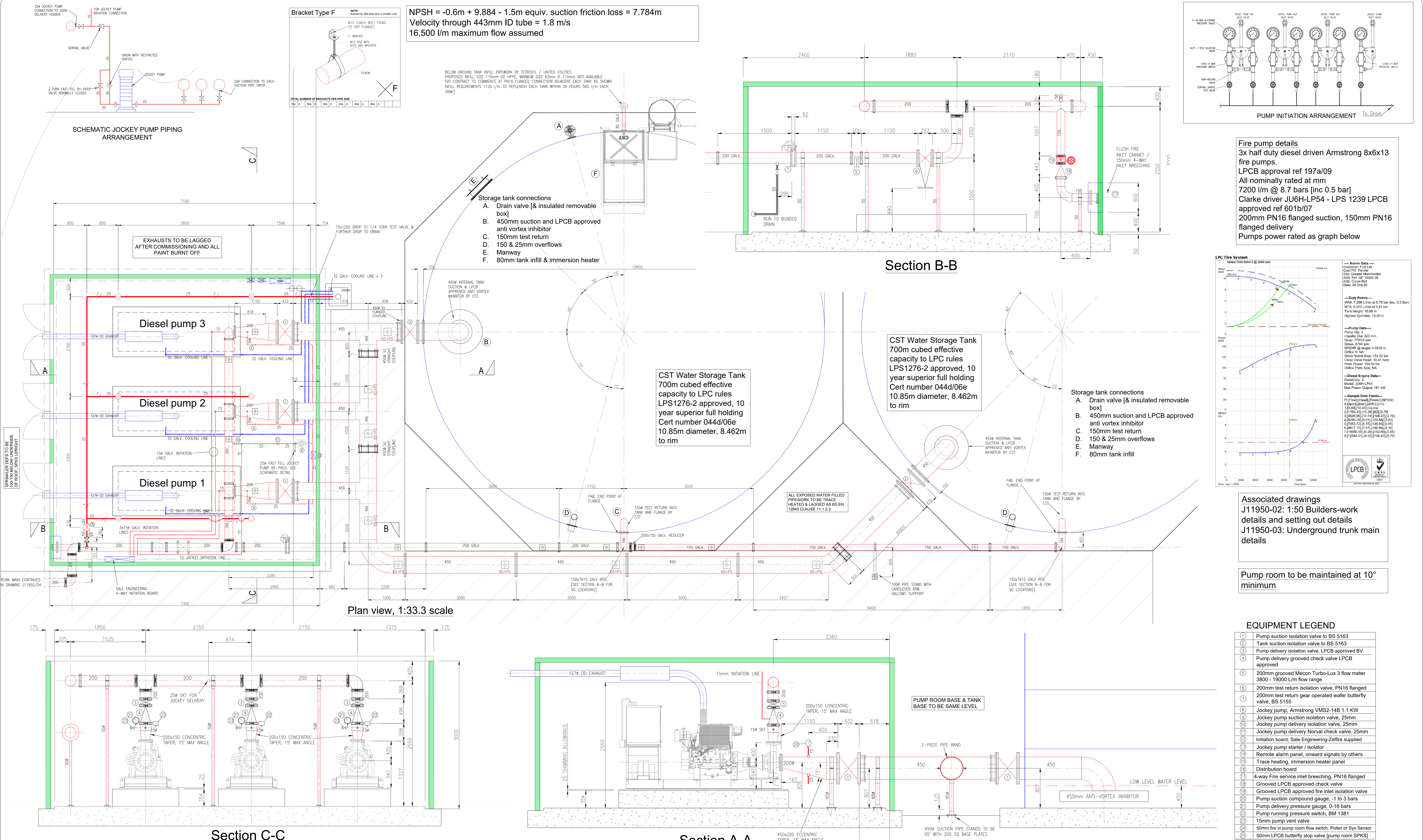




LEGEND			
	FVS-New Sprinkler Head - Installed on Rise or Drop		
	FVS-New Sprinkler Head - Installed Upright		
	FVS-New Sprinkler Head - Pendant Upright		
	FVS-Riser / Drop		
	FVS-Location of Valve Set		
	FVS-New Sprinkler Pipe		
	Existing Sprinkler Pipe		
	FVS-Bracket Location		

BLOCK PLAN			

Important Note			
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Weight of Pipe in kg/m - Filled with Water			
Steel Pipe (BS EN 10255)			
Nominal Diameter (mm)	Red Oxide Medium	Red Oxide Heavy	Galvanised Medium
25	3.02	3.49	3.07
32	4.15	4.77	4.22
40	4.98	5.71	5.06
50	7.37	8.41	7.47
65	10.40	11.74	10.53
80	13.81	15.56	13.96
100	21.42	23.48	21.61
150	38.84	40.20	39.13
200	68 kg/m [API 5L tube]		

Pipework Specification			
• Tube up to and including 150mm Bore to be mild steel BS EN 10255, medium quality.			
• Tube >200mm bore to be API 5L, schedule 20			
• Screwed pipe fittings to be BS EN 10242 black malleable iron, painted red oxide.			
• All welded fittings to conform to BS EN 10253 and flanged joints to conform to BS4505 Pt.1.NP16 Unless noted.			
• Welding standards as per BS EN 12845 clause 17.1.3 & BS ISO 1461.			
• Grooved joints to be installed/supported in accordance with manufacturers instructions.			
• Grooved mechanical fittings to be LPCB/FM approved.			
• All pipework and fittings to be painted 1 full coat red oxide primer.			
• All piping installed below ground to be Ductile Spun Iron Lined/Unlined to BS4772 Tyton/Bolted Gland/Flanged Joints or HPPE - as per BS EN 12845 clause 17.1.3			
Client/Reference Drawings			

To the Client			
• FVS Limited do not accept any responsibility for damage caused by frost. Clients should take adequate precautions against water in the valves, pumps, tanks and pipework from freezing during severe weather.			
• Unless otherwise agreed, it is the responsibility of the client to carry out all civil, builders and electrical works on this contract.			
• Where sprinkler pipework and heads are fitted into solid ceilings, we recommend a 600mm square hatch is provided adjacent each head for access at a later date.			
• If not provided by the Client, FVS Limited do not accept any responsibility or costs for access holes being required at a later date for any reason.			
• It is the clients responsibility to advise FVS Limited of any services clash within 7 days of drawing issue.			
• All pipework to be earthed and bonded in accordance with the requirements IEE regulations by the client.			
• Temperature rating of the sprinkler head should always be at least 30°C above ambient temperature. It is the clients responsibility to inform FVS Limited where the ambient temperature will exceed 38°C			
WARNING Sprinkler heads, multi jet controls, spray nozzles etc. must NOT be painted.			

To the Erector			
• Alterations and additions should not be made to the system without first contacting the design office.			
• All sprinklers and controls are to be installed upright with the yoke arms parallel with the pipe, unless otherwise stated.			
• Sprinkler deflector plates must be parallel with the roof/ceiling.			
• All dry pipework to be installed with a slope for drainage as follows:			
• Range pipework 25-50mm 4mm/metre			
• Distribution pipework >65: 2mm/1metre			
• All dimensions shown are to the centre line of pipe.			
• Pipework supports are to be installed in accordance with the LPC Rules.			
• All arm pipes over 450mm long and riser/drops feeding single sprinklers over 600mm to be supported where possible.			
• A minimum of 150mm clearance should be maintained between pipework supports and sprinkler heads [LPC] or 300mm [FM Global].			
• Sprinkler deflectors shall be set out between 75-150mm below underside of ceiling or roof where possible and a maximum of 300mm from the ceiling/sloft where unavoidable for combustible ceilings and 450mm for non-combustible ceilings. If roof purlins present, deflectors to be set out 25mm below underside of purlin. If in doubt, consult a competent design engineer.			

DESIGN SCHEDULE			
Design Criteria	LPC rules inc. BS EN 12845	Area Protected	Pump room
Occupancy	Pump room	Area (m2)	70
Property Protection/Annex F	Property	No. of Sprinklers	6
Scope of Works	New system water supplies	Type	SSU
Hazard Classification	OH3	Thermal Sensitivity	STD
Storage Configuration	not permitted in pump room	Orifice Size/K Factor	15mm/K80
Goods Category	NA	Temperature Rating	93°
Maximum Storage Height	NA	Manufacturer	Tycos
Clearance Below Spk Deflector	500mm	Reference/Part No.	TY-B [315]
Design Density of Discharge	5mm/min	BUILDING SCHEDULE	
Area of Operation	70m sq [room size]	Internal Walls	Brick/block
Hydraulic Design	FHC	External Walls	Brick/block
Highest Spk above 'C' Gauge	NA, from trunk main	Floors / Ceilings	Concrete/non-combustible to client design
Water Supplies	3 half duty diesel fire pumps	SPRINKLER SCHEDULE	
Pump Duty/Flow Result	Each rated 7200 l/m @ 8.7 bars	Pump room	
Tank Capacity	2x700m cubed		
Valve No., Size & Type	50mm fire in pump room stop valve-flow switch		

DESIGN SCHEDULE			
Design Criteria	LPC rules inc. BS EN 12845	Area Protected	Pump room
Occupancy	Pump room	Area (m2)	70
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Hydraulic Design	FHC	External Walls	Brick/block
Highest Spk above 'C' Gauge	NA, from trunk main	Floors / Ceilings	Concrete/non-combustible to client design
Water Supplies	3 half duty diesel fire pumps	SPRINKLER SCHEDULE	
Pump Duty/Flow Result	Each rated 7200 l/m @ 8.7 bars	Pump room	
Tank Capacity	2x700m cubed		
Valve No., Size & Type	50mm fire in pump room stop valve-flow switch		

SPRINKLER SCHEDULE			
Design Criteria	LPC rules inc. BS EN 12845	Area Protected	Pump room
Occupancy	Pump room	Area (m2)	70
Property Protection/Annex F	Property	No. of Sprinklers	6
Scope of Works	New system water supplies	Type	SSU
Hazard Classification	OH3	Thermal Sensitivity	STD
Storage Configuration	not permitted in pump room	Orifice Size/K Factor	15mm/K80
Goods Category	NA	Temperature Rating	93°
Maximum Storage Height	NA	Manufacturer	Tycos
Clearance Below Spk Deflector	500mm	Reference/Part No.	TY-B [315]
Design Density of Discharge	5mm/min	BUILDING SCHEDULE	
Area of Operation	70m sq [room size]	Internal Walls	Brick/block
Hydraulic Design	FHC	External Walls	Brick/block
Highest Spk above 'C' Gauge	NA, from trunk main	Floors / Ceilings	Concrete/non-combustible to client design
Water Supplies	3 half duty diesel fire pumps	SPRINKLER SCHEDULE	
Pump Duty/Flow Result	Each rated 7200 l/m @ 8.7 bars	Pump room	
Tank Capacity	2x700m cubed		
Valve No., Size & Type	50mm fire in pump room stop valve-flow switch		

BUILDING SCHEDULE			
Internal Walls	Brick/block	Area Protected	Pump room
External Walls	Brick/block	Area (m2)	70
Floors / Ceilings	Concrete/non-combustible to client design	No. of Sprinklers	6
SPRINKLER SCHEDULE			
Pump room		Type	SSU
		Thermal Sensitivity	STD
		Orifice Size/K Factor	15mm/K80
		Temperature Rating	93°
		Manufacturer	Tycos
		Reference/Part No.	TY-B [315]

EQUIPMENT LEGEND			
1	Pump suction isolation valve to BS 5163		
2	Tank suction isolation valve to BS 5163		
3	Pump delivery isolation valve, LPCB approved BV		
4	Pump delivery grooved check valve LPCB approved		
5	200mm grooved Mecon Turbo-Lux 3 flow meter 3800 - 19000 l/m flow range		
6	200mm test return isolation valve, PN16 flanged		
7	200mm test return gear operated wafer butterfly valve, BS 5155		
8	Jockey pump, Armstrong VM52-14B 1.1 kW		
9	Jockey pump suction isolation valve, 25mm		
10	Jockey pump delivery isolation valve, 25mm		
11	Jockey pump delivery Norval check valve, 25mm		
12	Initiation board, Sale Engineering-Zeffire supplied		
13	Jockey pump starter / isolator		
14	Remote alarm panel, onward signals by others		
15	Trace heating, immersion heater panel		
16	Distribution board		
17	4-way Fire service inlet breeching, PN16 flanged		
18	Grooved LPCB approved check valve		
19	Grooved LPCB approved fire inlet isolation valve		
20	Pump suction compound gauge, -1 to 3 bars		
21	Pump delivery pressure gauge, 0-16 bars		
22	Pump running pressure switch, BM 1381		
23	15mm pump vent valve		
24	50mm fire in pump room flow switch, Potter & Sys Sensor		
25	50mm LPCB butterfly stop valve [pump room SPKS]		

LEGEND			
	FVS-New Sprinkler Head - Installed on Rise or Drop		
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	FVS-New Sprinkler Head - Pendant Upright		
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