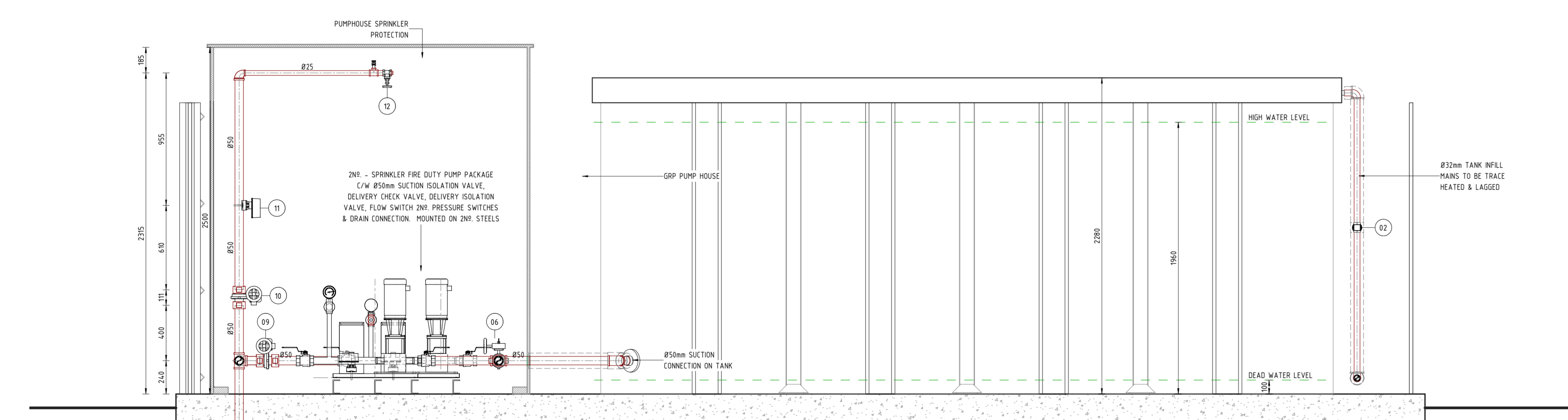


SCHEDULE OF SPRINKLERS						
WTRN ZONE	LOCATION	CONTR.	SPRINKLER TYPE	HEAD MAKE	TEMP. CLASSIFICATION	DESIGN
NA	PUMPHOUSE	NP	WING WAST. TYPICAL UPRIGHT	KOOL	68°C	12m ²

DESIGN CRITERIA	
ANNEX D & F FINISHMENTS	NO
ANY OTHER APPLICABLE ANNEXES	NO
HAZARD CLASS	2
DISCHARGE DENSITY	0.20/min/m ²
AREA OF OPERATION	4 HEADS OPERATING
HIGHEST FLOOR	NA
HIGHEST HEAD ABOVE 'C' GAUGE	NA
INSTALLATION TYPE	WIRE
SYSTEM VOLUME (DRY / ALTERNATE ONLY)	NA
TYPE OF PRECALCULATED	FIN.

PIPEWORK SPECIFICATION UNLESS OTHERWISE STATED:	
1. ALL PIPE WORK TO BE 1025S MEDIUM WEIGHT LPTD 1500B	
2. ALL PIPE WORK TO BE 1025S HEAVY WEIGHT ANCHOR 1000B	
3. ALL SCREWED FITTINGS TO BE BLACK MALLEABLE IRON TO BS 143	
4. ALL WELDED FITTINGS TO BS 1560	

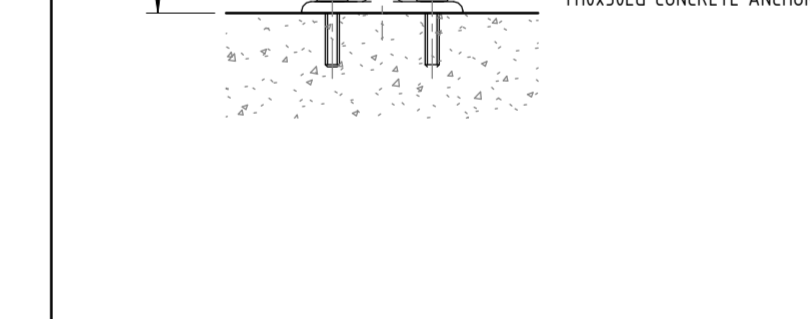
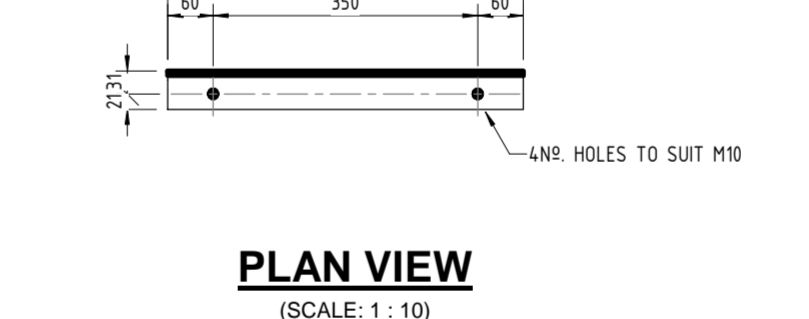
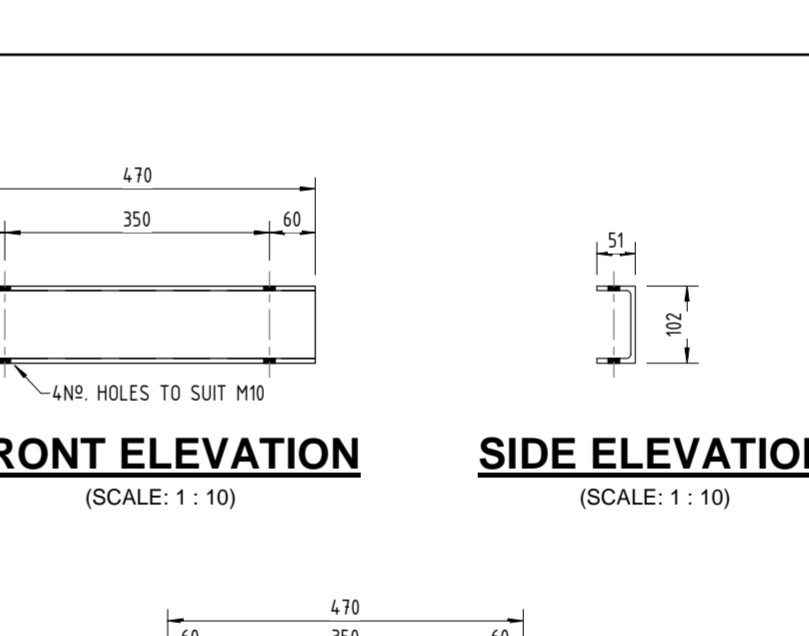
WEIGHT LOADINGS FOR MEDIUM WEIGHT PIPE WORK & FITTINGS			
NORMAL BORE	OUTSIDE DIAMETER	WEIGHT (METRE IN KG - EMPTY)	WEIGHT (METRE IN KG - CHARGED)
20mm	27.3mm	1.7	2.5
25mm	33.7mm	2.2	3.2
32mm	42.4mm	3.2	4.5
40mm	48.3mm	4.2	5.8
50mm	60.3mm	5.1	7.3
63mm	76.2mm	6.8	9.5
75mm	89.1mm	8.5	11.6
90mm	108.0mm	10.2	13.8
100mm	127.0mm	11.9	16.0
125mm	154.5mm	15.2	20.4
150mm	190.5mm	21.2	28.2
200mm	219.0mm	32.2	43.1



PROPOSED DUTY PUMP INFORMATION
GRUNDFOS PRESAFE BASIC SET - CR 15-B 3PH
DESIGN STANDARD BS EN 12092
HEATED OR CONDENSED
NO. VERTICAL MULTISTAGE CENTRIFUGAL PUMP TYPE 12 15-B COUPLED TO A (15kW) 3PH/415V/50HZ 0.85 EFF. ELECTRIC MOTOR
NO. FLOW SWITCH - TO PROVIDE ALARM SIGNAL IN EVENT OF FLOW IN SYSTEM
2ND PRESSURE SWITCHES - FIRST SWITCH ACTS INITIALLY AS JOCKEY PUMP WITH MINIMUM RUN TIME OF 20 SECONDS. IF PRESSURE FALLS AGAIN WITHIN 10 SECONDS FOLLOWING PUMP DEACTIVATION, IT WILL START IMMEDIATELY AND OPERATE IN 'FIRE MODE' REQUIRING MANUAL SHUT-DOWN SECOND PRESSURE SWITCH ACTS AS FAIL SAFE ON PRIMARY SWITCH AND IS FACTORY SET TO NO. PRESSURE GAUGE - TO MONITOR SYSTEM PRESSURE
NO. 20mm TEST/DRAIN POINT - BALL PLUG TO ALLOW SETTING OF PRESSURE SWITCHES AND SYSTEM BANS/DOWN
NO. CONTROL PANEL - INCORPORATING PUMP RUNNING ALARM OUTPUT, POWER FAULTED ALARM OUTPUT, AND ALSO INCLUDES COUPLER TO TURN PUMP OVER PERMANENTLY. TEST BUTTON ALSO INCLUDED FOR MANUAL CHECK OF PUMP OPERATION. ALL ABOVE PRE-WIRED AND PIPED TOGETHER ON PUMP SKID. BLACK STEEL PIPEWORK TERMINATES IN 50mm BSP CONNECTIONS

PROPOSED SPRINKLER TANK INFORMATION
2ND FRANKLIN HOSE (P/S/STN, REF. NO. 83310E GALVANIZED FIRE/RAINER/ (DPS), RESIDENTIAL SUPERIOR WITH DIMENSIONS OF
EFFECTIVE CAPACITY OF 1m³ PER TANK (REQUIRED)
TANK IS COMPLETE WITH THE FOLLOWING CONNECTIONS/ANGLARY EQUIPMENT IN GALVANIZED STEEL PIPE:
NO. DECKING COVER WITH ROOF ACCESS HATCH NO. 0.7m THICK BUTYL LINER
NO. HOOD-ON ACCESS LADDER
NO. CONTENTS GAUGE
NO. 50mm DRAIN CONNECTION IN GALVANIZED STEEL WITH GUNMETAL GATE VALVE
NO. 50mm INLET CONNECTION IN GALVANIZED STEEL, INCLUDING BS12 BALL/FLAT VALVE
NO. 50mm OUTLET CONNECTION COMPLETE WITH ANTI-VORTEX DEVICE WITH SUPPORT PLATE, INTERNAL ELBOW AND EXTERNAL UP/DOWN, PEECE APPROXIMATELY 150mm LONG
NO. 100mm OVERFLOW CONNECTION, EXCLUDING DOWN PIPE
NO. 50mm TEST RETURN NO. 20mm WARNING OVERFLOW
NO. TYPE 'AB' AIRGAP

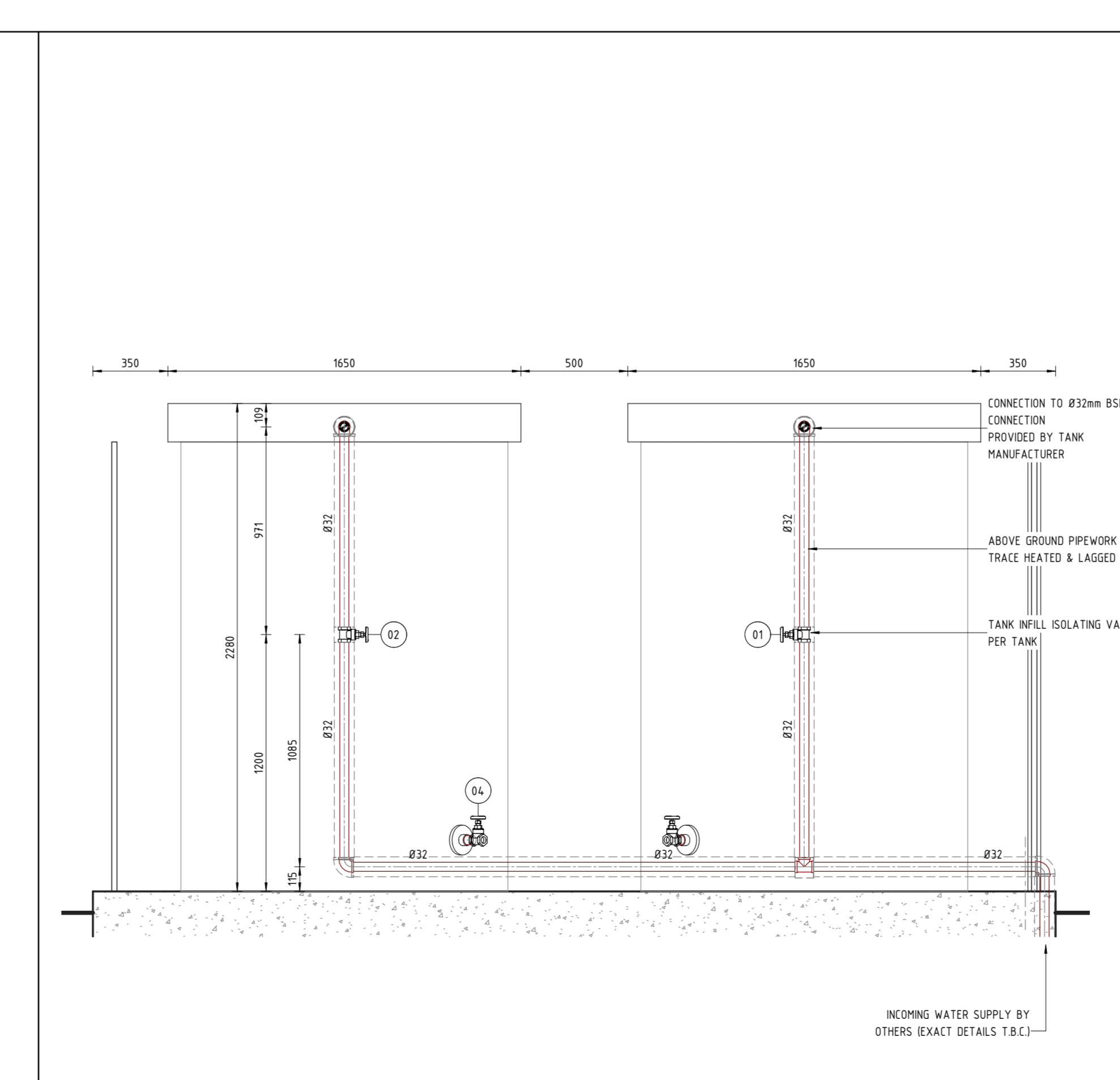
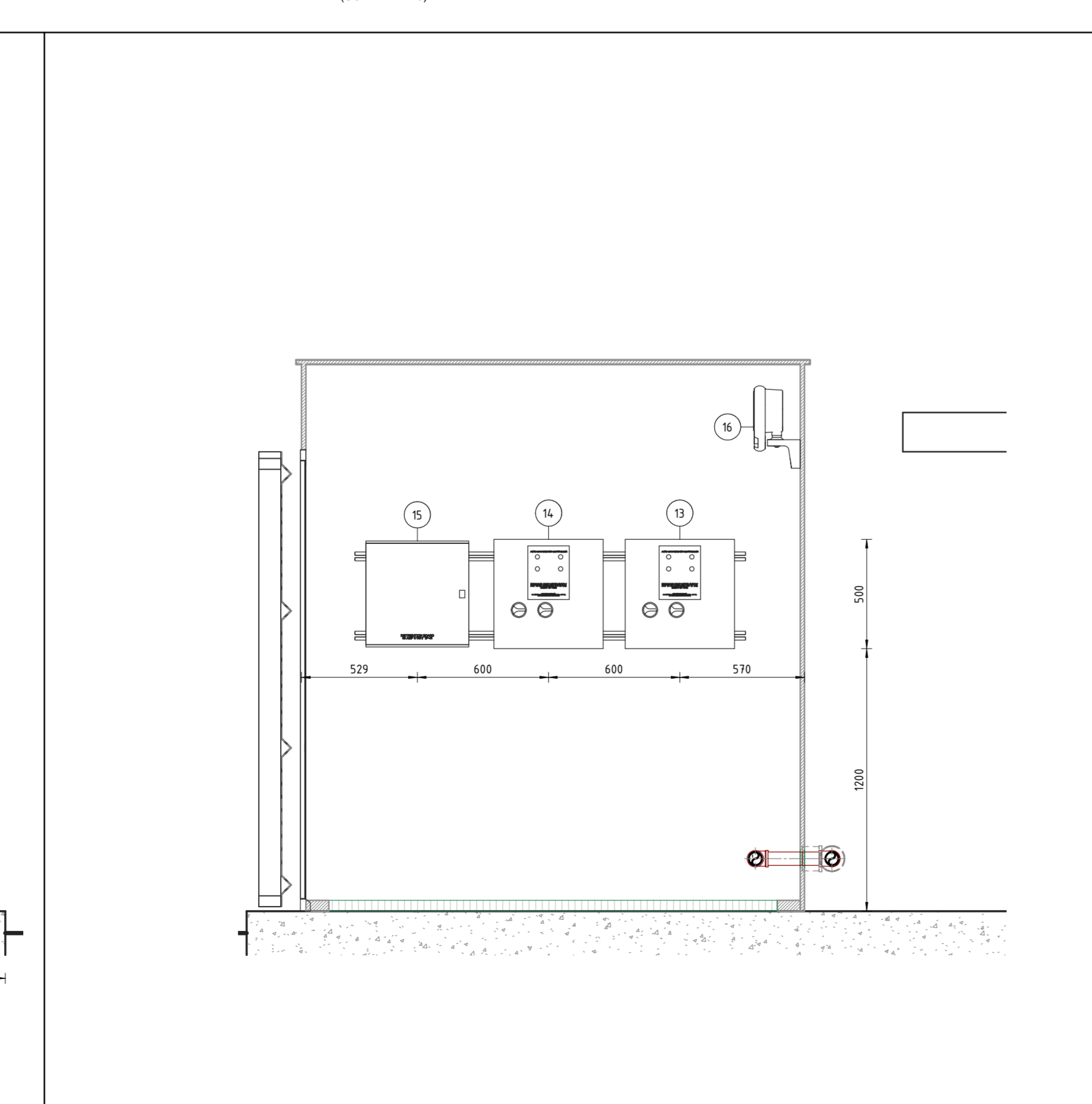
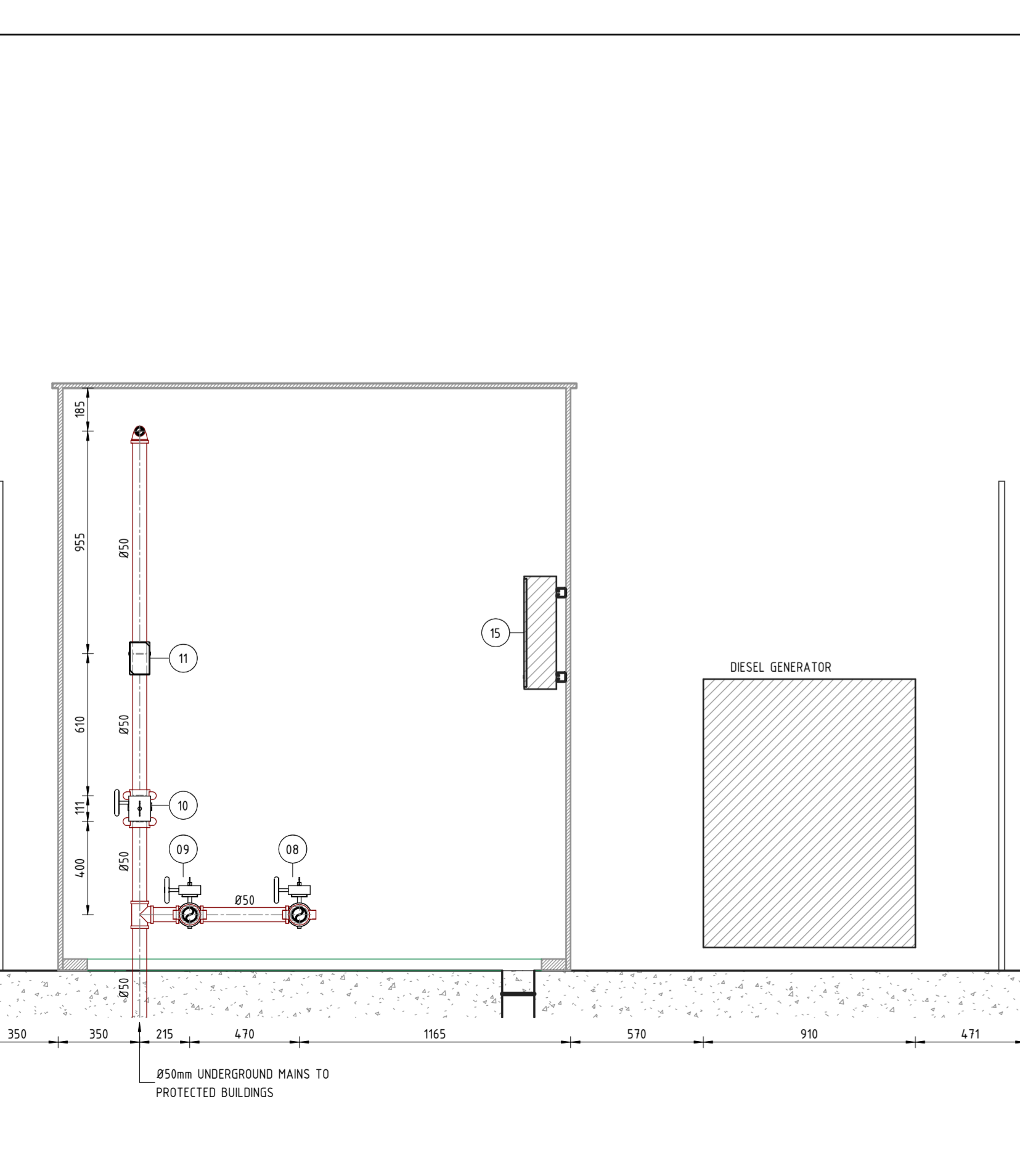
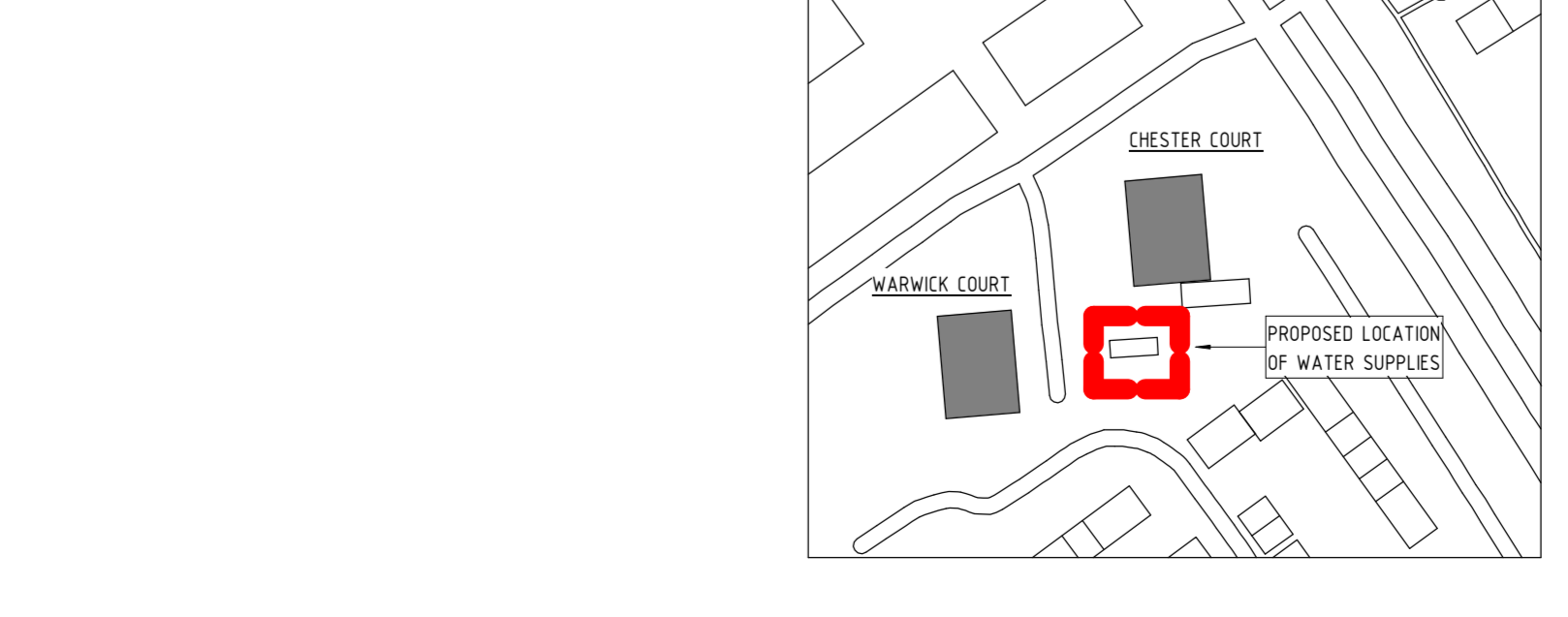
ELECTRICAL REQUIREMENTS
POWER 3PH
STARTING CURRENT: 52.4amps
FULL LOAD CURRENT: 16.4amps
START TYPE: SOFT START



TEMPERATURE IN THE PUMP ROOM TO BE MAINTAINED AT A MINIMUM TEMPERATURE OF 10°C

EQUIPMENT SCHEDULE			
ITEM NO.	SIZE (Ø)	DESCRIPTION	ORIENTATION
01	Ø12	TANK INFILL ISOLATING VALVE	OPEN
02	Ø12	TANK INFILL ISOLATING VALVE	OPEN
03	Ø12	TANK INFILL ISOLATING VALVE	OPEN
04	Ø12	TANK INFILL ISOLATING VALVE	OPEN
05	Ø12	TANK INFILL ISOLATING VALVE	OPEN
06	Ø12	TANK INFILL ISOLATING VALVE	OPEN
07	Ø12	TANK INFILL ISOLATING VALVE	OPEN
08	Ø12	TANK INFILL ISOLATING VALVE	OPEN
09	Ø12	TANK INFILL ISOLATING VALVE	OPEN
10	Ø12	TANK INFILL ISOLATING VALVE	OPEN
11	Ø12	TANK INFILL ISOLATING VALVE	OPEN
12	Ø12	TANK INFILL ISOLATING VALVE	OPEN
13	N/A	STAND-BY PUMP N°1 AUTOMATIC CHANGEOVER PANEL	N/A
14	N/A	STAND-BY PUMP N°2 AUTOMATIC CHANGEOVER PANEL	N/A
15	N/A	PUMPHOUSE DISTRIBUTION BOARD	N/A
16	N/A	PUMPHOUSE HEATER	N/A

FOR BUILDERSWORK DETAILS REFER TO DRG. NO. 0297-HAK-B06-GF-DR-X-4062



LEGEND	
○	SPRINKLER HEAD UPRIGHT
○	SPRINKLER HEAD PENDANT
○	SPRINKLER HEAD FALSE CEILING DROPPY PIPE
○	SPRINKLER HEAD WITH FLEXIBLE ARM & DROP TO FALSE CEILING
○	SPRINKLER HEAD ON RISE PIPE
○	SPRINKLER HEAD SIDEWALL
○	IN-RACK SPRINKLER HEAD FITTED WITH GAIRD & BAFFLE
○	CHANGE OF ELEVATION PIPE WORK
○	CENTRE LINE ELEVATION OF PIPEWORK BELOW SLAB / SOFFIT
○	CENTRE LINE ELEVATION OF PIPEWORK ABOVE FINISH FLOOR LEVEL / DATUM
○	DESIGN POINT
○	POSITION AND TYPE OF PIPE SUPPORT
○	POSITION OF MECHANICAL COUPLING
○	DRAIN/FLUSHING/TEST VALVE WITH BRASS PLUG
○	FLUSHING CONNECTION

DRAWING REVISIONS				
REV	REVISION DESCRIPTION	DRAWN	APPROVED	DATE
P01	PRELIMINARY ISSUE FOR COMMENTS	NM	IC	15.02.21
P02	PUMP & TANK RELOCATED WITH GROUND FLOOR OF BUILDING DETAILS & DRAWING SHEET RELOCATED TO SUIT. PRELIMINARY ISSUE FOR COMMENTS	NM	IC	02.07.21
P03	DETAILS UPDATED TO SUIT. TEST/DRAIN POINTS. DETAILS UPDATED TO SHOW AS EXTERNAL & BALL/BEARING SEALS	NM	IC	05.10.21
P04	TANK DIMENSIONS UPDATED TO SUIT MANUFACTURE	NM	IC	18.11.21
P05	PUMPHOUSE EQUIPMENT RENEWED TO SUIT INTRODUCTION OF DIESEL GENERATOR SECTIONS LOCATED TO SUIT	NM	IC	16.02.22
P06	BASE INCREASED IN SIZE, PUMPHOUSE & TANK SETTING OUT DIMENSIONS AMENDED & SUCTION LINE UPDATED TO SUIT. COMMON DRAIN LINE REMOVED	NM	IC	17.02.22

REFERENCE DRAWINGS:
BLOCK CONSTRUCTION TYPE
BRYANT - BISON 280
FOR WARWICK & CHESTER COURT

H&K
Hall & Kay Fire Engineering

BIRMINGHAM
Clifford Park
Woodgate Valley
Birmingham, B12 3BU
Tel: 0121 421 2311
Email: birmingham@hkfire.co.uk

MANCHESTER
Clifton Business Park
Wyndham Avenue, Clifton
Manchester, M2 7PQ
Tel: 0161 827 7316
Email: manchester@hkfire.co.uk

ASCOT
Link E
Siltwood Park
Berkshire, SL3 7PW
Tel: 01344 203 800
Email: ascot@hkfire.co.uk

CLIENT: DODD GROUP

PROJECT: SOLIHULL HOUSING SCHEME - PHASE 2

DRAWING TITLE: SPRINKLER WATER SUPPLY DETAILS WARWICK & CHESTER COURT

DRAWN BY: KS
DATE: 29.01.21
STATUS: APPROVAL

APPROVED BY: NM
SCALE: 1:25 at A0
CONTRACT NO: BA0324

DRAWING NO: 0297-HAK-B06-GF-DR-X-4060
REVISION: P06