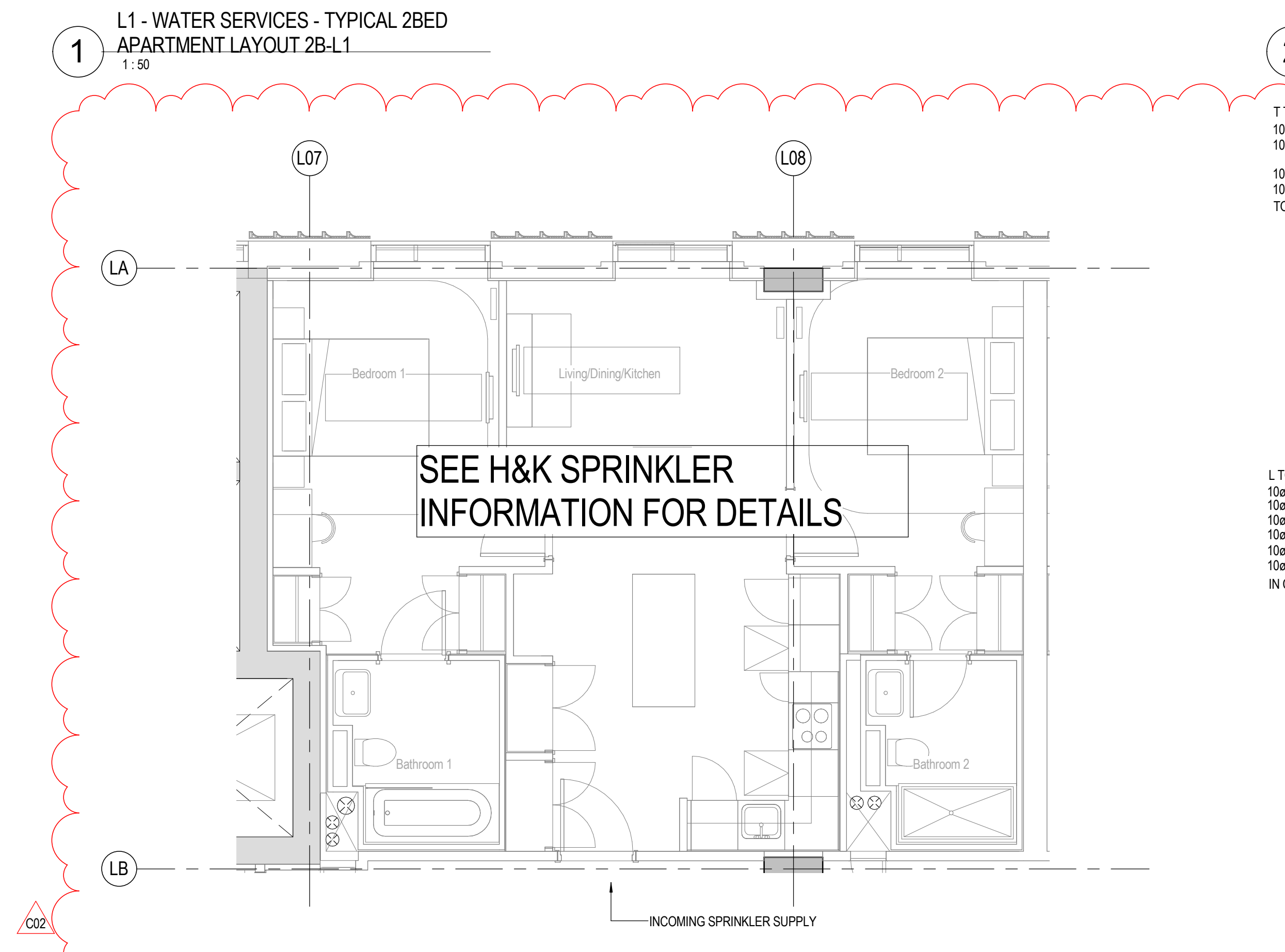
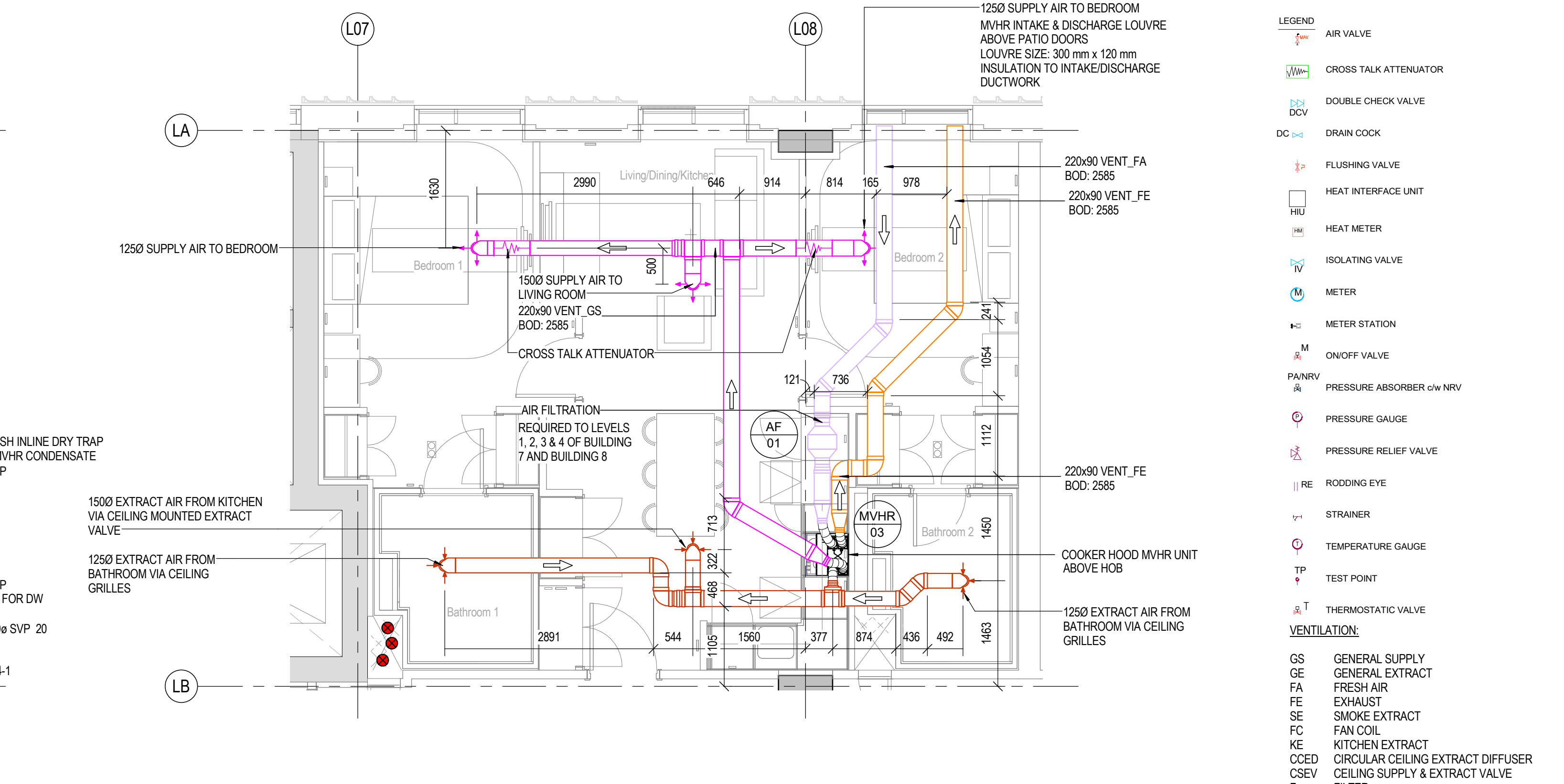
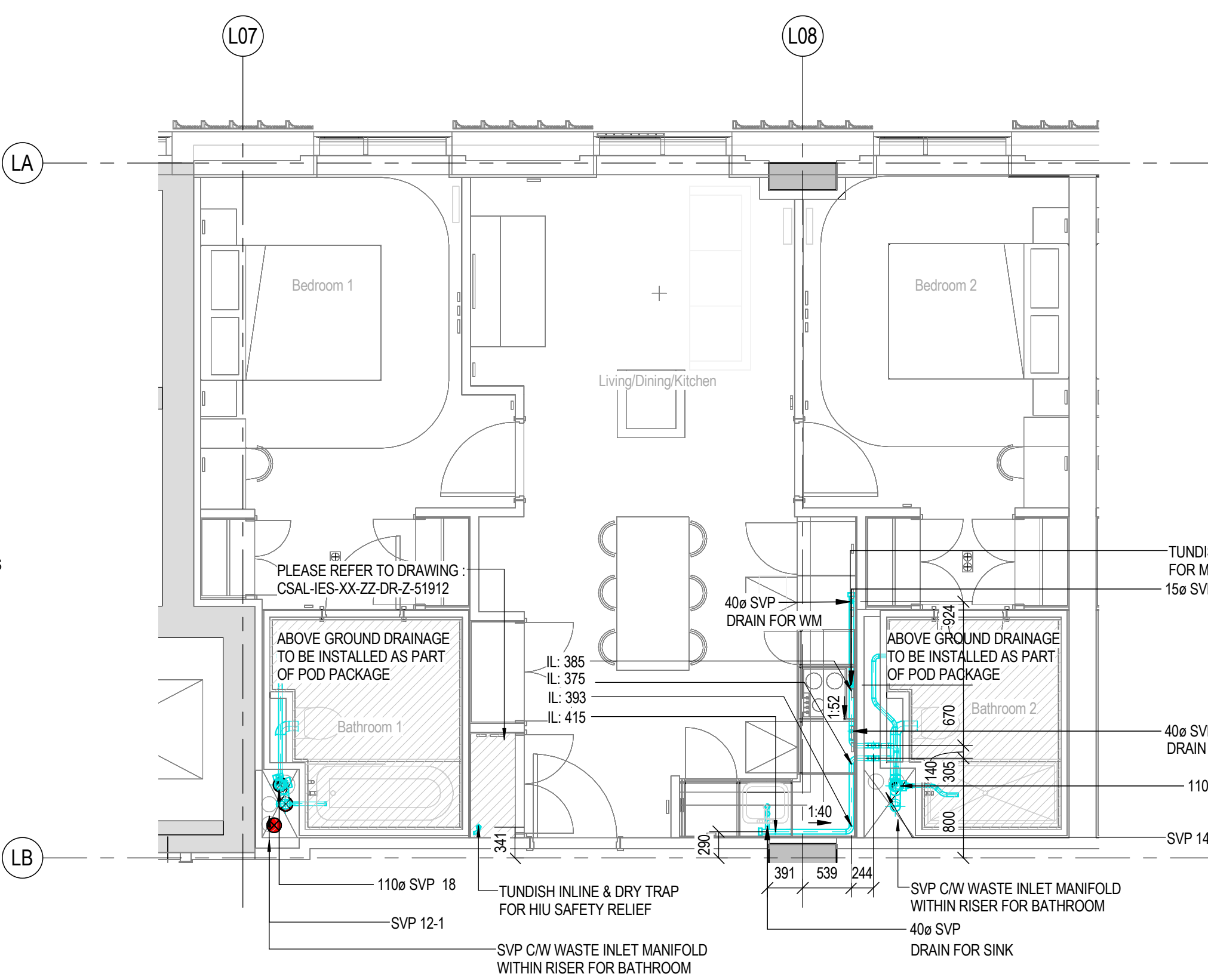
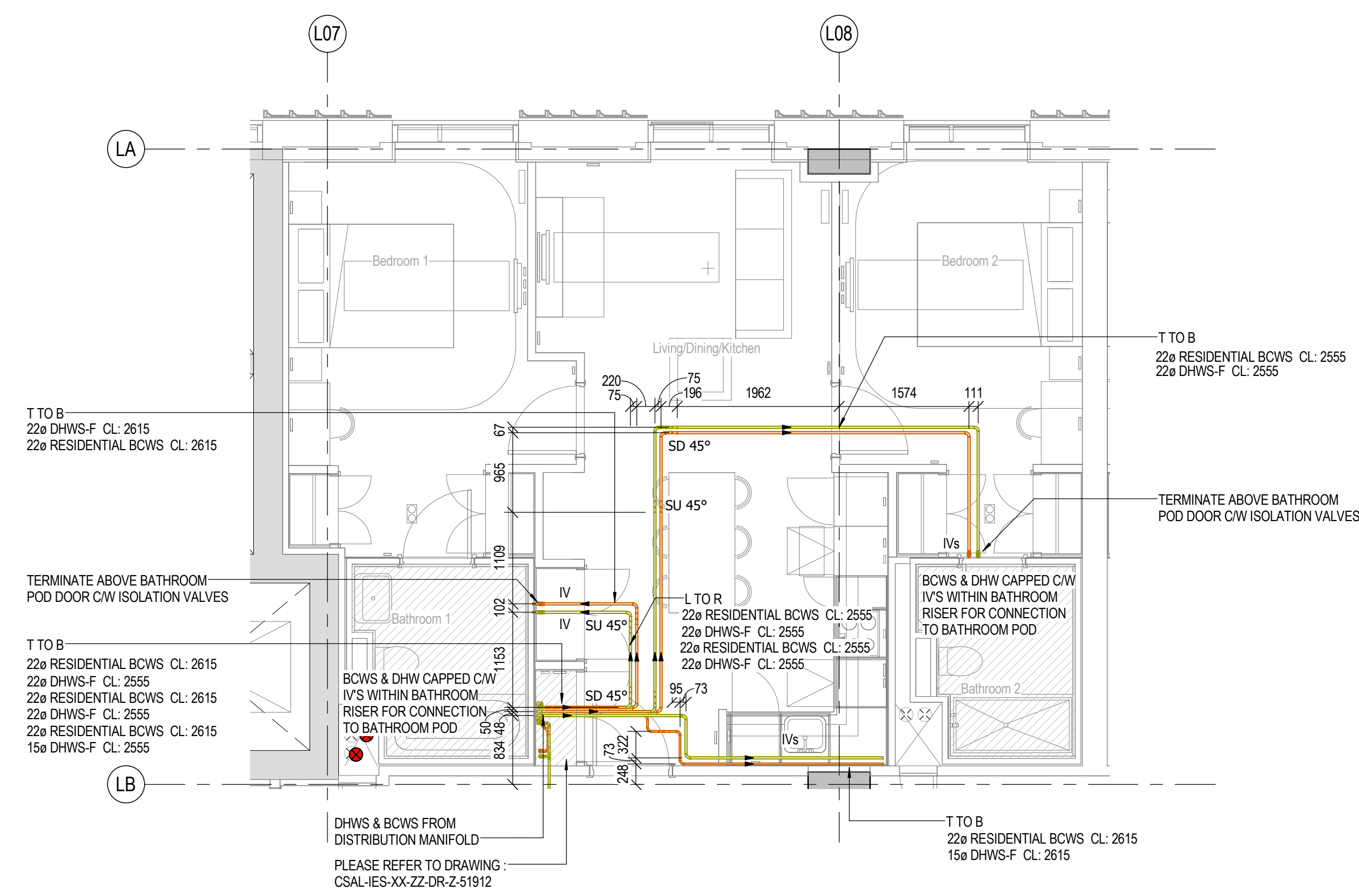


REFERENCE DRAWINGS & MODELS

ARCHITECTURAL	CSAL-FGBS-ZL-ZZ-M3-A-0001	P16
	CSAL-FGBS-ZL-ZZ-M3-A-1-FACADE	P02
STRUCTURAL	CSAL-CUR-ZL-XX-M3-S-0001	P09

GENERAL

FA	FROM ABOVE
TA	TO ABOVE
FB	FROM BELOW
TB	TO BELOW
HL	HIGH LEVEL
LL	LOW LEVEL
ML	MID LEVEL
DL	DROP TO LOW LEVEL
RTHL	RISE TO HIGH LEVEL
SU	SET UP
SD	SET DOWN
FFL	FINISHED FLOOR LEVEL
SSL	STRUCTURAL SLAB LEVEL
AFFL	ABOVE FINISHED FLOOR LEVEL
IL	LEVEL TO UNDERSIDE FROM FFL
IL	LEVEL TO CENTRE FROM FFL
BOO	BOTTOM OF DUCT FROM FFL
BOCT	BOTTOM OF CONTAINMENT FROM FFL

MECHANICAL

LTHW F	LOW TEMPERATURE HOT WATER FLOW
LTHW R	LOW TEMPERATURE HOT WATER RETURN
DRWR	DRY RISE
VRP	VARIBLE REFRIGERANT FLOW
IV	ISOLATION VALVE
NRV	NON RETURN VALVE
DCV	DOUBLE CHECK VALVE
DRV	DIFFERENTIAL PRESSURE VALVE
DPV	DIFFERENTIAL PRESSURE CONTROL VALVE
3PMV	3 PORT MOTORISED VALVE
FCMV	FIXED ORIFICE DOUBLE REGULATING VALVE
STR	STRAINER
PCV	PRESSURE INDEPENDENT CONTROL VALVE
TP	TEST POINT
TIP	GAUGES (T-TEMPERATURE; P-PRESSURE)
S	METER
M	METER
FCU	FAN COIL UNIT
DAC	DRY AIR COOLER
AB	AIR BOTTLE
NC	NORMALLY CLOSED
FC	FLEXIBLE CONNECTION
DC	DRAIN COOK
HE	HEAT EXCHANGER
ROK	RADIATOR
PCV	PRESSURE CONTROL VALVE
GV	GATE VALVE
PRV	PRESSURE REDUCING VALVE
AVV	AUTOMATIC AIR VENT
MVHR	MECHANICAL VENTILATION WITH HEAT RECOVERY

NOTES

- ALL INSULATED DOMESTIC COLD WATER PIPEWORK SHALL BE PROVIDED WITH VAPOUR SEAL.
- DRAINCOCKS TO BE INSTALLED AT ALL LOW POINTS AND AIR VENTS AT ALL HIGH POINTS.
- ALL PIPEWORK PASSING THROUGH FIRE BARRIERS AND WALLS TO PASS THROUGH FIRE SLEEVES.
- EXACT LOCATIONS OF SANITARY WARE SHALL BE AGREED WITH THE ARCHITECTS PRIOR TO INSTALLATION.
- DEAD LEGS ON HOT WATER SERVICES SHALL BE KEPT TO A MINIMUM.
- FIRE COLLARS SHALL BE INSTALLED WHERE DRAINAGE PIPE CROSS FIRE COMPARTMENTS.
- THE INSTALLATION OF THE DRAINAGE SYSTEM SHALL COMPLY WITH BUILDING REGULATIONS PART H AND BS 12056.
- ROODING EYES SHALL BE INSTALLED AT THE BASE OF ALL STACKS AND ALL CHANGES IN DIRECTION.
- EXPANSION JOINTS TO BE ADDED IN VERTICAL & HORIZONTAL PIPEWORK IN LINE WITH MANUFACTURERS RECOMMENDATIONS.
- ALL DUCTWORK SHALL BE INSTALLED IN ACCORDANCE WITH HVAC DW144 & DW172.
- AIR GRILLES WITHIN APARTMENTS TO BE AIR VALVE TYPE.
- FLEX DUCTS SHALL BE A MAXIMUM OF 900mm AND SHALL NOT BE USED TO TAKE OUT BENDS AND OBSTACLES.
- VENTILATION WITHIN APARTMENTS TO COMPLY WITH BUILDING REGULATION PART F.
- SPRINKLER LAYOUT/ SIZES TO BE BY SPRINKLER INSTALLER SPECIALIST DESIGN.

WATER SERVICES

BOVS	BOOSTED COLD WATER SERVICE
CAT 5	BOOSTED COLD WATER SERVICE CAT-5
HWS	HOT WATER SERVICE FLOW
HWSR	HOT WATER SERVICE RETURN
MCWS	MAINS COLD WATER SERVICE
IV	ISOLATING VALVE
DRV	DOUBLE REGULATING VALVE FOR HWS
NRV	NON RETURN VALVE
PRV	PRESSURE REDUCING VALVE
DCV	DOUBLE CHECK VALVE
DOC	DRAIN COOK
DP	TEST & DRAIN POINT
FS	FLOW SWITCH
PS	PRESSURE GAUGE
M	THAMES WATER METER

DRAINAGE

AAV	AUTO AIR VENT
AP	ACCESS CAP
AP	ACCESS PANEL
FG	FLOOR GULLY
RE	ROODING EYE
DRP	DRAIN WATER PIPE
SS	STUB STACK
SVP	SOIL VENT PIPE
GSVP	GROUND SOIL VENT PIPE
MSVP	MEZZANINE SOIL VENT PIPE
RSVP	RETAL SOIL VENT PIPE
SVP	SOIL VENT PIPE
VP	VENT PIPE
VP	VENT PIPE
D	DRAINAGE
BSO	BELOW GROUND DRAINAGE
SINK	SINK
KSK	KITCHEN SINK
DW	DISH WASHER
WM	WASHIN MACHINE
VHB	WASH HAND BASIN
WC	WATER CLOSET
SHR	SHOWER
BTH	BATH
TOX	FALL

CR2 UPDATED TO DESIGN COMMENTS

SW	IES	11.06.19	
CR1 CONTRACT ISSUE	SW	IES	31.01.19

Rev

Revision	Description	Checked by	Checked date	Approved by	Approved date
CWC	11.06.19	MM	03.09.18	MM	03.09.18

CHECK PLOT

UNCONTROLLED DRAWING

A

OK

ready for transmission

B

Minor Comments

needs to be actioned then ready for transmission

C

Major Comments

needs to be actioned then returned for checking

Intech

Intech Engineering Services North

Calder House, St Georges Park

Kirkham, Lancashire PR4 0Z

T + 44 (0)1772 471 111

www.intech.co.uk

client approval

A	Approved
B	Approved with Comments
C	Not Approved

client approval, initials and date

client/main contractor

SISK

consultant/structural

CWC

project

Circle Square

Affinity Living

drawing title

Zone: ZL Level: ZZ

Service: Apartment Mechanical Services

2 Bed Type L1

drawing date

13.07.18

scale

As indicated @ A0

project number

P070090

drawn by

CWC

checked by

MM

approved by

MM

date

13.07.18

revision

002

CSAL-IES-ZL-ZZ-DR-M-51006

Contract Issue