

Roof_remote Report - dbl warehouse

Project	dbl warehouse
Client	ABC logistics
Address	1 Main Road
Job number	123
Drawing number	123
Revision	A1
Prepared by	Michael
Checked by	Fritz
Measurement system	Metric KPA
Report type	Roof_remote Report
Design density	12.5 mm/min
Min pressure area basis	8.425 m ²
Total flow at node 100	3444 L/min
Required pressure at node 100	445.566 kPa
Total operating sprinklers	32
Roof sprinklers operating	32
Rack sprinklers operating	0
Highest sprinkler elevation	7.551 m
Controlling sprinkler demand	105 L/min @ 173.293 kPa
Actual area of operation	264.952 m ²
Largest sprinkler area	8.250 m ²
Notes	Roof protection only with free standing block storage

Hydraulically Significant Nodes

Node	Flow downstream	Required pressure
100	3444 L/min	445.566 kPa
102	3444 L/min	438.279 kPa
112	3444 L/min	411.800 kPa
122	3444 L/min	407.054 kPa

Node	Flow downstream	Required pressure
132	3444 L/min	404.360 kPa
142	3444 L/min	401.925 kPa
152	3444 L/min	418.689 kPa
162	3444 L/min	411.070 kPa
172	3444 L/min	393.823 kPa
182	3444 L/min	391.006 kPa
192	3444 L/min	388.603 kPa
202	3444 L/min	381.365 kPa
212	3444 L/min	373.559 kPa
222	3444 L/min	366.272 kPa
232	3444 L/min	310.382 kPa
242	3444 L/min	271.683 kPa
252	3444 L/min	251.513 kPa
617	3444 L/min	248.689 kPa
628	3444 L/min	246.440 kPa
639	3444 L/min	244.190 kPa
650	3444 L/min	241.940 kPa
760	3444 L/min	239.691 kPa
771	3444 L/min	237.441 kPa
782	3444 L/min	234.614 kPa
793	3444 L/min	231.787 kPa
903	3444 L/min	228.960 kPa
1013	3444 L/min	226.134 kPa
1123	3444 L/min	223.307 kPa
1233	3444 L/min	220.480 kPa
1343	3444 L/min	217.653 kPa
1354	3444 L/min	214.826 kPa
1464	3444 L/min	211.999 kPa
1574	3444 L/min	209.172 kPa
1684	3444 L/min	206.922 kPa
1794	3444 L/min	204.673 kPa
1904	3444 L/min	202.423 kPa

Node	Flow downstream	Required pressure
1914	863 L/min	197.271 kPa
1924	320 L/min	193.944 kPa
1934	212 L/min	181.304 kPa
1944	106 L/min	176.896 kPa
1954	0 L/min	174.938 kPa
1964	432 L/min	196.783 kPa
1974	321 L/min	193.908 kPa
1984	213 L/min	181.211 kPa
1994	107 L/min	176.761 kPa
2004	0 L/min	177.278 kPa
2014	2580 L/min	201.104 kPa
2024	860 L/min	195.962 kPa
2034	319 L/min	192.663 kPa
2044	212 L/min	180.115 kPa
2054	105 L/min	175.750 kPa
2064	0 L/min	173.820 kPa
2074	430 L/min	195.476 kPa
2084	320 L/min	192.627 kPa
2094	212 L/min	180.023 kPa
2104	106 L/min	175.616 kPa
2114	0 L/min	176.146 kPa
2124	1720 L/min	200.481 kPa
2134	859 L/min	195.344 kPa
2144	318 L/min	192.058 kPa
2154	211 L/min	179.554 kPa
2164	105 L/min	175.209 kPa
2174	0 L/min	173.293 kPa
2184	430 L/min	194.859 kPa
2194	319 L/min	192.022 kPa
2204	212 L/min	179.462 kPa
2214	106 L/min	175.075 kPa
2224	0 L/min	175.612 kPa

Node	Flow downstream	Required pressure
2234	861 L/min	200.292 kPa
2244	861 L/min	196.302 kPa
2254	319 L/min	192.996 kPa
2264	212 L/min	180.424 kPa
2274	106 L/min	176.048 kPa
2284	0 L/min	174.111 kPa
2294	431 L/min	195.816 kPa
2304	320 L/min	192.960 kPa
2314	212 L/min	180.332 kPa
2324	106 L/min	175.914 kPa
2334	0 L/min	176.440 kPa
3396	3444 L/min	390.730 kPa
3426	3444 L/min	312.372 kPa

Hydraulically Significant Sprinklers

Line	Node	Head	K	Area	Flow out	Pressure	Density	Status
264	1924	Roof	8	8.250 m ²	111 L/min	193.944 kPa	13.5 mm/min	OK
265	1934	Roof	8	8.250 m ²	108 L/min	181.304 kPa	13.1 mm/min	OK
266	1944	Roof	8	8.250 m ²	106 L/min	176.896 kPa	12.9 mm/min	OK
267	1954	Roof	8	8.425 m ²	106 L/min	174.938 kPa	12.6 mm/min	OK
269	1974	Roof	8	8.250 m ²	111 L/min	193.908 kPa	13.5 mm/min	OK
270	1984	Roof	8	8.250 m ²	108 L/min	181.211 kPa	13.1 mm/min	OK
271	1994	Roof	8	8.250 m ²	106 L/min	176.761 kPa	12.9 mm/min	OK
272	2004	Roof	8	8.250 m ²	107 L/min	177.278 kPa	12.9 mm/min	OK
275	2034	Roof	8	8.250 m ²	111 L/min	192.663 kPa	13.5 mm/min	OK
276	2044	Roof	8	8.250 m ²	107 L/min	180.115 kPa	13.0 mm/min	OK
277	2054	Roof	8	8.250 m ²	106 L/min	175.750 kPa	12.9 mm/min	OK
278	2064	Roof	8	8.425 m ²	105 L/min	173.820 kPa	12.5 mm/min	OK
280	2084	Roof	8	8.250 m ²	111 L/min	192.627 kPa	13.5 mm/min	OK
281	2094	Roof	8	8.250 m ²	107 L/min	180.023 kPa	13.0 mm/min	OK
282	2104	Roof	8	8.250 m ²	106 L/min	175.616 kPa	12.8 mm/min	OK
283	2114	Roof	8	8.250 m ²	106 L/min	176.146 kPa	12.9 mm/min	OK
286	2144	Roof	8	8.250 m ²	111 L/min	192.058 kPa	13.4 mm/min	OK

Line	Node	Head	K	Area	Flow out	Pressure	Density	Status
287	2154	Roof	8	8.250 m ²	107 L/min	179.554 kPa	13.0 mm/min	OK
288	2164	Roof	8	8.250 m ²	106 L/min	175.209 kPa	12.8 mm/min	OK
289	2174	Roof	8	8.425 m ²	105 L/min	173.293 kPa	12.5 mm/min	OK
291	2194	Roof	8	8.250 m ²	111 L/min	192.022 kPa	13.4 mm/min	OK
292	2204	Roof	8	8.250 m ²	107 L/min	179.462 kPa	13.0 mm/min	OK
293	2214	Roof	8	8.250 m ²	106 L/min	175.075 kPa	12.8 mm/min	OK
294	2224	Roof	8	8.250 m ²	106 L/min	175.612 kPa	12.8 mm/min	OK
297	2254	Roof	8	8.415 m ²	111 L/min	192.996 kPa	13.2 mm/min	OK
298	2264	Roof	8	8.415 m ²	107 L/min	180.424 kPa	12.8 mm/min	OK
299	2274	Roof	8	8.415 m ²	106 L/min	176.048 kPa	12.6 mm/min	OK
300	2284	Roof	8	7.522 m ²	106 L/min	174.111 kPa	14.0 mm/min	OK
302	2304	Roof	8	8.415 m ²	111 L/min	192.960 kPa	13.2 mm/min	OK
303	2314	Roof	8	8.415 m ²	107 L/min	180.332 kPa	12.8 mm/min	OK
304	2324	Roof	8	8.415 m ²	106 L/min	175.914 kPa	12.6 mm/min	OK
305	2334	Roof	8	8.415 m ²	106 L/min	176.440 kPa	12.6 mm/min	OK

Hydraulically Significant Pipes

Line	Start	End	Dir	Plan m	Slope	Actual m	Eff m	No m	ID mm	Family	Fitting	Flow	Friction	Static
1	100	102	U	0,300	0.00	0,300	6,700	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Butterfly valve	3444 L/min	4.344 kPa	2.943 kPa
2	102	112	U	0,300	0.00	0,300	36,300	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Lift check valve	3444 L/min	23.536 kPa	2.943 kPa
3	112	122	U	0,300	0.00	0,300	2,780	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Grooved short elbow	3444 L/min	1.802 kPa	2.943 kPa
4	122	132	N	1,750	0.00	1,675	4,155	150	155,00	Medium weight steel — BS1387/E N10255/S	Grooved short elbow	3444 L/min	2.694 kPa	0.000 kPa

Line	Start	End	Dir	Plan m	Slope	Actual m	Eff m	No m	ID mm	Family	Fitting	Flow	Friction	Static
										ANS62-1/AS1074				
5	132	142	E	1,350	0.00	1,275	3,755	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Grooved short elbow	3444 L/min	2.435 kPa	0.000 kPa
6	142	152	D	2,000	0.00	1,925	4,405	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Grooved short elbow	3444 L/min	2.856 kPa	-19.620 kPa
7	152	162	E	9,347	0.00	9,272	11,752	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Grooved short elbow	3444 L/min	7.620 kPa	0.000 kPa
8	162	172	U	1,500	0.00	1,425	3,905	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Grooved short elbow	3444 L/min	2.532 kPa	14.715 kPa
9	172	182	N	1,940	0.00	1,865	4,345	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Grooved short elbow	3444 L/min	2.817 kPa	0.000 kPa
10	182	3396	E	0,500	0.00	0,425	0,425	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Grooved coupling	3444 L/min	0.276 kPa	0.000 kPa
11	3396	192	E	0,800	0.00	0,800	3,280	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Grooved short elbow	3444 L/min	2.127 kPa	0.000 kPa
12	192	202	U	0,300	0.00	0,225	6,625	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Butterfly valve	3444 L/min	4.295 kPa	2.943 kPa

Line	Start	End	Dir	Plan m	Slope	Actual m	Eff m	No m	ID mm	Family	Fitting	Flow	Friction	Static
13	202	212	U	0,300	0.00	0,300	7,500	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Alarm / non-return valve (swinging)	3444 L/min	4.863 kPa	2.943 kPa
14	212	222	U	0,300	0.00	0,300	6,700	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Butterfly valve	3444 L/min	4.344 kPa	2.943 kPa
15	222	3426	U	5,000	0.00	5,000	7,480	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Grooved short elbow	3444 L/min	4.850 kPa	49.050 kPa
16	3426	232	N	0,665	0.00	0,590	3,070	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Grooved short elbow	3444 L/min	1.991 kPa	0.000 kPa
17	232	242	E	57,900	0.00	57,825	59,685	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Grooved tee	3444 L/min	38.698 kPa	0.000 kPa
18	242	252	N	11,800	5.00	11,770	15,490	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Grooved tee	3444 L/min	10.043 kPa	10.128 kPa
19	252	617	E	1,600	0.00	1,525	4,355	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Grooved tee	3444 L/min	2.823 kPa	0.000 kPa
20	617	628	E	2,500	0.00	2,500	3,470	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Grooved tee	3444 L/min	2.250 kPa	0.000 kPa
21	628	639	E	2,500	0.00	2,500	3,470	150	155,00	Medium weight	Grooved tee	3444 L/min	2.250	0.000

Line	Start	End	Dir	Plan m	Slope	Actual m	Eff m	No m	ID mm	Family	Fitting	Flow	Friction	Static
										steel — BS1387/E N10255/S ANS62- 1/AS1074			kPa	kPa
22	639	650	E	2,500	0.00	2,500	3,470	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62- 1/AS1074	Grooved tee	3444 L/min	2.250 kPa	0.000 kPa
23	650	760	E	2,500	0.00	2,500	3,470	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62- 1/AS1074	Grooved tee	3444 L/min	2.250 kPa	0.000 kPa
24	760	771	E	2,500	0.00	2,500	3,470	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62- 1/AS1074	Grooved tee	3444 L/min	2.250 kPa	0.000 kPa
25	771	782	E	2,500	0.00	2,500	4,360	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62- 1/AS1074	Grooved tee	3444 L/min	2.827 kPa	0.000 kPa
26	782	793	E	2,500	0.00	2,500	4,360	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62- 1/AS1074	Grooved tee	3444 L/min	2.827 kPa	0.000 kPa
27	793	903	E	2,500	0.00	2,500	4,360	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62- 1/AS1074	Grooved tee	3444 L/min	2.827 kPa	0.000 kPa
28	903	1013	E	2,500	0.00	2,500	4,360	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62- 1/AS1074	Grooved tee	3444 L/min	2.827 kPa	0.000 kPa
29	1013	1123	E	2,500	0.00	2,500	4,360	150	155,00	Medium weight steel — BS1387/E N10255/S	Grooved tee	3444 L/min	2.827 kPa	0.000 kPa

Line	Start	End	Dir	Plan m	Slope	Actual m	Eff m	No m	ID mm	Family	Fitting	Flow	Friction	Static
										ANS62-1/AS1074				
30	1123	1233	E	2,500	0.00	2,500	4,360	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Grooved tee	3444 L/min	2.827 kPa	0.000 kPa
31	1233	1343	E	2,500	0.00	2,500	4,360	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Grooved tee	3444 L/min	2.827 kPa	0.000 kPa
32	1343	1354	E	2,500	0.00	2,500	4,360	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Grooved tee	3444 L/min	2.827 kPa	0.000 kPa
33	1354	1464	E	2,500	0.00	2,500	4,360	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Grooved tee	3444 L/min	2.827 kPa	0.000 kPa
34	1464	1574	E	2,500	0.00	2,500	4,360	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Grooved tee	3444 L/min	2.827 kPa	0.000 kPa
35	1574	1684	E	2,500	0.00	2,500	3,470	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Grooved tee	3444 L/min	2.250 kPa	0.000 kPa
36	1684	1794	E	2,500	0.00	2,500	3,470	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Grooved tee	3444 L/min	2.250 kPa	0.000 kPa
37	1794	1904	E	2,500	0.00	2,500	3,470	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Grooved tee	3444 L/min	2.250 kPa	0.000 kPa

Line	Start	End	Dir	Plan m	Slope	Actual m	Eff m	No m	ID mm	Family	Fitting	Flow	Friction	Static
38	1904	1914	U	0,350	0.00	0,275	1,437	80	80,80	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Grooved tee	863 L/min	1.719 kPa	3.433 kPa
39	1914	1924	S	1,500	-5.00	1,466	1,786	50	53,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Threaded coupling	431 L/min	4.614 kPa	-1.287 kPa
40	1924	1934	S	3,300	-5.00	3,313	3,313	40	41,90	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Threaded coupling	320 L/min	15.472 kPa	-2.832 kPa
41	1934	1944	S	3,300	-5.00	3,313	3,313	40	41,90	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Threaded coupling	212 L/min	7.240 kPa	-2.832 kPa
42	1944	1954	S	3,300	-5.00	3,313	3,793	32	36,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Threaded short elbow	106 L/min	4.791 kPa	-2.832 kPa
43	1914	1964	N	0,150	5.00	0,110	1,080	80	80,80	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Grooved coupling	432 L/min	0.359 kPa	0.129 kPa
44	1964	1974	N	1,650	-5.00	1,656	1,656	50	53,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Threaded coupling	432 L/min	4.292 kPa	-1.416 kPa
45	1974	1984	N	3,300	-5.00	3,313	3,313	40	41,90	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Threaded coupling	321 L/min	15.529 kPa	-2.832 kPa
46	1984	1994	N	3,300	-5.00	3,313	3,313	40	41,90	Medium weight	Threaded	213 L/min	7.282	-2.832

Line	Start	End	Dir	Plan m	Slope	Actual m	Eff m	No m	ID mm	Family	Fitting	Flow	Friction	Static
										steel — BS1387/E N10255/S ANS62-1/AS1074	coupling		kPa	kPa
47	1994	2004	N	3,300	-5.00	3,313	3,793	40	41,90	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Threaded short elbow	107 L/min	2.316 kPa	-2.832 kPa
48	1904	2014	E	2,500	0.00	2,500	3,470	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Grooved tee	2580 L/min	1.319 kPa	0.000 kPa
49	2014	2024	U	0,350	0.00	0,275	1,437	80	80,80	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Grooved tee	860 L/min	1.709 kPa	3.433 kPa
50	2024	2034	S	1,500	-5.00	1,466	1,786	50	53,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Threaded coupling	430 L/min	4.587 kPa	-1.287 kPa
51	2034	2044	S	3,300	-5.00	3,313	3,313	40	41,90	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Threaded coupling	319 L/min	15.380 kPa	-2.832 kPa
52	2044	2054	S	3,300	-5.00	3,313	3,313	40	41,90	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Threaded coupling	212 L/min	7.197 kPa	-2.832 kPa
53	2054	2064	S	3,300	-5.00	3,313	3,793	32	36,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Threaded short elbow	105 L/min	4.762 kPa	-2.832 kPa
54	2024	2074	N	0,150	5.00	0,110	1,080	80	80,80	Medium weight steel — BS1387/E N10255/S	Grooved coupling	430 L/min	0.357 kPa	0.129 kPa

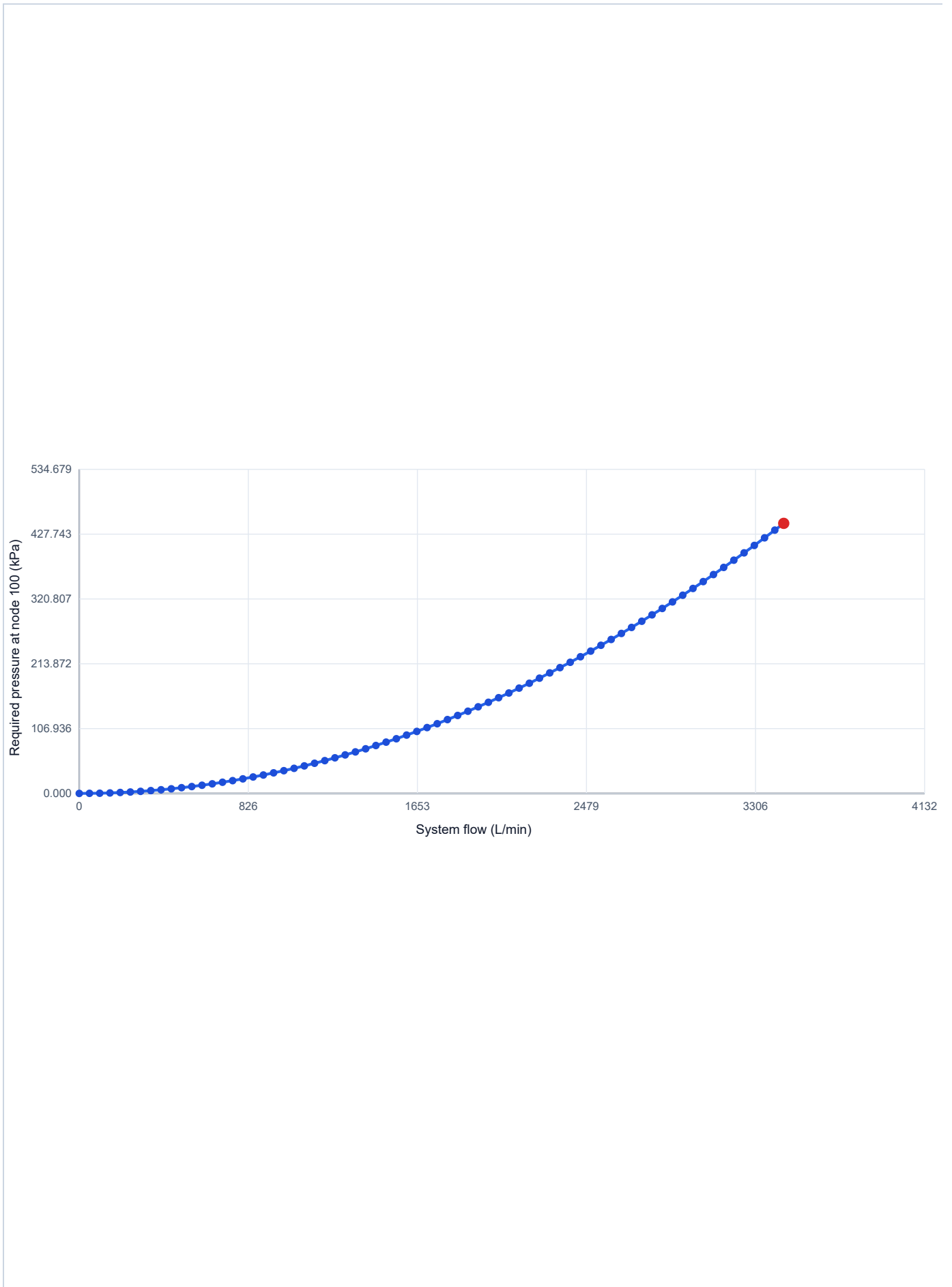
Line	Start	End	Dir	Plan m	Slope	Actual m	Eff m	No m	ID mm	Family	Fitting	Flow	Friction	Static
										ANS62-1/AS1074				
55	2074	2084	N	1,650	-5.00	1,656	1,656	50	53,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Threaded coupling	430 L/min	4.266 kPa	-1.416 kPa
56	2084	2094	N	3,300	-5.00	3,313	3,313	40	41,90	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Threaded coupling	320 L/min	15.436 kPa	-2.832 kPa
57	2094	2104	N	3,300	-5.00	3,313	3,313	40	41,90	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Threaded coupling	212 L/min	7.239 kPa	-2.832 kPa
58	2104	2114	N	3,300	-5.00	3,313	3,793	40	41,90	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Threaded short elbow	106 L/min	2.302 kPa	-2.832 kPa
59	2014	2124	E	2,500	0.00	2,500	3,470	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Grooved tee	1720 L/min	0.623 kPa	0.000 kPa
60	2124	2134	U	0,350	0.00	0,275	1,437	80	80,80	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Grooved tee	859 L/min	1.704 kPa	3.433 kPa
61	2134	2144	S	1,500	-5.00	1,466	1,786	50	53,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Threaded coupling	429 L/min	4.573 kPa	-1.287 kPa
62	2144	2154	S	3,300	-5.00	3,313	3,313	40	41,90	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Threaded coupling	318 L/min	15.336 kPa	-2.832 kPa

Line	Start	End	Dir	Plan m	Slope	Actual m	Eff m	No m	ID mm	Family	Fitting	Flow	Friction	Static
63	2154	2164	S	3,300	-5.00	3,313	3,313	40	41,90	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Threaded coupling	211 L/min	7.177 kPa	-2.832 kPa
64	2164	2174	S	3,300	-5.00	3,313	3,793	32	36,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Threaded short elbow	105 L/min	4.749 kPa	-2.832 kPa
65	2134	2184	N	0,150	5.00	0,110	1,080	80	80,80	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Grooved coupling	430 L/min	0.356 kPa	0.129 kPa
66	2184	2194	N	1,650	-5.00	1,656	1,656	50	53,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Threaded coupling	430 L/min	4.254 kPa	-1.416 kPa
67	2194	2204	N	3,300	-5.00	3,313	3,313	40	41,90	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Threaded coupling	319 L/min	15.392 kPa	-2.832 kPa
68	2204	2214	N	3,300	-5.00	3,313	3,313	40	41,90	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Threaded coupling	212 L/min	7.219 kPa	-2.832 kPa
69	2214	2224	N	3,300	-5.00	3,313	3,793	40	41,90	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Threaded short elbow	106 L/min	2.296 kPa	-2.832 kPa
70	2124	2234	E	2,500	0.00	2,500	3,793	150	155,00	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Grooved short elbow	861 L/min	0.189 kPa	0.000 kPa
71	2234	2244	U	0,350	0.00	0,275	0,467	80	80,80	Medium weight	Grooved tee	861 L/min	0.556 kPa	3.433 kPa

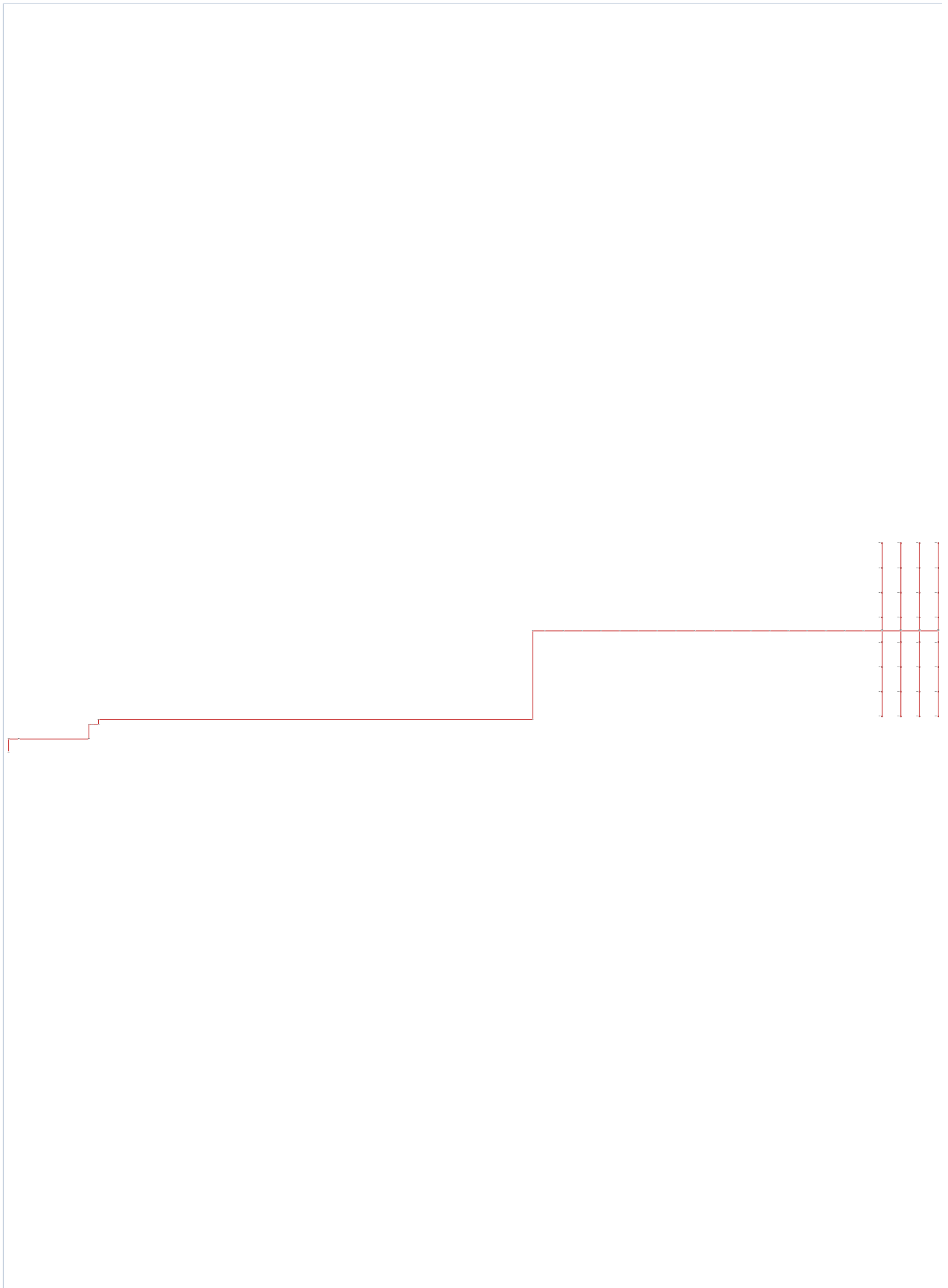
Line	Start	End	Dir	Plan m	Slope	Actual m	Eff m	No m	ID mm	Family	Fitting	Flow	Friction	Static
										steel — BS1387/E N10255/S ANS62- 1/AS1074			kPa	kPa
72	2244	2254	S	1,500	-5.00	1,466	1,786	50	53,000	Medium weight steel — BS1387/E N10255/S ANS62- 1/AS1074	Threaded coupling	430 L/min	4.594 kPa	-1.287 kPa
73	2254	2264	S	3,300	-5.00	3,313	3,313	40	41,900	Medium weight steel — BS1387/E N10255/S ANS62- 1/AS1074	Threaded coupling	319 L/min	15.404 kPa	-2.832 kPa
74	2264	2274	S	3,300	-5.00	3,313	3,313	40	41,900	Medium weight steel — BS1387/E N10255/S ANS62- 1/AS1074	Threaded coupling	212 L/min	7.208 kPa	-2.832 kPa
75	2274	2284	S	3,300	-5.00	3,313	3,793	32	36,000	Medium weight steel — BS1387/E N10255/S ANS62- 1/AS1074	Threaded short elbow	106 L/min	4.770 kPa	-2.832 kPa
76	2244	2294	N	0,150	5.00	0,110	1,080	80	80,800	Medium weight steel — BS1387/E N10255/S ANS62- 1/AS1074	Grooved coupling	431 L/min	0.357 kPa	0.129 kPa
77	2294	2304	N	1,650	-5.00	1,656	1,656	50	53,000	Medium weight steel — BS1387/E N10255/S ANS62- 1/AS1074	Threaded coupling	431 L/min	4.273 kPa	-1.416 kPa
78	2304	2314	N	3,300	-5.00	3,313	3,313	40	41,900	Medium weight steel — BS1387/E N10255/S ANS62- 1/AS1074	Threaded coupling	320 L/min	15.460 kPa	-2.832 kPa
79	2314	2324	N	3,300	-5.00	3,313	3,313	40	41,900	Medium weight steel — BS1387/E N10255/S	Threaded coupling	212 L/min	7.250 kPa	-2.832 kPa

Line	Start	End	Dir	Plan m	Slope	Actual m	Eff m	No m	ID mm	Family	Fitting	Flow	Friction	Static
										ANS62-1/AS1074				
80	2324	2334	N	3,300	-5.00	3,313	3,793	40	41,90	Medium weight steel — BS1387/E N10255/S ANS62-1/AS1074	Threaded short elbow	106 L/min	2.306 kPa	-2.832 kPa

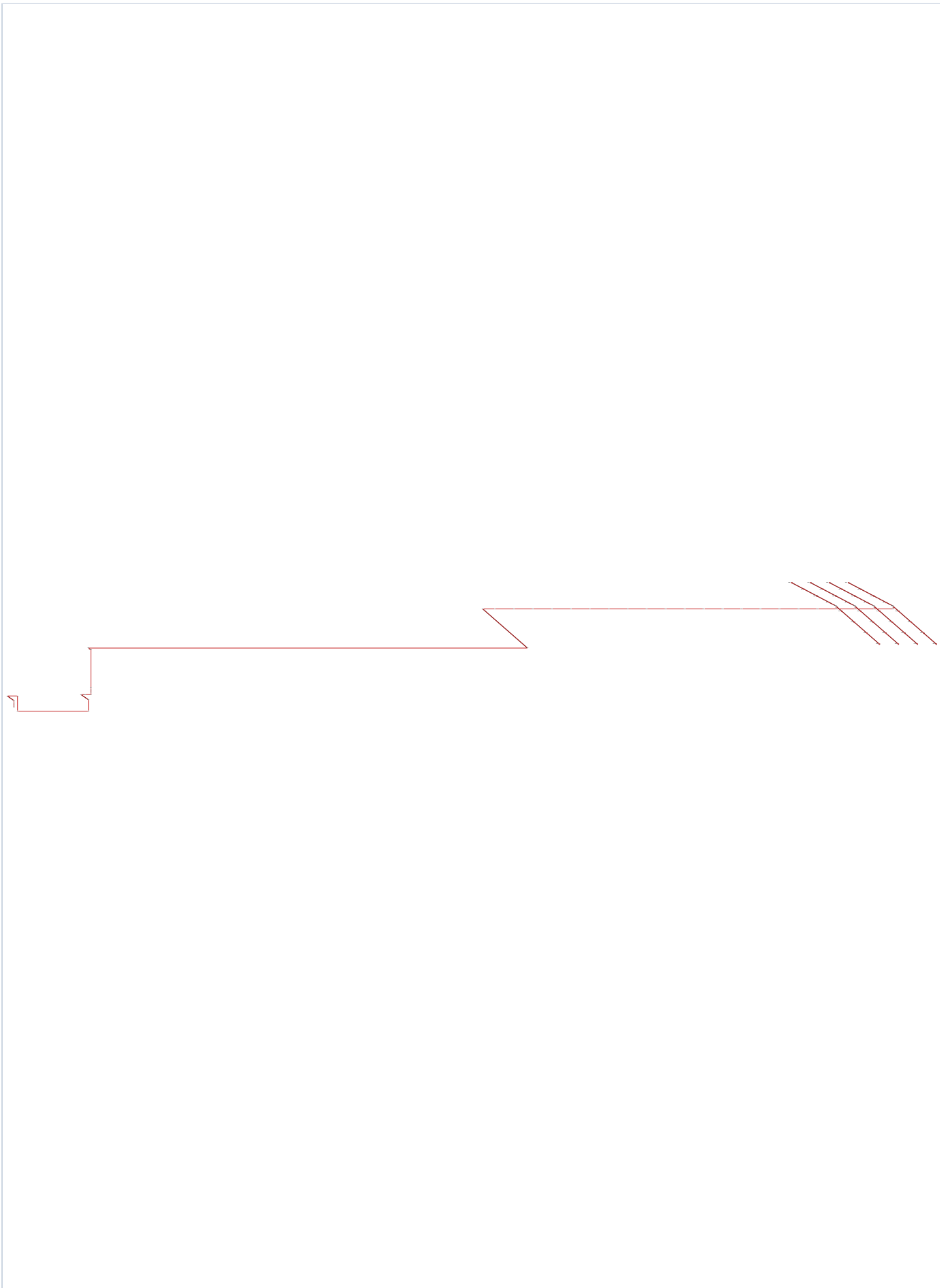
System Demand Curve



Plan View



Isometric View



Selected Operating Area

