

FIRE SERVICES NOTES:

1. HOSE REEL SYSTEM
 - 1.1 HOSE REEL SHALL BE PROVIDED AT POSITIONS AS INDICATED ON PLANS.
 - 1.2 THERE SHALL BE SUFFICIENT HOSE REELS TO ENSURE THAT EVERY PART OF THE BUILDING CAN BE REACHED BY A LENGTH OF NOT MORE THAN 30M OF HOSE REEL TUBING. ONE ACTUATING POINT AND ONE AUDIO WARNING DEVICE TO BE LOCATED AT EACH HR POINT. THE ACTUATING POINT SHOULD INCLUDE FACILITIES FOR THE FIRE PUMP START DEVICE INITIATION.
 - 1.3 A MODIFIED HOSE REEL SYSTEM OF 2000 LITRES WATER TANK TO BE PROVIDED FOR THE ENTIRE BUILDING AS INDICATED ON PLAN.
 - 1.4 NO FIRE SERVICES INLET TO BE PROVIDED FOR THE MODIFIED HOSE REEL SYSTEM.
 - 1.5 TWO FIXED FIRE PUMPS (DUTY/STANDBY) TO BE PROVIDED AT SPR. & FS. PUMP ROOM.
 - 1.6 THE HR SYSTEM INSTALLED SHOULD BE IN ACCORDANCE WITH PARA. 5.14 OF THE CODE OF PRACTICE FOR MINIMUM FIRE SERVICE INSTALLATION AND EQUIPMENT 2022.
 - 1.7 AN INSTRUCTION PLATE SHALL BE PROVIDED NEXT TO THE BREAK GLASS UNIT FOR OPERATION OF HOSE REEL.
2. AUTOMATIC SPRINKLER SYSTEM
 - 2.1 AUTOMATIC SPRINKLER SYSTEM SUPPLIED BY A 135,000L SPRINKLER WATER TANK AND HAZARD CLASS OH3 SHALL BE PROVIDED TO THE STRUCTURE 1 IN ACCORDANCE WITH LPC RULES INCORPORATING BS EN12845 : 2015 AND FSD CIRCULAR LETTER 5/2020. THE SPRINKLER TANK, SPRINKLER PUMP ROOM, SPRINKLER INLET AND SPRINKLER CONTROL VALVE GROUP SHALL BE CLEARLY MARKED ON PLANS.
 - 2.2 THE CLASSIFICATION OF THE AUTOMATIC SPRINKLER INSTALLATION TO BE ORDINARY HAZARD GROUP 3.
 - 2.3 ONE NUMBER 135,000 LITRES SPRINKLER WATER TANK TO BE PROVIDED AS INDICATED ON PLANS.
 - 2.4 ALL INSTALLED SPRINKLER SHOULD BE PENDENT TYPE AND THE TEMPERATURE RATING OF SPRINKLER HEAD SHALL BE 68 C UNLESS OTHERWISE SPECIFIED.
 - 2.5 SPRINKLER CONTROL VALVE SET AND SPRINKLER INLET TO BE PROVIDED AS INDICATED ON PLANS.
 - 2.6 ALL SPRINKLER PIPE SIZE SHOULD BE $\phi 32\text{mm}$ UNLESS SPECIFY.
 - 2.7 TYPE OF STORAGE METHOD FOR THE BUILDING IS AS FOLLOWS:
 - (A) STORAGE CATEGORY : CATEGORY (I)
 - (B) STORAGE HEIGHT : NOT EXCEEDING 4M
 - (C) STORAGE : ST1
 - 2.8 THE MAXIMUM STORAGE AREA SHALL BE 50m² FOR ANY SINGLE BLOCK WITH NO LESS THAN 2.4M CLEARANCE AROUND THE BLOCK.
3. FIRE ALARM SYSTEM
 - 3.1 FIRE ALARM SYSTEM SHALL BE PROVIDED THROUGHOUT THE ENTIRE BUILDING IN ACCORDANCE WITH BS 5839-1 : 2017 AND FSD CIRCULAR LETTER NO.6/2021. ONE ACTUATING POINT AND ONE AUDIO WARNING DEVICE SHOULD BE LOCATED AT EACH HOSE REEL POINT. THE ACTUATION POINT SHOULD INCLUDE FACILITIES FOR FIRE PUMP START AND AUDIO / VISUAL WARNING DEVICE INITIATION.
 - 3.2 AN ADDRESSABLE TYPE FIRE ALARM PANEL TO BE PROVIDED AND LOCATED INSIDE G/F SPR. & F.S. PUMP ROOM.

4. MISCELLANEOUS F.S. INSTALLATION
 - 4.1 PORTABLE FIRE EXTINGUISHER WITH SPECIFIED TYPE AND CAPACITY TO BE PROVIDED AT LOCATIONS AS INDICATED ON PLANS.
 - 4.2 SUFFICIENT EMERGENCY LIGHTING SHALL BE PROVIDED THROUGHOUT THE ENTIRE BUILDINGS/STRUCTURES IN ACCORDANCE WITH BS 5266-1:2016 AND BS EN 1838:2013 AND FSD CIRCULAR LETTER NO. 4/2021.
 - 4.3 SUFFICIENT DIRECTIONAL AND EXIT SIGN SHALL BE PROVIDED IN ACCORDANCE WITH BS 5266: PART 1 AND FSD CIRCULAR LETTER 5/2008.
 - 4.4 NO EMERGENCY GENERATOR TO BE PROVIDED FOR SERVING THE EMERGENCY POWER. DUPLICATED POWER SUPPLIES FOR ALL FIRE SERVICES INSTALLATIONS COMPRISING A CABLE CONNECTED FROM ELECTRICITY MAINS DIRECTLY BEFORE THE MAIN SWITCH.
 - 4.5 WHEN A VENTILATION/AIR CONDITIONING CONTROL IS PROVIDED, IT SHALL STOP MECHANICALLY INDUCED AIR MOVEMENT WITHIN A DESIGNATED FIR COMPARTMENT.
 - 4.6 NO DYNAMIC SMOKE EXTRACTION SYSTEM SHALL BE PROVIDED SINCE EITHER THERE BE NO FIRE COMPARTMENT EXCEEDING 7000 CUBIC METRES OR THE AGGREGATE AREA OF OPENABLE WINDOWS OF THE RESPECTIVE COMPARTMENT EXCEEDS 6.25% OF THE FLOOR AREA OF THAT COMPARTMENT.
5. NOTES FOR WATERWORKS
 - 5.1 ALL EQUIPMENT USED IN THE INSTALLATION SHALL BE OF THE APPROVED TYPE AND APPROVED MAKE BY THE H.K.F.S.D.
 - 5.2 ALL OVERFLOW PIPE OF WATER TANKS SHALL BE DISCHARGED IN A CONSPICUOUS POSITION TO THE COMMUNAL AREA WHERE IT IS EASILY VISIBLE AND ACCESSIBLE BY THE OCCUPANTS.
 - 5.3 ALL ABOVE GROUND PIPEWORKS UP TO INCLUDING $\phi 150\text{mm}$ SHALL BE GALVANIZED MILD STEEL (G.M.S.) PIPES TO BS 1387 MEDIUM GRADE AND JOINTED WITH SCREWED FITTINGS, SCREWED FLANGES, OR SCREWED UNIONS.
 - 5.4 ALL UNDERGROUND PIPEWORKS UP TO AND INCLUDING $\phi 150\text{mm}$ SHALL BE GALVANIZED MILD STEEL (G.M.S) PIPE TO BS 1387 HEAVY GRADE AND JOINTED WITH SCREWED FITTINGS, SCREWED FLANGES, OR SCREWED UNIONS.
 - 5.5 ALL PIPEWORKS FROM $\phi 150\text{mm}$ UPWARDS SHALL BE DUCTILE IRON (D.I) TO BS 4722 AND JOINTED WITH FLANGE AND FLANGED FITTINGS.
 - 5.6 ALL COPPER ALLOY GATE VALVE SHALL CONFORM TO BS 5154 AND CHECK VALVES CONFORM TO BS 5153.
 - 5.7 ALL BALL FLOAT VALVES SHALL CONFORM TO BS 1221, PART 1.
 - 5.8 NO WATER PIPE SHALL BE EMBEDDED WITHIN LOAD BEARING STRUCTURAL ELEMENTS SUCH AS COLUMNS, BEAMS AND SLABS IN LONGITUDINAL DIRECTION.

DRAWING LIST

<u>DRAWING NO</u>	<u>DESCRIPTION</u>
EP-10343-FS01	FS NOTES, LEGEND, ABBREVIATIONS, DRAWING LIST AND LOCATION BLOCK PLAN
EP-10343-FS02	PROPOSED FSI LAYOUT PLAN
EP-10343-FS03	SCHEMATIC DIAGRAM FOR SPRINKLER SYSTEM & WATER METER CABINET DETAILS
EP-10343-FS04	SCHEMATIC DIAGRAM FOR HOSE REEL SYSTEM

LEGEND (FOR SCHEMATIC DIAGRAM)

- HOSE REEL W/ LOCKABLE GLASS FRONTED NOZZLE BOX, STRIKER, C/W FIRE ALARM BELL & BREAK GLASS UNIT
- 150mm FIRE ALARM BELL
- BREAK GLASS UNIT
- GATE VALVE
- NON RETURN VALVE
- BALL FLOAT VALVE
- PRESSURE SWITCH
- PRESSURE GAUGE WITH COCK
- AUTOMATIC AIR VENT WITH COCK
- HOSE REEL PIPE
- LEVEL SWITCH (HIGH LEVEL SIGNAL & LOW LEVEL SIGNAL)
- FLEXIBLE CONNECTOR
- CHECK METER POSITION
- PLUG
- Y-STRAINER

LEGEND (FOR LAYOUT PLAN)

- HOSE REEL W/ LOCKABLE GLASS FRONTED NOZZLE BOX, STRIKER, C/W FIRE ALARM BELL & BREAK GLASS UNIT
- 150mm FIRE ALARM BELL
- BREAK GLASS UNIT
- GATE VALVE
- NON RETURN VALVE
- BALL FLOAT VALVE
- PRESSURE SWITCH
- HOSE REEL PIPE
- CHECK METER POSITION
- 4KG DRY POWDER TYPE FIRE EXTINGUISHER
- 5KG CO2 TYPE FIRE EXTINGUISHER
- SAND BUCKET
- PUMP
- EMERGENCY LIGHTING
- EXIT SIGN
- MANUAL TYPE FIRE ALARM PANEL
- PUMP PANEL WITH WATERPROOF ENCLOSURE

REV	DESCRIPTION	DATE	BY
F	FSD SUBMISSION	31-12-2023	WC
E	WSD SUBMISSION	16-09-2022	JN
D	WSD SUBMISSION	02-04-2022	JN
C	WSD SUBMISSION	21-12-2020	JN
B	FSD COMMENT	15-12-2020	CAD
A	FSD SUBMISSION	01-02-2018	BY

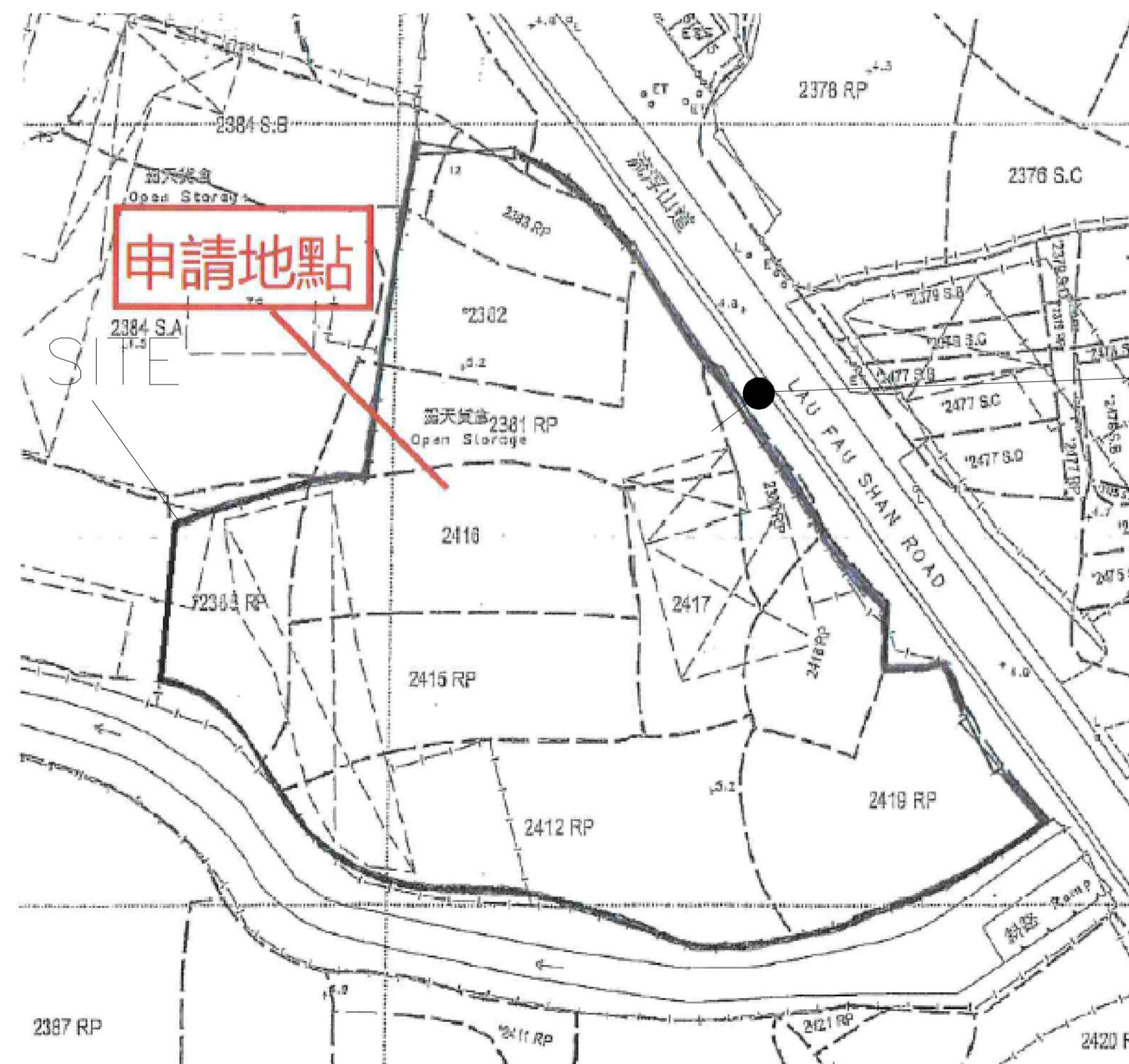
FSI CONTRACTOR
East Power Engineering Limited



PROJECT
 PROPOSED TEMPORARY WAREHOUSE WITH ANCILLARY SITE OFFICE FOR A PERIOD OF 3 YEARS AT LOTS 2187RP (Part), 2380 RP(PART), 2381 RP(PART), 2382(PART), 2383 RP(PART), 2384 S.B (PART), 2385 RP(PART), 2412 RP, 2415 RP, 2416 (PART), 2417, 2418 RP(PART) AND 2419 RP(PART) IN D.D. 129 AND ADJOINING GOVERNMENT LAND, HA TSUEN, YUEN LONG.

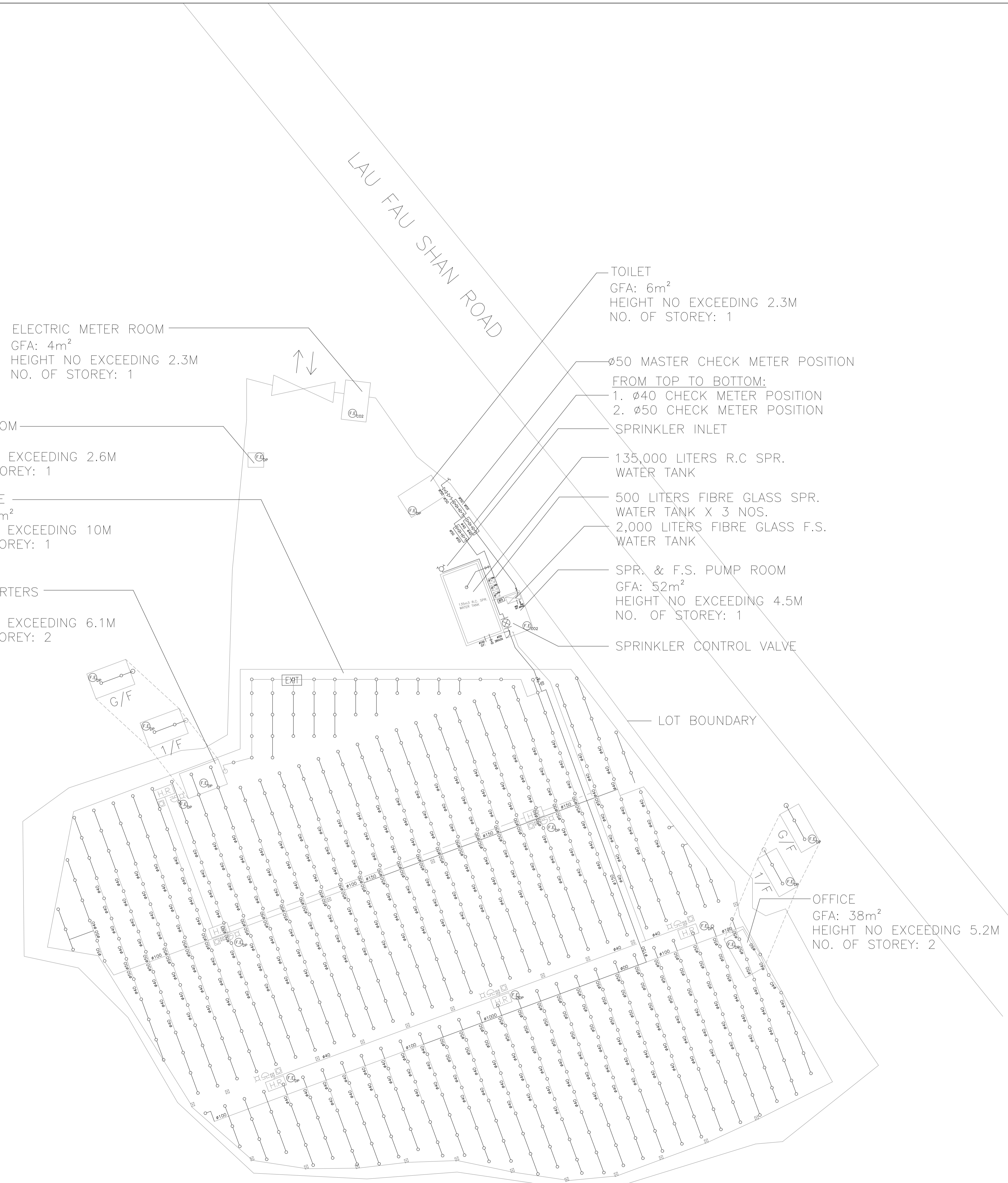
DRAWING TITLE
 PROPOSED FSI LAYOUT PLAN

	INITIAL	DESIGNATION	DATE
DRAWN BY	HY	Eng.T	01-02-2018
DESIGNED BY	HY	Eng.T	01-02-2018
CHECKED BY	CM	PM	01-02-2018
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PROJECT NO.	10343		
PAPER SIZE	A3	PLOT SCALE	1 : 1
DRAWING NO.	EP-10343-FS01		
SCALE	N.T.S	REVISION	E



PROPOSED CONNECTION POINT TO WSD MAIN

LOCATION PLAN (1:1000)



ELECTRIC METER ROOM
GFA: 4m²
HEIGHT NO EXCEEDING 2.3M
NO. OF STOREY: 1

GUARD ROOM
GFA: 3m²
HEIGHT NO EXCEEDING 2.6M
NO. OF STOREY: 1

WAREHOUSE
GFA: 4973m²
HEIGHT NO EXCEEDING 10M
NO. OF STOREY: 1

STAFF QUARTERS
GFA: 44m²
HEIGHT NO EXCEEDING 6.1M
NO. OF STOREY: 2

TOILET
GFA: 6m²
HEIGHT NO EXCEEDING 2.3M
NO. OF STOREY: 1

Ø50 MASTER CHECK METER POSITION
FROM TOP TO BOTTOM:
1. Ø40 CHECK METER POSITION
2. Ø50 CHECK METER POSITION

SPRINKLER INLET

135,000 LITERS R.C SPR.
WATER TANK

500 LITERS FIBRE GLASS SPR.
WATER TANK X 3 NOS.
2,000 LITERS FIBRE GLASS F.S.
WATER TANK

SPR. & F.S. PUMP ROOM
GFA: 52m²
HEIGHT NO EXCEEDING 4.5M
NO. OF STOREY: 1

SPRINKLER CONTROL VALVE

OFFICE
GFA: 38m²
HEIGHT NO EXCEEDING 5.2M
NO. OF STOREY: 2

F	FSD SUBMISSION	31-12-2023	WC
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B	FSD COMMENT	15-12-2020	CAD
A	FSD SUBMISSION	01-02-2018	BY
REV	DESCRIPTION	DATE	BY

FSI CONTRACTOR
East Power Engineering Limited

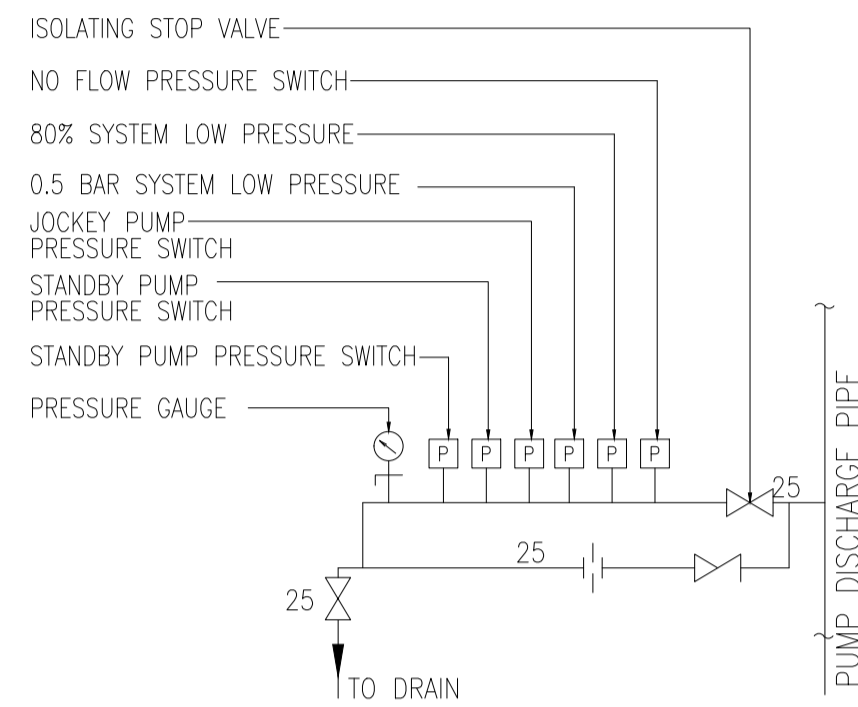
PROJECT
PROPOSED TEMPORARY WAREHOUSE WITH ANCILLARY SITE OFFICE FOR A PERIOD OF 3 YEARS AT LOTS 2187RP (Part), 2380 RP(PART), 2381 RP(PART), 2382(PART), 2383 RP(PART), 2384 S.B (PART), 2385 RP(PART), 2412 RP, 2415 RP, 2416 (PART), 2417, 2418 RP(PART) AND 2419 RP(PART) IN D.D. 129 AND ADJOINING GOVERNMENT LAND, HA TSUEN, YUEN LONG.

DRAWING TITLE
PROPOSED FSI LAYOUT PLAN

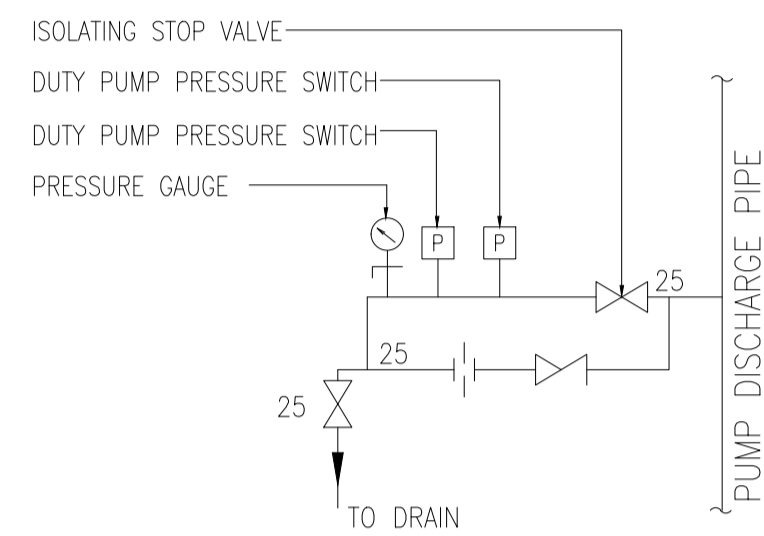
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SCALE	1 : 600	REVISION	E

PUMP SCHEDULE

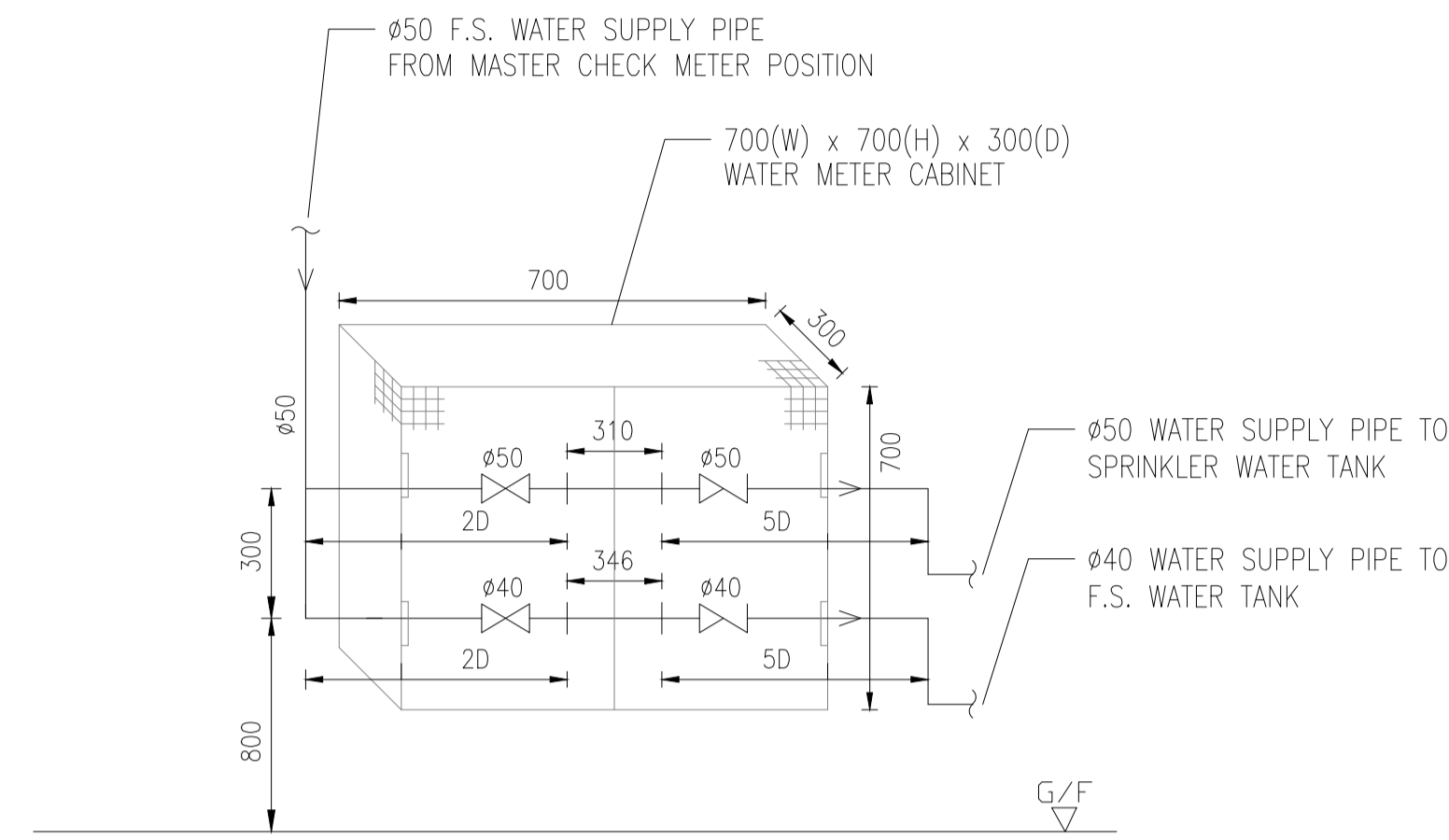
DESCRIPTION	PRESSURE (BAR)	FLOW (L/MIN.)	PUMP SPEED (RPM)	PUMP RATING (KW)	POWER SUPPLY (volts/phases/Hz)
SPRINKLER JOCKEY PUMP (SJP-1)	5	60	2900 MAXIMUM	2.2 KW	380/3/50
TWO SPRINKLER PUMPS (SP-1 AS DUTY & SP-2 AS STAND-BY PUMP)	1.4 / 2.9 / 3.2	2250 / 1350 / 1100	2900 MAXIMUM	18.5 KW	380/3/50



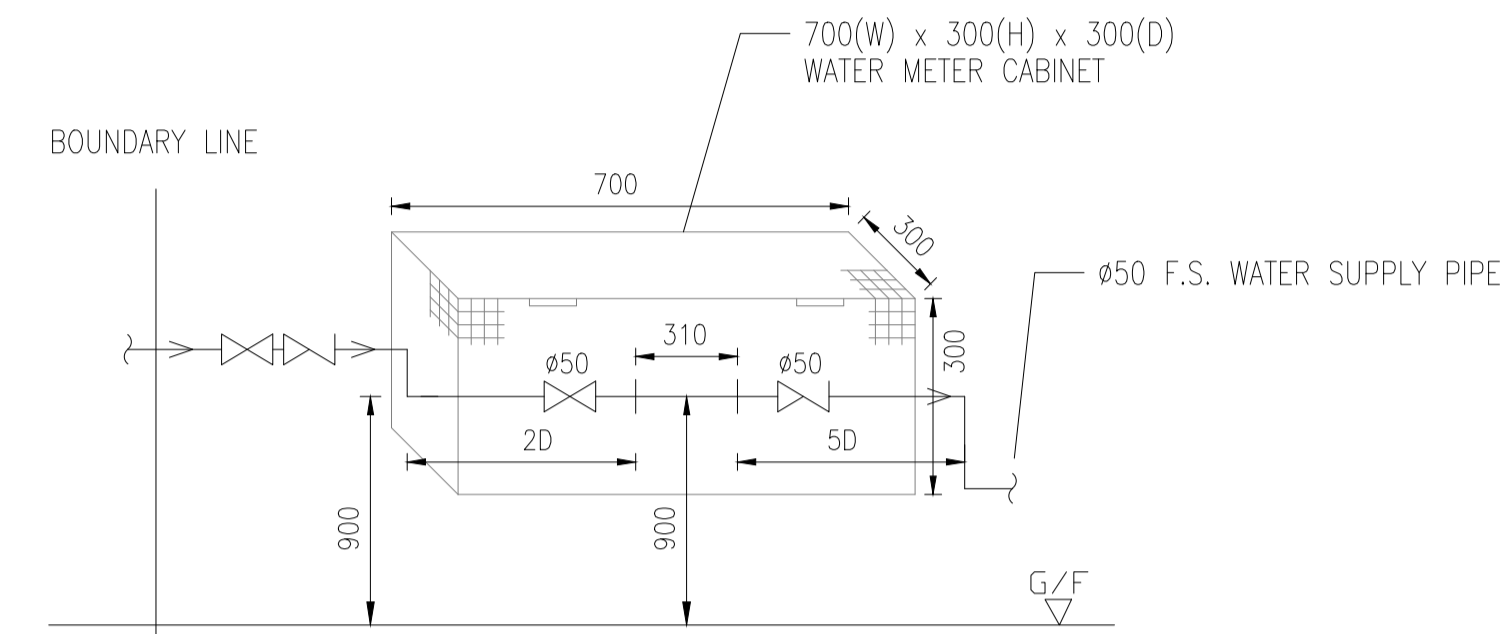
DETAIL 'F' PRESSURE SWITCH ASSEMBLY ARRANGEMENT FOR SPRINKLER JOCKEY PUMP



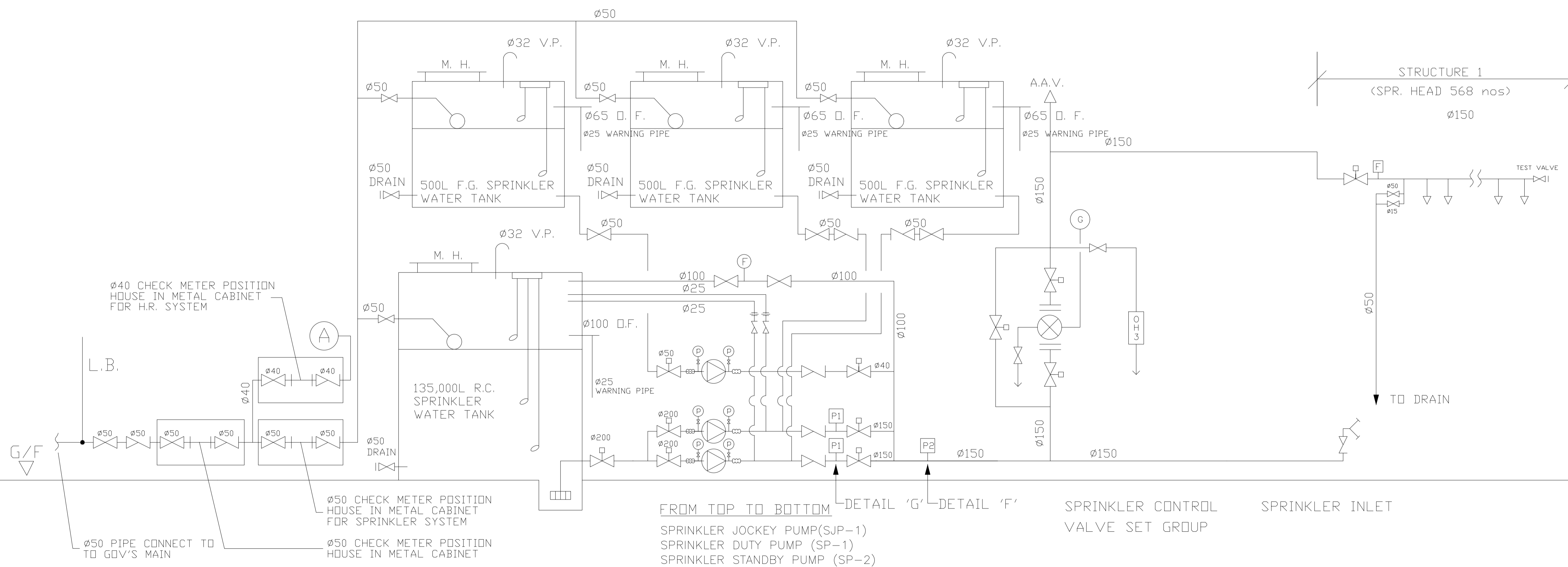
DETAIL 'G' PRESSURE SWITCH ASSEMBLY ARRANGEMENT FOR SPRINKLER DUTY/STANDBY PUMP



DETAIL 'B' OF WATER METER ARRANGEMENT IN WATER METER CABINET



DETAIL 'A' OF MASTER WATER METER ARRANGEMENT IN WATER METER CABINET



FROM TOP TO BOTTOM
 SPRINKLER JOCKEY PUMP(SJP-1)
 SPRINKLER DUTY PUMP (SP-1)
 SPRINKLER STANDBY PUMP (SP-2)
 SPRINKLER CONTROL VALVE SET GROUP
 SPRINKLER INLET

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DRAWING TITLE
 SCHEMATIC DIAGRAM FOR SPRINKLER SYSTEM & WATER METER CABINET DETAILS

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PAPER SIZE	A3	PLOT SCALE	1 : 1

DRAWING NO.
 EP-10343-FS03

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SPRINKLER SYSTEM SCHEMATIC DIAGRAM

PUMP SCHEDULE

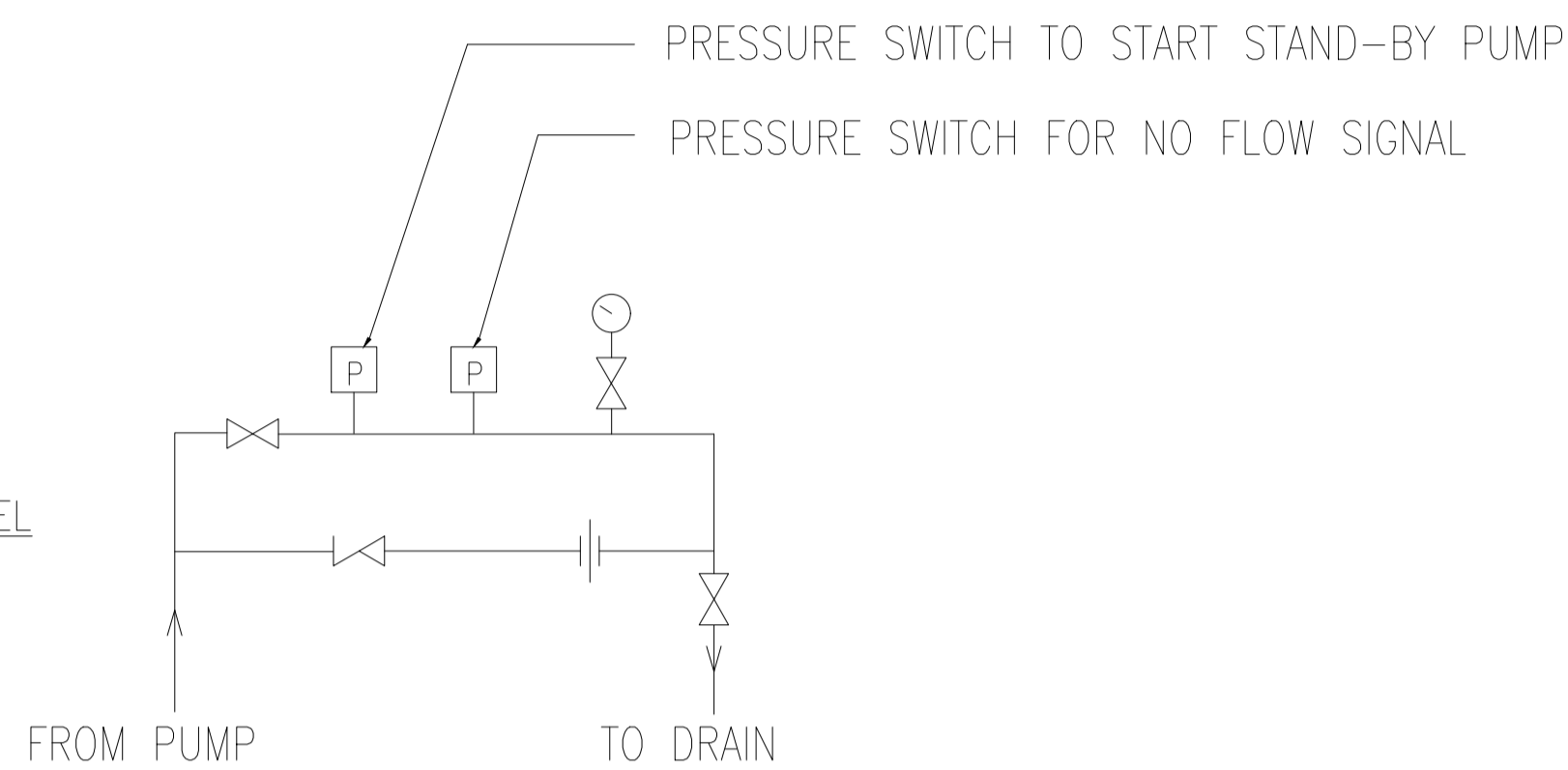
DESCRIPTION	PRESSURE (BAR)	FLOW (L/MIN.)	PUMP SPEED (RPM)	PUMP RATING (KW)	POWER SUPPLY (volts/phases/Hz)
TWO FIRE SERVICES PUMPS (FP-1 AS DUTY & FP-2 AS STANDBY PUMP)	5	60	2900 MAXIMUM	2.2KW	380/3/50

TO OPERATE FIRE HOSE REEL
使用消防喉
 (1) BREAK GLASS OF THE FIRE ALARM CALL POINT. (OR)
打破火警鐘玻璃
 ACTIVATE FIRE ALARM CALL POINT.
按動火警鐘掣
 (2) OPEN CONTROL VALVE BEFORE RUNNING OUT HOSE.
先開啓水掣，再拉出膠喉
 (3) TURN ON WATER AT NOZZLE AND DIRECT JET AT BASE OF FIRE.
將喉咀擊開啓，然後射向火之底部
(NOT SUITABLE FOR ELECTRICAL FIRES)
不適用於電火
(WATER STRICTLY RESERVED FOR FIRE USE)
除滅火用途，不准濫用

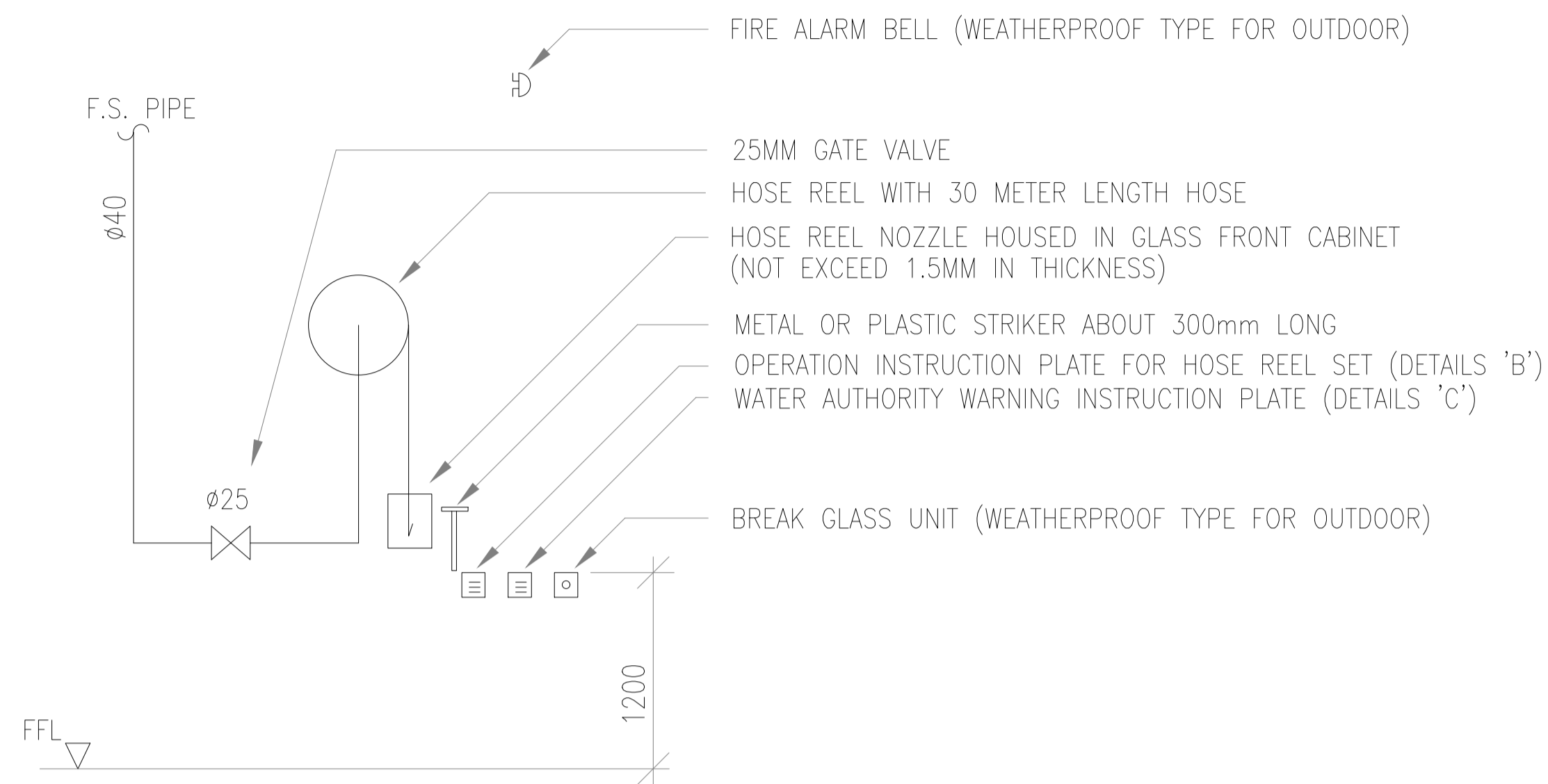
DETAILS 'B' INSTRUCTION PLATE FOR HOSE REEL

消防用水
嚴禁作其他用途
 USE OF WATER FROM FIRE SERVICES
 FOR PURPOSES OTHER THAN FIRE
 FIGHTING IS STRICTLY PROHIBITED
 水務監督辦事處 Office of the Water Authority

DETAILS 'C' WARNING INSTRUCTION PLATE



DETAIL ARRANGEMENT FOR 'P3'



TYPICAL ARRANGEMENT OF HOSE REEL

F	FSD SUBMISSION	31-12-2023	WC
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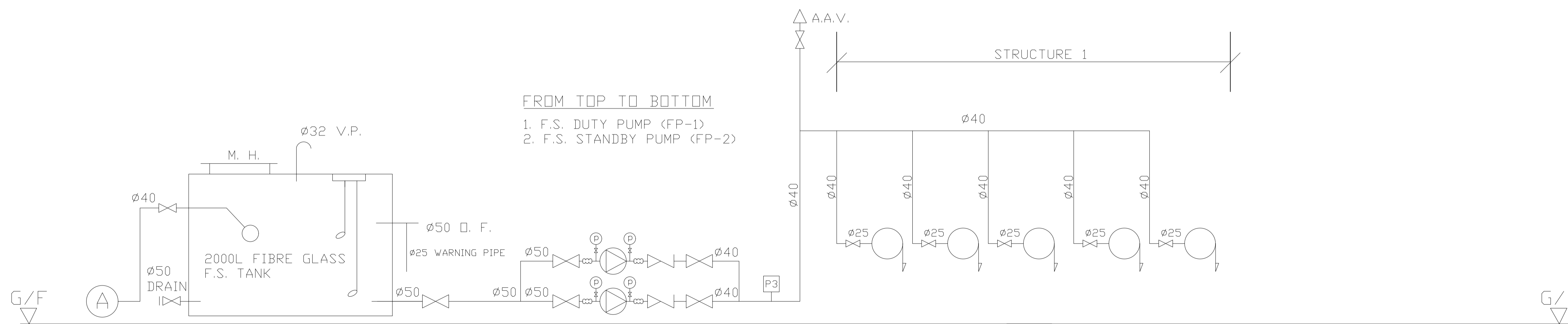
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SCHEMATIC DIAGRAM FOR HOSE REEL SYSTEM