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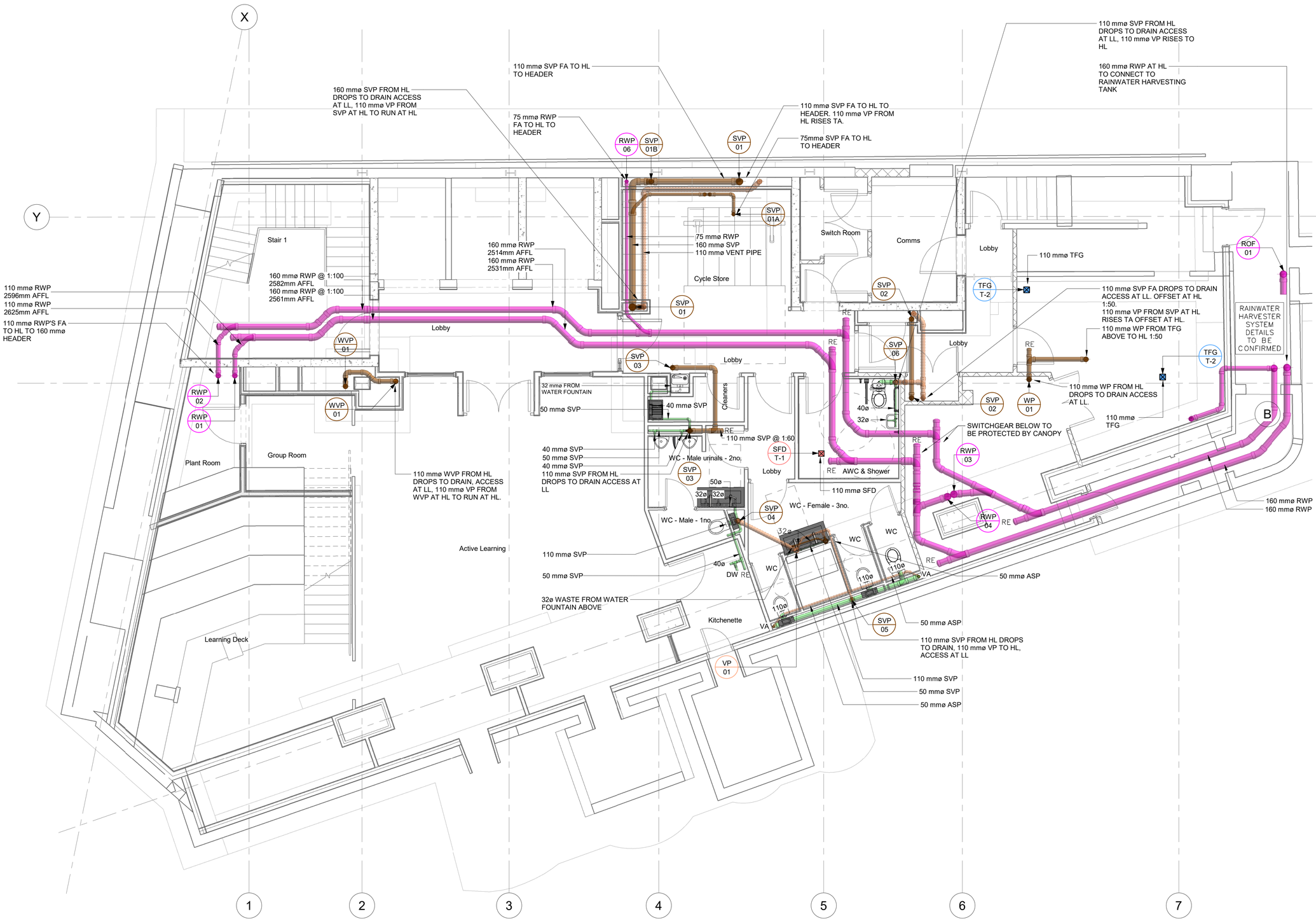

LEGEND

SVP	-	SOIL VENT PIPE
SP	-	SOIL PIPE
WVP	-	WASTE VENT PIPE
WP	-	WASTE PIPE
VP	-	VENT PIPE
ASP	-	ANTI-SYPHON PIPE
RE	-	RODDING EYE
VA	-	VERTICAL ACCESS
CWP	-	CONDENSATE WASTE PIPE
WT	-	WATERLESS TRAP
DW	-	DISHWASHER PROVISION
SFD	-	SHOWER FLOOR DRAIN
TFG	-	TRAPPED FLOOR GULLEY
RWO	-	RAINWATER OUTLET
RWP	-	RAINWATER PIPE
ROF	-	RAINWATER OUTFALL

HIGH LEVEL SANITARY PIPE

LOW LEVEL SANITARY PIPE

VENT PIPE

RAINWATER PIPE

Soil, Waste and Rainwater Installations Notes:

1. **Pipework, Soil, Waste & Rainwater Pipework** – All soil, waste & rainwater and ventilating pipework of sizes 50mm and above will be carried out in High Density Polyethylene (HDPE) to BS EN 1519 with electro-sleeve coupling joints Polypipe Terrain "Fuze". Expansion will be taken up by means of proprietary expansion sleeve couplings at 3.0m centres with accompanying anchor brackets to restrict movement. All pipework running exposed within plant or store area shall be cast iron.
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9. **Fire Stopping** – Where pipework passes through firebreak walls or through intermediate floors, intumescent fire collars to suit the diameter of the pipe concerned from the same manufacturer will to be installed in accordance with the manufacturer's instructions, requirements and recommendations.
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Rev.	Description	Drawn	Ch'kd	Date
C8	ISSUED FOR CONSTRUCTION	SRW	MI	11.02.20
C7	ISSUED FOR CONSTRUCTION	SRW	MI	31.01.20
C6	ISSUED FOR CONSTRUCTION	SRW	DG	19.12.19
C5	ISSUED FOR CONSTRUCTION	SRW	DG	23.10.19

For Construction

Architect
GIBBERD

Client
ELEMENTS M&E CONTRACTING LTD

Project
CAMBRIDGE HOUSE, BIRKBECK COLLEGE

Drawing Title:
BASEMENT FLOOR DRAINAGE LAYOUT

iles consulting
ENGINEERING EXCELLENCE
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REVIT Directory: I:\Projects\19-000\19-011\Drawings\

Drawing Size: A1 | Scale: 1 : 50

Dwg No: 19-011-M-52-99-001 | Rev: C8

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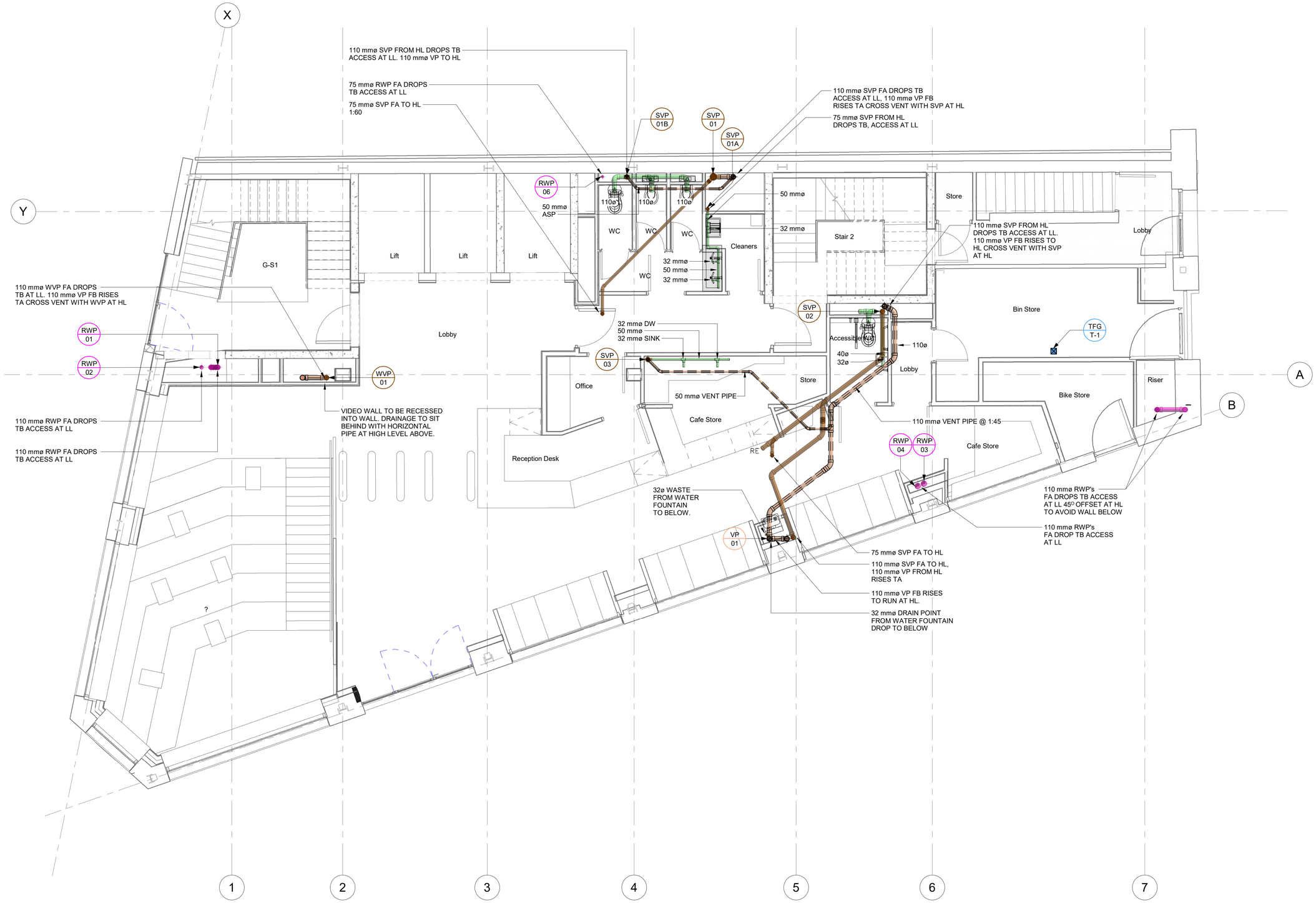

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C7	ISSUED FOR CONSTRUCTION	SRW	MI	11.02.20
C6	ISSUED FOR CONSTRUCTION	SRW	MI	31.01.20
C5	ISSUED FOR CONSTRUCTION	SRW	DG	19.12.19
C4	ISSUED FOR CONSTRUCTION	SRW	DG	16.10.19

For Construction

Architect
GIBBERD

Client
ELEMENTS M&E CONTRACTING LTD

Project
CAMBRIDGE HOUSE, BIRKBECK COLLEGE

Drawing Title:
GROUND FLOOR DRAINAGE LAYOUT

iles consulting IC
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ILES Consulting Ltd
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REVIT Directory: I:\Projects\19-000\19-011\Drawings\

Drawing Size: A1 | Scale: 1 : 50

Dwg No: 19-011-M-52-00-001 | Rev: C7

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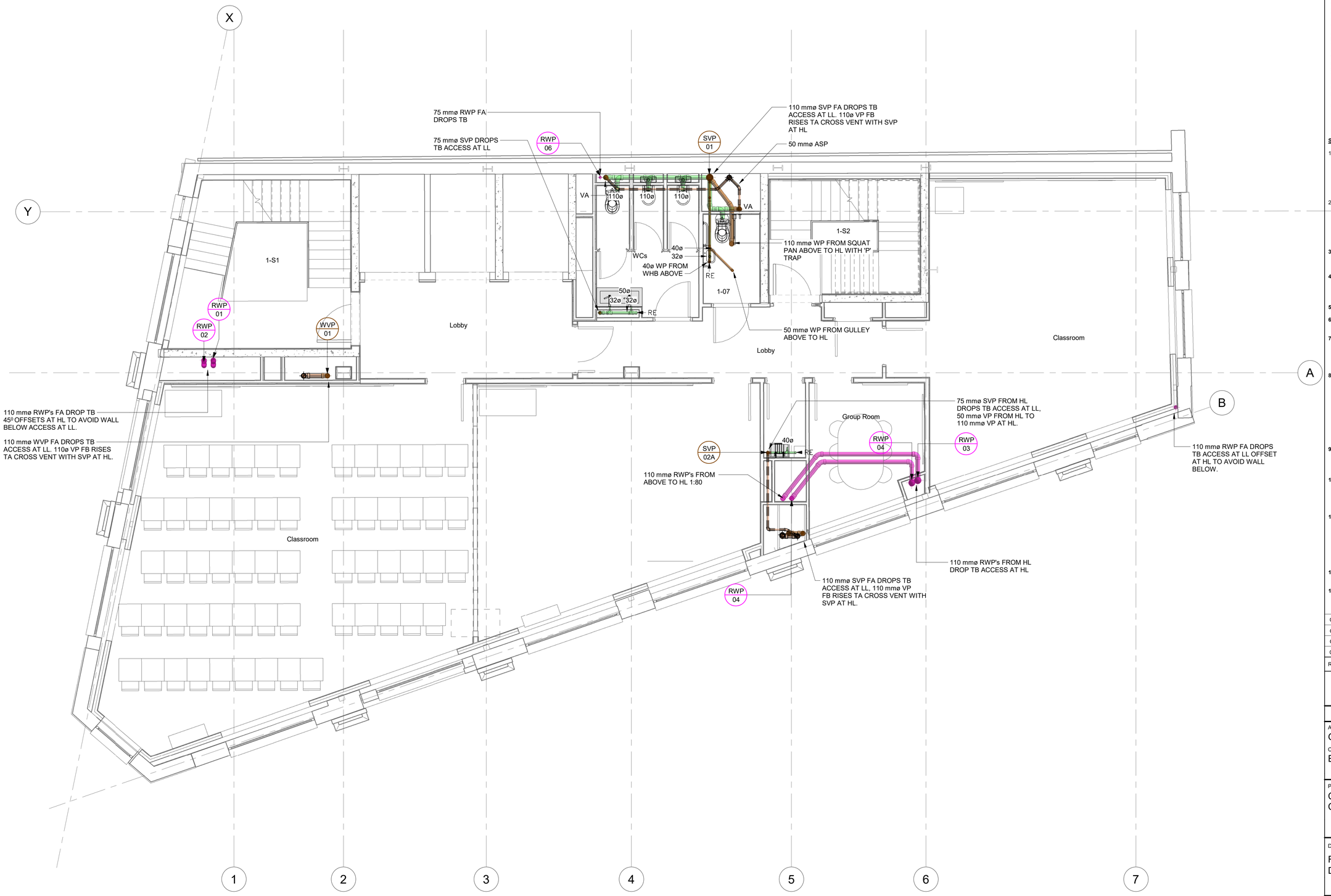
DO NOT SCALE. THE CONTRACTOR IS RESPONSIBLE FOR CHECKING DIMENSIONS WHICH ARE IN MILLIMETRES UNLESS OTHERWISE STATED.



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C8	ISSUED FOR CONSTRUCTION	SRW	MI	11.02.20
C7	ISSUED FOR CONSTRUCTION	SRW	MI	31.01.20
C6	ISSUED FOR CONSTRUCTION	SRW	DG	28.10.19
C5	ISSUED FOR CONSTRUCTION	SRW	DG	23.10.19

For Construction

Architect
GIBBERD

Client
ELEMENTS M&E CONTRACTING LTD

Project
CAMBRIDGE HOUSE, BIRKBECK COLLEGE

Drawing Title:
FIRST FLOOR
DRAINAGE LAYOUT

iles consulting
ENGINEERING EXCELLENCE
ILES Consulting Ltd
Metropolitan House, Longrigg Road, Swalwell, Gateshead,NE16 3AS
t: 0191 4956250 f: 0191 4067500 e: mail@ilesconsulting.co.uk w:www.ilesconsulting.co.uk

REVIT Directory: I:\Projects\19-000\19-011\Drawings\

Drawing Size: A1 | Scale: 1 : 50

Dwg No: 19-011-M-52-01-001 | Rev: C8

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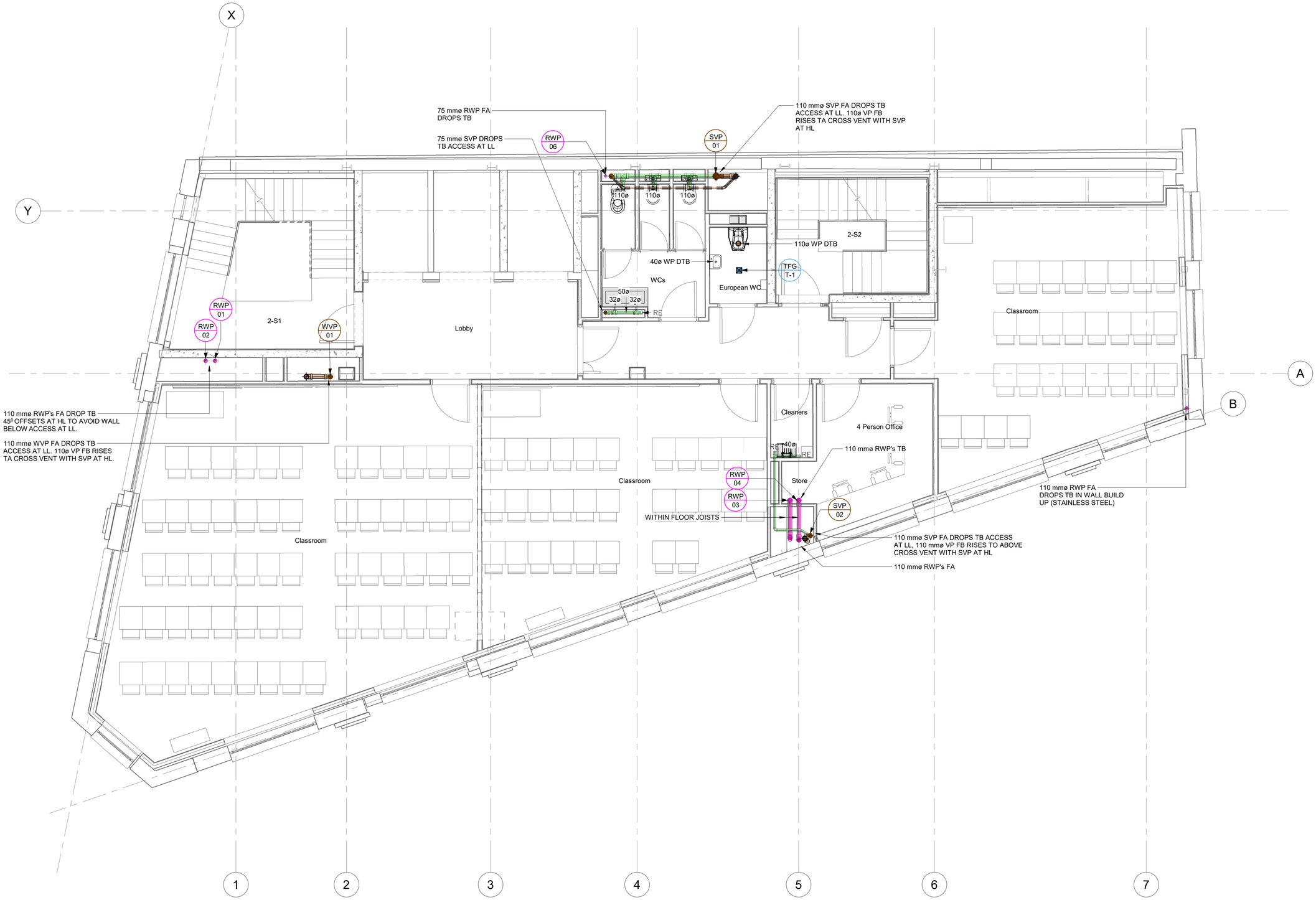

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LEGEND

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For Construction

Architect
GIBBERD

Client
ELEMENTS M&E CONTRACTING LTD

Project
CAMBRIDGE HOUSE, BIRKBECK COLLEGE

Drawing Title:
SECOND FLOOR
DRAINAGE LAYOUT

iles consulting IC
ENGINEERING EXCELLENCE
ILES Consulting Ltd
Metropolitan House, Longrigg Road, Swalwell, Gateshead.NE16 3AS
t: 0191 4956250 f: 0191 4067500 e: mail@ilesconsulting.co.uk w:www.ilesconsulting.co.uk

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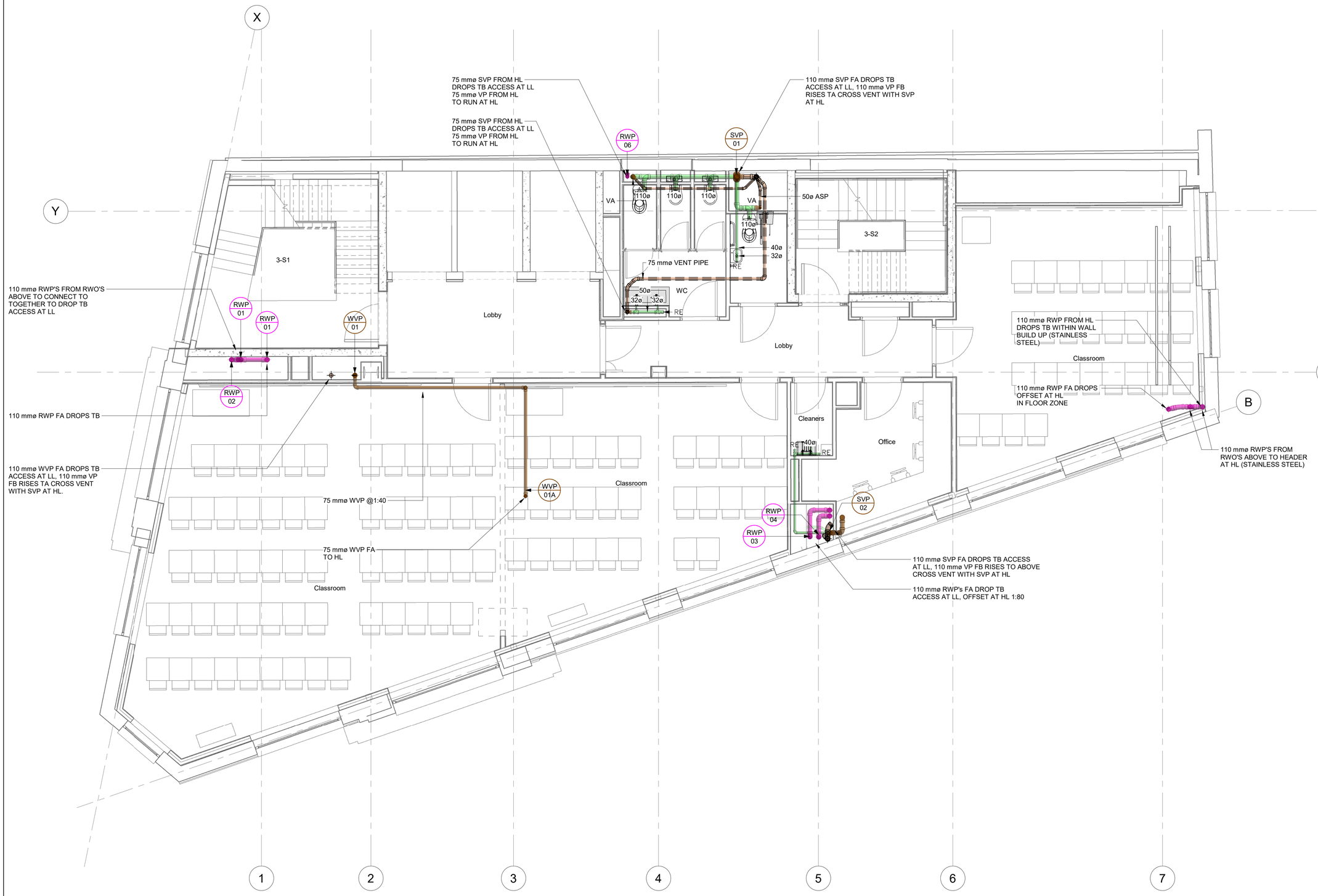

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12. **Testing** – All soil, waste, ventilating and rainwater pipework will be air and performance tested in accordance with the requirements of British Standard BS EN 12056:2000.
13. FCU Condensate connections not shown, refer to schematics for details.

Rev.	Description	Drawn	Ch'kd	Date
C7	ISSUED FOR CONSTRUCTION	SRW	MI	11.02.20
C6	ISSUED FOR CONSTRUCTION	SRW	MI	31.01.20
C5	ISSUED FOR CONSTRUCTION	SRW	DG	17.10.19
C4	ISSUED FOR CONSTRUCTION	SRW	DG	16.10.19

For Construction

Architect
GIBBERD

Client
ELEMENTS M&E CONTRACTING LTD

Project
CAMBRIDGE HOUSE, BIRKBECK COLLEGE

Drawing Title:
THIRD FLOOR
DRAINAGE LAYOUT

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REVIT Directory: I:\Projects\19-000\19-011\Drawings\

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Dwg No: 19-011-M-52-03-001 | Rev: C7

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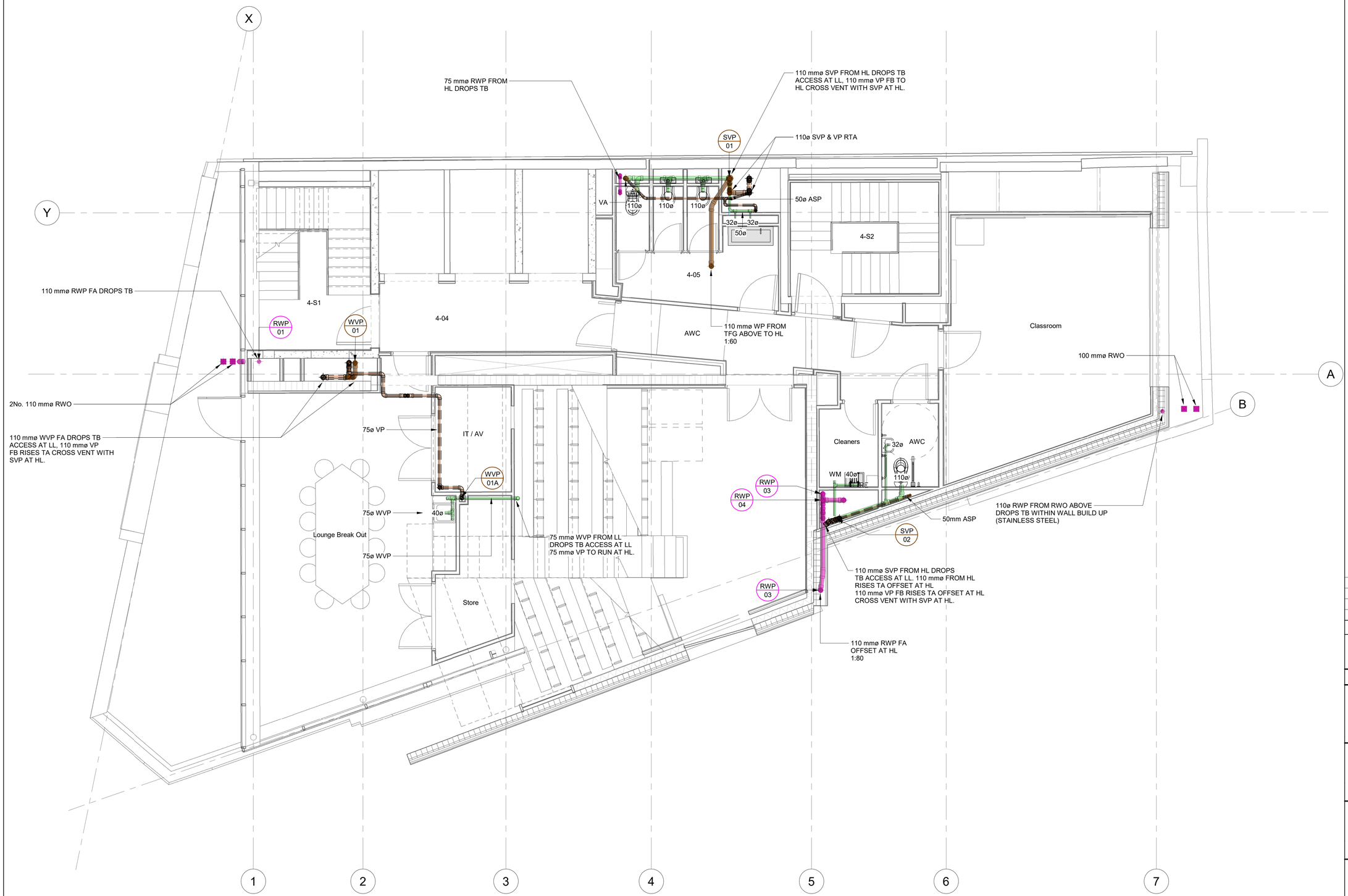

DO NOT SCALE. THE CONTRACTOR IS RESPONSIBLE FOR CHECKING DIMENSIONS WHICH ARE IN MILLIMETRES UNLESS OTHERWISE STATED.

LEGEND

SVP	-	SOIL VENT PIPE
SP	-	SOIL PIPE
WVP	-	WASTE VENT PIPE
WP	-	WASTE PIPE
VP	-	VENT PIPE
ASP	-	ANTI-SYPHON PIPE
RE	-	RODDING EYE
VA	-	VERTICAL ACCESS
CWP	-	CONDENSATE WASTE PIPE
WT	-	WATERLESS TRAP
DW	-	DISHWASHER PROVISION
SFD	-	SHOWER FLOOR DRAIN
TFG	-	TRAPPED FLOOR GULLEY
RWO	-	RAINWATER OUTLET
RWP	-	RAINWATER PIPE
ROF	-	RAINWATER OUTFALL

HIGH LEVEL SANITARY PIPE

LOW LEVEL SANITARY PIPE

VENT PIPE

RAINWATER PIPE

Soil, Waste and Rainwater Installations Notes:

1. **Pipework, Soil, Waste & Rainwater Pipework** – All soil, waste & rainwater and ventilating pipework of sizes 50mm and above will be carried out in High Density Polyethylene (HDPE) to BS EN 1519 with electro-sleeve coupling joints Polypipe Terrain "Fuze". Expansion will be taken up by means of proprietary expansion sleeve couplings at 3.0m centres with accompanying anchor brackets to restrict movement. All pipework running exposed within plant or store area shall be cast iron.
2. **Pipework, Concealed Within Cladding** – In order to prevent the spread of flame, all pipework and fittings located behind cladding will be carried out in push-fit austenitic stainless steel Grade AISI 304 with push-fit joints as manufactured by Blücher (UK) from their "Europipe" range of pipework and fittings. All pipework and fittings for continuity of quality and compatibility will be obtained from the same manufacturer. Plastics/combustible pipework materials will NOT be utilised for this purpose.
3. **Pipework, Branches to Appliances and Sanitaryware** – All traps will be two-piece tubular polypropylene to BS 3943:1979. All waste water pipework serving the water heaters will be carried out in copper Table X.
4. **WC Connectors** – Connections between the WC pan and soil header will be made using proprietary angled pan connectors to suit the gradient involved. Opposing connections will be arranged offset to alleviate any problems with cross-flow. Flexible WC pan connectors will NOT be utilised for this purpose.
5. **Rainwater Outlets** – Rainwater outlets will be supplied and installed by others.
6. **Exposed Pipework** – All exposed pipework will be carried out in chromium plated copper as described within the water services pipework section.
7. **Access** – Access for soil, waste and ventilating pipework will be provided at each floor level, changes in direction, major junctions, at the heads of the runs and as required for testing. Access for rainwater pipework will be provided at alternate floor levels, changes in direction, major junctions, at the heads of the runs and as required for testing.
8. **Installation** – Throughout the duration of the works the manufacturers' instructions, requirements and recommendations will be adhered to at all times. All pipework will be installed to allow free and easy draining of the system under normal operating conditions by maintaining a fall of no less than 1:40 unless stated otherwise on the drawings. Vertical pipework will be installed true and plumb. All branches will be configured so as to be swept at 45° in the direction of flow. All bends and changes in direction will be formed using long radius bends or 2Nº 45° bends "knuckle" type bends will not be used. All works will to be carried out in accordance with the requirements of the current British Standard BS EN 12056:2000 and the Building Regulations.
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Rev.	Description	Drawn	Ch'kd	Date
C7	ISSUED FOR CONSTRUCTION	SRW	MI	11.02.20
C6	ISSUED FOR CONSTRUCTION	SRW	MI	31.01.20
C5	ISSUED FOR CONSTRUCTION	SRW	DG	17.10.19
C4	ISSUED FOR CONSTRUCTION	SRW	DG	16.10.19

For Construction

Architect
GIBBERD

Client
ELEMENTS M&E CONTRACTING LTD

Project
CAMBRIDGE HOUSE, BIRKBECK COLLEGE

Drawing Title:
FOURTH FLOOR
DRAINAGE LAYOUT

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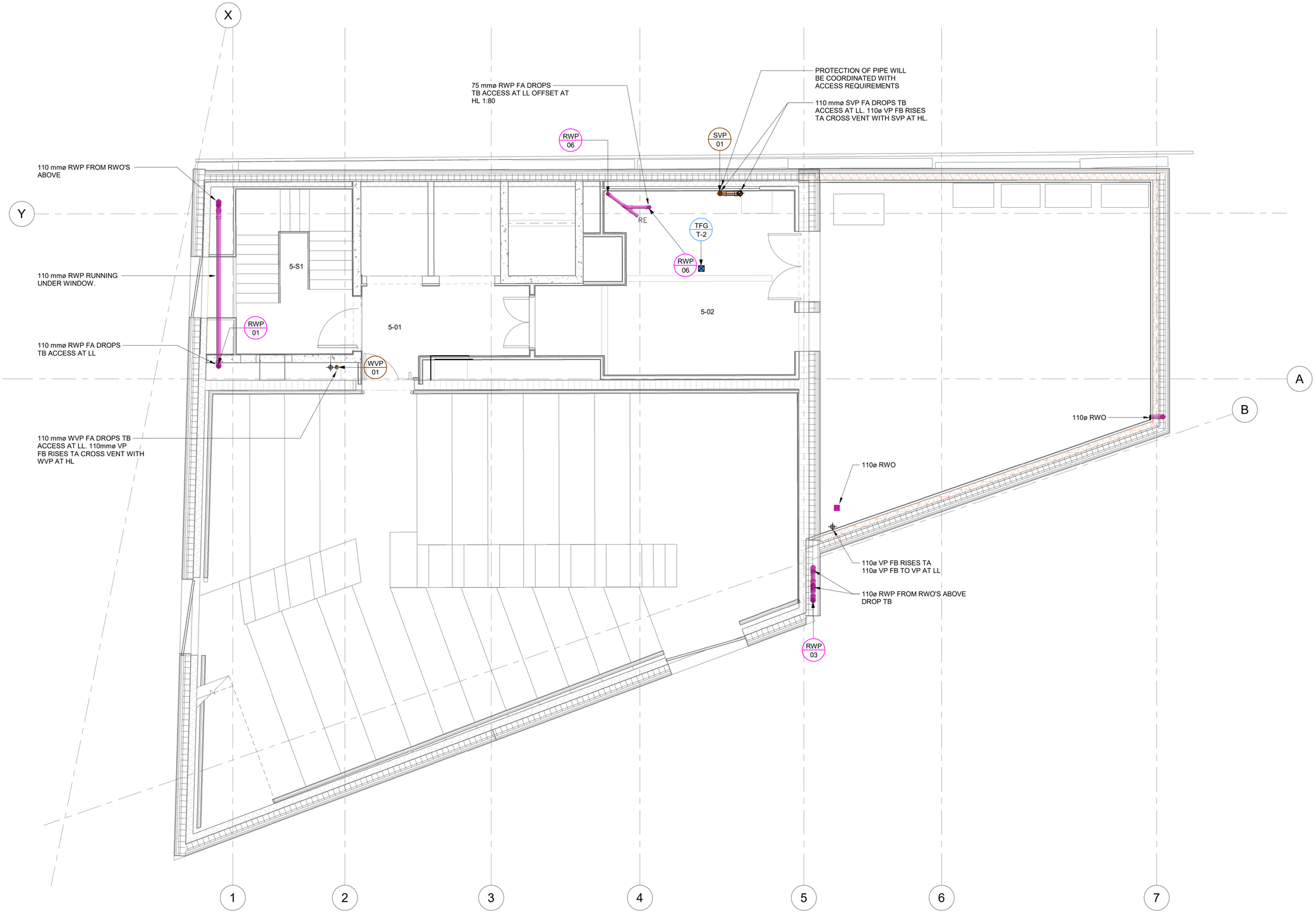
REVIT Directory: I:\Projects\19-000\19-011\Drawings\

Drawing Size: A1 | Scale: 1 : 50

Dwg No: 19-011-M-52-04-001 | Rev: C7



DO NOT SCALE. THE CONTRACTOR IS RESPONSIBLE FOR CHECKING DIMENSIONS WHICH ARE IN MILLIMETRES UNLESS OTHERWISE STATED.

LEGEND

SVP	-	SOIL VENT PIPE
SP	-	SOIL PIPE
WVP	-	WASTE VENT PIPE
WP	-	WASTE PIPE
VP	-	VENT PIPE
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VA	-	VERTICAL ACCESS
CWP	-	CONDENSATE WASTE PIPE
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DW	-	DISHWASHER PROVISION
SFD	-	SHOWER FLOOR DRAIN
TFG	-	TRAPPED FLOOR GULLEY
RWO	-	RAINWATER OUTLET
RWP	-	RAINWATER PIPE
ROF	-	RAINWATER OUTFALL

HIGH LEVEL SANITARY PIPE
LOW LEVEL SANITARY PIPE
VENT PIPE
RAINWATER PIPE

Soil, Waste and Rainwater Installations Notes:

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13. FCU Condensate connections not shown, refer to schematics for details.

Rev.	Description	Drawn	Ch'kd	Date
C6	ISSUED FOR CONSTRUCTION	SRW	MI	11.02.20
C5	ISSUED FOR CONSTRUCTION	SRW	MI	31.01.20
C4	ISSUED FOR CONSTRUCTION	SRW	DG	17.10.19
C3	ISSUED FOR CONSTRUCTION	SRW	DG	16.10.19

For Construction

Architect
GIBBERD

Client
ELEMENTS M&E CONTRACTING LTD

Project
CAMBRIDGE HOUSE, BIRKBECK COLLEGE

Drawing Title:
FIFTH FLOOR
DRAINAGE LAYOUT

iles consulting
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REVIT Directory: I:\Projects\19-000\19-011\Drawings\

Drawing Size: A1 | Scale: 1 : 50

Dwg No: 19-011-M-52-05-001 | Rev: C6

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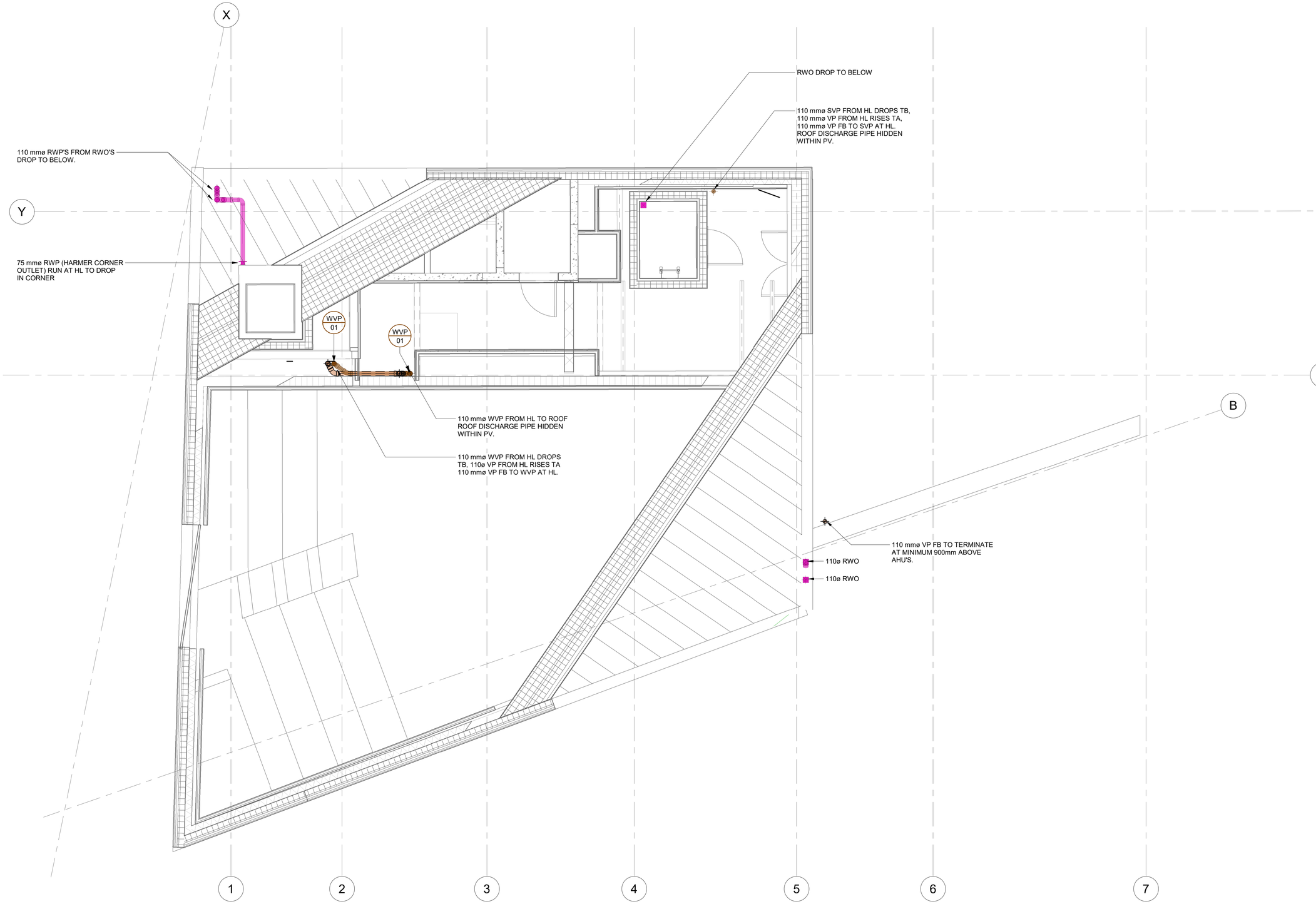

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LEGEND

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LOW LEVEL SANITARY PIPE
VENT PIPE
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Rev.	Description	Drawn	Ch'kd	Date
C6	ISSUED FOR CONSTRUCTION	SRW	MI	11.02.20
C5	ISSUED FOR CONSTRUCTION	SRW	MI	31.01.20
C4	ISSUED FOR CONSTRUCTION	SRW	DG	16.10.19
C3	ISSUED FOR CONSTRUCTION	SRW	DG	14.08.19

For Construction

Architect
GIBBERD

Client
ELEMENTS M&E CONTRACTING LTD

Project
CAMBRIDGE HOUSE, BIRKBECK COLLEGE

Drawing Title:
FIFTH MEZZANINE FLOOR DRAINAGE LAYOUT

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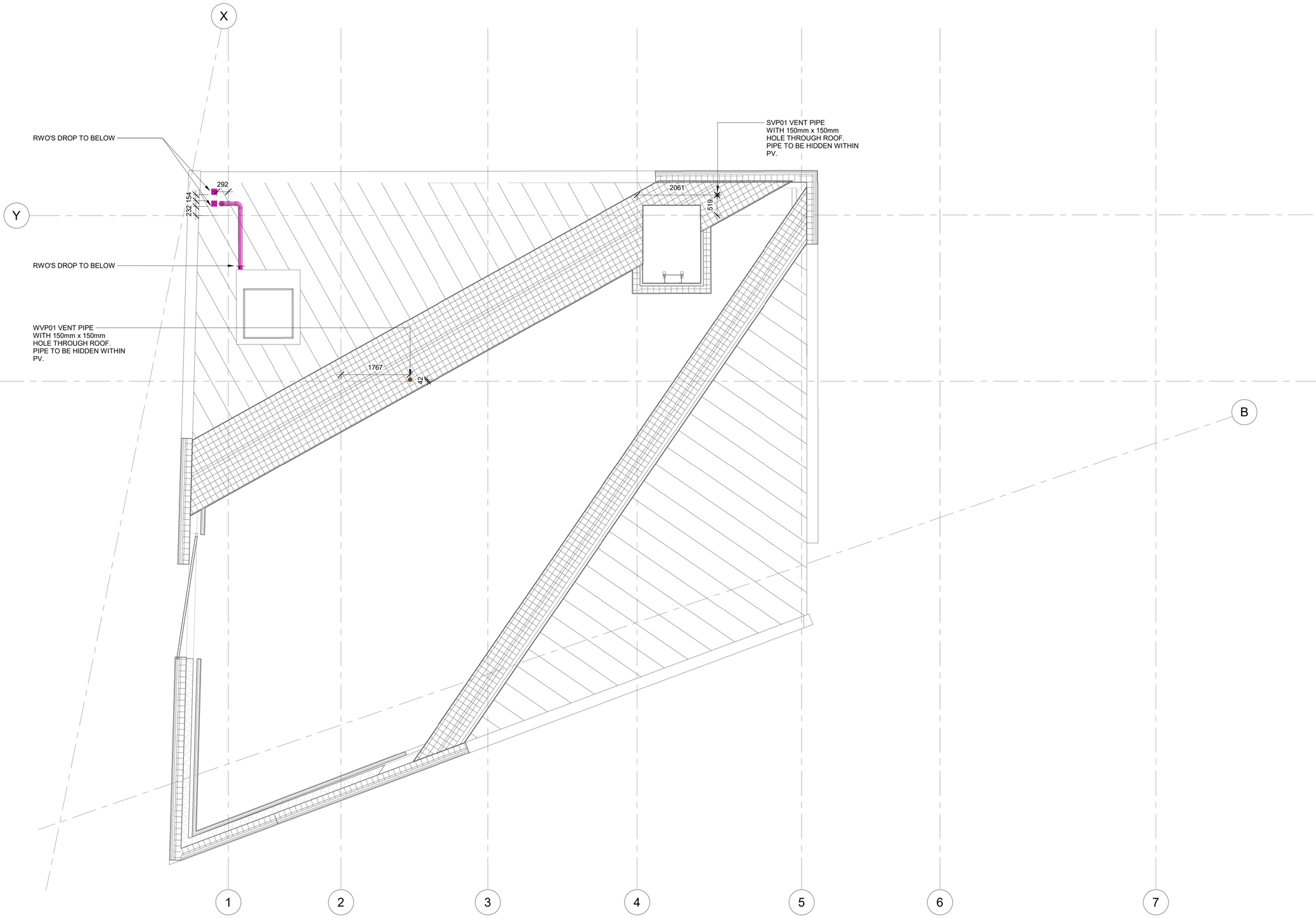
REVIT Directory: I:\Projects\19-000\19-011\Drawings\

Drawing Size: A1 | Scale: 1 : 50

Dwg No: 19-011-M-52-05M-001 | Rev: C6

Plotted:12/02/2020 09:48:11



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LEGEND

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HIGH LEVEL SANITARY PIPE
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Rev.	Description	Drawn	Ch'kd	Date
C3	ISSUED FOR CONSTRUCTION	SRW	MI	11.02.20
C2	ISSUED FOR CONSTRUCTION	SRW	DB	31.01.20
C1	ISSUED FOR CONSTRUCTION	SRW	DG	16.10.19

For Construction

Architect
GIBBERD

Client
ELEMENTS M&E CONTRACTING LTD

Project
CAMBRIDGE HOUSE, BIRKBECK COLLEGE

Drawing Title:
ROOF LEVEL
DRAINAGE LAYOUT

iles consulting IC
ENGINEERING EXCELLENCE
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REVIT Directory: I:\Projects\19-000\19-011\Drawings\

Drawing Size: A1 | Scale: 1 : 50

Dwg No: 19-011-M-52-RF-001 | Rev: C3

Plotted:12/02/2020 09:46:38