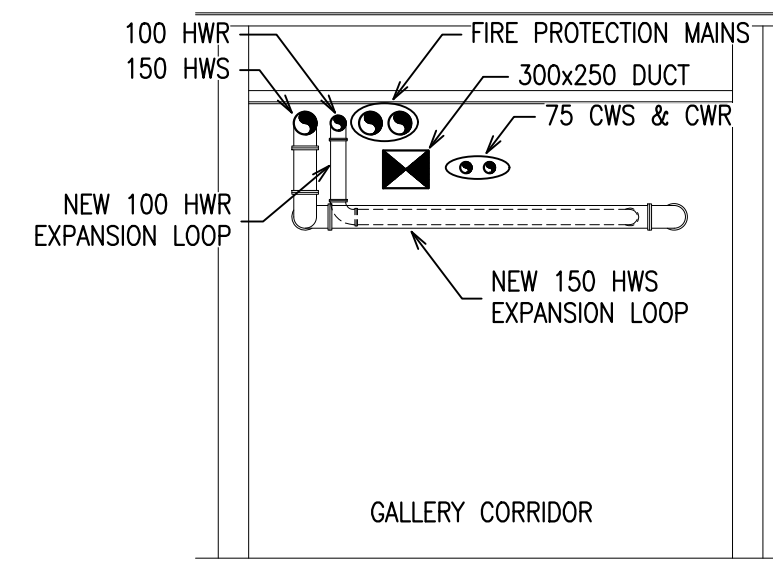
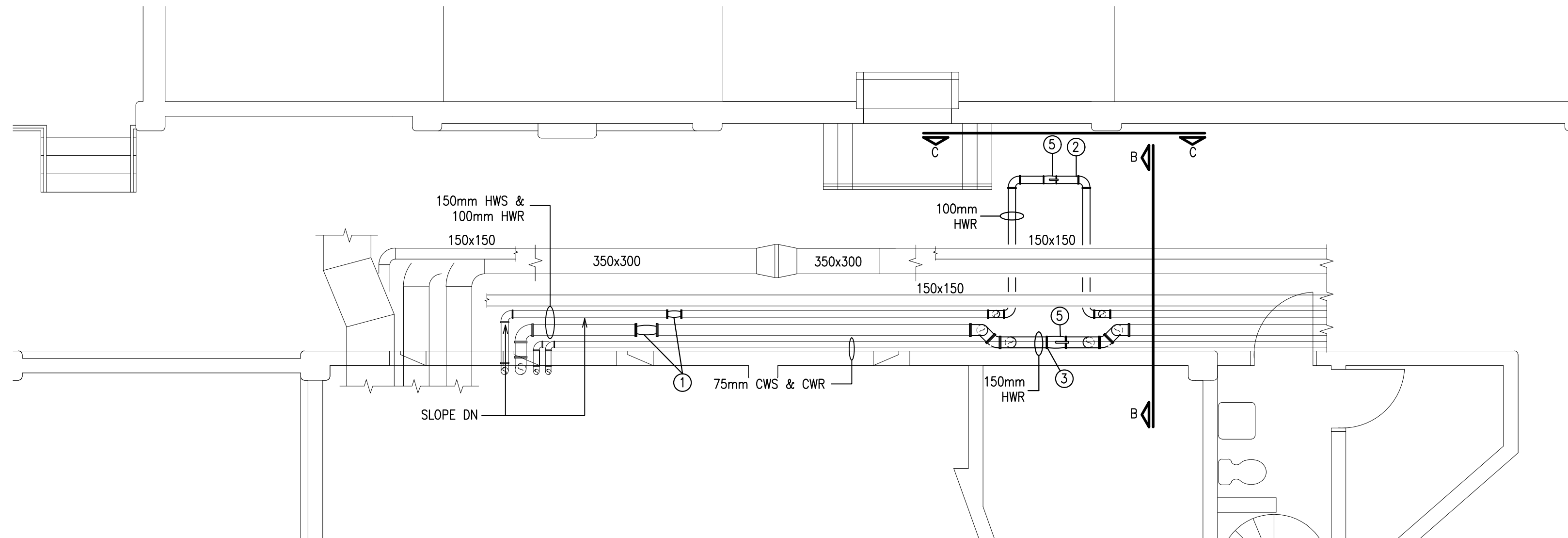


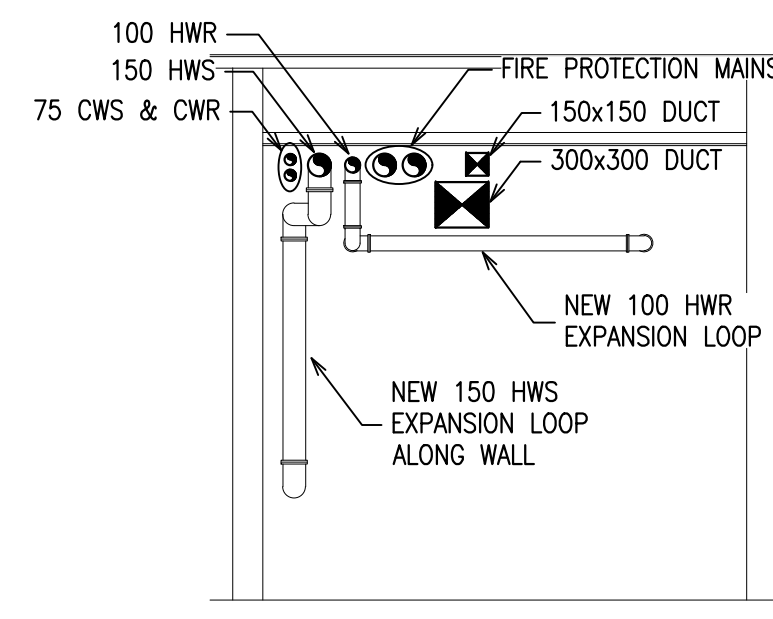
PARTIAL SECOND FLOOR PLAN — AREA 1 — MECHANICAL
SCALE : 1:50



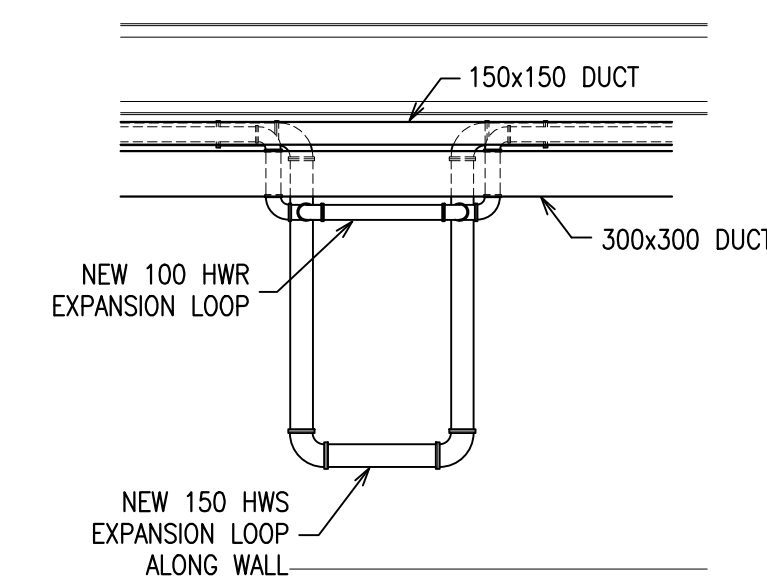
AREA 1 — SECTION A-A
SCALE : 1:50



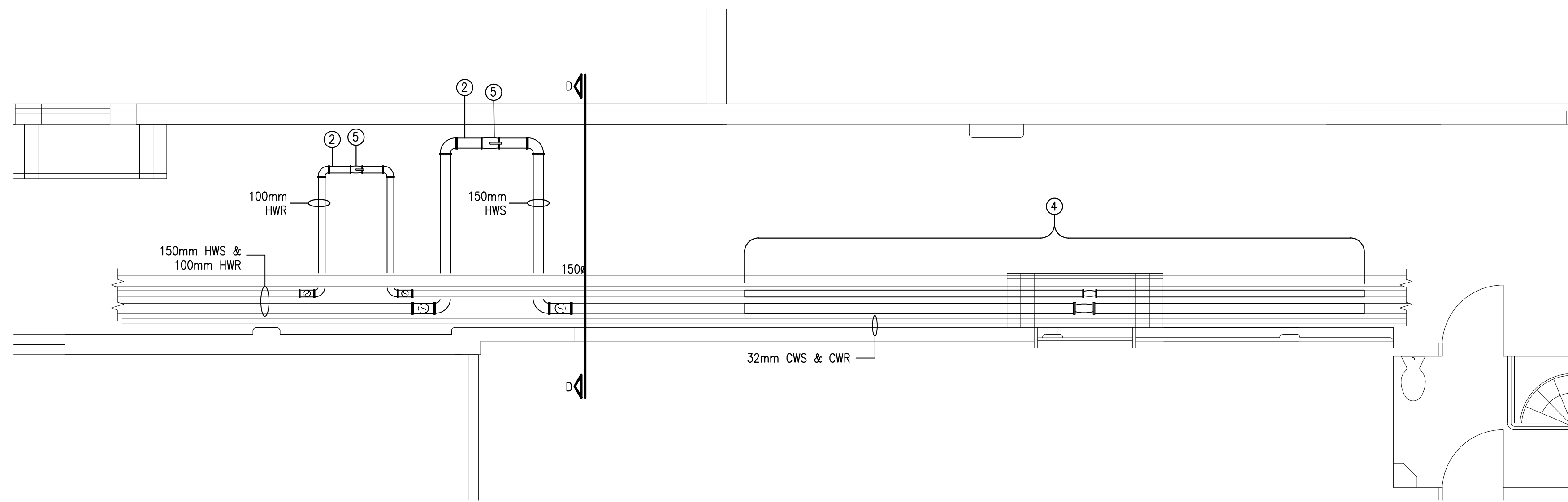
PARTIAL SECOND FLOOR PLAN — AREA 2 — MECHANICAL
SCALE : 1:50



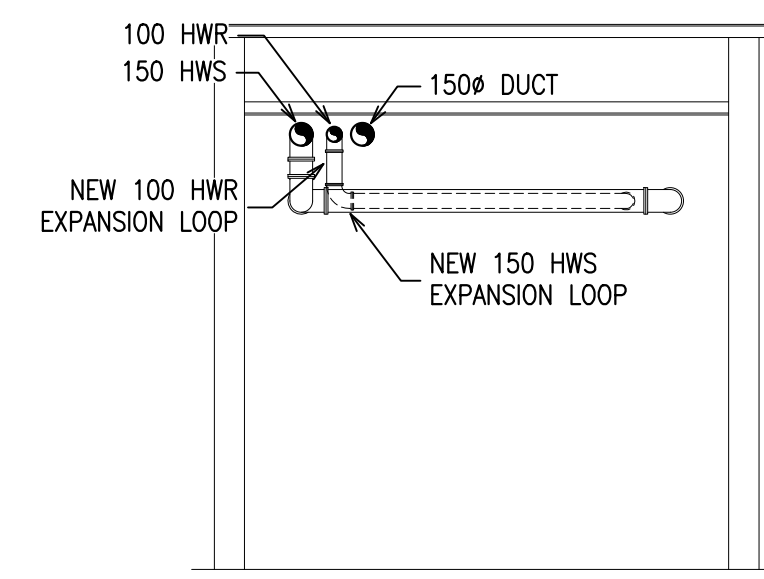
AREA 2 — SECTION B-B
SCALE : 1:50



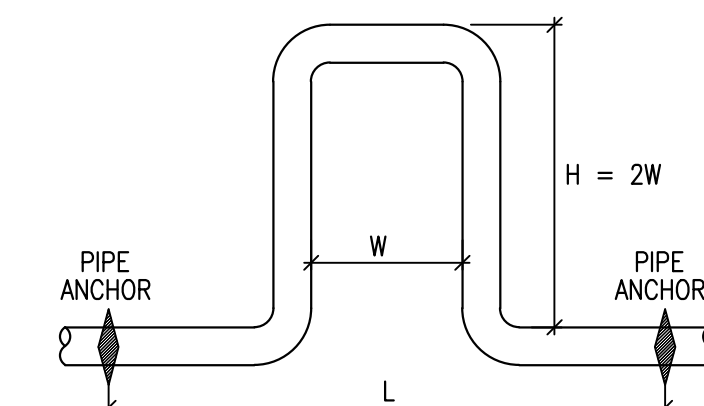
AREA 2 — SECTION C-C
SCALE : 1:50



PARTIAL SECOND FLOOR PLAN — AREA 3 — MECHANICAL
SCALE : 1:50



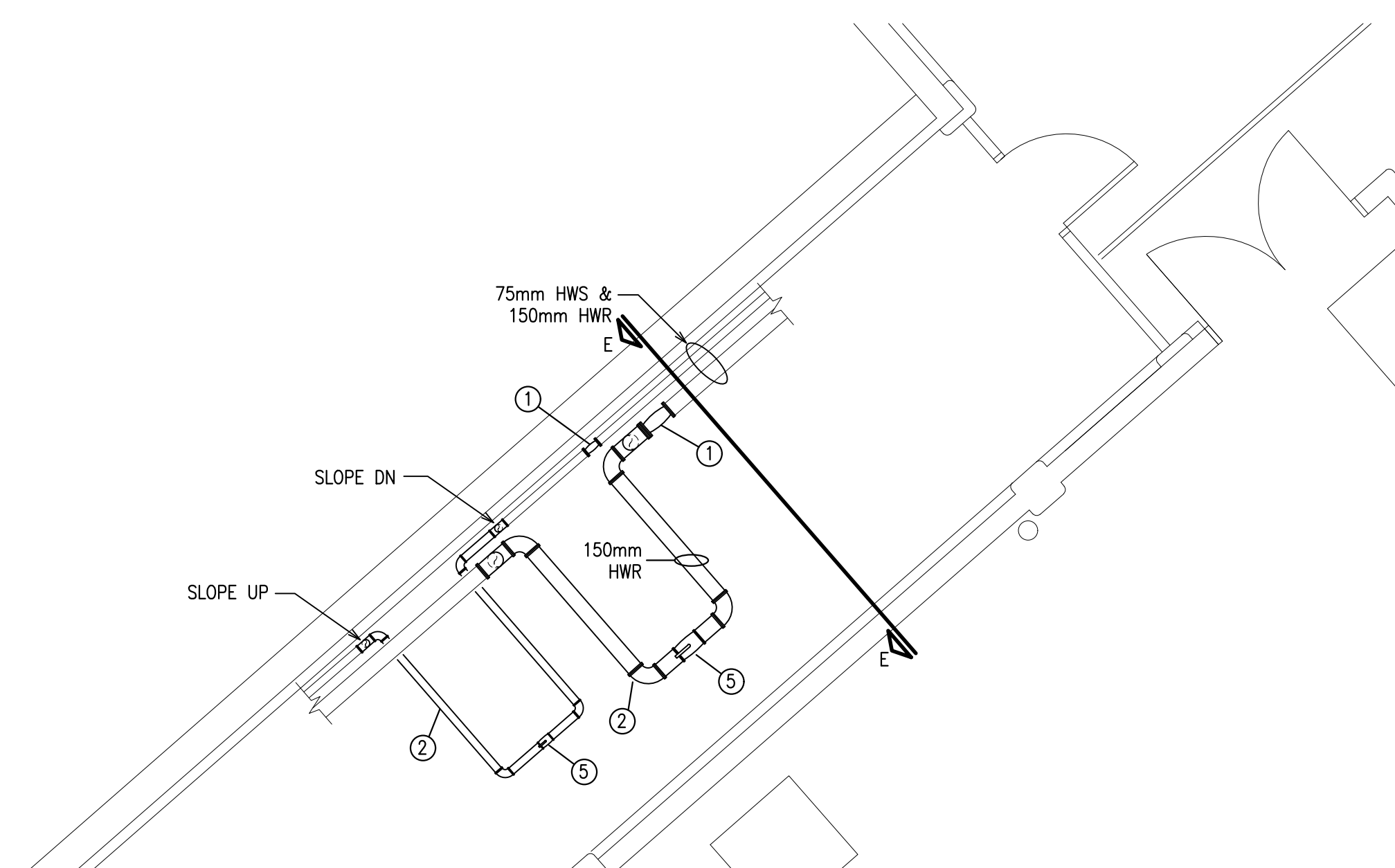
AREA 3 — SECTION D-D
SCALE : 1:50



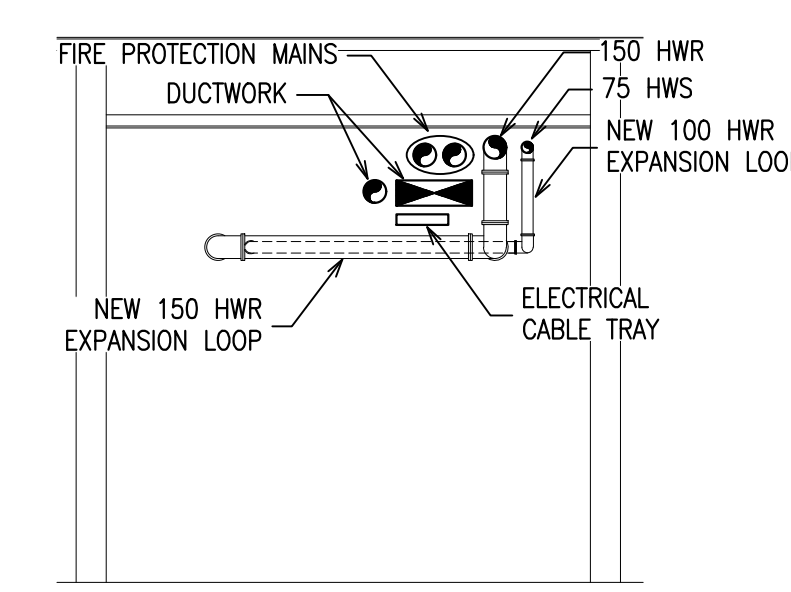
TYPICAL EXPANSION LOOP DETAIL
SCALE : NTS

EXPANSION LOOP SCHEDULE						
AREA	LOOP SERVICE	PIPE SIZE (mm)	L (m)	dL (m)	LOOP DIMENSIONS	
					W (mm)	H (mm)
1	HWS	150	50.3	.039	1220	2440
	HWR	100	50.3	.036	915	1830
2	HWS	150	33.5	.024	915	1830
	HWR	100	33.5	.036	915	1830
3	HWS	150	42.7	.024	1220	2440
	HWR	100	42.7	.036	915	1830
4	HWS	75	45.7	.024	915	1830
	HWR	150	45.7	.024	1220	2440

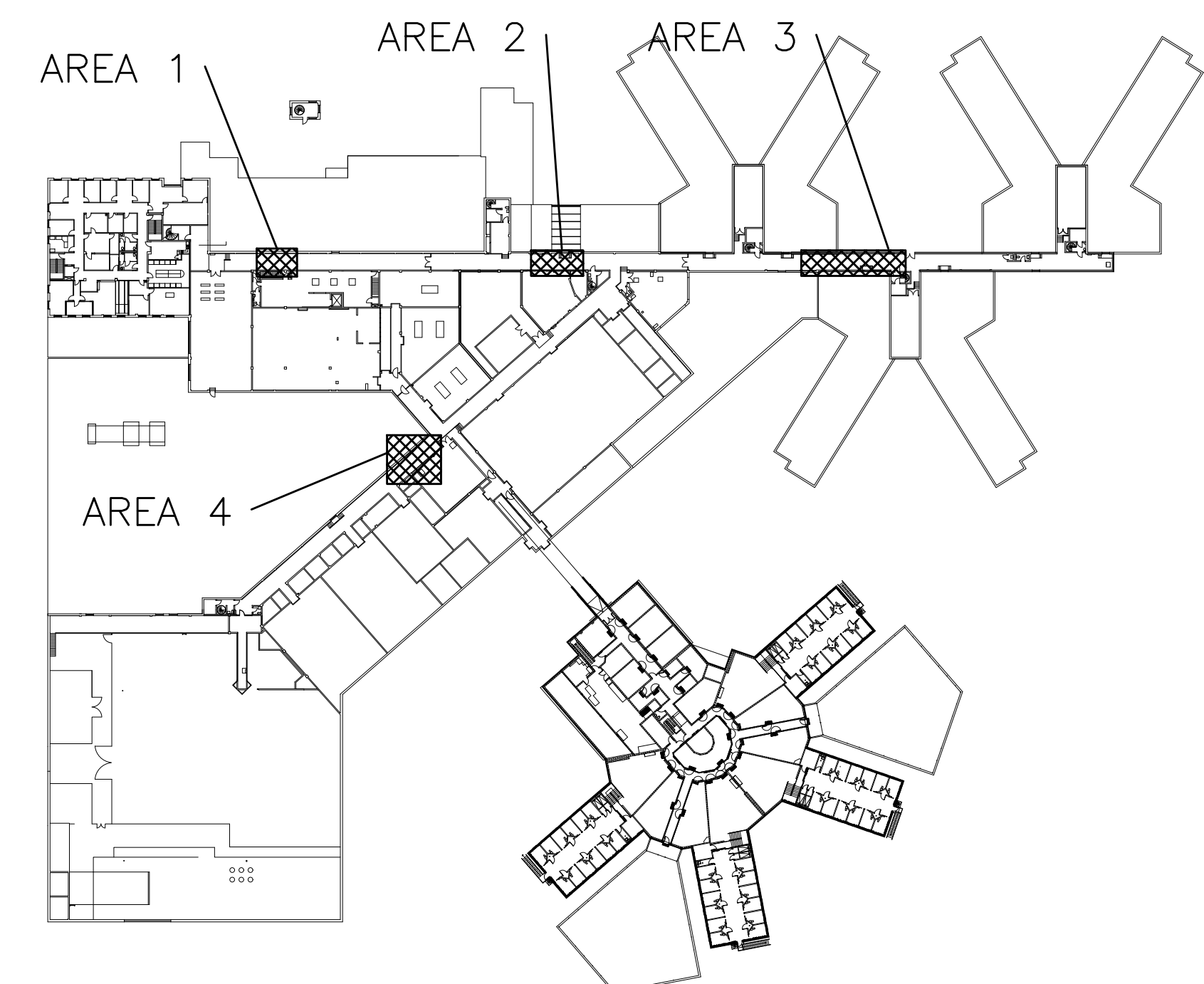
LOOP DIMENSIONS BASED ON DISTANCE BETWEEN PIPE ANCHORS, PIPE SIZE, TEMPERATURE DIFFERENCE TO AMBIENT AND CALCULATED DEFLECTIONS (DL)



PARTIAL SECOND FLOOR PLAN — AREA 4 — MECHANICAL
SCALE : 1:50



AREA 4 — SECTION E-E
SCALE : 1:50



KEY PLAN
SCALE : N.T.S.

GENERAL NOTES

ALLOW FOR EXTRA PIPE AND FITTINGS FOR OFFSETS TO COMPLETE INSTALLATION AND AVOID INTERFERENCES.

PROVIDE ADDITIONAL PIPE HANGERS ON EXISTING PIPING AS REQUIRED PER SPECIFICATION.

ALL SERVICES (PIPING, DUCTWORK, ETC) ARE NOT SHOWN ON DRAWING FOR CLARITY. CONTRACTOR TO VERIFY EXISTING SERVICES IN EACH LOCATION AND VERIFY ROUTING AND DIMENSION ON SITE PRIOR TO INSTALLATION OF LOOPS.

PROVIDE PIPE IDENTIFICATION AS PER SPECIFICATION.

WHERE INSULATION IS REMOVED ON EXISTING PIPING TO REMAIN, RE-INSULATE AS REQUIRED PER SPECIFICATION PRIOR TO RE-INSTATING PIPING FOR SERVICE.

PROTECT ANY NEARBY ELECTRICAL EQUIPMENT TO THE SATISFACTION OF CSC PRIOR TO BEGINNING WORK.

DRAWING NOTES

- REMOVE EXISTING MECHANICAL EXPANSION JOINT. INFILL EXISTING HWS AND HWR PIPING WITH NEW AND RE-INSULATE PIPE AS REQUIRED PER SPECIFICATIONS.
- NEW HORIZONTAL EXPANSION LOOP PIPING. REFER TO DETAIL ON THIS SHEET FOR LOOP PIPING LENGTHS. MODIFY AND OFFSET PIPING AS REQUIRED TO INSTALL NEW EXPANSION LOOPS IN HWS AND HWR PIPING AND AVOID INTERFERENCE WITH OTHER SERVICES. VERIFY EXACT LOCATION OF EXPANSION JOINTS AND SERVICES ON SITE. KEEP PIPING AS HIGH AS POSSIBLE IN THE CORRIDOR TO KEEP MAXIMUM ALLOWABLE HEAD ROOM.
- NEW VERTICAL EXPANSION LOOP PIPING. REFER TO DETAIL ON THIS SHEET FOR LOOP PIPING LENGTHS. MODIFY AND OFFSET PIPING AS REQUIRED TO INSTALL NEW EXPANSION LOOPS IN HWS AND HWR PIPING AND AVOID INTERFERENCE WITH OTHER SERVICES. VERIFY EXACT LOCATION OF EXPANSION JOINTS AND SERVICES ON SITE. KEEP PIPING AS TIGHT TO WALL AS POSSIBLE IN THE CORRIDOR.
- ACCESS TO EXPANSION JOINTS IS VERY LIMITED IN THIS AREA. PIPING IS LOCATED ABOVE EXISTING ELECTRICAL CONDUITS AND WILL NEED TO BE TAKEN DOWN IN SECTIONS. REMOVE APPROXIMATELY 8' IN LENGTH OF HWS AND HWR PIPING TO ALLOW NEW PIPE TO BE ANGLED UP AND LIFTED INTO PLACE. INFILL HWS AND HWR PIPE WITH NEW SECTION OF STRAIGHT PIPE TO MATCH EXISTING. CONTRACTOR TO INSPECT AREA THOROUGHLY PRIOR TO INSTALLATION TO DETERMINE EXACT LENGTH OF PIPING TO BE REMOVED.
- INSTALL NEW ISOLATION VALVE IN LINE. VALVE SIZE TO MATCH PIPE SIZE. ISOLATION VALVES TO BE MOTORIZED TO ALLOW AUTOMATED CYCLING AND MONITORING FROM THE BMS.