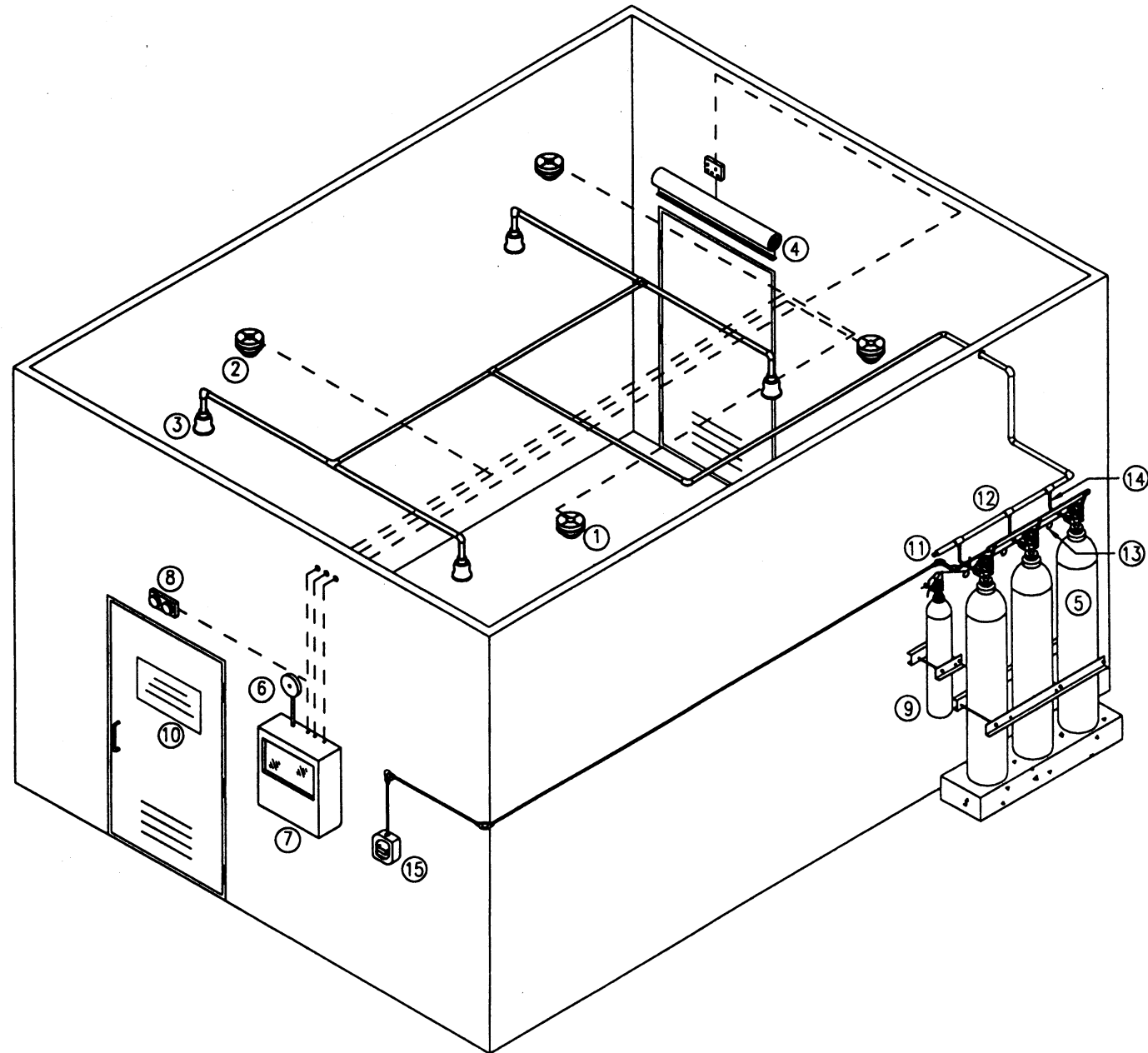


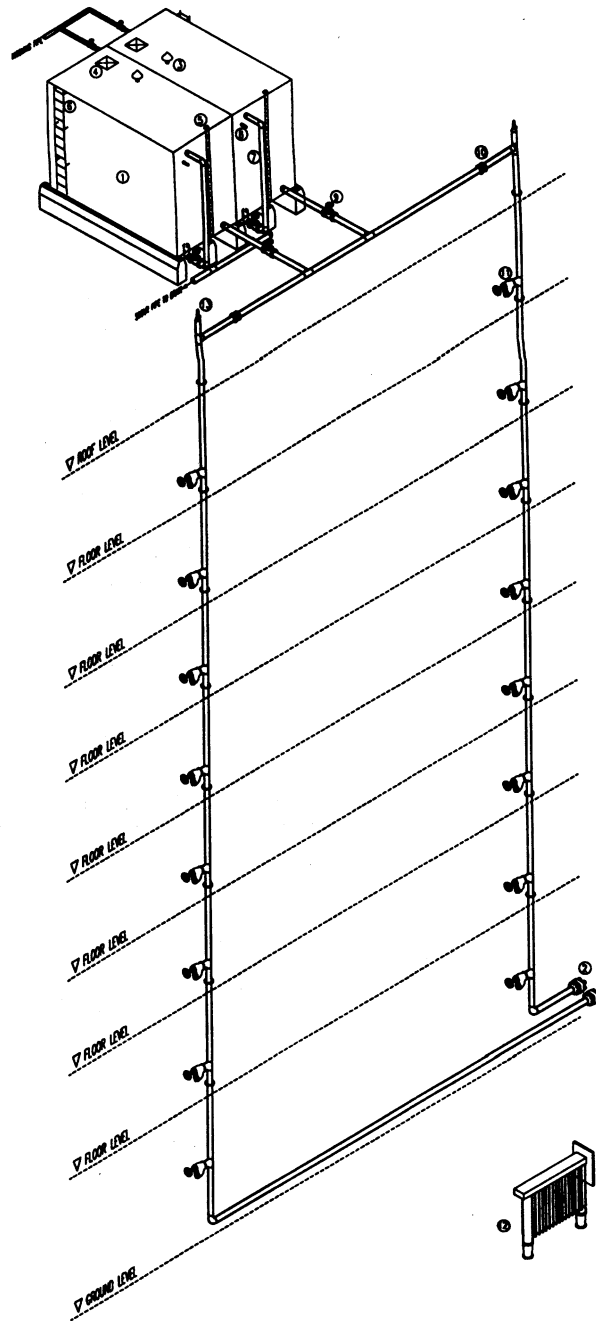
CARBON DIOXIDE EXTINGUISHING SYSTEM

COMPONENT / EQUIPMENT

- 1 Heat Detector
- 2 Smoke Detector
- 3 Extinguishing Nozzles
- 4 Fire Curtain (for Louvre Door / Opening)
- 5 CO₂ Cylinder c/w Accessories
- 6 Alarm Bell
- 7 Key Switch
- 8 Double Inter-lock Control Panel c/w Back Up Battery
- 9 Normal / Discharge Light
- 10 Pilot Cylinder c/w Solenoid Valve
- 12 Safety Plug
- 13 Piping Manifold
- 14 Copper Tubing
- 15 Discharge Hose c/w Check Valve
- 16 Manual Pull Station



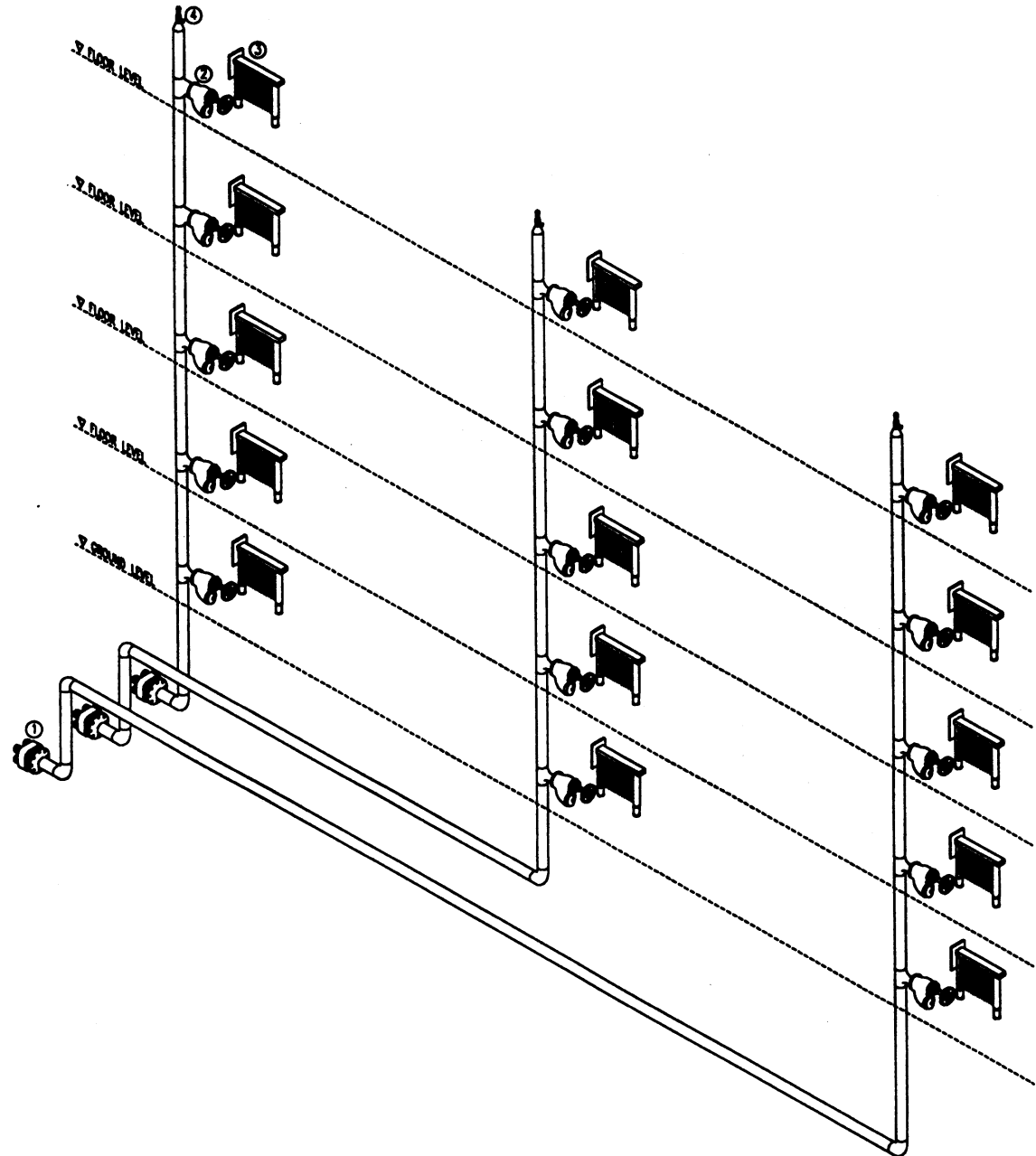
DOWN COMER SYSTEM



DRY RISER SYSTEM

COMPONENT / EQUIPMENT

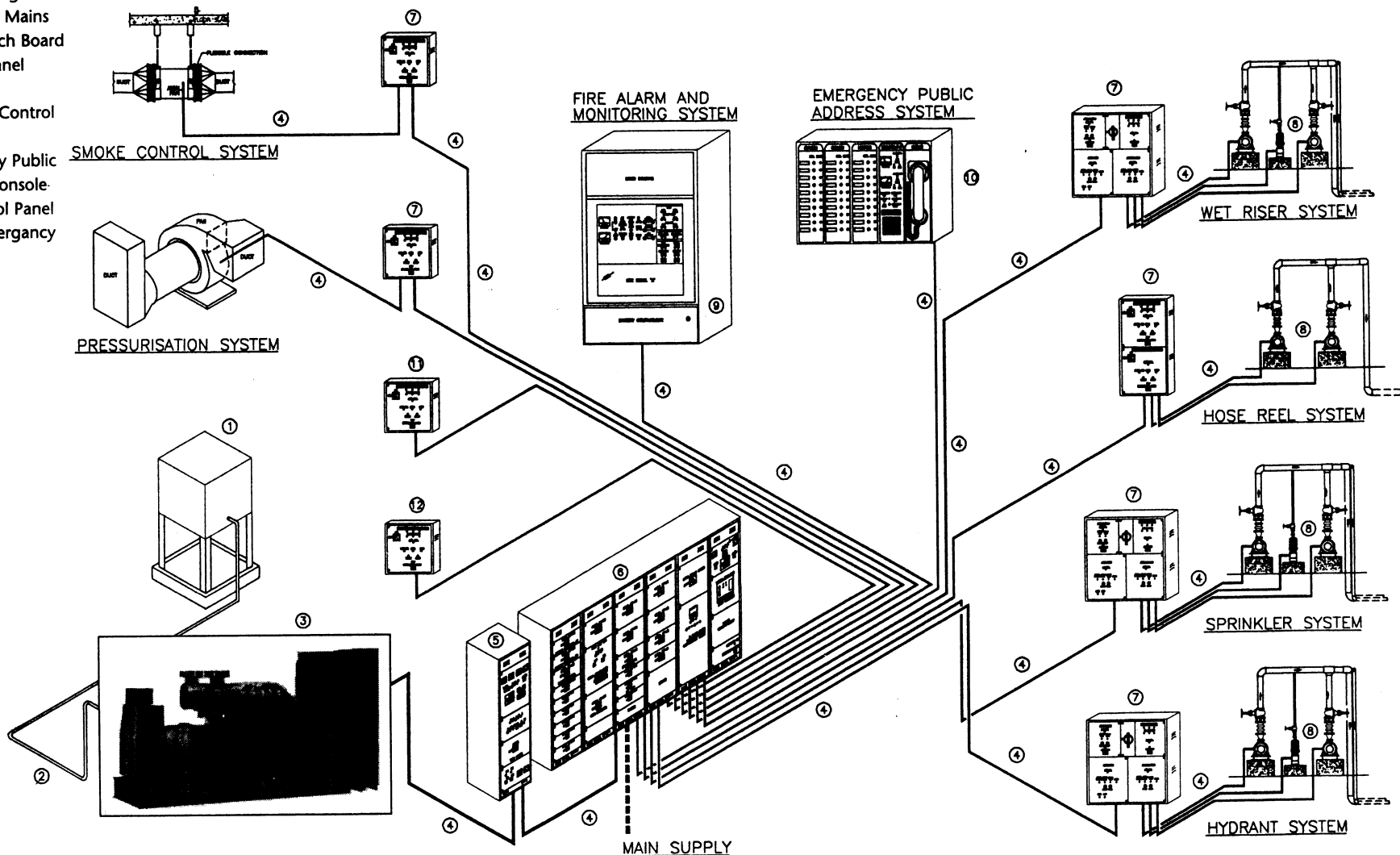
- 1 4-Way Breeching Inlet
- 2 Landing Valve
- 3 Hose Cradle
- 4 Air Release Valve c/w Ball Valve



EMERGENCY POWER SYSTEM

COMPONENT / EQUIPMENT LIST

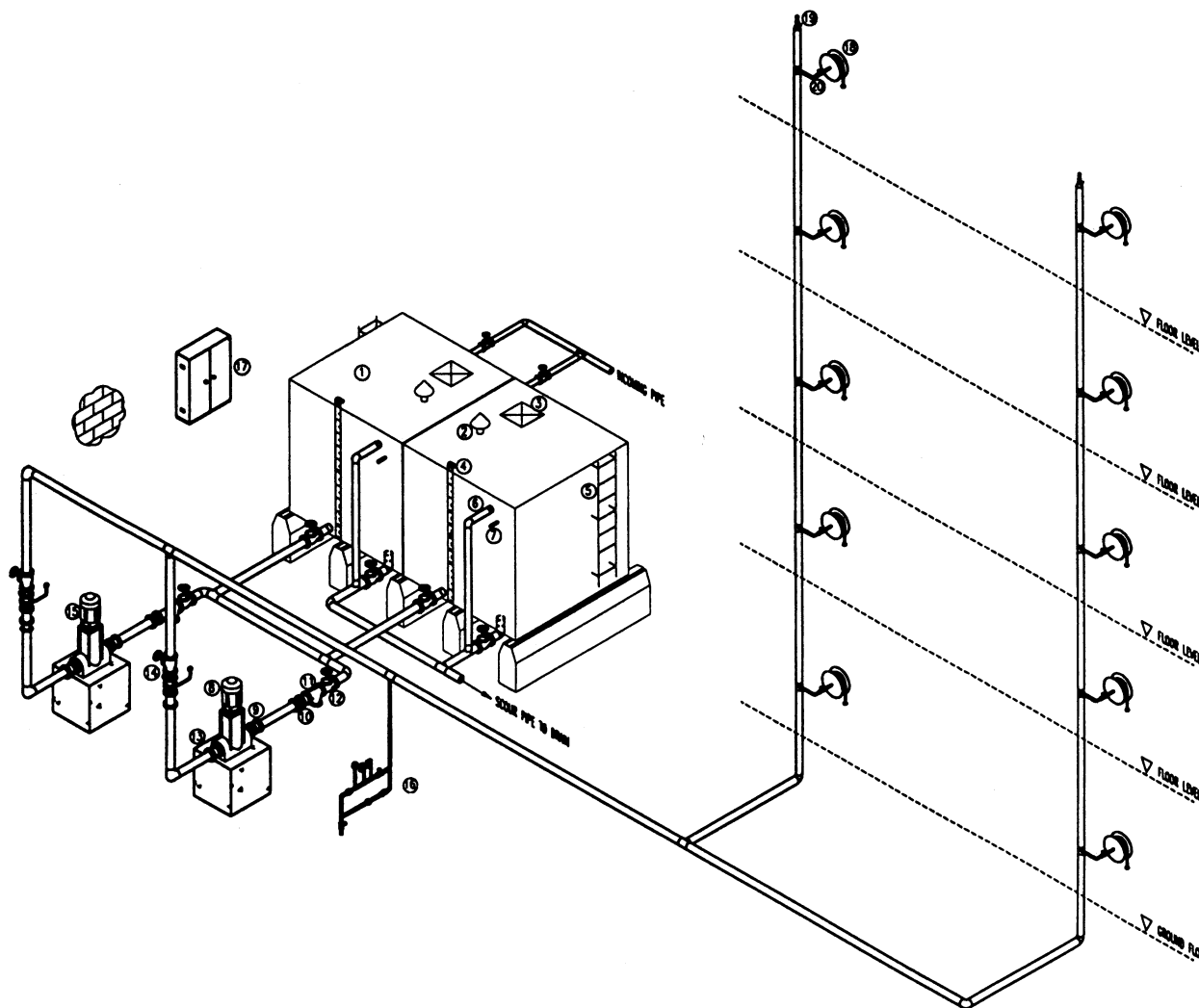
- 1 Fuel Tank
- 2 Fuel Line
- 3 Generator
- 4 Fire Resisting Cable
- 5 Automatic Mains
- 6 Main Switch Board
- 7 Control Panel
- 8 Pump Set
- 9 Main Fire Control Console
- 10 Emergency Public Address Console
- 11 Lift Control Panel
- 12 Other Emergency System



HOSE REEL SYSTEM

COMPONENT / EQUIPMENT

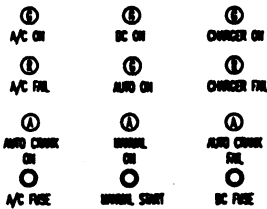
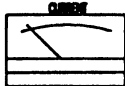
- 1 Water Tank
- 2 Vent Pipe c/w Mosquito Net
- 3 Access Opening
- 4 Level Indicator
- 5 External Cat Ladder
- 6 Overflow Pipe
- 7 Warning Pipe
- 8 Standby Pump
- 9 Eccentric Reducer
- 10 Expansion Joint
- 11 Y-Strainer
- 12 Gate Valve
- 13 Concentric Reducer
- 14 Check Valve
- 15 Duty Pump
- 16 Pump Start Test Pipe
- 17 Pump Starter Panel
- 18 Hose Reel Drum c/w Hose & Nozzle
- 19 Air Release Valve c/w Ball Valve
- 20 Stop Valve



HOSE REEL PUMP STARTER PANEL

HOSE REEL PUMP STARTER PANEL
ONE ELECTRIC AND ONE DIESEL

STAND-BY DIESEL PUMP



ISOLATOR

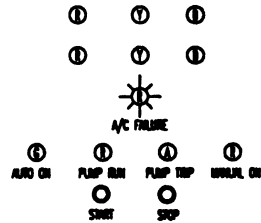


AUTO/MANUAL
SELECTOR SWITCH

DUTY ELECTRIC PUMP



ISOLATOR



AUTO/MANUAL
SELECTOR SWITCH

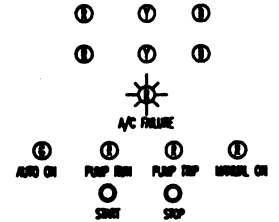
SERIAL NO.
MANUFACTURER.
DATE OF TESTING.
CERTIFICATE NO.
OWNER.
PURPOSE.

HOSE REEL PUMP STARTER PANEL
TWO ELECTRIC PUMP

DUTY PUMP (1)

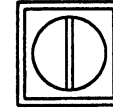


ISOLATOR

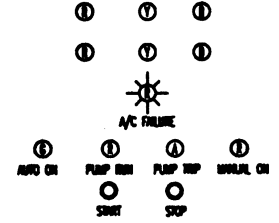


AUTO/MANUAL
SELECTOR SWITCH

STAND-BY PUMP (2)



ISOLATOR



AUTO/MANUAL
SELECTOR SWITCH

SERIAL NO.
MANUFACTURER.
DATE OF TESTING.
CERTIFICATE NO.
OWNER.
PURPOSE.

Note :

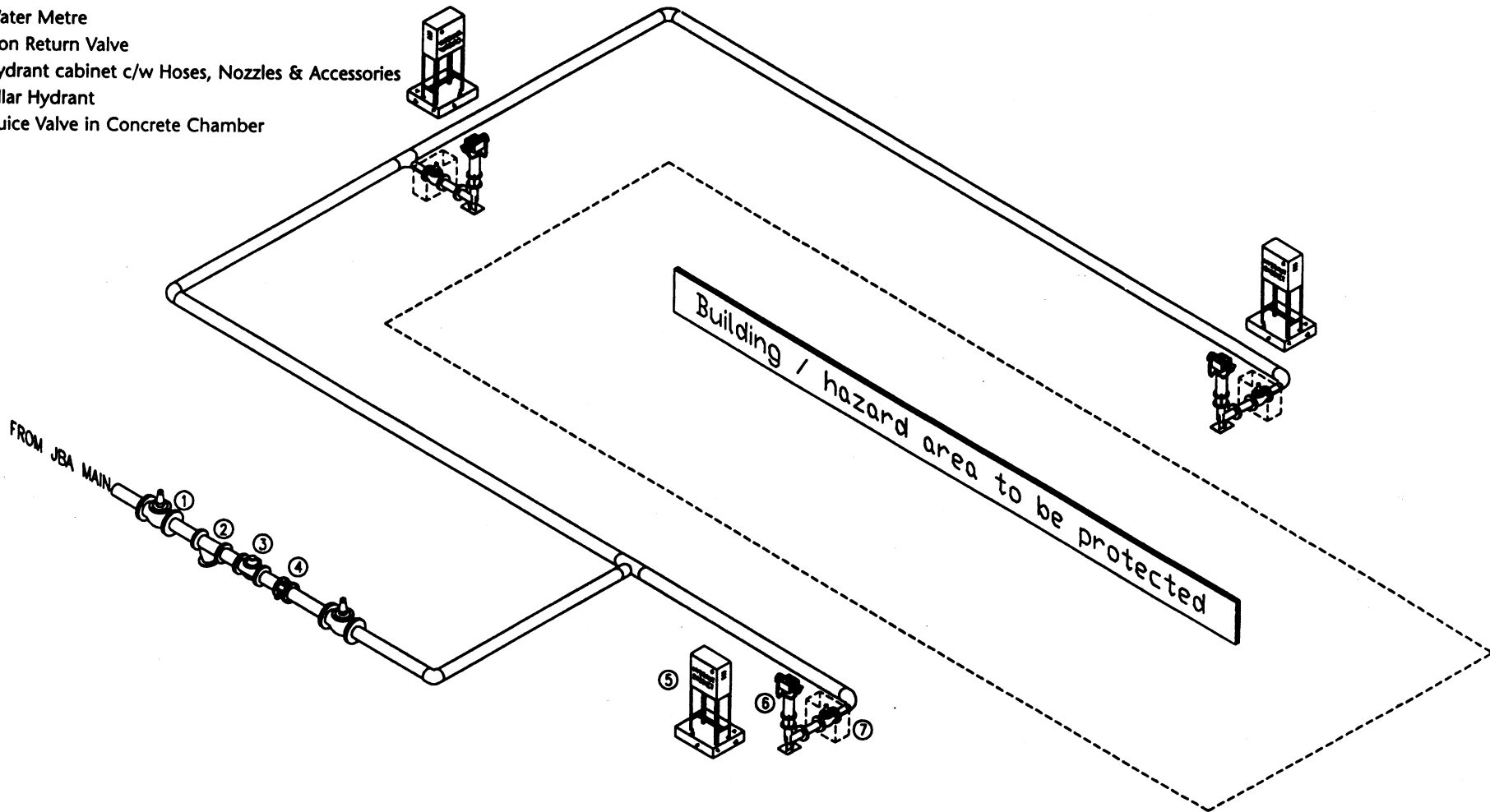
1. Phase indicator shall be shown in duplicate (double filament bulbs with a single alignment is acceptable as an alternative.)
2. A/C failure indicator shall be monitored on to the fire alarm indicator panel.

Legend

- ① :- Red light
- ① :- Yellow light
- ① :- Blue light
- ① :- Green light
- ① :- Amber light
- ⚡ :- Red flashing light

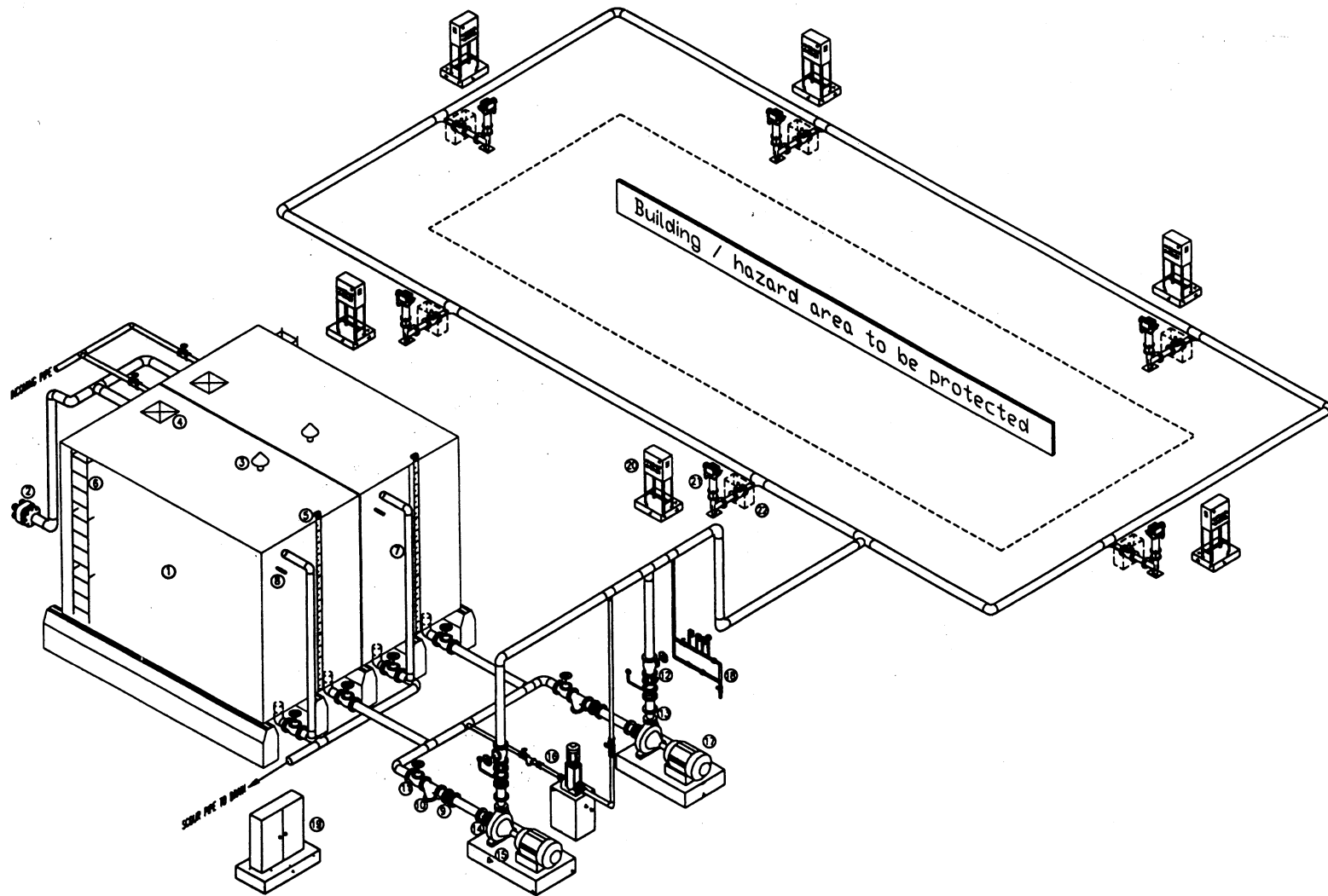
HYDRANT SYSTEM (DIRECT FROM JBA)

- 1 Sluice Valve
- 2 Strainer
- 3 Water Metre
- 4 Non Return Valve
- 5 Hydrant cabinet c/w Hoses, Nozzles & Accessories
- 6 Pillar Hydrant
- 7 Sluice Valve in Concrete Chamber

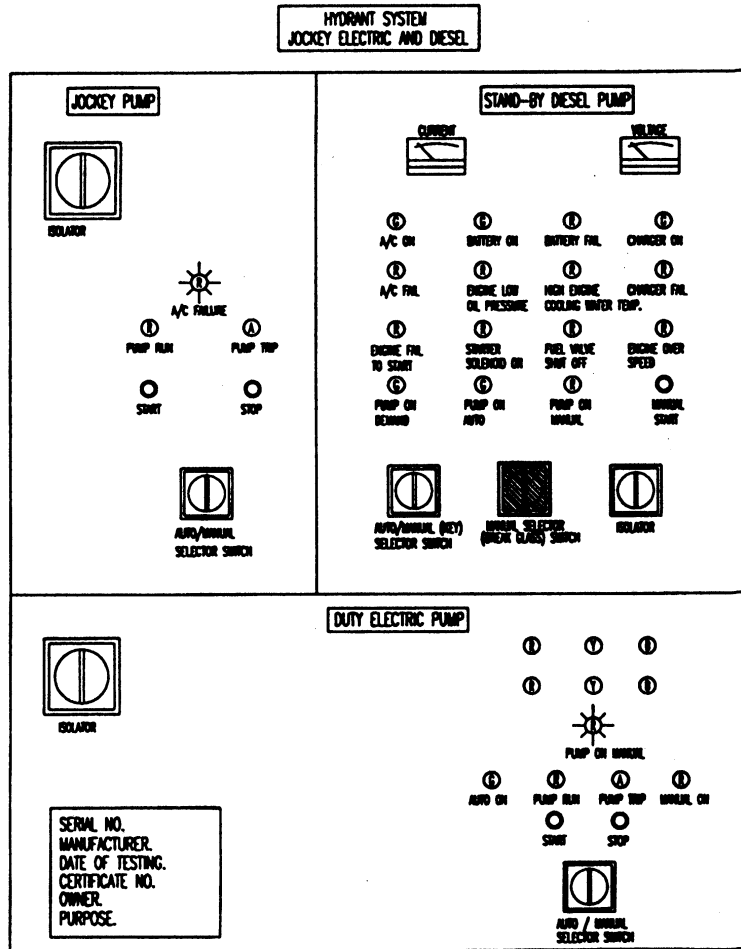


PRESSURISED HYDRANT SYSTEM

- 1 Water Tank
- 2 4-Way Breeching Inlet
- 3 Vent Pipe c/w Mosquito Net
- 4 Access Manhole
- 5 Level Indicator
- 6 External Cat Ladder
- 7 Overflow Pipe
- 8 Warning Pipe
- 9 Expansion Joint
- 10 Y-Strainer
- 11 Gate Valve
- 12 Check Valve
- 13 Concentric Reducer
- 14 Eccentric Reducer
- 15 Duty Pump
- 16 Jockey Pump
- 17 Standby Pump
- 18 Pump Start Test Pipe
- 19 Pump Starter Panel
- 20 Hydrant cabinet c/w Hoses, Nozzles & Accessories
- 21 Pillar Hydrant
- 22 Sluice Valve in Concrete Chamber



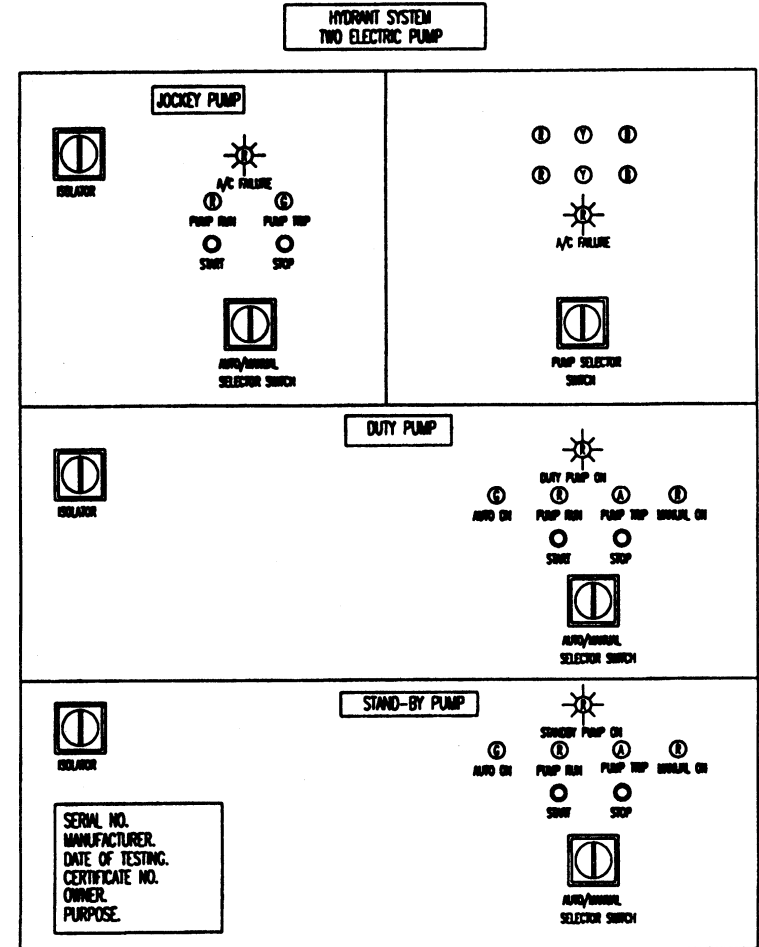
HYDRANT PUMP STARTER PANEL



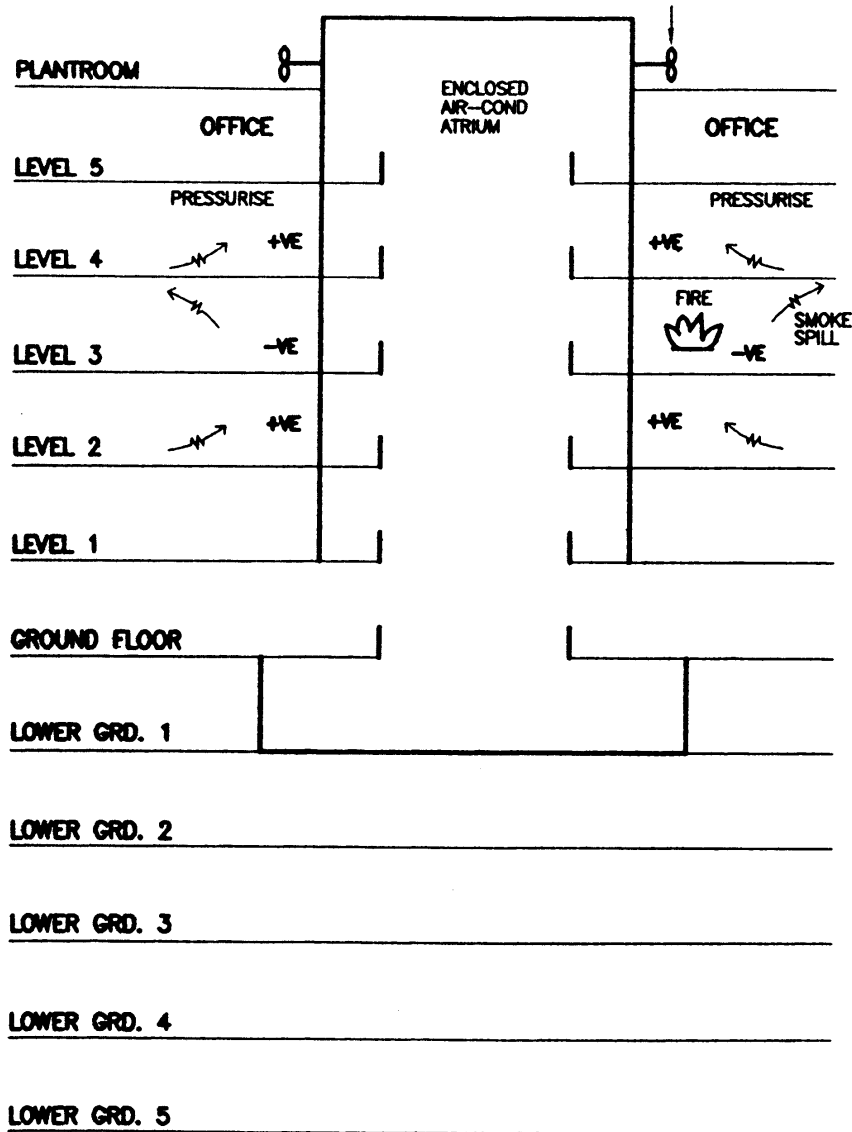
- Note :
- Phase indicators shall be shown in duplicate (double filament bulbs with a single alignment is acceptable as a alternate)
 - A/C failure indicator shall be monitored on to the fire alarm indicator panel.

Legend

- ① :- Red light
- ② :- Yellow light
- ③ :- Blue light
- ④ :- Green light
- ⑤ :- Amber light
- ⚡ :- Red flashing light

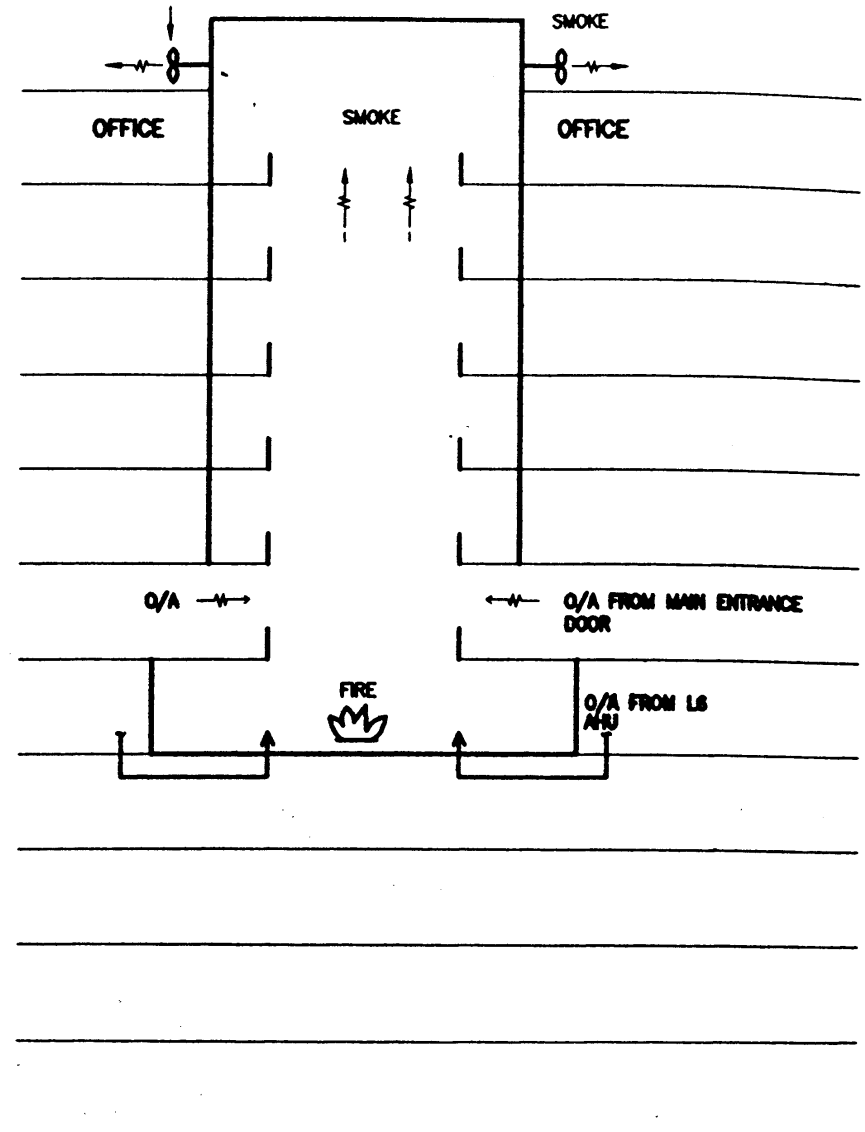


SMOKE CONTROL FOR ATRIUM



1. FIRE ON L3

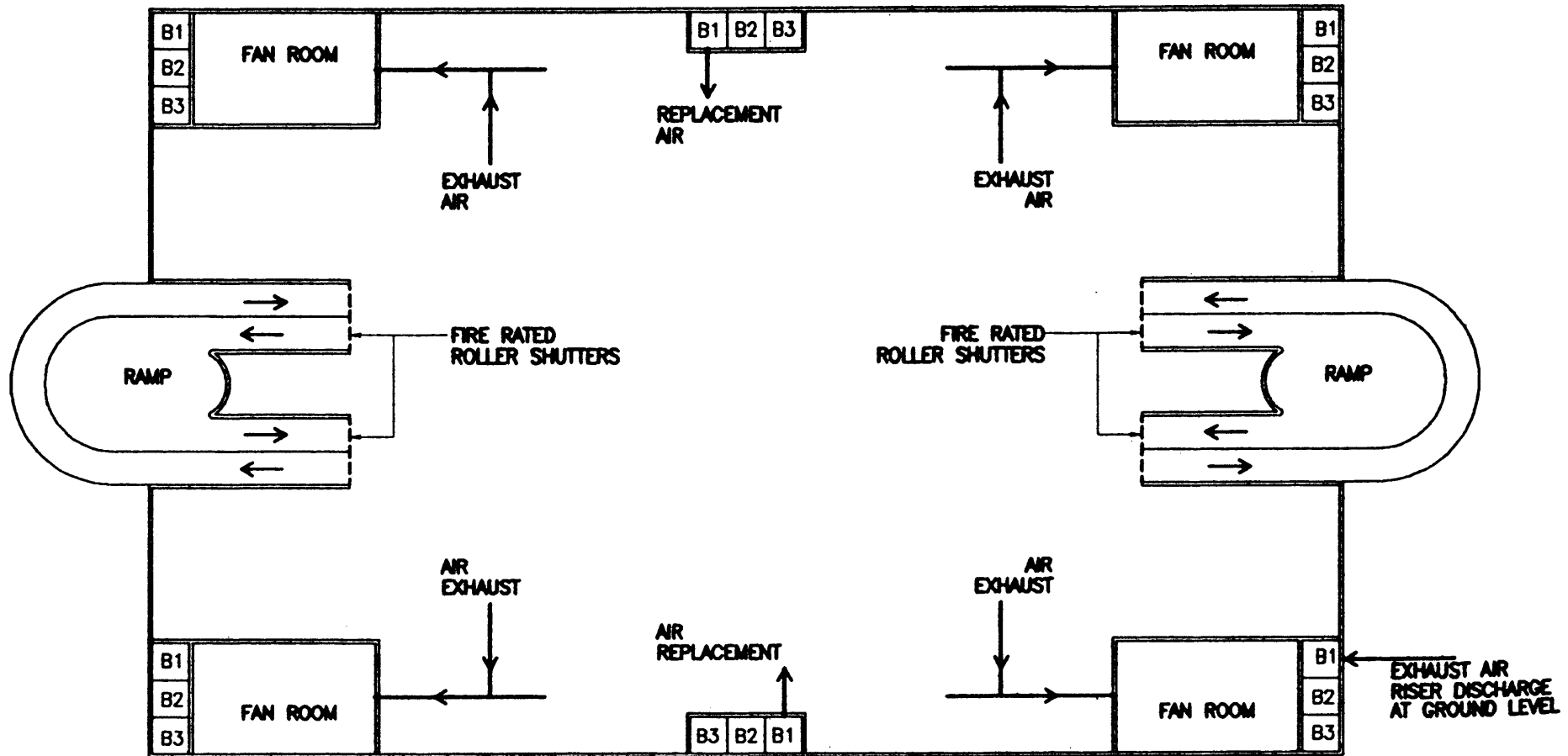
- SMOKE SPILL SYSTEM AT L3 OFFICE ACTIVATED
- L4 AND L2 OFFICE FA OPERATE IN PRESSURISED MODE
- AHU'S ON ALL OTHER FLOORS TRIPPED



2. FIRE IN ATRIUM VOID

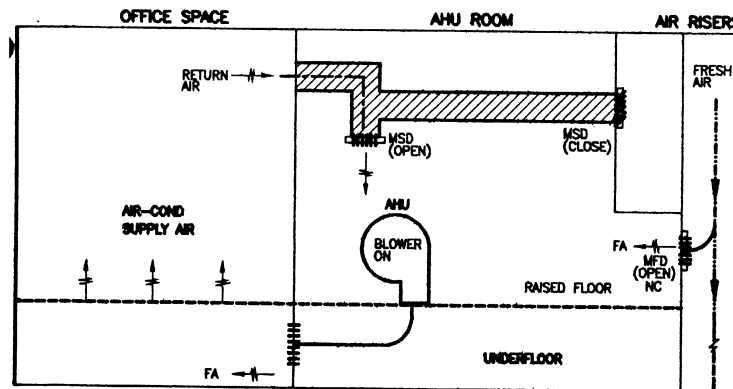
- ATRIUM SMOKE SPILL FANS OPERATE
- ALL AHU'S TRIPPED

SMOKE CONTROL FOR BASEMENT CAR PARK



Typical Floor Layout

SMOKE CONTROL FOR OFFICE



NOTE:

- 1). UNDER FIRE MODE, OTHER AHU'S SHALL TRIP AND ALL MSD'S AND MFD'S CLOSED

LEGEND:

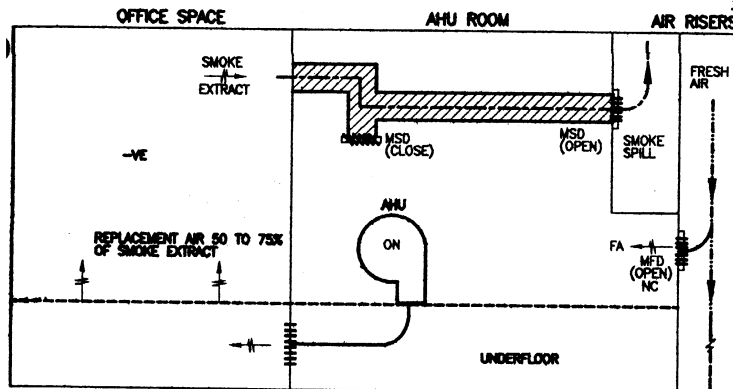
MSD — MOTORISED SMOKE DAMPER

MFD — MOTORISED FIRE DAMPER

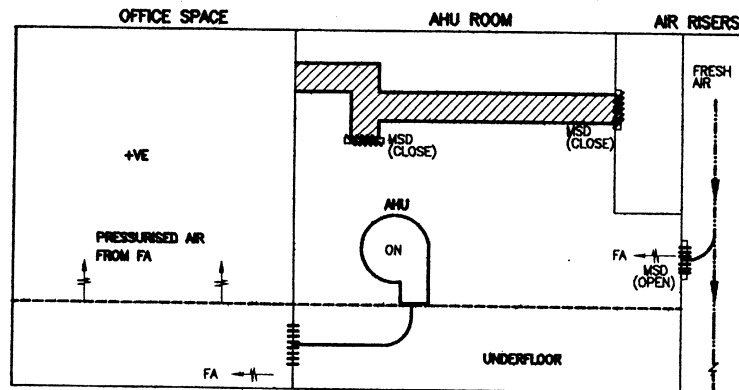
FA — FRESH AIR

— FIRE RATED DUCT

1. NORMAL AIR-CONDITIONING MODE

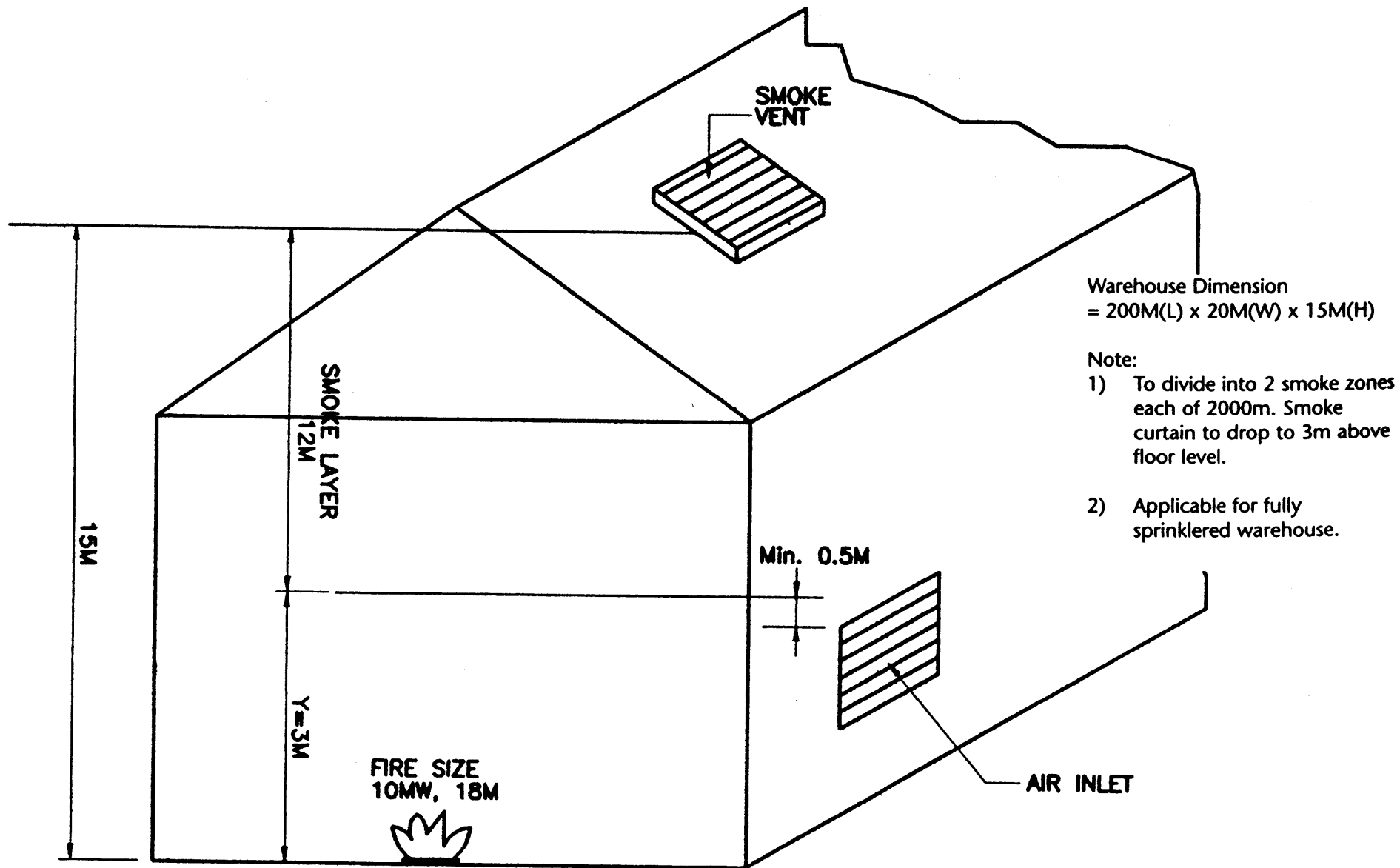


2. FIRE MODE (THIS FLOOR ON FIRE)
THIS SMOKE SPILL SYSTEM CAN DOUBLE UP AS 100% AIR PURGING SYSTEM



3. FIRE MODE (FLOOR NOT ON FIRE BUT IS ONE FLOOR ABOVE OR BELOW FIRE FLOOR)

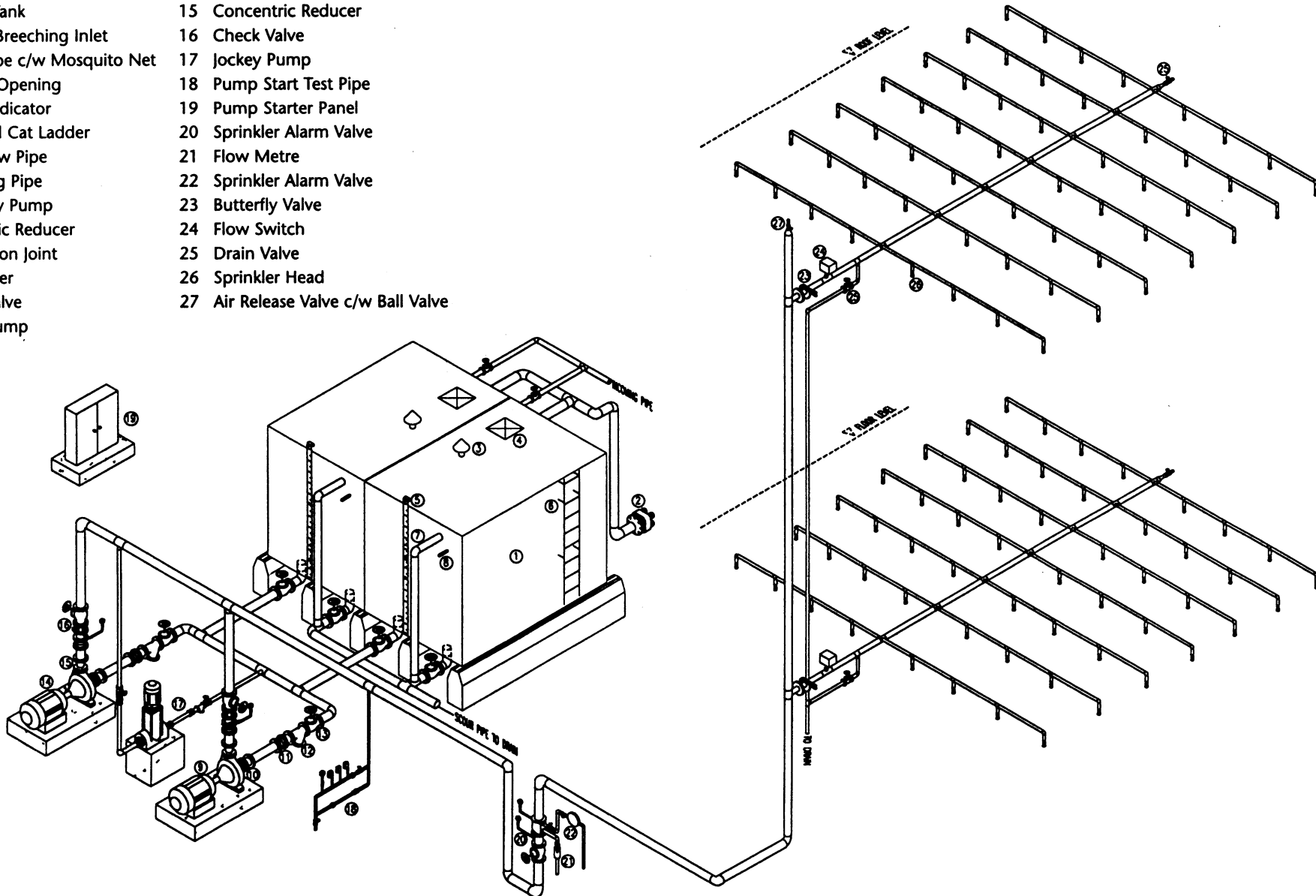
SMOKE CONTROL FOR WAREHOUSE



SPRINKLER SYSTEM

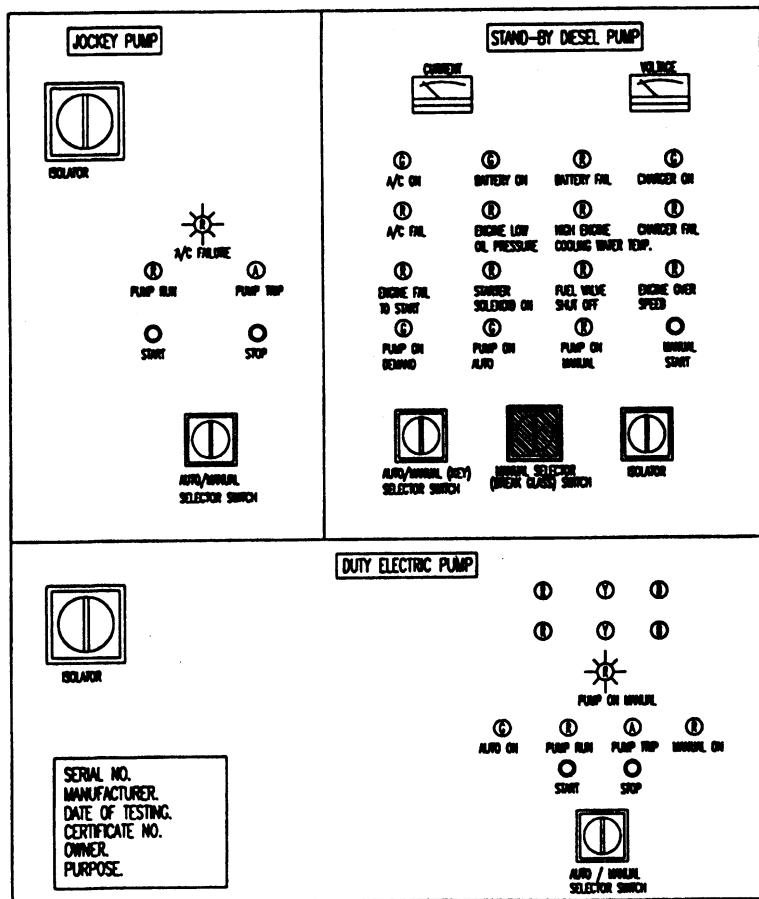
COMPONENT / EQUIPMENT

- | | |
|------------------------------|-------------------------------------|
| 1 Water Tank | 15 Concentric Reducer |
| 2 4-Way Breeching Inlet | 16 Check Valve |
| 3 Vent Pipe c/w Mosquito Net | 17 Jockey Pump |
| 4 Access Opening | 18 Pump Start Test Pipe |
| 5 Level Indicator | 19 Pump Starter Panel |
| 6 External Cat Ladder | 20 Sprinkler Alarm Valve |
| 7 Overflow Pipe | 21 Flow Metre |
| 8 Warning Pipe | 22 Sprinkler Alarm Valve |
| 9 Standby Pump | 23 Butterfly Valve |
| 10 Eccentric Reducer | 24 Flow Switch |
| 11 Expansion Joint | 25 Drain Valve |
| 12 Y-Strainer | 26 Sprinkler Head |
| 13 Gate Valve | 27 Air Release Valve c/w Ball Valve |
| 14 Duty Pump | |



AUTOMATIC SPRINKLER PUMP STARTER PANEL

AUTOMATIC SPRINKLER SYSTEM JOCKEY ELECTRIC AND DIESEL



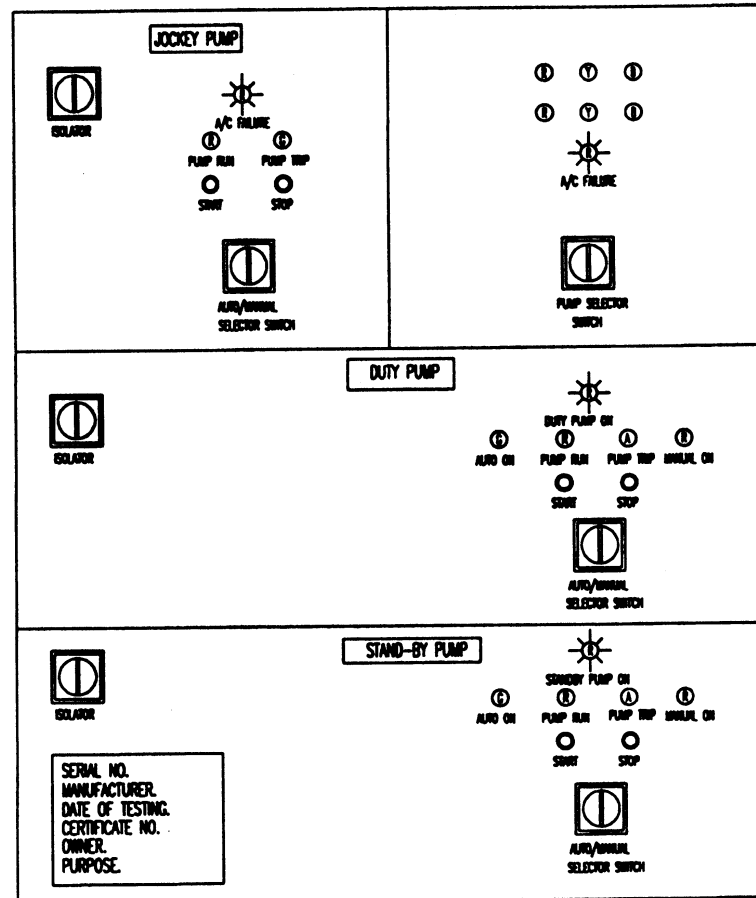
Note :

- Phase indicators shall be shown in duplicate (double filament bulbs with a single alignment is acceptable as a alternate)
- A/C failure indicator shall be monitored on to the fire alarm indicator panel.

Legend

- ① :- Red light
- ⑦ :- Yellow light
- ③ :- Blue light
- ⑤ :- Green light
- ② :- Amber light
- ☀ :- Red flashing light

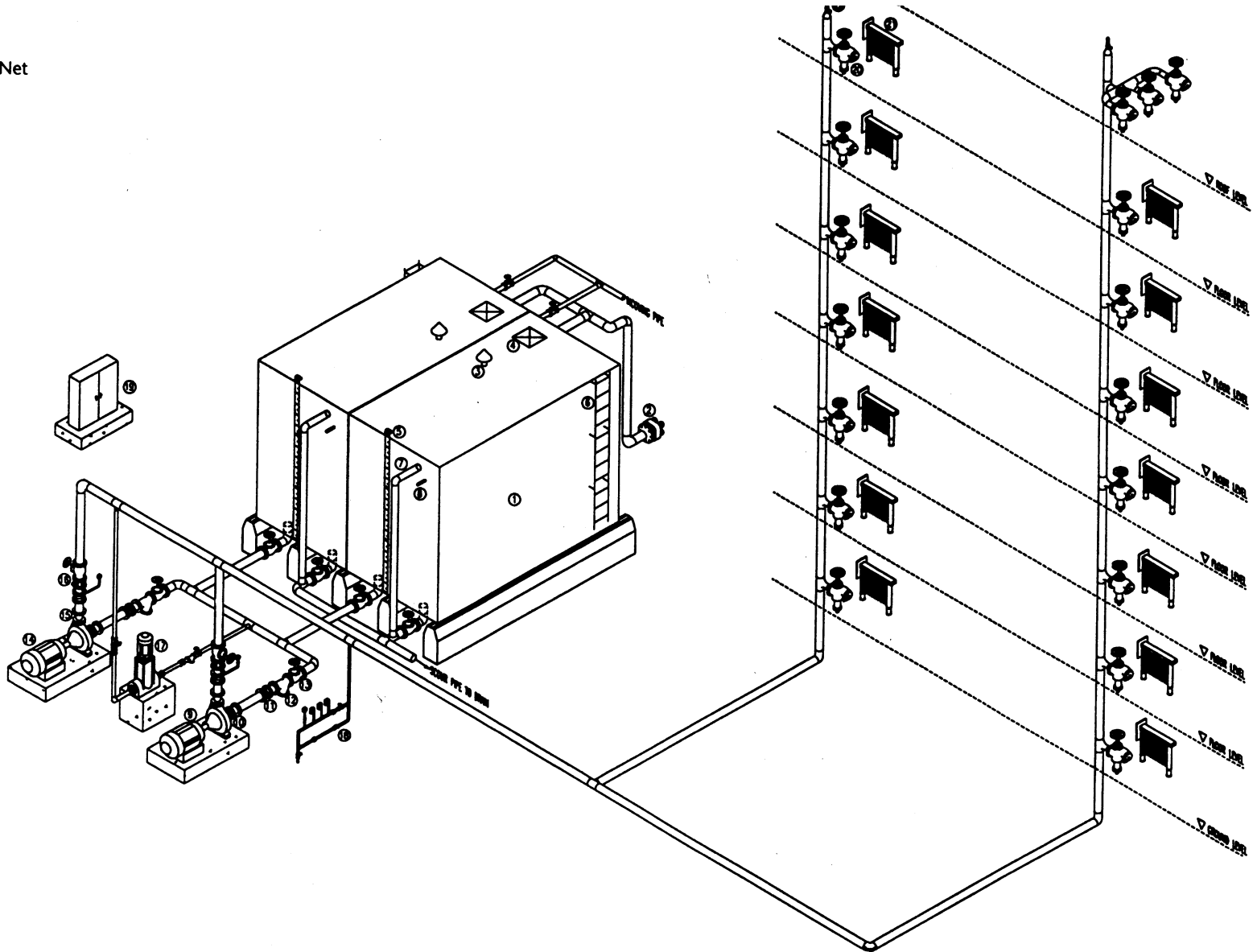
AUTOMATIC SPRINKLER SYSTEM TWO ELECTRIC PUMP



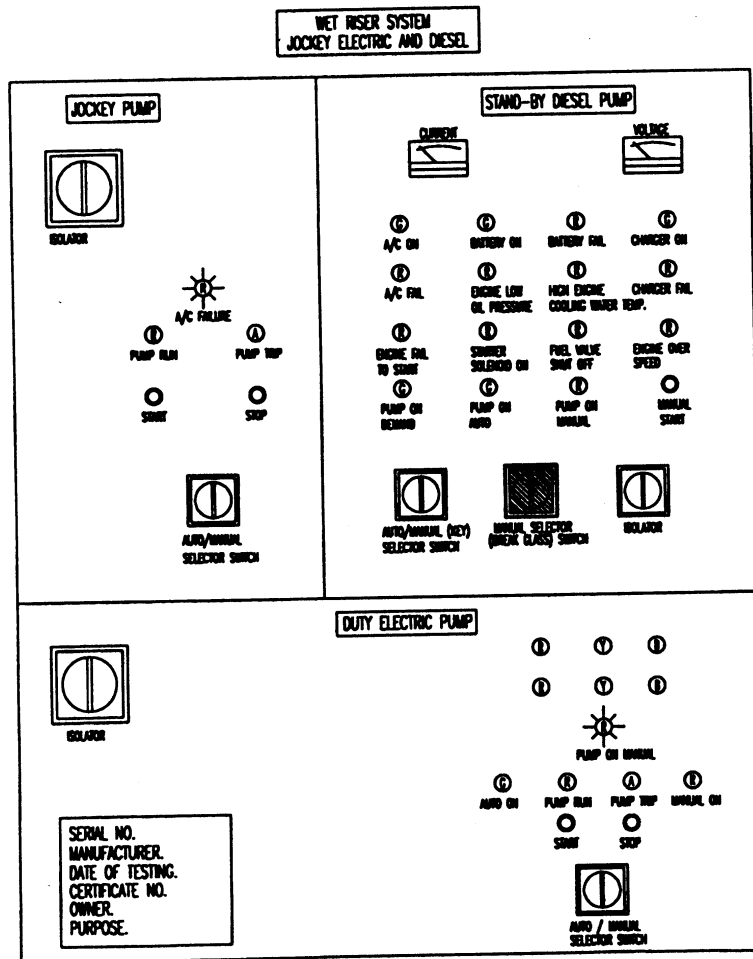
WET RISER SYSTEM

COMPONENT / EQUIPMENT

- 1 Water Tank
- 2 4-Way Breeching Inlet
- 3 Vent Pipe c/w Mosquito Net
- 4 Access Opening
- 5 Level Indicator
- 6 External Cat Ladder
- 7 Overflow Pipe
- 8 Warning Pipe
- 9 Standby Pump
- 10 Eccentric Reducer
- 11 Expansion Joint
- 12 Y-Strainer
- 13 Gate Valve
- 14 Duty Pump
- 15 Concentric Reducer
- 16 Check Valve
- 17 Jockey Pump
- 18 Pump Start Test Pipe
- 19 Pump Starter Panel
- 20 Landing Valve
- 21 Hose Cradle
- 22 Air Release Valve c/w Ball Valve









WET RISER PUMP STARTER PANEL



- Note :**
1. Phase indicators shall be shown in duplicate (double filament bulbs with a single alignment is acceptable as a alternate)
 2. A/C failure indicator shall be monitored on to the fire alarm indicator panel.

Legend

-  :- Red light
-  :- Yellow light
-  :- Blue light
-  :- Green light
-  :- Amber light
-  :- Red flashing light

