RESIDENTIAL MEP DESIGN

Mechanical Engineering & Construction Documentation

Selected Project

HONAAM ENGINEERING

Behrouz Armani

MEP Designer

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MECHANICAL DESIGN

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Residential Building
MEP Design

LOCATION:

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REV. 01

SCALE

1:100

PAGE

M- 000

List of Mechanical Installation Drawings

Page no	Description
M- 000	List of Mechanical Installation Drawings
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M- 102	Ground Sewage Plumbing
M- 103	1~5th Floor Sewage Plumbing
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M- 105	Sewage Plumbing Diagram
M- 201	Basement Clean Water & Fire Extinguishing
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M- 203	1~5th Floor Clean Water & Fire Extinguishing
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M- 205	Clean Water & Fire Extinguishing Diagram
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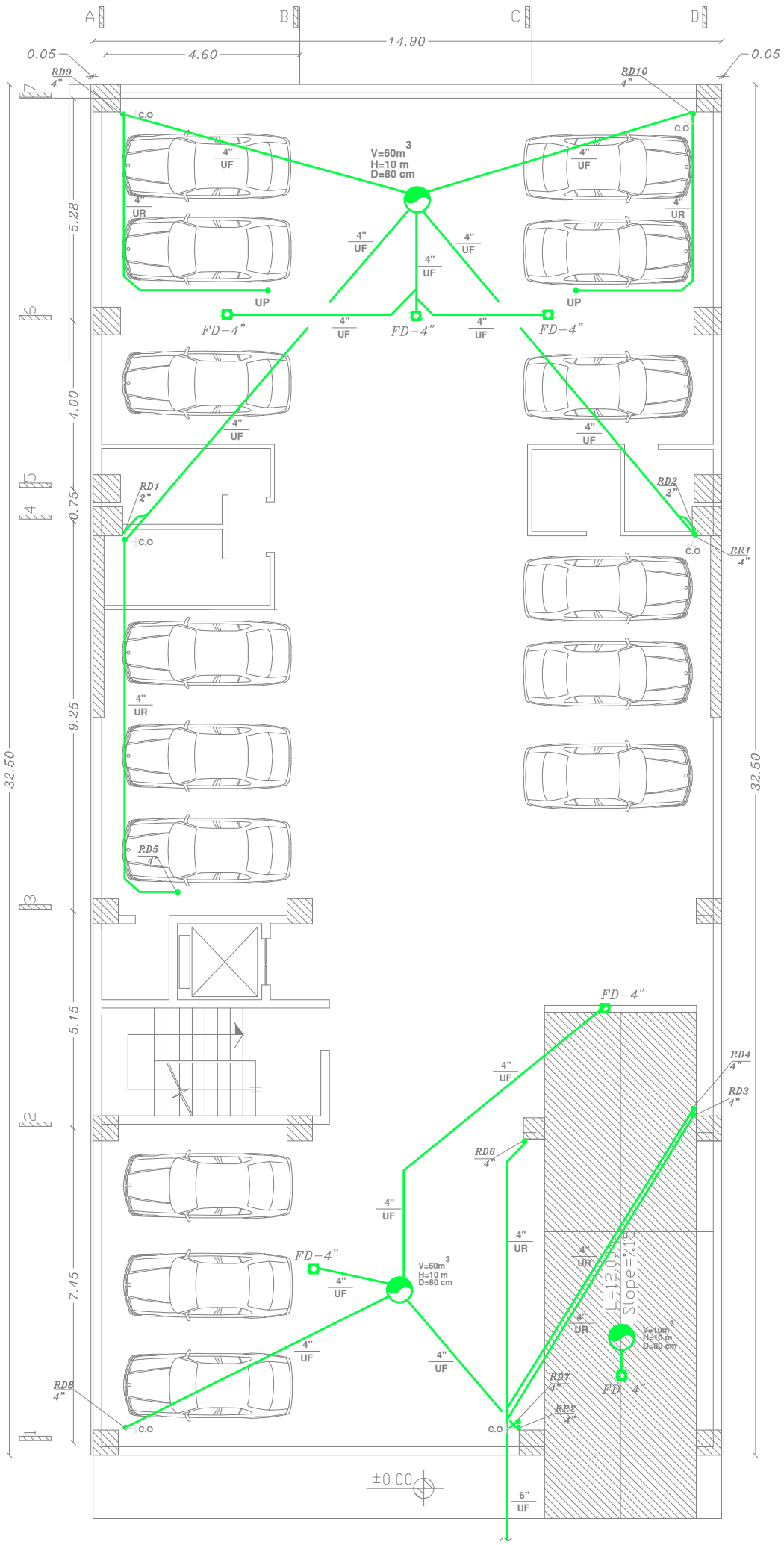
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M- 101



Connection to the sewer system

UR = Under the Roof
UF = Under the Floor

Sewage Plumbing

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Basement

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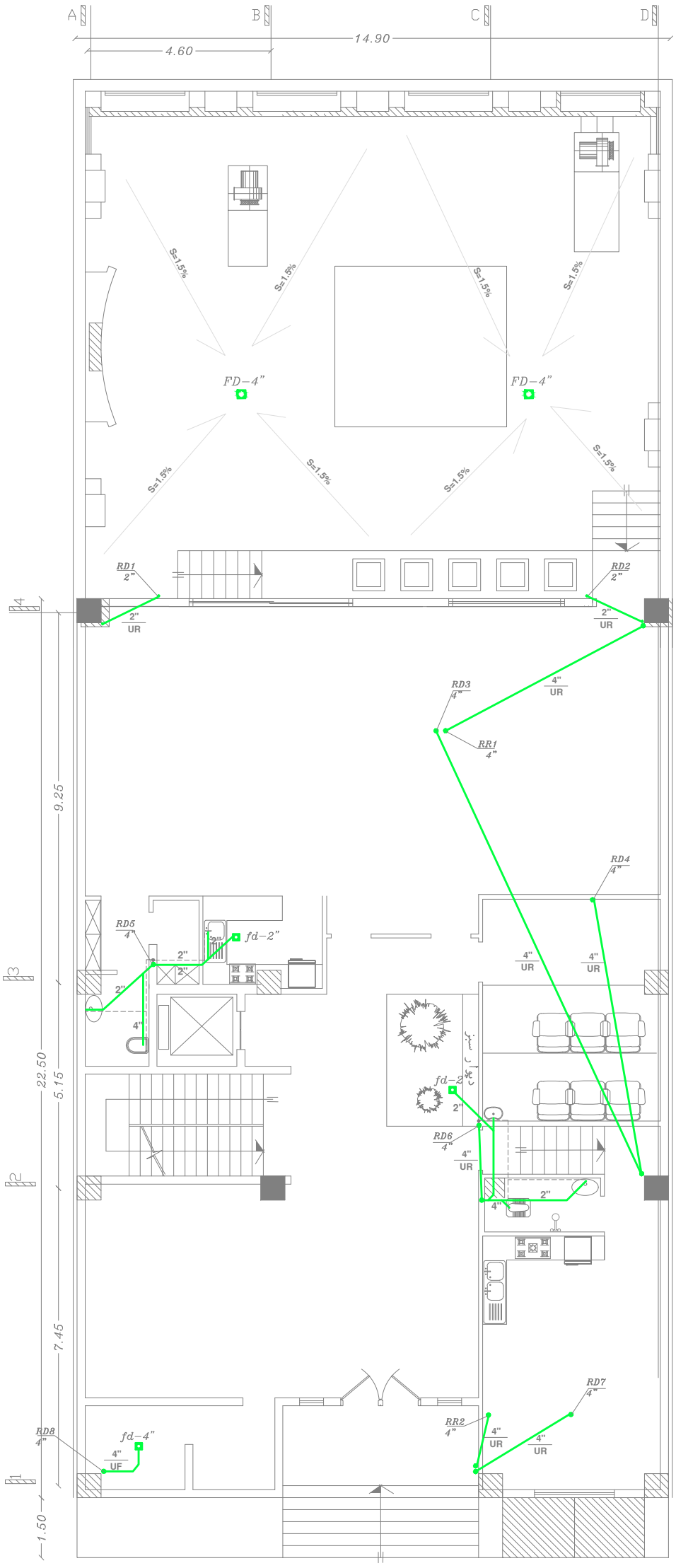
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UF = Under the Floor

Sewage Plumbing

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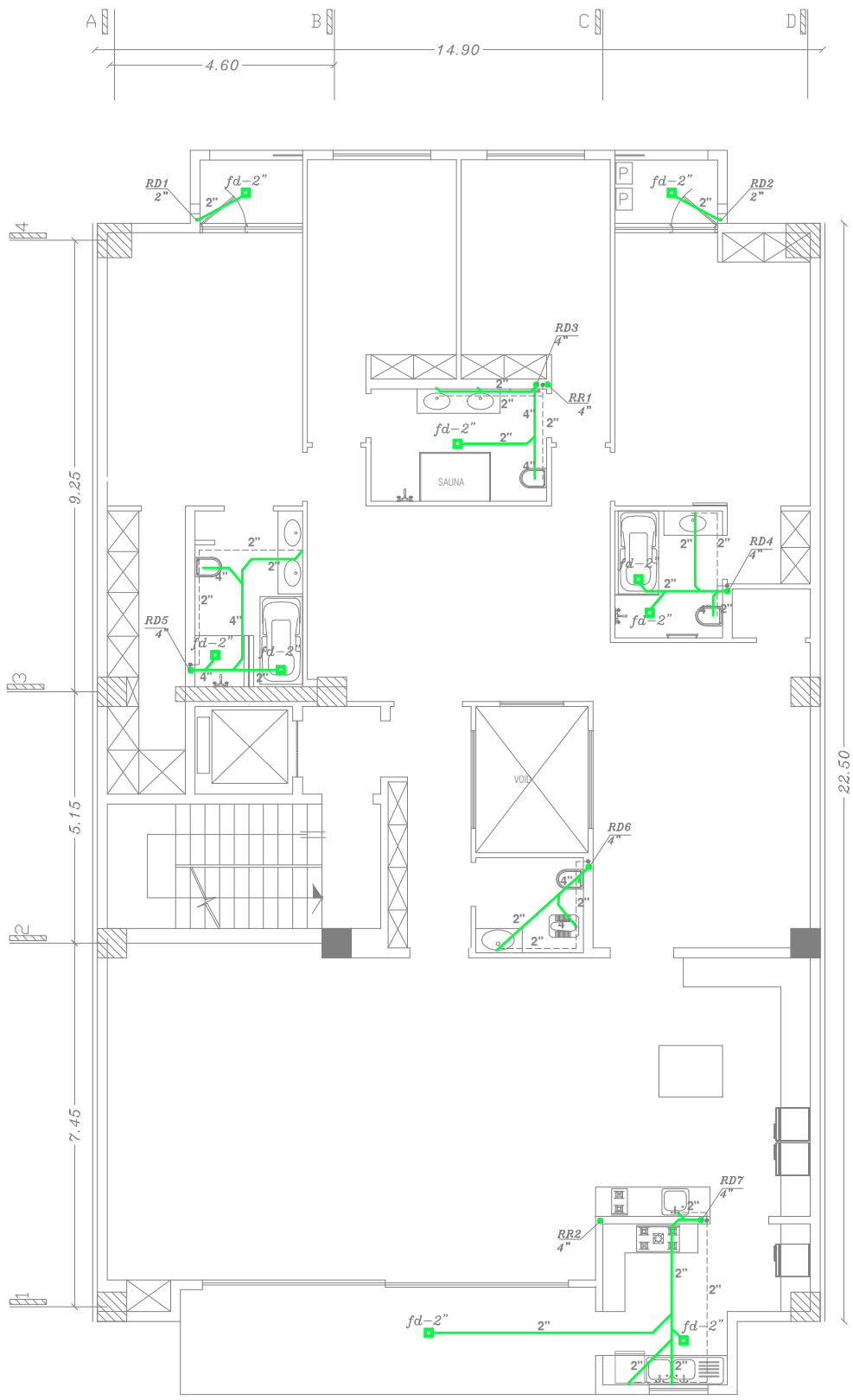
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M- 103



All plumbing = Under the Floor

Sewage Plumbing

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1~5th Floor

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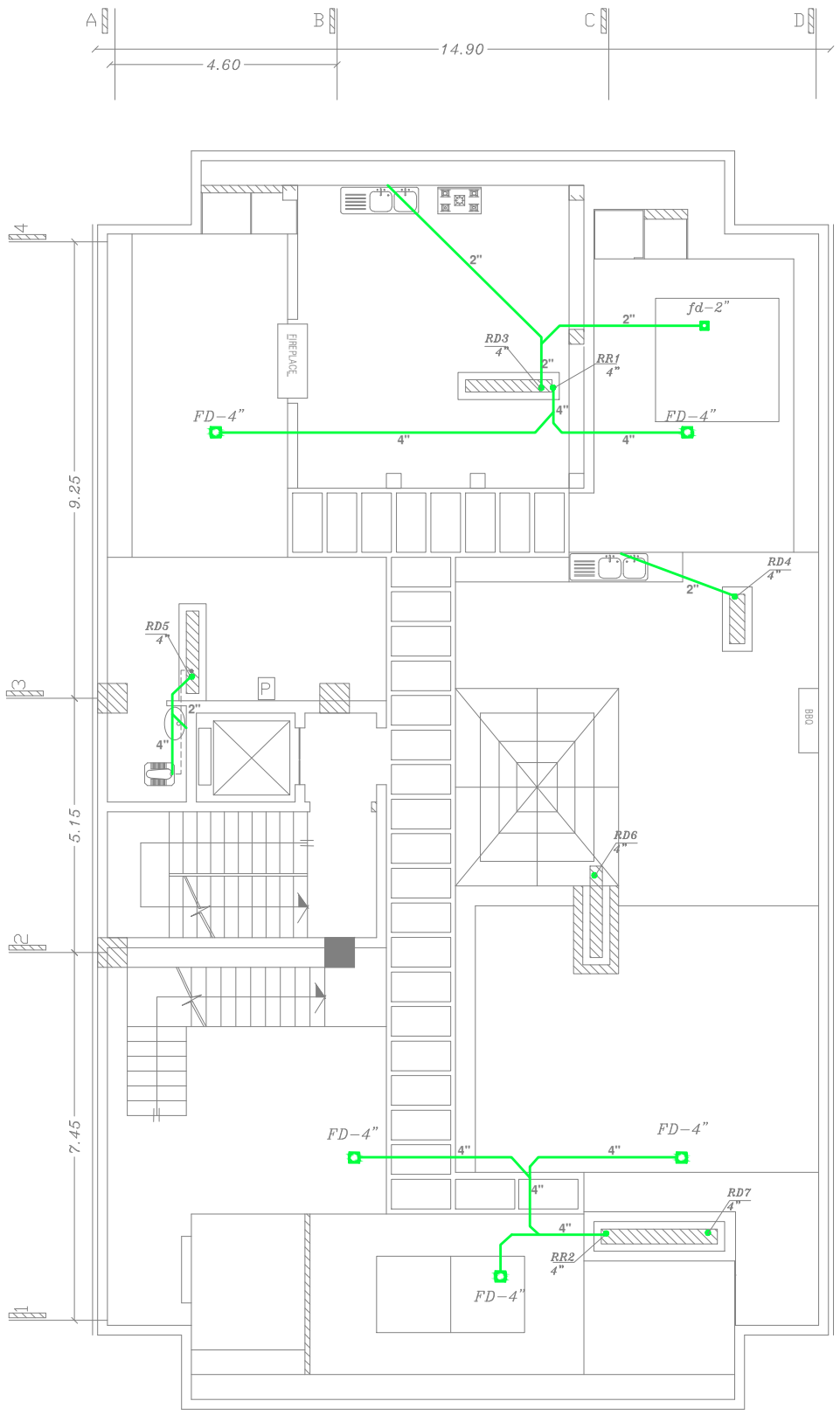
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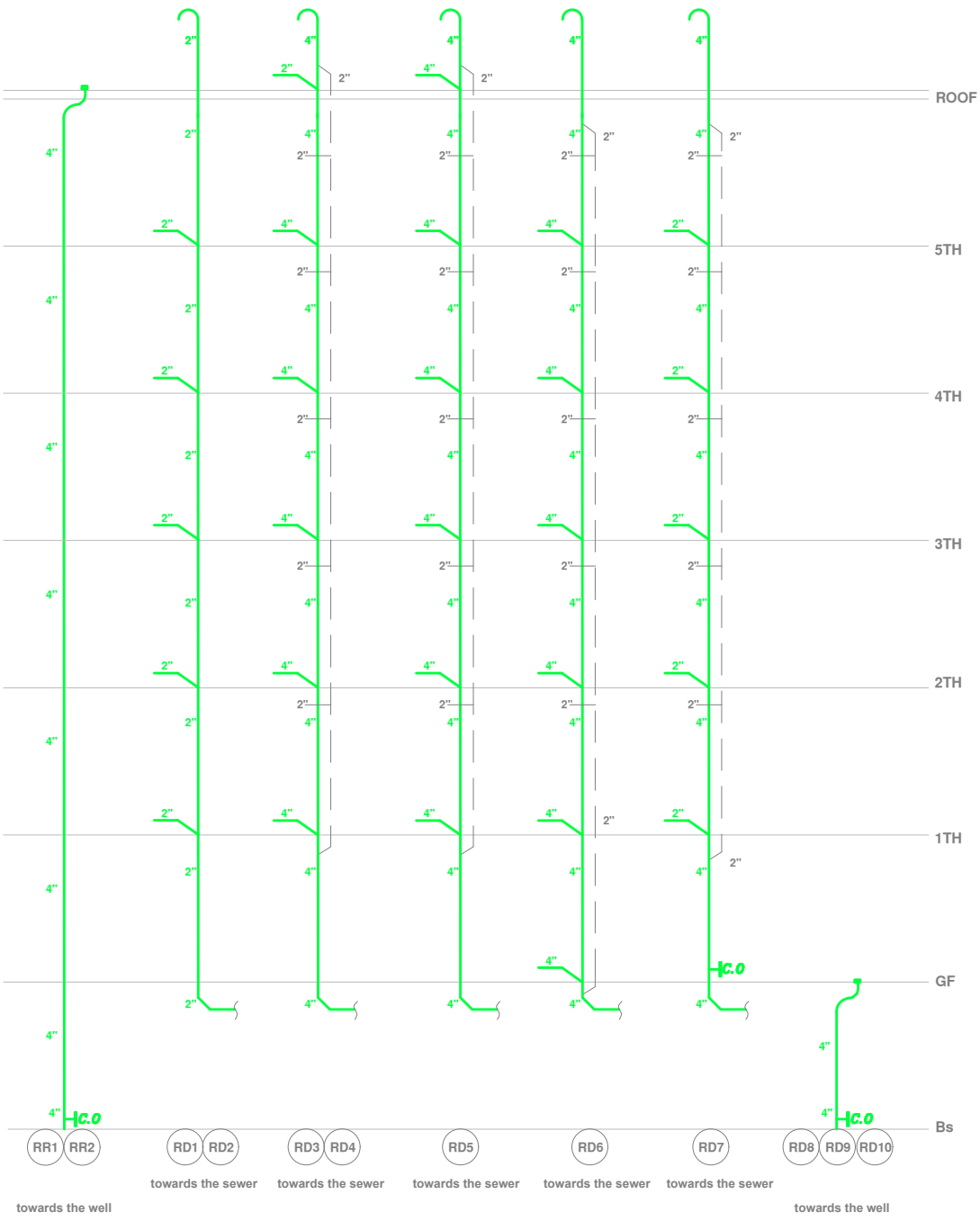
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Sewage Plumbing Diagram

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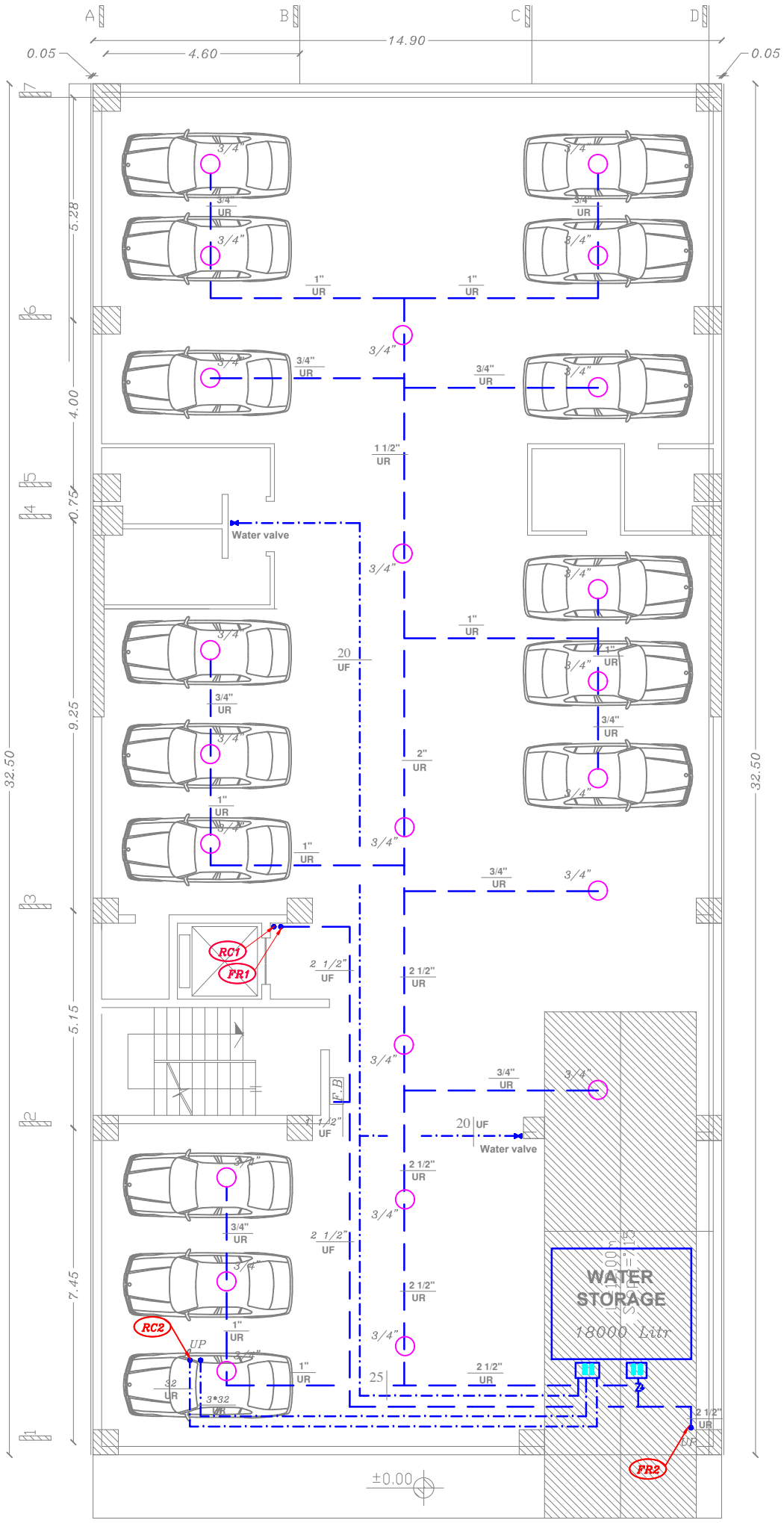
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UR = Under the Roof
UF = Under the Floor

Clean Water & Fire Extinguishing

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Basement

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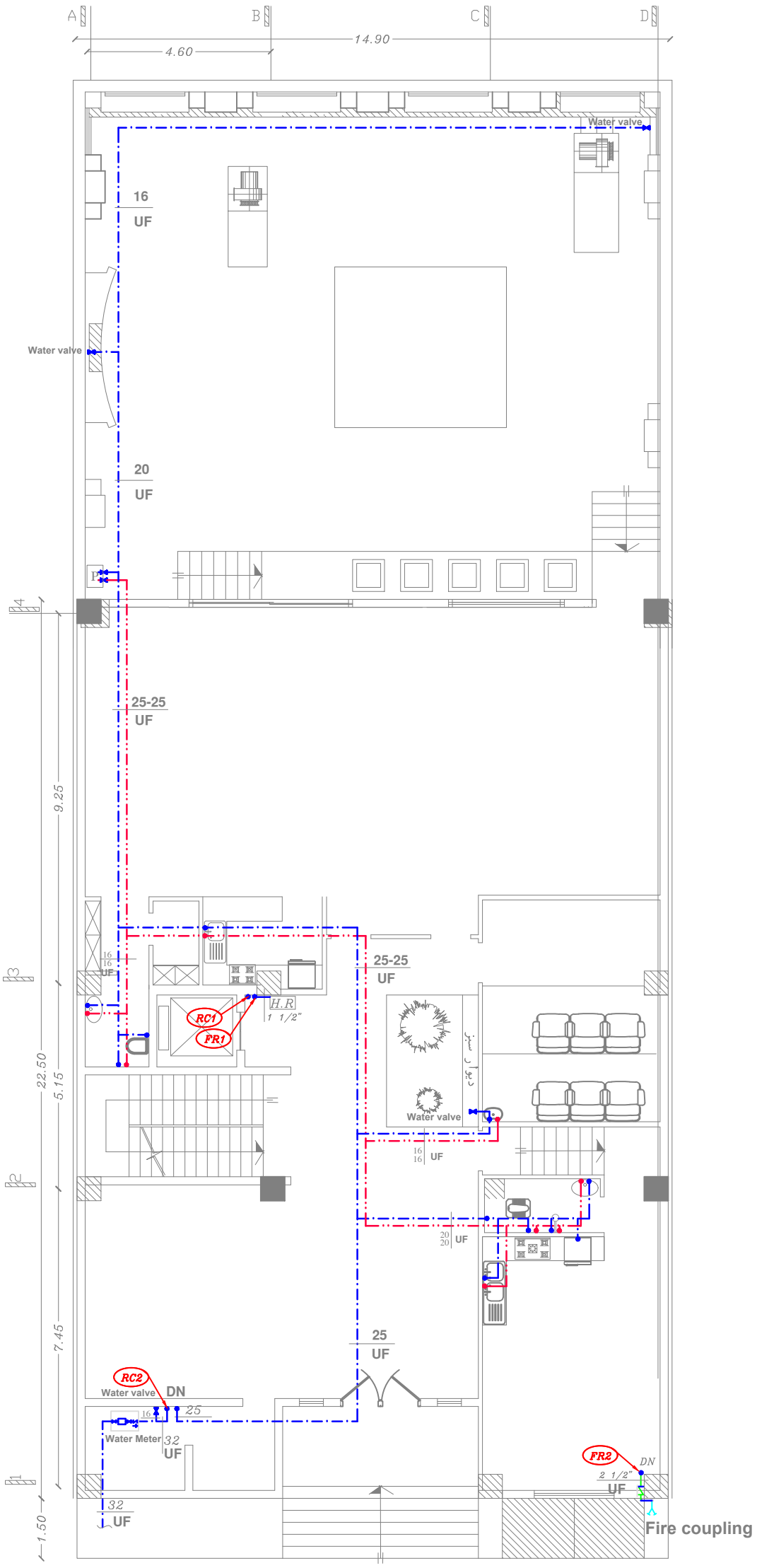
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Clean Water & Fire Extinguishing

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Ground

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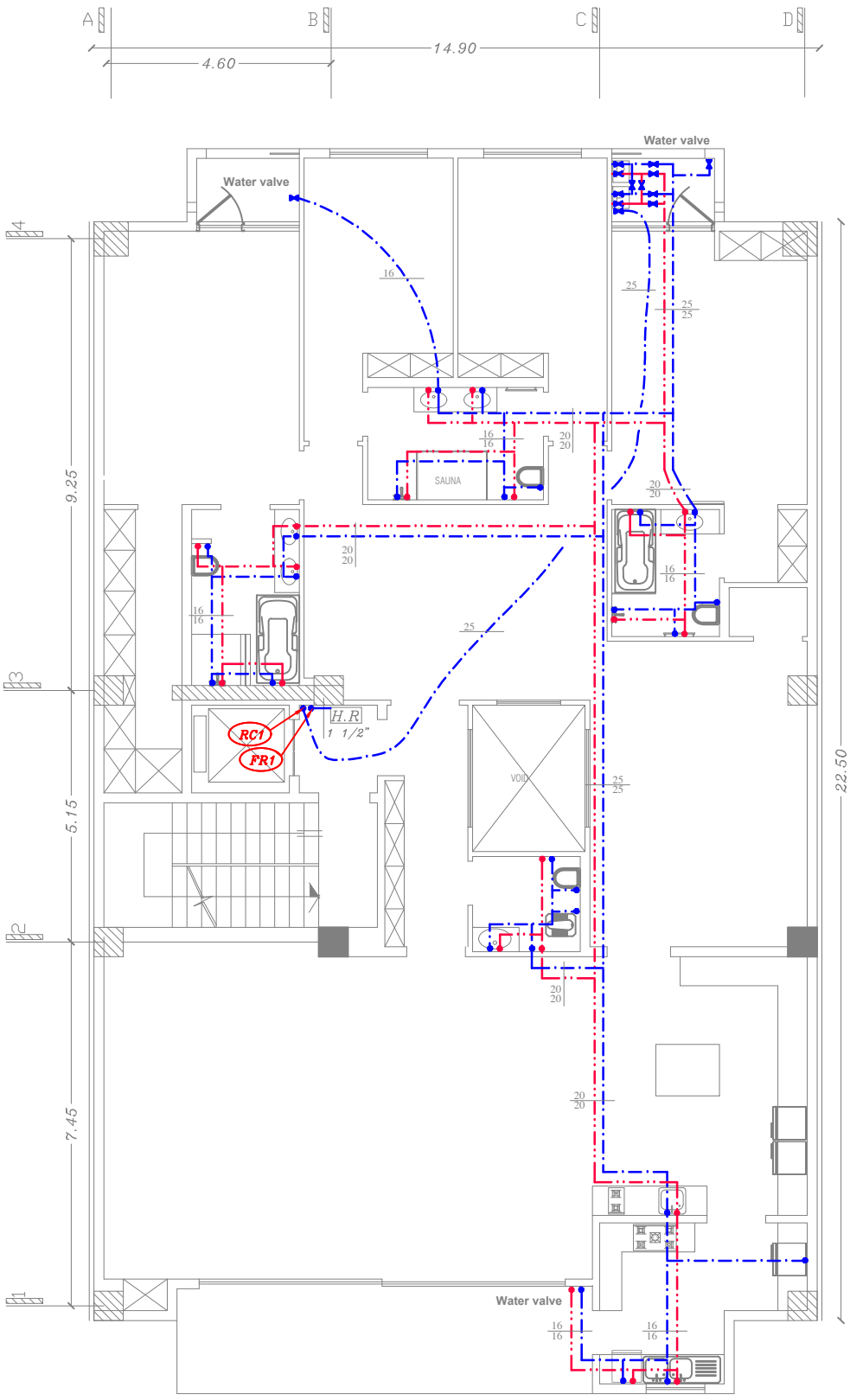
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All plumbing = Under the Floor

Clean Water & Fire Extinguishing

Sc 1:100

1~5th Floor

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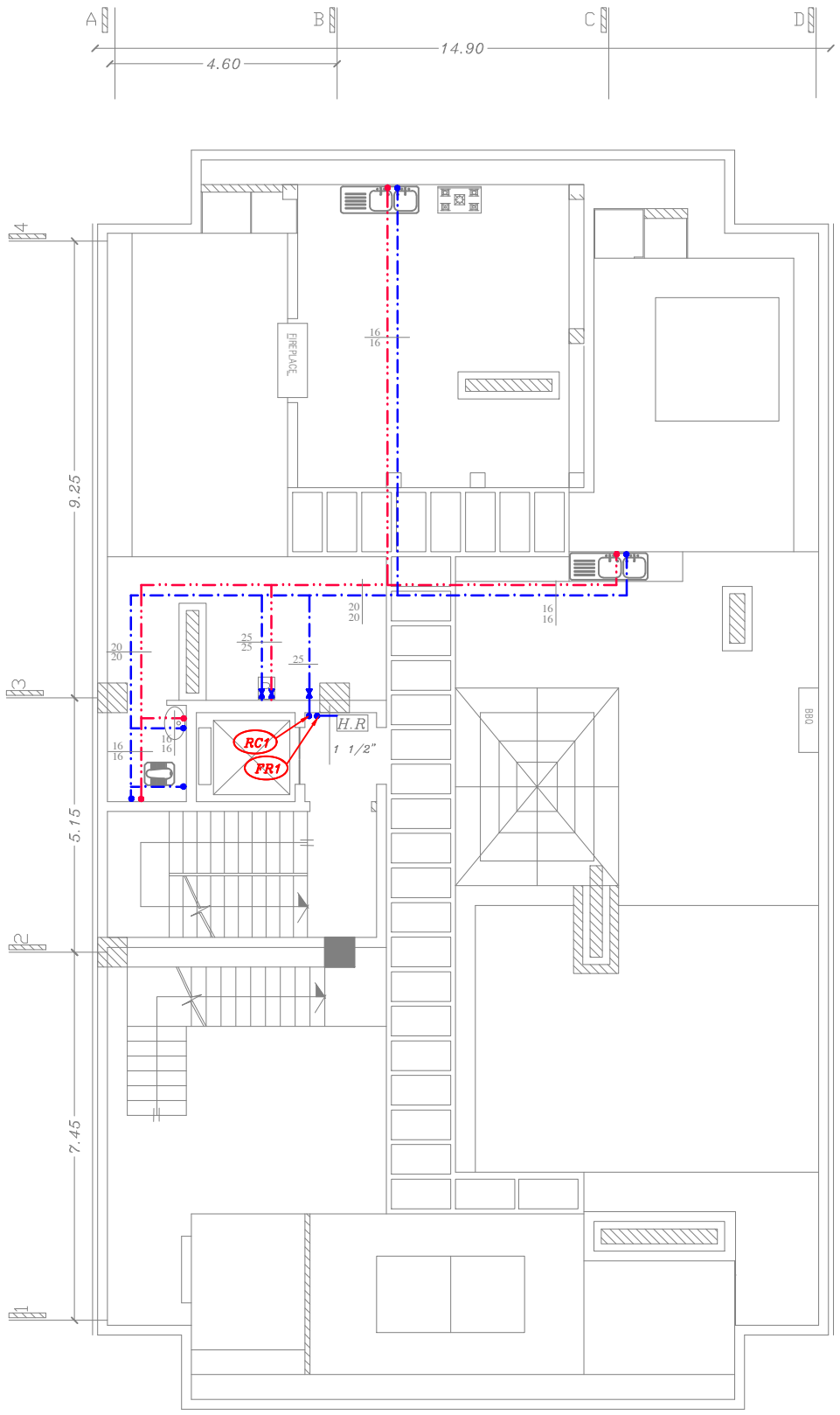
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All plumbing = Under the Floor

Clean Water & Fire Extinguishing

Sc 1:100

Roof

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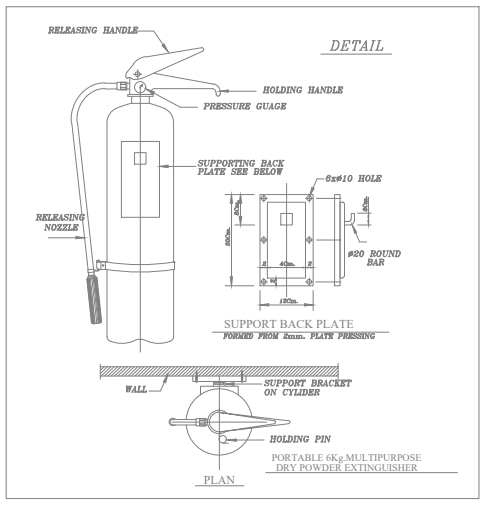
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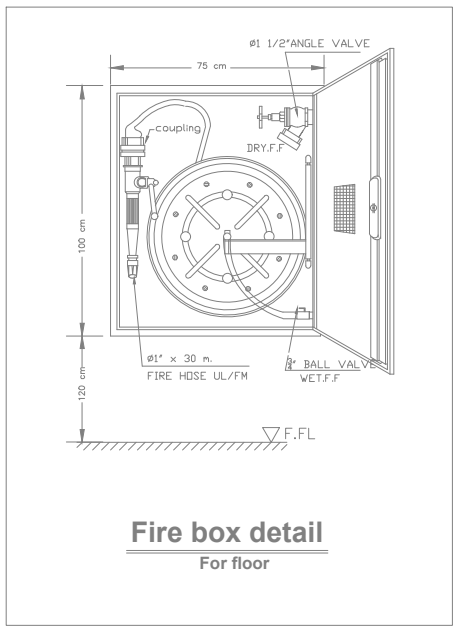
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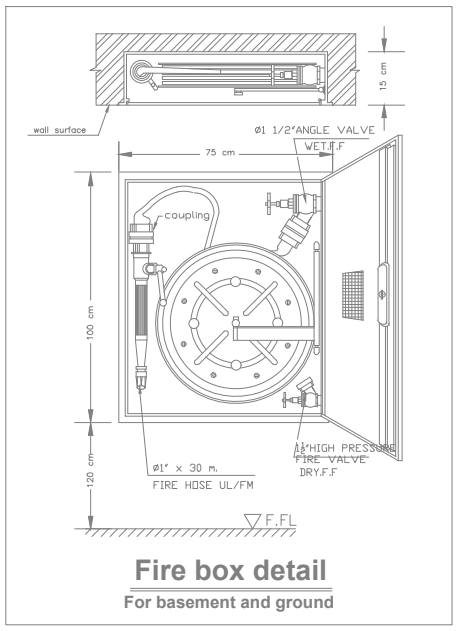
M- 205





Fire box detail

For floor



Fire box detail

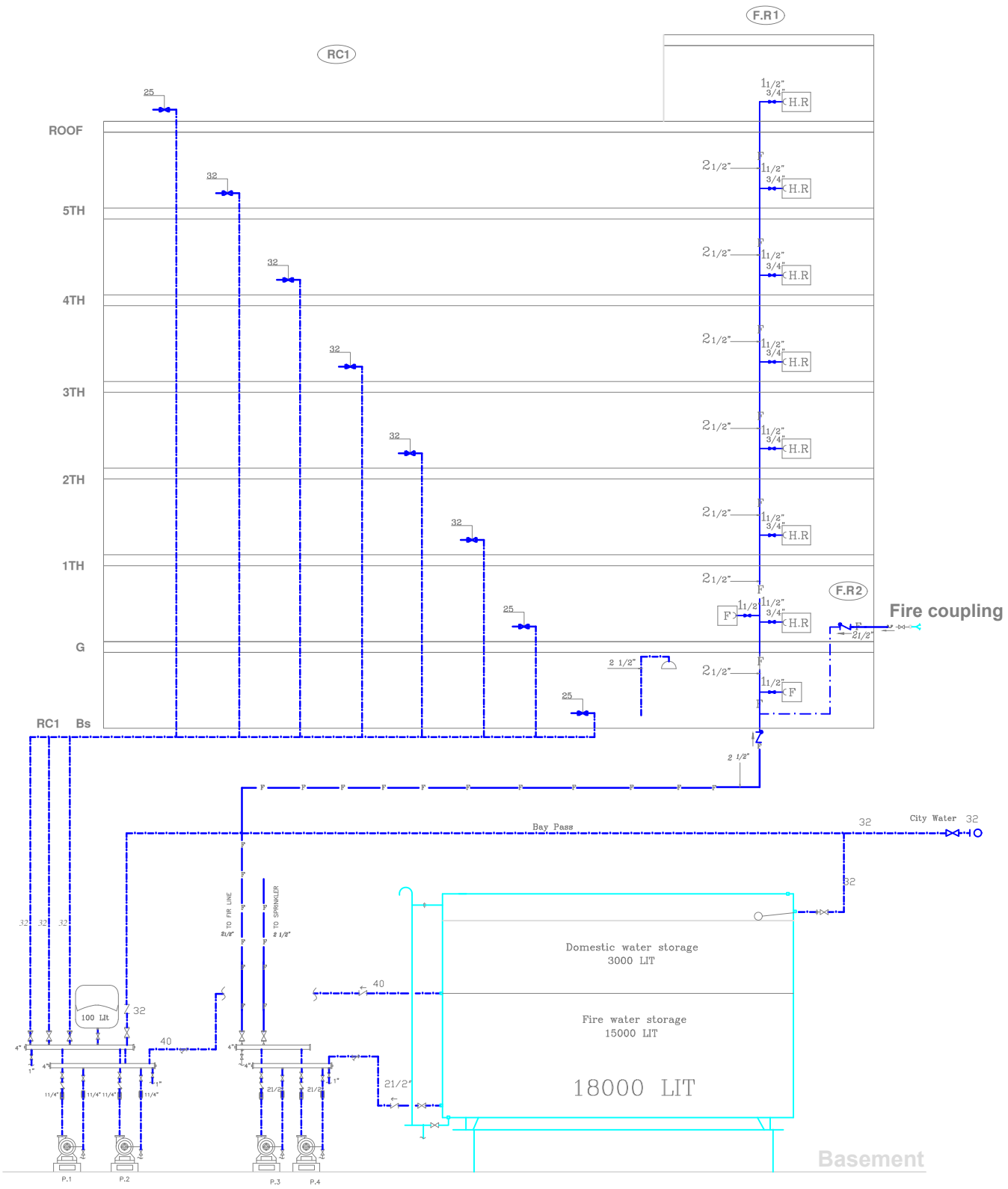
For basement and ground

Domestic Pump

NO	Ph ⌀	TYPE (PUMP)	P2-norm hp-kw	Amper	Q (L/M)	H (M)
2	3	PENTAX CBT-310/01	3 hp 2.2 kw	9.5	10-150	63-36

Fire Pump

NO	Ph ⌀	TYPE (PUMP)	P2-norm hp-kw	Amper	Q (M3/h)	H (M)
2	3	BAHR PUMP BP32-200/5.5 2P	7.5 hp 5.5 kw	11.3	15.5	60



Clean Water & Fire Extinguishing Diagram

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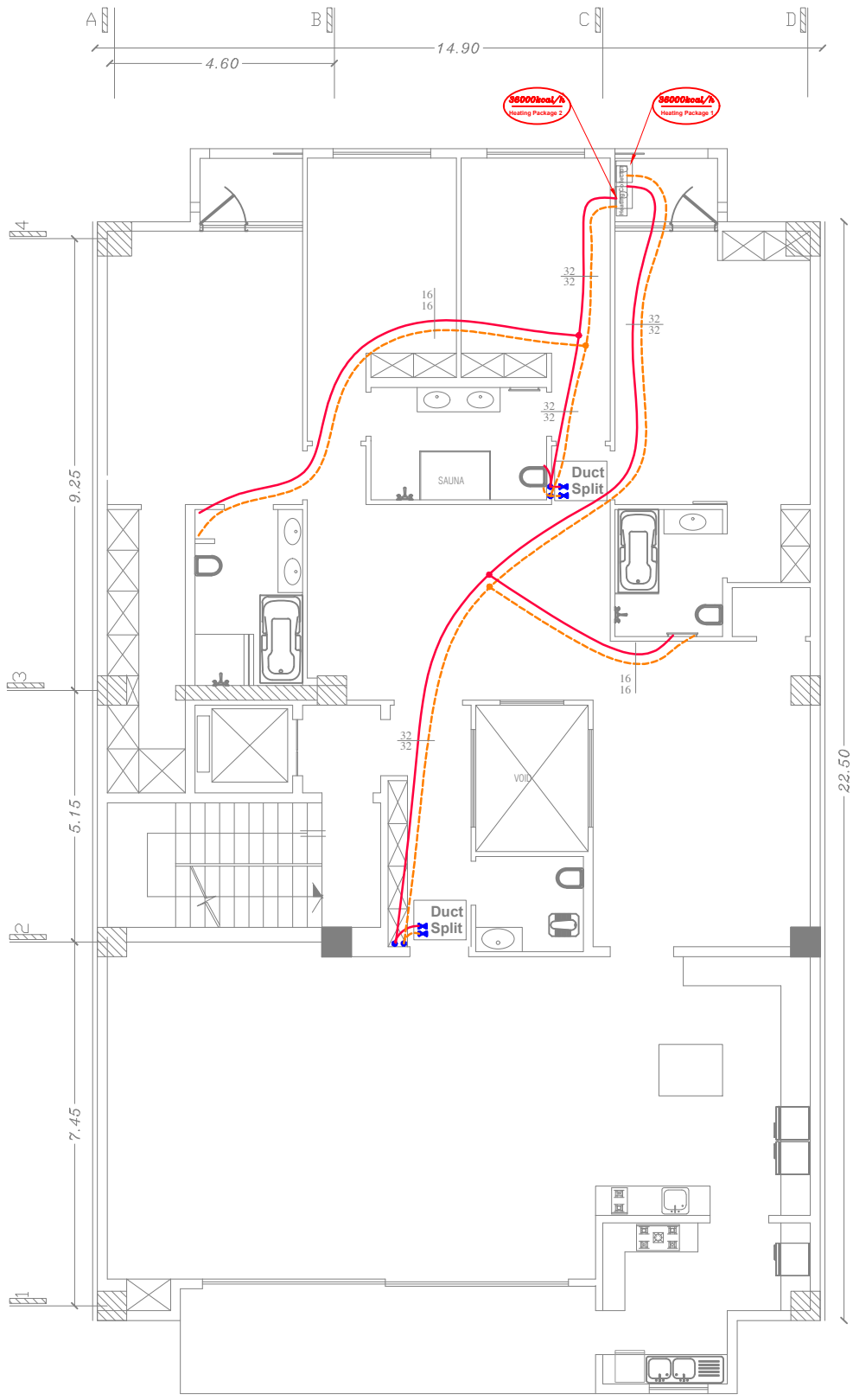
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M- 301



All plumbing = Under the Floor

Hot Water Piping

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1~5th Floor

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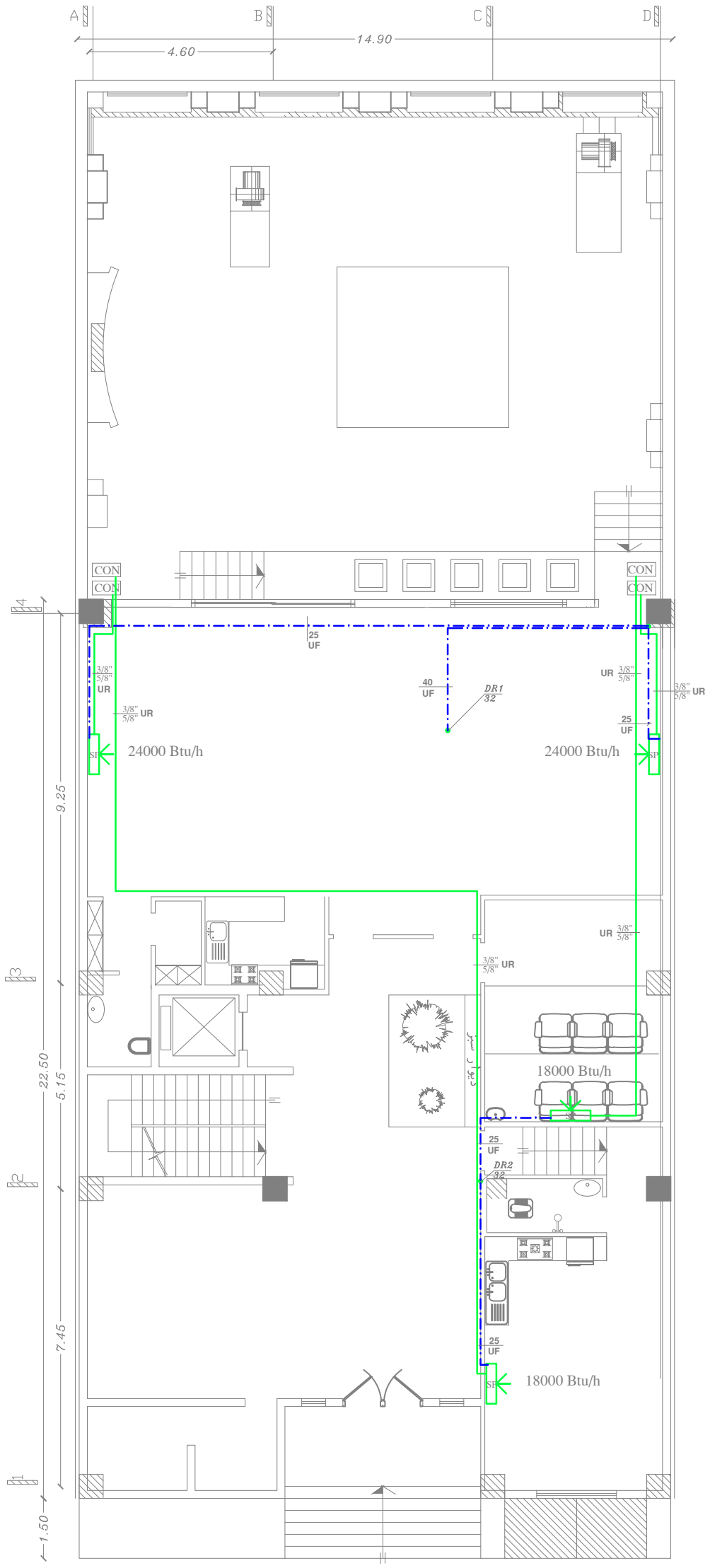
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SCALE
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PAGE
M- 401



UR = Under the Roof
UF = Under the Floor

Air Conditioner Piping System

Sc 1:100

Ground

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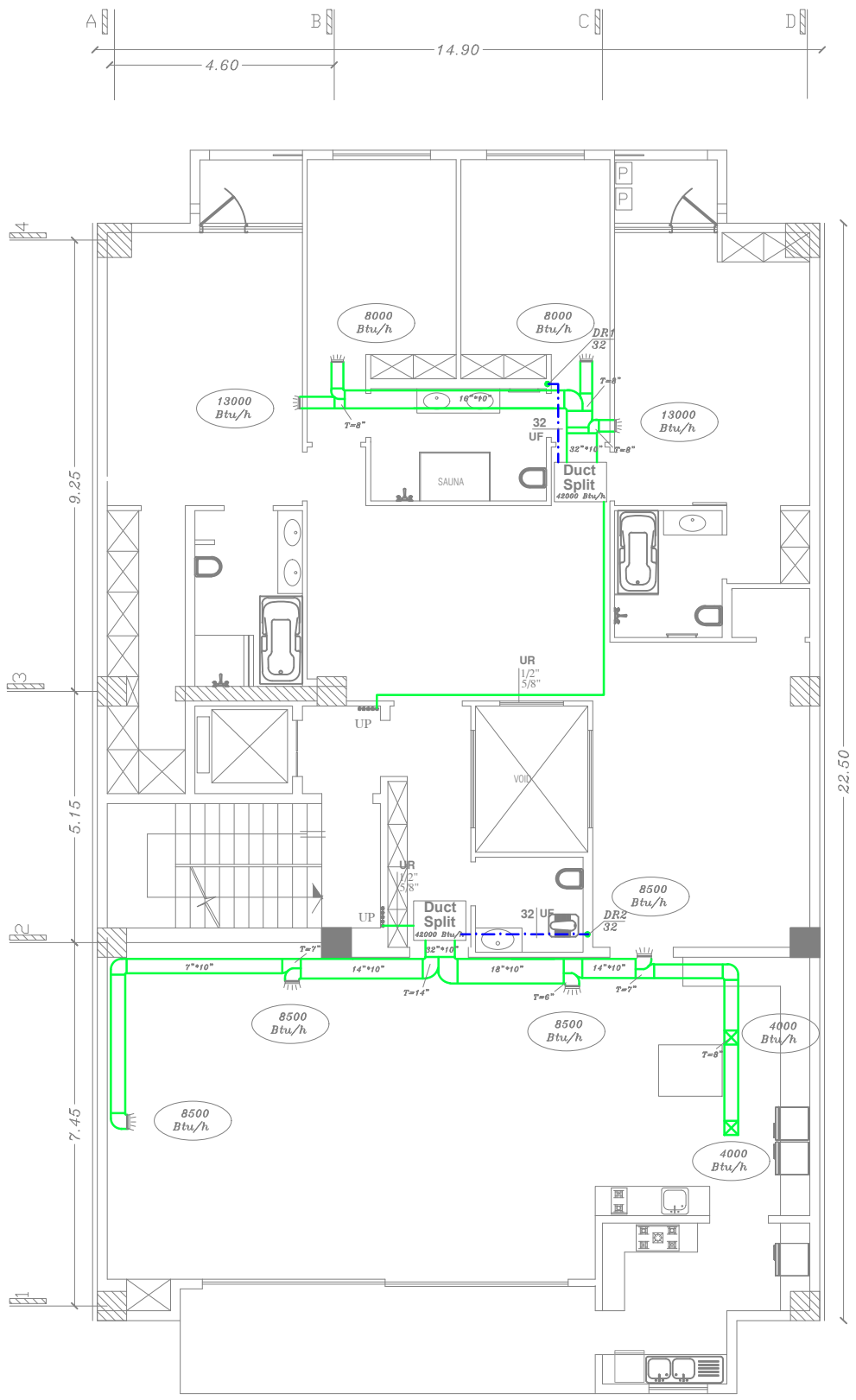
REV. 01

SCALE

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M- 402



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UF = Under the Floor

Air Conditioner Piping System

Sc 1:100

1~5th Floor

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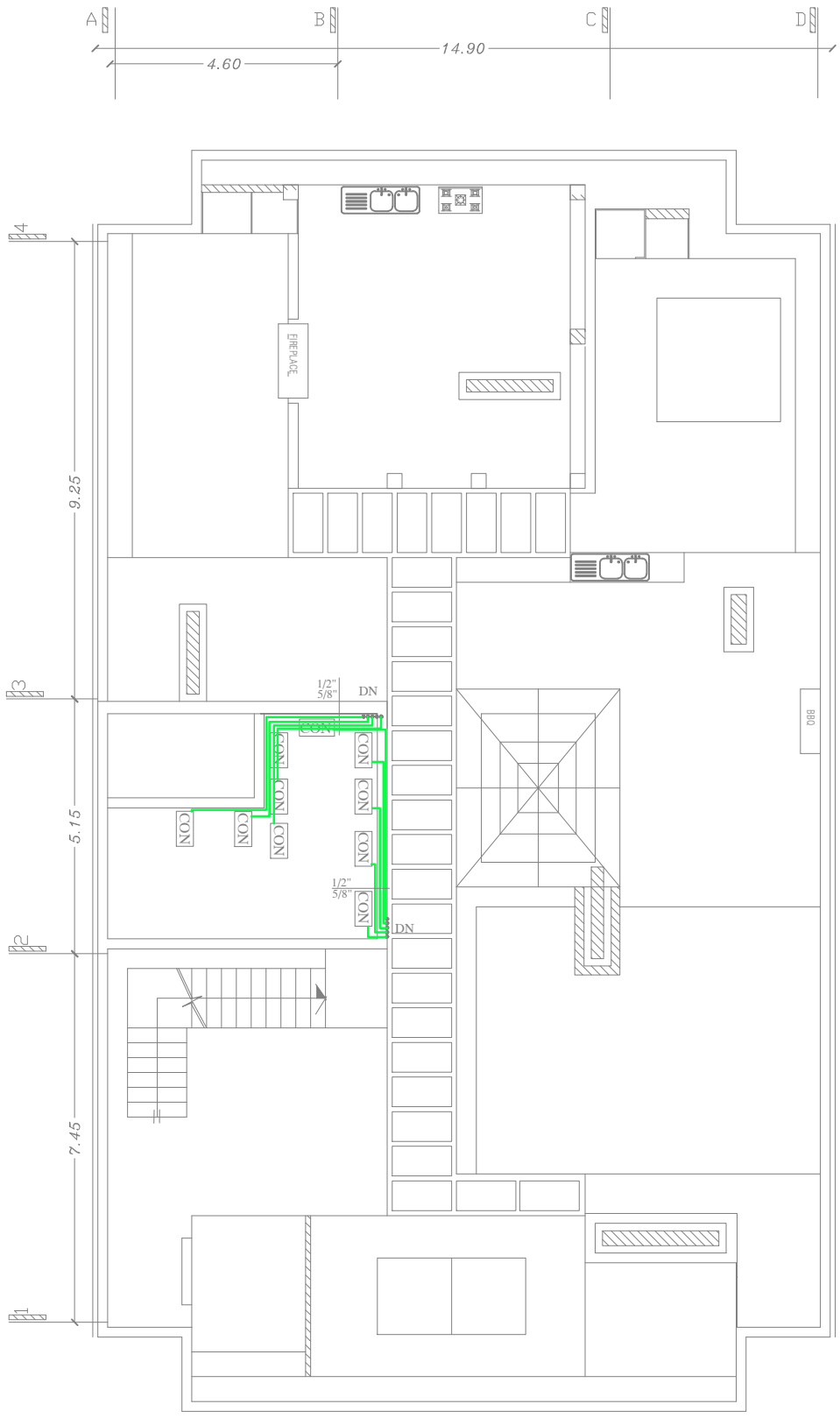
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Air Conditioner Piping System

Sc 1:100

Roof

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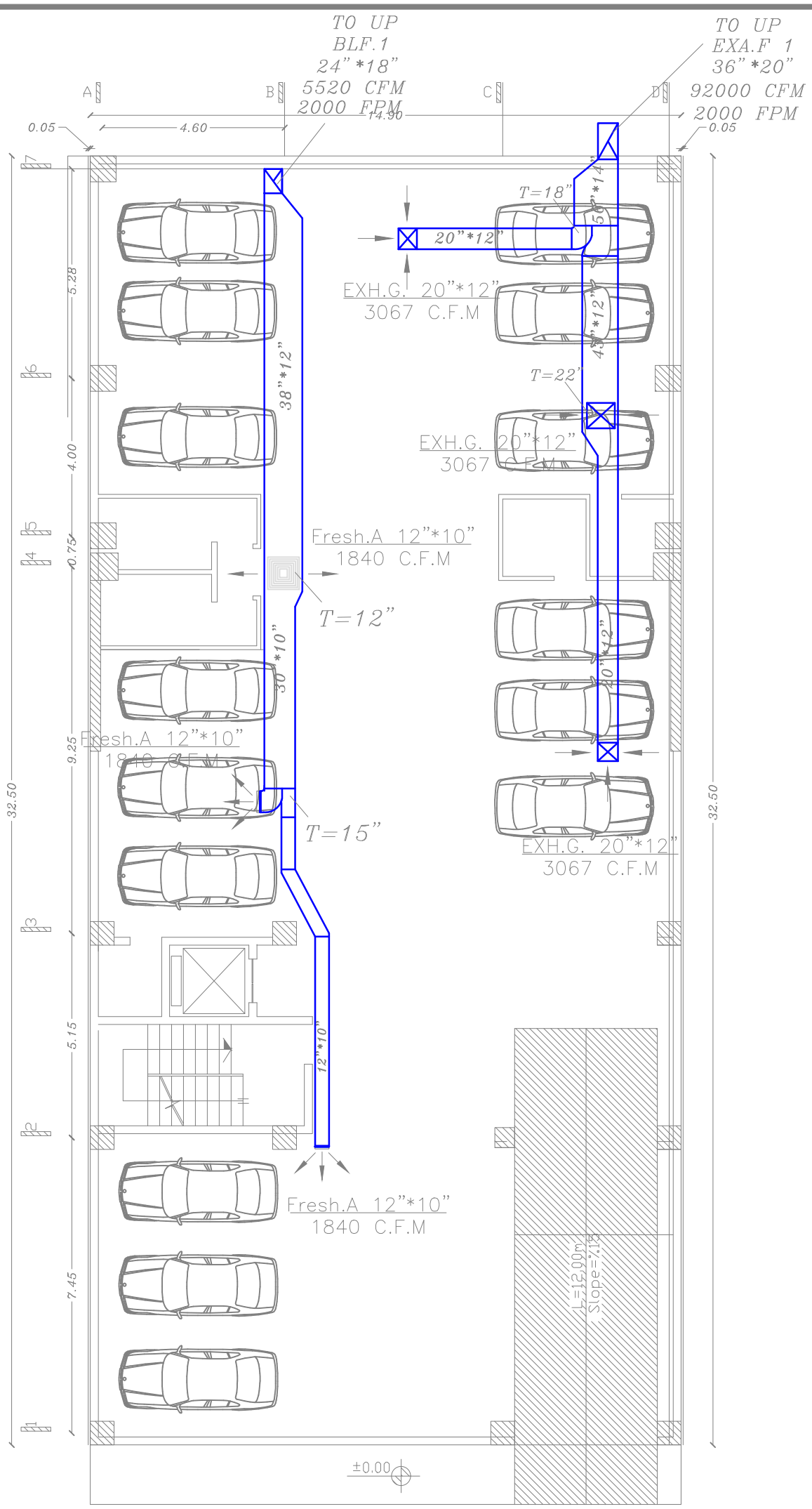
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Exhaust Air System

Sc 1:100

Basement

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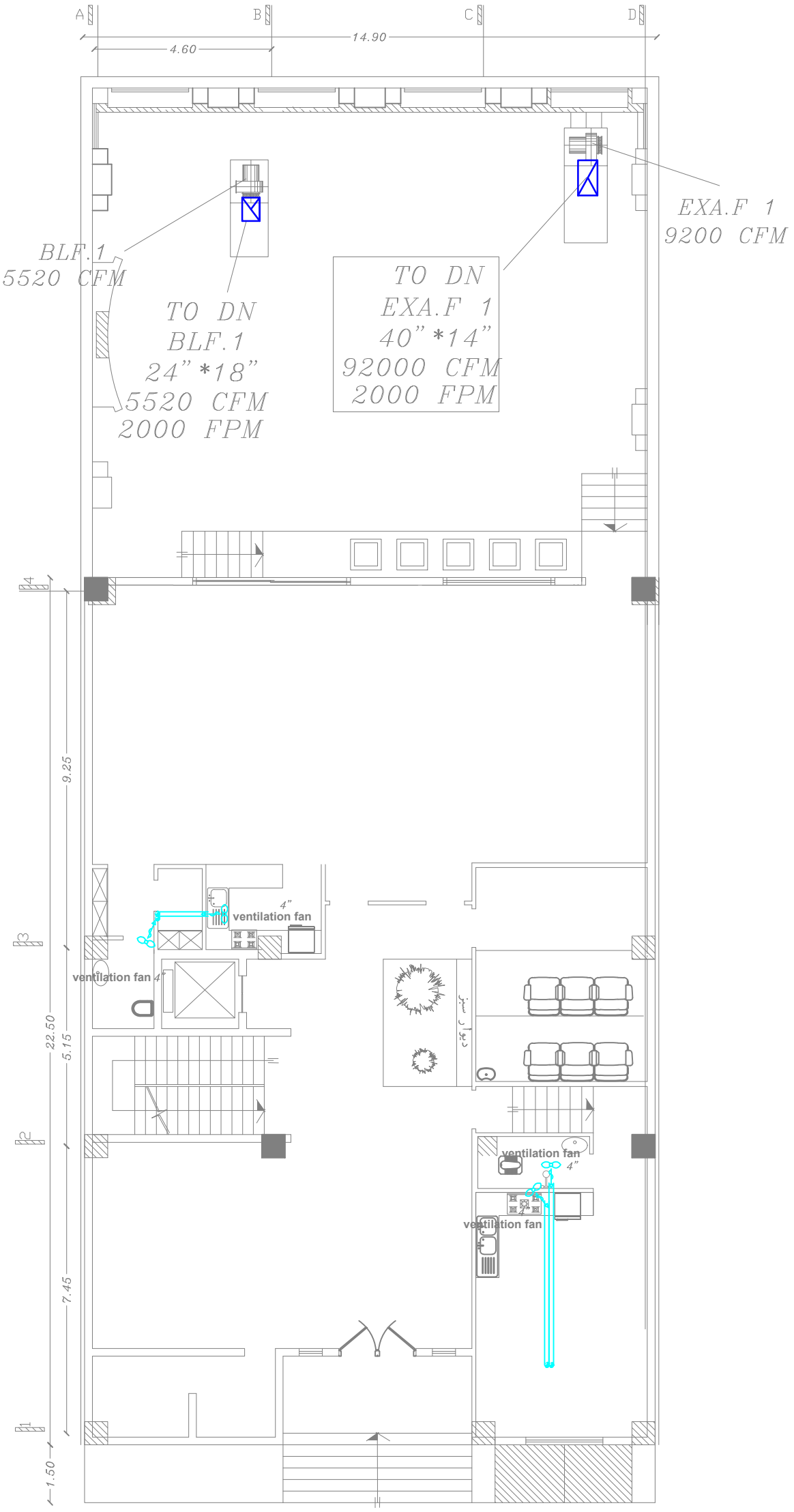
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Exhaust Air System

Sc 1:100 Ground

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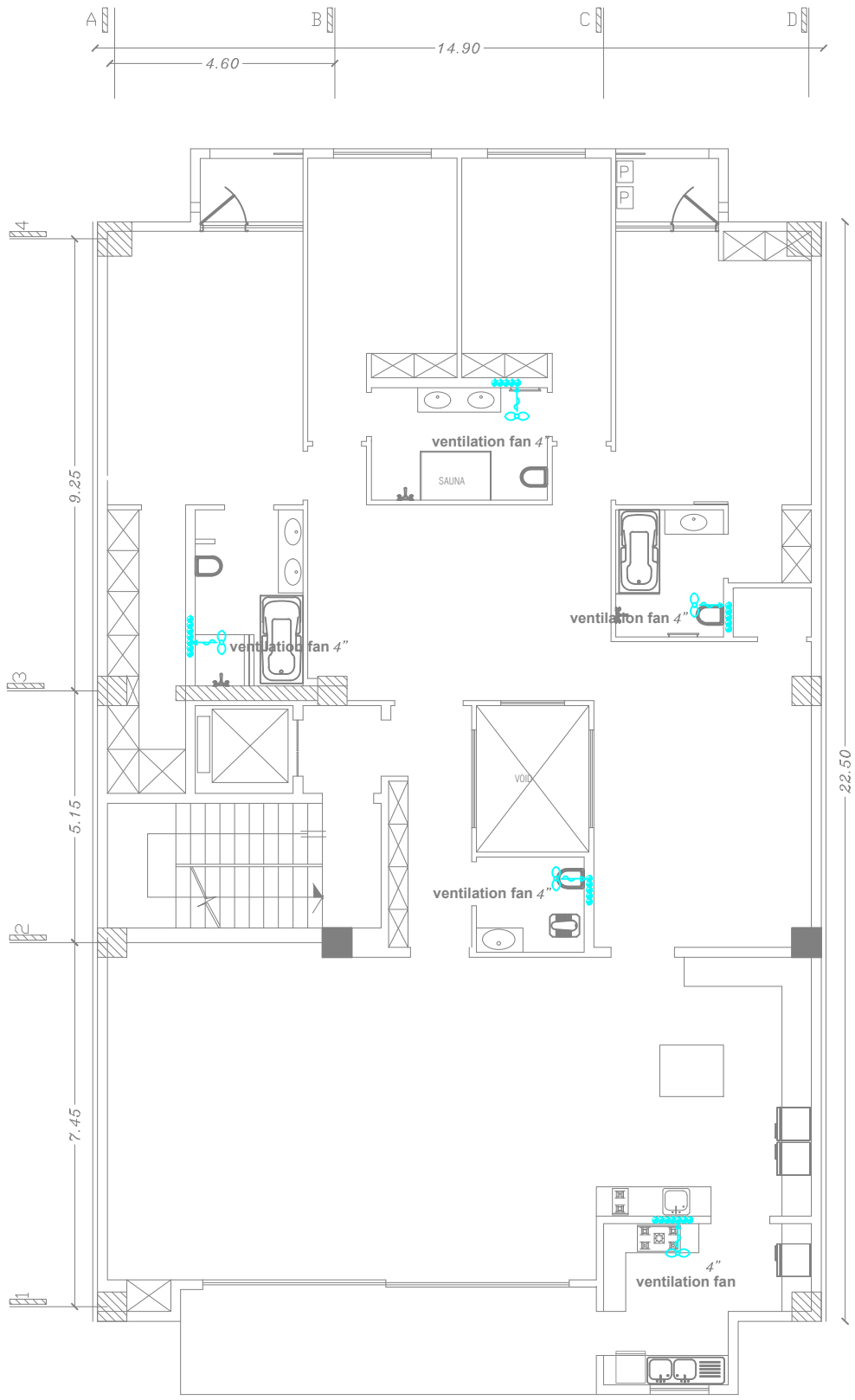
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Exhaust Air System

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1~5th Floor

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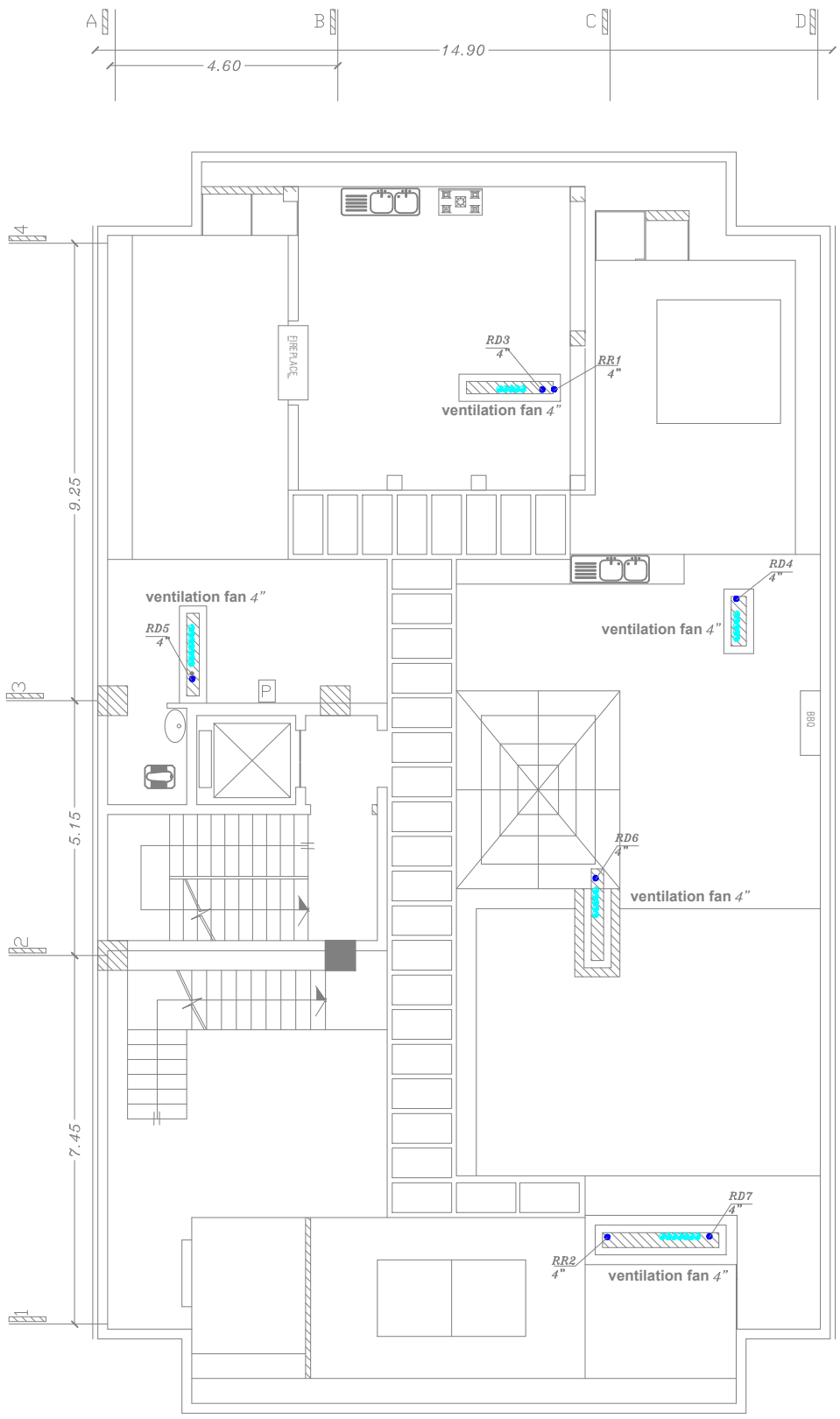
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Exhaust Air System

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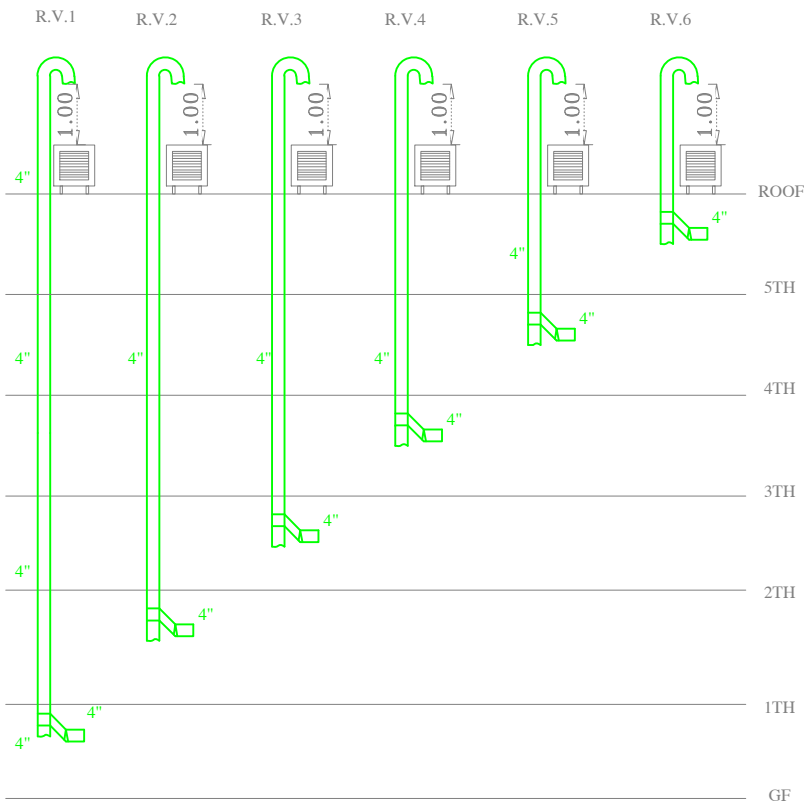
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Plumbing Symbol

- Corner Bathtub
- Recessed Bathtub
- Sitz Bath
- Bidet
- Shower Stall
- Shower Head
- Overhead Gang Shower
- Pedestal Lavatory
- Wall Lavatory
- Corner Lavatory
- Handicapped Lavatory
- Dental Lavatory
- Standard Kitchen Sink
- Kitchen Sink, R & L Drain Board
- Kitchen Sink, L H Drain Board
- Combination Sink & Dishwasher
- Combination Sink & Laundry Tray
- Service Sink
- Wash Sink (Wall-Type)
- Wash Sink
- Laundry Tray (Single)
- Laundry Tray (Double)
- Water Closet (Tank-Type)
- Water Closet (Integral Tank)
- Water Closet (Flush Valve, Floor Outlet)
- Water Closet (Flush Valve, Wall-Hung)
- Urinal (Wall-Hung)
- Urinal (Stall)
- Urinal (Trough-Type)
- Drinking Fountain (Recessed)
- Drinking Fountain (Semi-Recessed)
- Drinking Fountain (Projecting-Type)
- Hot Water Tank
- Water Heater
- Meter
- Hose Rack
- Hose Bibb
- Gas Outlet
- Vacuum Outlet
- Drain
- Grease Separator
- Oil Separator
- Cleanout
- Garage Drain
- Floor Drain with Backwater Valve
- Roof Sump



Ventilation Diagram

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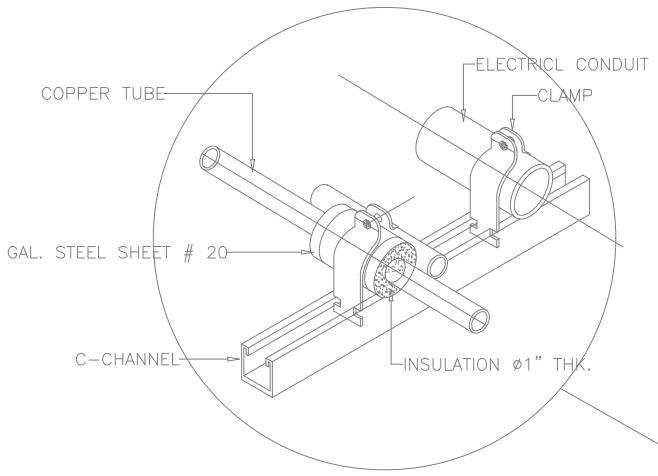
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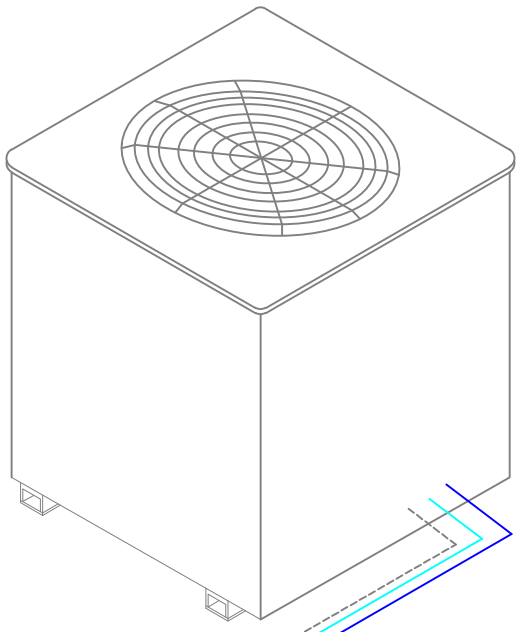
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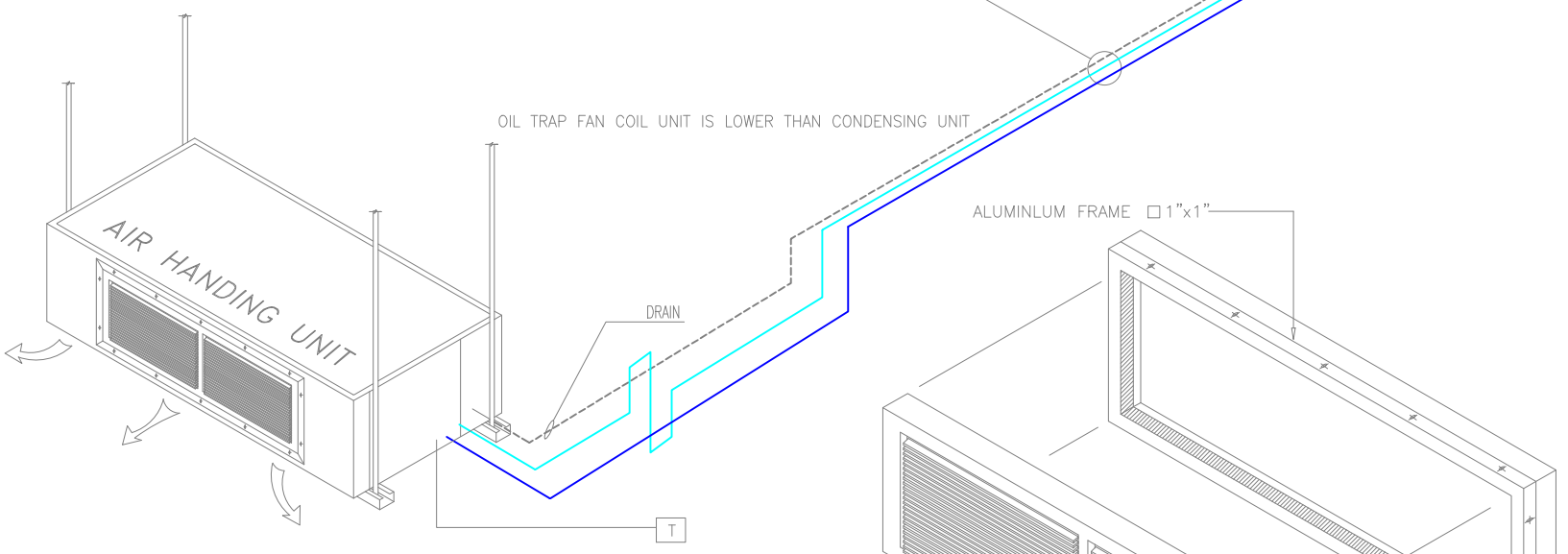
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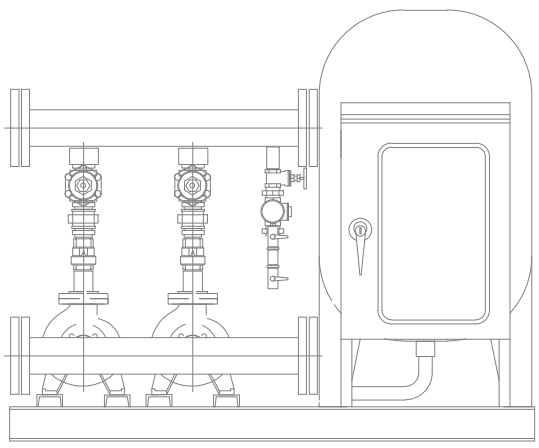
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M- 506

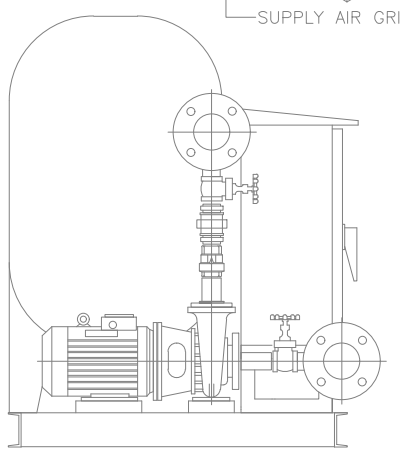




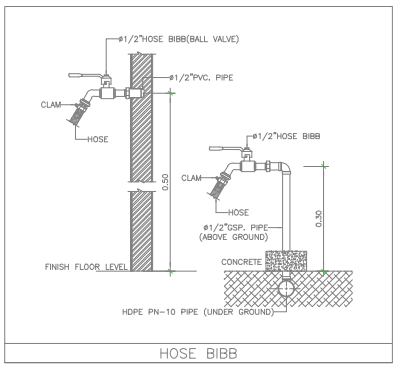


AHU CEILING MOUNTED

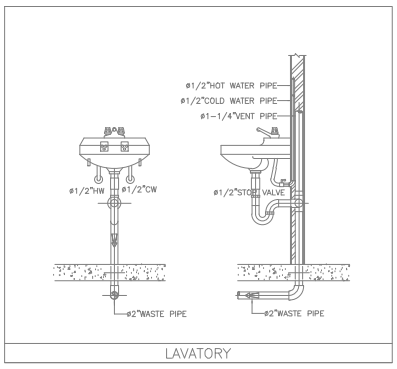




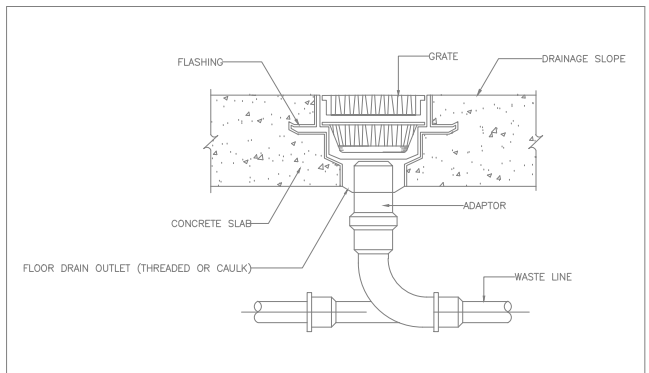
Booster Pump detail



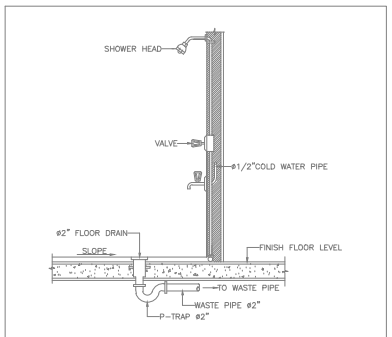
HOSE BIBB



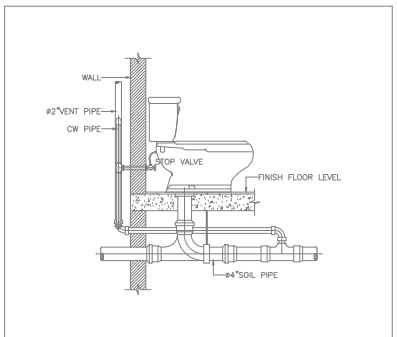
LAVATORY



SPRINKLER OR GUTTER DRAIN



SHOWER HEAD



WATER CLOSET WITH FLUSH TANK (WC)

Mechanical Specifications