

MECHANICAL DRAWINGS

BY

MENNA NASSER

JULY - 2024

List of Drawings

Project Name : Villa Mousa

No	System Type	Title	LEVEL	Scale	sheet
01	General	Mechanical Drawings	-	NR	A2
02		List of Drawings	-	NR	A2
03		Reflecting Ceiling Plan	-	1:100	A2
04	HVAC Work	Color Coding	G.F	1:100	A2
05		Equipment Info , Floor	G.F	1:100	A2
06		Equipment Info , Roof	R.F	1:100	A2
07		Duct Work	G.F	1:100	A2
08		Schedules	-	NR	A2
09		Details	-	NR	A2
10	Fire Fighting Work	Color Coding	G.F	1:100	A2
11		Distribution	G.F	1:100	A2
12		Piping	G.F	1:100	A2
13		Details	-	NR	A2
14	Plumbing Work	Color Coding	G.F	1:100	A2
15		Domestic Floor	G.F	1:100	A2
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17		Drain Floor	G.F	1:100	A2
18		Drain Roof	R.F	1:100	A2
19		Details	-	NR	A2



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PROJECT NAME

VILAA MOUSA

GENERAL CONSULTANT

ASEC

GENERAL CONTRACTOR

Engineers

SHEET TITLE

List of Drawings

Univeristy

BENHA

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SCALE

SHEET NO

NR

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PROJECT NAME

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SHEET TITLE

Reflecting
Ceiling Plan

University

BENHA

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Ground Ceiling Plan - RCP
1:100

LEGEND

	DUCT CONCEALED UNIT		INLINE FAN		SUPPLY LINEAR SLOT		SUPPLY BAR GRILLE		PENDENT AT 93° C	GFC	GROUND CASSETEL
	CASSETTE UNIT		WALL MOUNTED		RETURN LINEAR SLOT		RETURN BAR GRILLE		PENDENT AT 68° C	GFD	GROUND DUCT
	HI WALL SPLIT UNIT		ACCESS DOOR		EXHAUST SQ-DIFFUSER		EXHAUST RO-DIFFUSER		TRANSFER DUCT	GFS	GROUND SPLIT
										SAD	SUPPLY AIR DUCT
										RAD	RETURN AIR DUCT
										TRD	TRANSFER DUCT

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PROJECT NAME

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SHEET TITLE

HVAC Color Coding

Univeristy

BENHA

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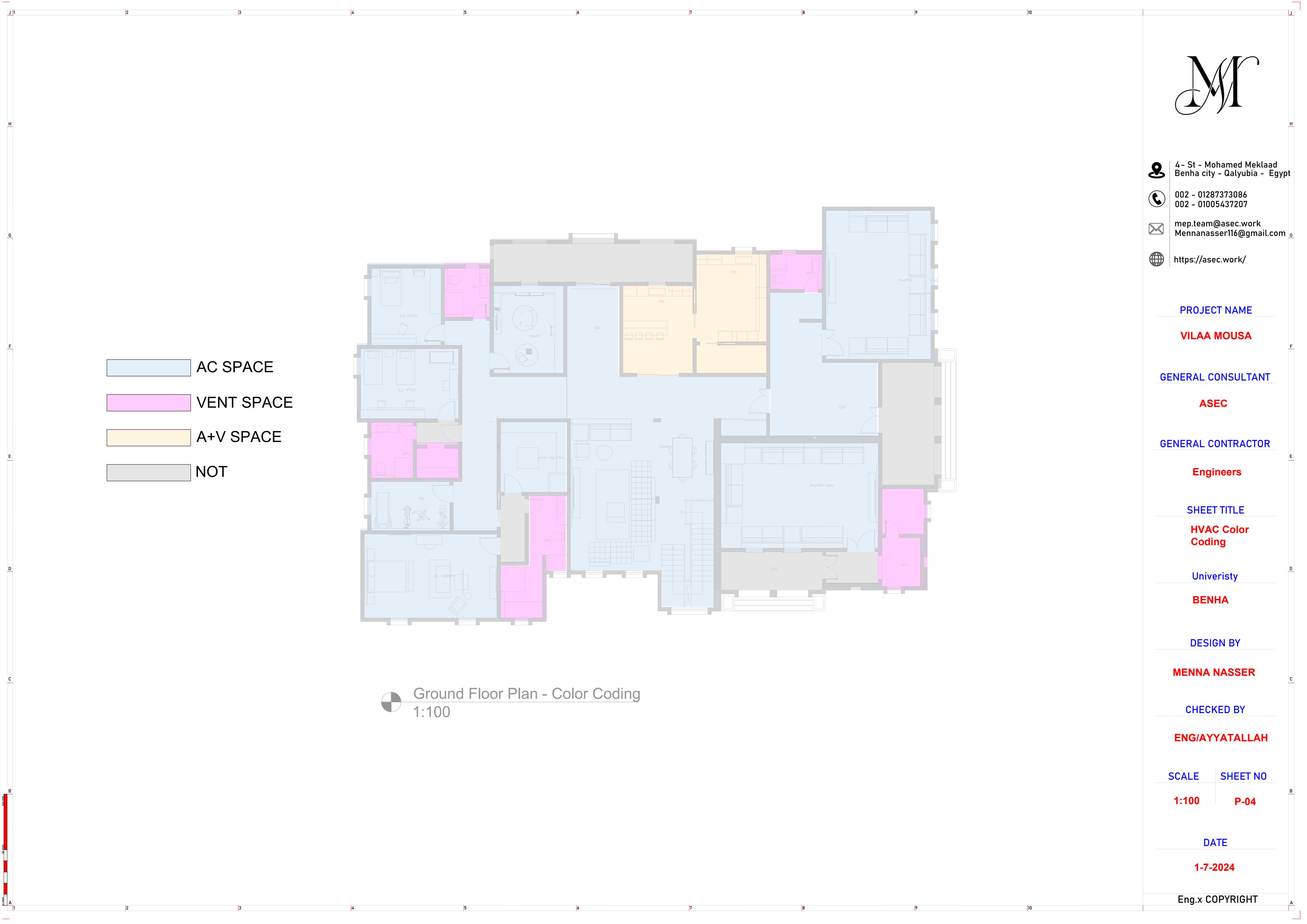
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Ground Floor Plan - Color Coding
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PROJECT NAME

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Equipment Info

University

BENHA

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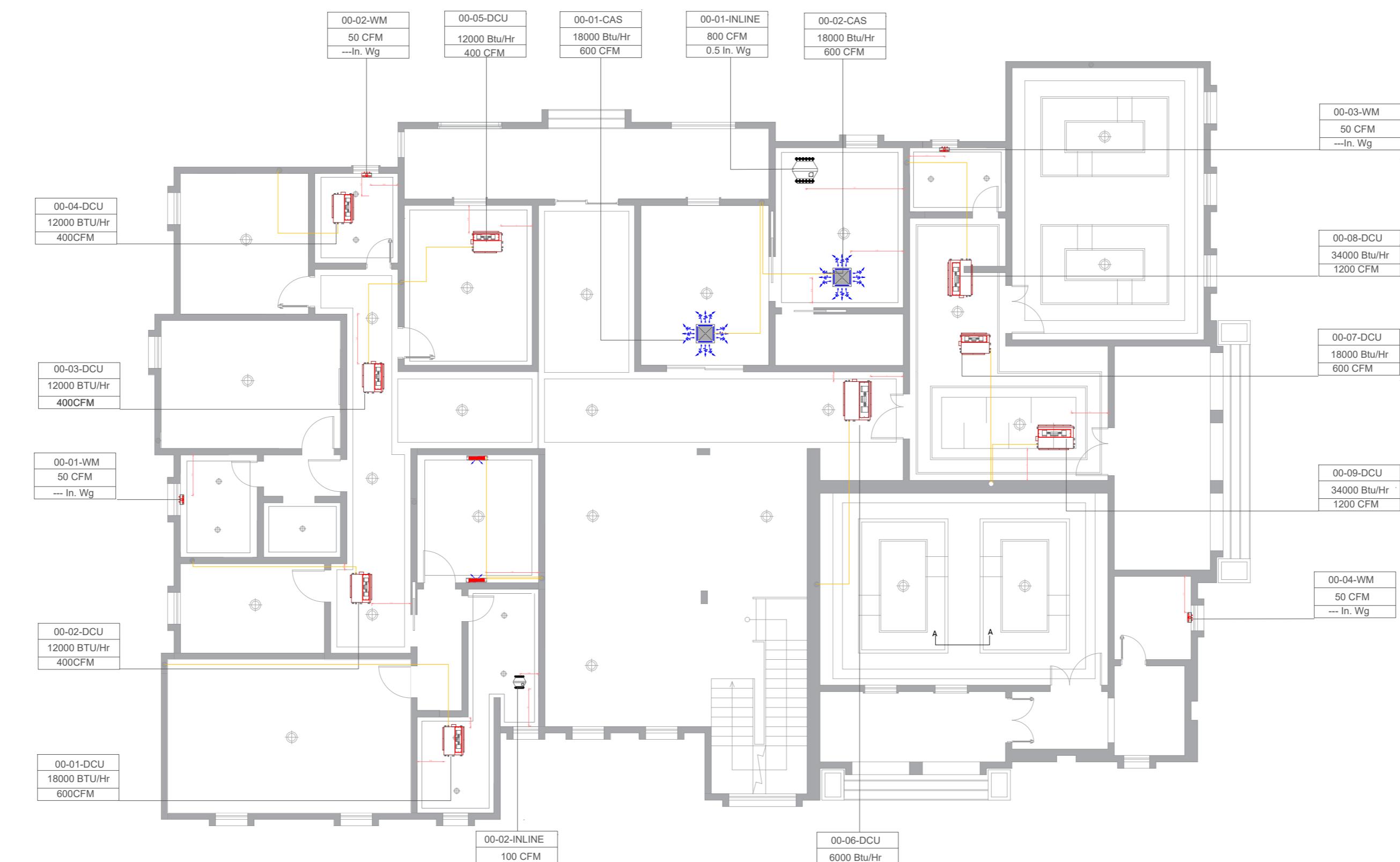
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Ground Ceiling Plan - Equipment Info
1:100

LEGEND

	DUCT CONCEALED UNIT		INLINE FAN		SUPPLY LINEAR SLOT		SUPPLY BAR GRILLE		PENDENT AT 93° C	GFC	GROUND CASSETTE
	CASSETTE UNIT		WALL MOUNTED		RETURN LINEAR SLOT		RETURN BAR GRILLE		PENDENT AT 68° C	GFD	GROUND DUCT
	HI WALL SPLIT UNIT		ACCESS DOOR		EXHAUST SQ-DIFFUSER		EXHAUST RO-DIFFUSER		TRANSFER DUCT	GFS	GROUND SPLIT
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Equipment Info

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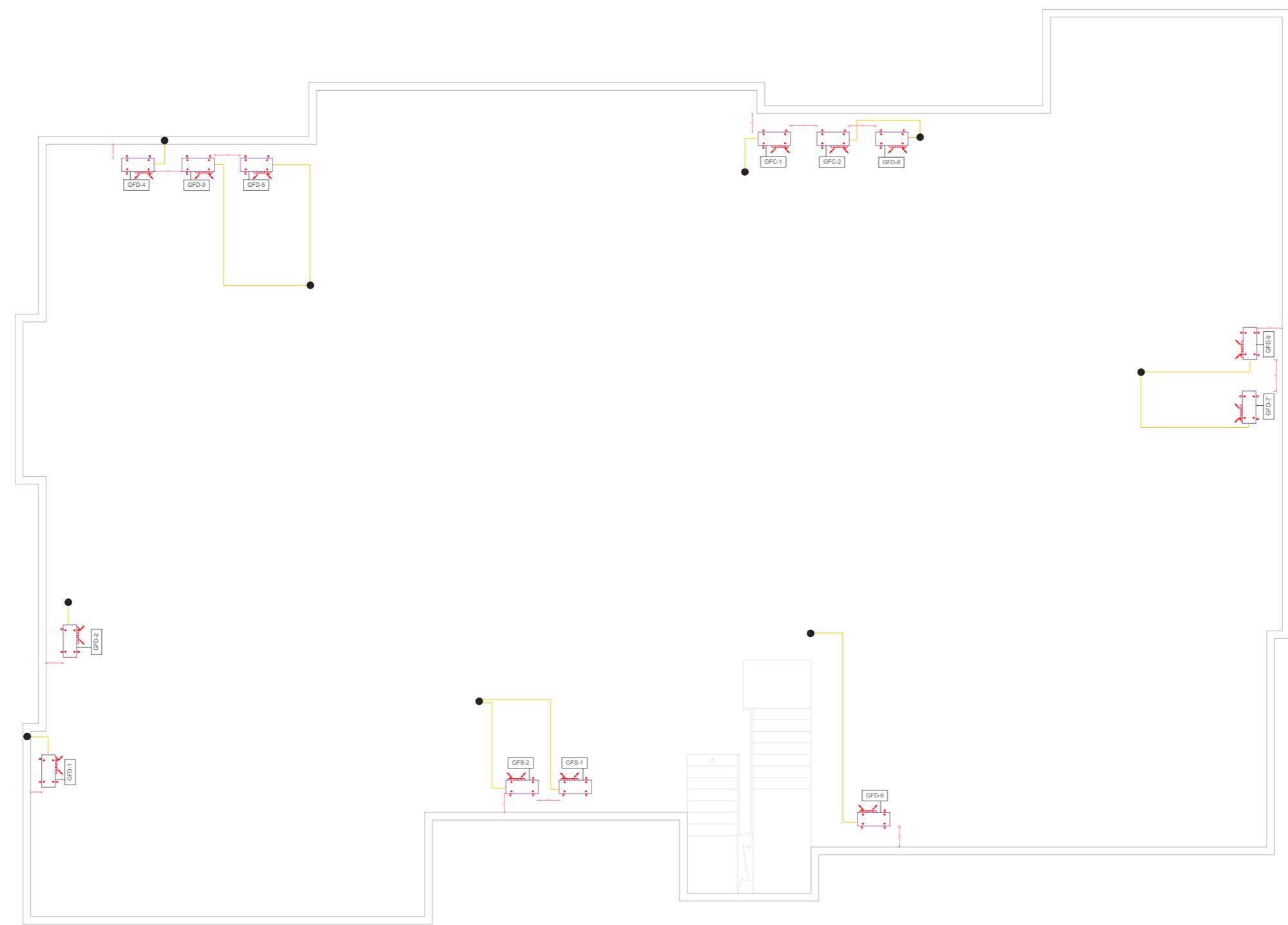
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Roof Floor Plan - Equipment Info
1:100

LEGEND

	DUCT CONCEALED UNIT		INLINE FAN		SUPPLY LINEAR SLOT		SUPPLY BAR GRILLE		PENDENT AT 93° C	GFC	GROUND CASSETTE
	CASSETTE UNIT		WALL MOUNTED		RETURN LINEAR SLOT		RETURN BAR GRILLE		PENDENT AT 68° C	GFD	GROUND DUCT
	HI WALL SPLIT UNIT		ACCESS DOOR		EXHAUST SQ-DIFFUSER		EXHAUST RO-DIFFUSER		TRANSFER DUCT	GFS	GROUND SPLIT
										SAD	SUPPLY AIR DUCT
										RAD	RETURN AIR DUCT
										TRD	TRANSFER DUCT

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Ducts Work

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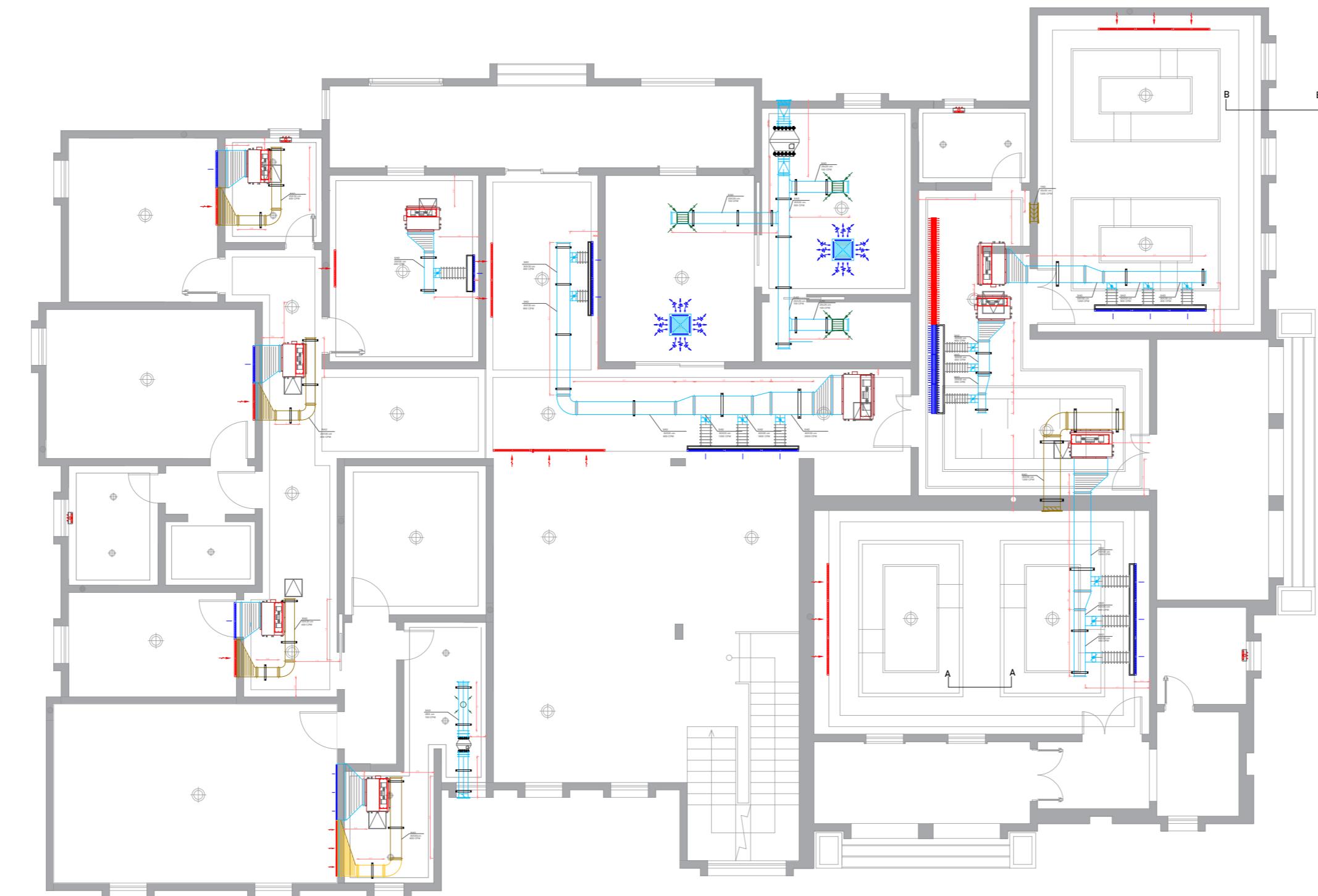
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Ground Ceiling Plan -Ducts Work
1:100

LEGEND

	DUCT CONCEALED UNIT		INLINE FAN		SUPPLY LINEAR SLOT		SUPPLY BAR GRILLE		PENDENT AT 93° C	GFC	GROUND CASSETTE
	CASSETTE UNIT		WALL MOUNTED		RETURN LINEAR SLOT		RETURN BAR GRILLE		PENDENT AT 68° C	GFD	GROUND DUCT
	HI WALL SPLIT UNIT		ACCESS DOOR		EXHAUST SQ-DIFFUSER		EXHAUST RO-DIFFUSER		TRANSFER DUCT	GFS	GROUND SPLIT
										SAD	SUPPLY AIR DUCT
										RAD	RETURN AIR DUCT
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HVAC Schedules

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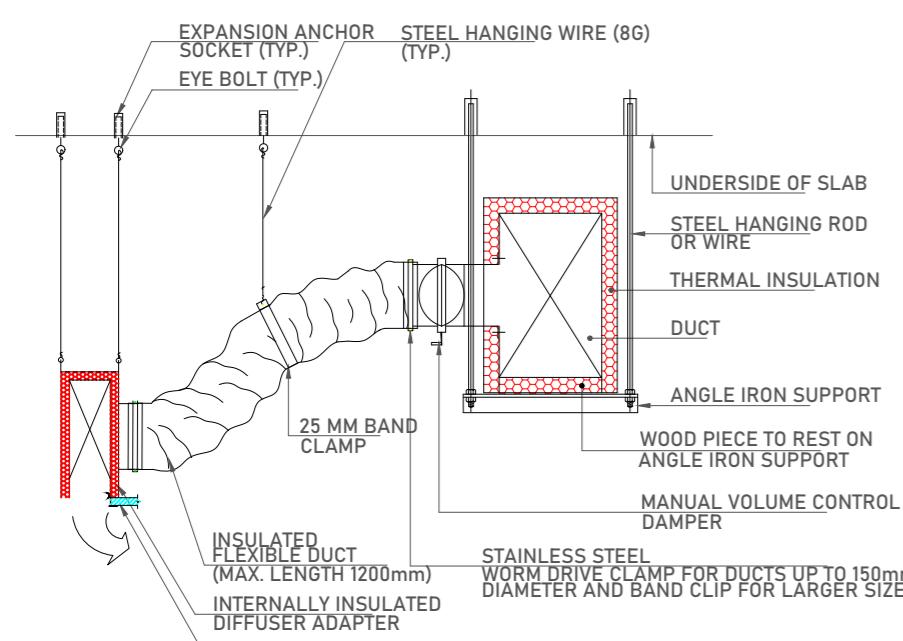
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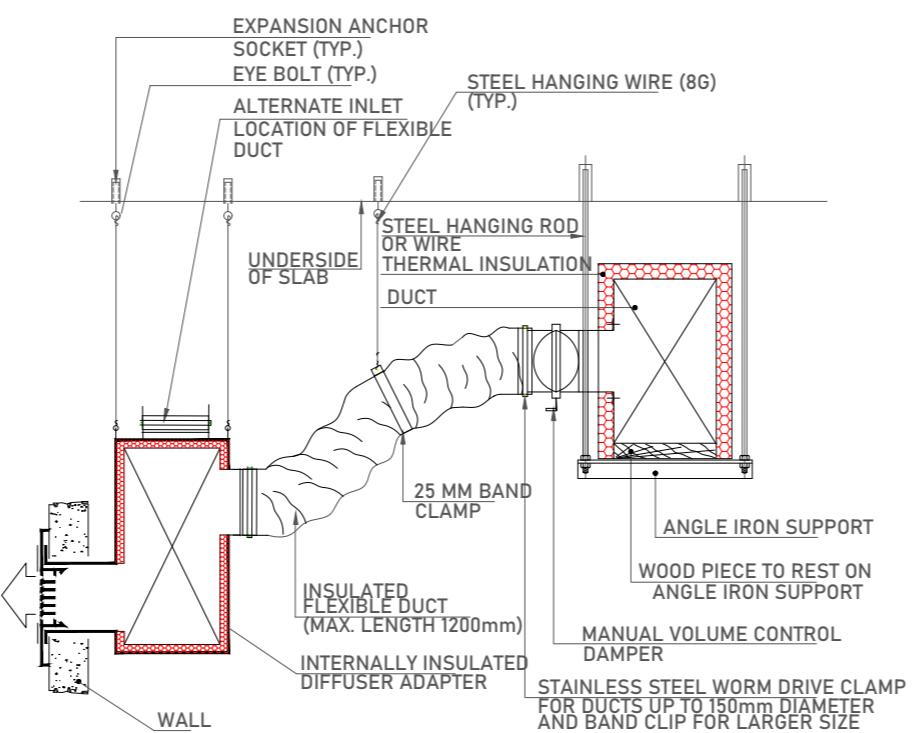
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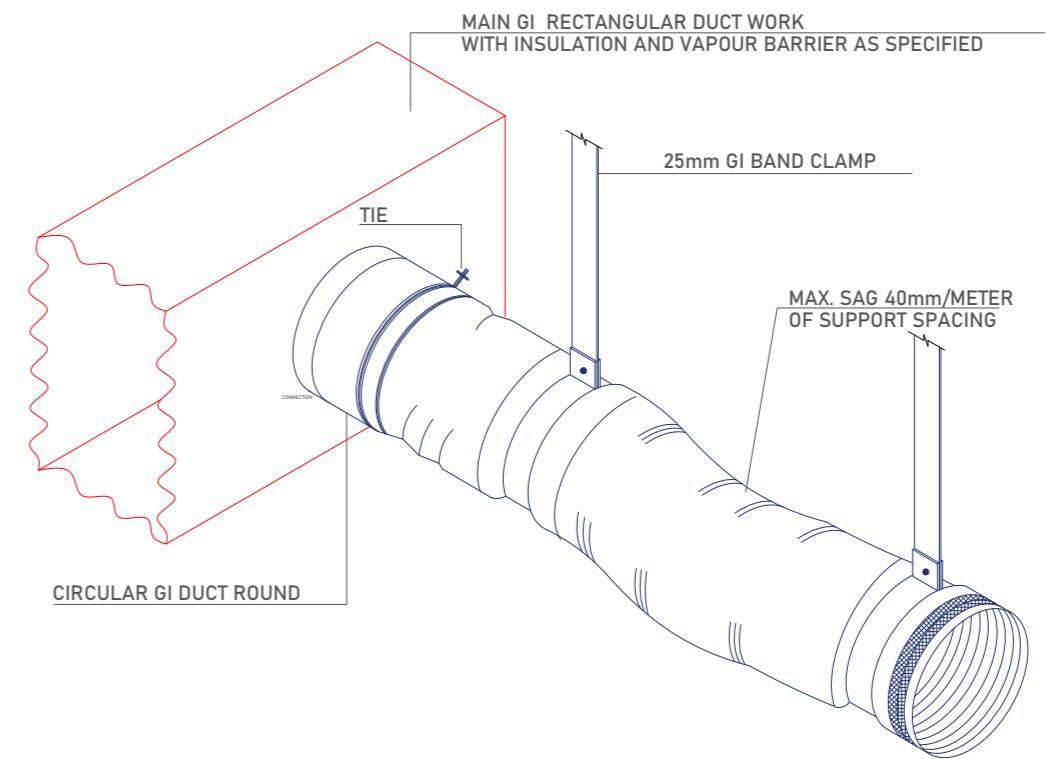
Load Estimation Schedule							Fan Schedule				
NO.	System Name	Space Name	Area	T.R	CFM	Air Terminal	NO.	Name	Type	Inwg	CFM
01	00-01-DCU	00-01-Master	36.5 m ²	1.50	600	150x10-SBG 150x10-RBG	01	00-01-WM	Wall Mounted	-	50
02	00-02-DCU	00-02-Gym	12.6 m ²	1.00	400	100x10-SBG 100x10-RBG	02	00-02-WM	Wall Mounted	-	50
03	00-03-DCU	00-03-Bed	22.6 m ²	1.00	400	100x10-SBG 100x10-RBG	03	00-03-WM	Wall Mounted	-	50
04	00-04-DCU	00-04-Bed	17.6 m ²	1.00	400	100x10-SBG 100x10-RBG	04	00-04-WM	Wall Mounted	-	50
05	00-05-DCU	00-05-Gaming	20.0 m ²	1.00	400	100x10-SBG 100x10-RBG	05	00-01-INLINE	Inline	0.5	350
06	00-06-DCU	00-06-Living	123 m ²	5.00	2000	500x10-SBG 500x10-RBG	06	00-02-INLINE	Inline	0.5	100
07	00-07-DCU	00-07-Entra	37.8 m ²	1.50	600	300x3S-SLD 300x3S-RLD					
08	00-08-DCU	00-08-Man	51.0 m ²	3.00	1200	300x10-SPG 300x10-RPG					
09	00-09-DCU	00-09-Women	54.0 m ²	3.00	1200	300x10-SPG 300x10-RPG					
10	00-01-SPLT	00-10-Elec	15.2 m ²	1.00	400						
11	00-01-CAS	00-11-Kitchen	20.0 m ²	1.50	600						
12	00-02-CAS	00-12-Kitchen	20.0 m ²	1.50	600						



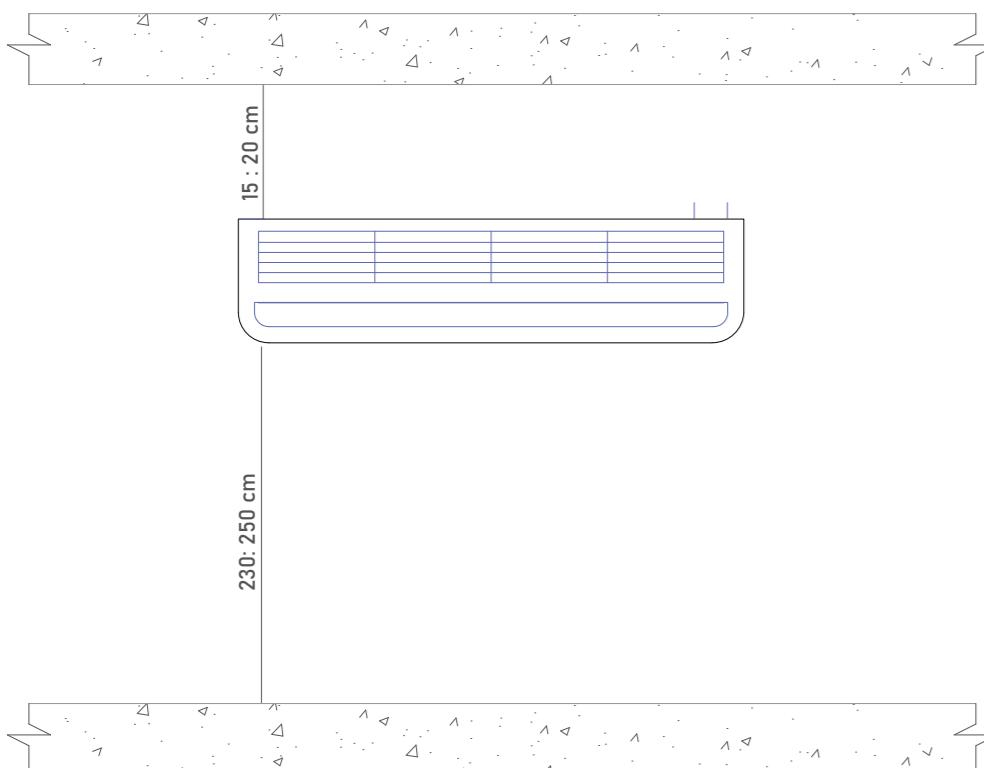
DUCT CONNECTED WITH LINEAR SLOT



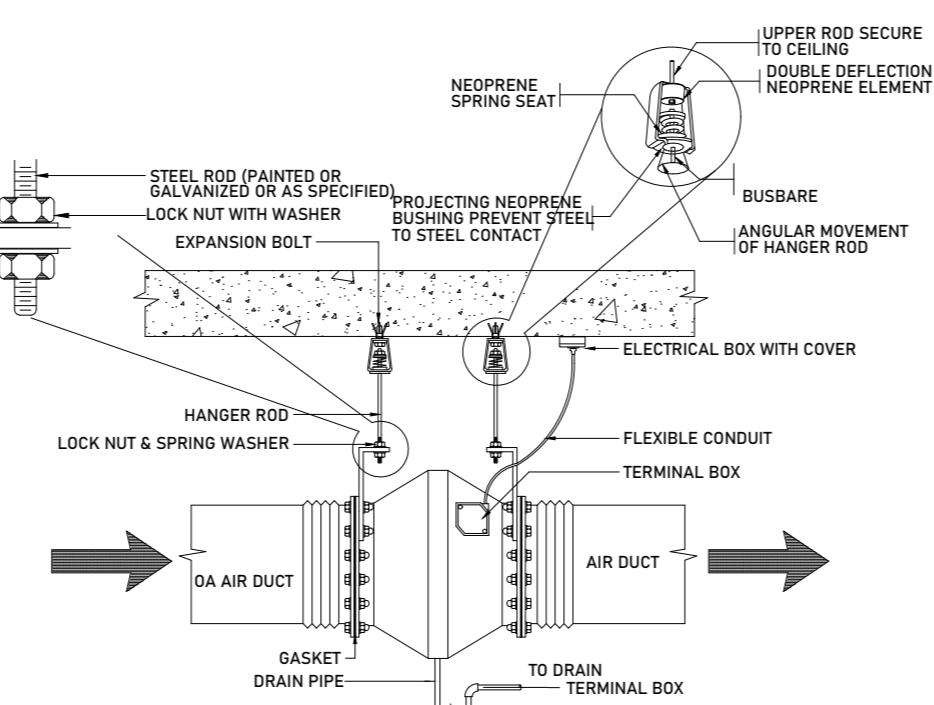
DUCT CONNECTED WITH BAR SLOT



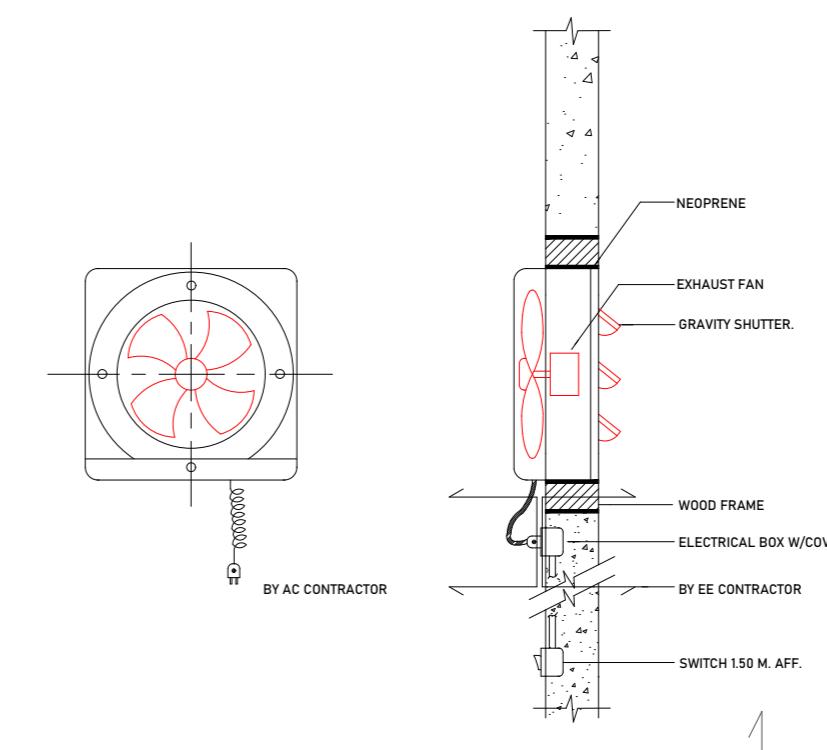
FLEXIBLE DUCT



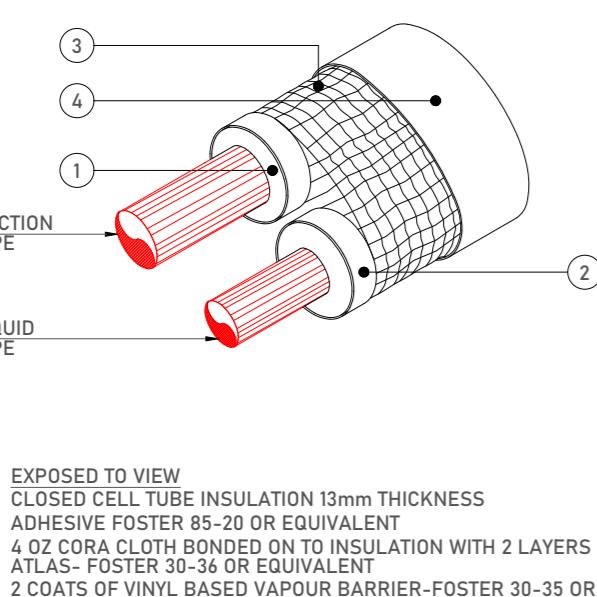
SPLIT UNIT



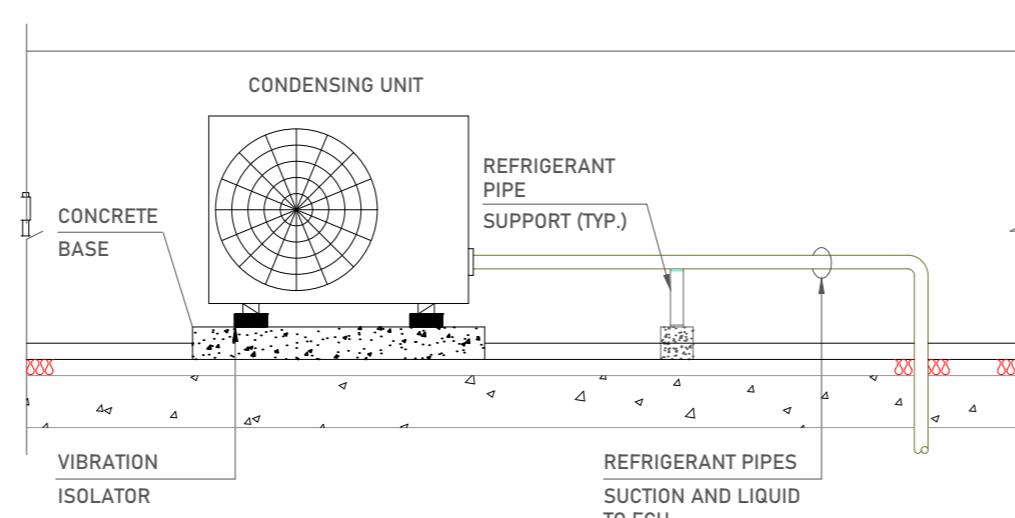
INLINE FAN



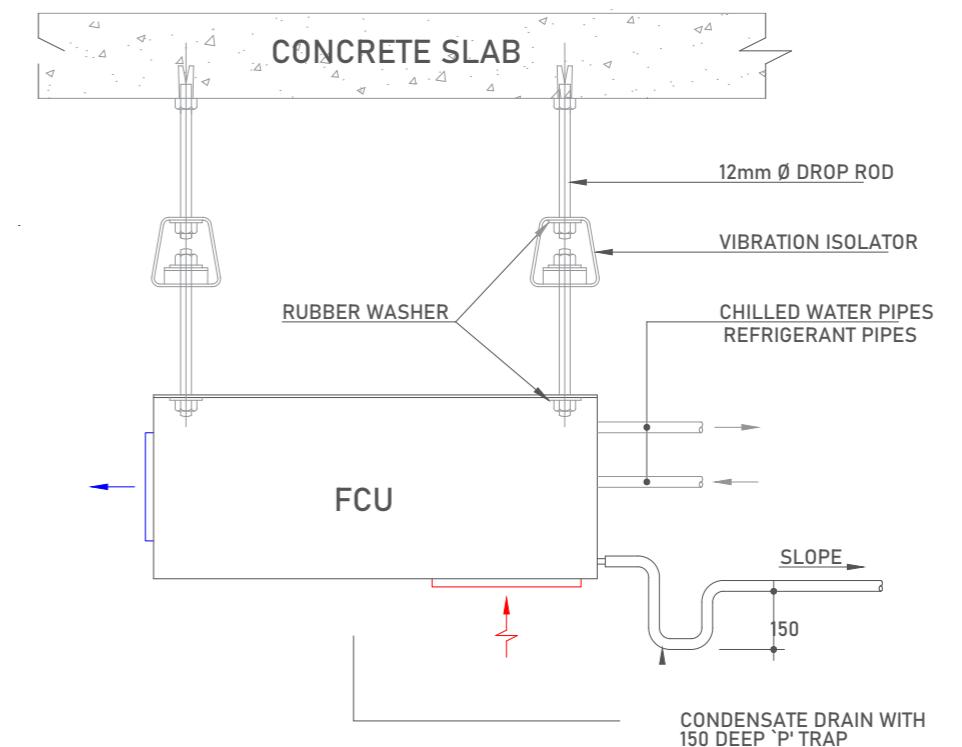
WALL MOUNTED



COPPER PIPE



OUT DOOR UNIT



FAN COIL UNIT

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SHEET TITLE

HVAC Details

Univeristy

BENHA

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NR **P-04**

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PROJECT NAME

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Engineers

SHEET TITLE

Fire Color Coding

Univeristy

BENHA

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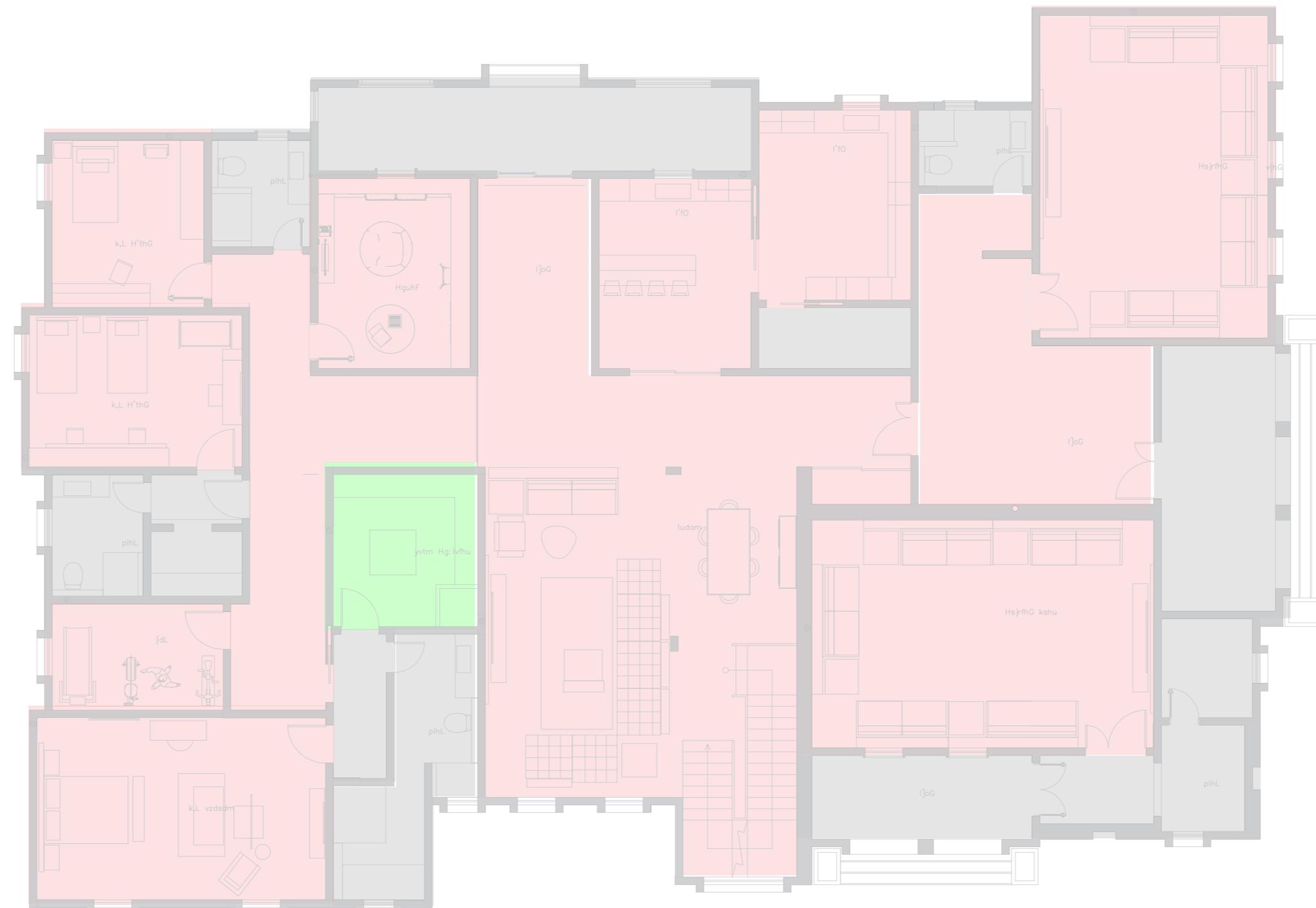
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Ground Floor Plan - Color Coding
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PROJECT NAME

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Engineers

SHEET TITLE

Fire Distribution

University

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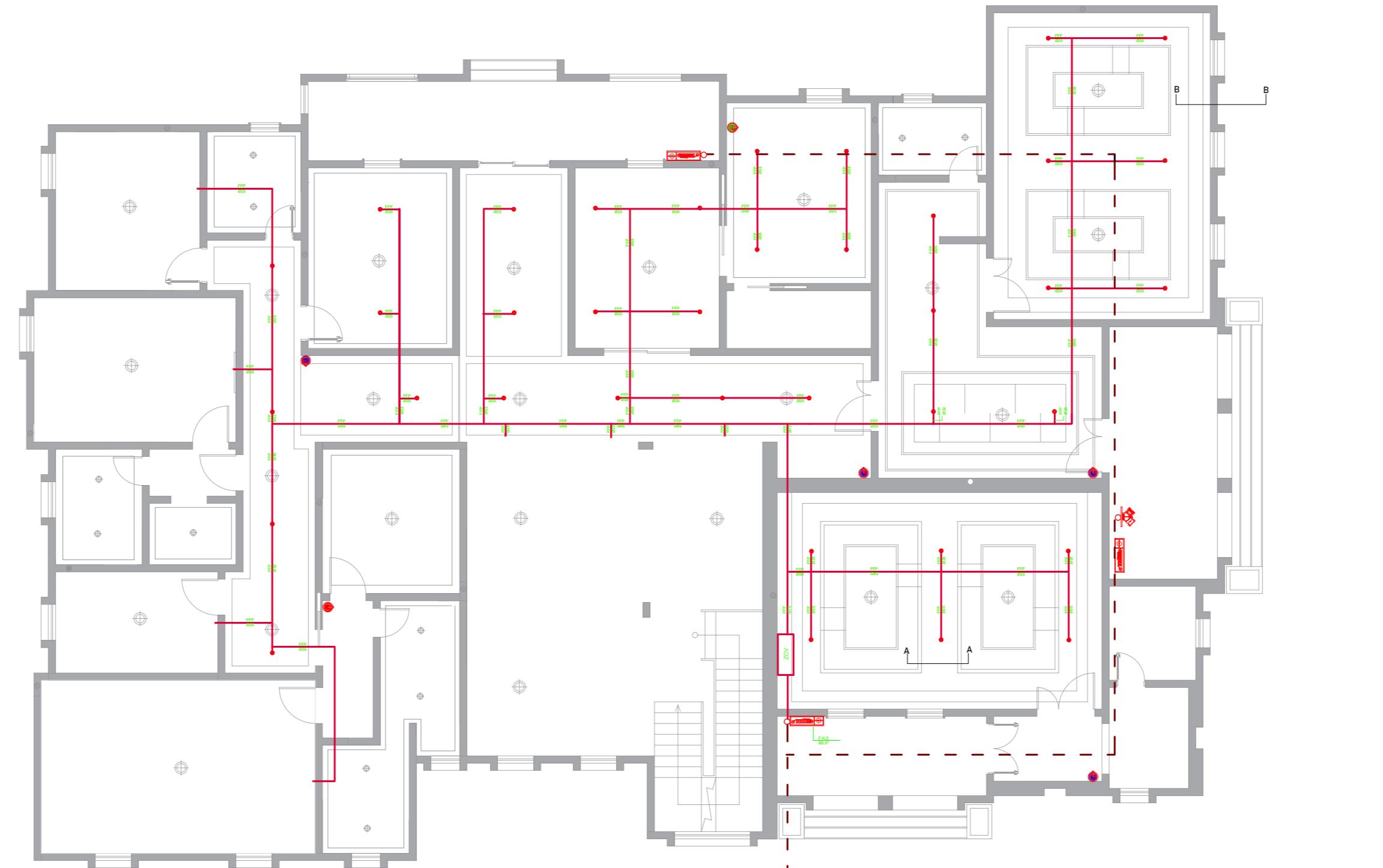




Ground Floor Plan - Distribution

1:100

M



Ground Floor Plan - Piping
1:100

LEGEND

	PENDENT AT 93° C		WET		DIESEL PUMP		FIRE DEPARTMENT	ZCV	ZONE CONTROL VALVE		
	PENDENT AT 68° C		CO ₂		FIRE HOSE CABINET		JOKEY PUMP	FFP	FIRE FIGHTING PIPE		
	SIDE SPRINKLER		DRY		ELECTRICAL PUMP		SEBMERISLE PUMP	HDPE	HIGH -DENSITY POLYETHYIENE		
								FHC	FIRE HOSE CABINET		
									EXCESS DOOR		

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Engineers

SHEET TITLE

Fire Piping

University

BENHA

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Engineers

SHEET TITLE

Fire Details

Univeristy

BENHA

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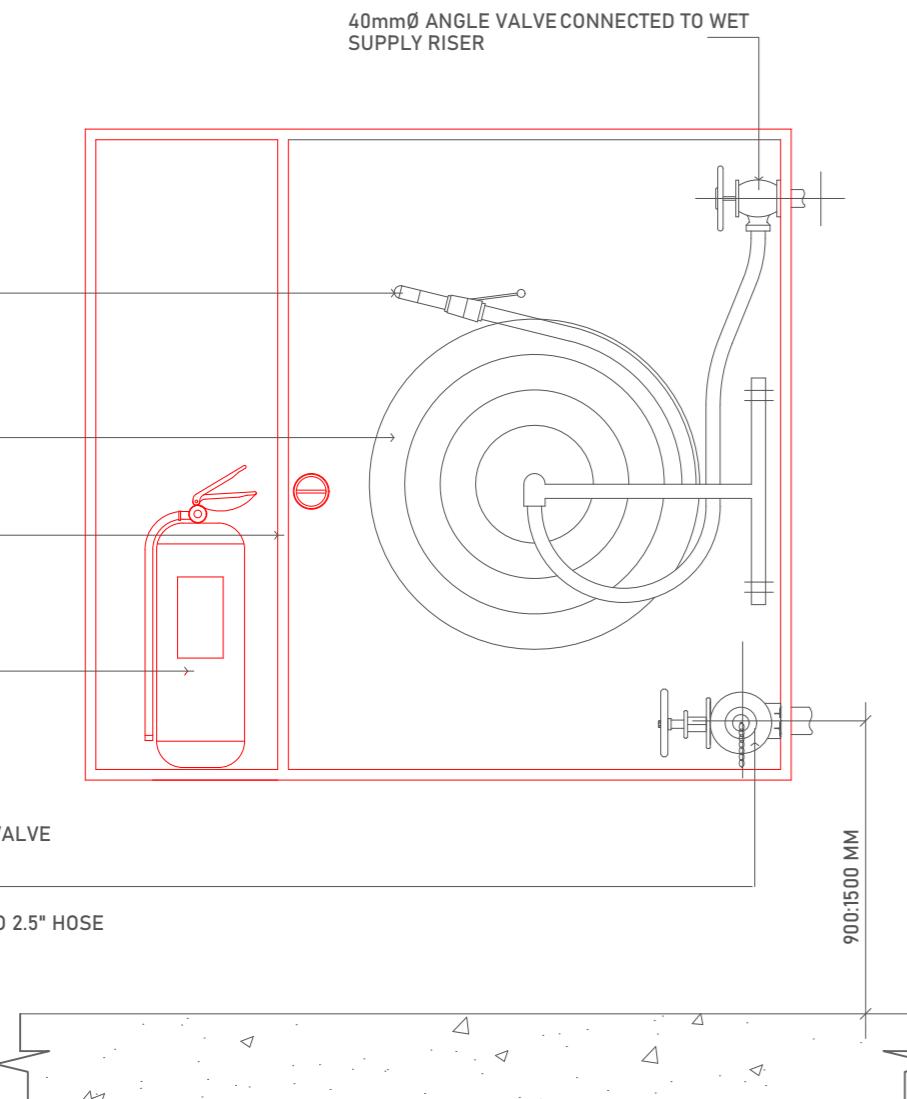
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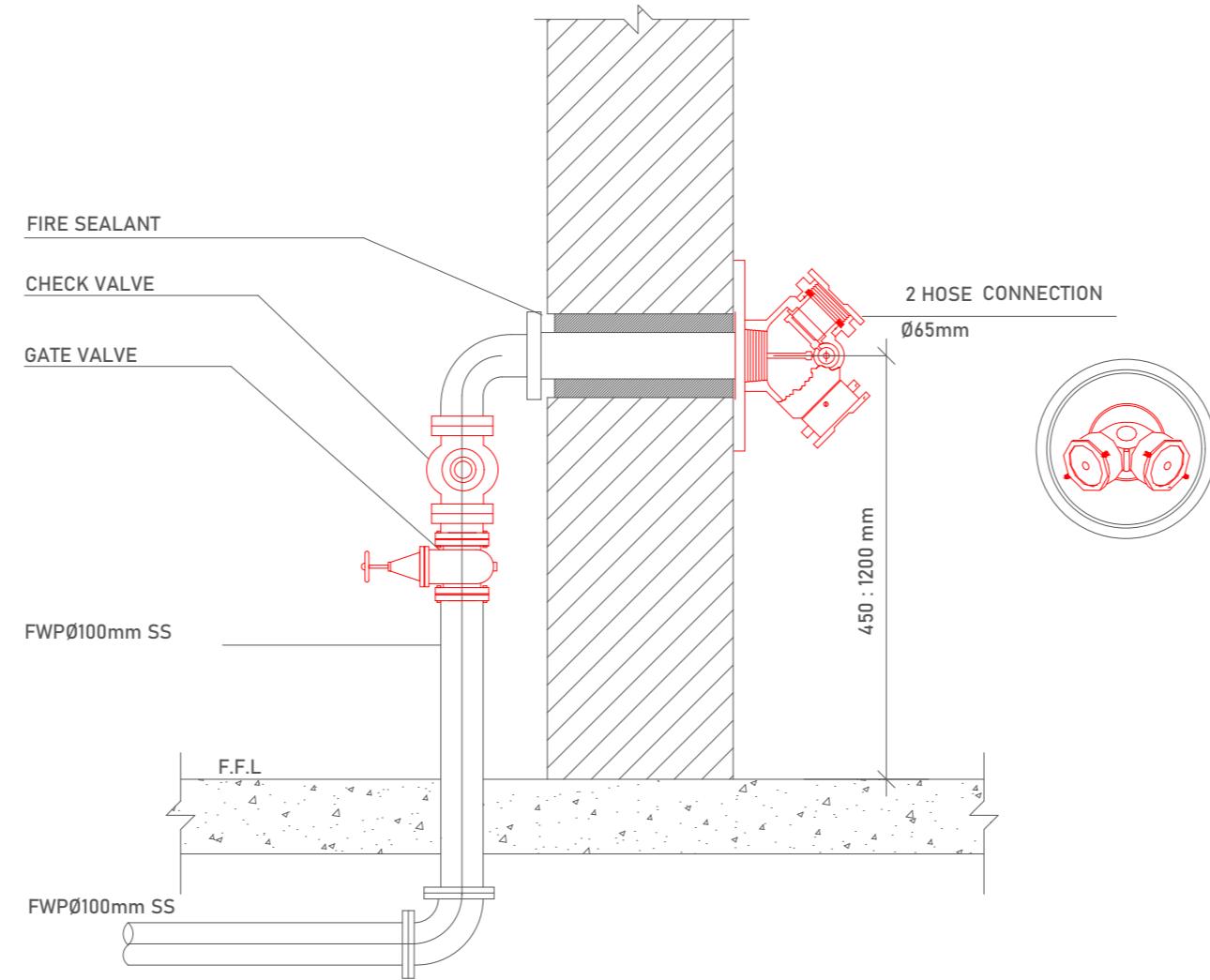
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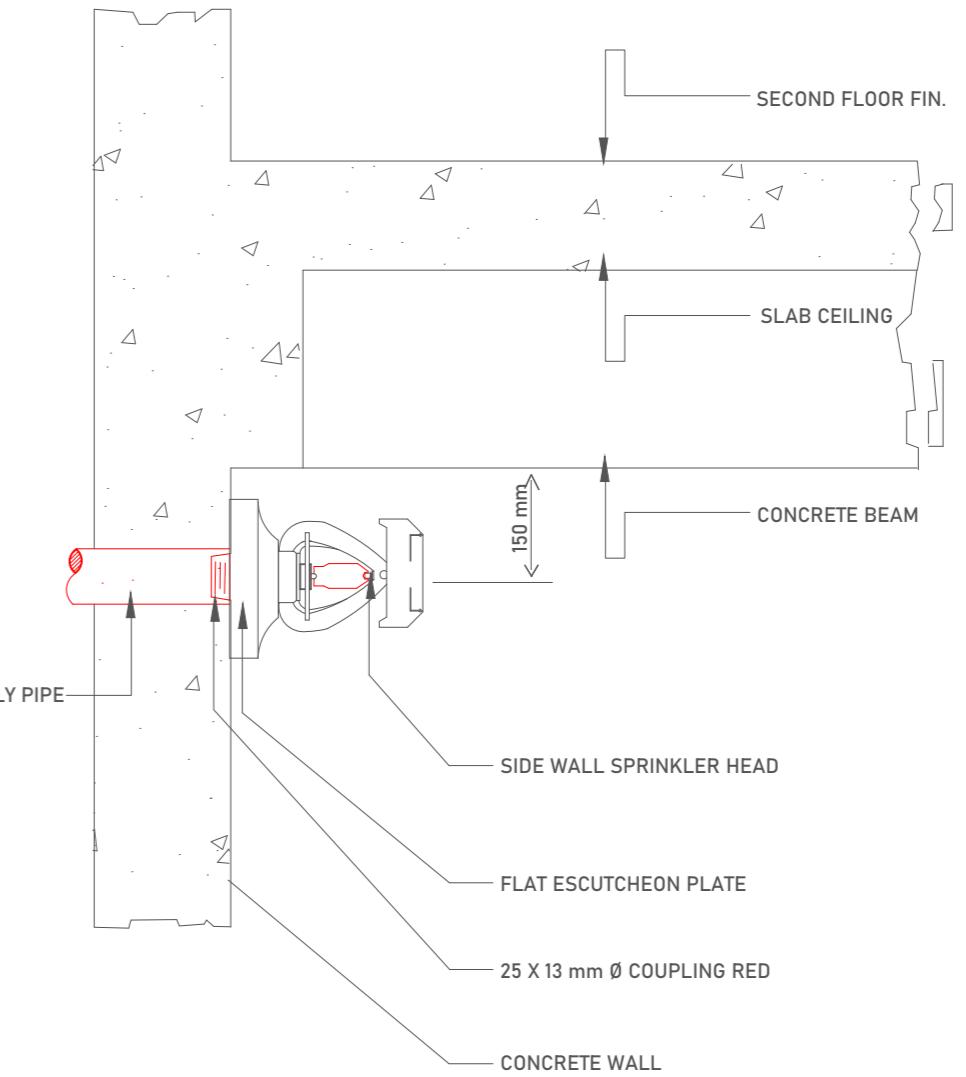
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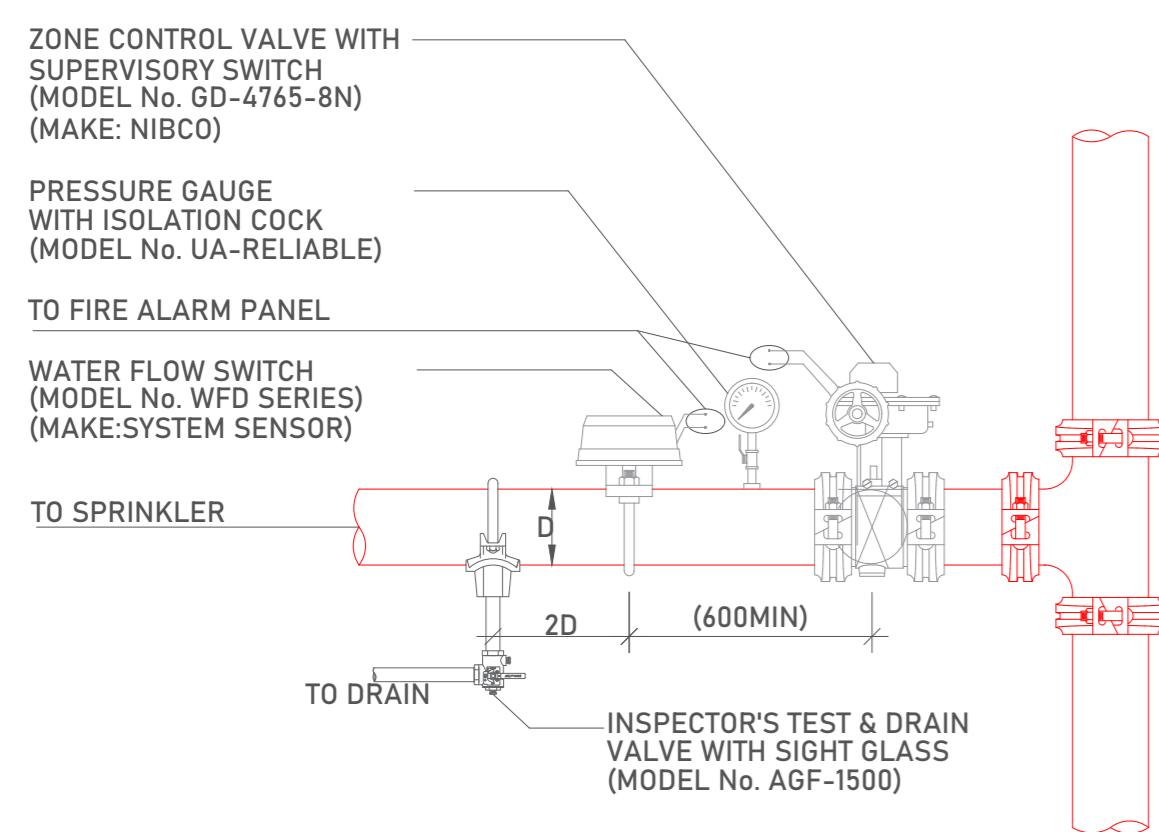
FIRE HOSE VALVE AND FIRE HOSE CABINET DETAIL



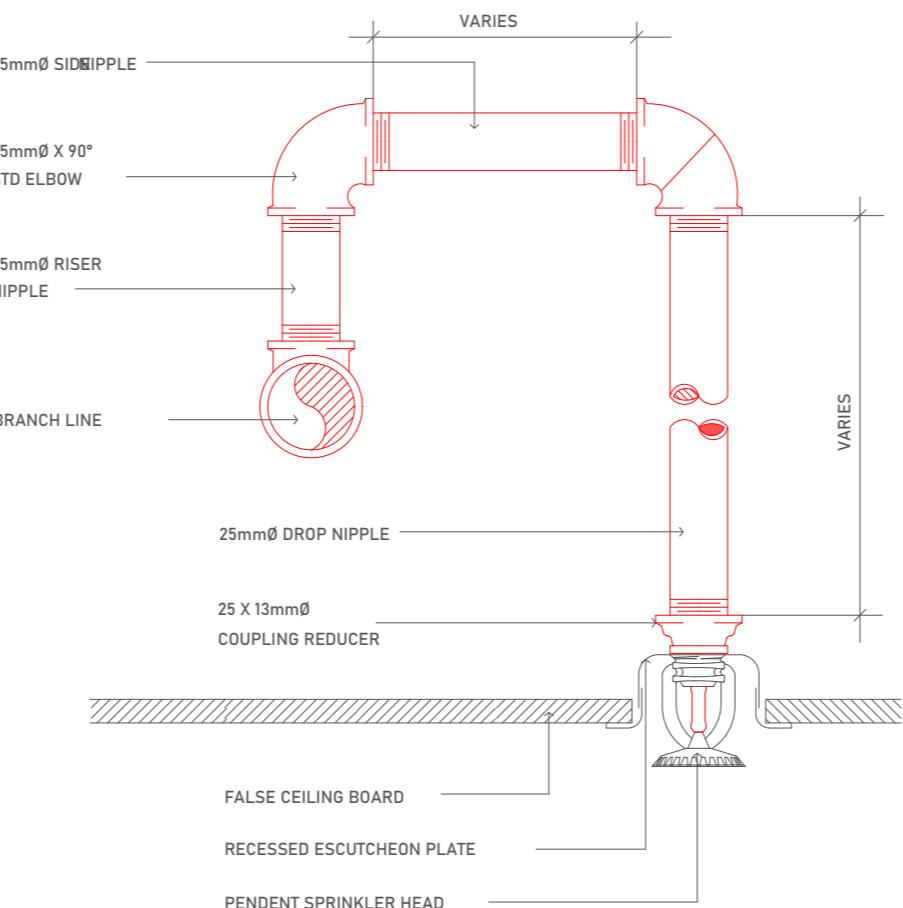
FIRE DEPARTMENT CONNECTION (FDC)



SIDEWALL SPRINKLER HEAD MOUNTING DETAIL



ZONE CONTROL VALVE



PENDENT SPRINKLER HEAD CONNECTION DETAIL

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PROJECT NAME

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SHEET TITLE

Domestic Color Coding

Univeristy

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DOMISTIC WATER

NOT



Ground Floor Plan - Color Coding
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PROJECT NAME

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Engineers

SHEET TITLE

Drain Color Coding

University

BENHA

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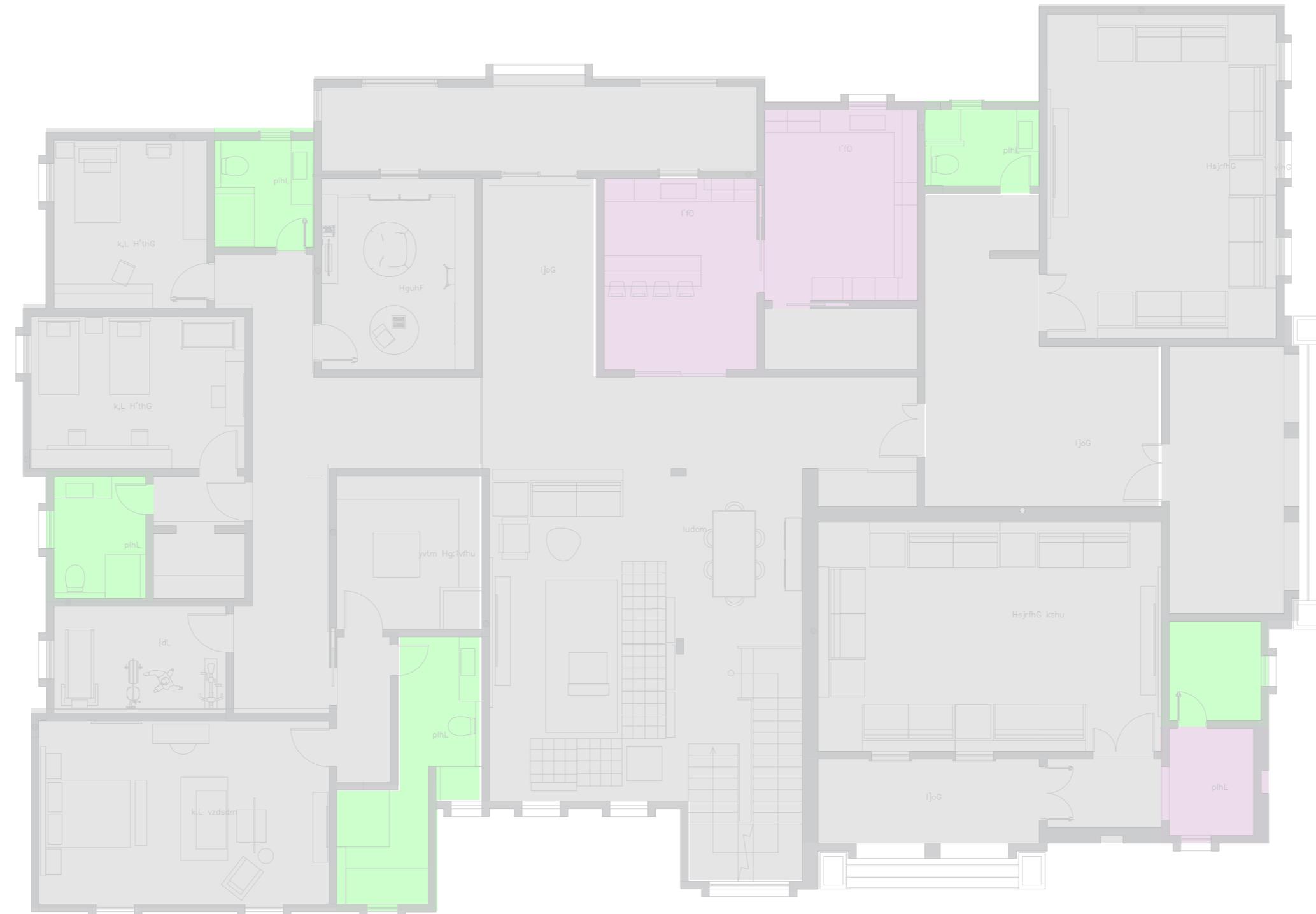
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 Ground Floor Plan - Color Coding
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SHEET TITLE

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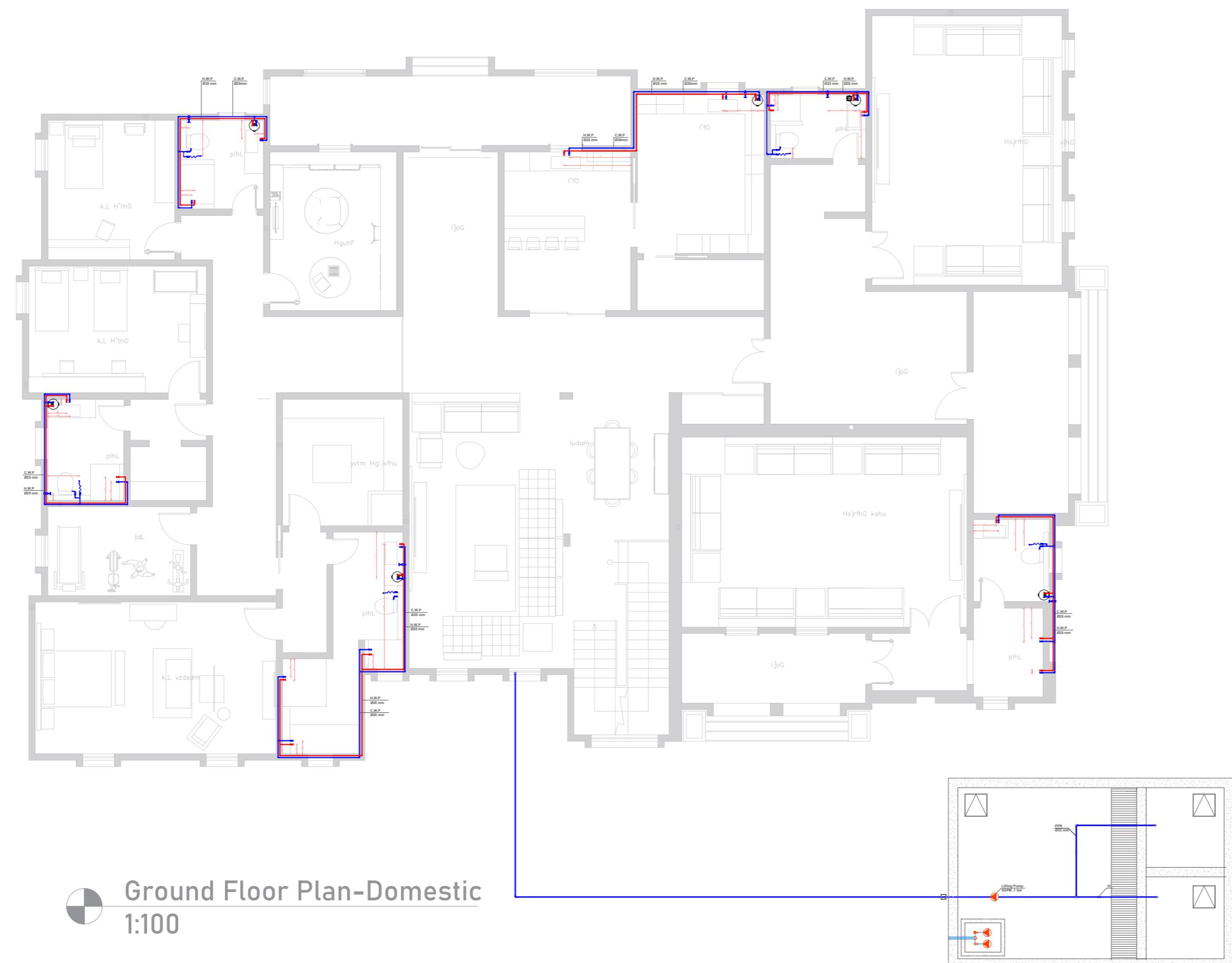
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LEGEND

	HOT VALVE		HAND SHOWER		FD		TANK	PPR	POLY PROPYLENE	TD	TANK DRAIN
	COLD VALVE		ELEC.HEATER		GT		SEBMERISLE PUMP	SP	SOIL PIPE	CWP	COLD WATER PIPE
	MAIN VALVE		LIFTING PUMP		IC		EXCESS DOOR	WP	WASTE PIPE	HWP	HOT WATER PIPE
								FFL	FISH FLOOR LEVEL	GT	GULLY TRAP
								IL	INERT LEVEL	IC	INSPECTION CHAMBER
								IV	ISOLATION VALVE	FD	FLOOR DRAIN

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SHEET TITLE

Domestic

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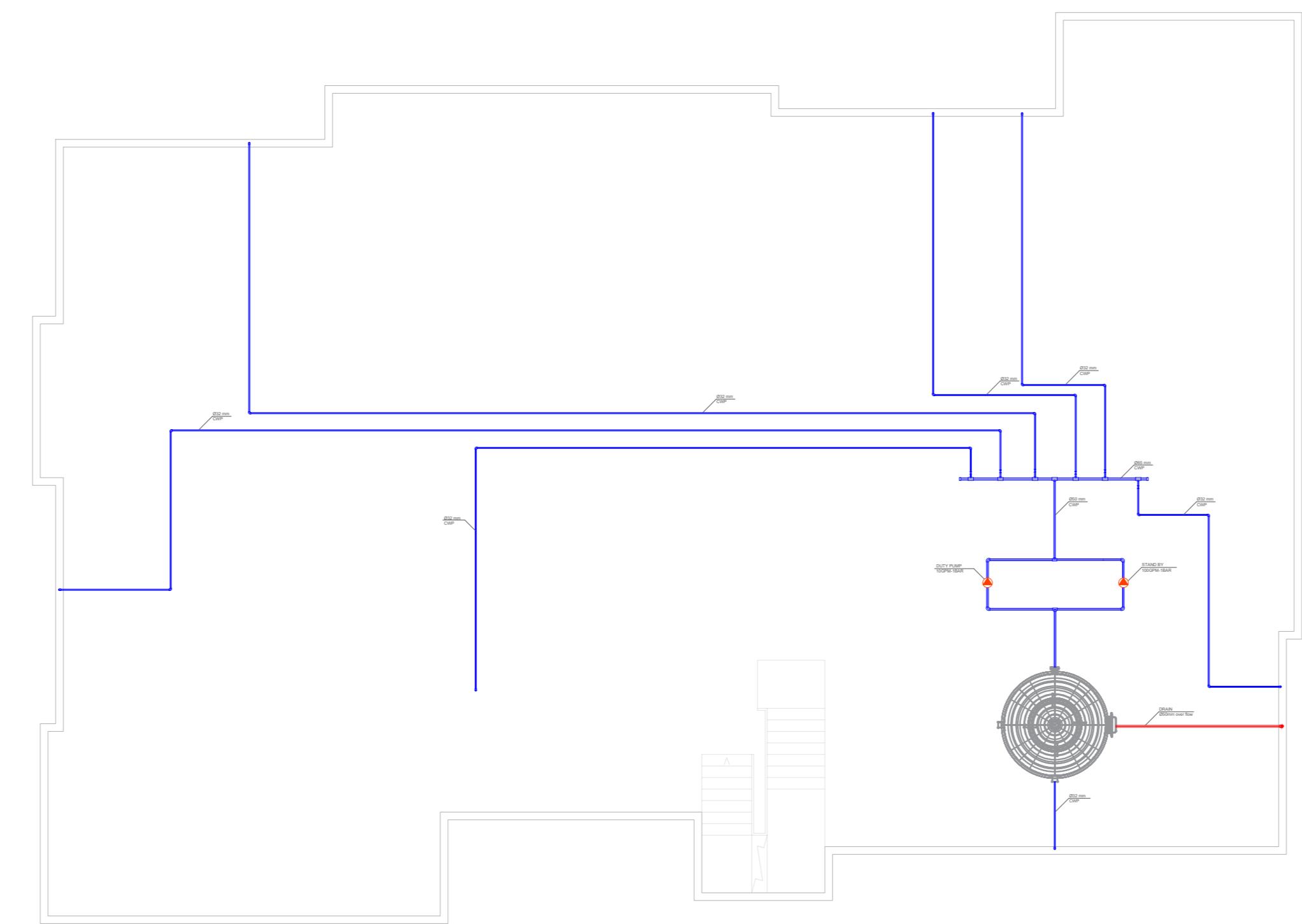
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Roof Floor Plan-Domestic
 1:100

LEGEND

	HOT VALVE		HAND SHOWER		FD		TANK	PPR	POLY PROPYLENE	TD	TANK DRAIN
	COLD VALVE		ELEC.HEATER		GT		SEBMERISLE PUMP	SP	SOIL PIPE	CWP	COLD WATER PIPE
	MAIN VALVE		LIFTING PUMP		IC		EXCESS DOOR	WP	WASTE PIPE	HWP	HOT WATER PIPE
								FFL	FISH FLOOR LEVEL	GT	GULLY TRAP
								IL	INERT LEVEL	IC	INSPECTION CHAMBER
									ISOLATION VALVE	FD	FLOOR DRAIN

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SHEET TITLE

Drain

University

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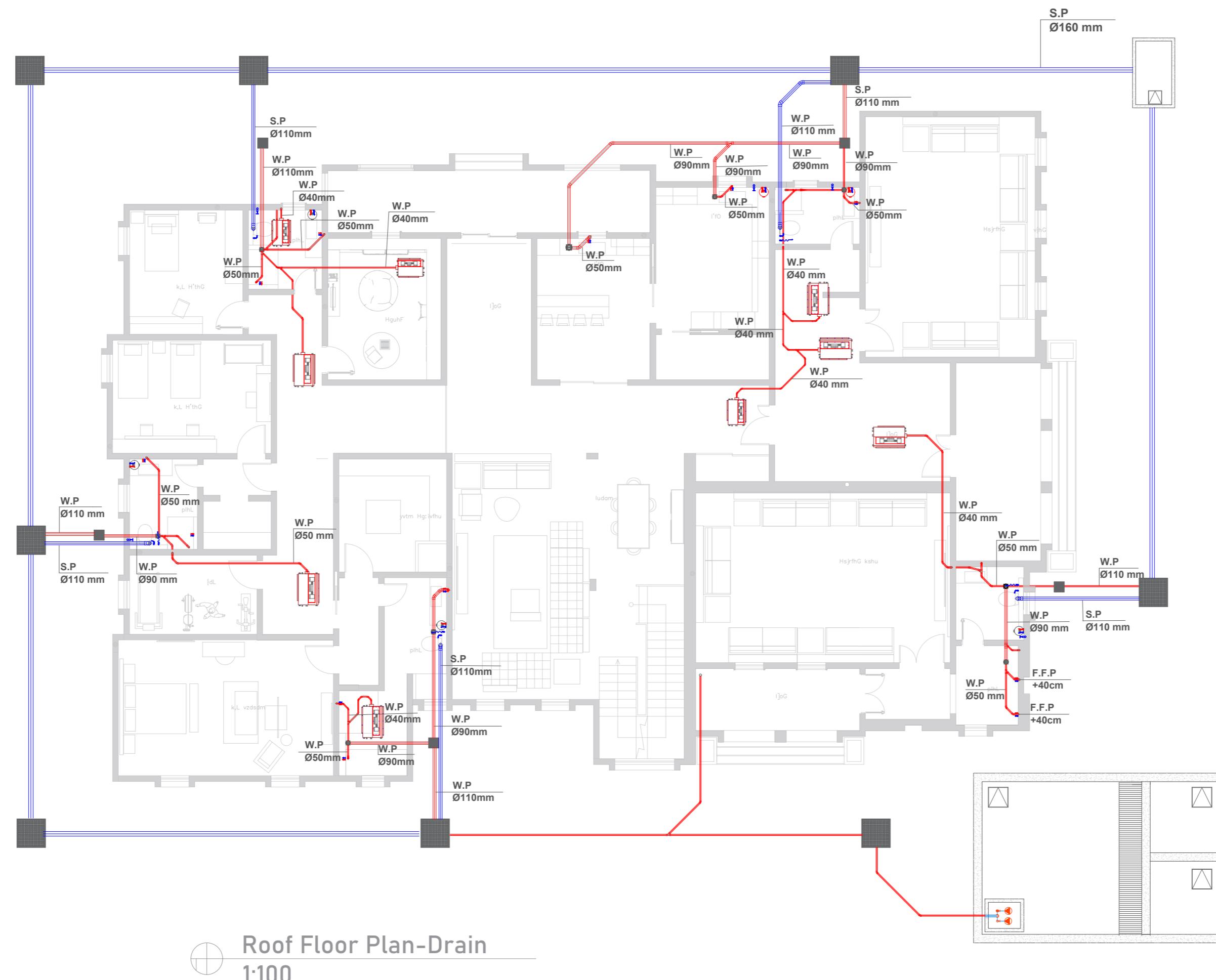
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LEGEND

HOT VALVE		HAND SHOWER		FD		TANK		PPR	POLY PROPYLENE	TD	TANK DRAIN
COLD VALVE		ELEC.HEATER		GT		SEBMERISLE PUMP		SP	SOIL PIPE	CWP	COLD WATER PIPE
MAIN VALVE		LIFTING PUMP		IC		EXCESS DOOR		WP	WASTE PIPE	HWP	HOT WATER PIPE
								FFL	FISH FLOOR LEVEL	GT	GULLY TRAP
								IL	INERT LEVEL	IC	INSPECTION CHAMBER
								IV	ISOLATION VALVE	FD	FLOOR DRAIN

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PROJECT NAME

VILAA MOUSA

GENERAL CONSULTANT

ASEC

GENERAL CONTRACTOR

Engineers

SHEET TITLE

Drain

Univeristy

BENHA

DESIGN BY

MENNA NASSER

CHECKED BY

ENG/AYYATALLAH

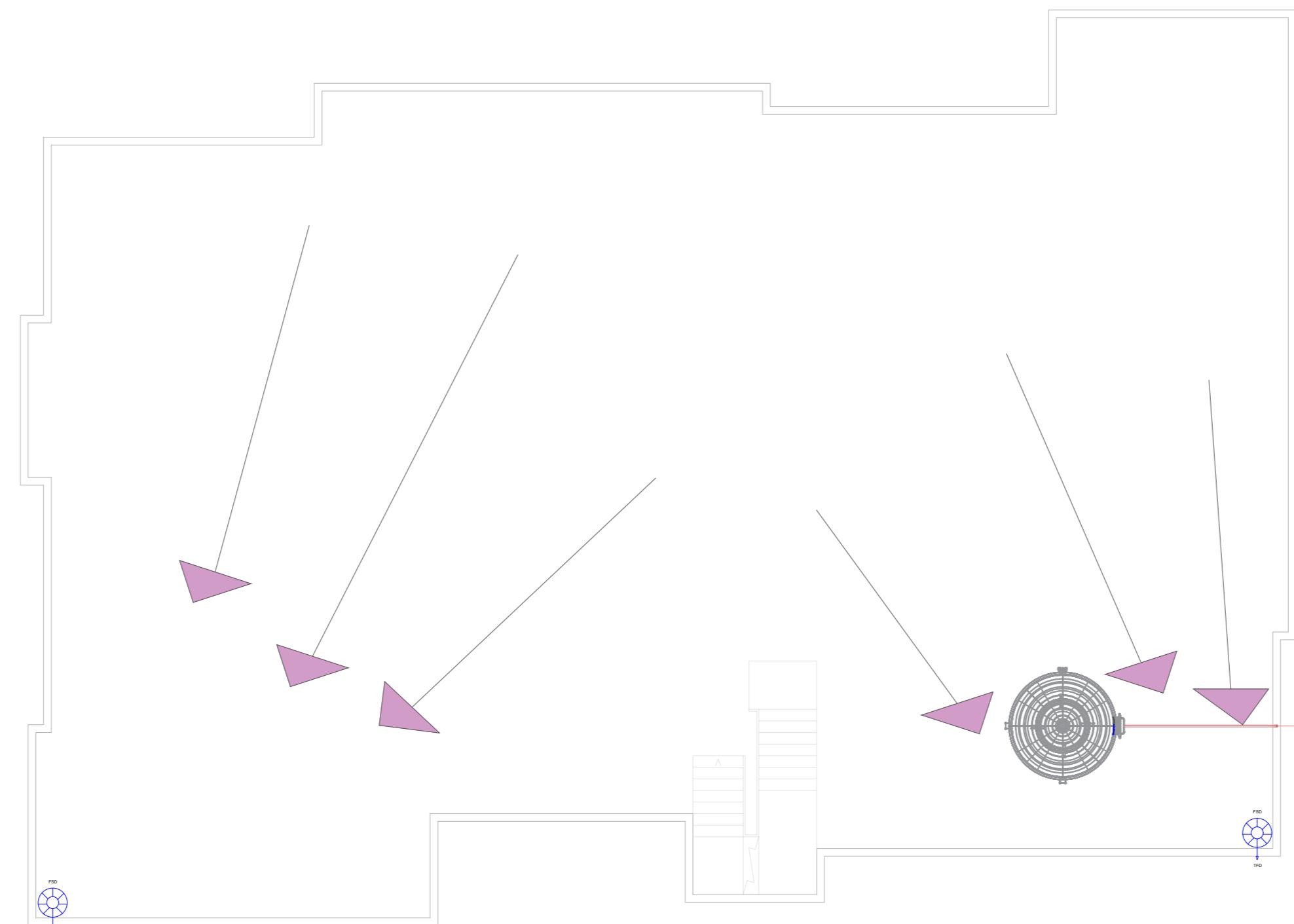
SCALE SHEET NO

1:100 P-04

DATE

1-7-2024

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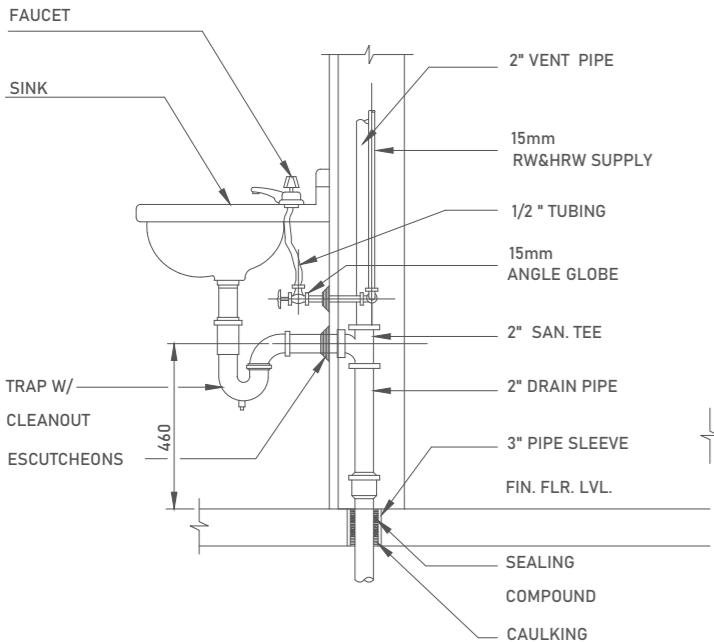
Roof Floor Plan - Drain
1:100

LEGEND

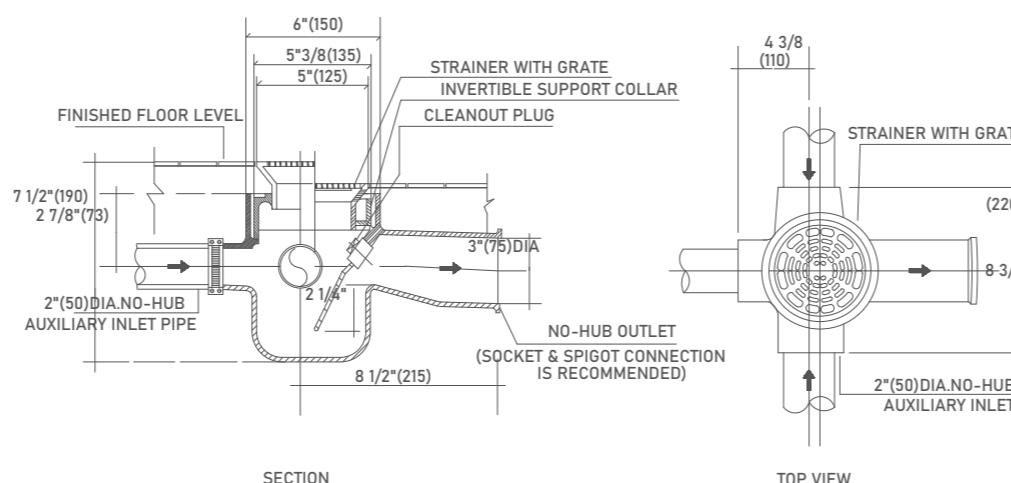
HOT VALVE		COLD VALVE		HAND SHOWER		FD		TANK		SEBMERISLE PUMP		PPR		POLY PROPYLENE		TD		TANK DRAIN	
												SP		SOIL PIPE		CWP		COLD WATER PIPE	
												WP		WASTE PIPE		HWP		HOT WATER PIPE	
												FFL		FISH FLOOR LEVEL		GT		GULLY TRAP	
												IL		INERT LEVEL		IC		INSPECTION CHAMBER	
														ISOLATION VALVE		FD		FLOOR DRAIN	



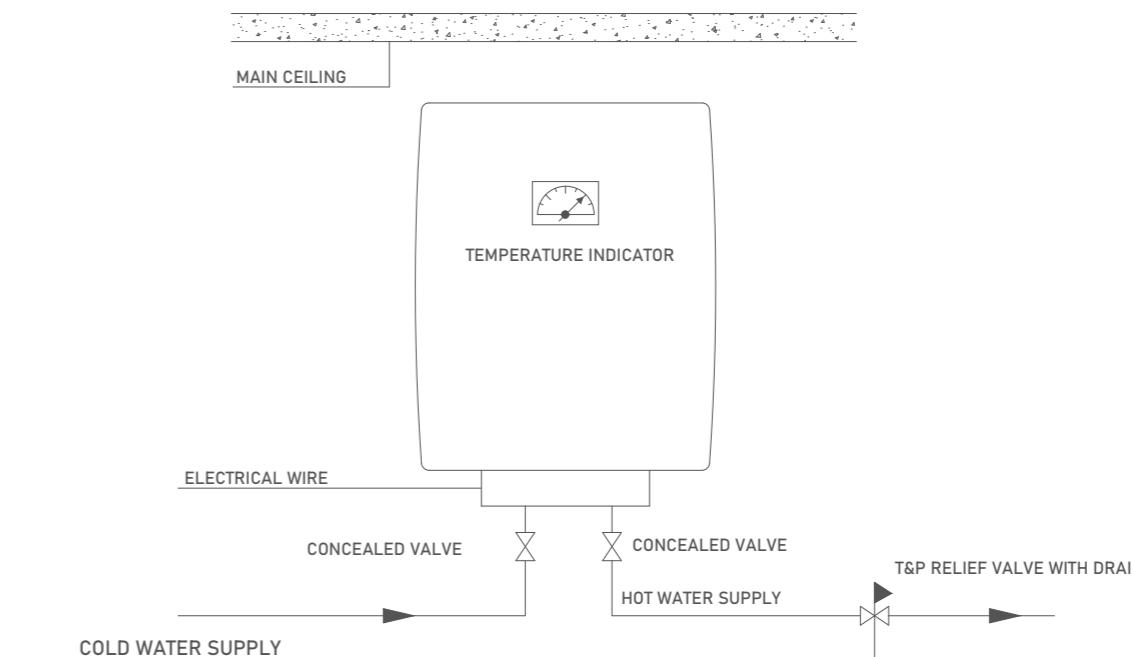
4 - St - Mohamed Meklaad
Benha city - Qalyubia - Egypt
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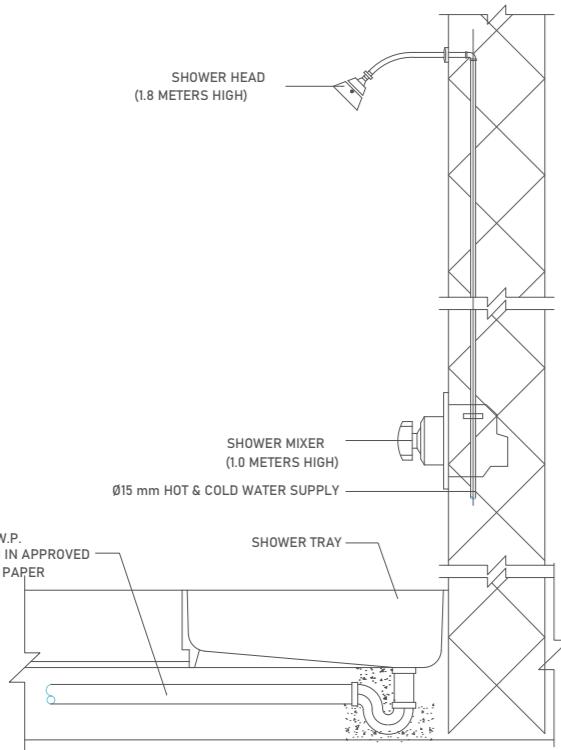
LAVATORY INSTALLATION DETAIL



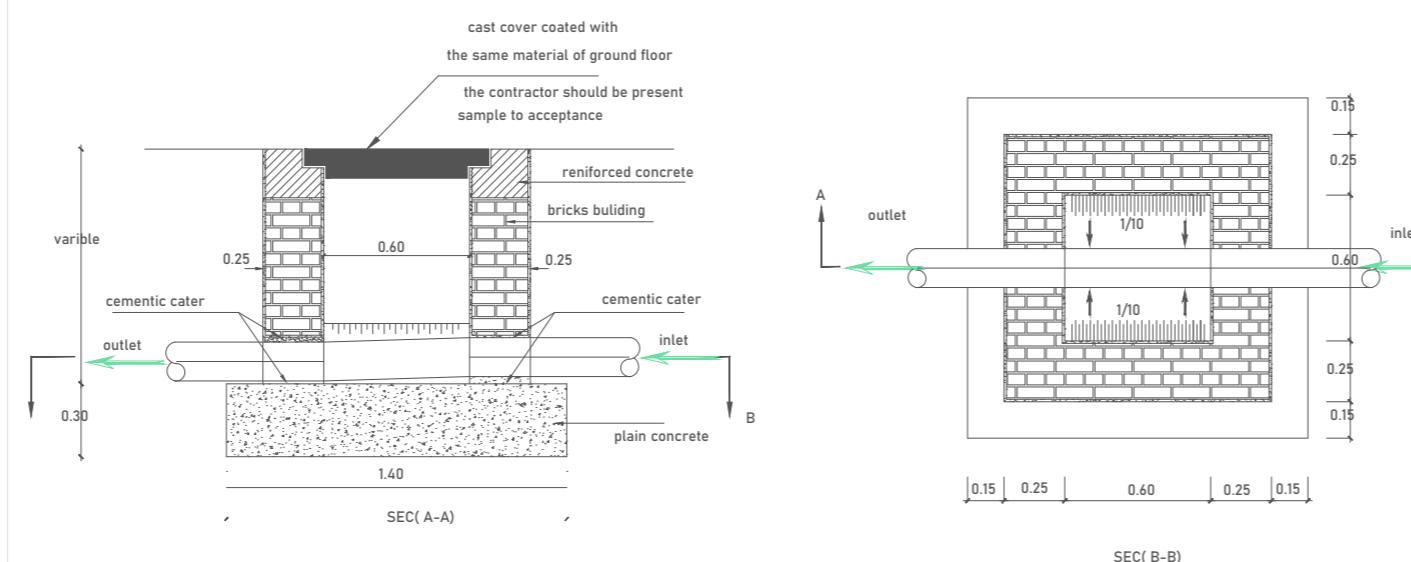
DETAIL OF FLOOR DRAIN



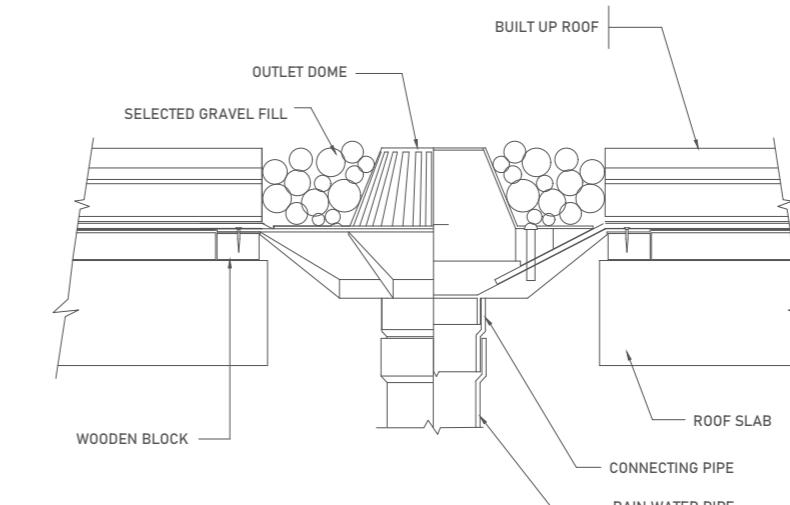
ELECTRIC WATER HEATER DETAIL (VERTICAL TYPE)



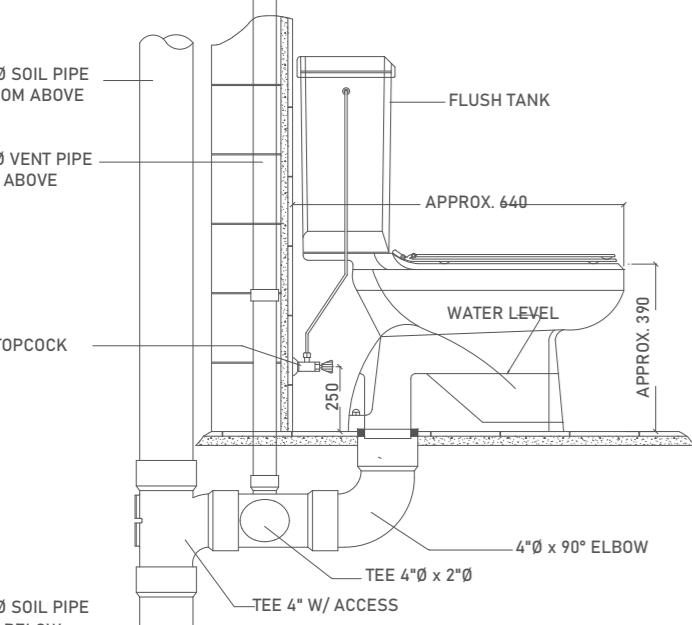
TYPICAL DETAIL OF SHOWER TRAY



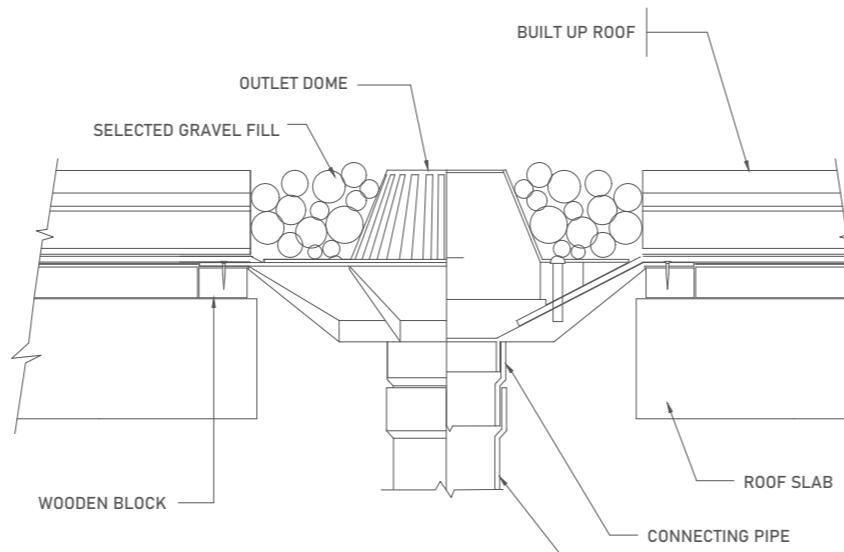
INSPECTION CHAMBER



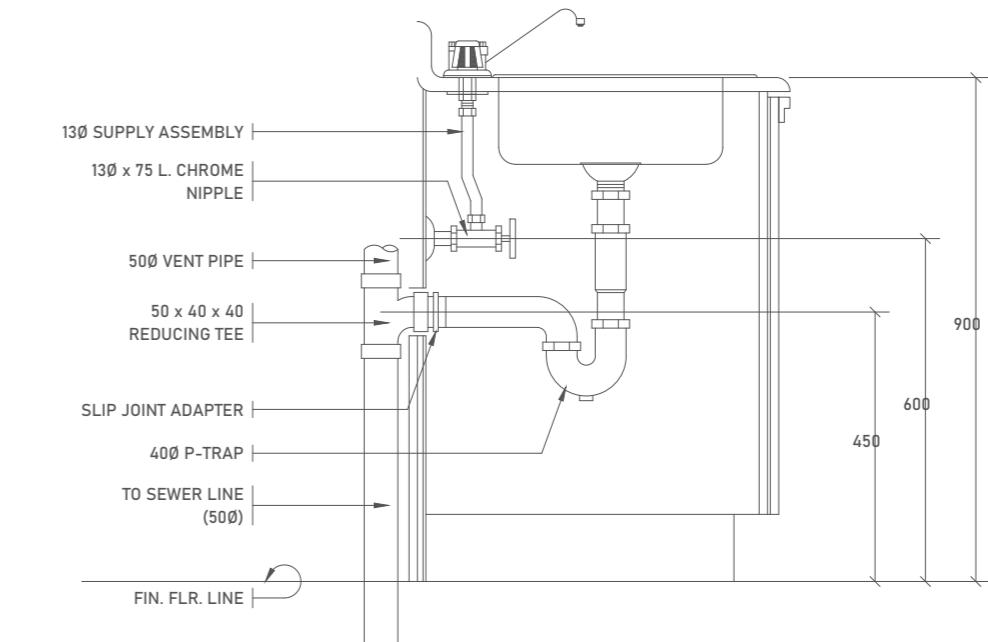
ROOF DRAIN DETAIL (DOME TYPE)



WATER CLOSET INSTALLATION DETAIL



ROOF DRAIN DETAIL (DOME TYPE)



KITCHEN SINK INSTALLATION DETAIL

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