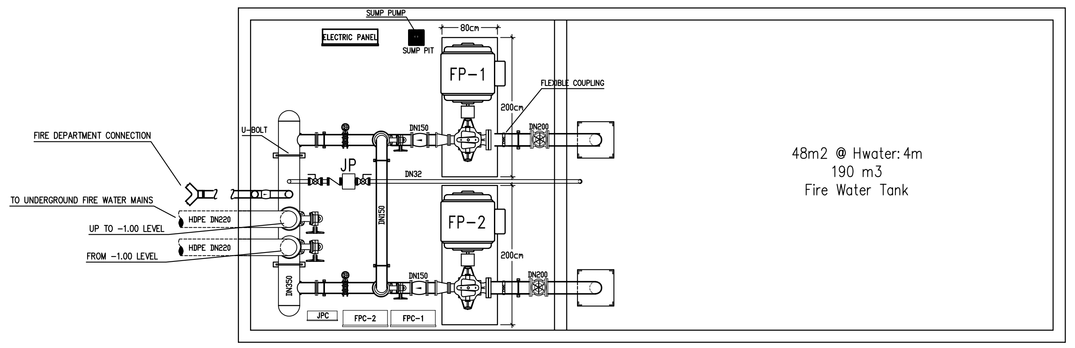


FIRE PUMP ROOM PLAN
(SCALE : 1/50)

PUMP LIST

PROPERTIES	FIRE PUMP (FP-1)	FIRE PUMP (FP-2)	JOCKEY PUMP (JP)
PUMP TYPE	New	New	New
PUMP TYPE	Single Stage Horizontal Split-case	Single Stage Horizontal Split-case	Multi-Stage Vertical
RATED CAPACITY (FLOW)	500 GPM	500 GPM	10 GPM
RATED HEAD	120 psi	120 psi	130 psi
DRIVE	Electrical Motor	Electrical Motor	Electrical Motor
ROTATION	Counter Clockwise Direction	Counter Clockwise Direction	–
MOTOR SPECIFICATIONS	–	–	To be determined later
CONTROLLER	–	–	To be determined later
MANUFACTURER / MODEL NO	Peerless	Peerless	To be determined later

Pomp controller pressure switch shall be adjusted to have the following operation sequence.

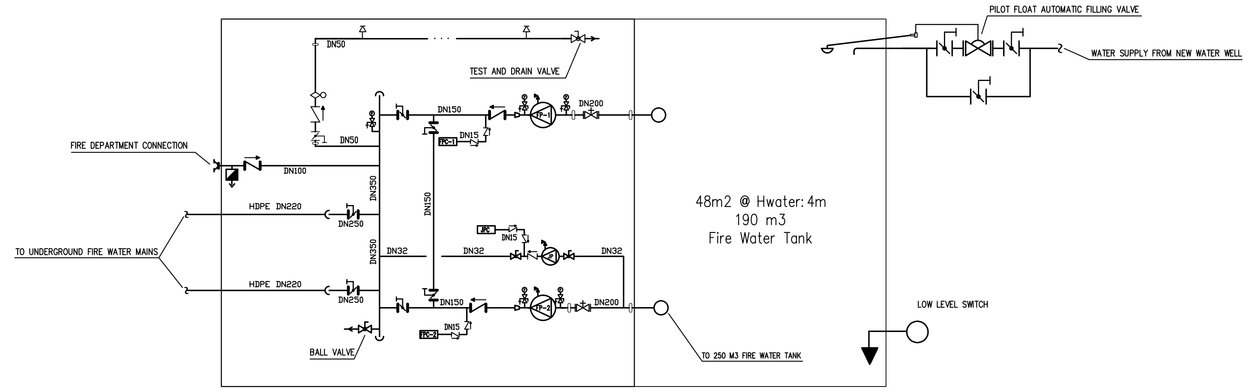
FP-01 starts automatically at 130 psi head.
FP-01 is stopped manually.
FP-02 starts automatically at 120 psi head.
FP-02 stops automatically at 110 psi head.
JP starts automatically at 135 psi head.
JP stops automatically at 140 psi head.

NOTES :

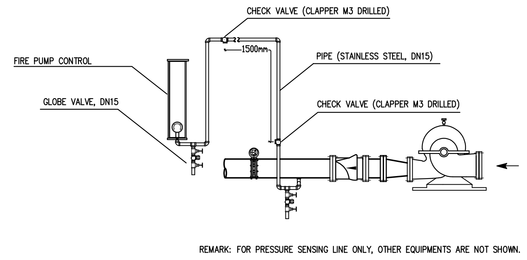
1- All the pipes and pumps shall be electrically grounded.
2- If the size is not explicitly mentioned, pipe size shall be equal to valve size; valve size shall be equal to pipe size.
3- Pressure sensing line shall be stainless steel.
4- Fuel pipes shall be black steel.
5- All aboveground main pipes shall conform to TS EN 10217-1, welded black steel. Pipe joining shall be Welded or Flanged.
6- OS&Y Gate valves and check valves shall be supported individually.
7- Flexible connections shall be furnished at the all inlets and outlets of the fuel tank and the diesel motor. Shut-Off valves shall be used at the inlet line of diesel motor and at the outlet line of the fuel tank.
8- The batteries of diesel fire pumps, shall be placed on supportings, fixed minimum 10 cm height from floor, to provide ease of maintenance.
9- The interior floor and walls of the fuel tank pools will be of ceramic tiles, durable against fuel leakage.
10-Fuel tank and control panels shall be fixed to the floor. Precautions shall be taken against bucking of the rised fuel tank supportings.
11-Pitch to the floor drains shall be provided at the pump house floor.
12-Dimensions of the pump foundation shall be arranged on site according to actual pump dimensions.

ROOM SPECIFICATIONS

SPECIFICATION	REQUIRED
DESIGN STANDARD	NFPA 20
SEPARATION WALL RATING	Not Required
AMBIENT TEMPERATURE	+4°C ... +45°C
HEATER TYPE	Oil Convector (Thermostat Controlled)
LIGHTING TYPE	Fluoresan (IP 55)
EMERGENCY LIGHTING ILLUM.	min. 10 Lux (Average on floor)
EMERGENCY LIGHTING DURATION	120 Minutes
TELEPHONE	Shall be provided
ELECTRICAL RECEPTACLE	2 Ea. (220VAC, 16 A)
PORTABLE EXTINGUISHER	1 Ea. 6kg CO_2, 1 Ea. 9L Foam Ext.

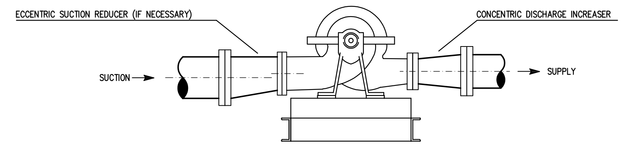


PRESSURIZATION SYSTEM RISER DIAGRAM
(N.T.S.)



REMARK: FOR PRESSURE SENSING LINE ONLY, OTHER EQUIPMENTS ARE NOT SHOWN.

PRESSURE SENSING PIPING
(N.T.S.)

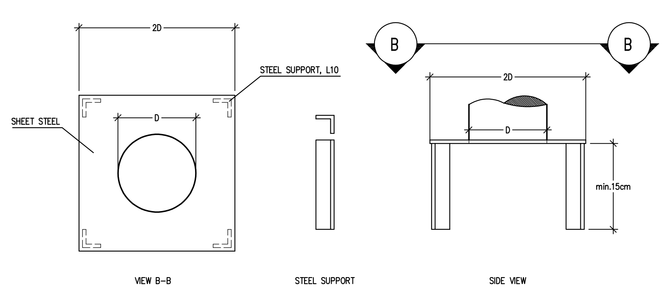


PUMP SUCTION AND DISCHARGE DETAIL
(ÖLÇEKSİZ / N.T.S.)

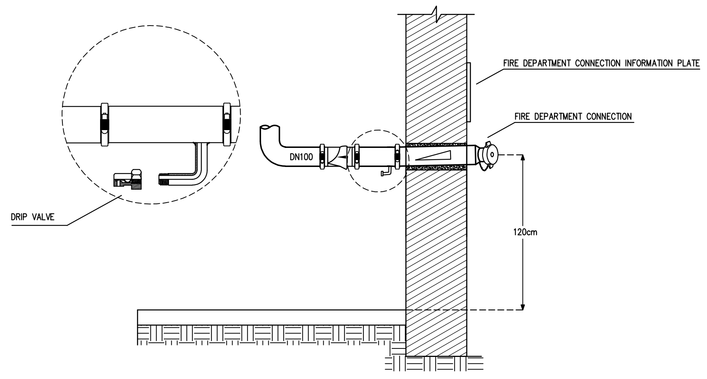
LEGEND AND MATERIAL LIST

SYMBOL SİMGE	TANIMI / DESCRIPTION	MODEL NO.
	SPRINKLER HEAD (STANDART, UPRIGHT, 1/2" NPT, K=5.6, 68°C, BRASS)	•
	FLOW SWITCH (2 EA. SPDT FORM C CONTACT)	•
	TEST AND DRAIN VALVE (1" NPT THREADED CONNECTION, TEST K=5.6, W PRESSURE GAUGE)	•
	OS&Y VALVE (FLANGED, C/W SUPERVISORY SWITCH)	•
	CHECK VALVE (SWING TYPE)	•
	BUTTERFLY VALVE (W POSITION INDICATOR, W SUPERVISORY SWITCH)	•
	BALL VALVE (PN 16, THREADED CONNECTED)	•
	GROOVED COUPLING (FLEXIBLE)	•
	PRESSURE RELIEF VALVE (C/W WASTE CONE)	•
	PRESSURE GAUGE	•
	FIRE PUMP	•
	JOCKEY PUMP	•
FPC	FIRE PUMP CONTROLLER	•
JPC	JOCKEY PUMP CONTROLLER	•
	CONCENTRIC INCREASER	•
	AIR RELIEF VALVE	•
	FIRE DEPARTMENT CONNECTION (DN100 INLET, 2xDN65 STORZ OUTLET, ROUGH BRASS, C/W CAPS&CHAIN)	•
	AUTOMATIC DRIP VALVE	•
	FLOW METER (0~5000 GPM, VENTURI OR ANNUBAR)	•
	PIPE HANGER (GALV. STEEL, WITH M10 SCREWED EXTENSION ROD)	•
	ABOVEGROUND STEEL PIPE (WELDED BLACK STEEL, CONFORMING TO TS EN 10217-1)	•
	UNDERGROUND FIRE WATER PIPING (HDPE, PE100, PN16)	•
	CONCRETE THRUST BLOCK	–
	NEW UNDERGROUND FIRE WATER PIPING (HDPE, PE100) – C/W SLEEVE (CONCRETE PIPE)	–
	PIPE RISE OR DROP	–
	VORTEX PLATE	–

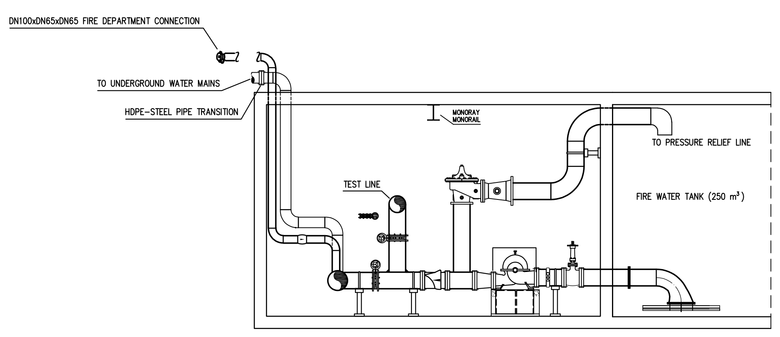
• TO BE SUBMITTED BY THE CONTRACTOR – NOT APPLICABLE



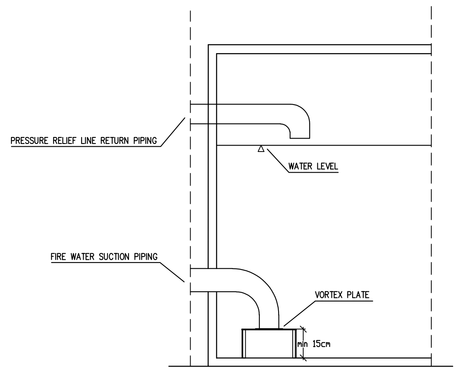
ANTI-VORTEX PLATE CONSTRUCTION DETAIL
(N.T.S.)



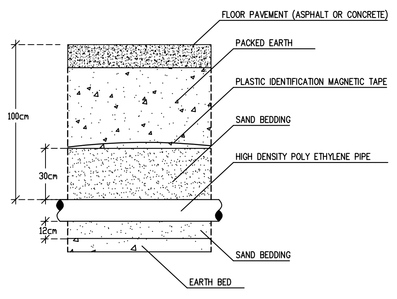
FİRE DEP. CONNECTION AND DRIP VALVE VIEW
(ÖLÇEKSİZ / N.T.S.)



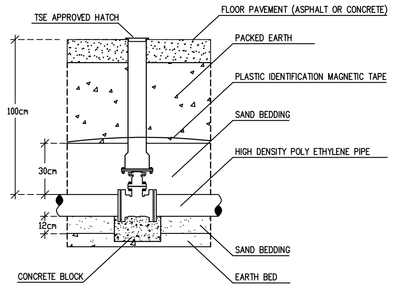
SECTION
(N.T.S)



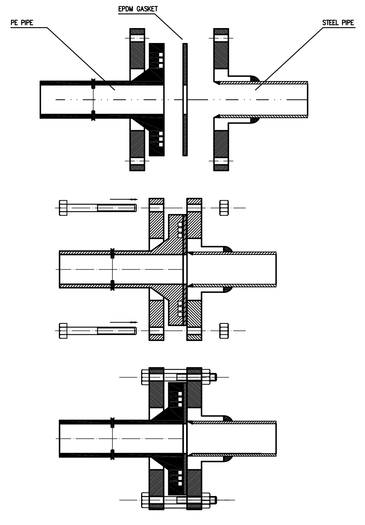
FIRE WATER TANK OUTLET PIPING
(N.T.S.)



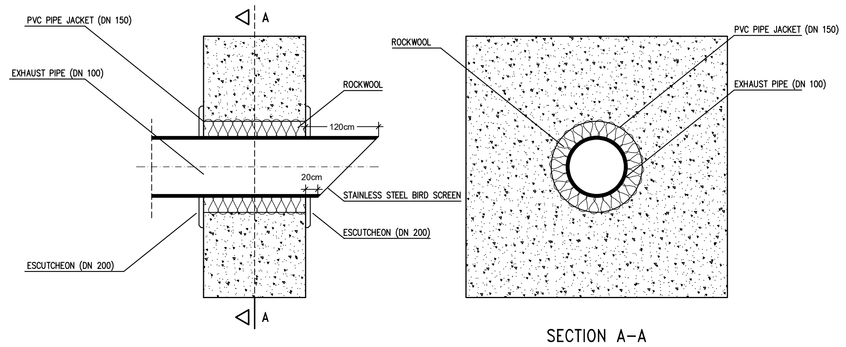
UNDERGROUND PIPE INSTALLATION
(N.T.S.)



UNDERGROUNG NRS VALVE INSTALLTION
(N.T.S.)



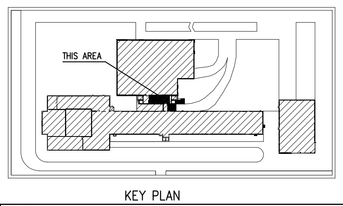
PE – STELL PIPES CONNECTION RULES
(N.T.S.)



SECTION A-A

EXHAUST PIPE WALL CROSSING
(ÖLÇEKSİZ / N.T.S.)

■ FOR SYSTEM APPROVAL
□ FOR TENDER
□ FOR INSTALLATION
□ AS BUILT



KEY PLAN

	Date	Explanation
00	25.01.2021	For System Approval

CLIENT

EVEX
Medical Corporation

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40 Vazha Pshavela Ave
Tbilisi – GEORGIA
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TECH. CONSULTANCY	: KARİNA
SYSTEM DESIGN	: KARİNA
MATERIAL SUPPLY	: –
INSTALLATION	: –
APPROVAL	: –
DATE	: 25.01.2021
SCALE	: 1/100

DEKA HOSPITAL

FIRE & LIFE SAFETY
FIRE PUMP ROOM PLAN
SECTION AND DETAIL DRAWINGS

DRAWING NO : EVEX-DEKA-KAR-MECH-601
REV. 00
FILE NAME : C:\...\EVEX-DEKA-KAR-MECH-601.•

EVEX-DEKA-KAR-MECH-601

ORIGINAL DRAWING SIZE : A0

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