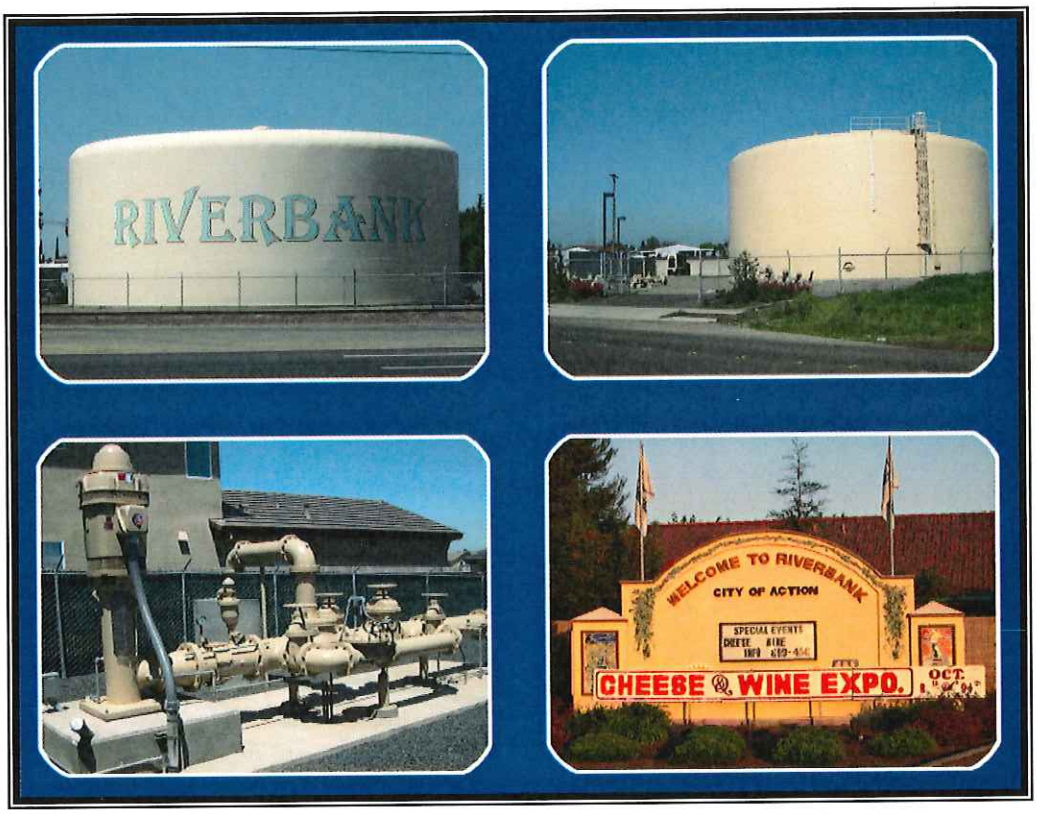
CITY OF RIVERBANK
WATER SUPPLY STUDY AND
WATER MASTER PLAN



VOLUME TWO

NOVEMBER 2007

NOLTE

BEYOND ENGINEERING

Scenario: Existing - Average Day
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-C4-90	88.00	12	130.0	0.28	-97.5	277.32	277.32	0.00	0.03
P-C5-1	249.00	6	130.0	0.88	77.8	277.43	277.27	0.16	0.65
P-C5-10	317.00	12	130.0	0.18	63.7	277.21	277.21	0.00	0.02
P-C5-15	348.00	10	130.0	0.61	150.4	277.21	277.14	0.06	0.18
P-C5-20	283.00	6	130.0	0.44	38.7	277.14	277.09	0.05	0.18
P-C5-25	488.00	6	130.0	0.30	26.2	277.09	277.05	0.04	0.09
P-C5-30	807.00	6	130.0	0.35	30.9	277.53	277.43	0.10	0.12
P-C5-35	123.00	6	130.0	0.08	-6.8	277.42	277.43	0.01	0.01
P-C5-40	349.00	10	130.0	0.35	86.8	277.30	277.21	0.09	0.07
P-C5-45	851.00	6	130.0	0.13	11.5	277.05	277.03	0.02	0.02
P-C5-5	297.00	10	130.0	0.28	68.7	277.22	277.21	0.01	0.04
P-C5-50	976.00	10	130.0	0.46	111.8	277.14	277.04	0.10	0.11
P-C5-60	301.00	8	130.0	0.47	73.7	277.27	277.22	0.04	0.15
P-D1-10	221.00	8	130.0	0.01	2.2	285.11	285.11	0.00	0.00
P-D1-15	253.00	12	130.0	0.25	87.6	285.11	285.10	0.01	0.03
P-D1-20	383.00	6	130.0	0.07	5.9	285.10	285.10	0.00	0.01
P-D1-25	376.00	8	130.0	0.32	50.4	285.33	285.30	0.03	0.07
P-D1-30	221.00	8	130.0	0.32	-50.5	285.30	285.32	0.02	0.07
P-D1-35	211.00	8	130.0	0.63	98.4	285.30	285.25	0.05	0.25
P-D1-40	884.00	12	130.0	0.37	130.8	285.17	285.12	0.05	0.06
P-D1-5	295.00	12	130.0	0.33	117.9	285.12	285.11	0.01	0.05
P-D2-10	267.00	8	130.0	0.40	-63.0	285.01	285.04	0.03	0.11
P-D2-100	423.00	8	130.0	0.81	127.3	285.00	284.83	0.17	0.40
P-D2-105	262.00	8	130.0	0.37	-57.6	285.00	285.03	0.02	0.09
P-D2-110	305.00	8	130.0	0.02	2.5	285.03	285.03	0.00	0.00
P-D2-115	262.00	8	130.0	0.41	-64.4	285.03	285.06	0.03	0.11
P-D2-120	417.00	12	130.0	0.38	133.3	285.06	285.03	0.03	0.06
P-D2-125	281.00	8	130.0	0.26	-40.1	285.06	285.07	0.01	0.05
P-D2-130	297.00	8	130.0	0.02	2.5	285.07	285.07	0.00	0.00
P-D2-135	260.00	8	130.0	0.30	-47.6	285.07	285.09	0.02	0.06
P-D2-140	423.00	8	130.0	0.22	34.0	285.09	285.07	0.01	0.03
P-D2-145	246.00	8	130.0	0.44	-68.2	285.09	285.12	0.03	0.13
P-D2-15	638.00	12	130.0	0.22	77.9	285.10	285.09	0.01	0.02
P-D2-150	434.00	8	130.0	0.33	51.1	285.12	285.09	0.03	0.07
P-D2-155	266.00	8	130.0	0.04	6.6	285.12	285.12	0.00	0.00
P-D2-160	346.00	8	130.0	0.02	3.4	285.12	285.12	0.00	0.00
P-D2-165	509.00	8	130.0	0.12	-19.3	285.09	285.09	0.01	0.01
P-D2-170	541.00	8	130.0	0.16	-24.9	285.09	285.10	0.01	0.02
P-D2-175	519.00	8	130.0	0.40	62.3	285.10	285.05	0.06	0.11
P-D2-180	513.00	8	130.0	0.36	56.3	285.05	285.00	0.05	0.09
P-D2-185	783.00	8	130.0	0.29	-45.0	285.00	285.05	0.05	0.06
P-D2-190	265.00	8	130.0	0.05	-8.4	285.05	285.05	0.00	0.00
P-D2-195	288.00	8	130.0	0.04	5.6	285.05	285.05	0.00	0.00
P-D2-20	258.00	12	130.0	0.35	124.3	285.09	285.07	0.01	0.05
P-D2-200	229.00	8	130.0	0.02	2.5	285.05	285.05	0.00	0.00
P-D2-205	545.00	12	130.0	0.47	-166.6	285.00	285.05	0.05	0.09
P-D2-210	357.00	8	130.0	0.40	-62.2	285.05	285.09	0.04	0.11
P-D2-215	245.00	8	130.0	0.02	2.5	285.09	285.09	0.00	0.00
P-D2-220	397.00	8	130.0	0.44	-68.4	285.09	285.14	0.05	0.13
P-D2-225	255.00	8	130.0	0.36	-55.8	285.14	285.16	0.02	0.09
P-D2-230	769.00	12	130.0	0.60	213.3	285.16	285.05	0.11	0.14

Scenario: Existing - Peak Hour
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-B2-90	330.00	10	130.0	0.96	235.3	280.83	280.27	0.56	0.42
P-B2-95	322.00	10	130.0	0.29	72.1	280.01	279.95	0.06	0.05
P-B3-1	327.00	10	130.0	0.36	89.2	280.10	280.08	0.02	0.07
P-B3-10	046.00	8	130.0	0.26	40.9	280.00	279.95	0.05	0.05
P-B3-20	255.00	10	130.0	0.06	15.2	280.02	280.02	0.00	0.00
P-B3-25	305.00	10	130.0	0.29	-71.2	280.02	280.08	0.06	0.05
P-B3-3	375.00	6	130.0	0.46	-40.7	280.00	280.08	0.07	0.20
P-B3-30	803.00	10	130.0	0.89	-218.9	280.08	280.38	0.30	0.37
P-B3-40	198.00	10	130.0	0.19	47.1	281.55	281.54	0.00	0.02
P-B3-45	558.00	10	130.0	2.34	572.4	281.55	280.33	1.22	2.19
P-B3-5	359.00	6	130.0	0.20	17.7	280.02	280.00	0.02	0.04
P-B3-50	075.00	6	130.0	0.17	-14.5	280.02	280.08	0.06	0.03
P-B3-55	241.00	10	130.0	0.07	17.7	280.02	280.02	0.00	0.00
P-B3-60	136.00	6	130.0	0.53	47.1	281.54	280.99	0.55	0.26
P-B3-70	168.00	10	130.0	5.35	-1,310.5	280.38	282.08	1.71	10.16
P-B3-75	173.00	10	130.0	2.82	689.5	282.08	281.55	0.54	3.09
P-B4-1	345.00	8	130.0	1.57	-246.2	278.09	278.56	0.47	1.36
P-B4-10	310.00	10	130.0	1.08	264.9	267.82	267.13	0.69	0.53
P-B4-15	352.00	6	130.0	5.36	-472.2	267.13	273.63	6.51	18.48
P-B4-20	160.00	8	130.0	2.49	389.5	273.63	273.12	0.51	3.19
P-B4-25	190.00	8	130.0	1.58	-247.8	272.86	273.12	0.26	1.38
P-B4-250	974.00	10	130.0	2.11	517.1	280.33	278.56	1.77	1.82
P-B4-30	546.00	8	130.0	1.31	204.8	272.86	272.33	0.53	0.97
P-B4-35	318.00	10	130.0	3.18	777.9	267.82	266.58	1.23	3.87
P-B4-40	320.00	8	130.0	2.85	446.9	267.13	265.81	1.32	4.11
P-B4-45	832.00	10	130.0	4.33	1,059.5	280.38	267.82	12.56	6.86
P-B4-50	422.00	8	130.0	0.36	-57.1	277.96	278.09	0.13	0.09
P-B4-55	578.00	6	130.0	0.23	20.5	272.86	272.83	0.03	0.06
P-B4-60	772.00	10	130.0	0.24	59.9	280.38	280.33	0.06	0.03
P-B4-65	034.00	4	130.0	2.07	-81.0	272.83	278.09	5.26	5.09
P-B4-70	180.00	8	130.0	0.36	57.0	272.33	272.31	0.02	0.09
P-B5-1	404.00	8	130.0	0.44	68.6	272.53	272.48	0.05	0.13
P-B5-10	712.00	10	130.0	0.33	81.8	272.33	272.11	0.22	0.06
P-B5-15	831.00	10	130.0	1.06	260.6	267.13	266.70	0.42	0.51
P-B5-20	165.00	10	130.0	0.00	0.0	266.70	266.70	0.00	0.00
P-B5-25	655.00	6	130.0	2.62	230.9	266.70	263.48	3.22	4.91
P-B5-30	011.00	6	130.0	0.03	-3.1	279.18	279.19	0.00	0.00
P-B5-40	109.00	6	130.0	13.62	-1,200.0	281.68	293.01	11.33	103.96
P-B5-45	199.00	6	130.0	13.62	-1,200.0	286.31	306.99	20.69	103.96
P-B5-5	331.00	8	130.0	0.86	134.6	273.12	272.53	0.59	0.45
P-B5-50	180.00	6	130.0	10.21	-900.0	286.54	297.52	10.98	61.02
P-B5-55	166.00	6	130.0	7.09	-625.0	280.27	285.43	5.16	31.06
P-B5-60	193.00	6	130.0	10.21	-900.0	281.28	293.06	11.78	61.02
P-B5-65	370.00	8	130.0	1.41	221.0	278.56	277.03	1.53	1.12
P-B5-70	245.00	8	130.0	5.50	861.7	277.03	273.63	3.40	13.87
P-B5-75	270.00	6	130.0	7.49	-659.7	277.03	286.30	9.27	34.33
P-C1-1	421.00	6	130.0	0.13	-11.1	280.69	280.70	0.01	0.02
P-C1-10	244.00	6	130.0	0.26	23.0	280.71	280.69	0.02	0.07
P-C1-100	488.00	6	130.0	0.59	51.8	281.00	280.84	0.15	0.31
P-C1-105	251.00	6	130.0	2.96	-260.9	281.00	282.54	1.55	6.16
P-C1-110	491.00	8	130.0	1.42	-222.8	281.99	282.54	0.56	1.13

Scenario: Buildout - Average Day
Steady State Analysis
Pipe Report

Label	Diameter (in)	Velocity (ft/s)	Discharge (Absolute Value) (gpm)	Length (ft)	Material	Hazen-Williams C	Control Status	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)
P-E2-140	8	0.03	4.1	350.00	Ductile Iro	130.0	Open	288.58	288.58	0.00
P-E2-145	8	0.51	80.1	261.00	Ductile Iro	130.0	Open	288.58	288.54	0.04
P-E2-15	8	0.81	127.3	552.00	Ductile Iro	130.0	Open	288.36	288.58	0.22
P-E2-150	8	0.02	3.8	352.00	Ductile Iro	130.0	Open	288.54	288.54	0.00
P-E2-155	8	0.02	2.7	274.00	Ductile Iro	130.0	Open	288.54	288.54	0.00
P-E2-160	8	0.45	69.8	263.00	Ductile Iro	130.0	Open	288.54	288.50	0.03
P-E2-165	8	0.02	2.7	287.00	Ductile Iro	130.0	Open	288.50	288.50	0.00
P-E2-170	8	0.02	3.8	337.00	Ductile Iro	130.0	Open	288.50	288.50	0.00
P-E2-175	8	0.38	59.5	258.00	Ductile Iro	130.0	Open	288.50	288.48	0.03
P-E2-180	8	0.04	5.5	270.00	Ductile Iro	130.0	Open	288.48	288.48	0.00
P-E2-185	8	0.02	2.7	267.00	Ductile Iro	130.0	Open	288.48	288.48	0.00
P-E2-190	8	0.32	50.3	257.00	Ductile Iro	130.0	Open	288.48	288.46	0.02
P-E2-195	8	0.30	46.5	238.00	Ductile Iro	130.0	Open	288.46	288.45	0.01
P-E2-20	8	0.11	16.9	221.00	Ductile Iro	130.0	Open	288.58	288.58	0.00
P-E2-200	8	0.93	145.4	177.00	Ductile Iro	130.0	Open	288.35	288.45	0.09
P-E2-205	8	1.01	157.9	279.00	Ductile Iro	130.0	Open	288.45	288.61	0.17
P-E2-210	8	1.02	159.3	279.00	Ductile Iro	130.0	Open	288.61	288.78	0.17
P-E2-215	8	1.42	221.8	369.00	Ductile Iro	130.0	Open	288.78	288.37	0.41
P-E2-220	8	0.28	44.2	331.00	Ductile Iro	130.0	Open	288.37	288.39	0.02
P-E2-225	8	0.01	1.7	302.00	Ductile Iro	130.0	Open	288.39	288.39	0.00
P-E2-230	8	0.32	49.7	269.00	Ductile Iro	130.0	Open	288.39	288.41	0.02
P-E2-235	8	0.35	54.8	474.00	Ductile Iro	130.0	Open	288.41	288.45	0.04
P-E2-240	8	1.68	263.3	263.00	Ductile Iro	130.0	Open	288.37	287.96	0.41
P-E2-245	8	0.73	114.0	259.00	Ductile Iro	130.0	Open	287.96	287.88	0.08
P-E2-25	8	0.25	38.6	345.00	Ductile Iro	130.0	Open	288.58	288.60	0.02
P-E2-250	8	0.16	24.5	554.00	Ductile Iro	130.0	Open	287.88	287.87	0.01
P-E2-251	8	0.25	38.4	269.00	Ductile Iro	130.0	Open	287.45	287.46	0.01
P-E2-255	10	1.22	299.8	737.00	Ductile Iro	130.0	Open	287.87	288.35	0.49
P-E2-260	8	0.27	42.3	190.00	Ductile Iro	130.0	Open	287.87	287.86	0.01
P-E2-265	8	0.03	4.8	413.00	Ductile Iro	130.0	Open	287.86	287.86	0.00
P-E2-270	8	0.22	34.8	297.00	Ductile Iro	130.0	Open	287.86	287.85	0.01
P-E2-275	8	0.02	3.8	413.00	Ductile Iro	130.0	Open	287.85	287.85	0.00
P-E2-280	8	0.17	26.2	278.00	Ductile Iro	130.0	Open	287.85	287.84	0.01
P-E2-285	12	0.24	84.1	315.00	Ductile Iro	130.0	Open	287.45	287.46	0.01
P-E2-290	12	0.36	127.7	445.00	Ductile Iro	130.0	Open	287.46	287.48	0.02
P-E2-295	10	1.14	278.5	663.00	Ductile Iro	130.0	Open	287.48	287.87	0.38
P-E2-30	8	0.11	16.9	232.00	Ductile Iro	130.0	Open	288.58	288.58	0.00
P-E2-300	8	0.54	84.1	249.00	Ductile Iro	130.0	Open	287.88	287.83	0.05
P-E2-305	8	0.03	4.8	484.00	Ductile Iro	130.0	Open	287.83	287.83	0.00
P-E2-310	8	0.47	74.1	256.00	Ductile Iro	130.0	Open	287.83	287.79	0.04
P-E2-315	8	0.03	4.8	486.00	Ductile Iro	130.0	Open	287.79	287.79	0.00
P-E2-320	8	0.40	63.1	254.00	Ductile Iro	130.0	Open	287.79	287.77	0.03
P-E2-325	8	0.03	4.8	485.00	Ductile Iro	130.0	Open	287.77	287.76	0.00
P-E2-330	8	0.33	52.2	250.00	Ductile Iro	130.0	Open	287.77	287.75	0.02
P-E2-335	8	0.48	74.6	725.00	Ductile Iro	130.0	Open	287.85	287.96	0.11
P-E2-340	8	0.38	59.7	308.00	Ductile Iro	130.0	Open	287.96	287.93	0.03
P-E2-345	8	0.32	50.1	249.00	Ductile Iro	130.0	Open	287.85	287.87	0.02
P-E2-35	8	0.02	2.7	237.00	Ductile Iro	130.0	Open	288.58	288.58	0.00
P-E2-40	8	0.07	10.4	266.00	Ductile Iro	130.0	Open	288.58	288.58	0.00
P-E2-45	8	0.02	3.8	238.00	Ductile Iro	130.0	Open	288.58	288.58	0.00
P-E2-5	8	1.06	165.3	605.00	Ductile Iro	130.0	Open	287.84	288.23	0.39
P-E2-50	8	0.02	3.2	217.00	Ductile Iro	130.0	Open	288.58	288.58	0.00
P-E2-55	12	0.07	23.7	499.00	Ductile Iro	130.0	Open	288.58	288.58	0.00

Scenario: Buildout - Average Day
Steady State Analysis
Pipe Report

Label	Diameter (in)	Velocity (ft/s)	Discharge (Absolute Value) (gpm)	Length (ft)	Material	Hazen-Williams C	Control Status	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)
P-E2-60	8	0.80	125.7	275.00	Ductile Iro	130.0	Open	288.58	288.47	0.11
P-E2-65	8	0.02	3.8	311.00	Ductile Iro	130.0	Open	288.47	288.47	0.00
P-E2-70	8	0.75	117.8	266.00	Ductile Iro	130.0	Open	288.47	288.38	0.09
P-E2-75	8	0.23	36.6	506.00	Ductile Iro	130.0	Open	288.38	288.36	0.02
P-E2-80	8	0.48	75.7	235.00	Ductile Iro	130.0	Open	288.38	288.34	0.04
P-E2-85	8	0.49	76.5	265.00	Ductile Iro	130.0	Open	288.34	288.30	0.04
P-E2-90	8	0.66	103.8	249.00	Ductile Iro	130.0	Open	288.30	288.23	0.07
P-E2-95	8	0.20	31.1	356.00	Ductile Iro	130.0	Open	288.30	288.31	0.01
P-E3-1	8	0.06	9.0	472.00	Ductile Iro	130.0	Open	287.38	287.38	0.00
P-E3-10	12	0.47	164.5	400.00	Ductile Iro	130.0	Open	287.39	287.42	0.04
P-E3-100	8	0.27	43.0	273.00	Ductile Iro	130.0	Open	286.55	286.53	0.01
P-E3-105	8	1.25	195.2	188.00	Ductile Iro	130.0	Open	286.55	286.38	0.17
P-E3-11	8	0.13	20.7	299.00	Ductile Iro	130.0	Open	287.38	287.39	0.00
P-E3-110	8	0.78	122.4	258.00	Ductile Iro	130.0	Open	286.38	286.29	0.10
P-E3-120	8	0.42	65.6	691.00	Ductile Iro	130.0	Open	286.38	286.30	0.08
P-E3-125	12	0.42	147.0	815.00	Ductile Iro	130.0	Open	287.48	287.42	0.06
P-E3-130	8	0.54	84.3	217.00	Ductile Iro	130.0	Open	287.71	287.75	0.04
P-E3-135	8	0.03	5.1	446.00	Ductile Iro	130.0	Open	287.38	287.38	0.00
P-E3-145	8	0.04	5.5	927.00	Ductile Iro	130.0	Open	287.38	287.38	0.00
P-E3-15	8	0.11	17.5	174.00	Ductile Iro	130.0	Open	287.42	287.43	0.00
P-E3-150	8	0.25	38.9	754.00	Ductile Iro	130.0	Open	286.50	286.53	0.03
P-E3-155	8	0.26	40.9	429.00	Ductile Iro	130.0	Open	286.22	286.20	0.02
P-E3-16	8	0.16	25.5	177.00	Ductile Iro	130.0	Open	287.39	287.39	0.00
P-E3-160	8	0.74	116.1	289.00	Ductile Iro	130.0	Open	287.85	287.76	0.10
P-E3-17	8	0.02	3.4	471.00	Ductile Iro	130.0	Open	287.39	287.39	0.00
P-E3-170	8	0.28	44.4	281.00	Ductile Iro	130.0	Open	286.23	286.22	0.02
P-E3-175	8	0.41	64.7	469.00	Ductile Iro	130.0	Open	286.23	286.18	0.05
P-E3-180	8	0.24	37.9	394.00	Ductile Iro	130.0	Open	286.18	286.20	0.02
P-E3-190	8	0.36	55.9	128.00	Ductile Iro	130.0	Open	286.24	286.23	0.01
P-E3-195	8	0.00	0.3	120.00	Ductile Iro	130.0	Open	286.23	286.23	0.00
P-E3-20	8	0.03	4.1	374.00	Ductile Iro	130.0	Open	287.43	287.43	0.00
P-E3-200	8	0.35	55.2	296.00	Ductile Iro	130.0	Open	286.23	286.20	0.03
P-E3-205	8	0.33	52.2	295.00	Ductile Iro	130.0	Open	286.20	286.18	0.02
P-E3-210	8	0.13	21.1	372.00	Ductile Iro	130.0	Open	286.23	286.24	0.01
P-E3-215	8	0.58	91.1	242.00	Ductile Iro	130.0	Open	286.23	286.29	0.05
P-E3-220	8	0.16	25.1	377.00	Ductile Iro	130.0	Open	286.29	286.28	0.01
P-E3-225	8	0.37	58.4	237.00	Ductile Iro	130.0	Open	286.28	286.30	0.02
P-E3-230	8	0.51	79.8	233.00	Ductile Iro	130.0	Open	286.28	286.24	0.04
P-E3-235	12	0.23	80.7	1,171.00	Ductile Iro	130.0	Open	286.89	286.86	0.03
P-E3-245	8	0.20	31.6	276.00	Ductile Iro	130.0	Open	287.44	287.45	0.01
P-E3-25	8	0.16	25.0	274.00	Ductile Iro	130.0	Open	287.43	287.43	0.01
P-E3-30	8	0.18	28.8	275.00	Ductile Iro	130.0	Open	287.43	287.44	0.01
P-E3-40	8	0.02	2.7	346.00	Ductile Iro	130.0	Open	287.71	287.71	0.00
P-E3-42	8	0.03	4.1	323.00	Ductile Iro	130.0	Open	287.45	287.45	0.00
P-E3-45	8	0.50	78.1	254.00	Ductile Iro	130.0	Open	287.71	287.66	0.04
P-E3-50	8	0.02	2.7	276.00	Ductile Iro	130.0	Open	287.66	287.66	0.00
P-E3-55	8	0.02	2.7	223.00	Ductile Iro	130.0	Open	287.66	287.66	0.00
P-E3-60	8	0.44	68.9	256.00	Ductile Iro	130.0	Open	287.66	287.63	0.03
P-E3-65	8	0.38	58.9	219.00	Ductile Iro	130.0	Open	287.63	287.61	0.02
P-E3-70	8	0.36	56.2	254.00	Ductile Iro	130.0	Open	287.61	287.59	0.02
P-E3-71	8	0.03	5.1	417.00	Ductile Iro	130.0	Open	287.63	287.63	0.00
P-E3-75	12	0.99	348.1	373.00	Ductile Iro	130.0	Open	287.59	287.45	0.13
P-E3-80	12	0.84	296.4	264.00	Ductile Iro	130.0	Open	287.59	287.66	0.07

Scenario: Buildout - Average Day
Steady State Analysis
Pipe Report

Label	Diameter (in)	Velocity (ft/s)	Discharge (Absolute Value) (gpm)	Length (ft)	Material	Hazen-Williams C	Control Status	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)
P-E3-81	8	0.02	2.7	374.00	Ductile Iro	130.0	Open	287.59	287.59	0.00
P-E3-85	8	0.46	72.3	695.00	Ductile Iro	130.0	Open	287.66	287.76	0.10
P-E3-86	8	0.02	2.4	308.00	Ductile Iro	130.0	Open	287.45	287.45	0.00
P-E3-87	12	0.97	343.3	185.00	Ductile Iro	130.0	Open	287.39	287.45	0.06
P-E3-90	8	0.23	35.9	257.00	Ductile Iro	130.0	Open	287.76	287.75	0.01
P-E3-91	8	0.02	2.7	343.00	Ductile Iro	130.0	Open	287.66	287.66	0.00
P-E3-94	12	1.37	482.3	763.00	Ductile Iro	130.0	Open	286.89	287.39	0.50
P-E3-96	12	1.13	398.7	734.00	Ductile Iro	130.0	Open	286.55	286.89	0.34
P-E4-1	8	0.51	79.2	327.00	Ductile Iro	130.0	Open	286.01	285.96	0.05
P-E4-10	6	0.35	30.8	455.00	Ductile Iro	130.0	Open	285.90	285.84	0.05
P-E4-12	12	0.62	217.7	902.00	Ductile Iro	130.0	Open	285.98	285.84	0.14
P-E4-15	12	0.51	180.1	1,019.00	Ductile Iro	130.0	Open	285.84	285.74	0.11
P-E4-20	10	0.34	82.3	274.00	Ductile Iro	130.0	Open	286.03	286.01	0.02
P-E4-30	8	0.02	3.1	200.00	Ductile Iro	130.0	Open	286.01	286.01	0.00
P-E4-35	8	0.46	72.4	259.00	Ductile Iro	130.0	Open	285.96	285.92	0.04
P-E4-40	8	0.37	57.6	255.00	Ductile Iro	130.0	Open	285.92	285.90	0.02
P-E4-45	8	0.03	4.5	356.00	Ductile Iro	130.0	Open	285.92	285.92	0.00
P-E4-5	8	0.76	118.6	637.00	Ductile Iro	130.0	Open	286.28	286.05	0.22
P-E4-50	8	0.04	6.9	533.00	Ductile Iro	130.0	Open	285.92	285.92	0.00
P-E4-55	8	0.13	19.7	599.00	Ductile Iro	130.0	Open	286.04	286.05	0.01
P-E4-60	8	0.97	151.7	246.00	Ductile Iro	130.0	Open	286.18	286.04	0.14
P-E4-65	8	0.35	55.5	450.00	Ductile Iro	130.0	Open	286.04	286.00	0.04
P-E4-70	8	0.62	97.1	191.00	Ductile Iro	130.0	Open	286.05	286.00	0.05
P-E4-75	8	0.96	149.9	432.00	Ductile Iro	130.0	Open	286.00	285.77	0.23
P-E4-80	8	0.71	111.4	308.00	Ductile Iro	130.0	Open	286.04	285.95	0.10
P-E4-85	8	0.68	107.3	605.00	Ductile Iro	130.0	Open	285.95	285.77	0.18
P-E4-90	8	1.63	254.8	118.00	Ductile Iro	130.0	Open	285.77	285.60	0.17
P-E4-91	12	0.72	254.5	148.00	Ductile Iro	130.0	Open	285.60	285.57	0.03
P-E4-92	12	0.72	254.5	785.00	Ductile Iro	130.0	Open	285.57	285.41	0.16
P-E5-1	10	0.36	89.0	1,036.00	Ductile Iro	130.0	Open	285.78	285.71	0.07
P-E5-10	6	0.10	8.5	2,530.00	Ductile Iro	130.0	Open	285.74	285.71	0.03
P-E5-15	6	0.23	20.3	2,149.00	Ductile Iro	130.0	Open	285.90	285.78	0.12
P-E5-18	10	0.52	128.1	642.00	Ductile Iro	130.0	Open	285.87	285.78	0.09
P-E5-5	10	0.34	82.3	990.00	Ductile Iro	130.0	Open	285.71	285.65	0.06
P-F1-1	12	3.60	1,270.0	55.00	Ductile Iro	130.0	Open	291.69	291.91	0.22
P-F1-10	12	1.31	461.1	317.00	Ductile Iro	130.0	Open	291.69	291.50	0.19
P-F1-15	12	0.94	330.0	281.00	Ductile Iro	130.0	Open	291.50	291.41	0.09
P-F1-2	12	4.82	1,700.0	50.00	Ductile Iro	130.0	Open	291.91	292.25	0.34
P-F2-1	8	0.40	62.1	564.00	Ductile Iro	130.0	Open	287.93	287.87	0.06
P-F2-10	12	0.89	314.3	1,983.00	Ductile Iro	130.0	Open	291.41	290.82	0.59
P-F2-11	8	0.41	64.8	262.00	Ductile Iro	130.0	Open	287.93	287.96	0.03
P-F2-16	8	0.44	68.6	181.00	Ductile Iro	130.0	Open	287.96	287.94	0.02
P-F2-2	12	1.22	430.0	1,972.00	Ductile Iro	130.0	Open	291.91	290.86	1.05
P-F2-21	8	0.03	4.8	440.00	Ductile Iro	130.0	Open	287.94	287.94	0.00
P-F2-26	8	0.38	59.6	251.00	Ductile Iro	130.0	Open	287.94	287.91	0.02
P-F2-31	8	0.02	3.4	367.00	Ductile Iro	130.0	Open	287.91	287.91	0.00
P-F2-36	12	0.39	137.5	248.00	Ductile Iro	130.0	Open	288.32	288.33	0.02
P-F2-41	8	2.81	439.6	158.00	Ductile Iro	130.0	Open	288.33	288.96	0.63
P-F2-46	8	0.02	3.8	172.00	Ductile Iro	130.0	Open	288.96	288.96	0.00
P-F2-5	8	0.84	131.1	1,963.00	PVC	150.0	Open	291.50	290.86	0.64
P-F2-51	8	2.83	443.4	319.00	Ductile Iro	130.0	Open	288.96	290.26	1.29
P-F2-56	12	0.86	301.8	266.00	Ductile Iro	130.0	Open	288.33	288.26	0.07
P-F2-6	8	0.04	6.5	299.00	Ductile Iro	130.0	Open	287.93	287.93	0.00

Scenario: Buildout - Average Day
Steady State Analysis
Pipe Report

Label	Diameter (in)	Velocity (ft/s)	Discharge (Absolute Value) (gpm)	Length (ft)	Material	Hazen-Williams C	Control Status	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)
P-F2-61	8	0.03	4.1	313.00	Ductile Iro	130.0	Open	288.26	288.26	0.00
P-F2-66	8	0.88	137.5	767.00	Ductile Iro	130.0	Open	287.96	288.32	0.36
P-F2-7	12	1.27	446.8	989.00	Ductile Iro	130.0	Open	290.82	290.26	0.56
P-F3-1	8	0.03	4.8	374.00	Ductile Iro	130.0	Open	287.70	287.70	0.00
P-F3-10	8	1.82	285.5	428.00	Ductile Iro	130.0	Open	287.75	286.98	0.77
P-F3-100	12	0.82	288.1	267.00	Ductile Iro	130.0	Open	288.12	288.05	0.07
P-F3-105	12	0.81	284.7	269.00	Ductile Iro	130.0	Open	288.05	287.99	0.07
P-F3-11	8	0.02	2.7	219.00	Ductile Iro	130.0	Open	287.70	287.70	0.00
P-F3-110	8	0.03	4.1	346.00	Ductile Iro	130.0	Open	287.87	287.87	0.00
P-F3-115	8	0.34	53.1	645.00	Ductile Iro	130.0	Open	287.93	287.88	0.05
P-F3-116	12	1.02	359.7	456.00	Ductile Iro	130.0	Open	286.86	286.69	0.17
P-F3-117	12	1.01	356.9	857.00	Ductile Iro	130.0	Open	286.69	286.36	0.32
P-F3-118	12	1.01	356.9	2,339.00	Ductile Iro	130.0	Open	286.36	285.48	0.88
P-F3-12	12	0.67	235.0	252.00	Ductile Iro	130.0	Open	287.66	287.70	0.04
P-F3-120	8	0.33	52.4	248.00	Ductile Iro	130.0	Open	287.91	287.90	0.02
P-F3-125	12	0.84	296.7	261.00	Ductile Iro	130.0	Open	288.26	288.19	0.07
P-F3-15	8	0.02	2.4	257.00	Ductile Iro	130.0	Open	286.98	286.98	0.00
P-F3-20	8	0.01	2.1	167.00	Ductile Iro	130.0	Open	287.91	287.91	0.00
P-F3-25	8	0.03	4.1	428.00	Ductile Iro	130.0	Open	287.79	287.79	0.00
P-F3-30	8	0.03	4.8	493.00	Ductile Iro	130.0	Open	287.83	287.83	0.00
P-F3-35	8	0.29	44.9	246.00	Ductile Iro	130.0	Open	287.88	287.90	0.01
P-F3-40	8	0.02	2.7	308.00	Ductile Iro	130.0	Open	287.90	287.90	0.00
P-F3-45	8	0.02	3.8	289.00	Ductile Iro	130.0	Open	288.19	288.19	0.00
P-F3-5	12	0.70	246.0	259.00	Ductile Iro	130.0	Open	287.70	287.75	0.05
P-F3-50	8	0.02	2.7	241.00	Ductile Iro	130.0	Open	288.12	288.12	0.00
P-F3-55	8	0.02	2.4	212.00	Ductile Iro	130.0	Open	288.05	288.05	0.00
P-F3-60	12	0.01	4.5	220.00	Ductile Iro	130.0	Open	287.99	287.99	0.00
P-F3-65	12	0.79	279.9	324.00	Ductile Iro	130.0	Open	287.99	287.91	0.08
P-F3-70	8	0.58	90.8	247.00	Ductile Iro	130.0	Open	287.88	287.83	0.05
P-F3-75	8	0.51	79.8	249.00	Ductile Iro	130.0	Open	287.83	287.79	0.04
P-F3-8	12	0.80	281.4	511.00	Ductile Iro	130.0	Open	286.98	286.86	0.12
P-F3-80	8	0.45	70.9	258.00	Ductile Iro	130.0	Open	287.79	287.75	0.04
P-F3-85	12	1.32	465.3	259.00	Ductile Iro	130.0	Open	287.75	287.91	0.16
P-F3-95	12	0.83	291.9	266.00	Ductile Iro	130.0	Open	288.19	288.12	0.07
P-F4-1	12	0.44	156.3	1,001.00	Ductile Iro	130.0	Open	285.74	285.66	0.08
P-F4-11	12	0.59	208.9	755.00	Ductile Iro	130.0	Open	285.48	285.59	0.11
P-F4-12	12	0.20	70.9	2,196.00	Ductile Iro	130.0	Open	285.59	285.63	0.04
P-F4-13	12	0.39	138.0	1,016.00	Ductile Iro	130.0	Open	285.66	285.59	0.07
P-F4-5	6	0.04	3.8	2,398.00	Ductile Iro	130.0	Open	285.66	285.65	0.01
P-F4-6	12	1.51	533.1	399.00	Ductile Iro	130.0	Open	285.48	285.17	0.32
P-F4-70	12	0.63	221.7	1,555.00	Ductile Iro	130.0	Open	285.17	285.41	0.24
P-F5-5	12	0.20	70.9	983.00	Ductile Iro	130.0	Open	285.65	285.63	0.02
PC3-55	10	0.24	58.1	865.00	Ductile Iro	130.0	Open	286.56	286.53	0.03

Scenario: Buildout - Average Day
Steady State Analysis
Reservoir Report

Label	Elevation (ft)	Zone	Inflow (gpm)	Calculated Hydraulic Grade (ft)
R-1	285	Zone	692.7	285.00
R-2	285	Zone	1,002.8	285.00
R-3	285	Zone	722.1	285.00

Scenario: Buildout - Max Day
Steady State Analysis
Junction Report

Label	Pressure (psi)	Elevation (ft)	Base Flow (gpm)	Zone	Type	Calculated Hydraulic Grade (ft)	Demand (Calculated) (gpm)
J-A1-1	68.98	130	14.2	Zone	Demand	289.44	14.2
J-A1-10	68.66	130	16.6	Zone	Demand	288.71	16.6
J-A1-15	68.65	130	0.0	Zone	Demand	288.68	0.0
J-A1-5	68.82	130	0.0	Zone	Demand	289.07	0.0
J-A2-1	67.26	130	20.5	Zone	Demand	285.46	20.5
J-A2-20	84.20	90	21.3	Zone	Demand	284.62	21.3
J-A2-35	84.20	90	18.1	Zone	Demand	284.61	18.1
J-A2-45	84.20	90	16.6	Zone	Demand	284.61	16.6
J-A2-5	84.21	90	52.5	Zone	Demand	284.65	52.5
J-A2-55	84.22	90	20.5	Zone	Demand	284.65	20.5
J-A3-1	79.95	100	14.2	Zone	Demand	284.79	14.2
J-A3-10	82.06	95	0.0	Zone	Demand	284.66	0.0
J-A3-15	84.20	90	34.7	Zone	Demand	284.62	34.7
J-A3-20	84.20	90	0.0	Zone	Demand	284.62	0.0
J-A3-25	84.20	90	33.1	Zone	Demand	284.61	33.1
J-A3-30	79.95	100	21.8	Zone	Demand	284.79	21.8
J-A3-40	79.98	100	0.0	Zone	Demand	284.86	0.0
J-A3-45	62.80	140	40.5	Zone	Demand	285.16	40.5
J-A3-5	82.05	95	60.7	Zone	Demand	284.65	60.7
J-A3-50	63.19	140	61.0	Zone	Demand	286.05	61.0
J-A3-55	63.06	140	101.0	Zone	Demand	285.76	101.0
J-A3-60	79.86	100	34.4	Zone	Demand	284.58	34.4
J-A3-65	82.03	95	0.0	Zone	Demand	284.61	0.0
J-A3-70	79.87	100	0.0	Zone	Demand	284.61	0.0
J-A4-1	62.92	140	37.9	Zone	Demand	285.42	37.9
J-A4-10	61.14	144	0.0	Zone	Demand	285.32	0.0
J-A4-15	60.63	145	65.5	Zone	Demand	285.14	65.5
J-A4-20	60.64	145	10.4	Zone	Demand	285.15	10.4
J-A4-5	61.14	144	66.2	Zone	Demand	285.33	66.2
J-B1-10	68.62	128	15.8	Zone	Demand	286.60	15.8
J-B1-100	68.37	130	21.3	Zone	Demand	288.03	21.3
J-B1-105	68.41	130	8.7	Zone	Demand	288.12	8.7
J-B1-110	69.13	130	13.4	Zone	Demand	289.79	13.4
J-B1-115	69.37	130	39.4	Zone	Demand	290.34	39.4
J-B1-120	70.42	130	0.0	Zone	Demand	292.76	0.0
J-B1-125	67.86	130	0.0	Zone	Demand	286.85	0.0
J-B1-130	68.62	128	9.5	Zone	Demand	286.61	9.5
J-B1-15	68.62	128	6.3	Zone	Demand	286.61	6.3
J-B1-20	68.63	128	0.0	Zone	Demand	286.62	0.0
J-B1-25	68.62	128	13.4	Zone	Demand	286.61	13.4
J-B1-30	68.62	128	10.3	Zone	Demand	286.60	10.3
J-B1-35	65.61	135	32.2	Zone	Demand	286.65	32.2
J-B1-40	66.20	133	56.8	Zone	Demand	286.00	56.8
J-B1-45	68.64	128	0.0	Zone	Demand	286.65	0.0
J-B1-50	67.83	130	11.8	Zone	Demand	286.79	11.8
J-B1-55	67.83	130	0.0	Zone	Demand	286.79	0.0
J-B1-60	67.83	130	11.0	Zone	Demand	286.79	11.0
J-B1-65	67.94	130	24.3	Zone	Demand	287.02	24.3
J-B1-70	67.97	130	13.4	Zone	Demand	287.10	13.4
J-B1-75	67.99	130	11.0	Zone	Demand	287.14	11.0
J-B1-80	68.05	130	9.5	Zone	Demand	287.28	9.5
J-B1-85	68.24	130	28.4	Zone	Demand	287.72	28.4
J-B1-90	68.26	130	0.0	Zone	Demand	287.78	0.0
J-B1-95	68.26	130	13.4	Zone	Demand	287.78	13.4

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Label	Pressure (psi)	Elevation (ft)	Base Flow (gpm)	Zone	Type	Calculated Hydraulic Grade (ft)	Demand (Calculated) (gpm)
J-B2-1	67.19	130	20.5	Zone	Demand	285.31	20.5
J-B2-10	67.29	130	11.0	Zone	Demand	285.53	11.0
J-B2-15	67.44	130	15.8	Zone	Demand	285.87	15.8
J-B2-20	67.24	130	14.2	Zone	Demand	285.41	14.2
J-B2-25	67.28	130	37.1	Zone	Demand	285.50	37.1
J-B2-30	65.07	135	4.7	Zone	Demand	285.40	4.7
J-B2-35	67.23	130	16.6	Zone	Demand	285.40	16.6
J-B2-45	79.96	100	0.0	Zone	Demand	284.80	0.0
J-B2-5	67.24	130	7.1	Zone	Demand	285.41	7.1
J-B2-50	79.95	100	38.6	Zone	Demand	284.79	38.6
J-B2-55	64.93	135	33.1	Zone	Demand	285.06	33.1
J-B2-60	67.09	130	75.7	Zone	Demand	285.06	75.7
J-B2-65	64.92	135	30.0	Zone	Demand	285.06	30.0
J-B2-70	64.93	135	32.2	Zone	Demand	285.08	32.2
J-B2-72	65.88	133	56.8	Zone	Demand	285.27	56.8
J-B2-75	67.31	130	0.0	Zone	Demand	285.58	0.0
J-B2-80	65.06	135	21.3	Zone	Demand	285.37	21.3
J-B2-85	65.76	133	56.8	Zone	Demand	285.00	56.8
J-B3-1	62.77	140	67.9	Zone	Demand	285.09	67.9
J-B3-10	62.72	140	32.8	Zone	Demand	284.97	32.8
J-B3-12	62.72	140	0.0	Zone	Demand	284.98	0.0
J-B3-15	62.72	140	0.0	Zone	Demand	284.98	0.0
J-B3-25	67.05	130	53.2	Zone	Demand	284.97	53.2
J-B3-27	67.04	130	56.8	Zone	Demand	284.96	56.8
J-B3-3	62.77	140	32.2	Zone	Demand	285.07	32.2
J-B3-30	67.04	130	47.7	Zone	Demand	284.96	47.7
J-B3-35	62.74	140	18.3	Zone	Demand	285.00	18.3
J-B3-40	64.91	135	0.0	Zone	Demand	285.03	0.0
J-B3-45	64.91	135	100.3	Zone	Demand	285.03	100.3
J-B3-5	62.74	140	0.0	Zone	Demand	285.00	0.0
J-B3-50	64.90	135	0.0	Zone	Demand	285.00	0.0
J-B4-10	62.89	140	33.1	Zone	Demand	285.37	33.1
J-B4-15	64.97	135	89.0	Zone	Demand	285.16	89.0
J-B4-20	63.63	138	1.1	Zone	Demand	285.06	1.1
J-B4-25	62.90	140	19.7	Zone	Demand	285.39	19.7
J-B4-30	63.91	140	53.7	Zone	Demand	287.72	53.7
J-B4-35	64.10	140	4.7	Zone	Demand	288.15	4.7
J-B4-40	64.13	140	15.0	Zone	Demand	288.22	15.0
J-B4-45	63.78	140	67.4	Zone	Demand	287.41	67.4
J-B4-5	62.87	140	71.8	Zone	Demand	285.30	71.8
J-B4-50	64.46	140	37.9	Zone	Demand	288.99	37.9
J-B4-55	64.46	140	43.8	Zone	Demand	289.00	43.8
J-B5-1	62.68	145	43.8	Zone	Demand	289.86	43.8
J-B5-10	60.74	145	22.0	Zone	Demand	285.39	22.0
J-B5-15	60.74	145	19.7	Zone	Demand	285.40	19.7
J-B5-20	61.08	150	0.0	Zone	Demand	291.17	0.0
J-B5-25	62.66	147	0.0	Zone	Demand	291.82	0.0
J-B5-30	63.91	140	12.6	Zone	Demand	287.71	12.6
J-B5-34	65.03	147	0.0	Zone	Demand	297.32	0.0
J-B5-35	63.45	147	0.0	Zone	Demand	293.66	0.0
J-B5-40	62.77	145	0.0	Zone	Demand	290.08	0.0
J-B5-5	61.08	148	45.6	Zone	Demand	289.17	45.6
J-B6-1	63.73	150	54.3	Zone	Demand	297.29	54.3
J-C1-1	68.62	128	12.6	Zone	Demand	286.60	12.6

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Label	Pressure (psi)	Elevation (ft)	Base Flow (gpm)	Zone	Type	Calculated Hydraulic Grade (ft)	Demand (Calculated) (gpm)
J-C1-10	68.62	128	10.3	Zone	Demand	286.61	10.3
J-C1-100	68.64	128	18.9	Zone	Demand	286.65	18.9
J-C1-105	69.38	128	42.7	Zone	Demand	288.36	42.7
J-C1-110	69.14	128	12.6	Zone	Demand	287.81	12.6
J-C1-115	69.00	128	15.8	Zone	Demand	287.49	15.8
J-C1-120	68.77	128	15.3	Zone	Demand	286.95	15.3
J-C1-125	69.77	128	15.0	Zone	Demand	289.26	15.0
J-C1-130	71.03	128	12.6	Zone	Demand	292.18	12.6
J-C1-20	68.62	128	3.9	Zone	Demand	286.60	3.9
J-C1-25	68.62	128	6.3	Zone	Demand	286.60	6.3
J-C1-30	68.62	128	37.1	Zone	Demand	286.61	37.1
J-C1-35	68.62	128	12.6	Zone	Demand	286.61	12.6
J-C1-40	68.62	128	11.8	Zone	Demand	286.60	11.8
J-C1-45	68.63	128	28.4	Zone	Demand	286.63	28.4
J-C1-5	68.62	128	10.3	Zone	Demand	286.60	10.3
J-C1-50	68.68	128	13.4	Zone	Demand	286.73	13.4
J-C1-55	68.67	128	20.5	Zone	Demand	286.72	20.5
J-C1-60	68.71	128	10.3	Zone	Demand	286.82	10.3
J-C1-70	68.73	128	5.5	Zone	Demand	286.86	5.5
J-C1-75	68.69	128	0.0	Zone	Demand	286.76	0.0
J-C1-80	68.65	128	0.0	Zone	Demand	286.68	0.0
J-C1-85	68.62	128	19.7	Zone	Demand	286.61	19.7
J-C1-90	65.52	135	26.8	Zone	Demand	286.44	26.8
J-C1-95	68.69	128	27.6	Zone	Demand	286.77	27.6
J-C2-1	65.34	135	25.2	Zone	Demand	286.03	25.2
J-C2-10	67.33	130	15.0	Zone	Demand	285.63	15.0
J-C2-100	67.28	130	11.8	Zone	Demand	285.50	11.8
J-C2-105	67.39	130	8.7	Zone	Demand	285.76	8.7
J-C2-110	67.38	130	13.4	Zone	Demand	285.74	13.4
J-C2-115	67.41	130	0.0	Zone	Demand	285.80	0.0
J-C2-120	65.30	135	16.6	Zone	Demand	285.94	16.6
J-C2-125	68.73	128	6.3	Zone	Demand	286.86	6.3
J-C2-130	68.40	128	0.0	Zone	Demand	286.09	0.0
J-C2-135	68.31	128	6.3	Zone	Demand	285.89	6.3
J-C2-140	68.36	128	8.7	Zone	Demand	286.00	8.7
J-C2-145	68.34	128	16.6	Zone	Demand	285.96	16.6
J-C2-15	67.26	130	5.5	Zone	Demand	285.45	5.5
J-C2-150	64.93	135	10.3	Zone	Demand	285.08	10.3
J-C2-155	64.93	135	22.1	Zone	Demand	285.08	22.1
J-C2-20	67.26	130	12.6	Zone	Demand	285.45	12.6
J-C2-25	67.19	130	5.5	Zone	Demand	285.31	5.5
J-C2-30	67.19	130	11.8	Zone	Demand	285.31	11.8
J-C2-35	67.14	130	20.2	Zone	Demand	285.19	20.2
J-C2-40	67.14	130	19.4	Zone	Demand	285.18	19.4
J-C2-45	64.94	135	16.6	Zone	Demand	285.09	16.6
J-C2-5	65.24	135	12.6	Zone	Demand	285.78	12.6
J-C2-50	67.03	130	22.1	Zone	Demand	284.93	22.1
J-C2-55	67.04	130	34.7	Zone	Demand	284.95	34.7
J-C2-60	67.88	128	11.8	Zone	Demand	284.89	11.8
J-C2-65	67.08	130	16.6	Zone	Demand	285.03	16.6
J-C2-70	67.10	130	9.5	Zone	Demand	285.08	9.5
J-C2-75	67.14	130	22.1	Zone	Demand	285.18	22.1
J-C2-80	67.14	130	12.6	Zone	Demand	285.17	12.6
J-C2-85	68.01	128	15.8	Zone	Demand	285.19	15.8

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Label	Pressure (psi)	Elevation (ft)	Base Flow (gpm)	Zone	Type	Calculated Hydraulic Grade (ft)	Demand (Calculated) (gpm)
J-C2-90	68.02	128	25.2	Zone	Demand	285.22	25.2
J-C2-95	67.18	130	9.5	Zone	Demand	285.29	9.5
J-C3-1	64.81	135	107.3	Zone	Demand	284.81	107.3
J-C3-10	66.99	130	0.0	Zone	Demand	284.83	0.0
J-C3-15	67.85	128	22.1	Zone	Demand	284.83	22.1
J-C3-20	66.98	130	5.5	Zone	Demand	284.81	5.5
J-C3-25	66.97	130	11.8	Zone	Demand	284.79	11.8
J-C3-30	66.96	130	18.3	Zone	Demand	284.77	18.3
J-C3-35	64.79	135	18.9	Zone	Demand	284.75	18.9
J-C3-40	64.79	135	12.6	Zone	Demand	284.75	12.6
J-C3-45	64.79	135	19.8	Zone	Demand	284.76	19.8
J-C3-5	66.98	130	30.8	Zone	Demand	284.81	30.8
J-C3-50	64.80	135	9.6	Zone	Demand	284.77	9.6
J-C3-55	64.79	135	71.9	Zone	Demand	284.75	71.9
J-C3-60	64.80	135	32.3	Zone	Demand	284.77	32.3
J-C4-1	63.61	138	51.3	Zone	Demand	285.03	51.3
J-C4-10	62.87	140	33.1	Zone	Demand	285.32	33.1
J-C4-15	62.86	140	52.8	Zone	Demand	285.30	52.8
J-C4-20	62.86	140	9.8	Zone	Demand	285.30	9.8
J-C4-25	62.72	140	43.7	Zone	Demand	284.96	43.7
J-C4-30	62.66	140	37.9	Zone	Demand	284.83	37.9
J-C4-35	63.58	138	0.0	Zone	Demand	284.96	0.0
J-C4-40	62.67	140	25.2	Zone	Demand	284.85	25.2
J-C4-45	62.67	140	0.0	Zone	Demand	284.86	0.0
J-C4-46	62.69	140	0.0	Zone	Demand	284.89	0.0
J-C4-5	62.87	140	27.6	Zone	Demand	285.32	27.6
J-C4-50	62.68	140	30.0	Zone	Demand	284.88	30.0
J-C4-60	62.57	140	23.7	Zone	Demand	284.61	23.7
J-C4-65	62.58	140	47.5	Zone	Demand	284.65	47.5
J-C5-1	63.02	140	55.2	Zone	Demand	285.66	55.2
J-C5-10	61.10	145	12.7	Zone	Demand	286.22	12.7
J-C5-15	63.07	140	0.0	Zone	Demand	285.78	0.0
J-C5-20	62.81	140	0.0	Zone	Demand	285.18	0.0
J-C5-25	62.62	140	31.5	Zone	Demand	284.74	31.5
J-C5-30	62.43	140	46.7	Zone	Demand	284.30	46.7
J-C5-35	63.54	140	10.3	Zone	Demand	286.86	10.3
J-C5-5	61.54	145	12.7	Zone	Demand	287.25	12.7
J-D1-1	69.98	125	0.0	Zone	Demand	286.74	0.0
J-D1-10	69.90	125	5.5	Zone	Demand	286.56	5.5
J-D1-15	69.85	125	9.5	Zone	Demand	286.45	9.5
J-D1-20	69.85	125	15.0	Zone	Demand	286.44	15.0
J-D1-22	69.75	125	62.3	Zone	Demand	286.22	62.3
J-D1-25	69.79	125	20.7	Zone	Demand	286.31	20.7
J-D1-30	70.67	123	20.7	Zone	Demand	286.33	20.7
J-D1-5	69.90	125	71.0	Zone	Demand	286.56	71.0
J-D2-1	68.36	128	9.5	Zone	Demand	285.99	9.5
J-D2-10	68.45	128	21.4	Zone	Demand	286.20	21.4
J-D2-100	68.30	128	11.0	Zone	Demand	285.87	11.0
J-D2-105	68.30	128	6.3	Zone	Demand	285.87	6.3
J-D2-110	68.35	128	19.7	Zone	Demand	285.99	19.7
J-D2-115	69.67	125	12.6	Zone	Demand	286.04	12.6
J-D2-120	68.37	128	6.3	Zone	Demand	286.04	6.3
J-D2-125	69.70	125	15.0	Zone	Demand	286.10	15.0
J-D2-130	69.74	125	15.0	Zone	Demand	286.20	15.0

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Label	Pressure (psi)	Elevation (ft)	Base Flow (gpm)	Zone	Type	Calculated Hydraulic Grade (ft)	Demand (Calculated) (gpm)
J-D2-135	69.75	125	7.9	Zone	Demand	286.20	7.9
J-D2-140	69.74	125	8.7	Zone	Demand	286.20	8.7
J-D2-145	69.68	125	14.2	Zone	Demand	286.05	14.2
J-D2-15	68.41	128	11.0	Zone	Demand	286.12	11.0
J-D2-150	69.67	125	37.1	Zone	Demand	286.03	37.1
J-D2-155	68.31	128	15.0	Zone	Demand	285.88	15.0
J-D2-160	68.27	128	25.2	Zone	Demand	285.79	25.2
J-D2-165	69.59	125	11.0	Zone	Demand	285.84	11.0
J-D2-170	69.59	125	7.9	Zone	Demand	285.84	7.9
J-D2-175	69.63	125	9.5	Zone	Demand	285.94	9.5
J-D2-180	69.63	125	6.3	Zone	Demand	285.94	6.3
J-D2-185	69.69	125	9.5	Zone	Demand	286.08	9.5
J-D2-190	69.69	125	25.2	Zone	Demand	286.08	25.2
J-D2-195	69.95	125	11.8	Zone	Demand	286.67	11.8
J-D2-20	68.37	128	5.5	Zone	Demand	286.04	5.5
J-D2-200	69.87	125	9.5	Zone	Demand	286.49	9.5
J-D2-205	69.82	125	7.9	Zone	Demand	286.38	7.9
J-D2-210	70.67	123	9.5	Zone	Demand	286.34	9.5
J-D2-215	70.68	123	11.0	Zone	Demand	286.35	11.0
J-D2-220	70.70	123	11.0	Zone	Demand	286.41	11.0
J-D2-225	70.65	123	6.3	Zone	Demand	286.28	6.3
J-D2-230	70.60	123	11.0	Zone	Demand	286.18	11.0
J-D2-25	68.35	128	15.0	Zone	Demand	285.98	15.0
J-D2-30	68.24	128	18.1	Zone	Demand	285.73	18.1
J-D2-35	68.03	128	30.4	Zone	Demand	285.24	30.4
J-D2-40	67.96	128	16.9	Zone	Demand	285.09	16.9
J-D2-45	67.92	128	22.9	Zone	Demand	284.98	22.9
J-D2-5	68.36	128	31.5	Zone	Demand	285.99	31.5
J-D2-50	67.88	128	15.0	Zone	Demand	284.90	15.0
J-D2-55	67.86	128	22.9	Zone	Demand	284.84	22.9
J-D2-60	66.98	130	25.2	Zone	Demand	284.80	25.2
J-D2-65	68.19	128	40.9	Zone	Demand	285.62	40.9
J-D2-70	68.19	128	11.8	Zone	Demand	285.62	11.8
J-D2-75	68.02	128	12.6	Zone	Demand	285.22	12.6
J-D2-80	68.02	128	6.3	Zone	Demand	285.22	6.3
J-D2-85	68.21	128	30.0	Zone	Demand	285.66	30.0
J-D2-90	67.96	128	0.0	Zone	Demand	285.08	0.0
J-D2-95	68.26	128	12.6	Zone	Demand	285.77	12.6
J-D3-1	66.97	130	9.5	Zone	Demand	284.80	9.5
J-D3-10	66.97	130	6.3	Zone	Demand	284.79	6.3
J-D3-100	64.80	135	5.5	Zone	Demand	284.78	5.5
J-D3-105	64.80	135	3.9	Zone	Demand	284.78	3.9
J-D3-110	64.81	135	7.1	Zone	Demand	284.79	7.1
J-D3-115	64.82	135	18.9	Zone	Demand	284.81	18.9
J-D3-120	64.80	135	3.9	Zone	Demand	284.78	3.9
J-D3-125	64.80	135	24.4	Zone	Demand	284.78	24.4
J-D3-130	64.81	135	6.3	Zone	Demand	284.79	6.3
J-D3-135	64.81	135	5.5	Zone	Demand	284.79	5.5
J-D3-140	64.81	135	10.3	Zone	Demand	284.79	10.3
J-D3-145	64.80	135	9.5	Zone	Demand	284.78	9.5
J-D3-15	66.97	130	22.1	Zone	Demand	284.79	22.1
J-D3-150	64.83	135	0.0	Zone	Demand	284.85	0.0
J-D3-20	66.97	130	0.0	Zone	Demand	284.79	0.0
J-D3-25	66.97	130	15.0	Zone	Demand	284.79	15.0

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Label	Pressure (psi)	Elevation (ft)	Base Flow (gpm)	Zone	Type	Calculated Hydraulic Grade (ft)	Demand (Calculated) (gpm)
J-D3-30	66.97	130	3.9	Zone	Demand	284.79	3.9
J-D3-35	64.80	135	36.6	Zone	Demand	284.77	36.6
J-D3-40	64.79	135	36.5	Zone	Demand	284.76	36.5
J-D3-45	64.81	135	19.2	Zone	Demand	284.79	19.2
J-D3-5	66.97	130	11.8	Zone	Demand	284.79	11.8
J-D3-50	64.81	135	10.6	Zone	Demand	284.80	10.6
J-D3-55	66.98	130	10.3	Zone	Demand	284.81	10.3
J-D3-60	66.98	130	11.0	Zone	Demand	284.81	11.0
J-D3-65	66.98	130	12.6	Zone	Demand	284.82	12.6
J-D3-70	66.99	130	26.0	Zone	Demand	284.84	26.0
J-D3-75	64.83	135	7.1	Zone	Demand	284.84	7.1
J-D3-80	68.17	128	18.4	Zone	Demand	285.56	18.4
J-D3-81	68.17	128	11.0	Zone	Demand	285.55	11.0
J-D3-82	68.17	128	8.7	Zone	Demand	285.55	8.7
J-D3-85	68.17	128	3.9	Zone	Demand	285.57	3.9
J-D3-90	69.48	125	3.9	Zone	Demand	285.59	3.9
J-D3-91	69.48	125	11.8	Zone	Demand	285.58	11.8
J-D3-95	64.80	135	15.0	Zone	Demand	284.78	15.0
J-D4-1	64.58	135	19.7	Zone	Demand	284.27	19.7
J-D4-10	64.57	135	30.0	Zone	Demand	284.25	30.0
J-D4-15	64.53	135	45.7	Zone	Demand	284.14	45.7
J-D4-20	64.46	135	47.3	Zone	Demand	283.98	47.3
J-D4-25	64.44	135	19.7	Zone	Demand	283.94	19.7
J-D4-30	66.59	130	28.4	Zone	Demand	283.90	28.4
J-D4-35	66.58	130	17.4	Zone	Demand	283.88	17.4
J-D4-40	62.25	140	26.0	Zone	Demand	283.88	26.0
J-D4-45	62.26	140	0.0	Zone	Demand	283.90	0.0
J-D4-5	62.47	140	15.8	Zone	Demand	284.39	15.8
J-D4-50	62.26	140	22.9	Zone	Demand	283.90	22.9
J-D4-55	62.27	140	79.1	Zone	Demand	283.92	79.1
J-D4-60	62.33	140	60.5	Zone	Demand	284.07	60.5
J-D4-65	62.47	140	12.6	Zone	Demand	284.38	12.6
J-D4-70	64.81	135	10.3	Zone	Demand	284.79	10.3
J-D4-75	64.81	135	19.5	Zone	Demand	284.79	19.5
J-D4-80	64.55	135	12.6	Zone	Demand	284.20	12.6
J-D4-85	62.40	140	44.7	Zone	Demand	284.24	44.7
J-D4-90	65.30	133	19.2	Zone	Demand	283.93	19.2
J-D5-1	62.38	140	6.7	Zone	Demand	284.19	6.7
J-D5-10	62.34	140	33.1	Zone	Demand	284.09	33.1
J-D5-15	62.34	140	28.4	Zone	Demand	284.08	28.4
J-D5-20	62.29	140	17.4	Zone	Demand	283.96	17.4
J-D5-25	62.28	140	18.1	Zone	Demand	283.96	18.1
J-D5-30	62.28	140	15.8	Zone	Demand	283.96	15.8
J-D5-35	62.29	140	17.4	Zone	Demand	283.97	17.4
J-D5-40	62.26	140	3.2	Zone	Demand	283.90	3.2
J-D5-45	62.26	140	15.0	Zone	Demand	283.90	15.0
J-D5-5	62.35	140	40.2	Zone	Demand	284.12	40.2
J-D5-50	62.25	140	15.8	Zone	Demand	283.87	15.8
J-D5-55	62.25	140	22.9	Zone	Demand	283.87	22.9
J-D5-60	61.34	142	157.4	Zone	Demand	283.78	157.4
J-D5-85	62.25	140	17.4	Zone	Demand	283.87	17.4
J-E1-1	70.67	123	22.3	Zone	Demand	286.34	22.3
J-E1-10	70.74	123	14.0	Zone	Demand	286.51	14.0
J-E1-15	70.70	123	9.5	Zone	Demand	286.41	9.5

Scenario: Buildout - Max Day
Steady State Analysis
Junction Report

Label	Pressure (psi)	Elevation (ft)	Base Flow (gpm)	Zone	Type	Calculated Hydraulic Grade (ft)	Demand (Calculated) (gpm)
J-E1-20	70.67	123	3.2	Zone	Demand	286.35	3.2
J-E1-25	71.97	120	11.0	Zone	Demand	286.35	11.0
J-E1-30	71.97	120	11.0	Zone	Demand	286.35	11.0
J-E1-35	71.98	120	11.8	Zone	Demand	286.36	11.8
J-E1-40	71.98	120	3.9	Zone	Demand	286.36	3.9
J-E1-45	71.98	120	11.0	Zone	Demand	286.37	11.0
J-E1-5	70.68	123	20.7	Zone	Demand	286.36	20.7
J-E1-50	72.27	120	0.0	Zone	Demand	287.05	0.0
J-E2-1	70.67	123	11.0	Zone	Demand	286.33	11.0
J-E2-10	70.45	123	6.3	Zone	Demand	285.84	6.3
J-E2-100	70.58	123	11.8	Zone	Demand	286.14	11.8
J-E2-105	70.60	123	0.0	Zone	Demand	286.17	0.0
J-E2-110	70.68	123	0.0	Zone	Demand	286.36	0.0
J-E2-115	70.64	123	6.3	Zone	Demand	286.28	6.3
J-E2-120	70.64	123	8.7	Zone	Demand	286.28	8.7
J-E2-125	71.94	120	9.5	Zone	Demand	286.28	9.5
J-E2-130	71.93	120	8.7	Zone	Demand	286.24	8.7
J-E2-135	70.63	123	8.7	Zone	Demand	286.25	8.7
J-E2-140	70.63	123	6.3	Zone	Demand	286.24	6.3
J-E2-145	70.62	123	6.3	Zone	Demand	286.23	6.3
J-E2-15	70.36	123	19.7	Zone	Demand	285.63	19.7
J-E2-150	70.62	123	8.7	Zone	Demand	286.23	8.7
J-E2-155	71.92	120	8.7	Zone	Demand	286.23	8.7
J-E2-160	71.92	120	6.3	Zone	Demand	286.22	6.3
J-E2-165	71.92	120	6.3	Zone	Demand	286.22	6.3
J-E2-170	70.62	123	8.7	Zone	Demand	286.22	8.7
J-E2-175	70.62	123	8.7	Zone	Demand	286.22	8.7
J-E2-180	70.62	123	9.5	Zone	Demand	286.22	9.5
J-E2-185	70.69	123	3.2	Zone	Demand	286.39	3.2
J-E2-190	72.06	120	3.9	Zone	Demand	286.55	3.9
J-E2-195	70.61	123	6.3	Zone	Demand	286.20	6.3
J-E2-20	69.59	125	20.5	Zone	Demand	285.84	20.5
J-E2-200	70.61	123	8.7	Zone	Demand	286.20	8.7
J-E2-205	70.61	123	3.9	Zone	Demand	286.20	3.9
J-E2-210	70.61	123	11.8	Zone	Demand	286.20	11.8
J-E2-215	68.33	128	34.4	Zone	Demand	285.93	34.4
J-E2-220	68.30	128	12.6	Zone	Demand	285.86	12.6
J-E2-225	68.30	128	7.9	Zone	Demand	285.85	7.9
J-E2-230	68.29	128	6.3	Zone	Demand	285.84	6.3
J-E2-235	68.29	128	11.0	Zone	Demand	285.84	11.0
J-E2-240	69.59	125	8.7	Zone	Demand	285.84	8.7
J-E2-245	69.59	125	11.0	Zone	Demand	285.84	11.0
J-E2-25	70.56	123	11.8	Zone	Demand	286.10	11.8
J-E2-250	69.50	125	11.8	Zone	Demand	285.63	11.8
J-E2-255	70.37	123	8.7	Zone	Demand	285.64	8.7
J-E2-260	70.43	123	11.0	Zone	Demand	285.78	11.0
J-E2-265	70.43	123	14.2	Zone	Demand	285.78	14.2
J-E2-270	70.43	123	14.2	Zone	Demand	285.79	14.2
J-E2-275	70.43	123	11.0	Zone	Demand	285.78	11.0
J-E2-280	70.44	123	11.0	Zone	Demand	285.81	11.0
J-E2-285	70.44	123	11.8	Zone	Demand	285.81	11.8
J-E2-290	69.59	125	19.7	Zone	Demand	285.86	19.7
J-E2-30	70.60	123	23.7	Zone	Demand	286.18	23.7
J-E2-35	70.68	123	21.3	Zone	Demand	286.36	21.3

Scenario: Buildout - Max Day
Steady State Analysis
Junction Report

Label	Pressure (psi)	Elevation (ft)	Base Flow (gpm)	Zone	Type	Calculated Hydraulic Grade (ft)	Demand (Calculated) (gpm)
J-E2-40	70.68	123	11.0	Zone	Demand	286.36	11.0
J-E2-45	70.68	123	8.7	Zone	Demand	286.35	8.7
J-E2-5	70.64	123	7.9	Zone	Demand	286.28	7.9
J-E2-50	70.68	123	6.3	Zone	Demand	286.35	6.3
J-E2-55	70.68	123	7.9	Zone	Demand	286.35	7.9
J-E2-60	70.67	123	8.7	Zone	Demand	286.35	8.7
J-E2-65	70.68	123	11.0	Zone	Demand	286.35	11.0
J-E2-70	70.63	123	9.5	Zone	Demand	286.26	9.5
J-E2-75	70.63	123	8.7	Zone	Demand	286.26	8.7
J-E2-80	70.60	123	12.6	Zone	Demand	286.19	12.6
J-E2-85	70.59	123	9.5	Zone	Demand	286.16	9.5
J-E2-90	70.58	123	8.7	Zone	Demand	286.13	8.7
J-E2-95	70.58	123	11.0	Zone	Demand	286.13	11.0
J-E3-1	69.47	125	11.8	Zone	Demand	285.56	11.8
J-E3-10	68.17	128	14.2	Zone	Demand	285.56	14.2
J-E3-100	69.56	125	8.7	Zone	Demand	285.78	8.7
J-E3-105	64.82	135	7.9	Zone	Demand	284.83	7.9
J-E3-110	67.03	130	11.5	Zone	Demand	284.93	11.5
J-E3-115	67.02	130	9.5	Zone	Demand	284.90	9.5
J-E3-120	67.00	130	16.6	Zone	Demand	284.87	16.6
J-E3-125	66.99	130	14.2	Zone	Demand	284.84	14.2
J-E3-130	64.83	135	16.6	Zone	Demand	284.84	16.6
J-E3-135	64.82	135	7.1	Zone	Demand	284.82	7.1
J-E3-140	64.82	135	7.1	Zone	Demand	284.83	7.1
J-E3-145	64.82	135	7.1	Zone	Demand	284.82	7.1
J-E3-15	69.47	125	0.0	Zone	Demand	285.58	0.0
J-E3-150	66.99	130	6.3	Zone	Demand	284.83	6.3
J-E3-155	64.82	135	0.8	Zone	Demand	284.83	0.8
J-E3-16	69.47	125	3.2	Zone	Demand	285.57	3.2
J-E3-160	64.82	135	0.8	Zone	Demand	284.83	0.8
J-E3-165	64.82	135	7.1	Zone	Demand	284.83	7.1
J-E3-17	69.47	125	7.9	Zone	Demand	285.57	7.9
J-E3-175	66.99	130	8.7	Zone	Demand	284.83	8.7
J-E3-18	68.48	127	6.8	Zone	Demand	285.27	6.8
J-E3-20	69.48	125	0.0	Zone	Demand	285.60	0.0
J-E3-25	69.48	125	7.9	Zone	Demand	285.60	7.9
J-E3-30	69.48	125	9.5	Zone	Demand	285.60	9.5
J-E3-35	69.48	125	8.7	Zone	Demand	285.60	8.7
J-E3-40	69.49	125	6.3	Zone	Demand	285.61	6.3
J-E3-41	69.49	125	6.3	Zone	Demand	285.61	6.3
J-E3-42	69.49	125	9.5	Zone	Demand	285.61	9.5
J-E3-45	69.55	125	6.3	Zone	Demand	285.75	6.3
J-E3-5	68.17	128	12.6	Zone	Demand	285.55	12.6
J-E3-50	69.55	125	7.9	Zone	Demand	285.75	7.9
J-E3-55	69.54	125	8.7	Zone	Demand	285.73	8.7
J-E3-60	69.54	125	6.3	Zone	Demand	285.73	6.3
J-E3-65	69.54	125	6.3	Zone	Demand	285.73	6.3
J-E3-70	69.54	125	11.0	Zone	Demand	285.73	11.0
J-E3-71	69.54	125	11.8	Zone	Demand	285.73	11.8
J-E3-75	69.54	125	6.3	Zone	Demand	285.73	6.3
J-E3-80	69.54	125	3.9	Zone	Demand	285.73	3.9
J-E3-81	69.54	125	6.3	Zone	Demand	285.73	6.3
J-E3-85	69.49	125	5.5	Zone	Demand	285.62	5.5
J-E3-86	69.49	125	5.5	Zone	Demand	285.62	5.5

Scenario: Buildout - Max Day
Steady State Analysis
Junction Report

Label	Pressure (psi)	Elevation (ft)	Base Flow (gpm)	Zone	Type	Calculated Hydraulic Grade (ft)	Demand (Calculated) (gpm)
J-E3-90	68.28	128	18.9	Zone	Demand	285.81	18.9
J-E3-91	68.28	128	6.3	Zone	Demand	285.81	6.3
J-E3-95	69.57	125	18.1	Zone	Demand	285.81	18.1
J-E4-1	64.41	135	0.0	Zone	Demand	283.87	0.0
J-E4-10	66.56	130	15.0	Zone	Demand	283.85	15.0
J-E4-15	66.60	130	157.4	Zone	Demand	283.93	157.4
J-E4-20	64.48	135	35.1	Zone	Demand	284.03	35.1
J-E4-25	64.41	135	7.1	Zone	Demand	283.87	7.1
J-E4-30	66.56	130	10.3	Zone	Demand	283.85	10.3
J-E4-35	66.56	130	7.9	Zone	Demand	283.85	7.9
J-E4-40	64.40	135	15.8	Zone	Demand	283.85	15.8
J-E4-45	64.82	135	3.9	Zone	Demand	284.82	3.9
J-E4-5	66.57	130	15.8	Zone	Demand	283.86	15.8
J-E4-50	64.82	135	10.3	Zone	Demand	284.82	10.3
J-E4-55	64.82	135	6.3	Zone	Demand	284.82	6.3
J-E4-60	64.83	135	5.5	Zone	Demand	284.83	5.5
J-E4-65	64.82	135	9.5	Zone	Demand	284.82	9.5
J-E4-70	64.83	135	0.8	Zone	Demand	284.84	0.8
J-E4-75	64.83	135	0.0	Zone	Demand	284.84	0.0
J-E4-80	64.83	135	75.3	Zone	Demand	284.85	75.3
J-E5-1	60.05	145	136.7	Zone	Demand	283.78	136.7
J-E5-5	62.27	140	35.1	Zone	Demand	283.93	35.1
J-F1-10	74.03	118	0.0	Zone	Demand	289.12	0.0
J-F1-15	73.99	118	36.2	Zone	Demand	289.02	36.2
J-F1-4	74.21	118	0.0	Zone	Demand	289.53	0.0
J-F1-5	74.12	118	44.1	Zone	Demand	289.32	44.1
J-F2-1	69.63	125	9.5	Zone	Demand	285.93	9.5
J-F2-10	69.64	125	11.8	Zone	Demand	285.97	11.8
J-F2-15	69.67	125	9.5	Zone	Demand	286.02	9.5
J-F2-20	69.66	125	9.5	Zone	Demand	286.00	9.5
J-F2-25	69.65	125	11.0	Zone	Demand	286.00	11.0
J-F2-30	68.35	128	8.7	Zone	Demand	285.98	8.7
J-F2-35	68.35	128	7.9	Zone	Demand	285.98	7.9
J-F2-40	68.57	128	0.0	Zone	Demand	286.49	0.0
J-F2-45	68.58	128	0.8	Zone	Demand	286.51	0.8
J-F2-5	69.60	125	18.1	Zone	Demand	285.87	18.1
J-F2-50	68.79	128	0.0	Zone	Demand	286.99	0.0
J-F2-55	68.79	128	8.7	Zone	Demand	286.99	8.7
J-F2-60	69.23	128	7.9	Zone	Demand	288.00	7.9
J-F2-65	68.56	128	2.4	Zone	Demand	286.47	2.4
J-F2-70	68.56	128	9.5	Zone	Demand	286.47	9.5
J-F2-75	72.89	120	69.0	Zone	Demand	288.48	69.0
J-F2-80	72.89	120	0.0	Zone	Demand	288.48	0.0
J-F2-85	72.88	120	36.2	Zone	Demand	288.45	36.2
J-F3-1	69.60	125	9.5	Zone	Demand	285.86	9.5
J-F3-10	68.31	128	7.9	Zone	Demand	285.89	7.9
J-F3-100	68.52	128	5.5	Zone	Demand	286.37	5.5
J-F3-105	68.51	128	10.3	Zone	Demand	286.35	10.3
J-F3-11	68.31	128	6.3	Zone	Demand	285.89	6.3
J-F3-110	68.51	128	0.8	Zone	Demand	286.35	0.8
J-F3-115	67.18	130	5.3	Zone	Demand	285.28	5.3
J-F3-120	67.16	130	6.5	Zone	Demand	285.22	6.5
J-F3-125	67.11	130	0.0	Zone	Demand	285.11	0.0
J-F3-15	67.49	130	11.0	Zone	Demand	285.99	11.0

Scenario: Buildout - Max Day
Steady State Analysis
Junction Report

Label	Pressure (psi)	Elevation (ft)	Base Flow (gpm)	Zone	Type	Calculated Hydraulic Grade (ft)	Demand (Calculated) (gpm)
J-F3-20	67.22	130	3.9	Zone	Demand	285.37	3.9
J-F3-25	67.22	130	5.5	Zone	Demand	285.37	5.5
J-F3-30	67.63	130	4.7	Zone	Demand	286.32	4.7
J-F3-35	67.63	130	0.0	Zone	Demand	286.32	0.0
J-F3-40	67.48	130	11.0	Zone	Demand	285.98	11.0
J-F3-45	67.48	130	9.5	Zone	Demand	285.98	9.5
J-F3-5	68.31	128	11.0	Zone	Demand	285.89	11.0
J-F3-50	68.35	128	14.2	Zone	Demand	285.97	14.2
J-F3-55	68.35	128	11.0	Zone	Demand	285.97	11.0
J-F3-60	68.35	128	16.6	Zone	Demand	285.97	16.6
J-F3-65	68.35	128	11.0	Zone	Demand	285.97	11.0
J-F3-70	68.35	128	6.3	Zone	Demand	285.97	6.3
J-F3-75	68.55	128	2.4	Zone	Demand	286.44	2.4
J-F3-80	68.55	128	8.7	Zone	Demand	286.44	8.7
J-F3-85	68.53	128	6.3	Zone	Demand	286.40	6.3
J-F3-90	68.53	128	2.4	Zone	Demand	286.40	2.4
J-F3-95	68.52	128	2.4	Zone	Demand	286.37	2.4
J-F4-1	64.54	135	33.3	Zone	Demand	284.18	33.3
J-F4-10	66.98	130	75.3	Zone	Demand	284.82	75.3
J-F4-15	67.04	130	75.3	Zone	Demand	284.94	75.3
J-F4-5	66.81	130	0.0	Zone	Demand	284.41	0.0
J-F5-1	64.51	135	35.1	Zone	Demand	284.11	35.1
J-F5-5	66.72	130	0.0	Zone	Demand	284.20	0.0
WELL 2	65.06	139	261.6	Zone	Inflow	289.39	-261.6
WELL 3	68.41	128	247.8	Zone	Inflow	286.11	-247.8
WELL 4	73.05	129	900.0	Zone	Inflow	297.83	-900.0
WELL 5	75.17	130	900.0	Zone	Inflow	303.74	-900.0
WELL 6	64.39	139	396.6	Zone	Inflow	287.83	-396.6
WELL 7	79.55	129	1,200.0	Zone	Inflow	312.87	-1,200.0
WELL 8	74.85	125	1,200.0	Zone	Inflow	298.01	-1,200.0
WELL 9	68.09	129	515.8	Zone	Inflow	286.38	-515.8
WELL 10	74.36	118	1,700.0	Zone	Inflow	289.87	-1,700.0
WELL 11	66.24	145	1,700.0	Zone	Inflow	298.11	-1,700.0

Scenario: Buildout - Max Day
Steady State Analysis
Pipe Report

Label	Diameter (in)	Velocity (ft/s)	Discharge (Absolute Value) (gpm)	Length (ft)	Material	Hazen-Williams C	Control Status	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)
P-5	8	0.00	0.0	25.00	Ductile Iro	130.0	Closed	285.00	285.00	0.00
P-10	8	0.00	0.0	25.00	Ductile Iro	130.0	Open	285.00	285.00	0.00
P-15	8	0.00	0.0	25.00	Ductile Iro	130.0	Closed	285.00	285.00	0.00
P-20	8	0.00	0.0	25.00	Ductile Iro	130.0	Open	285.00	285.00	0.00
P-25	8	0.00	0.0	25.00	Ductile Iro	130.0	Closed	285.00	285.00	0.00
P-30	8	0.00	0.0	25.00	Ductile Iro	130.0	Open	285.00	285.00	0.00
P-35	10	0.38	93.0	50.00	Ductile Iro	130.0	Open	285.00	285.00	0.00
P-40	8	0.00	0.0	25.00	Ductile Iro	130.0	Closed	285.00	285.08	0.00
P-45	8	0.00	0.0	25.00	Ductile Iro	130.0	Open	285.08	285.08	0.00
P-50	8	0.00	0.0	25.00	Ductile Iro	130.0	Closed	285.00	285.08	0.00
P-55	8	0.00	0.0	25.00	Ductile Iro	130.0	Open	285.08	285.08	0.00
P-60	8	0.00	0.0	25.00	Ductile Iro	130.0	Closed	285.00	285.08	0.00
P-65	8	0.00	0.0	25.00	Ductile Iro	130.0	Open	285.08	285.08	0.00
P-70	10	1.97	483.0	50.00	Ductile Iro	130.0	Open	285.08	285.00	0.08
P-75	12	1.46	515.8	84.00	Ductile Iro	130.0	Open	286.38	286.32	0.06
P-80	8	1.41	220.6	25.00	Ductile Iro	130.0	Open	285.00	284.97	0.03
P-85	8	1.41	220.6	25.00	Ductile Iro	130.0	Open	284.97	284.94	0.03
P-90	8	1.41	220.6	25.00	Ductile Iro	130.0	Open	285.00	284.97	0.03
P-95	8	1.41	220.6	25.00	Ductile Iro	130.0	Open	284.97	284.94	0.03
P-100	8	0.53	82.5	284.00	Ductile Iro	130.0	Open	284.95	285.00	0.05
P-105	8	0.53	82.5	25.00	Ductile Iro	130.0	Open	284.95	284.94	0.00
P-110	10	0.00	0.0	50.00	Ductile Iro	130.0	Closed	284.94	285.00	0.00
P-A1-1	8	1.48	231.2	305.00	Ductile Iro	130.0	Open	289.44	289.07	0.37
P-A1-10	8	0.59	92.1	109.00	Ductile Iro	130.0	Open	288.71	288.68	0.02
P-A1-5	8	1.48	231.2	304.00	Ductile Iro	130.0	Open	289.07	288.71	0.37
P-A2-10	6	0.81	71.5	724.00	Ductile Iro	130.0	Open	285.46	285.87	0.41
P-A2-15	6	0.58	51.0	522.00	Ductile Iro	130.0	Open	285.46	285.31	0.16
P-A2-30	8	0.25	38.9	690.00	Ductile Iro	130.0	Open	284.65	284.62	0.03
P-A2-50	8	0.11	17.6	543.00	Ductile Iro	130.0	Open	284.62	284.61	0.01
P-A2-55	8	0.00	0.5	265.00	Ductile Iro	130.0	Open	284.61	284.61	0.00
P-A2-75	8	0.05	8.2	250.00	Ductile Iro	130.0	Open	284.65	284.65	0.00
P-A2-80	8	0.18	28.8	320.00	Ductile Iro	130.0	Open	284.65	284.66	0.01
P-A3-1	6	0.60	52.5	452.00	Ductile Iro	130.0	Open	284.79	284.65	0.14
P-A3-10	8	0.49	77.4	247.00	Ductile Iro	130.0	Open	284.66	284.62	0.04
P-A3-100	10	0.90	220.7	899.00	Ductile Iro	130.0	Open	285.76	285.42	0.34
P-A3-115	8	2.35	367.5	674.00	Ductile Iro	130.0	Open	286.55	288.48	1.93
P-A3-120	12	0.02	5.6	399.00	Ductile Iro	130.0	Open	288.48	288.48	0.00
P-A3-125	12	0.35	124.9	562.00	Ductile Iro	130.0	Open	288.48	288.45	0.03
P-A3-15	8	0.16	25.7	256.00	Ductile Iro	130.0	Open	284.62	284.62	0.01
P-A3-20	8	0.16	25.7	237.00	Ductile Iro	130.0	Open	284.62	284.61	0.00
P-A3-25	6	0.47	41.8	880.00	Ductile Iro	130.0	Open	284.61	284.79	0.18
P-A3-30	8	0.41	63.6	567.00	Ductile Iro	130.0	Open	284.86	284.79	0.06
P-A3-35	8	0.11	17.1	1,110.00	Ductile Iro	130.0	Open	284.61	284.62	0.01
P-A3-40	8	1.52	237.6	237.00	Ductile Iro	130.0	Open	284.86	285.16	0.30
P-A3-45	8	0.58	91.4	716.00	Ductile Iro	130.0	Open	284.65	284.80	0.16
P-A3-5	8	0.01	1.1	1,056.00	Ductile Iro	130.0	Open	284.79	284.79	0.00
P-A3-50	8	0.68	106.2	683.00	Ductile Iro	130.0	Open	284.66	284.86	0.20
P-A3-55	8	0.43	67.8	496.00	Ductile Iro	130.0	Open	284.79	284.86	0.06
P-A3-60	12	0.53	188.1	2,648.00	Ductile Iro	130.0	Open	286.74	287.05	0.30
P-A3-70	12	1.31	462.9	1,471.00	Ductile Iro	130.0	Open	285.16	286.05	0.90
P-A3-75	10	1.54	376.1	297.00	Ductile Iro	130.0	Open	286.05	285.76	0.30
P-A3-80	12	0.52	184.8	626.00	Ductile Iro	130.0	Open	285.16	285.09	0.07
P-A3-85	8	0.22	34.4	149.00	Ductile Iro	130.0	Open	284.61	284.61	0.01

Scenario: Buildout - Max Day
Steady State Analysis
Pipe Report

Label	Diameter (in)	Velocity (ft/s)	Discharge (Absolute Value) (gpm)	Length (ft)	Material	Hazen-Williams C	Control Status	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)
P-A3-90	8	0.22	34.4	759.00	Ductile Iro	130.0	Open	284.61	284.58	0.03
P-A3-95	6	0.00	0.0	296.00	Ductile Iro	130.0	Open	284.61	284.61	0.00
P-A4-1	10	0.75	182.8	353.00	Ductile Iro	130.0	Open	285.42	285.33	0.09
P-A4-10	4	0.35	13.8	897.00	Ductile Iro	130.0	Open	285.32	285.15	0.17
P-A4-15	8	0.42	65.5	131.00	Ductile Iro	130.0	Open	285.14	285.15	0.02
P-A4-5	6	0.16	13.8	78.00	Ductile Iro	130.0	Open	285.33	285.32	0.00
P-B1-10	12	0.07	24.2	810.00	Ductile Iro	130.0	Open	286.61	286.61	0.00
P-B1-100	8	1.65	258.8	372.00	Ductile Iro	130.0	Open	289.79	290.34	0.56
P-B1-105	10	3.68	900.0	476.00	Ductile Iro	130.0	Open	290.34	292.76	2.41
P-B1-110	10	2.46	601.8	1,090.00	Ductile Iro	130.0	Open	290.34	287.72	2.62
P-B1-115	10	1.45	354.4	290.00	Ductile Iro	130.0	Open	287.28	287.02	0.26
P-B1-120	12	1.11	392.2	140.00	Ductile Iro	130.0	Open	286.85	286.79	0.06
P-B1-125	8	1.57	245.4	254.00	Ductile Iro	130.0	Open	289.44	289.79	0.34
P-B1-130	6	1.39	122.5	385.00	Ductile Iro	130.0	Open	288.71	288.12	0.58
P-B1-135	6	1.05	92.1	723.00	Ductile Iro	130.0	Open	288.68	288.03	0.65
P-B1-140	6	0.01	1.1	407.00	Ductile Iro	130.0	Open	286.60	286.60	0.00
P-B1-145	8	0.20	30.7	289.00	Ductile Iro	130.0	Open	286.61	286.61	0.01
P-B1-15	6	0.17	14.7	455.00	Ductile Iro	130.0	Open	286.61	286.60	0.01
P-B1-150	12	1.05	369.3	344.00	Ductile Iro	130.0	Open	286.65	286.79	0.14
P-B1-155	8	1.88	294.3	978.00	Ductile Iro	130.0	Open	287.72	285.87	1.85
P-B1-160	10	1.47	360.0	698.00	Ductile Iro	130.0	Open	286.65	286.00	0.65
P-B1-165	10	1.24	303.1	631.00	Ductile Iro	130.0	Open	286.00	285.58	0.43
P-B1-20	6	0.28	24.8	164.00	Ductile Iro	130.0	Open	286.62	286.61	0.01
P-B1-25	8	0.07	10.3	546.00	Ductile Iro	130.0	Open	286.61	286.60	0.00
P-B1-30	12	0.24	86.0	1,144.00	Ductile Iro	130.0	Open	286.62	286.65	0.03
P-B1-40	12	0.00	0.0	480.00	Ductile Iro	130.0	Open	286.65	286.65	0.00
P-B1-45	10	1.60	392.2	157.00	Ductile Iro	130.0	Open	287.02	286.85	0.17
P-B1-5	12	0.17	61.2	435.00	Ductile Iro	130.0	Open	286.62	286.61	0.01
P-B1-50	8	0.07	11.0	514.00	Ductile Iro	130.0	Open	286.79	286.79	0.00
P-B1-55	8	0.07	11.0	276.00	Ductile Iro	130.0	Open	286.79	286.79	0.00
P-B1-60	8	0.40	62.1	718.00	Ductile Iro	130.0	Open	287.02	287.10	0.08
P-B1-65	8	0.48	75.5	294.00	Ductile Iro	130.0	Open	287.10	287.14	0.04
P-B1-70	8	0.55	86.5	716.00	Ductile Iro	130.0	Open	287.14	287.28	0.14
P-B1-75	10	1.84	450.4	312.00	Ductile Iro	130.0	Open	287.28	287.72	0.44
P-B1-80	10	0.70	171.3	238.00	Ductile Iro	130.0	Open	287.72	287.78	0.06
P-B1-85	8	0.09	13.4	339.00	Ductile Iro	130.0	Open	287.78	287.78	0.00
P-B1-90	8	1.18	184.7	319.00	Ductile Iro	130.0	Open	287.78	288.03	0.26
P-B1-95	8	0.73	113.8	268.00	Ductile Iro	130.0	Open	288.03	288.12	0.09
P-B2-1	8	0.76	119.4	301.00	Ductile Iro	130.0	Open	285.31	285.41	0.11
P-B2-10	8	1.32	207.0	346.00	Ductile Iro	130.0	Open	285.53	285.87	0.34
P-B2-100	10	0.18	45.0	1,330.00	Ductile Iro	130.0	Open	285.06	285.09	0.03
P-B2-105	6	0.19	17.0	1,325.00	Ductile Iro	130.0	Open	285.06	285.00	0.05
P-B2-110	6	0.25	22.3	1,309.00	Ductile Iro	130.0	Open	285.06	284.98	0.08
P-B2-115	10	1.00	245.6	675.00	Ductile Iro	130.0	Open	285.58	285.27	0.31
P-B2-120	10	0.77	188.8	686.00	Ductile Iro	130.0	Open	285.27	285.08	0.19
P-B2-15	8	0.09	14.2	419.00	Ductile Iro	130.0	Open	285.41	285.41	0.00
P-B2-20	8	0.35	55.2	298.00	Ductile Iro	130.0	Open	285.53	285.50	0.03
P-B2-25	8	0.48	75.7	668.00	Ductile Iro	130.0	Open	285.50	285.40	0.10
P-B2-30	8	0.11	16.6	400.00	Ductile Iro	130.0	Open	285.40	285.40	0.00
P-B2-40	8	0.24	37.5	193.00	Ductile Iro	130.0	Open	284.80	284.79	0.01
P-B2-45	6	1.46	129.0	156.00	Ductile Iro	130.0	Open	284.80	285.06	0.26
P-B2-5	8	0.90	140.7	234.00	Ductile Iro	130.0	Open	285.41	285.53	0.11
P-B2-50	10	0.13	32.8	730.00	Ductile Iro	130.0	Open	285.06	285.06	0.01

Scenario: Buildout - Max Day
Steady State Analysis
Pipe Report

Label	Diameter (in)	Velocity (ft/s)	Discharge (Absolute Value) (gpm)	Length (ft)	Material	Hazen-Williams C	Control Status	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)
P-B2-55	10	0.11	26.8	588.00	Ductile Iro	130.0	Open	285.06	285.06	0.00
P-B2-60	10	0.32	79.1	268.00	Ductile Iro	130.0	Open	285.06	285.08	0.02
P-B2-65	10	0.49	120.2	649.00	Ductile Iro	130.0	Open	285.08	285.00	0.08
P-B2-70	10	0.26	63.3	655.00	Ductile Iro	130.0	Open	285.00	284.97	0.02
P-B2-75	8	0.37	57.5	818.00	Ductile Iro	130.0	Open	285.50	285.58	0.08
P-B2-80	4	0.84	33.1	324.00	Ductile Iro	130.0	Open	285.37	285.06	0.31
P-B2-85	8	0.35	54.4	356.00	Ductile Iro	130.0	Open	285.40	285.37	0.03
P-B2-95	10	0.61	149.9	1,322.00	Ductile Iro	130.0	Open	285.31	285.06	0.24
P-B3-1	10	0.29	71.9	327.00	Ductile Iro	130.0	Open	285.09	285.07	0.02
P-B3-10	8	0.21	32.8	1,046.00	Ductile Iro	130.0	Open	285.00	284.97	0.03
P-B3-20	10	0.16	38.7	255.00	Ductile Iro	130.0	Open	284.97	284.98	0.00
P-B3-3	6	0.45	39.7	375.00	Ductile Iro	130.0	Open	285.00	285.07	0.07
P-B3-30	10	0.32	78.4	803.00	Ductile Iro	130.0	Open	284.96	285.00	0.04
P-B3-40	10	0.22	54.4	198.00	Ductile Iro	130.0	Open	285.03	285.03	0.01
P-B3-45	10	0.71	174.8	558.00	Ductile Iro	130.0	Open	285.03	285.16	0.14
P-B3-5	6	0.27	24.0	359.00	Ductile Iro	130.0	Open	284.98	285.00	0.03
P-B3-50	6	0.09	7.6	2,075.00	Ductile Iro	130.0	Open	284.98	284.96	0.02
P-B3-55	10	0.10	24.0	241.00	Ductile Iro	130.0	Open	284.98	284.98	0.00
P-B3-60	6	0.62	54.4	2,136.00	Ductile Iro	130.0	Open	285.03	285.76	0.72
P-B3-70	10	0.15	36.0	168.00	Ductile Iro	130.0	Open	285.00	285.00	0.00
P-B3-75	10	0.53	128.9	173.00	Ductile Iro	130.0	Open	285.00	285.03	0.02
P-B3-80	10	0.20	48.8	650.00	Ductile Iro	130.0	Open	284.97	284.96	0.01
P-B3-85	10	0.03	8.1	655.00	Ductile Iro	130.0	Open	284.96	284.96	0.00
P-B4-1	8	0.54	84.5	345.00	Ductile Iro	130.0	Open	285.30	285.37	0.06
P-B4-10	10	0.72	177.3	1,310.00	Ductile Iro	130.0	Open	285.06	285.39	0.33
P-B4-15	6	3.08	271.1	352.00	Ductile Iro	130.0	Open	285.39	287.72	2.33
P-B4-20	8	2.26	354.5	160.00	Ductile Iro	130.0	Open	287.72	288.15	0.43
P-B4-25	8	0.77	120.3	190.00	Ductile Iro	130.0	Open	288.22	288.15	0.07
P-B4-250	10	0.66	161.0	974.00	Ductile Iro	130.0	Open	285.16	285.37	0.20
P-B4-30	8	1.61	252.2	546.00	Ductile Iro	130.0	Open	288.22	289.00	0.78
P-B4-35	10	0.47	115.5	318.00	Ductile Iro	130.0	Open	285.06	285.03	0.04
P-B4-40	8	0.59	91.8	320.00	Ductile Iro	130.0	Open	285.39	285.32	0.07
P-B4-45	10	0.25	60.7	1,832.00	Ductile Iro	130.0	Open	285.00	285.06	0.06
P-B4-50	8	0.40	62.2	1,422.00	Ductile Iro	130.0	Open	285.15	285.30	0.15
P-B4-55	6	1.33	116.9	578.00	Ductile Iro	130.0	Open	288.22	287.41	0.80
P-B4-60	10	0.42	102.7	1,772.00	Ductile Iro	130.0	Open	285.33	285.16	0.16
P-B4-65	4	1.26	49.5	1,034.00	Ductile Iro	130.0	Open	287.41	285.30	2.11
P-B4-70	8	0.24	37.9	180.00	Ductile Iro	130.0	Open	289.00	288.99	0.01
P-B5-1	8	1.78	279.5	404.00	Ductile Iro	130.0	Open	289.86	289.17	0.70
P-B5-11	10	6.72	1,645.7	236.00	Ductile Iro	130.0	Open	293.66	297.32	3.66
P-B5-12	12	4.82	1,700.0	117.00	Ductile Iro	130.0	Open	297.32	298.11	0.79
P-B5-15	10	0.07	17.7	831.00	Ductile Iro	130.0	Open	285.39	285.40	0.00
P-B5-2	12	2.13	749.5	1,347.00	Ductile Iro	130.0	Open	289.17	291.17	2.00
P-B5-20	10	0.09	22.0	165.00	Ductile Iro	130.0	Open	285.40	285.39	0.00
P-B5-25	6	0.67	59.5	655.00	Ductile Iro	130.0	Open	285.40	285.66	0.26
P-B5-3	12	2.13	749.5	439.00	Ductile Iro	130.0	Open	291.17	291.82	0.65
P-B5-30	6	0.13	11.5	1,011.00	Ductile Iro	130.0	Open	284.75	284.77	0.02
P-B5-4	8	1.62	253.9	1,357.00	Ductile Iro	130.0	Open	291.82	289.86	1.96
P-B5-40	6	13.62	1,200.0	109.00	Ductile Iro	130.0	Open	286.67	298.01	11.33
P-B5-45	6	13.62	1,200.0	199.00	Ductile Iro	130.0	Open	292.18	312.87	20.69
P-B5-5	8	1.52	238.9	1,331.00	Ductile Iro	130.0	Open	288.15	289.86	1.72
P-B5-50	6	10.21	900.0	180.00	Ductile Iro	130.0	Open	292.76	303.74	10.98
P-B5-55	6	2.81	247.8	166.00	Ductile Iro	130.0	Open	285.18	286.11	0.93

Scenario: Buildout - Max Day
Steady State Analysis
Pipe Report

Label	Diameter (in)	Velocity (ft/s)	Discharge (Absolute Value) (gpm)	Length (ft)	Material	Hazen-Williams C	Control Status	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)
P-B5-6	12	0.87	308.3	743.00	Ductile Iro	130.0	Open	289.86	290.08	0.21
P-B5-60	6	10.21	900.0	193.00	Ductile Iro	130.0	Open	286.05	297.83	11.78
P-B5-65	8	1.78	278.6	1,370.00	Ductile Iro	130.0	Open	285.37	287.71	2.35
P-B5-7	12	2.85	1,003.4	720.00	Ductile Iro	130.0	Open	291.82	293.66	1.84
P-B5-70	8	0.19	29.6	245.00	Ductile Iro	130.0	Open	287.71	287.72	0.01
P-B5-75	6	2.97	261.6	270.00	Ductile Iro	130.0	Open	287.71	289.39	1.67
P-B5-8	10	1.36	333.9	1,339.00	Ductile Iro	130.0	Open	289.00	290.08	1.08
P-B5-9	10	2.62	642.2	1,320.00	Ductile Iro	130.0	Open	290.08	293.66	3.58
P-B6-2	10	0.22	54.3	817.00	Ductile Iro	130.0	Open	297.32	297.29	0.02
P-C1-1	6	0.11	9.3	421.00	Ductile Iro	130.0	Open	286.60	286.60	0.01
P-C1-10	6	0.17	14.6	244.00	Ductile Iro	130.0	Open	286.61	286.60	0.01
P-C1-100	6	0.51	44.8	488.00	Ductile Iro	130.0	Open	286.77	286.65	0.12
P-C1-105	6	3.01	264.9	251.00	Ductile Iro	130.0	Open	286.77	288.36	1.59
P-C1-110	8	1.41	221.6	491.00	Ductile Iro	130.0	Open	287.81	288.36	0.55
P-C1-115	8	1.33	208.9	316.00	Ductile Iro	130.0	Open	287.49	287.81	0.32
P-C1-120	10	2.72	664.7	188.00	Ductile Iro	130.0	Open	286.95	287.49	0.54
P-C1-125	8	3.01	471.5	390.00	Ductile Iro	130.0	Open	287.49	289.26	1.77
P-C1-130	8	3.11	486.5	607.00	Ductile Iro	130.0	Open	289.26	292.18	2.92
P-C1-135	8	4.47	700.9	404.00	Ductile Iro	130.0	Open	288.36	292.18	3.82
P-C1-140	6	0.29	25.9	522.00	Ductile Iro	130.0	Open	286.65	286.61	0.04
P-C1-145	12	1.06	373.9	218.00	Ductile Iro	130.0	Open	286.86	286.95	0.09
P-C1-15	6	0.07	5.8	428.00	Ductile Iro	130.0	Open	286.60	286.61	0.00
P-C1-150	12	0.31	108.8	659.00	Ductile Iro	130.0	Open	286.65	286.68	0.03
P-C1-155	8	0.40	62.1	1,068.00	Ductile Iro	130.0	Open	286.61	286.72	0.11
P-C1-20	6	0.08	7.4	70.00	Ductile Iro	130.0	Open	286.60	286.60	0.00
P-C1-25	6	0.16	13.7	270.00	Ductile Iro	130.0	Open	286.60	286.61	0.01
P-C1-30	8	0.15	23.3	216.00	Ductile Iro	130.0	Open	286.61	286.61	0.00
P-C1-35	8	0.01	1.1	247.00	Ductile Iro	130.0	Open	286.61	286.61	0.00
P-C1-40	8	0.08	11.8	556.00	Ductile Iro	130.0	Open	286.61	286.60	0.00
P-C1-45	6	0.14	12.1	1,048.00	Ductile Iro	130.0	Open	286.61	286.63	0.02
P-C1-5	6	0.04	3.3	254.00	Ductile Iro	130.0	Open	286.60	286.60	0.00
P-C1-50	6	0.46	40.5	518.00	Ductile Iro	130.0	Open	286.63	286.73	0.10
P-C1-55	8	0.22	34.0	274.00	Ductile Iro	130.0	Open	286.72	286.73	0.01
P-C1-60	6	0.55	48.6	342.00	Ductile Iro	130.0	Open	286.72	286.82	0.09
P-C1-65	12	0.88	309.6	334.00	Ductile Iro	130.0	Open	286.76	286.86	0.10
P-C1-70	8	0.38	58.8	424.00	Ductile Iro	130.0	Open	286.82	286.86	0.04
P-C1-75	8	0.56	87.8	140.00	Ductile Iro	130.0	Open	286.73	286.76	0.03
P-C1-80	12	0.63	221.7	538.00	Ductile Iro	130.0	Open	286.76	286.68	0.08
P-C1-85	8	0.72	112.9	212.00	Ductile Iro	130.0	Open	286.68	286.61	0.07
P-C1-90	8	0.76	119.1	479.00	Ductile Iro	130.0	Open	286.61	286.44	0.17
P-C1-95	6	0.87	76.5	519.00	Ductile Iro	130.0	Open	286.44	286.77	0.33
P-C2-10	6	0.57	50.6	513.00	Ductile Iro	130.0	Open	285.78	285.63	0.15
P-C2-100	6	0.48	42.6	311.00	Ductile Iro	130.0	Open	285.22	285.29	0.07
P-C2-105	6	1.01	88.8	262.00	Ductile Iro	130.0	Open	285.29	285.50	0.22
P-C2-110	6	1.14	100.6	245.00	Ductile Iro	130.0	Open	285.50	285.76	0.26
P-C2-115	10	0.31	76.3	233.00	Ductile Iro	130.0	Open	285.19	285.18	0.01
P-C2-120	8	1.15	179.7	185.00	Ductile Iro	130.0	Open	285.80	285.94	0.14
P-C2-125	6	1.88	165.5	290.00	Ductile Iro	130.0	Open	286.86	286.09	0.77
P-C2-130	6	0.93	81.7	285.00	Ductile Iro	130.0	Open	286.09	285.89	0.20
P-C2-135	6	0.86	75.4	205.00	Ductile Iro	130.0	Open	285.89	285.76	0.13
P-C2-140	6	0.38	33.9	257.00	Ductile Iro	130.0	Open	285.76	285.80	0.04
P-C2-145	8	0.53	83.8	499.00	Ductile Iro	130.0	Open	286.09	286.00	0.09
P-C2-15	8	1.07	168.0	266.00	Ductile Iro	130.0	Open	285.63	285.45	0.18

Scenario: Buildout - Max Day
Steady State Analysis
Pipe Report

Label	Diameter (in)	Velocity (ft/s)	Discharge (Absolute Value) (gpm)	Length (ft)	Material	Hazen-Williams C	Control Status	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)
P-C2-150	8	0.33	51.4	509.00	Ductile Iro	130.0	Open	286.00	285.96	0.04
P-C2-155	8	0.15	23.7	375.00	Ductile Iro	130.0	Open	285.99	286.00	0.01
P-C2-160	8	0.40	62.0	258.00	Ductile Iro	130.0	Open	285.99	285.96	0.03
P-C2-165	6	1.95	171.8	527.00	Ductile Iro	130.0	Open	286.86	288.36	1.50
P-C2-170	6	1.32	115.9	605.00	Ductile Iro	130.0	Open	285.94	286.77	0.83
P-C2-175	8	0.51	80.3	518.00	Ductile Iro	130.0	Open	285.94	286.03	0.09
P-C2-180	8	1.08	168.8	608.00	Ductile Iro	130.0	Open	286.03	286.44	0.41
P-C2-185	6	0.20	17.4	708.00	Ductile Iro	130.0	Open	285.22	285.19	0.03
P-C2-190	6	0.27	23.6	808.00	Ductile Iro	130.0	Open	285.03	284.98	0.06
P-C2-195	8	0.75	117.8	396.00	Ductile Iro	130.0	Open	285.03	285.17	0.14
P-C2-20	8	0.08	12.6	265.00	Ductile Iro	130.0	Open	285.45	285.45	0.00
P-C2-200	6	0.42	36.7	670.00	Ductile Iro	130.0	Open	285.18	285.29	0.11
P-C2-205	8	0.07	10.3	292.00	Ductile Iro	130.0	Open	285.08	285.08	0.00
P-C2-210	8	0.93	145.8	111.00	Ductile Iro	130.0	Open	285.74	285.80	0.06
P-C2-215	8	0.84	132.4	263.00	Ductile Iro	130.0	Open	285.74	285.63	0.11
P-C2-220	10	0.71	174.2	522.00	Ductile Iro	130.0	Open	284.93	284.81	0.13
P-C2-225	8	0.58	91.3	563.00	Ductile Iro	130.0	Open	284.95	284.83	0.12
P-C2-230	10	0.17	42.7	494.00	Ductile Iro	130.0	Open	285.08	285.08	0.01
P-C2-235	10	0.31	75.0	140.00	Ductile Iro	130.0	Open	285.08	285.09	0.01
P-C2-25	8	0.96	149.9	263.00	Ductile Iro	130.0	Open	285.45	285.31	0.14
P-C2-30	8	0.08	11.8	267.00	Ductile Iro	130.0	Open	285.31	285.31	0.00
P-C2-35	8	0.85	132.5	274.00	Ductile Iro	130.0	Open	285.31	285.19	0.12
P-C2-40	10	0.15	35.9	396.00	Ductile Iro	130.0	Open	285.19	285.18	0.01
P-C2-45	10	1.08	264.3	176.00	Ductile Iro	130.0	Open	285.18	285.09	0.09
P-C2-5	6	0.72	63.2	557.00	Ductile Iro	130.0	Open	286.03	285.78	0.25
P-C2-50	10	0.71	172.7	664.00	Ductile Iro	130.0	Open	285.09	284.93	0.16
P-C2-55	8	0.15	23.6	1,142.00	Ductile Iro	130.0	Open	284.93	284.95	0.02
P-C2-60	8	0.23	35.4	598.00	Ductile Iro	130.0	Open	284.95	284.98	0.02
P-C2-65	6	0.13	11.8	358.00	Ductile Iro	130.0	Open	284.90	284.89	0.01
P-C2-70	8	0.73	114.2	245.00	Ductile Iro	130.0	Open	284.95	285.03	0.08
P-C2-75	6	0.41	36.5	295.00	Ductile Iro	130.0	Open	285.03	285.08	0.05
P-C2-80	6	0.52	45.9	386.00	Ductile Iro	130.0	Open	285.08	285.18	0.10
P-C2-85	10	0.18	45.0	251.00	Ductile Iro	130.0	Open	285.18	285.17	0.00
P-C2-90	10	0.35	85.4	286.00	Ductile Iro	130.0	Open	285.17	285.19	0.02
P-C2-95	10	0.34	83.8	756.00	Ductile Iro	130.0	Open	285.19	285.24	0.05
P-C3-1	8	0.02	3.1	1,053.00	Ductile Iro	130.0	Open	284.81	284.81	0.00
P-C3-10	8	0.08	12.2	313.00	Ductile Iro	130.0	Open	284.83	284.83	0.00
P-C3-15	8	0.26	40.5	490.00	Ductile Iro	130.0	Open	284.83	284.81	0.02
P-C3-20	6	0.24	21.1	398.00	Ductile Iro	130.0	Open	284.77	284.75	0.02
P-C3-25	6	0.02	2.2	598.00	Ductile Iro	130.0	Open	284.75	284.75	0.00
P-C3-30	6	0.12	10.5	398.00	Ductile Iro	130.0	Open	284.75	284.76	0.01
P-C3-35	8	0.19	30.3	618.00	Ductile Iro	130.0	Open	284.77	284.76	0.02
P-C3-40	8	0.44	69.6	243.00	Ductile Iro	130.0	Open	284.81	284.77	0.03
P-C3-45	6	0.34	30.2	1,668.00	Ductile Iro	130.0	Open	284.77	284.96	0.19
P-C3-5	8	0.66	103.5	88.00	Ductile Iro	130.0	Open	284.81	284.83	0.02
P-C3-50	10	0.25	60.5	558.00	Ductile Iro	130.0	Open	284.77	284.75	0.02
P-C4-1	6	0.50	43.7	1,304.00	Ductile Iro	130.0	Open	285.03	285.32	0.29
P-C4-10	8	0.31	48.5	321.00	Ductile Iro	130.0	Open	285.32	285.30	0.02
P-C4-15	8	0.01	1.8	331.00	Ductile Iro	130.0	Open	285.30	285.30	0.00
P-C4-20	8	1.33	208.2	333.00	Ductile Iro	130.0	Open	285.30	284.96	0.33
P-C4-230	6	0.53	46.8	1,304.00	Ductile Iro	130.0	Open	284.96	285.30	0.33
P-C4-25	8	0.40	62.0	1,278.00	Ductile Iro	130.0	Open	284.96	284.83	0.14
P-C4-30	10	0.63	154.7	693.00	Ductile Iro	130.0	Open	284.83	284.96	0.13

Scenario: Buildout - Max Day
Steady State Analysis
Pipe Report

Label	Diameter (in)	Velocity (ft/s)	Discharge (Absolute Value) (gpm)	Length (ft)	Material	Hazen-Williams C	Control Status	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)
P-C4-35	12	0.45	159.1	194.00	Ductile Iro	130.0	Open	284.85	284.86	0.02
P-C4-45	6	0.79	70.0	417.00	Ductile Iro	130.0	Open	284.88	284.65	0.22
P-C4-5	8	0.13	20.5	333.00	Ductile Iro	130.0	Open	285.32	285.32	0.00
P-C4-50	10	1.28	312.7	307.00	Ductile Iro	130.0	Open	284.83	284.61	0.22
P-C4-55	12	0.38	133.9	286.00	Ductile Iro	130.0	Open	284.85	284.83	0.02
P-C4-60	10	0.44	107.9	662.00	Ductile Iro	130.0	Open	285.03	284.96	0.07
P-C4-65	10	1.18	289.0	352.00	Ductile Iro	130.0	Open	284.61	284.39	0.22
P-C4-75	6	4.50	396.6	220.00	Ductile Iro	130.0	Open	284.89	287.83	2.94
P-C4-80	8	0.88	137.5	449.00	Ductile Iro	130.0	Open	284.65	284.86	0.21
P-C4-85	12	0.28	100.0	188.00	Ductile Iro	130.0	Open	284.89	284.88	0.01
P-C4-90	12	0.84	296.6	88.00	Ductile Iro	130.0	Open	284.86	284.89	0.02
P-C5-1	6	2.60	228.7	249.00	Ductile Iro	130.0	Open	285.66	286.86	1.20
P-C5-10	12	2.04	719.2	317.00	Ductile Iro	130.0	Open	286.22	285.78	0.44
P-C5-15	10	2.05	503.0	348.00	Ductile Iro	130.0	Open	285.78	285.18	0.60
P-C5-20	6	1.41	124.2	283.00	Ductile Iro	130.0	Open	285.18	284.74	0.44
P-C5-25	6	1.05	92.6	488.00	Ductile Iro	130.0	Open	284.74	284.30	0.44
P-C5-30	6	0.69	61.1	807.00	Ductile Iro	130.0	Open	285.32	285.66	0.34
P-C5-35	6	0.60	52.9	1,123.00	Ductile Iro	130.0	Open	285.30	285.66	0.36
P-C5-40	10	0.88	216.2	1,349.00	Ductile Iro	130.0	Open	285.30	285.78	0.49
P-C5-45	6	0.52	46.0	851.00	Ductile Iro	130.0	Open	284.30	284.09	0.21
P-C5-5	10	2.99	731.9	297.00	Ductile Iro	130.0	Open	287.25	286.22	1.03
P-C5-50	10	1.55	378.8	976.00	Ductile Iro	130.0	Open	285.18	284.19	1.00
P-C5-6	12	2.79	983.5	782.00	Ductile Iro	130.0	Open	289.17	287.25	1.92
P-C5-60	8	1.53	239.0	301.00	Ductile Iro	130.0	Open	286.86	287.25	0.39
P-D1-10	8	0.04	5.5	221.00	Ductile Iro	130.0	Open	286.56	286.56	0.00
P-D1-15	12	1.10	387.0	253.00	Ductile Iro	130.0	Open	286.56	286.45	0.11
P-D1-20	6	0.17	15.0	383.00	Ductile Iro	130.0	Open	286.45	286.44	0.01
P-D1-25	8	0.26	40.1	376.00	Ductile Iro	130.0	Open	286.31	286.33	0.02
P-D1-30	8	0.23	35.3	221.00	Ductile Iro	130.0	Open	286.33	286.34	0.01
P-D1-35	8	0.16	25.5	211.00	Ductile Iro	130.0	Open	286.33	286.34	0.00
P-D1-40	12	0.78	275.4	884.00	Ductile Iro	130.0	Open	286.95	286.74	0.21
P-D1-45	8	0.58	91.0	454.00	Ductile Iro	130.0	Open	286.31	286.22	0.10
P-D1-5	12	1.31	463.5	295.00	Ductile Iro	130.0	Open	286.74	286.56	0.18
P-D1-50	8	0.18	28.7	460.00	Ductile Iro	130.0	Open	286.22	286.20	0.01
P-D2-10	8	0.51	79.3	267.00	Ductile Iro	130.0	Open	285.99	286.04	0.04
P-D2-100	8	0.40	62.1	423.00	Ductile Iro	130.0	Open	285.77	285.73	0.04
P-D2-105	8	0.76	119.8	262.00	Ductile Iro	130.0	Open	285.77	285.87	0.09
P-D2-110	8	0.04	6.3	305.00	Ductile Iro	130.0	Open	285.87	285.87	0.00
P-D2-115	8	0.88	137.2	262.00	Ductile Iro	130.0	Open	285.87	285.99	0.12
P-D2-120	12	0.19	66.9	417.00	Ductile Iro	130.0	Open	285.99	285.98	0.01
P-D2-125	8	0.51	79.1	281.00	Ductile Iro	130.0	Open	285.99	286.04	0.05
P-D2-130	8	0.04	6.3	297.00	Ductile Iro	130.0	Open	286.04	286.04	0.00
P-D2-135	8	0.63	98.1	260.00	Ductile Iro	130.0	Open	286.04	286.10	0.06
P-D2-140	8	0.26	40.2	423.00	Ductile Iro	130.0	Open	286.10	286.12	0.02
P-D2-145	8	0.83	129.7	246.00	Ductile Iro	130.0	Open	286.10	286.20	0.10
P-D2-15	12	1.03	362.5	638.00	Ductile Iro	130.0	Open	286.45	286.20	0.25
P-D2-150	8	0.07	10.8	434.00	Ductile Iro	130.0	Open	286.20	286.20	0.00
P-D2-155	8	0.08	12.2	266.00	Ductile Iro	130.0	Open	286.20	286.20	0.00
P-D2-160	8	0.06	8.7	346.00	Ductile Iro	130.0	Open	286.20	286.20	0.00
P-D2-165	8	0.36	56.8	509.00	Ductile Iro	130.0	Open	286.10	286.05	0.05
P-D2-170	8	0.27	42.7	541.00	Ductile Iro	130.0	Open	286.05	286.03	0.03
P-D2-175	8	0.67	104.4	519.00	Ductile Iro	130.0	Open	286.03	285.88	0.14
P-D2-180	8	0.57	89.4	513.00	Ductile Iro	130.0	Open	285.88	285.77	0.11

Scenario: Buildout - Max Day
Steady State Analysis
Pipe Report

Label	Diameter (in)	Velocity (ft/s)	Discharge (Absolute Value) (gpm)	Length (ft)	Material	Hazen-Williams C	Control Status	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)
P-D2-185	8	0.50	78.9	783.00	Ductile Iro	130.0	Open	285.66	285.79	0.13
P-D2-190	8	0.52	81.1	265.00	Ductile Iro	130.0	Open	285.79	285.84	0.05
P-D2-195	8	0.09	14.2	288.00	Ductile Iro	130.0	Open	285.84	285.84	0.00
P-D2-20	12	0.94	330.3	258.00	Ductile Iro	130.0	Open	286.20	286.12	0.08
P-D2-200	8	0.04	6.3	229.00	Ductile Iro	130.0	Open	285.84	285.84	0.00
P-D2-205	12	0.94	329.7	545.00	Ductile Iro	130.0	Open	285.62	285.79	0.18
P-D2-210	8	0.66	104.1	357.00	Ductile Iro	130.0	Open	285.84	285.94	0.10
P-D2-215	8	0.04	6.3	245.00	Ductile Iro	130.0	Open	285.94	285.94	0.00
P-D2-220	8	0.77	119.9	397.00	Ductile Iro	130.0	Open	285.94	286.08	0.14
P-D2-225	8	0.15	23.9	255.00	Ductile Iro	130.0	Open	286.08	286.08	0.00
P-D2-230	12	1.00	352.8	769.00	Ductile Iro	130.0	Open	286.08	285.79	0.28
P-D2-235	12	0.69	243.5	268.00	Ductile Iro	130.0	Open	286.08	286.03	0.05
P-D2-240	12	1.70	597.6	613.00	Ductile Iro	130.0	Open	286.08	286.67	0.60
P-D2-245	12	1.68	590.5	193.00	Ductile Iro	130.0	Open	286.67	286.49	0.18
P-D2-25	12	0.79	279.1	356.00	Ductile Iro	130.0	Open	286.12	286.04	0.08
P-D2-250	8	0.86	135.2	243.00	Ductile Iro	130.0	Open	286.49	286.38	0.11
P-D2-255	8	0.46	71.6	484.00	Ductile Iro	130.0	Open	286.38	286.31	0.07
P-D2-260	8	0.29	44.7	236.00	Ductile Iro	130.0	Open	286.34	286.35	0.01
P-D2-265	8	0.36	55.8	312.00	Ductile Iro	130.0	Open	286.35	286.38	0.03
P-D2-270	12	0.92	324.1	254.00	Ductile Iro	130.0	Open	286.49	286.41	0.08
P-D2-275	12	0.50	175.8	527.00	Ductile Iro	130.0	Open	286.41	286.36	0.05
P-D2-280	8	0.88	137.3	274.00	Ductile Iro	130.0	Open	286.41	286.28	0.13
P-D2-285	8	0.05	7.9	238.00	Ductile Iro	130.0	Open	286.28	286.28	0.00
P-D2-290	8	0.79	123.1	280.00	Ductile Iro	130.0	Open	286.28	286.18	0.11
P-D2-295	8	0.07	10.5	523.00	Ductile Iro	130.0	Open	286.18	286.18	0.00
P-D2-30	10	0.79	194.3	180.00	Ductile Iro	130.0	Open	286.04	285.98	0.05
P-D2-300	8	0.78	122.6	261.00	Ductile Iro	130.0	Open	286.18	286.08	0.10
P-D2-305	8	0.20	30.7	532.00	Ductile Iro	130.0	Open	286.08	286.10	0.02
P-D2-310	8	0.78	121.7	777.00	Ductile Iro	130.0	Open	286.20	286.49	0.29
P-D2-315	12	0.30	105.5	380.00	Ductile Iro	130.0	Open	285.62	285.63	0.01
P-D2-320	8	0.01	2.2	434.00	Ductile Iro	130.0	Open	285.84	285.84	0.00
P-D2-325	12	0.41	144.6	518.00	Ductile Iro	130.0	Open	285.99	286.03	0.04
P-D2-330	8	0.62	96.8	969.00	Ductile Iro	130.0	Open	285.96	285.73	0.23
P-D2-35	10	1.01	246.2	550.00	Ductile Iro	130.0	Open	285.98	285.73	0.25
P-D2-40	10	1.58	386.9	464.00	Ductile Iro	130.0	Open	285.73	285.24	0.49
P-D2-45	10	1.11	272.6	271.00	Ductile Iro	130.0	Open	285.24	285.09	0.15
P-D2-5	8	0.09	14.3	573.00	Ductile Iro	130.0	Open	285.99	285.99	0.00
P-D2-50	8	0.87	136.3	244.00	Ductile Iro	130.0	Open	285.09	284.98	0.11
P-D2-55	8	0.65	101.7	279.00	Ductile Iro	130.0	Open	284.98	284.90	0.07
P-D2-60	6	1.36	119.4	173.00	Ductile Iro	130.0	Open	285.09	284.84	0.25
P-D2-65	6	0.37	32.9	257.00	Ductile Iro	130.0	Open	284.84	284.80	0.03
P-D2-70	12	0.00	0.6	309.00	Ductile Iro	130.0	Open	285.62	285.62	0.00
P-D2-75	8	2.03	318.4	244.00	Ductile Iro	130.0	Open	285.62	285.08	0.54
P-D2-80	8	0.04	6.3	127.00	Ductile Iro	130.0	Open	285.62	285.22	0.00
P-D2-85	8	1.17	183.5	562.00	Ductile Iro	130.0	Open	285.22	285.66	0.44
P-D2-90	8	1.05	164.6	214.00	Ductile Iro	130.0	Open	285.22	285.22	0.14
P-D2-95	8	0.86	134.6	251.00	Ductile Iro	130.0	Open	285.08	285.77	0.11
P-D3-1	8	0.16	25.5	253.00	Ductile Iro	130.0	Open	285.66	284.79	0.01
P-D3-10	10	0.15	37.1	155.00	Ductile Iro	130.0	Open	284.80	284.79	0.00
P-D3-100	10	0.26	63.6	1,135.00	Ductile Iro	130.0	Open	284.79	284.79	0.04
P-D3-105	6	0.09	7.7	1,283.00	Ductile Iro	130.0	Open	284.84	284.79	0.01
P-D3-110	10	0.06	13.6	680.00	Ductile Iro	130.0	Open	284.80	284.77	0.00
P-D3-115	8	0.41	64.1	268.00	Ductile Iro	130.0	Open	284.77	285.59	0.03

Scenario: Buildout - Max Day
Steady State Analysis
Pipe Report

Label	Diameter (in)	Velocity (ft/s)	Discharge (Absolute Value) (gpm)	Length (ft)	Material	Hazen-Williams C	Control Status	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)
P-D3-120	8	0.04	5.5	257.00	Ductile Iro	130.0	Open	284.78	284.78	0.00
P-D3-125	8	0.07	10.5	253.00	Ductile Iro	130.0	Open	284.78	284.78	0.00
P-D3-130	8	0.09	14.5	268.00	Ductile Iro	130.0	Open	284.78	284.79	0.00
P-D3-135	12	0.37	131.1	559.00	Ductile Iro	130.0	Open	284.84	284.81	0.03
P-D3-140	12	0.23	79.9	181.00	Ductile Iro	130.0	Open	284.81	284.80	0.00
P-D3-145	8	0.21	32.3	734.00	Ductile Iro	130.0	Open	284.79	284.81	0.02
P-D3-15	8	0.07	11.2	258.00	Ductile Iro	130.0	Open	284.79	284.79	0.00
P-D3-150	8	0.07	10.8	280.00	Ductile Iro	130.0	Open	284.79	284.78	0.00
P-D3-155	8	0.16	24.4	249.00	Ductile Iro	130.0	Open	284.78	284.78	0.00
P-D3-16	8	0.11	16.6	414.00	Ductile Iro	130.0	Open	285.56	285.55	0.00
P-D3-160	8	0.11	17.6	174.00	Ductile Iro	130.0	Open	284.78	284.79	0.00
P-D3-165	8	0.05	8.4	267.00	Ductile Iro	130.0	Open	284.79	284.79	0.00
P-D3-170	8	0.21	32.3	247.00	Ductile Iro	130.0	Open	284.79	284.79	0.01
P-D3-175	8	0.06	9.5	168.00	Ductile Iro	130.0	Open	284.79	284.78	0.00
P-D3-180	12	0.44	154.2	142.00	Ductile Iro	130.0	Open	284.84	284.85	0.01
P-D3-185	12	0.58	206.2	577.00	Ductile Iro	130.0	Open	284.85	284.93	0.08
P-D3-190	8	0.33	52.0	771.00	Ductile Iro	130.0	Open	284.79	284.85	0.06
P-D3-195	8	0.06	9.4	674.00	Ductile Iro	130.0	Open	284.79	284.79	0.00
P-D3-20	8	0.03	3.9	142.00	Ductile Iro	130.0	Open	284.79	284.79	0.00
P-D3-200	8	0.04	6.6	404.00	Ductile Iro	130.0	Open	284.79	284.79	0.00
P-D3-25	10	0.15	36.5	1,044.00	Ductile Iro	130.0	Open	284.77	284.76	0.01
P-D3-30	10	0.35	86.7	276.00	Ductile Iro	130.0	Open	284.77	284.79	0.02
P-D3-35	12	0.23	80.0	726.00	Ductile Iro	130.0	Open	284.79	284.80	0.02
P-D3-40	8	0.07	10.7	340.00	Ductile Iro	130.0	Open	284.80	284.81	0.00
P-D3-45	8	0.13	20.9	184.00	Ductile Iro	130.0	Open	284.81	284.81	0.00
P-D3-5	8	0.12	18.1	258.00	Ductile Iro	130.0	Open	284.79	284.79	0.00
P-D3-50	8	0.20	32.0	294.00	Ductile Iro	130.0	Open	284.81	284.82	0.01
P-D3-55	8	0.28	44.6	344.00	Ductile Iro	130.0	Open	284.82	284.84	0.02
P-D3-6	8	0.03	4.4	243.00	Ductile Iro	130.0	Open	284.79	284.79	0.00
P-D3-60	8	0.10	16.0	490.00	Ductile Iro	130.0	Open	284.84	284.84	0.00
P-D3-70	8	0.21	32.6	280.00	Ductile Iro	130.0	Open	285.56	285.57	0.01
P-D3-75	8	0.31	48.3	278.00	Ductile Iro	130.0	Open	285.57	285.59	0.02
P-D3-80	10	0.11	25.9	543.00	Ductile Iro	130.0	Open	284.79	284.79	0.00
P-D3-81	8	0.02	3.1	274.00	Ductile Iro	130.0	Open	285.55	285.55	0.00
P-D3-82	8	0.06	8.7	295.00	Ductile Iro	130.0	Open	285.55	285.55	0.00
P-D3-85	8	0.22	35.0	287.00	Ductile Iro	130.0	Open	284.81	284.80	0.01
P-D3-90	8	0.08	11.8	410.00	Ductile Iro	130.0	Open	284.79	284.79	0.00
P-D3-91	8	0.08	11.8	464.00	Ductile Iro	130.0	Open	285.59	285.58	0.00
P-D3-95	8	0.48	74.8	459.00	Ductile Iro	130.0	Open	284.90	284.83	0.07
P-D4-1	10	1.01	248.3	312.00	Ductile Iro	130.0	Open	284.39	284.25	0.15
P-D4-10	10	0.83	202.4	512.00	Ductile Iro	130.0	Open	284.14	283.98	0.16
P-D4-100	6	0.30	26.7	1,810.00	Ductile Iro	130.0	Open	284.14	283.98	0.16
P-D4-105	6	1.16	102.5	665.00	Ductile Iro	130.0	Open	284.96	284.24	0.73
P-D4-110	6	0.80	70.1	311.00	Ductile Iro	130.0	Open	284.24	284.07	0.17
P-D4-115	4	0.31	12.3	939.00	Ductile Iro	130.0	Open	284.38	284.24	0.15
P-D4-15	10	0.74	181.8	169.00	Ductile Iro	130.0	Open	283.98	283.94	0.04
P-D4-16	12	0.13	45.4	394.00	Ductile Iro	130.0	Open	283.94	283.93	0.00
P-D4-20	12	0.33	116.7	738.00	Ductile Iro	130.0	Open	283.94	283.90	0.04
P-D4-25	10	0.29	70.4	502.00	Ductile Iro	130.0	Open	283.90	283.88	0.02
P-D4-30	8	0.03	4.3	592.00	Ductile Iro	130.0	Open	283.88	283.88	0.00
P-D4-35	8	0.24	37.9	488.00	Ductile Iro	130.0	Open	283.88	283.90	0.02
P-D4-40	12	0.16	55.7	128.00	Ductile Iro	130.0	Open	283.90	283.90	0.00
P-D4-45	10	0.25	60.6	562.00	Ductile Iro	130.0	Open	283.90	283.92	0.02

Scenario: Buildout - Max Day
Steady State Analysis
Pipe Report

Label	Diameter (in)	Velocity (ft/s)	Discharge (Absolute Value) (gpm)	Length (ft)	Material	Hazen-Williams C	Control Status	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)
P-D4-5	10	0.80	194.8	338.00	Ductile Iro	130.0	Open	284.25	284.14	0.10
P-D4-50	8	0.73	114.9	452.00	Ductile Iro	130.0	Open	283.92	284.07	0.15
P-D4-55	8	0.45	71.2	1,280.00	Ductile Iro	130.0	Open	284.25	284.07	0.18
P-D4-60	8	0.16	25.0	335.00	Ductile Iro	130.0	Open	284.39	284.38	0.01
P-D4-65	12	0.05	18.0	545.00	Ductile Iro	130.0	Open	283.90	283.90	0.00
P-D4-70	8	0.06	10.0	984.00	Ductile Iro	130.0	Open	284.78	284.79	0.00
P-D4-75	8	0.17	26.9	251.00	Ductile Iro	130.0	Open	284.79	284.79	0.01
P-D4-80	8	1.02	160.1	618.00	Ductile Iro	130.0	Open	284.65	284.27	0.38
P-D4-85	8	0.59	92.7	317.00	Ductile Iro	130.0	Open	284.27	284.20	0.07
P-D4-90	8	0.51	80.1	348.00	Ductile Iro	130.0	Open	284.20	284.14	0.06
P-D4-95	8	0.30	47.7	450.00	Ductile Iro	130.0	Open	284.27	284.25	0.03
P-D5-1	10	0.75	183.4	245.00	Ductile Iro	130.0	Open	284.19	284.12	0.07
P-D5-10	10	0.44	107.7	133.00	Ductile Iro	130.0	Open	284.09	284.08	0.01
P-D5-100	8	0.11	17.4	506.00	Ductile Iro	130.0	Open	283.87	283.87	0.01
P-D5-15	6	0.51	45.2	469.00	Ductile Iro	130.0	Open	284.08	283.96	0.11
P-D5-20	6	0.15	13.5	362.00	Ductile Iro	130.0	Open	283.96	283.96	0.01
P-D5-25	6	0.05	4.6	626.00	Ductile Iro	130.0	Open	283.96	283.96	0.00
P-D5-30	6	0.23	20.4	305.00	Ductile Iro	130.0	Open	283.96	283.97	0.02
P-D5-35	12	0.11	37.0	464.00	Ductile Iro	130.0	Open	283.90	283.90	0.00
P-D5-40	8	0.25	39.9	502.00	Ductile Iro	130.0	Open	283.90	283.87	0.02
P-D5-41	10	0.61	148.6	653.00	Ductile Iro	130.0	Open	283.90	283.78	0.12
P-D5-45	8	0.04	6.7	306.00	Ductile Iro	130.0	Open	283.87	283.87	0.00
P-D5-5	10	0.39	94.9	397.00	Ductile Iro	130.0	Open	284.12	284.09	0.03
P-D5-50	8	0.10	16.1	489.00	Ductile Iro	130.0	Open	283.88	283.87	0.00
P-D5-55	12	0.05	17.8	721.00	Ductile Iro	130.0	Open	283.90	283.90	0.00
P-D5-60	6	0.28	24.8	563.00	Ductile Iro	130.0	Open	283.92	283.96	0.04
P-D5-65	10	0.14	34.2	557.00	Ductile Iro	130.0	Open	284.07	284.08	0.01
P-D5-70	10	0.77	188.7	1,017.00	Ductile Iro	130.0	Open	284.19	283.90	0.29
P-D5-75	6	0.55	48.3	543.00	Ductile Iro	130.0	Open	284.12	283.97	0.15
P-D5-80	6	0.12	10.5	609.00	Ductile Iro	130.0	Open	283.96	283.97	0.01
P-E1-10	8	0.38	58.8	225.00	Ductile Iro	130.0	Open	286.34	286.36	0.02
P-E1-15	8	0.60	93.5	663.00	Ductile Iro	130.0	Open	286.36	286.51	0.15
P-E1-20	8	1.01	158.5	166.00	Ductile Iro	130.0	Open	286.51	286.41	0.10
P-E1-25	8	0.60	94.5	262.00	Ductile Iro	130.0	Open	286.41	286.35	0.06
P-E1-30	8	0.04	5.6	270.00	Ductile Iro	130.0	Open	286.35	286.35	0.00
P-E1-35	8	0.11	16.6	426.00	Ductile Iro	130.0	Open	286.35	286.35	0.00
P-E1-40	8	0.18	27.7	273.00	Ductile Iro	130.0	Open	286.35	286.36	0.01
P-E1-45	8	0.03	3.9	378.00	Ductile Iro	130.0	Open	286.36	286.36	0.00
P-E1-5	8	0.07	11.0	371.00	Ductile Iro	130.0	Open	286.34	286.33	0.00
P-E1-50	8	0.28	43.4	253.00	Ductile Iro	130.0	Open	286.36	286.37	0.01
P-E1-55	8	0.35	54.5	432.00	Ductile Iro	130.0	Open	286.37	286.41	0.04
P-E1-60	12	1.60	563.0	615.00	Ductile Iro	130.0	Open	286.51	287.05	0.54
P-E1-65	12	2.13	751.1	1,523.00	Ductile Iro	130.0	Open	287.05	289.32	2.27
P-E2-1	8	0.71	111.7	660.00	Ductile Iro	130.0	Open	285.63	285.84	0.21
P-E2-10	8	0.65	101.1	322.00	Ductile Iro	130.0	Open	286.10	286.18	0.08
P-E2-100	8	0.18	28.1	252.00	Ductile Iro	130.0	Open	286.13	286.14	0.01
P-E2-105	8	0.25	39.9	432.00	Ductile Iro	130.0	Open	286.14	286.16	0.02
P-E2-110	8	0.31	48.0	168.00	Ductile Iro	130.0	Open	286.16	286.17	0.01
P-E2-115	10	0.74	180.2	741.00	Ductile Iro	130.0	Open	286.17	286.36	0.19
P-E2-120	12	0.33	116.8	161.00	Ductile Iro	130.0	Open	286.36	286.35	0.01
P-E2-125	12	0.84	297.0	544.00	Ductile Iro	130.0	Open	286.36	286.51	0.15
P-E2-130	8	0.62	96.9	269.00	Ductile Iro	130.0	Open	286.28	286.35	0.07
P-E2-135	8	0.04	6.3	282.00	Ductile Iro	130.0	Open	286.28	286.28	0.00

Scenario: Buildout - Max Day
Steady State Analysis
Pipe Report

Label	Diameter (in)	Velocity (ft/s)	Discharge (Absolute Value) (gpm)	Length (ft)	Material	Hazen-Williams C	Control Status	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)
P-E2-140	8	0.06	9.5	350.00	Ductile Iro	130.0	Open	286.28	286.28	0.00
P-E2-145	8	0.46	72.5	261.00	Ductile Iro	130.0	Open	286.28	286.25	0.04
P-E2-15	8	0.72	112.7	552.00	Ductile Iro	130.0	Open	286.18	286.36	0.18
P-E2-150	8	0.06	8.7	352.00	Ductile Iro	130.0	Open	286.25	286.24	0.00
P-E2-155	8	0.04	6.3	274.00	Ductile Iro	130.0	Open	286.25	286.24	0.00
P-E2-160	8	0.31	48.8	263.00	Ductile Iro	130.0	Open	286.25	286.23	0.02
P-E2-165	8	0.04	6.3	287.00	Ductile Iro	130.0	Open	286.23	286.23	0.00
P-E2-170	8	0.06	8.7	337.00	Ductile Iro	130.0	Open	286.23	286.23	0.00
P-E2-175	8	0.16	25.2	258.00	Ductile Iro	130.0	Open	286.23	286.22	0.01
P-E2-180	8	0.08	12.6	270.00	Ductile Iro	130.0	Open	286.22	286.22	0.00
P-E2-185	8	0.04	6.3	267.00	Ductile Iro	130.0	Open	286.22	286.22	0.00
P-E2-190	8	0.02	3.9	257.00	Ductile Iro	130.0	Open	286.22	286.22	0.00
P-E2-195	8	0.03	4.8	238.00	Ductile Iro	130.0	Open	286.22	286.22	0.00
P-E2-20	8	0.09	13.3	221.00	Ductile Iro	130.0	Open	286.22	286.22	0.00
P-E2-200	8	0.68	106.1	177.00	Ductile Iro	130.0	Open	286.22	286.22	0.00
P-E2-205	8	1.00	155.9	279.00	Ductile Iro	130.0	Open	286.36	286.36	0.00
P-E2-210	8	1.02	159.1	279.00	Ductile Iro	130.0	Open	286.17	286.22	0.05
P-E2-215	8	1.31	204.5	369.00	Ductile Iro	130.0	Open	286.22	286.39	0.16
P-E2-220	8	0.07	11.1	331.00	Ductile Iro	130.0	Open	286.39	286.55	0.17
P-E2-225	8	0.03	3.9	302.00	Ductile Iro	130.0	Open	286.55	286.20	0.36
P-E2-230	8	0.15	23.8	269.00	Ductile Iro	130.0	Open	286.20	286.20	0.00
P-E2-235	8	0.23	35.6	474.00	Ductile Iro	130.0	Open	286.20	286.20	0.00
P-E2-240	8	1.34	209.3	263.00	Ductile Iro	130.0	Open	286.20	286.20	0.00
P-E2-245	8	0.69	107.9	259.00	Ductile Iro	130.0	Open	286.20	286.20	0.00
P-E2-25	8	0.09	14.0	345.00	Ductile Iro	130.0	Open	286.20	286.22	0.02
P-E2-250	8	0.08	13.1	554.00	Ductile Iro	130.0	Open	286.20	285.93	0.27
P-E2-251	8	0.30	47.1	269.00	Ductile Iro	130.0	Open	285.93	285.86	0.08
P-E2-255	10	0.97	238.3	737.00	Ductile Iro	130.0	Open	286.36	286.36	0.00
P-E2-260	8	0.26	40.3	190.00	Ductile Iro	130.0	Open	285.86	285.85	0.00
P-E2-265	8	0.07	11.0	413.00	Ductile Iro	130.0	Open	285.61	285.63	0.02
P-E2-270	8	0.15	23.0	297.00	Ductile Iro	130.0	Open	285.85	286.17	0.32
P-E2-275	8	0.06	8.7	413.00	Ductile Iro	130.0	Open	285.85	285.84	0.01
P-E2-280	8	0.02	3.3	278.00	Ductile Iro	130.0	Open	285.84	285.84	0.00
P-E2-285	12	0.04	13.5	315.00	Ductile Iro	130.0	Open	285.84	285.84	0.01
P-E2-290	12	0.21	72.4	445.00	Ductile Iro	130.0	Open	285.84	285.84	0.00
P-E2-295	10	0.83	203.2	663.00	Ductile Iro	130.0	Open	285.84	285.84	0.00
P-E2-30	8	0.10	16.3	232.00	Ductile Iro	130.0	Open	285.84	285.84	0.00
P-E2-300	8	0.52	82.1	249.00	Ductile Iro	130.0	Open	285.84	285.84	0.00
P-E2-305	8	0.07	11.0	484.00	Ductile Iro	130.0	Open	285.84	285.84	0.00
P-E2-310	8	0.38	59.3	256.00	Ductile Iro	130.0	Open	285.63	285.63	0.00
P-E2-315	8	0.07	11.0	486.00	Ductile Iro	130.0	Open	285.63	285.64	0.01
P-E2-320	8	0.22	34.0	254.00	Ductile Iro	130.0	Open	285.64	285.85	0.21
P-E2-325	8	0.07	11.0	485.00	Ductile Iro	130.0	Open	286.36	286.35	0.00
P-E2-330	8	0.06	8.8	250.00	Ductile Iro	130.0	Open	285.86	285.81	0.04
P-E2-335	8	0.40	62.1	725.00	Ductile Iro	130.0	Open	285.81	285.81	0.00
P-E2-340	8	0.03	4.9	308.00	Ductile Iro	130.0	Open	285.81	285.79	0.02
P-E2-345	8	0.24	37.9	249.00	Ductile Iro	130.0	Open	285.79	285.78	0.00
P-E2-35	8	0.04	6.3	237.00	Ductile Iro	130.0	Open	285.79	285.78	0.01
P-E2-40	8	0.01	1.3	266.00	Ductile Iro	130.0	Open	285.78	285.78	0.00
P-E2-45	8	0.06	8.7	238.00	Ductile Iro	130.0	Open	285.78	285.78	0.00
P-E2-5	8	0.84	131.1	605.00	Ductile Iro	130.0	Open	285.86	285.93	0.08
P-E2-50	8	0.10	15.3	217.00	Ductile Iro	130.0	Open	285.93	285.93	0.00
P-E2-55	12	0.08	28.5	499.00	Ductile Iro	130.0	Open	285.86	285.87	0.01
								286.35	286.35	0.00
								286.35	286.35	0.00
								286.35	286.35	0.00
								286.35	286.35	0.00
								285.84	286.10	0.26
								286.35	286.35	0.00
								286.35	286.36	0.00

Scenario: Buildout - Max Day
Steady State Analysis
Pipe Report

Label	Diameter (in)	Velocity (ft/s)	Discharge (Absolute Value) (gpm)	Length (ft)	Material	Hazen-Williams C	Control Status	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)
P-E2-60	8	0.76	119.0	275.00	Ductile Iro	130.0	Open	286.35	286.26	0.10
P-E2-65	8	0.06	8.7	311.00	Ductile Iro	130.0	Open	286.26	286.26	0.00
P-E2-70	8	0.64	100.8	266.00	Ductile Iro	130.0	Open	286.26	286.19	0.07
P-E2-75	8	0.14	22.6	506.00	Ductile Iro	130.0	Open	286.19	286.18	0.01
P-E2-80	8	0.42	65.6	235.00	Ductile Iro	130.0	Open	286.19	286.16	0.03
P-E2-85	8	0.41	64.1	265.00	Ductile Iro	130.0	Open	286.16	286.13	0.03
P-E2-90	8	0.46	72.5	249.00	Ductile Iro	130.0	Open	286.13	286.10	0.04
P-E2-95	8	0.11	17.1	356.00	Ductile Iro	130.0	Open	286.13	286.13	0.00
P-E3-1	8	0.10	15.7	472.00	Ductile Iro	130.0	Open	285.55	285.56	0.00
P-E3-10	12	0.34	121.0	400.00	Ductile Iro	130.0	Open	285.58	285.60	0.02
P-E3-100	8	0.41	64.1	273.00	Ductile Iro	130.0	Open	284.93	284.90	0.03
P-E3-105	8	0.75	117.8	188.00	Ductile Iro	130.0	Open	284.93	284.87	0.07
P-E3-11	8	0.21	32.4	299.00	Ductile Iro	130.0	Open	285.56	285.57	0.01
P-E3-110	8	0.41	64.0	258.00	Ductile Iro	130.0	Open	284.87	284.84	0.03
P-E3-120	8	0.24	37.3	691.00	Ductile Iro	130.0	Open	284.87	284.84	0.03
P-E3-125	12	0.35	122.0	815.00	Ductile Iro	130.0	Open	285.64	285.60	0.04
P-E3-130	8	0.41	64.0	217.00	Ductile Iro	130.0	Open	285.75	285.78	0.02
P-E3-135	8	0.08	11.8	446.00	Ductile Iro	130.0	Open	285.57	285.56	0.00
P-E3-145	8	0.02	2.4	927.00	Ductile Iro	130.0	Open	285.56	285.56	0.00
P-E3-15	8	0.01	1.0	174.00	Ductile Iro	130.0	Open	285.60	285.60	0.00
P-E3-150	8	0.35	54.7	754.00	Ductile Iro	130.0	Open	284.84	284.90	0.06
P-E3-155	8	0.05	8.6	429.00	Ductile Iro	130.0	Open	284.83	284.82	0.00
P-E3-16	8	0.28	43.4	177.00	Ductile Iro	130.0	Open	285.57	285.58	0.01
P-E3-160	8	0.51	80.3	289.00	Ductile Iro	130.0	Open	285.86	285.81	0.05
P-E3-17	8	0.05	7.9	471.00	Ductile Iro	130.0	Open	285.57	285.57	0.00
P-E3-170	8	0.11	16.5	281.00	Ductile Iro	130.0	Open	284.83	284.83	0.00
P-E3-175	8	0.10	15.4	469.00	Ductile Iro	130.0	Open	284.83	284.82	0.00
P-E3-180	8	0.01	1.5	394.00	Ductile Iro	130.0	Open	284.82	284.82	0.00
P-E3-190	8	0.11	16.5	128.00	Ductile Iro	130.0	Open	284.83	284.83	0.00
P-E3-195	8	0.01	0.8	120.00	Ductile Iro	130.0	Open	284.83	284.83	0.00
P-E3-20	8	0.06	9.5	374.00	Ductile Iro	130.0	Open	285.60	285.60	0.00
P-E3-200	8	0.10	14.9	296.00	Ductile Iro	130.0	Open	284.83	284.83	0.00
P-E3-205	8	0.05	7.8	295.00	Ductile Iro	130.0	Open	284.83	284.82	0.00
P-E3-210	8	0.03	4.5	372.00	Ductile Iro	130.0	Open	284.83	284.83	0.00
P-E3-215	8	0.22	34.5	242.00	Ductile Iro	130.0	Open	284.83	284.84	0.01
P-E3-220	8	0.10	15.2	377.00	Ductile Iro	130.0	Open	284.84	284.83	0.00
P-E3-225	8	0.13	20.8	237.00	Ductile Iro	130.0	Open	284.83	284.84	0.00
P-E3-230	8	0.17	27.3	233.00	Ductile Iro	130.0	Open	284.83	284.83	0.01
P-E3-235	12	0.11	37.5	1,171.00	Ductile Iro	130.0	Open	285.27	285.28	0.01
P-E3-245	8	0.20	31.3	276.00	Ductile Iro	130.0	Open	285.61	285.61	0.01
P-E3-25	8	0.10	16.3	274.00	Ductile Iro	130.0	Open	285.60	285.60	0.00
P-E3-30	8	0.16	25.0	275.00	Ductile Iro	130.0	Open	285.60	285.61	0.01
P-E3-40	8	0.04	6.3	346.00	Ductile Iro	130.0	Open	285.75	285.75	0.00
P-E3-42	8	0.06	9.5	323.00	Ductile Iro	130.0	Open	285.61	285.61	0.00
P-E3-45	8	0.32	49.8	254.00	Ductile Iro	130.0	Open	285.75	285.73	0.02
P-E3-50	8	0.04	6.3	276.00	Ductile Iro	130.0	Open	285.73	285.73	0.00
P-E3-55	8	0.04	6.3	223.00	Ductile Iro	130.0	Open	285.73	285.73	0.00
P-E3-60	8	0.18	28.5	256.00	Ductile Iro	130.0	Open	285.73	285.73	0.01
P-E3-65	8	0.04	5.7	219.00	Ductile Iro	130.0	Open	285.73	285.73	0.00
P-E3-70	8	0.00	0.6	254.00	Ductile Iro	130.0	Open	285.73	285.73	0.00
P-E3-71	8	0.08	11.8	417.00	Ductile Iro	130.0	Open	285.73	285.73	0.00
P-E3-75	12	0.86	302.5	373.00	Ductile Iro	130.0	Open	285.73	285.62	0.10
P-E3-80	12	0.89	313.4	264.00	Ductile Iro	130.0	Open	285.73	285.81	0.08

Scenario: Buildout - Max Day
Steady State Analysis
Pipe Report

Label	Diameter (in)	Velocity (ft/s)	Discharge (Absolute Value) (gpm)	Length (ft)	Material	Hazen-Williams C	Control Status	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)
P-E3-81	8	0.04	6.3	374.00	Ductile Iro	130.0	Open	285.73	285.73	0.00
P-E3-85	8	0.01	1.7	695.00	Ductile Iro	130.0	Open	285.81	285.81	0.00
P-E3-86	8	0.04	5.5	308.00	Ductile Iro	130.0	Open	285.62	285.62	0.00
P-E3-87	12	0.83	291.4	185.00	Ductile Iro	130.0	Open	285.58	285.62	0.05
P-E3-90	8	0.41	63.9	257.00	Ductile Iro	130.0	Open	285.81	285.78	0.03
P-E3-91	8	0.04	6.3	343.00	Ductile Iro	130.0	Open	285.81	285.81	0.00
P-E3-94	12	1.05	369.1	763.00	Ductile Iro	130.0	Open	285.27	285.58	0.31
P-E3-96	12	1.13	399.7	734.00	Ductile Iro	130.0	Open	284.93	285.27	0.34
P-E4-1	8	0.27	41.7	327.00	Ductile Iro	130.0	Open	283.87	283.86	0.02
P-E4-10	6	0.43	38.1	455.00	Ductile Iro	130.0	Open	283.85	283.93	0.08
P-E4-12	12	0.07	26.2	902.00	Ductile Iro	130.0	Open	283.93	283.93	0.00
P-E4-15	12	0.48	169.3	1,019.00	Ductile Iro	130.0	Open	283.93	284.03	0.10
P-E4-20	10	0.20	48.8	274.00	Ductile Iro	130.0	Open	283.88	283.87	0.01
P-E4-30	8	0.05	7.1	200.00	Ductile Iro	130.0	Open	283.87	283.87	0.00
P-E4-35	8	0.17	25.9	259.00	Ductile Iro	130.0	Open	283.86	283.85	0.01
P-E4-40	8	0.05	8.0	255.00	Ductile Iro	130.0	Open	283.85	283.85	0.00
P-E4-45	8	0.07	10.3	356.00	Ductile Iro	130.0	Open	283.85	283.85	0.00
P-E4-5	8	0.24	36.9	637.00	Ductile Iro	130.0	Open	284.79	284.82	0.03
P-E4-50	8	0.10	15.8	533.00	Ductile Iro	130.0	Open	283.85	283.85	0.00
P-E4-55	8	0.09	14.7	599.00	Ductile Iro	130.0	Open	284.82	284.82	0.00
P-E4-60	8	0.11	17.7	246.00	Ductile Iro	130.0	Open	284.82	284.82	0.00
P-E4-65	8	0.03	4.4	450.00	Ductile Iro	130.0	Open	284.82	284.82	0.00
P-E4-70	8	0.17	26.1	191.00	Ductile Iro	130.0	Open	284.82	284.82	0.00
P-E4-75	8	0.18	28.1	432.00	Ductile Iro	130.0	Open	284.82	284.82	0.00
P-E4-80	8	0.07	11.7	308.00	Ductile Iro	130.0	Open	284.82	284.83	0.01
P-E4-85	8	0.13	21.1	605.00	Ductile Iro	130.0	Open	284.83	284.84	0.01
P-E4-90	8	0.35	54.7	118.00	Ductile Iro	130.0	Open	284.84	284.84	0.00
P-E4-91	12	0.16	55.5	148.00	Ductile Iro	130.0	Open	284.84	284.85	0.01
P-E4-92	12	0.16	55.5	785.00	Ductile Iro	130.0	Open	283.78	283.93	0.15
P-E5-1	10	0.53	130.4	1,036.00	Ductile Iro	130.0	Open	284.03	283.93	0.10
P-E5-10	6	0.19	16.8	2,530.00	Ductile Iro	130.0	Open	283.85	283.78	0.07
P-E5-15	6	0.17	15.1	2,149.00	Ductile Iro	130.0	Open	283.78	283.78	0.00
P-E5-18	10	0.04	8.8	642.00	Ductile Iro	130.0	Open	283.93	284.11	0.18
P-E5-5	10	0.61	148.7	990.00	Ductile Iro	130.0	Open	289.32	289.53	0.22
P-F1-1	12	3.60	1,269.0	55.00	Ductile Iro	130.0	Open	289.32	289.12	0.20
P-F1-10	12	1.34	473.9	317.00	Ductile Iro	130.0	Open	289.12	289.02	0.10
P-F1-15	12	0.97	343.4	281.00	Ductile Iro	130.0	Open	289.53	289.87	0.34
P-F1-2	12	4.82	1,700.0	50.00	Ductile Iro	130.0	Open	285.93	285.87	0.07
P-F2-1	8	0.42	65.5	564.00	Ductile Iro	130.0	Open	289.02	288.45	0.57
P-F2-10	12	0.87	307.2	1,983.00	Ductile Iro	130.0	Open	285.97	286.02	0.05
P-F2-11	8	0.53	82.9	262.00	Ductile Iro	130.0	Open	286.02	286.00	0.02
P-F2-16	8	0.43	67.9	181.00	Ductile Iro	130.0	Open	289.53	288.48	1.05
P-F2-2	12	1.22	431.0	1,972.00	Ductile Iro	130.0	Open	286.00	286.00	0.00
P-F2-21	8	0.07	11.0	440.00	Ductile Iro	130.0	Open	286.00	285.98	0.02
P-F2-26	8	0.30	47.4	251.00	Ductile Iro	130.0	Open	285.98	285.98	0.00
P-F2-31	8	0.05	7.9	367.00	Ductile Iro	130.0	Open	286.49	286.51	0.02
P-F2-36	12	0.45	160.3	248.00	Ductile Iro	130.0	Open	286.51	286.99	0.48
P-F2-41	8	2.42	379.4	158.00	Ductile Iro	130.0	Open	286.99	286.99	0.00
P-F2-46	8	0.06	8.7	172.00	Ductile Iro	130.0	Open	289.12	288.48	0.63
P-F2-5	8	0.83	130.5	1,963.00	PVC	150.0	Open	286.99	288.00	1.01
P-F2-51	8	2.48	388.1	319.00	Ductile Iro	130.0	Open	286.51	286.47	0.04
P-F2-56	12	0.62	218.4	266.00	Ductile Iro	130.0	Open	285.93	285.97	0.04
P-F2-6	8	0.45	70.0	299.00	Ductile Iro	130.0	Open			

Scenario: Buildout - Max Day
Steady State Analysis
Pipe Report

Label	Diameter (in)	Velocity (ft/s)	Discharge (Absolute Value) (gpm)	Length (ft)	Material	Hazen-Williams C	Control Status	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)
P-F2-61	8	0.06	9.5	313.00	Ductile Iro	130.0	Open	286.47	286.47	0.00
P-F2-66	8	1.02	160.3	767.00	Ductile Iro	130.0	Open	286.02	286.49	0.47
P-F2-7	12	1.12	396.0	989.00	Ductile Iro	130.0	Open	288.45	288.00	0.45
P-F3-1	8	0.07	11.0	374.00	Ductile Iro	130.0	Open	285.89	285.89	0.00
P-F3-10	8	1.62	254.6	428.00	Ductile Iro	130.0	Open	285.99	285.37	0.62
P-F3-100	12	0.53	186.9	267.00	Ductile Iro	130.0	Open	286.40	286.37	0.03
P-F3-105	12	0.51	179.0	269.00	Ductile Iro	130.0	Open	286.37	286.35	0.03
P-F3-11	8	0.04	6.3	219.00	Ductile Iro	130.0	Open	285.89	285.89	0.00
P-F3-110	8	0.06	9.5	346.00	Ductile Iro	130.0	Open	285.87	285.86	0.00
P-F3-115	8	0.01	1.0	645.00	Ductile Iro	130.0	Open	285.97	285.97	0.00
P-F3-116	12	0.57	202.3	456.00	Ductile Iro	130.0	Open	285.28	285.22	0.06
P-F3-117	12	0.56	195.8	857.00	Ductile Iro	130.0	Open	285.22	285.11	0.11
P-F3-118	12	0.56	195.8	2,339.00	Ductile Iro	130.0	Open	285.11	284.82	0.29
P-F3-12	12	0.97	340.3	252.00	Ductile Iro	130.0	Open	285.81	285.89	0.09
P-F3-120	8	0.20	30.8	248.00	Ductile Iro	130.0	Open	285.98	285.97	0.01
P-F3-125	12	0.59	206.6	261.00	Ductile Iro	130.0	Open	286.47	286.44	0.04
P-F3-15	8	0.04	5.5	257.00	Ductile Iro	130.0	Open	285.37	285.37	0.00
P-F3-20	8	0.03	4.7	167.00	Ductile Iro	130.0	Open	286.32	286.32	0.00
P-F3-25	8	0.06	9.5	428.00	Ductile Iro	130.0	Open	285.98	285.98	0.00
P-F3-30	8	0.07	11.0	493.00	Ductile Iro	130.0	Open	285.97	285.97	0.00
P-F3-35	8	0.09	13.5	246.00	Ductile Iro	130.0	Open	285.97	285.97	0.00
P-F3-40	8	0.04	6.3	308.00	Ductile Iro	130.0	Open	285.97	285.97	0.00
P-F3-45	8	0.06	8.7	289.00	Ductile Iro	130.0	Open	286.44	286.44	0.00
P-F3-5	12	1.04	365.6	259.00	Ductile Iro	130.0	Open	285.89	285.99	0.10
P-F3-50	8	0.04	6.3	241.00	Ductile Iro	130.0	Open	286.40	286.40	0.00
P-F3-55	8	0.04	5.5	212.00	Ductile Iro	130.0	Open	286.37	286.37	0.00
P-F3-60	12	0.03	10.3	220.00	Ductile Iro	130.0	Open	286.35	286.35	0.00
P-F3-65	12	0.48	167.9	324.00	Ductile Iro	130.0	Open	286.35	286.32	0.03
P-F3-70	8	0.01	2.1	247.00	Ductile Iro	130.0	Open	285.97	285.97	0.00
P-F3-75	8	0.17	27.3	249.00	Ductile Iro	130.0	Open	285.97	285.98	0.01
P-F3-8	12	0.70	245.1	511.00	Ductile Iro	130.0	Open	285.37	285.28	0.10
P-F3-80	8	0.31	47.8	258.00	Ductile Iro	130.0	Open	285.98	285.99	0.02
P-F3-85	12	1.93	679.0	259.00	Ductile Iro	130.0	Open	285.99	286.32	0.32
P-F3-95	12	0.55	195.5	266.00	Ductile Iro	130.0	Open	286.44	286.40	0.03
P-F4-1	12	0.63	221.1	1,001.00	Ductile Iro	130.0	Open	284.03	284.18	0.16
P-F4-11	12	1.24	438.1	755.00	Ductile Iro	130.0	Open	284.82	284.41	0.42
P-F4-12	12	0.48	169.0	2,196.00	Ductile Iro	130.0	Open	284.41	284.20	0.21
P-F4-13	12	0.76	269.2	1,016.00	Ductile Iro	130.0	Open	284.18	284.41	0.23
P-F4-5	6	0.17	14.8	2,398.00	Ductile Iro	130.0	Open	284.18	284.11	0.07
P-F4-6	12	0.90	317.7	399.00	Ductile Iro	130.0	Open	284.82	284.94	0.12
P-F4-70	12	0.37	130.8	1,555.00	Ductile Iro	130.0	Open	284.94	284.85	0.09
P-F5-5	12	0.48	169.0	983.00	Ductile Iro	130.0	Open	284.11	284.20	0.09
PC3-55	10	0.29	70.1	865.00	Ductile Iro	130.0	Open	284.81	284.77	0.04

Scenario: Buildout - Max Day
Steady State Analysis
Reservoir Report

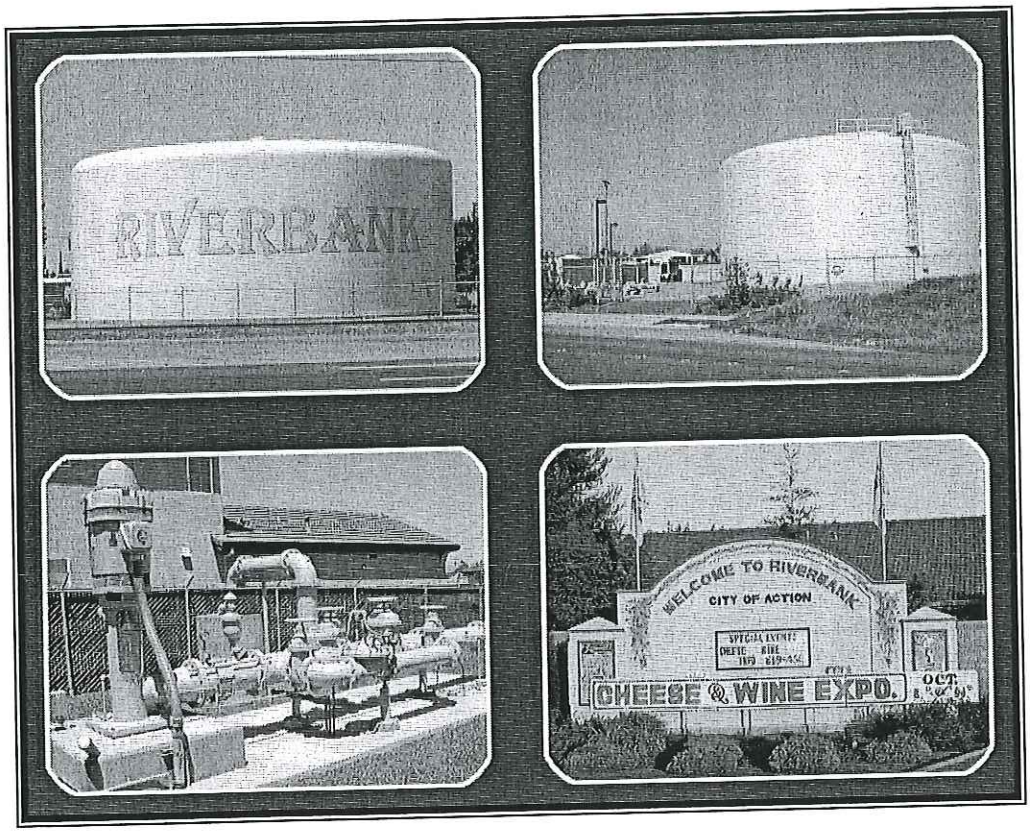
Label	Elevation (ft)	Zone	Inflow (gpm)	Calculated Hydraulic Grade (ft)
R-1	285	Zone	93.0	285.00
R-2	285	Zone	483.0	285.00
R-3	285	Zone	-523.7	285.00

APPENDIX E

WELL DESIGN CRITERIA

CITY OF RIVERBANK
2006 WATER SUPPLY STUDY AND UPDATED WATER MASTER PLAN

WELL DESIGN CRITERIA TECHNICAL MEMORANDUM



DRAFT

MARCH 2006

NOLTE

BEYOND ENGINEERING

CITY OF RIVERBANK

2006 WATER SUPPLY STUDY AND UPDATED WATER MASTER PLAN

WELL DESIGN CRITERIA TECHNICAL MEMORANDUM

DRAFT

MARCH 2006

Prepared for:

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CITY OF RIVERBANK
2006 WATER SUPPLY STUDY AND UPDATED WATER MASTER PLAN
WELL DESIGN CRITERIA

TECHNICAL MEMORANDUM
ADMINISTRATIVE DRAFT
March 2006

This technical memorandum provides a summary of the design elements specific to the City of Riverbank (City) water supply wells including site work, building, architectural, mechanical, electrical, instrumentation, and control criteria and standards. Water supply wells will be designed in accordance with the *California Well Standards (DWR Bulletins 74-81 and 74-90)* [1, 2], and Stanislaus County Requirements [3].

General

Water supply well buildings typically include one room housing pump equipment (wellhead, discharge piping, and electrical controls), and chlorination storage and injection equipment.

Site Design Criteria

The following criteria apply to water supply well site design:

1. Typically, a one-acre site is set aside for a new water supply well. This provides adequate area for installation of a test well (that is later converted to a monitoring well), the production well, and a future production well, in addition to providing space for a well building, driveway turn-around for large maintenance vehicles, and landscaping setbacks.

2. The water supply well building will be designed to blend-in with the surrounding development/building architecture.

3. The well site will have a minimum 24-foot wide driveway with a gate to deter public access. The driveway access gate will be located such that a maintenance truck can pull completely off the road in front of the gate (minimum 20 feet). Driveways will be designed per City Standards.

4. The paved area around the well building will be designed to accommodate the turning radius for the largest maintenance vehicle (i.e., WB-50) expected to be used at the site. Access and operating space for pump removal cranes/rigs must also be provided.

5. Access will be provided to the test well. An aggregate base road is acceptable.

6. A location for a future replacement well at the site will be identified. The production well will be located a minimum of 100 feet from the future replacement well location and 100 feet from the test well/monitoring well.

7. The future replacement well location will be placed a minimum of 25 feet from any adjacent property line.

8. The production well and future replacement well will be sited at a minimum based on minimum setbacks specified in the *California Well Standards*, shown in Table 1. A proposed well site may be rejected based on its proximity to possible future contamination.

TABLE 1
REQUIRED SETBACK DISTANCES
PER CALIFORNIA WELL STANDARDS

Potential Pollution or Contamination Source	Minimum Horizontal Separation Distance Between Well and Known or Potential Source
Any sewer line (sanitary, industrial, or storm; main or lateral)	50 feet
Watertight septic tank or subsurface sewage leaching field	100 feet
Cesspool or seepage pit	150 feet
Animal or fowl enclosure	100 feet

9. Water well facilities will require the following utility connections:

    a. Water: for connecting the well to the distribution system

    b. Storm Drainage: for site drainage and connection to well bypass piping

    c. Electricity: to meet facility electrical requirements

    d. Communication: to provide a phone line and potential backup digital SCADA connection

10. The site must be well drained with access to the storm drain system for bypass and pump test water.

11. The site must have adequate space and access for supporting facilities including emergency generator, transformer, and motor control system.

12. The site should have a perimeter block wall for security and noise abatement.

Building Design and Architecture

Well building design and architectural criteria and standards are described below.

Design Criteria

1. The building will be designed to enclose all well and chemical addition equipment.

2. A roof hatch will be installed over the well to allow the removal of the pump and motor for maintenance, replacement of the pump, or work on the well. Roof tie-downs and safety equipment will be installed per OSHA standards.

3. During preliminary design, a review of the most current CFC and CBC will be performed to verify ventilation requirements.

Design Standards

1. Interior Concrete Coatings: Coatings will not be used on the concrete floors or the interior of CMU walls.

2. Access Doors: The pump room will have two man-doors and one roll-up door (minimum 6 feet wide). The roll-up door and one man-door will be located at the wellhead, each on a wall 90 degrees to the other. This provides a crane operator an unobstructed view into the pump room (during pump and column removal) while the other door can be used for support personnel and equipment access.

Mechanical Design

Mechanical design criteria and standards are described below.

Design Criteria

1. Sodium Hypochlorite (NaOCl) Storage: NaOCl is injected according to City operations plans and needs. A 50-gallon NaOCl day tank will be provided, at a minimum. Additional storage capacity and equipment may be required for future wells.

2. Valve requirements: A well pump pressure relief valve will be designed to alleviate half of the well pump flow to relieve a temporary high system pressure situation. The pressure relief valve is not sized for deadhead conditions. If a high well discharge pressure setpoint is triggered, the well will automatically shuts down.

Design Standards

1. Mechanical:

    a. The waste bypass structure (air gap) will be provided. The air gap will be designed with a duck-bill valve. Two pipe diameters of clear space will be provided between the flood rim of the receiving vessel to the supply line and the outlet of the duck bill valve.

b. Two sampling locations will be provided: one on the well discharge piping prior to the check valve and a second mounted on an interior wall of the pump room, but taps the well discharge line outside the building after chemical injection.

c. Containment for sodium hypochlorite will be provided as required in the CFC and CBC.

d. All valves on sodium hypochlorite chemical piping will be diaphragm style to prevent valve locking and other problems associated with chemical off-gassing.

e. Sodium hypochlorite piping will not have any local high points to help prevent offgassing problems.

f. All chemical piping will be Sch. 80 PVC.

2. Plumbing:

   a. Acid waste drain piping will be used for drain lines due to the potentially corrosive nature of the liquids that may need to be drained from the disinfection system.

   b. One hose bibb and hose rack will be installed in the well building.

3. Ventilation:

   a. Thermostat controlled ventilation will be used in the well building.

   b. Exhaust fans will provide between 30 to 60 air changes per hour. All exhaust fans will have lockable disconnect switches at the MCC for maintenance purposes.

   c. Louvers will be installed with backdraft dampers to prevent water penetration in the well building. Louvers will be sized to provide sufficient intake for the exhaust fan and to prevent negative pressures in the building.

4. Heating:

   a. Unit heaters will be used in the well building.

   b. Thermostat control with manual override will be used for heating system operation.

   c. Heating is intended only to provide freeze and condensation protection for the equipment.

5. Noise Mitigation: Wells and mechanical equipment must comply with the City Noise Control Ordinance.

Standard Well Mechanical Equipment

The following lists the mechanical equipment typically installed at water supply well facilities.

1. Pump Equipment:

    a. Well Liquid Level Indicator – with cable suspended sensor and remote electronics; transmitter to connect to SCADA system.

    b. Pump Discharge Pressure Indicator – comprised of a pressure transducer installed on the discharge piping after the check valve.

    c. Magnetic Flowmeter – electromagnetic design with an integral transmitter.

    d. Well Pump and Motor – water-lubed vertical turbine pump with a premium efficiency motor.

    e. Check Valve – on the discharge piping after the tee to the pump control valve on the waste line.

    f. Pump Control Valve and Pressure Relief Valve – located on the pump waste bypass line. Because the pump control valve will send the water initially produced during start-up, a sand trap is not required.

    g. Butterfly Valve – located on discharge piping after the flowmeter.

    h. Pump Waste Bypass Line – to bypass the well discharge piping during well startup. The pump waste bypass line will have an air gap outside of the building and empty to the storm drain.

    i. Emergency Shower/Eyewash Station – hand and foot-operated shower and eyewash station with floor drain (in case of human exposure to chemicals).

    j. Heater – overhead, thermostat-controlled, radiant heater sufficient to keep temperatures in the room above freezing and to prevent condensation on equipment (thermostat and manual control).

    k. Exhaust Fan – centrifugal roof fans to ventilate pump room (thermostat and manual control). All roof fans will also have lockable disconnect switches at the MCC for maintenance purposes.

2. Disinfection Equipment:

    a. Day Tank – to provide seven days of disinfection without refill.

b. Metering Pump – to regulate injection of sodium hypochlorite into discharge line.

Equipment Specified as "No Equal"

The well facilities are important to the City's ability to ensure a supply of treated water, especially in the summer months. The use of a "No Equal" specification ensures that the City is able to standardize certain equipment to increase the reliability, availability, and maintainability of the facility.

Standardization of critical equipment allows City staff to have the required training, tools, and spare parts to respond rapidly to equipment problems and place the facilities back in service as quickly as possible. In addition, standardization ensures that facilities are operated efficiently.

1. Cla-Val Deep Well Pump Control Valve: The City uses Cla-Val as the standard pump control valve for all wells. The control valves (along with the pilot valves unique to this manufacturer) have been very reliable and durable. The use of a single valve manufacturer allows the City to consolidate spare parts and minimize maintenance staff training. In addition, standardization allows operations such as the manual override of the valve to be consistent from well to well.

Electrical, Instrumentation, and Control System Design

Electrical, instrumentation, and control system design criteria and standards are summarized below.

1. Well Pump Motor Controls:

    a. Utilize soft starters for all motors and pumps.

    b. The number of relays used within the motor elementary will be minimized.

    c. Provide external motor overload protection and motor overtemp relay.

    d. Show hand-off-remote, indicating lights and human interface panel (if applicable) on door of motor control center.

2. Pump Control Valve:

    a. Starter type dependent on motor horsepower and fixed or variable speed operating requirements. All solid state 'soft start' and VFD drives shall be equipped with bypass contactors. VFD drives of 200HP or greater shall be 18-pulse or greater for harmonic suppression.

    b. The number of relays used within the motor elementary will be minimized.

c. Provide external motor overload protection and motor overtemp relay (for all VFD drives and all motors 100HP and larger).

d. Minimum control features at the motor control center shall include hand-off-remote switch, run and ready indicating lights, and a run time meter for each pump.

3. Pump Control Valve:

a. The PLC will directly control the valve.

b. Hand control for the pump control valve will be located on the solenoid itself.

c. Limit switch position feedback will be provided for both ends of travel and connected directly to the PLC discrete input module.

d. The PLC will be programmed to close the valve after a wasting time delay.

4. Pressure Relief Valve:

a. The PLC will monitor the closed position status of the relief valve. A limit switch will be specified with the valve to actuate in the closed position.

5. Chemical Pump Control Panel:

a. The pumps will have quick disconnect capabilities from the panel power and controls.

b. The metering pump will be capable of hand speed control at the pump.

c. Local-off-remote controls and running lights will be provided for each pump.

6. Instrumentation:

a. All transmitters will output 4-20 mA signals to the PLC.

b. Magnetic flow transmitter will be used to measure well pump flow. For well flow applications, the flow tube and transmitter will be integral. The flowmeter will be installed above grade and within the building. Sufficient pipe diameters of straight run must be provided to maintain the manufacturer's specified accuracy. Flow transmitters will be powered from the PLC UPS. The flowmeter will be installed after the pressure relief valve and just prior to the last discharge piping valve.

c. Pressure transmitters will be smart electronics, gauge pressure type with digital LCD display. A shutoff valve and calibration valve are required for service. A transmitter will be provided on the well pump discharge after the check valve.

d. Pressure indicators will be gauge dial type with stainless steel housing and wetted parts. Pressure indicators will be provided before and after the discharge piping check valve.

e. Pump and valve control logic and chemical pacing logic shall be fully implemented in the programmable logic controller. Programmable logic controller shall be Allen-Bradley Control Logix with the following standard I/O modules supplied in quantities required.

f. Display and operation access to all control parameters analog signals, setpoints, timers, alarms, and indication shall be provided via a door-mounted Operator Interface Display Terminal (OID). All settable values shall be password protected. OID shall be Allen-Bradley PanelView Plus 700.

g. Smoke and heat detectors will be provided in the pump and electrical room.

7. Emergency power shall be provided at all well sites. Emergency power shall be provided by standby service rated diesel engine driven emergency generator in an outdoor enclosure with generator breaker, battery charger, and double walled base tank rated for 12-hour runtime at full load.

   Automatic transfer switch shall provide automatic starting of the emergency generator and transfer to the emergency source. A manual transfer switch shall provide means for isolating the onsite generator and connecting a portable generating unit. Requirements for sound attenuating features of the generator enclosure and the selection of the generator silencer class shall be site specific. Emergency generator selection will be determined by the requirements of motor starting, load sequencing total loading and (where applicable) derating for generator heating due to harmonics associated with VFD drives.

8. Telemetry shall utilize spread spectrum frequency hopping radio modems operating in the _____ band. A radio survey shall be performed at each site to determine the necessary mast height and Yagi antennae selection.

References

[1] *Water Well Standards: State of California (Bulletin 74-81)*, California Department of Water Resources, December 1981.

[2] *California Well Standards (Bulletin 74-90, Supplement to Bulletin 74-81)*, California Department of Water Resources, June 1991

[3] *Stanislaus County Code, Title 9 – Health and Safety, Chapter 9.36 Water Wells*, Stanislaus County, http://www.co.stanislaus.ca.us/BOARD/ch9-36.htm

Scenario: Existing - Peak Hour
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-C1-115	316.00	8	130.0	1.30	-203.8	281.68	281.99	0.30	0.96
P-C1-120	188.00	10	130.0	2.63	-643.2	281.17	281.68	0.51	2.72
P-C1-125	390.00	8	130.0	2.96	-463.2	281.68	283.40	1.71	4.39
P-C1-130	607.00	8	130.0	3.10	-485.7	283.40	286.31	2.91	4.80
P-C1-135	404.00	8	130.0	4.44	-695.3	282.54	286.31	3.76	9.32
P-C1-140	522.00	6	130.0	0.26	23.3	280.84	280.81	0.04	0.07
P-C1-145	218.00	12	130.0	1.18	-417.5	281.06	281.17	0.11	0.50
P-C1-15	428.00	6	130.0	0.16	-13.9	280.70	280.71	0.01	0.03
P-C1-150	659.00	12	130.0	0.34	-119.6	280.83	280.86	0.03	0.05
P-C1-155	068.00	8	130.0	0.51	-80.1	280.70	280.88	0.18	0.17
P-C1-20	70.00	6	130.0	0.04	-3.1	280.70	280.70	0.00	0.00
P-C1-25	270.00	6	130.0	0.14	-12.6	280.70	280.70	0.01	0.02
P-C1-30	216.00	8	130.0	0.15	23.5	280.70	280.70	0.00	0.02
P-C1-35	247.00	8	130.0	0.09	13.3	280.70	280.70	0.00	0.01
P-C1-40	556.00	8	130.0	0.11	17.8	280.70	280.69	0.01	0.01
P-C1-45	048.00	6	130.0	0.13	-11.8	280.70	280.72	0.02	0.02
P-C1-5	254.00	6	130.0	0.09	7.9	280.69	280.69	0.00	0.01
P-C1-50	518.00	6	130.0	0.62	-54.5	280.72	280.90	0.18	0.34
P-C1-55	274.00	8	130.0	0.27	-42.6	280.88	280.90	0.01	0.05
P-C1-60	342.00	6	130.0	0.63	-55.3	280.88	281.00	0.12	0.35
P-C1-65	334.00	12	130.0	0.96	-338.4	280.95	281.06	0.11	0.34
P-C1-70	424.00	8	130.0	0.45	-70.8	281.00	281.06	0.06	0.14
P-C1-75	140.00	8	130.0	0.75	-117.3	280.90	280.95	0.05	0.35
P-C1-80	538.00	12	130.0	0.63	221.1	280.95	280.86	0.08	0.15
P-C1-85	212.00	8	130.0	0.65	101.5	280.86	280.81	0.06	0.26
P-C1-90	479.00	8	130.0	0.61	95.1	280.81	280.70	0.11	0.23
P-C1-95	519.00	6	130.0	0.82	-72.6	280.70	281.00	0.30	0.58
P-C2-10	513.00	6	130.0	0.30	26.8	280.31	280.27	0.05	0.09
P-C2-100	311.00	6	130.0	0.42	-37.3	280.02	280.07	0.05	0.17
P-C2-105	262.00	6	130.0	0.72	-63.6	280.07	280.19	0.12	0.45
P-C2-110	245.00	6	130.0	0.92	-81.4	280.19	280.36	0.17	0.71
P-C2-115	233.00	10	130.0	0.96	233.8	280.15	280.06	0.10	0.42
P-C2-120	185.00	8	130.0	0.72	-113.6	280.36	280.42	0.06	0.33
P-C2-125	290.00	6	130.0	1.56	137.7	281.42	280.87	0.55	1.89
P-C2-130	285.00	6	130.0	1.17	103.5	280.87	280.55	0.32	1.11
P-C2-135	205.00	6	130.0	1.07	94.0	280.55	280.36	0.19	0.93
P-C2-140	257.00	6	130.0	0.01	-0.5	280.36	280.36	0.00	0.00
P-C2-145	499.00	8	130.0	0.22	34.2	280.87	280.85	0.02	0.04
P-C2-15	266.00	8	130.0	0.62	97.1	280.27	280.20	0.06	0.24
P-C2-150	509.00	8	130.0	0.18	29.0	280.85	280.84	0.01	0.03
P-C2-155	375.00	8	130.0	0.05	7.8	280.85	280.85	0.00	0.00
P-C2-160	258.00	8	130.0	0.36	56.5	280.86	280.84	0.02	0.09
P-C2-165	527.00	6	130.0	1.67	-147.2	281.42	282.54	1.12	2.13
P-C2-170	605.00	6	130.0	1.08	-94.9	280.42	281.00	0.57	0.95
P-C2-175	518.00	8	130.0	0.28	-43.6	280.42	280.45	0.03	0.06
P-C2-180	608.00	8	130.0	0.81	-127.4	280.45	280.70	0.24	0.40
P-C2-185	708.00	6	130.0	0.01	-0.7	280.02	280.02	0.00	0.00
P-C2-190	808.00	6	130.0	0.41	36.3	279.76	279.63	0.13	0.16
P-C2-195	396.00	8	130.0	1.05	-164.4	279.76	280.01	0.26	0.65
P-C2-20	265.00	8	130.0	0.12	19.0	280.20	280.20	0.00	0.01
P-C2-200	670.00	6	130.0	0.14	-12.0	280.06	280.07	0.01	0.02

Scenario: Existing - Peak Hour
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-C2-205	292.00	8	130.0	0.10	15.4	280.04	280.04	0.00	0.01
P-C2-210	111.00	8	130.0	0.72	-113.1	280.33	280.36	0.04	0.32
P-C2-215	263.00	8	130.0	0.59	92.9	280.33	280.27	0.06	0.22
P-C2-220	522.00	10	130.0	1.10	268.3	279.61	279.33	0.28	0.54
P-C2-225	563.00	8	130.0	0.85	133.4	279.61	279.37	0.25	0.44
P-C2-230	494.00	10	130.0	0.21	-50.8	280.03	280.04	0.01	0.02
P-C2-235	140.00	10	130.0	0.41	-99.5	280.04	280.05	0.01	0.09
P-C2-25	263.00	8	130.0	0.45	69.8	280.20	280.17	0.03	0.13
P-C2-30	267.00	8	130.0	0.11	17.8	280.17	280.17	0.00	0.01
P-C2-35	274.00	8	130.0	0.28	43.7	280.17	280.15	0.02	0.06
P-C2-40	396.00	10	130.0	0.80	-196.1	280.15	280.27	0.12	0.30
P-C2-45	176.00	10	130.0	1.73	424.2	280.27	280.05	0.22	1.26
P-C2-5	557.00	6	130.0	0.52	45.8	280.45	280.31	0.14	0.25
P-C2-50	664.00	10	130.0	1.22	299.8	280.05	279.61	0.44	0.66
P-C2-55	142.00	8	130.0	0.01	-1.7	279.61	279.61	0.00	0.00
P-C2-60	598.00	8	130.0	0.19	-30.0	279.61	279.63	0.02	0.03
P-C2-65	358.00	6	130.0	0.20	17.8	279.49	279.47	0.02	0.04
P-C2-70	245.00	8	130.0	1.00	-157.3	279.61	279.76	0.15	0.59
P-C2-75	295.00	6	130.0	0.61	-54.2	279.76	279.86	0.10	0.34
P-C2-80	386.00	6	130.0	0.78	-68.4	279.86	280.06	0.20	0.52
P-C2-85	251.00	10	130.0	0.59	144.2	280.06	280.01	0.04	0.17
P-C2-90	286.00	10	130.0	0.16	-39.3	280.01	280.02	0.00	0.02
P-C2-95	756.00	10	130.0	0.26	-63.7	280.02	280.05	0.03	0.04
P-C3-1	053.00	8	130.0	0.02	-3.0	279.33	279.33	0.00	0.00
P-C3-10	313.00	8	130.0	0.05	8.0	279.37	279.36	0.00	0.00
P-C3-15	490.00	8	130.0	0.50	77.7	279.36	279.29	0.08	0.16
P-C3-20	398.00	6	130.0	0.32	28.6	279.29	279.25	0.04	0.10
P-C3-25	598.00	6	130.0	0.00	0.1	279.25	279.25	0.00	0.00
P-C3-30	398.00	6	130.0	0.21	-18.9	279.25	279.27	0.02	0.05
P-C3-35	618.00	8	130.0	0.22	34.3	279.29	279.27	0.02	0.04
P-C3-40	243.00	8	130.0	0.49	76.0	279.33	279.29	0.04	0.15
P-C3-45	668.00	6	130.0	0.79	-69.8	279.19	280.08	0.89	0.54
P-C3-5	88.00	8	130.0	0.80	-125.4	279.33	279.37	0.03	0.39
P-C3-50	423.00	10	130.0	0.45	109.8	279.33	279.18	0.15	0.10
P-C4-1	304.00	6	130.0	0.84	73.8	266.58	265.81	0.77	0.59
P-C4-10	321.00	8	130.0	2.13	333.9	264.25	263.49	0.77	2.39
P-C4-15	331.00	8	130.0	2.25	352.2	263.49	262.61	0.88	2.64
P-C4-20	333.00	8	130.0	0.11	17.4	262.61	262.61	0.00	0.01
P-C4-230	304.00	6	130.0	1.14	100.9	264.87	263.49	1.38	1.06
P-C4-25	278.00	8	130.0	1.30	-204.0	262.61	263.84	1.23	0.96
P-C4-30	693.00	10	130.0	1.90	-464.4	263.84	264.87	1.03	1.49
P-C4-35	194.00	12	130.0	1.45	-510.5	264.02	264.16	0.14	0.73
P-C4-45	417.00	6	130.0	1.74	153.3	264.28	263.32	0.96	2.30
P-C4-5	333.00	8	130.0	3.06	479.1	265.81	264.25	1.56	4.67
P-C4-50	307.00	10	130.0	2.76	675.9	263.84	262.92	0.92	2.98
P-C4-55	286.00	12	130.0	1.34	472.5	264.02	263.84	0.18	0.63
P-C4-60	662.00	10	130.0	2.56	627.0	266.58	264.87	1.72	2.59
P-C4-65	352.00	10	130.0	2.62	640.3	262.92	261.97	0.95	2.70
P-C4-75	220.00	6	130.0	11.35	-1,000.0	264.31	280.62	16.32	74.17
P-C4-80	449.00	8	130.0	1.86	-291.2	263.32	264.16	0.83	1.86
P-C4-85	188.00	12	130.0	0.56	198.4	264.31	264.28	0.02	0.13

Scenario: Existing - Peak Hour
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-C4-90	88.00	12	130.0	2.27	-801.6	264.16	264.31	0.15	1.68
P-C5-1	249.00	6	130.0	2.79	246.1	263.48	262.11	1.38	5.53
P-C5-10	317.00	12	130.0	0.55	192.5	261.64	261.60	0.04	0.12
P-C5-15	348.00	10	130.0	2.09	512.5	261.60	260.98	0.62	1.79
P-C5-20	283.00	6	130.0	1.54	135.7	260.98	260.46	0.52	1.84
P-C5-25	488.00	6	130.0	1.00	88.2	260.46	260.06	0.40	0.83
P-C5-30	807.00	6	130.0	1.08	95.3	264.25	263.48	0.77	0.95
P-C5-35	123.00	6	130.0	0.03	3.0	263.49	263.48	0.00	0.00
P-C5-40	349.00	10	130.0	1.31	320.1	262.61	261.60	1.01	0.75
P-C5-45	851.00	6	130.0	0.37	32.4	260.06	259.95	0.11	0.13
P-C5-5	297.00	10	130.0	0.86	211.6	261.74	261.64	0.10	0.35
P-C5-50	976.00	10	130.0	1.54	376.8	260.98	259.99	0.99	1.01
P-C5-60	301.00	8	130.0	1.47	230.7	262.11	261.74	0.36	1.21
P-D1-10	221.00	8	130.0	0.05	8.3	281.00	281.00	0.00	0.00
P-D1-15	253.00	12	130.0	0.18	62.2	281.00	280.99	0.00	0.01
P-D1-20	383.00	6	130.0	0.26	22.6	280.99	280.97	0.03	0.07
P-D1-25	376.00	8	130.0	0.37	58.1	281.20	281.16	0.04	0.09
P-D1-30	221.00	8	130.0	0.32	-49.6	281.16	281.18	0.02	0.07
P-D1-35	211.00	8	130.0	0.63	98.1	281.16	281.11	0.05	0.25
P-D1-40	884.00	12	130.0	0.64	225.8	281.17	281.03	0.14	0.16
P-D1-5	295.00	12	130.0	0.50	177.4	281.03	281.00	0.03	0.10
P-D2-10	267.00	8	130.0	0.80	-126.1	280.86	280.97	0.11	0.39
P-D2-100	423.00	8	130.0	1.28	200.7	281.14	280.74	0.39	0.93
P-D2-105	262.00	8	130.0	0.56	87.4	281.14	281.08	0.05	0.20
P-D2-110	305.00	8	130.0	0.06	9.5	281.08	281.08	0.00	0.00
P-D2-115	262.00	8	130.0	0.39	61.2	281.08	281.06	0.03	0.10
P-D2-120	417.00	12	130.0	0.74	262.3	281.06	280.97	0.09	0.21
P-D2-125	281.00	8	130.0	0.26	40.3	281.06	281.04	0.01	0.05
P-D2-130	297.00	8	130.0	0.06	9.5	281.04	281.04	0.00	0.00
P-D2-135	260.00	8	130.0	0.08	11.8	281.04	281.04	0.00	0.00
P-D2-140	423.00	8	130.0	0.44	68.8	281.04	280.99	0.05	0.13
P-D2-145	246.00	8	130.0	0.15	-23.3	281.04	281.05	0.00	0.02
P-D2-15	638.00	12	130.0	0.07	25.4	280.99	280.99	0.00	0.00
P-D2-150	434.00	8	130.0	0.43	67.1	281.05	280.99	0.05	0.12
P-D2-155	266.00	8	130.0	0.16	24.9	281.05	281.04	0.01	0.02
P-D2-160	346.00	8	130.0	0.08	13.1	281.04	281.04	0.00	0.01
P-D2-165	509.00	8	130.0	0.36	-56.2	281.04	281.09	0.04	0.09
P-D2-170	541.00	8	130.0	0.50	-77.6	281.09	281.17	0.09	0.16
P-D2-175	519.00	8	130.0	0.28	44.4	281.17	281.14	0.03	0.06
P-D2-180	513.00	8	130.0	0.14	21.8	281.14	281.14	0.01	0.02
P-D2-185	783.00	8	130.0	0.61	95.5	281.59	281.40	0.18	0.24
P-D2-190	265.00	8	130.0	1.06	166.5	281.40	281.23	0.17	0.66
P-D2-195	288.00	8	130.0	0.14	21.4	281.23	281.22	0.00	0.01
P-D2-20	258.00	12	130.0	0.21	74.7	280.99	280.99	0.01	0.02
P-D2-200	229.00	8	130.0	0.06	9.5	281.22	281.22	0.00	0.00
P-D2-205	545.00	12	130.0	0.79	279.1	281.53	281.40	0.13	0.24
P-D2-210	357.00	8	130.0	0.19	30.2	281.23	281.22	0.01	0.03
P-D2-215	245.00	8	130.0	0.06	9.5	281.22	281.21	0.00	0.00
P-D2-220	397.00	8	130.0	0.04	6.5	281.22	281.22	0.00	0.00
P-D2-225	255.00	8	130.0	0.85	-133.8	281.22	281.33	0.11	0.44
P-D2-230	769.00	12	130.0	0.48	-170.1	281.33	281.40	0.07	0.10

Scenario: Existing - Peak Hour
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-D2-235	268.00	12	130.0	1.27	448.8	281.33	281.17	0.15	0.57
P-D2-240	613.00	12	130.0	1.28	-450.5	281.33	281.68	0.35	0.58
P-D2-245	193.00	12	130.0	2.08	731.7	281.68	281.41	0.27	1.42
P-D2-25	356.00	12	130.0	0.36	126.8	280.99	280.97	0.02	0.06
P-D2-250	243.00	8	130.0	1.02	159.9	281.41	281.26	0.15	0.61
P-D2-255	484.00	8	130.0	0.43	67.6	281.26	281.20	0.06	0.12
P-D2-260	236.00	8	130.0	0.41	-63.8	281.18	281.21	0.03	0.11
P-D2-265	312.00	8	130.0	0.51	-80.4	281.21	281.26	0.05	0.17
P-D2-270	254.00	12	130.0	1.19	419.6	281.41	281.28	0.13	0.51
P-D2-275	527.00	12	130.0	0.91	321.7	281.28	281.12	0.16	0.31
P-D2-280	274.00	8	130.0	0.52	81.3	281.28	281.23	0.05	0.17
P-D2-285	238.00	8	130.0	0.08	11.9	281.23	281.23	0.00	0.01
P-D2-290	280.00	8	130.0	0.38	59.9	281.23	281.20	0.03	0.10
P-D2-295	523.00	8	130.0	0.53	82.3	281.20	281.11	0.09	0.18
P-D2-30	180.00	10	130.0	0.03	-7.6	280.97	280.97	0.00	0.00
P-D2-300	261.00	8	130.0	0.25	-39.1	281.20	281.22	0.01	0.05
P-D2-305	532.00	8	130.0	0.56	87.0	281.22	281.11	0.11	0.20
P-D2-310	777.00	8	130.0	0.88	-137.9	281.05	281.41	0.36	0.47
P-D2-315	380.00	12	130.0	1.02	359.3	281.30	281.15	0.14	0.38
P-D2-320	434.00	8	130.0	0.63	98.3	281.23	281.12	0.11	0.25
P-D2-325	518.00	12	130.0	0.77	-271.0	281.06	281.17	0.12	0.23
P-D2-330	969.00	8	130.0	0.39	60.5	280.84	280.74	0.10	0.10
P-D2-35	550.00	10	130.0	0.95	232.1	280.97	280.74	0.23	0.41
P-D2-40	464.00	10	130.0	1.90	466.1	280.74	280.05	0.70	1.50
P-D2-45	271.00	10	130.0	1.46	356.6	280.05	279.80	0.25	0.91
P-D2-5	573.00	8	130.0	0.14	-22.1	280.85	280.86	0.01	0.02
P-D2-50	244.00	8	130.0	1.09	171.5	279.80	279.63	0.17	0.70
P-D2-55	279.00	8	130.0	0.91	143.3	279.63	279.49	0.14	0.50
P-D2-60	173.00	6	130.0	1.95	172.1	279.80	279.31	0.49	2.85
P-D2-65	257.00	6	130.0	0.55	48.2	279.31	279.24	0.07	0.27
P-D2-70	309.00	12	130.0	1.48	-521.3	281.30	281.53	0.23	0.76
P-D2-75	244.00	8	130.0	5.22	-818.2	281.53	284.60	3.07	12.60
P-D2-80	127.00	8	130.0	0.06	9.5	283.70	283.70	0.00	0.00
P-D2-85	562.00	8	130.0	2.72	425.9	283.70	281.59	2.11	3.76
P-D2-90	214.00	8	130.0	2.90	454.4	284.60	283.70	0.91	4.24
P-D2-95	251.00	8	130.0	1.82	285.3	281.59	281.14	0.45	1.79
P-D3-1	253.00	8	130.0	0.35	55.1	279.25	279.23	0.02	0.09
P-D3-10	155.00	10	130.0	0.27	66.2	279.23	279.22	0.01	0.04
P-D3-100	135.00	10	130.0	0.37	89.4	279.31	279.23	0.08	0.07
P-D3-105	283.00	6	130.0	0.12	10.2	279.24	279.22	0.02	0.02
P-D3-110	680.00	10	130.0	0.07	18.0	279.19	279.18	0.00	0.00
P-D3-115	268.00	8	130.0	0.97	152.5	281.30	281.15	0.15	0.56
P-D3-120	257.00	8	130.0	0.05	8.3	279.09	279.09	0.00	0.00
P-D3-125	253.00	8	130.0	0.17	-27.3	279.09	279.10	0.01	0.02
P-D3-130	268.00	8	130.0	0.21	-33.2	279.10	279.11	0.01	0.03
P-D3-135	559.00	12	130.0	0.47	166.6	279.27	279.22	0.05	0.09
P-D3-140	181.00	12	130.0	0.18	62.2	279.22	279.22	0.00	0.01
P-D3-145	734.00	8	130.0	0.48	-75.9	279.11	279.22	0.11	0.15
P-D3-15	258.00	8	130.0	0.12	18.3	279.22	279.22	0.00	0.01
P-D3-150	280.00	8	130.0	0.20	32.0	279.11	279.10	0.01	0.03
P-D3-155	249.00	8	130.0	0.23	36.8	279.10	279.09	0.01	0.04

Scenario: Existing - Peak Hour
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-D3-16	414.00	8	130.0	0.36	56.5	280.95	280.92	0.04	0.09
P-D3-160	174.00	8	130.0	0.07	-10.7	279.10	279.10	0.00	0.00
P-D3-165	267.00	8	130.0	0.17	26.7	279.10	279.09	0.01	0.02
P-D3-170	247.00	8	130.0	0.30	-46.9	279.10	279.11	0.02	0.06
P-D3-175	168.00	8	130.0	0.09	14.3	279.09	279.09	0.00	0.01
P-D3-180	142.00	12	130.0	0.56	-197.8	279.27	279.29	0.02	0.13
P-D3-185	577.00	12	130.0	0.83	-291.3	279.29	279.44	0.15	0.26
P-D3-190	771.00	8	130.0	0.60	-93.5	279.11	279.29	0.17	0.23
P-D3-195	674.00	8	130.0	0.20	31.1	279.11	279.09	0.02	0.03
P-D3-20	142.00	8	130.0	0.04	5.9	279.22	279.22	0.00	0.00
P-D3-200	404.00	8	130.0	0.03	4.1	279.09	279.09	0.00	0.00
P-D3-25	044.00	10	130.0	0.26	64.2	279.18	279.14	0.04	0.04
P-D3-30	276.00	10	130.0	0.41	-100.8	279.18	279.21	0.02	0.09
P-D3-35	726.00	12	130.0	0.15	-52.9	279.21	279.22	0.01	0.01
P-D3-40	340.00	8	130.0	0.04	-6.1	279.22	279.22	0.00	0.00
P-D3-45	184.00	8	130.0	0.14	-21.5	279.22	279.22	0.00	0.01
P-D3-5	258.00	8	130.0	0.17	27.3	279.23	279.22	0.01	0.02
P-D3-50	294.00	8	130.0	0.24	-38.1	279.22	279.23	0.01	0.04
P-D3-55	344.00	8	130.0	0.36	-57.1	279.23	279.26	0.03	0.09
P-D3-6	243.00	8	130.0	0.06	10.0	279.23	279.23	0.00	0.00
P-D3-60	490.00	8	130.0	0.13	-20.5	279.26	279.27	0.01	0.01
P-D3-70	280.00	8	130.0	0.67	-105.0	280.95	281.03	0.08	0.28
P-D3-75	278.00	8	130.0	0.82	-128.8	281.03	281.15	0.11	0.41
P-D3-80	543.00	10	130.0	0.20	47.9	279.22	279.21	0.01	0.02
P-D3-81	274.00	8	130.0	0.17	26.8	280.92	280.91	0.01	0.02
P-D3-82	295.00	8	130.0	0.08	13.1	280.92	280.91	0.00	0.01
P-D3-85	287.00	8	130.0	0.44	69.4	279.29	279.25	0.04	0.13
P-D3-90	410.00	8	130.0	0.11	-17.8	279.22	279.22	0.00	0.01
P-D3-91	464.00	8	130.0	0.11	17.8	281.15	281.14	0.00	0.01
P-D3-95	459.00	8	130.0	0.66	102.9	279.49	279.36	0.12	0.27
P-D4-1	312.00	10	130.0	2.28	558.8	261.97	261.32	0.65	2.10
P-D4-10	512.00	10	130.0	2.01	492.6	260.87	260.02	0.85	1.66
P-D4-100	810.00	6	130.0	0.74	65.0	260.87	260.02	0.85	0.47
P-D4-105	665.00	6	130.0	1.95	171.5	262.61	260.72	1.88	2.83
P-D4-110	311.00	6	130.0	1.75	154.3	260.72	260.00	0.72	2.33
P-D4-115	939.00	4	130.0	0.99	38.7	261.94	260.72	1.22	1.29
P-D4-15	169.00	10	130.0	1.99	486.3	260.02	259.75	0.27	1.62
P-D4-20	738.00	12	130.0	0.68	240.6	259.75	259.62	0.13	0.18
P-D4-25	502.00	10	130.0	0.51	126.0	259.62	259.55	0.07	0.13
P-D4-30	592.00	8	130.0	0.03	5.0	259.55	259.55	0.00	0.00
P-D4-35	488.00	8	130.0	0.39	-60.6	259.55	259.60	0.05	0.10
P-D4-40	128.00	12	130.0	0.36	-128.6	259.60	259.61	0.01	0.06
P-D4-45	562.00	10	130.0	0.37	-91.2	259.61	259.65	0.04	0.07
P-D4-5	338.00	10	130.0	1.77	433.0	261.32	260.87	0.44	1.31
P-D4-50	452.00	8	130.0	1.16	-182.1	259.65	260.00	0.35	0.78
P-D4-55	280.00	8	130.0	1.35	211.5	261.32	260.00	1.32	1.03
P-D4-60	335.00	8	130.0	0.37	57.7	261.97	261.94	0.03	0.09
P-D4-65	545.00	12	130.0	0.20	71.8	259.62	259.61	0.01	0.02
P-D4-70	984.00	8	130.0	0.02	-3.6	279.09	279.09	0.00	0.00
P-D4-75	251.00	8	130.0	0.10	-14.9	279.09	279.09	0.00	0.01
P-D4-80	618.00	8	130.0	2.38	373.0	263.32	261.51	1.82	2.94

Scenario: Existing - Peak Hour
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Hea Grad (ft/10
P-D4-85	317.00	8	130.0	1.36	212.4	261.51	261.18	0.33	
P-D4-90	348.00	8	130.0	1.23	193.4	261.18	260.87	0.30	0
P-D4-95	450.00	8	130.0	0.84	130.8	261.51	261.32	0.19	0
P-D5-1	245.00	10	130.0	0.61	148.2	259.99	259.95	0.04	0.1
P-D5-10	133.00	10	130.0	0.03	7.3	259.95	259.95	0.00	0.00
P-D5-100	506.00	8	130.0	0.17	26.1	259.54	259.53	0.01	0.02
P-D5-15	469.00	6	130.0	0.78	68.7	259.95	259.70	0.24	0.52
P-D5-20	362.00	6	130.0	0.26	23.1	259.70	259.68	0.02	0.07
P-D5-25	626.00	6	130.0	0.05	-4.2	259.68	259.68	0.00	0.00
P-D5-30	305.00	6	130.0	0.32	-28.0	259.68	259.71	0.03	0.10
P-D5-35	464.00	12	130.0	0.04	12.5	259.59	259.59	0.00	0.00
P-D5-40	502.00	8	130.0	0.37	57.9	259.59	259.54	0.05	0.09
P-D5-45	306.00	8	130.0	0.05	8.0	259.54	259.54	0.00	0.00
P-D5-5	397.00	10	130.0	0.10	24.7	259.95	259.95	0.00	0.01
P-D5-50	489.00	8	130.0	0.17	26.4	259.55	259.54	0.01	0.02
P-D5-55	721.00	12	130.0	0.19	68.0	259.60	259.59	0.01	0.02
P-D5-60	563.00	6	130.0	0.32	-28.2	259.65	259.70	0.06	0.10
P-D5-65	557.00	10	130.0	0.43	104.2	260.00	259.95	0.05	0.09
P-D5-70	017.00	10	130.0	0.93	228.7	259.99	259.59	0.41	0.40
P-D5-75	543.00	6	130.0	0.71	62.9	259.95	259.71	0.24	0.44
P-D5-80	609.00	6	130.0	0.10	-8.7	259.70	259.71	0.01	0.01
P-E1-10	225.00	8	130.0	0.44	69.6	281.11	281.08	0.03	0.13
P-E1-15	663.00	8	130.0	0.41	63.7	281.08	281.01	0.07	0.11
P-E1-20	166.00	8	130.0	0.95	149.5	281.01	280.92	0.09	0.54
P-E1-25	262.00	8	130.0	0.52	80.8	280.92	280.87	0.05	0.17
P-E1-30	270.00	8	130.0	0.12	19.1	280.87	280.87	0.00	0.01
P-E1-35	426.00	8	130.0	0.02	2.5	280.87	280.87	0.00	0.00
P-E1-40	273.00	8	130.0	0.09	-14.1	280.87	280.87	0.00	0.01
P-E1-45	378.00	8	130.0	0.04	5.9	280.87	280.87	0.00	0.00
P-E1-5	371.00	8	130.0	0.11	16.6	281.11	281.11	0.00	0.01
P-E1-50	253.00	8	130.0	0.24	-37.9	280.87	280.88	0.01	0.04
P-E1-55	432.00	8	130.0	0.35	-54.5	280.88	280.92	0.04	0.08
P-E1-60	615.00	12	130.0	0.12	40.7	281.01	281.00	0.00	0.01
P-E1-65	523.00	12	130.0	0.25	89.1	281.00	280.96	0.04	0.03
P-E2-1	660.00	8	130.0	0.27	42.0	281.15	281.12	0.03	0.05
P-E2-10	322.00	8	130.0	0.00	-0.2	281.11	281.11	0.00	0.00
P-E2-100	252.00	8	130.0	0.11	16.8	281.05	281.04	0.00	0.01
P-E2-105	432.00	8	130.0	0.01	-1.0	281.04	281.04	0.00	0.00
P-E2-110	168.00	8	130.0	0.40	63.4	281.04	281.02	0.02	0.11
P-E2-115	741.00	10	130.0	0.18	-43.5	281.02	281.04	0.01	0.02
P-E2-120	161.00	12	130.0	0.48	-170.1	281.04	281.05	0.02	0.10
P-E2-125	544.00	12	130.0	0.36	126.6	281.04	281.01	0.03	0.06
P-E2-130	269.00	8	130.0	0.36	-56.9	280.85	280.87	0.02	0.09
P-E2-135	282.00	8	130.0	0.06	-9.5	280.85	280.85	0.00	0.00
P-E2-140	350.00	8	130.0	0.09	14.3	280.85	280.85	0.00	0.01
P-E2-145	261.00	8	130.0	0.13	20.1	280.85	280.85	0.00	0.01
P-E2-15	552.00	8	130.0	0.12	-18.1	281.11	281.12	0.01	0.01
P-E2-150	352.00	8	130.0	0.08	13.1	280.85	280.84	0.00	0.01
P-E2-155	274.00	8	130.0	0.06	9.5	280.85	280.84	0.00	0.00
P-E2-160	263.00	8	130.0	0.10	-15.6	280.85	280.85	0.00	0.01
P-E2-165	287.00	8	130.0	0.06	9.5	280.85	280.85	0.00	0.00

Scenario: Existing - Peak Hour
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-E2-170	337.00	8	130.0	0.08	13.1	280.85	280.85	0.00	0.01
P-E2-175	258.00	8	130.0	0.33	-51.2	280.85	280.87	0.02	0.07
P-E2-180	270.00	8	130.0	0.12	19.0	280.87	280.86	0.00	0.01
P-E2-185	267.00	8	130.0	0.06	9.5	280.86	280.86	0.00	0.00
P-E2-190	257.00	8	130.0	0.53	-83.3	280.87	280.91	0.05	0.18
P-E2-195	238.00	8	130.0	0.61	-96.3	280.91	280.97	0.06	0.24
P-E2-20	221.00	8	130.0	0.48	75.2	281.12	281.08	0.03	0.15
P-E2-200	177.00	8	130.0	0.70	109.3	281.02	280.97	0.05	0.30
P-E2-205	279.00	8	130.0	0.01	-1.3	280.97	280.97	0.00	0.00
P-E2-210	279.00	8	130.0	0.04	-6.0	280.97	280.97	0.00	0.00
P-E2-215	369.00	8	130.0	0.24	-37.9	280.97	280.99	0.02	0.04
P-E2-220	331.00	8	130.0	0.23	36.8	280.99	280.97	0.01	0.04
P-E2-225	302.00	8	130.0	0.04	5.9	280.97	280.97	0.00	0.00
P-E2-230	269.00	8	130.0	0.11	17.8	280.97	280.97	0.00	0.01
P-E2-235	474.00	8	130.0	0.00	-0.0	280.97	280.97	0.00	0.00
P-E2-240	263.00	8	130.0	0.54	-84.2	280.99	281.04	0.05	0.19
P-E2-245	259.00	8	130.0	0.31	48.1	281.04	281.02	0.02	0.07
P-E2-25	345.00	8	130.0	0.02	3.5	281.08	281.08	0.00	0.00
P-E2-250	554.00	8	130.0	0.11	-17.4	281.02	281.02	0.01	0.01
P-E2-251	269.00	8	130.0	0.56	-88.3	281.02	281.07	0.05	0.20
P-E2-255	737.00	10	130.0	0.01	2.4	281.02	281.02	0.00	0.00
P-E2-260	190.00	8	130.0	0.21	-33.3	281.02	281.03	0.01	0.03
P-E2-265	413.00	8	130.0	0.11	16.6	281.03	281.03	0.00	0.01
P-E2-270	297.00	8	130.0	0.38	-59.5	281.03	281.06	0.03	0.10
P-E2-275	413.00	8	130.0	0.08	13.1	281.06	281.06	0.00	0.01
P-E2-280	278.00	8	130.0	0.57	-89.1	281.06	281.12	0.06	0.21
P-E2-285	315.00	12	130.0	0.82	287.6	281.15	281.07	0.08	0.25
P-E2-290	445.00	12	130.0	0.51	181.5	281.07	281.02	0.05	0.11
P-E2-295	663.00	10	130.0	0.01	-1.6	281.02	281.02	0.00	0.00
P-E2-30	232.00	8	130.0	0.35	55.0	281.08	281.06	0.02	0.08
P-E2-300	249.00	8	130.0	0.30	46.5	281.02	281.00	0.02	0.06
P-E2-305	484.00	8	130.0	0.11	16.6	281.00	281.00	0.00	0.01
P-E2-310	256.00	8	130.0	0.08	12.1	281.00	281.00	0.00	0.01
P-E2-315	486.00	8	130.0	0.11	16.6	281.00	281.00	0.00	0.01
P-E2-320	254.00	8	130.0	0.17	-25.9	281.00	281.01	0.01	0.02
P-E2-325	485.00	8	130.0	0.11	16.6	281.01	281.00	0.00	0.01
P-E2-330	250.00	8	130.0	0.41	-63.9	281.01	281.04	0.03	0.11
P-E2-335	725.00	8	130.0	0.22	34.9	281.06	281.04	0.03	0.04
P-E2-340	308.00	8	130.0	0.77	-120.1	281.04	281.15	0.11	0.36
P-E2-345	249.00	8	130.0	0.19	-29.9	281.06	281.07	0.01	0.03
P-E2-35	237.00	8	130.0	0.06	9.5	281.06	281.06	0.00	0.00
P-E2-40	266.00	8	130.0	0.21	32.4	281.06	281.05	0.01	0.03
P-E2-45	238.00	8	130.0	0.08	13.1	281.05	281.05	0.00	0.01
P-E2-5	605.00	8	130.0	0.13	20.3	281.12	281.11	0.01	0.01
P-E2-50	217.00	8	130.0	0.05	7.5	281.05	281.05	0.00	0.00
P-E2-55	499.00	12	130.0	0.56	-196.4	281.05	281.12	0.06	0.12
P-E2-60	275.00	8	130.0	0.11	17.2	281.05	281.05	0.00	0.01
P-E2-65	311.00	8	130.0	0.08	13.1	281.05	281.05	0.00	0.01
P-E2-70	266.00	8	130.0	0.06	-10.1	281.05	281.05	0.00	0.00
P-E2-75	506.00	8	130.0	0.41	-64.6	281.05	281.11	0.06	0.11
P-E2-80	235.00	8	130.0	0.23	35.4	281.05	281.04	0.01	0.04

Scenario: Existing - Peak Hour
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-E2-85	265.00	8	130.0	0.28	-43.2	281.04	281.06	0.01	0.05
P-E2-90	249.00	8	130.0	0.57	-89.7	281.06	281.11	0.05	0.21
P-E2-95	356.00	8	130.0	0.21	33.4	281.06	281.05	0.01	0.03
P-E3-1	472.00	8	130.0	0.05	7.8	280.91	280.91	0.00	0.00
P-E3-10	400.00	12	130.0	0.53	-185.9	280.90	280.95	0.04	0.11
P-E3-100	273.00	8	130.0	0.57	90.0	279.44	279.38	0.06	0.21
P-E3-105	188.00	8	130.0	1.32	207.0	279.44	279.25	0.19	0.99
P-E3-11	299.00	8	130.0	0.17	26.6	280.91	280.90	0.01	0.02
P-E3-110	258.00	8	130.0	0.74	115.6	279.25	279.16	0.09	0.34
P-E3-120	691.00	8	130.0	0.42	66.4	279.25	279.17	0.08	0.12
P-E3-125	815.00	12	130.0	0.48	170.0	281.02	280.95	0.08	0.10
P-E3-130	217.00	8	130.0	0.02	3.3	281.04	281.04	0.00	0.00
P-E3-135	446.00	8	130.0	0.11	17.8	281.03	281.03	0.00	0.01
P-E3-145	927.00	8	130.0	0.26	40.2	280.95	280.91	0.04	0.05
P-E3-15	174.00	8	130.0	0.10	-15.9	280.95	280.95	0.00	0.01
P-E3-150	754.00	8	130.0	0.48	-75.8	279.26	279.38	0.12	0.15
P-E3-155	429.00	8	130.0	0.13	21.1	279.12	279.12	0.01	0.01
P-E3-16	177.00	8	130.0	0.06	10.0	280.90	280.90	0.00	0.00
P-E3-160	289.00	8	130.0	0.22	-34.6	281.06	281.07	0.01	0.04
P-E3-17	471.00	8	130.0	0.08	11.9	280.90	280.90	0.00	0.00
P-E3-170	281.00	8	130.0	0.21	33.0	279.13	279.12	0.01	0.03
P-E3-175	469.00	8	130.0	0.22	34.7	279.13	279.12	0.02	0.04
P-E3-180	394.00	8	130.0	0.07	-10.4	279.12	279.12	0.00	0.00
P-E3-190	128.00	8	130.0	0.22	34.8	279.14	279.13	0.00	0.04
P-E3-195	120.00	8	130.0	0.01	1.2	279.13	279.13	0.00	0.00
P-E3-20	374.00	8	130.0	0.09	14.3	280.95	280.95	0.00	0.01
P-E3-200	296.00	8	130.0	0.21	32.4	279.13	279.12	0.01	0.03
P-E3-205	295.00	8	130.0	0.14	21.7	279.12	279.12	0.00	0.02
P-E3-210	372.00	8	130.0	0.07	-10.9	279.13	279.14	0.00	0.00
P-E3-215	242.00	8	130.0	0.43	-67.5	279.13	279.16	0.03	0.12
P-E3-220	377.00	8	130.0	0.17	26.8	279.16	279.16	0.01	0.02
P-E3-225	237.00	8	130.0	0.26	-41.5	279.16	279.17	0.01	0.05
P-E3-230	233.00	8	130.0	0.35	55.2	279.16	279.14	0.02	0.09
P-E3-245	276.00	8	130.0	0.41	-64.6	280.99	281.02	0.03	0.11
P-E3-25	274.00	8	130.0	0.27	-42.0	280.95	280.96	0.01	0.05
P-E3-30	275.00	8	130.0	0.35	-55.1	280.96	280.99	0.02	0.09
P-E3-40	346.00	8	130.0	0.06	-9.5	281.03	281.04	0.00	0.00
P-E3-42	323.00	8	130.0	0.09	14.3	281.02	281.02	0.00	0.01
P-E3-45	254.00	8	130.0	0.16	-24.7	281.04	281.04	0.00	0.02
P-E3-50	276.00	8	130.0	0.06	9.5	281.04	281.04	0.00	0.00
P-E3-55	223.00	8	130.0	0.06	9.5	281.04	281.04	0.00	0.00
P-E3-60	256.00	8	130.0	0.36	-56.7	281.04	281.06	0.02	0.09
P-E3-65	219.00	8	130.0	0.58	-91.2	281.06	281.11	0.05	0.22
P-E3-70	254.00	8	130.0	0.64	-100.7	281.11	281.18	0.07	0.26
P-E3-71	417.00	8	130.0	0.11	17.8	281.06	281.06	0.00	0.01
P-E3-75	373.00	12	130.0	1.19	418.5	281.18	280.99	0.19	0.51
P-E3-80	264.00	12	130.0	1.52	-534.6	281.18	281.39	0.21	0.79
P-E3-81	374.00	8	130.0	0.06	9.5	281.18	281.18	0.00	0.00
P-E3-85	695.00	8	130.0	0.87	135.6	281.39	281.07	0.31	0.45
P-E3-86	308.00	8	130.0	0.05	8.3	280.99	280.99	0.00	0.00
P-E3-87	185.00	12	130.0	1.14	-401.9	280.90	280.99	0.09	0.47

Scenario: Existing - Peak Hour
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-E3-90	257.00	8	130.0	0.47	73.7	281.07	281.04	0.04	0.15
P-E3-91	343.00	8	130.0	0.06	9.5	281.39	281.39	0.00	0.00
P-E3-95	499.00	12	130.0	1.70	-597.9	279.44	280.90	1.47	0.98
P-E4-1	327.00	8	130.0	0.54	84.2	259.53	259.47	0.06	0.19
P-E4-10	455.00	6	130.0	0.53	-47.1	259.44	259.56	0.12	0.26
P-E4-15	019.00	12	130.0	0.48	168.9	259.56	259.46	0.10	0.09
P-E4-20	274.00	10	130.0	0.39	94.9	259.55	259.53	0.02	0.08
P-E4-25	296.00	12	130.0	0.61	216.0	259.75	259.56	0.19	0.15
P-E4-30	200.00	8	130.0	0.07	10.7	259.53	259.53	0.00	0.00
P-E4-35	259.00	8	130.0	0.39	60.4	259.47	259.44	0.03	0.10
P-E4-40	255.00	8	130.0	0.06	9.4	259.44	259.44	0.00	0.00
P-E4-45	356.00	8	130.0	0.10	-15.4	259.44	259.44	0.00	0.01
P-E4-5	637.00	8	130.0	0.01	-1.6	279.09	279.09	0.00	0.00
P-E4-50	533.00	8	130.0	0.15	23.8	259.44	259.43	0.01	0.02
P-E4-55	599.00	8	130.0	0.07	10.8	279.10	279.09	0.00	0.00
P-E4-60	246.00	8	130.0	0.36	56.2	279.12	279.10	0.02	0.09
P-E4-65	450.00	8	130.0	0.08	12.8	279.10	279.09	0.00	0.01
P-E4-70	191.00	8	130.0	0.02	3.3	279.09	279.09	0.00	0.00
P-E4-75	432.00	8	130.0	0.04	6.5	279.09	279.09	0.00	0.00
P-E4-80	308.00	8	130.0	0.11	17.2	279.10	279.09	0.00	0.01
P-E4-85	605.00	8	130.0	0.02	3.0	279.09	279.09	0.00	0.00
P-E4-90	118.00	8	130.0	0.01	1.2	279.09	279.09	0.00	0.00
P-E5-1	036.00	10	130.0	0.16	39.5	259.14	259.12	0.02	0.02
P-E5-10	530.00	6	130.0	0.38	33.1	259.46	259.12	0.34	0.13
P-E5-15	149.00	6	130.0	0.38	33.9	259.44	259.14	0.30	0.14
P-E5-20	295.00	10	130.0	0.86	211.4	259.59	259.14	0.45	0.35
P-E5-5	990.00	10	130.0	0.08	19.9	259.12	259.12	0.00	0.00
P-F1-10	317.00	12	130.0	0.20	70.3	280.96	280.95	0.01	0.02
P-F1-15	281.00	12	130.0	0.19	67.2	280.95	280.95	0.00	0.02
P-F2-1	564.00	8	130.0	0.46	71.5	281.15	281.07	0.08	0.14
P-F2-10	983.00	12	130.0	0.03	9.7	280.95	280.95	0.00	0.00
P-F2-11	262.00	8	130.0	0.90	-140.9	281.44	281.57	0.13	0.48
P-F2-16	181.00	8	130.0	0.33	52.0	281.57	281.55	0.01	0.08
P-F2-20	027.00	12	130.0	0.05	18.8	280.96	280.96	0.00	0.00
P-F2-21	440.00	8	130.0	0.11	16.6	281.55	281.55	0.00	0.01
P-F2-26	251.00	8	130.0	0.13	21.1	281.55	281.55	0.00	0.01
P-F2-31	367.00	8	130.0	0.08	11.9	281.55	281.55	0.00	0.00
P-F2-36	248.00	12	130.0	0.59	-207.1	282.33	282.36	0.03	0.14
P-F2-41	158.00	8	130.0	0.16	24.9	282.36	282.36	0.00	0.02
P-F2-46	172.00	8	130.0	0.08	13.1	282.36	282.36	0.00	0.01
P-F2-5	963.00	8	150.0	0.02	3.1	280.95	280.95	0.00	0.00
P-F2-51	319.00	8	130.0	0.08	11.9	282.36	282.35	0.00	0.00
P-F2-56	266.00	12	130.0	0.66	-233.2	282.36	282.40	0.05	0.17
P-F2-6	299.00	8	130.0	1.31	-205.8	281.15	281.44	0.29	0.98
P-F2-61	313.00	8	130.0	0.09	14.3	282.40	282.40	0.00	0.01
P-F2-66	767.00	8	130.0	1.32	-207.1	281.57	282.33	0.76	0.99
P-F3-1	374.00	8	130.0	0.11	-16.6	281.72	281.72	0.00	0.01
P-F3-10	428.00	8	130.0	0.09	14.3	282.11	282.10	0.00	0.01
P-F3-100	267.00	12	130.0	0.80	-280.7	282.51	282.58	0.06	0.24
P-F3-105	269.00	12	130.0	0.83	-292.6	282.58	282.65	0.07	0.26
P-F3-11	219.00	8	130.0	0.06	9.5	281.72	281.72	0.00	0.00

Scenario: Existing - Peak Hour
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-F3-110	346.00	8	130.0	0.09	14.3	281.07	281.07	0.00	0.01
P-F3-115	645.00	8	130.0	0.53	-82.7	281.44	281.56	0.12	0.18
P-F3-12	252.00	12	130.0	2.01	-708.3	281.39	281.72	0.34	1.34
P-F3-120	248.00	8	130.0	0.02	-3.9	281.55	281.55	0.00	0.00
P-F3-125	261.00	12	130.0	0.71	-251.1	282.40	282.46	0.05	0.20
P-F3-15	257.00	8	130.0	0.05	8.3	282.10	282.10	0.00	0.00
P-F3-20	167.00	8	130.0	0.05	-7.1	282.74	282.74	0.00	0.00
P-F3-25	428.00	8	130.0	0.09	14.3	281.85	281.85	0.00	0.01
P-F3-30	493.00	8	130.0	0.11	16.6	281.67	281.67	0.00	0.01
P-F3-35	246.00	8	130.0	0.19	30.0	281.56	281.55	0.01	0.03
P-F3-40	308.00	8	130.0	0.06	9.5	281.55	281.55	0.00	0.00
P-F3-45	289.00	8	130.0	0.08	13.1	282.46	282.45	0.00	0.01
P-F3-5	259.00	12	130.0	2.12	-746.3	281.72	282.11	0.38	1.47
P-F3-50	241.00	8	130.0	0.06	-9.5	282.51	282.51	0.00	0.00
P-F3-55	212.00	8	130.0	0.05	8.3	282.58	282.58	0.00	0.00
P-F3-60	220.00	12	130.0	0.04	-15.4	282.65	282.65	0.00	0.00
P-F3-65	324.00	12	130.0	0.88	-309.2	282.65	282.74	0.09	0.29
P-F3-70	247.00	8	130.0	0.88	-137.6	281.56	281.67	0.11	0.46
P-F3-75	249.00	8	130.0	1.12	-175.6	281.67	281.85	0.18	0.73
P-F3-80	258.00	8	130.0	1.32	-206.5	281.85	282.11	0.25	0.98
P-F3-85	259.00	12	130.0	2.79	-983.6	282.11	282.74	0.64	2.46
P-F3-95	266.00	12	130.0	0.76	-267.7	282.46	282.51	0.06	0.22
P-F4-1	001.00	12	130.0	0.24	83.1	259.46	259.44	0.03	0.03
P-F4-5	398.00	6	130.0	0.37	32.9	259.44	259.12	0.32	0.13

SCENARIO: EXISTING - PEAK HOUR
STEADY STATE ANALYSIS
VALVE (PUMPS) REPORT

Pump	Model Label	Elevation (ft)	Diameter (in)	Control Status	Discharge (gpm)	From HGL (ft)	To HGL (ft)
Tank 1 - Pump 1	FCV-1	138	8	Throttling	1000	284.54	282.54
Tank 1 - Pump 2	FCV-2	138	8	Throttling	1000	284.54	282.54
Tank 1 - Pump 3	FCV-3	138	8	Throttling	0	285	282.08
Tank 2 - Pump 1	FCV-4	127	8	Throttling	636.3	284.8	284.8
Tank 2 - Pump 2	FCV-5	127	8	Throttling	636.3	284.8	284.8
Tank 2 - Pump 3	FCV-6	127	8	Throttling	0	285	284.6

APPENDIX D

NODE DEMAND ALLOCATIONS FOR BUILDOUT CONDITIONS COMPUTER MODEL

Scenario: Buildout - Average Day
Steady State Analysis
Junction Report

Label	Pressure (psi)	Elevation (ft)	Base Flow (gpm)	Zone	Type	Calculated Hydraulic Grade (ft)	Demand (Calculated) (gpm)
J-A1-1	67.91	130	6.2	Zone	Demand	286.96	6.2
J-A1-10	67.91	130	7.2	Zone	Demand	286.96	7.2
J-A1-15	67.91	130	0.0	Zone	Demand	286.96	0.0
J-A1-5	67.91	130	0.0	Zone	Demand	286.96	0.0
J-A2-1	67.57	130	8.9	Zone	Demand	286.18	8.9
J-A2-20	84.59	90	9.3	Zone	Demand	285.51	9.3
J-A2-35	84.58	90	7.9	Zone	Demand	285.50	7.9
J-A2-45	84.58	90	7.2	Zone	Demand	285.49	7.2
J-A2-5	84.60	90	22.8	Zone	Demand	285.53	22.8
J-A2-55	84.58	90	8.9	Zone	Demand	285.49	8.9
J-A3-1	80.27	100	6.2	Zone	Demand	285.52	6.2
J-A3-10	82.42	95	0.0	Zone	Demand	285.49	0.0
J-A3-15	84.58	90	15.1	Zone	Demand	285.49	15.1
J-A3-20	84.58	90	0.0	Zone	Demand	285.49	0.0
J-A3-25	84.58	90	14.4	Zone	Demand	285.48	14.4
J-A3-30	80.26	100	9.5	Zone	Demand	285.50	9.5
J-A3-40	80.26	100	0.0	Zone	Demand	285.51	0.0
J-A3-45	62.96	140	17.6	Zone	Demand	285.52	17.6
J-A3-5	82.42	95	26.4	Zone	Demand	285.49	26.4
J-A3-50	62.93	140	26.5	Zone	Demand	285.46	26.5
J-A3-55	62.93	140	43.9	Zone	Demand	285.44	43.9
J-A3-60	80.25	100	14.9	Zone	Demand	285.48	14.9
J-A3-65	82.41	95	0.0	Zone	Demand	285.48	0.0
J-A3-70	80.25	100	0.0	Zone	Demand	285.48	0.0
J-A4-1	62.93	140	16.5	Zone	Demand	285.44	16.5
J-A4-10	61.20	144	0.0	Zone	Demand	285.45	0.0
J-A4-15	60.95	145	28.5	Zone	Demand	285.88	28.5
J-A4-20	60.95	145	4.5	Zone	Demand	285.88	4.5
J-A4-5	61.20	144	28.8	Zone	Demand	285.44	28.8
J-B1-10	68.97	128	6.9	Zone	Demand	287.40	6.9
J-B1-100	67.91	130	9.3	Zone	Demand	286.96	9.3
J-B1-105	67.91	130	3.8	Zone	Demand	286.96	3.8
J-B1-110	67.91	130	5.8	Zone	Demand	286.96	5.8
J-B1-115	67.91	130	17.1	Zone	Demand	286.96	17.1
J-B1-120	67.91	130	0.0	Zone	Demand	286.96	0.0
J-B1-125	68.04	130	0.0	Zone	Demand	287.26	0.0
J-B1-130	68.96	128	4.1	Zone	Demand	287.40	4.1
J-B1-15	68.96	128	2.7	Zone	Demand	287.40	2.7
J-B1-20	68.96	128	0.0	Zone	Demand	287.40	0.0
J-B1-25	69.01	128	5.8	Zone	Demand	287.50	5.8
J-B1-30	69.01	128	4.5	Zone	Demand	287.50	4.5
J-B1-35	65.92	135	14.0	Zone	Demand	287.36	14.0
J-B1-40	66.57	133	24.7	Zone	Demand	286.87	24.7
J-B1-45	68.95	128	0.0	Zone	Demand	287.36	0.0
J-B1-50	68.05	130	5.1	Zone	Demand	287.28	5.1
J-B1-55	68.05	130	0.0	Zone	Demand	287.28	0.0
J-B1-60	68.05	130	4.8	Zone	Demand	287.28	4.8
J-B1-65	68.00	130	10.6	Zone	Demand	287.18	10.6
J-B1-70	67.99	130	5.8	Zone	Demand	287.14	5.8
J-B1-75	67.98	130	4.8	Zone	Demand	287.12	4.8
J-B1-80	67.97	130	4.1	Zone	Demand	287.09	4.1
J-B1-85	67.91	130	12.3	Zone	Demand	286.97	12.3
J-B1-90	67.91	130	0.0	Zone	Demand	286.97	0.0
J-B1-95	67.91	130	5.8	Zone	Demand	286.97	5.8

Scenario: Buildout - Average Day
Steady State Analysis
Junction Report

Label	Pressure (psi)	Elevation (ft)	Base Flow (gpm)	Zone	Type	Calculated Hydraulic Grade (ft)	Demand (Calculated) (gpm)
J-B2-1	67.53	130	8.9	Zone	Demand	286.08	8.9
J-B2-10	67.62	130	4.8	Zone	Demand	286.29	4.8
J-B2-15	67.66	130	6.9	Zone	Demand	286.38	6.9
J-B2-20	67.58	130	6.2	Zone	Demand	286.19	6.2
J-B2-25	67.62	130	16.1	Zone	Demand	286.30	16.1
J-B2-30	65.44	135	2.1	Zone	Demand	286.25	2.1
J-B2-35	67.60	130	7.2	Zone	Demand	286.25	7.2
J-B2-45	80.30	100	0.0	Zone	Demand	285.60	0.0
J-B2-5	67.58	130	3.1	Zone	Demand	286.19	3.1
J-B2-50	80.29	100	16.8	Zone	Demand	285.58	16.8
J-B2-55	65.26	135	14.4	Zone	Demand	285.83	14.4
J-B2-60	67.47	130	32.9	Zone	Demand	285.94	32.9
J-B2-65	65.36	135	13.0	Zone	Demand	286.08	13.0
J-B2-70	65.41	135	14.0	Zone	Demand	286.18	14.0
J-B2-72	66.34	133	24.7	Zone	Demand	286.32	24.7
J-B2-75	67.71	130	0.0	Zone	Demand	286.50	0.0
J-B2-80	65.43	135	9.3	Zone	Demand	286.23	9.3
J-B2-85	66.18	133	24.7	Zone	Demand	285.97	24.7
J-B3-1	62.99	140	29.5	Zone	Demand	285.58	29.5
J-B3-10	63.05	140	14.3	Zone	Demand	285.73	14.3
J-B3-12	63.08	140	0.0	Zone	Demand	285.80	0.0
J-B3-15	63.08	140	0.0	Zone	Demand	285.80	0.0
J-B3-25	67.41	130	23.1	Zone	Demand	285.80	23.1
J-B3-27	67.36	130	24.7	Zone	Demand	285.70	24.7
J-B3-3	62.99	140	14.0	Zone	Demand	285.59	14.0
J-B3-30	67.33	130	20.7	Zone	Demand	285.63	20.7
J-B3-35	62.92	140	8.0	Zone	Demand	285.42	8.0
J-B3-40	64.99	135	0.0	Zone	Demand	285.22	0.0
J-B3-45	64.99	135	43.6	Zone	Demand	285.22	43.6
J-B3-5	63.05	140	0.0	Zone	Demand	285.74	0.0
J-B3-50	64.97	135	0.0	Zone	Demand	285.16	0.0
J-B4-10	63.17	140	14.4	Zone	Demand	286.01	14.4
J-B4-15	65.09	135	38.7	Zone	Demand	285.44	38.7
J-B4-20	64.31	138	0.5	Zone	Demand	286.65	0.5
J-B4-25	63.76	140	8.6	Zone	Demand	287.38	8.6
J-B4-30	64.57	140	23.4	Zone	Demand	289.24	23.4
J-B4-35	64.91	140	2.1	Zone	Demand	290.02	2.1
J-B4-40	64.99	140	6.5	Zone	Demand	290.21	6.5
J-B4-45	64.75	140	29.3	Zone	Demand	289.66	29.3
J-B4-5	63.17	140	31.2	Zone	Demand	286.01	31.2
J-B4-50	65.49	140	16.5	Zone	Demand	291.37	16.5
J-B4-55	65.49	140	19.1	Zone	Demand	291.37	19.0
J-B5-1	63.74	145	19.1	Zone	Demand	292.33	19.0
J-B5-10	61.61	145	9.6	Zone	Demand	287.41	9.6
J-B5-15	61.61	145	8.6	Zone	Demand	287.41	8.6
J-B5-20	62.18	150	0.0	Zone	Demand	293.72	0.0
J-B5-25	63.77	147	0.0	Zone	Demand	294.39	0.0
J-B5-30	64.45	140	5.5	Zone	Demand	288.96	5.5
J-B5-34	66.22	147	0.0	Zone	Demand	300.06	0.0
J-B5-35	64.59	147	0.0	Zone	Demand	296.28	0.0
J-B5-40	63.83	145	0.0	Zone	Demand	292.54	0.0
J-B5-5	62.16	148	19.8	Zone	Demand	291.68	19.8
J-B6-1	64.92	150	23.6	Zone	Demand	300.06	23.6
J-C1-1	68.97	128	5.5	Zone	Demand	287.42	5.5

Scenario: Buildout - Average Day
Steady State Analysis
Junction Report

Label	Pressure (psi)	Elevation (ft)	Base Flow (gpm)	Zone	Type	Calculated Hydraulic Grade (ft)	Demand (Calculated) (gpm)
J-C1-10	68.97	128	4.5	Zone	Demand	287.41	4.5
J-C1-100	69.24	128	8.2	Zone	Demand	288.04	8.2
J-C1-105	70.17	128	18.6	Zone	Demand	290.18	18.6
J-C1-110	69.91	128	5.5	Zone	Demand	289.58	5.5
J-C1-115	69.75	128	6.9	Zone	Demand	289.21	6.9
J-C1-120	69.49	128	6.7	Zone	Demand	288.60	6.7
J-C1-125	70.55	128	6.5	Zone	Demand	291.07	6.5
J-C1-130	71.84	128	5.5	Zone	Demand	294.04	5.5
J-C1-20	68.99	128	1.7	Zone	Demand	287.46	1.7
J-C1-25	69.00	128	2.7	Zone	Demand	287.48	2.7
J-C1-30	69.05	128	16.1	Zone	Demand	287.59	16.1
J-C1-35	69.03	128	5.5	Zone	Demand	287.54	5.5
J-C1-40	69.03	128	5.1	Zone	Demand	287.54	5.1
J-C1-45	69.16	128	12.3	Zone	Demand	287.84	12.3
J-C1-5	68.97	128	4.5	Zone	Demand	287.41	4.5
J-C1-50	69.24	128	5.8	Zone	Demand	288.03	5.8
J-C1-55	69.23	128	8.9	Zone	Demand	288.01	8.9
J-C1-60	69.34	128	4.5	Zone	Demand	288.27	4.5
J-C1-70	69.38	128	2.4	Zone	Demand	288.36	2.4
J-C1-75	69.26	128	0.0	Zone	Demand	288.08	0.0
J-C1-80	69.13	128	0.0	Zone	Demand	287.79	0.0
J-C1-85	69.14	128	8.6	Zone	Demand	287.80	8.6
J-C1-90	66.11	135	11.7	Zone	Demand	287.79	11.7
J-C1-95	69.36	128	12.0	Zone	Demand	288.32	12.0
J-C2-1	66.04	135	11.0	Zone	Demand	287.64	11.0
J-C2-10	68.08	130	6.5	Zone	Demand	287.36	6.5
J-C2-100	68.05	130	5.1	Zone	Demand	287.29	5.1
J-C2-105	68.16	130	3.8	Zone	Demand	287.53	3.8
J-C2-110	68.13	130	5.8	Zone	Demand	287.48	5.8
J-C2-115	68.16	130	0.0	Zone	Demand	287.53	0.0
J-C2-120	66.03	135	7.2	Zone	Demand	287.62	7.2
J-C2-125	69.58	128	2.7	Zone	Demand	288.81	2.7
J-C2-130	69.26	128	0.0	Zone	Demand	288.08	0.0
J-C2-135	69.12	128	2.7	Zone	Demand	287.76	2.7
J-C2-140	69.24	128	3.8	Zone	Demand	288.04	3.8
J-C2-145	69.23	128	7.2	Zone	Demand	288.00	7.2
J-C2-15	68.00	130	2.4	Zone	Demand	287.18	2.4
J-C2-150	65.54	135	4.5	Zone	Demand	286.48	4.5
J-C2-155	65.54	135	9.6	Zone	Demand	286.48	9.6
J-C2-20	68.00	130	5.5	Zone	Demand	287.18	5.5
J-C2-25	67.93	130	2.4	Zone	Demand	287.01	2.4
J-C2-30	67.93	130	5.1	Zone	Demand	287.01	5.1
J-C2-35	67.86	130	8.8	Zone	Demand	286.85	8.8
J-C2-40	67.80	130	8.5	Zone	Demand	286.70	8.5
J-C2-45	65.58	135	7.2	Zone	Demand	286.58	7.2
J-C2-5	65.97	135	5.5	Zone	Demand	287.48	5.5
J-C2-50	67.74	130	9.6	Zone	Demand	286.58	9.6
J-C2-55	67.81	130	15.1	Zone	Demand	286.73	15.1
J-C2-60	68.67	128	5.1	Zone	Demand	286.72	5.1
J-C2-65	67.84	130	7.2	Zone	Demand	286.79	7.2
J-C2-70	67.85	130	4.1	Zone	Demand	286.82	4.1
J-C2-75	67.87	130	9.6	Zone	Demand	286.86	9.6
J-C2-80	67.87	130	5.5	Zone	Demand	286.88	5.5
J-C2-85	68.76	128	6.9	Zone	Demand	286.94	6.9

Scenario: Buildout - Average Day
Steady State Analysis
Junction Report

Label	Pressure (psi)	Elevation (ft)	Base Flow (gpm)	Zone	Type	Calculated Hydraulic Grade (ft)	Demand (Calculated) (gpm)
J-C2-90	68.79	128	11.0	Zone	Demand	287.00	11.0
J-C2-95	67.95	130	4.1	Zone	Demand	287.06	4.1
J-C3-1	65.57	135	46.6	Zone	Demand	286.56	46.6
J-C3-10	67.77	130	0.0	Zone	Demand	286.65	0.0
J-C3-15	68.64	128	9.6	Zone	Demand	286.65	9.6
J-C3-20	67.76	130	2.4	Zone	Demand	286.61	2.4
J-C3-25	67.74	130	5.1	Zone	Demand	286.58	5.1
J-C3-30	67.76	130	7.9	Zone	Demand	286.62	7.9
J-C3-35	65.60	135	8.2	Zone	Demand	286.62	8.2
J-C3-40	65.60	135	5.5	Zone	Demand	286.61	5.5
J-C3-45	65.60	135	8.6	Zone	Demand	286.62	8.6
J-C3-5	67.77	130	13.4	Zone	Demand	286.63	13.4
J-C3-50	65.56	135	4.2	Zone	Demand	286.53	4.2
J-C3-55	65.55	135	31.3	Zone	Demand	286.52	31.3
J-C3-60	65.53	135	14.1	Zone	Demand	286.45	14.1
J-C4-1	64.32	138	22.3	Zone	Demand	286.65	22.3
J-C4-10	63.78	140	14.4	Zone	Demand	287.41	14.4
J-C4-15	63.78	140	23.0	Zone	Demand	287.41	23.0
J-C4-20	63.78	140	4.3	Zone	Demand	287.42	4.3
J-C4-25	63.62	140	19.0	Zone	Demand	287.04	19.0
J-C4-30	63.43	140	16.5	Zone	Demand	286.60	16.5
J-C4-35	64.31	138	0.0	Zone	Demand	286.65	0.0
J-C4-40	63.43	140	11.0	Zone	Demand	286.60	11.0
J-C4-45	63.43	140	0.0	Zone	Demand	286.60	0.0
J-C4-46	63.43	140	0.0	Zone	Demand	286.60	0.0
J-C4-5	63.76	140	12.0	Zone	Demand	287.37	12.0
J-C4-50	63.43	140	13.0	Zone	Demand	286.60	13.0
J-C4-60	63.39	140	10.3	Zone	Demand	286.52	10.3
J-C4-65	63.39	140	20.6	Zone	Demand	286.52	20.6
J-C5-1	63.99	140	24.0	Zone	Demand	287.89	24.0
J-C5-10	62.12	145	5.5	Zone	Demand	288.57	5.5
J-C5-15	64.08	140	0.0	Zone	Demand	288.10	0.0
J-C5-20	63.83	140	0.0	Zone	Demand	287.53	0.0
J-C5-25	63.70	140	13.7	Zone	Demand	287.23	13.7
J-C5-30	63.53	140	20.3	Zone	Demand	286.84	20.3
J-C5-35	64.57	140	4.5	Zone	Demand	289.25	4.5
J-C5-5	62.59	145	5.5	Zone	Demand	289.66	5.5
J-D1-1	70.78	125	0.0	Zone	Demand	288.59	0.0
J-D1-10	70.74	125	2.4	Zone	Demand	288.50	2.4
J-D1-15	70.71	125	4.1	Zone	Demand	288.43	4.1
J-D1-20	70.71	125	6.5	Zone	Demand	288.43	6.5
J-D1-22	70.71	125	27.1	Zone	Demand	288.43	27.1
J-D1-25	70.76	125	9.0	Zone	Demand	288.56	9.0
J-D1-30	71.64	123	9.0	Zone	Demand	288.58	9.0
J-D1-5	70.74	125	30.9	Zone	Demand	288.50	30.9
J-D2-1	69.24	128	4.1	Zone	Demand	288.04	4.1
J-D2-10	69.34	128	9.3	Zone	Demand	288.28	9.3
J-D2-100	69.16	128	4.8	Zone	Demand	287.86	4.8
J-D2-105	69.16	128	2.7	Zone	Demand	287.86	2.7
J-D2-110	69.24	128	8.6	Zone	Demand	288.04	8.6
J-D2-115	70.57	125	5.5	Zone	Demand	288.11	5.5
J-D2-120	69.27	128	2.7	Zone	Demand	288.11	2.7
J-D2-125	70.60	125	6.5	Zone	Demand	288.18	6.5
J-D2-130	70.66	125	6.5	Zone	Demand	288.31	6.5

Scenario: Buildout - Average Day
Steady State Analysis
Junction Report

Label	Pressure (psi)	Elevation (ft)	Base Flow (gpm)	Zone	Type	Calculated Hydraulic Grade (ft)	Demand (Calculated) (gpm)
J-D2-135	70.67	125	3.4	Zone	Demand	288.35	3.4
J-D2-140	70.67	125	3.8	Zone	Demand	288.35	3.8
J-D2-145	70.58	125	6.2	Zone	Demand	288.13	6.2
J-D2-15	69.31	128	4.8	Zone	Demand	288.19	4.8
J-D2-150	70.56	125	16.1	Zone	Demand	288.09	16.1
J-D2-155	69.17	128	6.5	Zone	Demand	287.88	6.5
J-D2-160	69.09	128	11.0	Zone	Demand	287.69	11.0
J-D2-165	70.45	125	4.8	Zone	Demand	287.83	4.8
J-D2-170	70.45	125	3.4	Zone	Demand	287.83	3.4
J-D2-175	70.52	125	4.1	Zone	Demand	287.99	4.1
J-D2-180	70.52	125	2.7	Zone	Demand	287.99	2.7
J-D2-185	70.60	125	4.1	Zone	Demand	288.18	4.1
J-D2-190	70.58	125	11.0	Zone	Demand	288.14	11.0
J-D2-195	70.89	125	5.1	Zone	Demand	288.84	5.1
J-D2-20	69.26	128	2.4	Zone	Demand	288.09	2.4
J-D2-200	70.82	125	4.1	Zone	Demand	288.68	4.1
J-D2-205	70.79	125	3.4	Zone	Demand	288.61	3.4
J-D2-210	71.64	123	4.1	Zone	Demand	288.59	4.1
J-D2-215	71.65	123	4.8	Zone	Demand	288.60	4.8
J-D2-220	71.66	123	4.8	Zone	Demand	288.62	4.8
J-D2-225	71.59	123	2.7	Zone	Demand	288.48	2.7
J-D2-230	71.54	123	4.8	Zone	Demand	288.35	4.8
J-D2-25	69.24	128	6.5	Zone	Demand	288.03	6.5
J-D2-30	69.09	128	7.9	Zone	Demand	287.68	7.9
J-D2-35	68.82	128	13.2	Zone	Demand	287.07	13.2
J-D2-40	68.75	128	7.3	Zone	Demand	286.91	7.3
J-D2-45	68.70	128	9.9	Zone	Demand	286.78	9.9
J-D2-5	69.24	128	13.7	Zone	Demand	288.04	13.7
J-D2-50	68.67	128	6.5	Zone	Demand	286.72	6.5
J-D2-55	68.64	128	9.9	Zone	Demand	286.64	9.9
J-D2-60	67.76	130	11.0	Zone	Demand	286.61	11.0
J-D2-65	68.96	128	17.8	Zone	Demand	287.39	17.8
J-D2-70	68.94	128	5.1	Zone	Demand	287.35	5.1
J-D2-75	68.30	128	5.5	Zone	Demand	285.86	5.5
J-D2-80	68.30	128	2.7	Zone	Demand	285.86	2.7
J-D2-85	68.95	128	13.0	Zone	Demand	287.37	13.0
J-D2-90	68.06	128	0.0	Zone	Demand	285.31	0.0
J-D2-95	69.09	128	5.5	Zone	Demand	287.70	5.5
J-D3-1	67.75	130	4.1	Zone	Demand	286.59	4.1
J-D3-10	67.74	130	2.7	Zone	Demand	286.58	2.7
J-D3-100	65.47	135	2.4	Zone	Demand	286.33	2.4
J-D3-105	65.48	135	1.7	Zone	Demand	286.34	1.7
J-D3-110	65.49	135	3.1	Zone	Demand	286.36	3.1
J-D3-115	65.54	135	8.2	Zone	Demand	286.49	8.2
J-D3-120	65.48	135	1.7	Zone	Demand	286.34	1.7
J-D3-125	65.48	135	10.6	Zone	Demand	286.34	10.6
J-D3-130	65.48	135	2.7	Zone	Demand	286.34	2.7
J-D3-135	65.47	135	2.4	Zone	Demand	286.32	2.4
J-D3-140	65.48	135	4.5	Zone	Demand	286.34	4.5
J-D3-145	65.47	135	4.1	Zone	Demand	286.32	4.1
J-D3-15	67.74	130	9.6	Zone	Demand	286.57	9.6
J-D3-150	65.55	135	0.0	Zone	Demand	286.50	0.0
J-D3-20	67.73	130	0.0	Zone	Demand	286.55	0.0
J-D3-25	67.73	130	6.5	Zone	Demand	286.56	6.5

Scenario: Buildout - Average Day
Steady State Analysis
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Label	Pressure (psi)	Elevation (ft)	Base Flow (gpm)	Zone	Type	Calculated Hydraulic Grade (ft)	Demand (Calculated) (gpm)
J-D3-30	67.73	130	1.7	Zone	Demand	286.56	1.7
J-D3-35	65.53	135	15.9	Zone	Demand	286.47	15.9
J-D3-40	65.53	135	15.8	Zone	Demand	286.47	15.8
J-D3-45	65.54	135	8.3	Zone	Demand	286.49	8.3
J-D3-5	67.74	130	5.1	Zone	Demand	286.58	5.1
J-D3-50	65.54	135	4.6	Zone	Demand	286.49	4.6
J-D3-55	67.71	130	4.5	Zone	Demand	286.49	4.5
J-D3-60	67.71	130	4.8	Zone	Demand	286.49	4.8
J-D3-65	67.71	130	5.5	Zone	Demand	286.50	5.5
J-D3-70	67.71	130	11.3	Zone	Demand	286.50	11.3
J-D3-75	65.55	135	3.1	Zone	Demand	286.50	3.1
J-D3-80	68.96	128	8.0	Zone	Demand	287.38	8.0
J-D3-81	68.96	128	4.8	Zone	Demand	287.38	4.8
J-D3-82	68.96	128	3.8	Zone	Demand	287.38	3.8
J-D3-85	68.96	128	1.7	Zone	Demand	287.38	1.7
J-D3-90	70.26	125	1.7	Zone	Demand	287.38	1.7
J-D3-91	70.26	125	5.1	Zone	Demand	287.38	5.1
J-D3-95	65.47	135	6.5	Zone	Demand	286.33	6.5
J-D4-1	65.48	135	8.6	Zone	Demand	286.36	8.6
J-D4-10	65.48	135	13.0	Zone	Demand	286.35	13.0
J-D4-15	65.44	135	19.9	Zone	Demand	286.26	19.9
J-D4-20	65.37	135	20.6	Zone	Demand	286.10	20.6
J-D4-25	65.35	135	8.6	Zone	Demand	286.04	8.6
J-D4-30	67.51	130	12.3	Zone	Demand	286.05	12.3
J-D4-35	67.51	130	7.5	Zone	Demand	286.03	7.5
J-D4-40	63.19	140	11.3	Zone	Demand	286.05	11.3
J-D4-45	63.20	140	0.0	Zone	Demand	286.06	0.0
J-D4-5	63.35	140	6.9	Zone	Demand	286.43	6.9
J-D4-50	63.20	140	9.9	Zone	Demand	286.07	9.9
J-D4-55	63.24	140	34.4	Zone	Demand	286.16	34.4
J-D4-60	63.32	140	26.3	Zone	Demand	286.35	26.3
J-D4-65	63.35	140	5.5	Zone	Demand	286.43	5.5
J-D4-70	65.46	135	4.5	Zone	Demand	286.30	4.5
J-D4-75	65.45	135	8.5	Zone	Demand	286.28	8.5
J-D4-80	65.46	135	5.5	Zone	Demand	286.31	5.5
J-D4-85	63.38	140	19.5	Zone	Demand	286.48	19.5
J-D4-90	66.19	133	8.3	Zone	Demand	285.98	8.3
J-D5-1	63.38	140	2.9	Zone	Demand	286.49	2.9
J-D5-10	63.35	140	14.4	Zone	Demand	286.42	14.4
J-D5-15	63.34	140	12.3	Zone	Demand	286.39	12.3
J-D5-20	63.30	140	7.5	Zone	Demand	286.32	7.5
J-D5-25	63.30	140	7.9	Zone	Demand	286.32	7.9
J-D5-30	63.31	140	6.9	Zone	Demand	286.33	6.9
J-D5-35	63.31	140	7.5	Zone	Demand	286.34	7.5
J-D5-40	63.20	140	1.4	Zone	Demand	286.07	1.4
J-D5-45	63.20	140	6.5	Zone	Demand	286.06	6.5
J-D5-5	63.36	140	17.5	Zone	Demand	286.45	17.5
J-D5-50	63.19	140	6.9	Zone	Demand	286.05	6.9
J-D5-55	63.19	140	9.9	Zone	Demand	286.05	9.9
J-D5-60	62.25	142	68.4	Zone	Demand	285.87	68.4
J-D5-85	63.19	140	7.5	Zone	Demand	286.05	7.5
J-E1-1	71.64	123	9.7	Zone	Demand	288.59	9.7
J-E1-10	71.71	123	6.1	Zone	Demand	288.74	6.1
J-E1-15	71.68	123	4.1	Zone	Demand	288.68	4.1

Scenario: Buildout - Average Day
Steady State Analysis
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Label	Pressure (psi)	Elevation (ft)	Base Flow (gpm)	Zone	Type	Calculated Hydraulic Grade (ft)	Demand (Calculated) (gpm)
J-E1-20	71.66	123	1.4	Zone	Demand	288.64	1.4
J-E1-25	72.96	120	4.8	Zone	Demand	288.64	4.8
J-E1-30	72.97	120	4.8	Zone	Demand	288.65	4.8
J-E1-35	72.97	120	5.1	Zone	Demand	288.66	5.1
J-E1-40	72.97	120	1.7	Zone	Demand	288.66	1.7
J-E1-45	72.97	120	4.8	Zone	Demand	288.66	4.8
J-E1-5	71.65	123	9.0	Zone	Demand	288.60	9.0
J-E1-50	73.20	120	0.0	Zone	Demand	289.20	0.0
J-E2-1	71.64	123	4.8	Zone	Demand	288.59	4.8
J-E2-10	71.31	123	2.7	Zone	Demand	287.83	2.7
J-E2-100	71.53	123	5.1	Zone	Demand	288.32	5.1
J-E2-105	71.54	123	0.0	Zone	Demand	288.35	0.0
J-E2-110	71.64	123	0.0	Zone	Demand	288.59	0.0
J-E2-115	71.64	123	2.7	Zone	Demand	288.58	2.7
J-E2-120	71.64	123	3.8	Zone	Demand	288.58	3.8
J-E2-125	72.94	120	4.1	Zone	Demand	288.58	4.1
J-E2-130	72.92	120	3.8	Zone	Demand	288.54	3.8
J-E2-135	71.62	123	3.8	Zone	Demand	288.54	3.8
J-E2-140	71.62	123	2.7	Zone	Demand	288.54	2.7
J-E2-145	71.61	123	2.7	Zone	Demand	288.50	2.7
J-E2-15	71.15	123	8.6	Zone	Demand	287.45	8.6
J-E2-150	71.61	123	3.8	Zone	Demand	288.50	3.8
J-E2-155	72.90	120	3.8	Zone	Demand	288.50	3.8
J-E2-160	72.89	120	2.7	Zone	Demand	288.48	2.7
J-E2-165	72.89	120	2.7	Zone	Demand	288.48	2.7
J-E2-170	71.59	123	3.8	Zone	Demand	288.48	3.8
J-E2-175	71.59	123	3.8	Zone	Demand	288.46	3.8
J-E2-180	71.58	123	4.1	Zone	Demand	288.45	4.1
J-E2-185	71.65	123	1.4	Zone	Demand	288.61	1.4
J-E2-190	73.02	120	1.7	Zone	Demand	288.78	1.7
J-E2-195	71.55	123	2.7	Zone	Demand	288.37	2.7
J-E2-20	70.45	125	8.9	Zone	Demand	287.84	8.9
J-E2-200	71.55	123	3.8	Zone	Demand	288.39	3.8
J-E2-205	71.55	123	1.7	Zone	Demand	288.39	1.7
J-E2-210	71.56	123	5.1	Zone	Demand	288.41	5.1
J-E2-215	69.21	128	15.0	Zone	Demand	287.96	15.0
J-E2-220	69.17	128	5.5	Zone	Demand	287.88	5.5
J-E2-225	69.17	128	3.4	Zone	Demand	287.87	3.4
J-E2-230	69.16	128	2.7	Zone	Demand	287.86	2.7
J-E2-235	69.16	128	4.8	Zone	Demand	287.85	4.8
J-E2-240	70.46	125	3.8	Zone	Demand	287.85	3.8
J-E2-245	70.46	125	4.8	Zone	Demand	287.86	4.8
J-E2-25	71.49	123	5.1	Zone	Demand	288.23	5.1
J-E2-250	70.29	125	5.1	Zone	Demand	287.46	5.1
J-E2-255	71.16	123	3.8	Zone	Demand	287.48	3.8
J-E2-260	71.29	123	4.8	Zone	Demand	287.76	4.8
J-E2-265	71.29	123	6.2	Zone	Demand	287.77	6.2
J-E2-270	71.30	123	6.2	Zone	Demand	287.79	6.2
J-E2-275	71.30	123	4.8	Zone	Demand	287.79	4.8
J-E2-280	71.31	123	4.8	Zone	Demand	287.83	4.8
J-E2-285	71.31	123	5.1	Zone	Demand	287.83	5.1
J-E2-290	70.46	125	8.6	Zone	Demand	287.85	8.6
J-E2-30	71.54	123	10.3	Zone	Demand	288.36	10.3
J-E2-35	71.64	123	9.3	Zone	Demand	288.58	9.3

Scenario: Buildout - Average Day
Steady State Analysis
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Label	Pressure (psi)	Elevation (ft)	Base Flow (gpm)	Zone	Type	Calculated Hydraulic Grade (ft)	Demand (Calculated) (gpm)
J-E2-40	71.64	123	4.8	Zone	Demand	288.58	4.8
J-E2-45	71.64	123	3.8	Zone	Demand	288.58	3.8
J-E2-5	71.59	123	3.4	Zone	Demand	288.48	3.4
J-E2-50	71.64	123	2.7	Zone	Demand	288.58	2.7
J-E2-55	71.64	123	3.4	Zone	Demand	288.58	3.4
J-E2-60	71.64	123	3.8	Zone	Demand	288.58	3.8
J-E2-65	71.64	123	4.8	Zone	Demand	288.58	4.8
J-E2-70	71.59	123	4.1	Zone	Demand	288.47	4.1
J-E2-75	71.59	123	3.8	Zone	Demand	288.47	3.8
J-E2-80	71.55	123	5.5	Zone	Demand	288.38	5.5
J-E2-85	71.54	123	4.1	Zone	Demand	288.34	4.1
J-E2-90	71.52	123	3.8	Zone	Demand	288.30	3.8
J-E2-95	71.52	123	4.8	Zone	Demand	288.31	4.8
J-E3-1	70.25	125	5.1	Zone	Demand	287.38	5.1
J-E3-10	68.96	128	6.2	Zone	Demand	287.38	6.2
J-E3-100	70.41	125	3.8	Zone	Demand	287.75	3.8
J-E3-105	65.42	135	3.4	Zone	Demand	286.22	3.4
J-E3-110	67.73	130	5.0	Zone	Demand	286.55	5.0
J-E3-115	67.72	130	4.1	Zone	Demand	286.53	4.1
J-E3-120	67.66	130	7.2	Zone	Demand	286.38	7.2
J-E3-125	67.62	130	6.2	Zone	Demand	286.29	6.2
J-E3-130	65.46	135	7.2	Zone	Demand	286.30	7.2
J-E3-135	65.42	135	3.1	Zone	Demand	286.20	3.1
J-E3-140	65.43	135	3.1	Zone	Demand	286.23	3.1
J-E3-145	65.41	135	3.1	Zone	Demand	286.18	3.1
J-E3-15	70.26	125	0.0	Zone	Demand	287.39	0.0
J-E3-150	67.60	130	2.7	Zone	Demand	286.24	2.7
J-E3-155	65.43	135	0.3	Zone	Demand	286.23	0.3
J-E3-16	70.26	125	1.4	Zone	Demand	287.39	1.4
J-E3-160	65.43	135	0.3	Zone	Demand	286.23	0.3
J-E3-165	65.42	135	3.1	Zone	Demand	286.20	3.1
J-E3-17	70.26	125	3.4	Zone	Demand	287.39	3.4
J-E3-175	67.61	130	3.8	Zone	Demand	286.28	3.8
J-E3-18	69.18	127	3.0	Zone	Demand	286.89	3.0
J-E3-20	70.27	125	0.0	Zone	Demand	287.42	0.0
J-E3-25	70.27	125	3.4	Zone	Demand	287.43	3.4
J-E3-30	70.27	125	4.1	Zone	Demand	287.43	4.1
J-E3-35	70.28	125	3.8	Zone	Demand	287.43	3.8
J-E3-40	70.28	125	2.7	Zone	Demand	287.44	2.7
J-E3-41	70.28	125	2.7	Zone	Demand	287.45	2.7
J-E3-42	70.28	125	4.1	Zone	Demand	287.45	4.1
J-E3-45	70.39	125	2.7	Zone	Demand	287.71	2.7
J-E3-5	68.96	128	5.5	Zone	Demand	287.38	5.5
J-E3-50	70.39	125	3.4	Zone	Demand	287.71	3.4
J-E3-55	70.38	125	3.8	Zone	Demand	287.66	3.8
J-E3-60	70.38	125	2.7	Zone	Demand	287.66	2.7
J-E3-65	70.38	125	2.7	Zone	Demand	287.66	2.7
J-E3-70	70.36	125	4.8	Zone	Demand	287.63	4.8
J-E3-71	70.36	125	5.1	Zone	Demand	287.63	5.1
J-E3-75	70.35	125	2.7	Zone	Demand	287.61	2.7
J-E3-80	70.34	125	1.7	Zone	Demand	287.59	1.7
J-E3-81	70.34	125	2.7	Zone	Demand	287.59	2.7
J-E3-85	70.29	125	2.4	Zone	Demand	287.45	2.4
J-E3-86	70.29	125	2.4	Zone	Demand	287.45	2.4

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Label	Pressure (psi)	Elevation (ft)	Base Flow (gpm)	Zone	Type	Calculated Hydraulic Grade (ft)	Demand (Calculated) (gpm)
J-E3-90	69.08	128	8.2	Zone	Demand	287.66	8.2
J-E3-91	69.08	128	2.7	Zone	Demand	287.66	2.7
J-E3-95	70.42	125	7.9	Zone	Demand	287.76	7.9
J-E4-1	65.34	135	0.0	Zone	Demand	286.01	0.0
J-E4-10	67.45	130	6.5	Zone	Demand	285.90	6.5
J-E4-15	67.43	130	68.4	Zone	Demand	285.84	68.4
J-E4-20	65.22	135	15.2	Zone	Demand	285.74	15.2
J-E4-25	65.34	135	3.1	Zone	Demand	286.01	3.1
J-E4-30	67.46	130	4.5	Zone	Demand	285.92	4.5
J-E4-35	67.46	130	3.4	Zone	Demand	285.92	3.4
J-E4-40	65.30	135	6.9	Zone	Demand	285.92	6.9
J-E4-45	65.35	135	1.7	Zone	Demand	286.05	1.7
J-E4-5	67.48	130	6.9	Zone	Demand	285.96	6.9
J-E4-50	65.35	135	4.5	Zone	Demand	286.04	4.5
J-E4-55	65.33	135	2.7	Zone	Demand	286.00	2.7
J-E4-60	65.23	135	2.4	Zone	Demand	285.77	2.4
J-E4-65	65.31	135	4.1	Zone	Demand	285.95	4.1
J-E4-70	65.16	135	0.3	Zone	Demand	285.60	0.3
J-E4-75	65.14	135	0.0	Zone	Demand	285.57	0.0
J-E4-80	65.08	135	32.7	Zone	Demand	285.41	32.7
J-E5-1	60.91	145	59.4	Zone	Demand	285.78	59.4
J-E5-5	63.04	140	15.2	Zone	Demand	285.71	15.2
J-F1-10	75.07	118	0.0	Zone	Demand	291.50	0.0
J-F1-15	75.03	118	15.7	Zone	Demand	291.41	15.7
J-F1-4	75.24	118	0.0	Zone	Demand	291.91	0.0
J-F1-5	75.15	118	19.2	Zone	Demand	291.69	19.2
J-F2-1	70.49	125	4.1	Zone	Demand	287.93	4.1
J-F2-10	70.49	125	5.1	Zone	Demand	287.93	5.1
J-F2-15	70.51	125	4.1	Zone	Demand	287.96	4.1
J-F2-20	70.50	125	4.1	Zone	Demand	287.94	4.1
J-F2-25	70.50	125	4.8	Zone	Demand	287.94	4.8
J-F2-30	69.19	128	3.8	Zone	Demand	287.91	3.8
J-F2-35	69.19	128	3.4	Zone	Demand	287.91	3.4
J-F2-40	69.36	128	0.0	Zone	Demand	288.32	0.0
J-F2-45	69.37	128	0.3	Zone	Demand	288.33	0.3
J-F2-5	70.47	125	7.9	Zone	Demand	287.87	7.9
J-F2-50	69.64	128	0.0	Zone	Demand	288.96	0.0
J-F2-55	69.64	128	3.8	Zone	Demand	288.96	3.8
J-F2-60	70.20	128	3.4	Zone	Demand	290.26	3.4
J-F2-65	69.34	128	1.0	Zone	Demand	288.26	1.0
J-F2-70	69.34	128	4.1	Zone	Demand	288.26	4.1
J-F2-75	73.92	120	30.0	Zone	Demand	290.86	30.0
J-F2-80	73.92	120	0.0	Zone	Demand	290.86	0.0
J-F2-85	73.91	120	15.7	Zone	Demand	290.82	15.7
J-F3-1	70.47	125	4.1	Zone	Demand	287.87	4.1
J-F3-10	69.10	128	3.4	Zone	Demand	287.70	3.4
J-F3-100	69.25	128	2.4	Zone	Demand	288.05	2.4
J-F3-105	69.22	128	4.5	Zone	Demand	287.99	4.5
J-F3-11	69.10	128	2.7	Zone	Demand	287.70	2.7
J-F3-110	69.22	128	0.3	Zone	Demand	287.99	0.3
J-F3-115	67.87	130	2.3	Zone	Demand	286.86	2.3
J-F3-120	67.79	130	2.8	Zone	Demand	286.69	2.8
J-F3-125	67.65	130	0.0	Zone	Demand	286.36	0.0
J-F3-15	68.25	130	4.8	Zone	Demand	287.75	4.8

Scenario: Buildout - Average Day
Steady State Analysis
Junction Report

Label	Pressure (psi)	Elevation (ft)	Base Flow (gpm)	Zone	Type	Calculated Hydraulic Grade (ft)	Demand (Calculated) (gpm)
J-F3-20	67.92	130	1.7	Zone	Demand	286.98	1.7
J-F3-25	67.92	130	2.4	Zone	Demand	286.98	2.4
J-F3-30	68.32	130	2.1	Zone	Demand	287.91	2.1
J-F3-35	68.32	130	0.0	Zone	Demand	287.91	0.0
J-F3-40	68.27	130	4.8	Zone	Demand	287.79	4.8
J-F3-45	68.27	130	4.1	Zone	Demand	287.79	4.1
J-F3-5	69.10	128	4.8	Zone	Demand	287.70	4.8
J-F3-50	69.15	128	6.2	Zone	Demand	287.83	6.2
J-F3-55	69.15	128	4.8	Zone	Demand	287.83	4.8
J-F3-60	69.17	128	7.2	Zone	Demand	287.88	7.2
J-F3-65	69.18	128	4.8	Zone	Demand	287.90	4.8
J-F3-70	69.18	128	2.7	Zone	Demand	287.90	2.7
J-F3-75	69.31	128	1.0	Zone	Demand	288.19	1.0
J-F3-80	69.31	128	3.8	Zone	Demand	288.19	3.8
J-F3-85	69.28	128	2.7	Zone	Demand	288.12	2.7
J-F3-90	69.28	128	1.0	Zone	Demand	288.12	1.0
J-F3-95	69.25	128	1.0	Zone	Demand	288.05	1.0
J-F4-1	65.18	135	14.5	Zone	Demand	285.66	14.5
J-F4-10	67.27	130	32.7	Zone	Demand	285.48	32.7
J-F4-15	67.13	130	32.7	Zone	Demand	285.17	32.7
J-F4-5	67.32	130	0.0	Zone	Demand	285.59	0.0
J-F5-1	65.18	135	15.2	Zone	Demand	285.65	15.2
J-F5-5	67.33	130	0.0	Zone	Demand	285.63	0.0
WELL 2	64.99	139	95.1	Zone	Inflow	289.21	-95.1
WELL 3	68.72	128	90.3	Zone	Inflow	286.84	-90.3
WELL 4	67.69	129	0.0	Zone	Demand	285.46	0.0
WELL 5	67.91	130	0.0	Zone	Demand	286.96	0.0
WELL 6	64.06	139	144.4	Zone	Inflow	287.06	-144.4
WELL 7	80.35	129	1,200.0	Zone	Inflow	314.72	-1,200.0
WELL 8	75.79	125	1,200.0	Zone	Inflow	300.18	-1,200.0
WELL 9	68.76	129	187.5	Zone	Inflow	287.92	-187.5
WELL 10	75.39	118	1,700.0	Zone	Inflow	292.25	-1,700.0
WELL 11	67.43	145	1,700.0	Zone	Inflow	300.86	-1,700.0

Scenario: Buildout - Average Day
Steady State Analysis
Pipe Report

Label	Diameter (in)	Velocity (ft/s)	Discharge (Absolute Value) (gpm)	Length (ft)	Material	Hazen-Williams C	Control Status	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)
P-5	8	0.00	0.0	25.00	Ductile Iro	130.0	Closed	285.00	285.16	0.00
P-10	8	0.00	0.0	25.00	Ductile Iro	130.0	Open	285.16	285.16	0.00
P-15	8	0.00	0.0	25.00	Ductile Iro	130.0	Closed	285.00	285.16	0.00
P-20	8	0.00	0.0	25.00	Ductile Iro	130.0	Open	285.16	285.16	0.00
P-25	8	0.00	0.0	25.00	Ductile Iro	130.0	Closed	285.00	285.16	0.00
P-30	8	0.00	0.0	25.00	Ductile Iro	130.0	Open	285.16	285.16	0.00
P-35	10	2.83	692.7	50.00	Ductile Iro	130.0	Open	285.16	285.00	0.16
P-40	8	0.00	0.0	25.00	Ductile Iro	130.0	Closed	285.00	285.31	0.00
P-45	8	0.00	0.0	25.00	Ductile Iro	130.0	Open	285.31	285.31	0.00
P-50	8	0.00	0.0	25.00	Ductile Iro	130.0	Closed	285.00	285.31	0.00
P-55	8	0.00	0.0	25.00	Ductile Iro	130.0	Open	285.31	285.31	0.00
P-60	8	0.00	0.0	25.00	Ductile Iro	130.0	Closed	285.00	285.31	0.00
P-65	8	0.00	0.0	25.00	Ductile Iro	130.0	Open	285.31	285.31	0.00
P-70	10	4.10	1,002.8	50.00	Ductile Iro	130.0	Open	285.31	285.00	0.31
P-75	12	0.53	187.5	84.00	Ductile Iro	130.0	Open	287.92	287.91	0.01
P-80	8	0.00	0.0	25.00	Ductile Iro	130.0	Open	285.00	285.00	0.00
P-85	8	0.00	0.0	25.00	Ductile Iro	130.0	Open	285.17	285.17	0.00
P-90	8	0.00	0.0	25.00	Ductile Iro	130.0	Open	285.00	285.00	0.00
P-95	8	0.00	0.0	25.00	Ductile Iro	130.0	Open	285.17	285.17	0.00
P-100	8	0.00	0.0	284.00	Ductile Iro	130.0	Open	285.00	285.00	0.00
P-105	8	0.00	0.0	25.00	Ductile Iro	130.0	Open	285.17	285.17	0.00
P-110	10	2.95	722.1	50.00	Ductile Iro	130.0	Open	285.17	285.00	0.17
P-A1-1	8	0.01	2.3	305.00	Ductile Iro	130.0	Open	286.96	286.96	0.00
P-A1-10	8	0.03	4.4	109.00	Ductile Iro	130.0	Open	286.96	286.96	0.00
P-A1-5	8	0.01	2.3	304.00	Ductile Iro	130.0	Open	286.96	286.96	0.00
P-A2-10	6	0.56	49.0	724.00	Ductile Iro	130.0	Open	286.18	286.38	0.20
P-A2-15	6	0.45	40.1	522.00	Ductile Iro	130.0	Open	286.18	286.08	0.10
P-A2-30	8	0.23	35.5	690.00	Ductile Iro	130.0	Open	285.53	285.51	0.03
P-A2-50	8	0.17	26.3	543.00	Ductile Iro	130.0	Open	285.51	285.50	0.01
P-A2-55	8	0.12	18.4	265.00	Ductile Iro	130.0	Open	285.50	285.49	0.00
P-A2-75	8	0.03	4.1	250.00	Ductile Iro	130.0	Open	285.49	285.49	0.00
P-A2-80	8	0.08	13.0	320.00	Ductile Iro	130.0	Open	285.49	285.49	0.00
P-A3-1	6	0.25	22.3	452.00	Ductile Iro	130.0	Open	285.52	285.49	0.03
P-A3-10	8	0.13	20.2	247.00	Ductile Iro	130.0	Open	285.49	285.49	0.00
P-A3-100	10	0.05	11.2	899.00	Ductile Iro	130.0	Open	285.44	285.44	0.00
P-A3-115	8	2.44	382.8	674.00	Ductile Iro	130.0	Open	288.78	290.86	2.08
P-A3-120	12	0.05	17.2	399.00	Ductile Iro	130.0	Open	290.86	290.86	0.00
P-A3-125	12	0.42	148.3	562.00	Ductile Iro	130.0	Open	290.86	290.82	0.04
P-A3-15	8	0.10	16.3	256.00	Ductile Iro	130.0	Open	285.49	285.49	0.00
P-A3-20	8	0.10	16.3	237.00	Ductile Iro	130.0	Open	285.49	285.48	0.00
P-A3-25	6	0.15	13.1	880.00	Ductile Iro	130.0	Open	285.48	285.50	0.02
P-A3-30	8	0.14	22.5	567.00	Ductile Iro	130.0	Open	285.51	285.50	0.01
P-A3-35	8	0.07	11.2	1,110.00	Ductile Iro	130.0	Open	285.49	285.49	0.00
P-A3-40	8	0.25	38.9	237.00	Ductile Iro	130.0	Open	285.51	285.52	0.01
P-A3-45	8	0.37	58.4	716.00	Ductile Iro	130.0	Open	285.53	285.60	0.07
P-A3-5	8	0.29	45.3	1,056.00	Ductile Iro	130.0	Open	285.58	285.52	0.06
P-A3-50	8	0.21	33.2	683.00	Ductile Iro	130.0	Open	285.49	285.51	0.02
P-A3-55	8	0.11	16.7	496.00	Ductile Iro	130.0	Open	285.52	285.51	0.00
P-A3-60	12	0.77	272.5	2,648.00	Ductile Iro	130.0	Open	288.59	289.20	0.60
P-A3-70	12	0.31	110.5	1,471.00	Ductile Iro	130.0	Open	285.52	285.46	0.06
P-A3-75	10	0.34	84.0	297.00	Ductile Iro	130.0	Open	285.46	285.44	0.02
P-A3-80	12	0.47	167.0	626.00	Ductile Iro	130.0	Open	285.52	285.58	0.06
P-A3-85	8	0.10	14.9	149.00	Ductile Iro	130.0	Open	285.48	285.48	0.00

Scenario: Buildout - Average Day
Steady State Analysis
Pipe Report

Label	Diameter (in)	Velocity (ft/s)	Discharge (Absolute Value) (gpm)	Length (ft)	Material	Hazen-Williams C	Control Status	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)
P-A3-90	8	0.10	14.9	759.00	Ductile Iro	130.0	Open	285.48	285.48	0.01
P-A3-95	6	0.00	0.0	296.00	Ductile Iro	130.0	Open	285.48	285.48	0.00
P-A4-1	10	0.02	5.3	353.00	Ductile Iro	130.0	Open	285.44	285.44	0.00
P-A4-10	4	0.58	22.8	897.00	Ductile Iro	130.0	Open	285.45	285.88	0.44
P-A4-15	8	0.18	28.5	131.00	Ductile Iro	130.0	Open	285.88	285.88	0.00
P-A4-5	6	0.26	22.8	78.00	Ductile Iro	130.0	Open	285.44	285.45	0.01
P-B1-10	12	0.00	0.2	810.00	Ductile Iro	130.0	Open	287.40	287.40	0.00
P-B1-100	8	0.06	9.7	372.00	Ductile Iro	130.0	Open	286.96	286.96	0.00
P-B1-105	10	0.00	0.0	476.00	Ductile Iro	130.0	Open	286.96	286.96	0.00
P-B1-110	10	0.11	26.9	1,090.00	Ductile Iro	130.0	Open	286.96	286.97	0.01
P-B1-115	10	0.79	194.5	290.00	Ductile Iro	130.0	Open	287.09	287.18	0.09
P-B1-120	12	0.71	251.5	140.00	Ductile Iro	130.0	Open	287.26	287.28	0.03
P-B1-125	8	0.02	3.9	254.00	Ductile Iro	130.0	Open	286.96	286.96	0.00
P-B1-130	6	0.06	5.1	385.00	Ductile Iro	130.0	Open	286.96	286.96	0.00
P-B1-135	6	0.05	4.4	723.00	Ductile Iro	130.0	Open	286.96	286.96	0.00
P-B1-140	6	0.13	11.2	407.00	Ductile Iro	130.0	Open	287.40	287.41	0.01
P-B1-145	8	0.19	30.1	289.00	Ductile Iro	130.0	Open	287.40	287.41	0.01
P-B1-15	6	0.05	4.3	455.00	Ductile Iro	130.0	Open	287.40	287.40	0.00
P-B1-150	12	0.74	261.5	344.00	Ductile Iro	130.0	Open	287.36	287.28	0.07
P-B1-155	8	1.01	158.6	978.00	Ductile Iro	130.0	Open	286.97	286.38	0.59
P-B1-160	10	1.25	306.6	698.00	Ductile Iro	130.0	Open	287.36	286.87	0.48
P-B1-165	10	1.15	281.8	631.00	Ductile Iro	130.0	Open	286.87	286.50	0.37
P-B1-20	6	0.84	74.0	164.00	Ductile Iro	130.0	Open	287.40	287.50	0.10
P-B1-25	8	0.03	4.5	546.00	Ductile Iro	130.0	Open	287.50	287.50	0.00
P-B1-30	12	0.29	101.6	1,144.00	Ductile Iro	130.0	Open	287.40	287.36	0.04
P-B1-40	12	0.00	0.0	480.00	Ductile Iro	130.0	Open	287.36	287.36	0.00
P-B1-45	10	1.03	251.5	157.00	Ductile Iro	130.0	Open	287.18	287.26	0.08
P-B1-5	12	0.08	27.6	435.00	Ductile Iro	130.0	Open	287.40	287.40	0.00
P-B1-50	8	0.03	4.8	514.00	Ductile Iro	130.0	Open	287.28	287.28	0.00
P-B1-55	8	0.03	4.8	276.00	Ductile Iro	130.0	Open	287.28	287.28	0.00
P-B1-60	8	0.30	46.4	718.00	Ductile Iro	130.0	Open	287.18	287.14	0.04
P-B1-65	8	0.26	40.6	294.00	Ductile Iro	130.0	Open	287.14	287.12	0.01
P-B1-70	8	0.23	35.8	716.00	Ductile Iro	130.0	Open	287.12	287.09	0.03
P-B1-75	10	0.92	226.2	312.00	Ductile Iro	130.0	Open	287.09	286.97	0.12
P-B1-80	10	0.12	28.3	238.00	Ductile Iro	130.0	Open	286.97	286.97	0.00
P-B1-85	8	0.04	5.8	339.00	Ductile Iro	130.0	Open	286.97	286.97	0.00
P-B1-90	8	0.14	22.5	319.00	Ductile Iro	130.0	Open	286.97	286.96	0.01
P-B1-95	8	0.06	8.9	268.00	Ductile Iro	130.0	Open	286.96	286.96	0.00
P-B2-1	8	0.77	120.9	301.00	Ductile Iro	130.0	Open	286.08	286.19	0.11
P-B2-10	8	0.66	102.8	346.00	Ductile Iro	130.0	Open	286.29	286.38	0.09
P-B2-100	10	0.62	151.6	1,330.00	Ductile Iro	130.0	Open	285.83	285.58	0.25
P-B2-105	6	0.40	35.6	1,325.00	Ductile Iro	130.0	Open	285.94	285.74	0.20
P-B2-110	6	0.48	42.3	1,309.00	Ductile Iro	130.0	Open	286.08	285.80	0.28
P-B2-115	10	0.75	183.2	675.00	Ductile Iro	130.0	Open	286.50	286.32	0.18
P-B2-120	10	0.65	158.5	686.00	Ductile Iro	130.0	Open	286.32	286.18	0.14
P-B2-15	8	0.04	6.2	419.00	Ductile Iro	130.0	Open	286.19	286.19	0.00
P-B2-20	8	0.21	32.2	298.00	Ductile Iro	130.0	Open	286.29	286.30	0.01
P-B2-25	8	0.32	50.3	668.00	Ductile Iro	130.0	Open	286.30	286.25	0.05
P-B2-30	8	0.05	7.2	400.00	Ductile Iro	130.0	Open	286.25	286.25	0.00
P-B2-40	8	0.40	62.1	193.00	Ductile Iro	130.0	Open	285.60	285.58	0.02
P-B2-45	6	1.37	120.4	156.00	Ductile Iro	130.0	Open	285.60	285.83	0.23
P-B2-5	8	0.83	130.2	234.00	Ductile Iro	130.0	Open	286.19	286.29	0.10
P-B2-50	10	0.55	134.3	730.00	Ductile Iro	130.0	Open	285.83	285.94	0.11

Scenario: Buildout - Average Day
Steady State Analysis
Pipe Report

Label	Diameter (in)	Velocity (ft/s)	Discharge (Absolute Value) (gpm)	Length (ft)	Material	Hazen-Williams C	Control Status	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)
P-B2-55	10	0.70	171.0	588.00	Ductile Iro	130.0	Open	285.94	286.08	0.14
P-B2-60	10	0.92	226.3	268.00	Ductile Iro	130.0	Open	286.08	286.18	0.11
P-B2-65	10	0.84	205.0	649.00	Ductile Iro	130.0	Open	286.18	285.97	0.21
P-B2-70	10	0.74	180.3	655.00	Ductile Iro	130.0	Open	285.97	285.80	0.17
P-B2-75	8	0.63	98.6	818.00	Ductile Iro	130.0	Open	286.30	286.50	0.20
P-B2-80	4	0.81	31.8	324.00	Ductile Iro	130.0	Open	286.23	285.94	0.29
P-B2-85	8	0.26	41.0	356.00	Ductile Iro	130.0	Open	286.25	286.23	0.02
P-B2-95	10	0.62	152.1	1,322.00	Ductile Iro	130.0	Open	286.08	285.83	0.25
P-B3-1	10	0.18	45.0	327.00	Ductile Iro	130.0	Open	285.58	285.59	0.01
P-B3-10	8	0.09	14.3	1,046.00	Ductile Iro	130.0	Open	285.74	285.73	0.01
P-B3-20	10	0.08	20.6	255.00	Ductile Iro	130.0	Open	285.80	285.80	0.00
P-B3-3	6	0.67	59.0	375.00	Ductile Iro	130.0	Open	285.74	285.59	0.15
P-B3-30	10	0.75	182.9	803.00	Ductile Iro	130.0	Open	285.63	285.42	0.21
P-B3-40	10	0.12	28.9	198.00	Ductile Iro	130.0	Open	285.22	285.22	0.00
P-B3-45	10	0.94	230.1	558.00	Ductile Iro	130.0	Open	285.22	285.44	0.23
P-B3-5	6	0.43	37.6	359.00	Ductile Iro	130.0	Open	285.80	285.74	0.06
P-B3-50	6	0.29	25.2	2,075.00	Ductile Iro	130.0	Open	285.80	285.63	0.17
P-B3-55	10	0.15	37.6	241.00	Ductile Iro	130.0	Open	285.80	285.80	0.00
P-B3-60	6	0.33	28.9	2,136.00	Ductile Iro	130.0	Open	285.22	285.44	0.22
P-B3-70	10	1.95	477.4	168.00	Ductile Iro	130.0	Open	285.42	285.16	0.26
P-B3-75	10	0.88	215.4	173.00	Ductile Iro	130.0	Open	285.16	285.22	0.06
P-B3-80	10	0.56	136.5	650.00	Ductile Iro	130.0	Open	285.80	285.70	0.10
P-B3-85	10	0.46	111.8	655.00	Ductile Iro	130.0	Open	285.70	285.63	0.07
P-B4-1	8	0.13	20.6	345.00	Ductile Iro	130.0	Open	286.01	286.01	0.00
P-B4-10	10	1.11	272.8	1,310.00	Ductile Iro	130.0	Open	286.65	287.38	0.73
P-B4-15	6	2.73	240.4	352.00	Ductile Iro	130.0	Open	287.38	289.24	1.86
P-B4-20	8	3.12	489.1	160.00	Ductile Iro	130.0	Open	289.24	290.02	0.78
P-B4-25	8	1.34	210.6	190.00	Ductile Iro	130.0	Open	290.21	290.02	0.19
P-B4-250	10	1.14	280.0	974.00	Ductile Iro	130.0	Open	285.44	286.01	0.57
P-B4-30	8	2.00	312.9	546.00	Ductile Iro	130.0	Open	290.21	291.37	1.16
P-B4-35	10	0.12	30.2	318.00	Ductile Iro	130.0	Open	286.65	286.65	0.00
P-B4-40	8	0.15	23.8	320.00	Ductile Iro	130.0	Open	287.38	287.37	0.01
P-B4-45	10	1.24	302.4	1,832.00	Ductile Iro	130.0	Open	285.42	286.65	1.23
P-B4-50	8	0.36	55.8	1,422.00	Ductile Iro	130.0	Open	285.88	286.01	0.12
P-B4-55	6	1.09	95.8	578.00	Ductile Iro	130.0	Open	290.21	289.66	0.56
P-B4-60	10	0.05	11.3	1,772.00	Ductile Iro	130.0	Open	285.44	285.44	0.00
P-B4-65	4	1.70	66.5	1,034.00	Ductile Iro	130.0	Open	289.66	286.01	3.65
P-B4-70	8	0.11	16.5	180.00	Ductile Iro	130.0	Open	291.37	291.37	0.00
P-B5-1	8	1.72	270.0	404.00	Ductile Iro	130.0	Open	292.33	291.68	0.65
P-B5-11	10	6.85	1,676.4	236.00	Ductile Iro	130.0	Open	296.28	300.06	3.78
P-B5-12	12	4.82	1,700.0	117.00	Ductile Iro	130.0	Open	300.06	300.86	0.79
P-B5-15	10	0.26	64.7	831.00	Ductile Iro	130.0	Open	287.38	287.41	0.03
P-B5-2	12	2.15	758.4	1,347.00	Ductile Iro	130.0	Open	291.68	293.72	2.05
P-B5-20	10	0.04	9.6	165.00	Ductile Iro	130.0	Open	287.41	287.41	0.00
P-B5-25	6	0.94	82.9	655.00	Ductile Iro	130.0	Open	287.41	287.89	0.48
P-B5-3	12	2.15	758.4	439.00	Ductile Iro	130.0	Open	293.72	294.39	0.67
P-B5-30	6	0.26	22.7	1,011.00	Ductile Iro	130.0	Open	286.52	286.45	0.07
P-B5-4	8	1.67	260.9	1,357.00	Ductile Iro	130.0	Open	294.39	292.33	2.06
P-B5-40	6	13.62	1,200.0	109.00	Ductile Iro	130.0	Open	288.84	300.18	11.33
P-B5-45	6	13.62	1,200.0	199.00	Ductile Iro	130.0	Open	294.04	314.72	20.69
P-B5-5	8	1.79	280.6	1,331.00	Ductile Iro	130.0	Open	290.02	292.33	2.31
P-B5-50	6	0.00	0.0	180.00	Ductile Iro	130.0	Open	286.96	286.96	0.00
P-B5-55	6	1.02	90.3	166.00	Ductile Iro	130.0	Open	286.70	286.84	0.14

Scenario: Buildout - Average Day
Steady State Analysis
Pipe Report

Label	Diameter (in)	Velocity (ft/s)	Discharge (Absolute Value) (gpm)	Length (ft)	Material	Hazen-Williams C	Control Status	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)
P-B5-6	12	0.88	308.7	743.00	Ductile Iro	130.0	Open	292.33	292.54	0.21
P-B5-60	6	0.00	0.0	193.00	Ductile Iro	130.0	Open	285.46	285.46	0.00
P-B5-65	8	2.01	315.0	1,370.00	Ductile Iro	130.0	Open	286.01	288.96	2.95
P-B5-7	12	2.89	1,019.3	720.00	Ductile Iro	130.0	Open	294.39	296.28	1.89
P-B5-70	8	1.44	225.3	245.00	Ductile Iro	130.0	Open	288.96	289.24	0.28
P-B5-75	6	1.08	95.1	270.00	Ductile Iro	130.0	Open	288.96	289.21	0.26
P-B5-8	10	1.42	348.4	1,339.00	Ductile Iro	130.0	Open	291.37	292.54	1.17
P-B5-9	10	2.68	657.1	1,320.00	Ductile Iro	130.0	Open	292.54	296.28	3.74
P-B6-2	10	0.10	23.6	817.00	Ductile Iro	130.0	Open	300.06	300.06	0.00
P-C1-1	6	0.29	25.4	421.00	Ductile Iro	130.0	Open	287.42	287.46	0.03
P-C1-10	6	0.05	4.3	244.00	Ductile Iro	130.0	Open	287.41	287.41	0.00
P-C1-100	6	0.82	72.6	488.00	Ductile Iro	130.0	Open	288.32	288.04	0.28
P-C1-105	6	3.28	288.8	251.00	Ductile Iro	130.0	Open	288.32	290.18	1.87
P-C1-110	8	1.49	232.7	491.00	Ductile Iro	130.0	Open	289.58	290.18	0.60
P-C1-115	8	1.45	227.2	316.00	Ductile Iro	130.0	Open	289.21	289.58	0.37
P-C1-120	10	2.88	704.5	188.00	Ductile Iro	130.0	Open	288.60	289.21	0.61
P-C1-125	8	3.09	484.1	390.00	Ductile Iro	130.0	Open	289.21	291.07	1.86
P-C1-130	8	3.13	490.7	607.00	Ductile Iro	130.0	Open	291.07	294.04	2.97
P-C1-135	8	4.49	703.9	404.00	Ductile Iro	130.0	Open	290.18	294.04	3.85
P-C1-140	6	0.73	64.3	522.00	Ductile Iro	130.0	Open	288.04	287.80	0.24
P-C1-145	12	1.82	642.5	218.00	Ductile Iro	130.0	Open	288.36	288.60	0.24
P-C1-15	6	0.34	30.3	428.00	Ductile Iro	130.0	Open	287.46	287.41	0.05
P-C1-150	12	1.36	480.4	659.00	Ductile Iro	130.0	Open	287.36	287.79	0.43
P-C1-155	8	0.81	126.2	1,068.00	Ductile Iro	130.0	Open	287.59	288.01	0.42
P-C1-20	6	0.65	57.4	70.00	Ductile Iro	130.0	Open	287.46	287.48	0.03
P-C1-25	6	0.68	60.2	270.00	Ductile Iro	130.0	Open	287.48	287.59	0.11
P-C1-30	8	0.61	94.9	216.00	Ductile Iro	130.0	Open	287.59	287.54	0.05
P-C1-35	8	0.54	84.3	247.00	Ductile Iro	130.0	Open	287.50	287.54	0.05
P-C1-40	8	0.03	5.1	556.00	Ductile Iro	130.0	Open	287.54	287.54	0.00
P-C1-45	6	0.51	45.0	1,048.00	Ductile Iro	130.0	Open	287.59	287.84	0.25
P-C1-5	6	0.23	19.9	254.00	Ductile Iro	130.0	Open	287.41	287.42	0.01
P-C1-50	6	0.65	57.4	518.00	Ductile Iro	130.0	Open	287.84	288.03	0.19
P-C1-55	8	0.32	50.8	274.00	Ductile Iro	130.0	Open	288.01	288.03	0.02
P-C1-60	6	0.96	84.3	342.00	Ductile Iro	130.0	Open	288.01	288.27	0.26
P-C1-65	12	1.56	551.4	334.00	Ductile Iro	130.0	Open	288.08	288.36	0.28
P-C1-70	8	0.57	88.7	424.00	Ductile Iro	130.0	Open	288.27	288.36	0.09
P-C1-75	8	0.73	114.0	140.00	Ductile Iro	130.0	Open	288.03	288.08	0.05
P-C1-80	12	1.24	437.4	538.00	Ductile Iro	130.0	Open	288.08	287.79	0.29
P-C1-85	8	0.27	43.0	212.00	Ductile Iro	130.0	Open	287.79	287.80	0.01
P-C1-90	8	0.08	12.7	479.00	Ductile Iro	130.0	Open	287.80	287.79	0.00
P-C1-95	6	1.12	98.3	519.00	Ductile Iro	130.0	Open	287.79	288.32	0.52
P-C2-10	6	0.50	44.2	513.00	Ductile Iro	130.0	Open	287.48	287.36	0.12
P-C2-100	6	0.43	37.9	311.00	Ductile Iro	130.0	Open	287.00	287.06	0.05
P-C2-105	6	1.04	91.8	262.00	Ductile Iro	130.0	Open	287.06	287.29	0.23
P-C2-110	6	1.10	97.0	245.00	Ductile Iro	130.0	Open	287.29	287.53	0.24
P-C2-115	10	0.32	77.6	233.00	Ductile Iro	130.0	Open	286.85	286.86	0.01
P-C2-120	8	0.88	137.5	185.00	Ductile Iro	130.0	Open	287.53	287.62	0.09
P-C2-125	6	1.83	161.1	290.00	Ductile Iro	130.0	Open	288.81	288.08	0.73
P-C2-130	6	1.19	105.3	285.00	Ductile Iro	130.0	Open	288.08	287.76	0.33
P-C2-135	6	1.16	102.5	205.00	Ductile Iro	130.0	Open	287.76	287.53	0.22
P-C2-140	6	0.02	1.8	257.00	Ductile Iro	130.0	Open	287.53	287.53	0.00
P-C2-145	8	0.36	55.8	499.00	Ductile Iro	130.0	Open	288.08	288.04	0.04
P-C2-15	8	1.09	171.0	266.00	Ductile Iro	130.0	Open	287.36	287.18	0.18

Scenario: Buildout - Average Day
Steady State Analysis
Pipe Report

Label	Diameter (in)	Velocity (ft/s)	Discharge (Absolute Value) (gpm)	Length (ft)	Material	Hazen-Williams C	Control Status	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)
P-C2-150	8	0.32	49.9	509.00	Ductile Iro	130.0	Open	288.04	288.00	0.04
P-C2-155	8	0.01	2.1	375.00	Ductile Iro	130.0	Open	288.04	288.04	0.00
P-C2-160	8	0.46	72.1	258.00	Ductile Iro	130.0	Open	288.04	288.00	0.04
P-C2-165	6	1.86	163.8	527.00	Ductile Iro	130.0	Open	288.81	290.18	1.37
P-C2-170	6	1.20	105.9	605.00	Ductile Iro	130.0	Open	287.62	288.32	0.70
P-C2-175	8	0.25	38.8	518.00	Ductile Iro	130.0	Open	287.62	287.64	0.02
P-C2-180	8	0.63	99.4	608.00	Ductile Iro	130.0	Open	287.64	287.79	0.15
P-C2-185	6	0.31	27.0	708.00	Ductile Iro	130.0	Open	287.00	286.94	0.07
P-C2-190	6	0.10	9.1	808.00	Ductile Iro	130.0	Open	286.79	286.78	0.01
P-C2-195	8	0.58	90.3	396.00	Ductile Iro	130.0	Open	286.79	286.88	0.08
P-C2-20	8	0.04	5.5	265.00	Ductile Iro	130.0	Open	287.18	287.18	0.00
P-C2-200	6	0.56	49.8	670.00	Ductile Iro	130.0	Open	286.86	287.06	0.19
P-C2-205	8	0.03	4.5	292.00	Ductile Iro	130.0	Open	286.48	286.48	0.00
P-C2-210	8	0.89	139.2	111.00	Ductile Iro	130.0	Open	287.48	287.53	0.05
P-C2-215	8	0.85	133.4	263.00	Ductile Iro	130.0	Open	287.48	287.36	0.12
P-C2-220	10	0.24	58.1	522.00	Ductile Iro	130.0	Open	286.58	286.56	0.02
P-C2-225	8	0.47	73.4	563.00	Ductile Iro	130.0	Open	286.73	286.65	0.08
P-C2-230	10	1.17	286.8	494.00	Ductile Iro	130.0	Open	286.18	286.48	0.30
P-C2-235	10	1.23	300.8	140.00	Ductile Iro	130.0	Open	286.48	286.58	0.09
P-C2-25	8	1.04	163.2	263.00	Ductile Iro	130.0	Open	287.18	287.01	0.17
P-C2-30	8	0.03	5.1	267.00	Ductile Iro	130.0	Open	287.01	287.01	0.00
P-C2-35	8	0.99	155.6	274.00	Ductile Iro	130.0	Open	287.01	286.85	0.16
P-C2-40	10	0.92	224.4	396.00	Ductile Iro	130.0	Open	286.85	286.70	0.15
P-C2-45	10	1.25	306.3	176.00	Ductile Iro	130.0	Open	286.70	286.58	0.12
P-C2-5	6	0.56	49.6	557.00	Ductile Iro	130.0	Open	287.64	287.48	0.16
P-C2-50	10	0.01	1.8	664.00	Ductile Iro	130.0	Open	286.58	286.58	0.00
P-C2-55	8	0.44	69.5	1,142.00	Ductile Iro	130.0	Open	286.58	286.73	0.15
P-C2-60	8	0.36	57.0	598.00	Ductile Iro	130.0	Open	286.73	286.78	0.05
P-C2-65	6	0.06	5.1	358.00	Ductile Iro	130.0	Open	286.72	286.72	0.00
P-C2-70	8	0.64	101.0	245.00	Ductile Iro	130.0	Open	286.73	286.79	0.06
P-C2-75	6	0.31	27.0	295.00	Ductile Iro	130.0	Open	286.79	286.82	0.03
P-C2-80	6	0.35	31.1	386.00	Ductile Iro	130.0	Open	286.82	286.86	0.05
P-C2-85	10	0.28	68.5	251.00	Ductile Iro	130.0	Open	286.86	286.88	0.01
P-C2-90	10	0.67	164.3	286.00	Ductile Iro	130.0	Open	286.88	286.94	0.06
P-C2-95	10	0.59	144.2	756.00	Ductile Iro	130.0	Open	286.94	287.07	0.13
P-C3-1	8	0.30	46.6	1,053.00	Ductile Iro	130.0	Open	286.56	286.63	0.07
P-C3-10	8	0.11	16.9	313.00	Ductile Iro	130.0	Open	286.65	286.65	0.00
P-C3-15	8	0.33	51.5	490.00	Ductile Iro	130.0	Open	286.65	286.61	0.04
P-C3-20	6	0.10	9.2	398.00	Ductile Iro	130.0	Open	286.62	286.62	0.00
P-C3-25	6	0.01	0.9	598.00	Ductile Iro	130.0	Open	286.62	286.61	0.00
P-C3-30	6	0.05	4.6	398.00	Ductile Iro	130.0	Open	286.61	286.62	0.00
P-C3-35	8	0.08	13.2	618.00	Ductile Iro	130.0	Open	286.62	286.62	0.00
P-C3-40	8	0.19	30.3	243.00	Ductile Iro	130.0	Open	286.63	286.62	0.01
P-C3-45	6	0.76	66.6	1,668.00	Ductile Iro	130.0	Open	286.45	285.63	0.82
P-C3-5	8	0.58	90.3	88.00	Ductile Iro	130.0	Open	286.63	286.65	0.02
P-C3-50	10	0.22	53.9	558.00	Ductile Iro	130.0	Open	286.53	286.52	0.02
P-C4-1	6	0.80	70.9	1,304.00	Ductile Iro	130.0	Open	286.65	287.37	0.72
P-C4-10	8	0.01	1.0	321.00	Ductile Iro	130.0	Open	287.41	287.41	0.00
P-C4-15	8	0.21	32.4	331.00	Ductile Iro	130.0	Open	287.41	287.42	0.01
P-C4-20	8	1.43	223.8	333.00	Ductile Iro	130.0	Open	287.42	287.04	0.38
P-C4-230	6	0.83	72.7	1,304.00	Ductile Iro	130.0	Open	286.65	287.41	0.75
P-C4-25	8	0.74	116.4	1,278.00	Ductile Iro	130.0	Open	287.04	286.60	0.43
P-C4-30	10	0.37	91.1	693.00	Ductile Iro	130.0	Open	286.60	286.65	0.05

Scenario: Buildout - Average Day
Steady State Analysis
Pipe Report

Label	Diameter (in)	Velocity (ft/s)	Discharge (Absolute Value) (gpm)	Length (ft)	Material	Hazen-Williams C	Control Status	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)
P-C4-35	12	0.02	8.7	194.00	Ductile Iro	130.0	Open	286.60	286.60	0.00
P-C4-45	6	0.46	40.3	417.00	Ductile Iro	130.0	Open	286.60	286.52	0.08
P-C4-5	8	0.38	59.1	333.00	Ductile Iro	130.0	Open	287.37	287.41	0.03
P-C4-50	10	0.77	188.8	307.00	Ductile Iro	130.0	Open	286.60	286.52	0.09
P-C4-55	12	0.01	2.2	286.00	Ductile Iro	130.0	Open	286.60	286.60	0.00
P-C4-60	10	0.08	18.4	662.00	Ductile Iro	130.0	Open	286.65	286.65	0.00
P-C4-65	10	0.73	178.5	352.00	Ductile Iro	130.0	Open	286.52	286.43	0.09
P-C4-75	6	1.64	144.4	220.00	Ductile Iro	130.0	Open	286.60	287.06	0.45
P-C4-80	8	0.53	82.3	449.00	Ductile Iro	130.0	Open	286.52	286.60	0.08
P-C4-85	12	0.15	53.4	188.00	Ductile Iro	130.0	Open	286.60	286.60	0.00
P-C4-90	12	0.26	91.1	88.00	Ductile Iro	130.0	Open	286.60	286.60	0.00
P-C5-1	6	2.77	243.7	249.00	Ductile Iro	130.0	Open	287.89	289.25	1.35
P-C5-10	12	2.13	749.4	317.00	Ductile Iro	130.0	Open	288.57	288.10	0.47
P-C5-15	10	2.00	488.9	348.00	Ductile Iro	130.0	Open	288.10	287.53	0.57
P-C5-20	6	1.14	100.9	283.00	Ductile Iro	130.0	Open	287.53	287.23	0.30
P-C5-25	6	0.99	87.2	488.00	Ductile Iro	130.0	Open	287.23	286.84	0.39
P-C5-30	6	0.85	74.5	807.00	Ductile Iro	130.0	Open	287.41	287.89	0.49
P-C5-35	6	0.71	62.3	1,123.00	Ductile Iro	130.0	Open	287.41	287.89	0.49
P-C5-40	10	1.06	260.4	1,349.00	Ductile Iro	130.0	Open	287.42	288.10	0.69
P-C5-45	6	0.76	66.9	851.00	Ductile Iro	130.0	Open	286.84	286.42	0.42
P-C5-5	10	3.08	754.9	297.00	Ductile Iro	130.0	Open	289.66	288.57	1.09
P-C5-50	10	1.59	388.0	976.00	Ductile Iro	130.0	Open	287.53	286.49	1.04
P-C5-6	12	2.86	1,008.6	782.00	Ductile Iro	130.0	Open	291.68	289.66	2.01
P-C5-60	8	1.58	248.2	301.00	Ductile Iro	130.0	Open	289.25	289.66	0.42
P-D1-10	8	0.02	2.4	221.00	Ductile Iro	130.0	Open	288.50	288.50	0.00
P-D1-15	12	0.84	294.6	253.00	Ductile Iro	130.0	Open	288.50	288.43	0.07
P-D1-20	6	0.07	6.5	383.00	Ductile Iro	130.0	Open	288.43	288.43	0.00
P-D1-25	8	0.32	49.6	376.00	Ductile Iro	130.0	Open	288.56	288.58	0.03
P-D1-30	8	0.20	30.9	221.00	Ductile Iro	130.0	Open	288.58	288.59	0.01
P-D1-35	8	0.18	27.7	211.00	Ductile Iro	130.0	Open	288.58	288.59	0.01
P-D1-40	12	0.16	55.3	884.00	Ductile Iro	130.0	Open	288.60	288.59	0.01
P-D1-45	8	0.67	105.7	454.00	Ductile Iro	130.0	Open	288.56	288.43	0.13
P-D1-5	12	0.93	327.8	295.00	Ductile Iro	130.0	Open	288.59	288.50	0.09
P-D1-50	8	0.50	78.7	460.00	Ductile Iro	130.0	Open	288.43	288.35	0.08
P-D2-10	8	0.56	87.8	267.00	Ductile Iro	130.0	Open	288.04	288.09	0.05
P-D2-100	8	0.23	36.3	423.00	Ductile Iro	130.0	Open	287.70	287.68	0.02
P-D2-105	8	1.03	162.1	262.00	Ductile Iro	130.0	Open	287.70	287.86	0.16
P-D2-110	8	0.02	2.7	305.00	Ductile Iro	130.0	Open	287.86	287.86	0.00
P-D2-115	8	1.08	169.6	262.00	Ductile Iro	130.0	Open	287.86	288.04	0.18
P-D2-120	12	0.25	87.1	417.00	Ductile Iro	130.0	Open	288.04	288.03	0.01
P-D2-125	8	0.62	97.3	281.00	Ductile Iro	130.0	Open	288.04	288.11	0.07
P-D2-130	8	0.02	2.7	297.00	Ductile Iro	130.0	Open	288.11	288.11	0.00
P-D2-135	8	0.67	105.5	260.00	Ductile Iro	130.0	Open	288.11	288.18	0.07
P-D2-140	8	0.15	23.7	423.00	Ductile Iro	130.0	Open	288.18	288.19	0.01
P-D2-145	8	0.95	148.1	246.00	Ductile Iro	130.0	Open	288.18	288.31	0.13
P-D2-15	12	0.81	284.0	638.00	Ductile Iro	130.0	Open	288.43	288.28	0.16
P-D2-150	8	0.36	56.5	434.00	Ductile Iro	130.0	Open	288.31	288.28	0.04
P-D2-155	8	0.46	71.5	266.00	Ductile Iro	130.0	Open	288.31	288.35	0.04
P-D2-160	8	0.02	3.8	346.00	Ductile Iro	130.0	Open	288.35	288.35	0.00
P-D2-165	8	0.38	59.8	509.00	Ductile Iro	130.0	Open	288.18	288.13	0.05
P-D2-170	8	0.34	53.6	541.00	Ductile Iro	130.0	Open	288.13	288.09	0.04
P-D2-175	8	0.81	126.7	519.00	Ductile Iro	130.0	Open	288.09	287.88	0.21
P-D2-180	8	0.77	120.2	513.00	Ductile Iro	130.0	Open	287.88	287.70	0.19

Scenario: Buildout - Average Day
Steady State Analysis
Pipe Report

Label	Diameter (in)	Velocity (ft/s)	Discharge (Absolute Value) (gpm)	Length (ft)	Material	Hazen-Williams C	Control Status	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)
P-D2-185	8	0.82	127.9	783.00	Ductile Iro	130.0	Open	287.37	287.69	0.32
P-D2-190	8	0.95	149.6	265.00	Ductile Iro	130.0	Open	287.69	287.83	0.14
P-D2-195	8	0.04	6.2	288.00	Ductile Iro	130.0	Open	287.83	287.83	0.00
P-D2-20	12	0.94	331.1	258.00	Ductile Iro	130.0	Open	288.28	288.19	0.08
P-D2-200	8	0.02	2.7	229.00	Ductile Iro	130.0	Open	287.83	287.83	0.00
P-D2-205	12	1.33	467.7	545.00	Ductile Iro	130.0	Open	287.35	287.69	0.34
P-D2-210	8	0.86	134.5	357.00	Ductile Iro	130.0	Open	287.83	287.99	0.16
P-D2-215	8	0.02	2.7	245.00	Ductile Iro	130.0	Open	287.99	287.99	0.00
P-D2-220	8	0.90	141.4	397.00	Ductile Iro	130.0	Open	287.99	288.18	0.19
P-D2-225	8	0.48	75.3	255.00	Ductile Iro	130.0	Open	288.18	288.14	0.04
P-D2-230	12	1.30	457.0	769.00	Ductile Iro	130.0	Open	288.14	287.69	0.46
P-D2-235	12	0.73	257.2	268.00	Ductile Iro	130.0	Open	288.14	288.09	0.05
P-D2-240	12	1.84	649.8	613.00	Ductile Iro	130.0	Open	288.14	288.84	0.70
P-D2-245	12	1.55	545.1	193.00	Ductile Iro	130.0	Open	288.84	288.68	0.16
P-D2-25	12	0.86	302.6	356.00	Ductile Iro	130.0	Open	288.19	288.09	0.10
P-D2-250	8	0.69	108.4	243.00	Ductile Iro	130.0	Open	288.68	288.61	0.07
P-D2-255	8	0.42	65.1	484.00	Ductile Iro	130.0	Open	288.61	288.56	0.06
P-D2-260	8	0.22	35.1	236.00	Ductile Iro	130.0	Open	288.59	288.60	0.01
P-D2-265	8	0.25	39.9	312.00	Ductile Iro	130.0	Open	288.60	288.61	0.01
P-D2-270	12	0.83	292.9	254.00	Ductile Iro	130.0	Open	288.68	288.62	0.07
P-D2-275	12	0.41	143.4	527.00	Ductile Iro	130.0	Open	288.62	288.58	0.04
P-D2-280	8	0.92	144.8	274.00	Ductile Iro	130.0	Open	288.62	288.48	0.14
P-D2-285	8	0.02	3.4	238.00	Ductile Iro	130.0	Open	288.48	288.48	0.00
P-D2-290	8	0.88	138.6	280.00	Ductile Iro	130.0	Open	288.48	288.35	0.13
P-D2-295	8	0.18	28.2	523.00	Ductile Iro	130.0	Open	288.35	288.36	0.01
P-D2-30	10	0.87	212.3	180.00	Ductile Iro	130.0	Open	288.09	288.03	0.06
P-D2-300	8	1.03	162.1	261.00	Ductile Iro	130.0	Open	288.35	288.18	0.16
P-D2-305	8	0.38	58.8	532.00	Ductile Iro	130.0	Open	288.18	288.23	0.05
P-D2-310	8	0.89	139.6	777.00	Ductile Iro	130.0	Open	288.31	288.68	0.37
P-D2-315	12	0.66	232.2	380.00	Ductile Iro	130.0	Open	287.39	287.45	0.06
P-D2-320	8	0.17	26.0	434.00	Ductile Iro	130.0	Open	287.83	287.84	0.01
P-D2-325	12	0.48	168.0	518.00	Ductile Iro	130.0	Open	288.04	288.09	0.05
P-D2-330	8	0.73	114.8	969.00	Ductile Iro	130.0	Open	288.00	287.68	0.32
P-D2-35	10	1.20	292.9	550.00	Ductile Iro	130.0	Open	288.03	287.68	0.35
P-D2-40	10	1.78	436.1	464.00	Ductile Iro	130.0	Open	287.68	287.07	0.61
P-D2-45	10	1.14	278.7	271.00	Ductile Iro	130.0	Open	287.07	286.91	0.16
P-D2-5	8	0.01	2.0	573.00	Ductile Iro	130.0	Open	288.04	288.04	0.00
P-D2-50	8	0.94	147.5	244.00	Ductile Iro	130.0	Open	286.91	286.78	0.13
P-D2-55	8	0.57	89.6	279.00	Ductile Iro	130.0	Open	286.78	286.72	0.06
P-D2-60	6	1.41	123.9	173.00	Ductile Iro	130.0	Open	286.91	286.64	0.27
P-D2-65	6	0.33	29.4	257.00	Ductile Iro	130.0	Open	286.64	286.61	0.03
P-D2-70	12	0.55	193.1	309.00	Ductile Iro	130.0	Open	287.39	287.35	0.04
P-D2-75	8	4.19	655.7	244.00	Ductile Iro	130.0	Open	287.35	285.31	2.04
P-D2-80	8	0.02	2.7	127.00	Ductile Iro	130.0	Open	285.86	285.86	0.00
P-D2-85	8	2.27	355.3	562.00	Ductile Iro	130.0	Open	285.86	287.37	1.51
P-D2-90	8	2.22	347.1	214.00	Ductile Iro	130.0	Open	285.31	285.86	0.55
P-D2-95	8	1.53	240.5	251.00	Ductile Iro	130.0	Open	287.37	287.70	0.33
P-D3-1	8	0.29	44.9	253.00	Ductile Iro	130.0	Open	286.59	286.58	0.01
P-D3-10	10	0.44	106.8	155.00	Ductile Iro	130.0	Open	286.57	286.55	0.02
P-D3-100	10	0.35	84.5	1,135.00	Ductile Iro	130.0	Open	286.64	286.57	0.07
P-D3-105	6	0.21	18.4	1,283.00	Ductile Iro	130.0	Open	286.61	286.56	0.06
P-D3-110	10	0.24	58.0	680.00	Ductile Iro	130.0	Open	286.45	286.47	0.02
P-D3-115	8	0.14	21.3	268.00	Ductile Iro	130.0	Open	287.39	287.38	0.00

Scenario: Buildout - Average Day
Steady State Analysis
Pipe Report

Label	Diameter (in)	Velocity (ft/s)	Discharge (Absolute Value) (gpm)	Length (ft)	Material	Hazen-Williams C	Control Status	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)
P-D3-120	8	0.02	2.4	257.00	Ductile Iro	130.0	Open	286.33	286.33	0.00
P-D3-125	8	0.25	39.1	253.00	Ductile Iro	130.0	Open	286.33	286.34	0.01
P-D3-130	8	0.26	40.9	268.00	Ductile Iro	130.0	Open	286.34	286.36	0.01
P-D3-135	12	0.20	69.0	559.00	Ductile Iro	130.0	Open	286.50	286.49	0.01
P-D3-140	12	0.06	22.1	181.00	Ductile Iro	130.0	Open	286.49	286.49	0.00
P-D3-145	8	0.53	82.8	734.00	Ductile Iro	130.0	Open	286.36	286.49	0.13
P-D3-15	8	0.07	10.2	258.00	Ductile Iro	130.0	Open	286.55	286.56	0.00
P-D3-150	8	0.25	38.9	280.00	Ductile Iro	130.0	Open	286.36	286.34	0.01
P-D3-155	8	0.07	10.6	249.00	Ductile Iro	130.0	Open	286.34	286.34	0.00
P-D3-16	8	0.03	5.1	414.00	Ductile Iro	130.0	Open	287.38	287.38	0.00
P-D3-160	8	0.17	26.6	174.00	Ductile Iro	130.0	Open	286.34	286.34	0.00
P-D3-165	8	0.30	46.6	267.00	Ductile Iro	130.0	Open	286.34	286.32	0.02
P-D3-170	8	0.15	22.8	247.00	Ductile Iro	130.0	Open	286.34	286.34	0.00
P-D3-175	8	0.03	4.1	168.00	Ductile Iro	130.0	Open	286.32	286.32	0.00
P-D3-180	12	0.19	67.0	142.00	Ductile Iro	130.0	Open	286.50	286.50	0.00
P-D3-185	12	0.44	155.4	577.00	Ductile Iro	130.0	Open	286.50	286.55	0.05
P-D3-190	8	0.56	88.4	771.00	Ductile Iro	130.0	Open	286.34	286.50	0.16
P-D3-195	8	0.39	61.2	674.00	Ductile Iro	130.0	Open	286.34	286.28	0.07
P-D3-20	8	0.01	1.7	142.00	Ductile Iro	130.0	Open	286.56	286.56	0.00
P-D3-200	8	0.26	40.1	404.00	Ductile Iro	130.0	Open	286.32	286.30	0.02
P-D3-25	10	0.06	15.8	1,044.00	Ductile Iro	130.0	Open	286.47	286.47	0.00
P-D3-30	10	0.37	89.7	276.00	Ductile Iro	130.0	Open	286.47	286.49	0.02
P-D3-35	12	0.05	19.0	726.00	Ductile Iro	130.0	Open	286.49	286.49	0.00
P-D3-40	8	0.05	7.7	340.00	Ductile Iro	130.0	Open	286.49	286.49	0.00
P-D3-45	8	0.08	12.2	184.00	Ductile Iro	130.0	Open	286.49	286.49	0.00
P-D3-5	8	0.05	7.9	258.00	Ductile Iro	130.0	Open	286.58	286.58	0.00
P-D3-50	8	0.11	17.0	294.00	Ductile Iro	130.0	Open	286.49	286.50	0.00
P-D3-55	8	0.14	22.5	344.00	Ductile Iro	130.0	Open	286.50	286.50	0.01
P-D3-6	8	0.20	31.9	243.00	Ductile Iro	130.0	Open	286.58	286.57	0.01
P-D3-60	8	0.03	5.1	490.00	Ductile Iro	130.0	Open	286.50	286.50	0.00
P-D3-70	8	0.05	7.6	280.00	Ductile Iro	130.0	Open	287.38	287.38	0.00
P-D3-75	8	0.09	14.4	278.00	Ductile Iro	130.0	Open	287.38	287.38	0.00
P-D3-80	10	0.48	117.0	543.00	Ductile Iro	130.0	Open	286.55	286.49	0.06
P-D3-81	8	0.02	3.5	274.00	Ductile Iro	130.0	Open	287.38	287.38	0.00
P-D3-82	8	0.02	3.8	295.00	Ductile Iro	130.0	Open	287.38	287.38	0.00
P-D3-85	8	0.31	49.1	287.00	Ductile Iro	130.0	Open	286.61	286.59	0.02
P-D3-90	8	0.03	5.1	410.00	Ductile Iro	130.0	Open	286.58	286.58	0.00
P-D3-91	8	0.03	5.1	464.00	Ductile Iro	130.0	Open	287.38	287.38	0.00
P-D3-95	8	0.50	77.9	459.00	Ductile Iro	130.0	Open	286.72	286.65	0.07
P-D4-1	10	0.71	173.6	312.00	Ductile Iro	130.0	Open	286.43	286.35	0.08
P-D4-10	10	0.83	202.1	512.00	Ductile Iro	130.0	Open	286.26	286.10	0.16
P-D4-100	6	0.30	26.7	1,810.00	Ductile Iro	130.0	Open	286.26	286.10	0.16
P-D4-105	6	1.00	88.5	665.00	Ductile Iro	130.0	Open	287.04	286.48	0.55
P-D4-110	6	0.70	61.6	311.00	Ductile Iro	130.0	Open	286.48	286.35	0.13
P-D4-115	4	0.19	7.4	939.00	Ductile Iro	130.0	Open	286.43	286.48	0.06
P-D4-15	10	0.85	208.2	169.00	Ductile Iro	130.0	Open	286.10	286.04	0.06
P-D4-16	12	0.64	226.0	394.00	Ductile Iro	130.0	Open	286.04	285.98	0.06
P-D4-20	12	0.07	26.4	738.00	Ductile Iro	130.0	Open	286.04	286.05	0.00
P-D4-25	10	0.24	59.6	502.00	Ductile Iro	130.0	Open	286.05	286.03	0.02
P-D4-30	8	0.19	30.3	592.00	Ductile Iro	130.0	Open	286.03	286.05	0.02
P-D4-35	8	0.22	35.2	488.00	Ductile Iro	130.0	Open	286.05	286.06	0.02
P-D4-40	12	0.10	36.2	128.00	Ductile Iro	130.0	Open	286.06	286.07	0.00
P-D4-45	10	0.59	144.5	562.00	Ductile Iro	130.0	Open	286.07	286.16	0.10

Scenario: Buildout - Average Day
Steady State Analysis
Pipe Report

Label	Diameter (in)	Velocity (ft/s)	Discharge (Absolute Value) (gpm)	Length (ft)	Material	Hazen-Williams C	Control Status	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)
P-D4-5	10	0.73	179.7	338.00	Ductile Iro	130.0	Open	286.35	286.26	0.09
P-D4-50	8	0.83	130.3	452.00	Ductile Iro	130.0	Open	286.16	286.35	0.19
P-D4-55	8	0.00	0.1	1,280.00	Ductile Iro	130.0	Open	286.35	286.35	0.00
P-D4-60	8	0.01	1.9	335.00	Ductile Iro	130.0	Open	286.43	286.43	0.00
P-D4-65	12	0.28	98.3	545.00	Ductile Iro	130.0	Open	286.05	286.07	0.02
P-D4-70	8	0.19	30.2	984.00	Ductile Iro	130.0	Open	286.33	286.30	0.03
P-D4-75	8	0.42	65.9	251.00	Ductile Iro	130.0	Open	286.30	286.28	0.03
P-D4-80	8	0.65	102.0	618.00	Ductile Iro	130.0	Open	286.52	286.36	0.16
P-D4-85	8	0.48	74.4	317.00	Ductile Iro	130.0	Open	286.36	286.31	0.05
P-D4-90	8	0.44	69.0	348.00	Ductile Iro	130.0	Open	286.31	286.26	0.04
P-D4-95	8	0.12	19.0	450.00	Ductile Iro	130.0	Open	286.36	286.35	0.01
P-D5-1	10	0.62	150.9	245.00	Ductile Iro	130.0	Open	286.49	286.45	0.05
P-D5-10	10	0.59	144.8	133.00	Ductile Iro	130.0	Open	286.42	286.39	0.02
P-D5-100	8	0.05	7.5	506.00	Ductile Iro	130.0	Open	286.05	286.05	0.00
P-D5-15	6	0.42	37.4	469.00	Ductile Iro	130.0	Open	286.39	286.32	0.08
P-D5-20	6	0.03	2.4	362.00	Ductile Iro	130.0	Open	286.32	286.32	0.00
P-D5-25	6	0.12	10.3	626.00	Ductile Iro	130.0	Open	286.32	286.33	0.01
P-D5-30	6	0.19	17.2	305.00	Ductile Iro	130.0	Open	286.33	286.34	0.01
P-D5-35	12	0.10	36.3	464.00	Ductile Iro	130.0	Open	286.07	286.06	0.00
P-D5-40	8	0.20	30.8	502.00	Ductile Iro	130.0	Open	286.06	286.05	0.01
P-D5-41	10	0.80	196.5	653.00	Ductile Iro	130.0	Open	286.07	285.87	0.20
P-D5-45	8	0.10	16.4	306.00	Ductile Iro	130.0	Open	286.05	286.05	0.00
P-D5-5	10	0.38	92.3	397.00	Ductile Iro	130.0	Open	286.45	286.42	0.03
P-D5-50	8	0.04	6.5	489.00	Ductile Iro	130.0	Open	286.05	286.05	0.00
P-D5-55	12	0.00	1.0	721.00	Ductile Iro	130.0	Open	286.06	286.06	0.00
P-D5-60	6	0.55	48.6	563.00	Ductile Iro	130.0	Open	286.16	286.32	0.15
P-D5-65	10	0.39	95.1	557.00	Ductile Iro	130.0	Open	286.35	286.39	0.04
P-D5-70	10	0.96	234.2	1,017.00	Ductile Iro	130.0	Open	286.49	286.07	0.43
P-D5-75	6	0.47	41.1	543.00	Ductile Iro	130.0	Open	286.45	286.34	0.11
P-D5-80	6	0.19	16.4	609.00	Ductile Iro	130.0	Open	286.32	286.34	0.02
P-E1-10	8	0.27	42.2	225.00	Ductile Iro	130.0	Open	288.59	288.60	0.01
P-E1-15	8	0.57	89.8	663.00	Ductile Iro	130.0	Open	288.60	288.74	0.14
P-E1-20	8	0.75	117.5	166.00	Ductile Iro	130.0	Open	288.74	288.68	0.06
P-E1-25	8	0.48	75.9	262.00	Ductile Iro	130.0	Open	288.68	288.64	0.04
P-E1-30	8	0.10	16.2	270.00	Ductile Iro	130.0	Open	288.64	288.64	0.00
P-E1-35	8	0.13	21.0	426.00	Ductile Iro	130.0	Open	288.64	288.65	0.01
P-E1-40	8	0.16	25.8	273.00	Ductile Iro	130.0	Open	288.65	288.66	0.01
P-E1-45	8	0.01	1.7	378.00	Ductile Iro	130.0	Open	288.66	288.66	0.00
P-E1-5	8	0.03	4.8	371.00	Ductile Iro	130.0	Open	288.59	288.59	0.00
P-E1-50	8	0.21	32.7	253.00	Ductile Iro	130.0	Open	288.66	288.66	0.01
P-E1-55	8	0.24	37.5	432.00	Ductile Iro	130.0	Open	288.66	288.68	0.02
P-E1-60	12	1.47	517.2	615.00	Ductile Iro	130.0	Open	288.74	289.20	0.46
P-E1-65	12	2.24	789.7	1,523.00	Ductile Iro	130.0	Open	289.20	291.69	2.49
P-E2-1	8	1.00	156.6	660.00	Ductile Iro	130.0	Open	287.45	287.84	0.39
P-E2-10	8	0.80	125.4	322.00	Ductile Iro	130.0	Open	288.23	288.36	0.13
P-E2-100	8	0.23	35.9	252.00	Ductile Iro	130.0	Open	288.31	288.32	0.01
P-E2-105	8	0.26	41.0	432.00	Ductile Iro	130.0	Open	288.32	288.34	0.02
P-E2-110	8	0.29	45.9	168.00	Ductile Iro	130.0	Open	288.34	288.35	0.01
P-E2-115	10	0.82	200.3	741.00	Ductile Iro	130.0	Open	288.35	288.59	0.23
P-E2-120	12	0.29	103.6	161.00	Ductile Iro	130.0	Open	288.59	288.58	0.01
P-E2-125	12	0.86	303.9	544.00	Ductile Iro	130.0	Open	288.59	288.74	0.15
P-E2-130	8	0.58	90.7	269.00	Ductile Iro	130.0	Open	288.58	288.64	0.06
P-E2-135	8	0.02	2.7	282.00	Ductile Iro	130.0	Open	288.58	288.58	0.00

Scenario: Existing - Average Day
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-D2-235	268.00	12	130.0	0.76	267.4	285.16	285.10	0.06	0.22
P-D2-240	613.00	12	130.0	1.55	-546.5	285.16	285.67	0.51	0.83
P-D2-245	193.00	12	130.0	1.84	648.8	285.67	285.45	0.22	1.14
P-D2-25	356.00	12	130.0	0.44	153.9	285.07	285.04	0.03	0.08
P-D2-250	243.00	8	130.0	0.73	114.7	285.45	285.37	0.08	0.33
P-D2-255	484.00	8	130.0	0.34	52.9	285.37	285.33	0.04	0.08
P-D2-260	236.00	8	130.0	0.35	-54.3	285.32	285.34	0.02	0.08
P-D2-265	312.00	8	130.0	0.37	-58.7	285.34	285.37	0.03	0.10
P-D2-270	254.00	12	130.0	1.13	398.6	285.45	285.33	0.12	0.46
P-D2-275	527.00	12	130.0	0.80	282.9	285.33	285.20	0.13	0.24
P-D2-280	274.00	8	130.0	0.71	111.4	285.33	285.25	0.09	0.31
P-D2-285	238.00	8	130.0	0.02	3.1	285.25	285.25	0.00	0.00
P-D2-290	280.00	8	130.0	0.68	105.8	285.25	285.17	0.08	0.28
P-D2-295	523.00	8	130.0	0.26	40.0	285.17	285.14	0.02	0.05
P-D2-30	180.00	10	130.0	0.36	88.7	285.04	285.03	0.01	0.07
P-D2-300	261.00	8	130.0	0.39	61.4	285.17	285.14	0.03	0.10
P-D2-305	532.00	8	130.0	0.29	45.0	285.14	285.11	0.03	0.06
P-D2-310	777.00	8	130.0	0.84	-131.8	285.12	285.45	0.33	0.43
P-D2-315	380.00	12	130.0	0.22	79.1	284.98	284.97	0.01	0.02
P-D2-320	434.00	8	130.0	0.28	43.8	285.05	285.03	0.02	0.06
P-D2-325	518.00	12	130.0	0.47	-165.5	285.06	285.10	0.05	0.09
P-D2-330	969.00	8	130.0	0.51	79.6	285.00	284.83	0.16	0.17
P-D2-35	550.00	10	130.0	0.88	216.1	285.03	284.83	0.20	0.36
P-D2-40	464.00	10	130.0	1.70	415.8	284.83	284.27	0.56	1.21
P-D2-45	271.00	10	130.0	0.96	234.1	284.27	284.16	0.11	0.42
P-D2-5	573.00	8	130.0	0.00	0.2	285.01	285.01	0.00	0.00
P-D2-50	244.00	8	130.0	0.98	154.0	284.16	284.02	0.14	0.57
P-D2-55	279.00	8	130.0	0.38	59.0	284.02	283.99	0.03	0.10
P-D2-60	173.00	6	130.0	0.87	76.6	284.16	284.05	0.11	0.64
P-D2-65	257.00	6	130.0	0.21	18.6	284.05	284.03	0.01	0.05
P-D2-70	309.00	12	130.0	0.44	-155.6	284.98	285.00	0.02	0.08
P-D2-75	244.00	8	130.0	0.04	6.4	285.00	285.00	0.00	0.00
P-D2-80	127.00	8	130.0	0.02	2.5	285.00	285.00	0.00	0.00
P-D2-85	562.00	8	130.0	0.09	-14.7	285.00	285.00	0.00	0.01
P-D2-90	214.00	8	130.0	0.05	-7.2	285.00	285.00	0.00	0.00
P-D2-95	251.00	8	130.0	0.12	18.4	285.00	285.00	0.00	0.01
P-D3-1	253.00	8	130.0	0.26	-40.7	283.99	284.00	0.01	0.05
P-D3-10	155.00	10	130.0	0.05	-12.3	284.02	284.02	0.00	0.00
P-D3-100	135.00	10	130.0	0.20	49.0	284.05	284.02	0.03	0.02
P-D3-105	283.00	6	130.0	0.10	8.6	284.03	284.02	0.01	0.01
P-D3-110	680.00	10	130.0	0.69	-168.3	283.78	283.94	0.15	0.23
P-D3-115	268.00	8	130.0	0.47	74.0	284.98	284.94	0.04	0.15
P-D3-120	257.00	8	130.0	0.01	2.2	284.15	284.15	0.00	0.00
P-D3-125	253.00	8	130.0	0.05	8.1	284.15	284.15	0.00	0.00
P-D3-130	268.00	8	130.0	0.04	6.5	284.15	284.15	0.00	0.00
P-D3-135	559.00	12	130.0	0.45	159.8	284.19	284.14	0.05	0.08
P-D3-140	181.00	12	130.0	0.50	175.8	284.14	284.12	0.02	0.10
P-D3-145	734.00	8	130.0	0.15	23.5	284.15	284.14	0.01	0.02
P-D3-15	258.00	8	130.0	0.01	-1.1	284.02	284.02	0.00	0.00
P-D3-150	280.00	8	130.0	0.13	-19.8	284.15	284.16	0.00	0.01
P-D3-155	249.00	8	130.0	0.06	9.7	284.16	284.16	0.00	0.00

Scenario: Existing - Average Day
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-D3-16	414.00	8	130.0	0.20	31.3	284.87	284.86	0.01	0.03
P-D3-160	174.00	8	130.0	0.20	-31.0	284.16	284.16	0.01	0.03
P-D3-165	267.00	8	130.0	0.01	-2.2	284.16	284.16	0.00	0.00
P-D3-170	247.00	8	130.0	0.20	-31.4	284.16	284.17	0.01	0.03
P-D3-175	168.00	8	130.0	0.02	3.7	284.16	284.16	0.00	0.00
P-D3-180	142.00	12	130.0	0.48	-167.9	284.19	284.20	0.01	0.09
P-D3-185	577.00	12	130.0	0.58	-205.0	284.20	284.28	0.08	0.13
P-D3-190	771.00	8	130.0	0.24	-37.1	284.17	284.20	0.03	0.04
P-D3-195	674.00	8	130.0	0.01	1.7	284.17	284.17	0.00	0.00
P-D3-20	142.00	8	130.0	0.01	1.6	284.02	284.02	0.00	0.00
P-D3-200	404.00	8	130.0	0.05	-8.1	284.16	284.16	0.00	0.00
P-D3-25	044.00	10	130.0	0.06	14.5	283.94	283.93	0.00	0.00
P-D3-30	276.00	10	130.0	0.81	-197.3	283.94	284.02	0.08	0.30
P-D3-35	726.00	12	130.0	0.59	-208.5	284.02	284.12	0.10	0.14
P-D3-40	340.00	8	130.0	0.24	-37.0	284.12	284.14	0.01	0.04
P-D3-45	184.00	8	130.0	0.26	-41.0	284.14	284.14	0.01	0.05
P-D3-5	258.00	8	130.0	0.05	7.2	284.00	284.00	0.00	0.00
P-D3-50	294.00	8	130.0	0.29	-45.4	284.14	284.16	0.02	0.06
P-D3-55	344.00	8	130.0	0.32	-50.4	284.16	284.19	0.02	0.07
P-D3-6	243.00	8	130.0	0.34	-52.5	284.00	284.02	0.02	0.08
P-D3-60	490.00	8	130.0	0.03	-5.3	284.19	284.19	0.00	0.00
P-D3-70	280.00	8	130.0	0.39	-61.5	284.87	284.90	0.03	0.10
P-D3-75	278.00	8	130.0	0.43	-67.7	284.90	284.94	0.03	0.12
P-D3-80	543.00	10	130.0	0.05	-11.2	284.02	284.02	0.00	0.00
P-D3-81	274.00	8	130.0	0.15	23.5	284.86	284.86	0.00	0.02
P-D3-82	295.00	8	130.0	0.02	3.4	284.86	284.86	0.00	0.00
P-D3-85	287.00	8	130.0	0.24	-36.9	283.98	283.99	0.01	0.04
P-D3-90	410.00	8	130.0	0.03	-4.7	284.00	284.00	0.00	0.00
P-D3-91	464.00	8	130.0	0.03	4.7	284.94	284.94	0.00	0.00
P-D3-95	459.00	8	130.0	0.31	48.3	283.99	283.96	0.03	0.07
P-D4-1	312.00	10	130.0	0.57	140.6	277.17	277.12	0.05	0.16
P-D4-10	512.00	10	130.0	0.49	120.3	277.09	277.03	0.06	0.12
P-D4-100	810.00	6	130.0	0.18	15.9	277.09	277.03	0.06	0.03
P-D4-105	665.00	6	130.0	0.55	48.8	277.29	277.10	0.18	0.28
P-D4-110	311.00	6	130.0	0.48	42.4	277.10	277.04	0.07	0.21
P-D4-115	939.00	4	130.0	0.21	8.3	277.17	277.10	0.07	0.07
P-D4-15	169.00	10	130.0	0.48	117.4	277.03	277.01	0.02	0.12
P-D4-20	738.00	12	130.0	0.15	54.3	277.01	277.00	0.01	0.01
P-D4-25	502.00	10	130.0	0.13	32.3	277.00	276.99	0.01	0.01
P-D4-30	592.00	8	130.0	0.00	-0.4	276.99	276.99	0.00	0.00
P-D4-35	488.00	8	130.0	0.11	-16.7	276.99	277.00	0.00	0.01
P-D4-40	128.00	12	130.0	0.09	-30.1	277.00	277.00	0.00	0.00
P-D4-45	562.00	10	130.0	0.12	-28.3	277.00	277.00	0.00	0.01
P-D4-5	338.00	10	130.0	0.44	108.1	277.12	277.09	0.03	0.10
P-D4-50	452.00	8	130.0	0.32	-50.3	277.00	277.04	0.03	0.07
P-D4-55	280.00	8	130.0	0.31	48.9	277.12	277.04	0.09	0.07
P-D4-60	335.00	8	130.0	0.08	13.3	277.17	277.17	0.00	0.01
P-D4-65	545.00	12	130.0	0.03	10.8	277.00	277.00	0.00	0.00
P-D4-70	984.00	8	130.0	0.10	-16.2	284.15	284.16	0.01	0.01
P-D4-75	251.00	8	130.0	0.18	-28.4	284.16	284.17	0.01	0.02
P-D4-80	618.00	8	130.0	0.56	87.2	277.26	277.13	0.12	0.20

Scenario: Existing - Average Day
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-D4-85	317.00	8	130.0	0.33	51.2	277.13	277.11	0.02	0.07
P-D4-90	348.00	8	130.0	0.29	46.2	277.11	277.09	0.02	0.06
P-D4-95	450.00	8	130.0	0.18	28.2	277.13	277.12	0.01	0.02
P-D5-1	245.00	10	130.0	0.18	45.3	277.04	277.03	0.00	0.02
P-D5-10	133.00	10	130.0	0.04	10.2	277.03	277.03	0.00	0.00
P-D5-100	506.00	8	130.0	0.04	6.9	276.99	276.99	0.00	0.00
P-D5-15	469.00	6	130.0	0.22	19.0	277.03	277.01	0.02	0.05
P-D5-20	362.00	6	130.0	0.07	5.8	277.01	277.01	0.00	0.01
P-D5-25	626.00	6	130.0	0.02	-1.4	277.01	277.01	0.00	0.00
P-D5-30	305.00	6	130.0	0.09	-7.6	277.01	277.01	0.00	0.01
P-D5-35	464.00	12	130.0	0.02	8.8	277.00	277.00	0.00	0.00
P-D5-40	502.00	8	130.0	0.10	16.3	277.00	276.99	0.00	0.01
P-D5-45	306.00	8	130.0	0.02	3.1	276.99	276.99	0.00	0.00
P-D5-5	397.00	10	130.0	0.05	11.8	277.03	277.03	0.00	0.00
P-D5-50	489.00	8	130.0	0.04	5.9	276.99	276.99	0.00	0.00
P-D5-55	721.00	12	130.0	0.04	13.4	277.00	277.00	0.00	0.00
P-D5-60	563.00	6	130.0	0.11	-9.4	277.00	277.01	0.01	0.01
P-D5-65	557.00	10	130.0	0.08	20.1	277.04	277.03	0.00	0.00
P-D5-70	017.00	10	130.0	0.27	66.5	277.04	277.00	0.04	0.04
P-D5-75	543.00	6	130.0	0.20	17.5	277.03	277.01	0.02	0.04
P-D5-80	609.00	6	130.0	0.03	-3.0	277.01	277.01	0.00	0.00
P-E1-10	225.00	8	130.0	0.58	90.9	285.25	285.20	0.05	0.22
P-E1-15	663.00	8	130.0	0.41	64.5	285.20	285.13	0.08	0.11
P-E1-20	166.00	8	130.0	0.46	71.8	285.13	285.10	0.02	0.14
P-E1-25	262.00	8	130.0	0.28	43.8	285.10	285.09	0.01	0.06
P-E1-30	270.00	8	130.0	0.03	-4.8	285.09	285.09	0.00	0.00
P-E1-35	426.00	8	130.0	0.06	-9.2	285.09	285.09	0.00	0.00
P-E1-40	273.00	8	130.0	0.09	-13.6	285.09	285.09	0.00	0.01
P-E1-45	378.00	8	130.0	0.01	1.6	285.09	285.09	0.00	0.00
P-E1-5	371.00	8	130.0	0.03	4.4	285.25	285.25	0.00	0.00
P-E1-50	253.00	8	130.0	0.13	-19.8	285.09	285.10	0.00	0.01
P-E1-55	432.00	8	130.0	0.15	-24.2	285.10	285.10	0.01	0.02
P-E1-60	615.00	12	130.0	0.17	60.6	285.13	285.12	0.01	0.01
P-E1-65	523.00	12	130.0	0.21	73.5	285.12	285.09	0.03	0.02
P-E2-1	660.00	8	130.0	0.37	-57.2	284.97	285.03	0.06	0.09
P-E2-10	322.00	8	130.0	0.39	-61.5	285.11	285.14	0.03	0.10
P-E2-100	252.00	8	130.0	0.05	7.2	285.10	285.10	0.00	0.00
P-E2-105	432.00	8	130.0	0.02	2.6	285.10	285.10	0.00	0.00
P-E2-110	168.00	8	130.0	0.51	79.6	285.10	285.07	0.03	0.17
P-E2-115	741.00	10	130.0	0.41	-101.6	285.07	285.14	0.07	0.09
P-E2-120	161.00	12	130.0	0.48	-169.5	285.14	285.15	0.02	0.09
P-E2-125	544.00	12	130.0	0.19	67.9	285.14	285.13	0.01	0.02
P-E2-130	269.00	8	130.0	0.30	-47.4	285.07	285.09	0.02	0.06
P-E2-135	282.00	8	130.0	0.02	-2.5	285.07	285.07	0.00	0.00
P-E2-140	350.00	8	130.0	0.02	3.7	285.07	285.07	0.00	0.00
P-E2-145	261.00	8	130.0	0.24	37.7	285.07	285.06	0.01	0.04
P-E2-15	552.00	8	130.0	0.41	-63.7	285.14	285.20	0.06	0.11
P-E2-150	352.00	8	130.0	0.02	3.4	285.06	285.06	0.00	0.00
P-E2-155	274.00	8	130.0	0.02	2.5	285.06	285.06	0.00	0.00
P-E2-160	263.00	8	130.0	0.18	28.3	285.06	285.05	0.01	0.02
P-E2-165	287.00	8	130.0	0.02	2.5	285.05	285.05	0.00	0.00

Scenario: Existing - Average Day
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-E2-170	337.00	8	130.0	0.02	3.4	285.05	285.05	0.00	0.00
P-E2-175	258.00	8	130.0	0.12	19.0	285.05	285.05	0.00	0.01
P-E2-180	270.00	8	130.0	0.03	5.0	285.05	285.05	0.00	0.00
P-E2-185	267.00	8	130.0	0.02	2.5	285.05	285.05	0.00	0.00
P-E2-190	257.00	8	130.0	0.07	10.5	285.05	285.05	0.00	0.00
P-E2-195	238.00	8	130.0	0.05	7.1	285.05	285.05	0.00	0.00
P-E2-20	221.00	8	130.0	0.21	32.7	285.20	285.20	0.01	0.03
P-E2-200	177.00	8	130.0	0.41	64.9	285.07	285.05	0.02	0.12
P-E2-205	279.00	8	130.0	0.15	23.4	285.05	285.05	0.00	0.02
P-E2-210	279.00	8	130.0	0.14	22.2	285.05	285.04	0.00	0.02
P-E2-215	369.00	8	130.0	0.42	65.5	285.04	285.00	0.04	0.12
P-E2-220	331.00	8	130.0	0.22	-35.1	285.00	285.01	0.01	0.04
P-E2-225	302.00	8	130.0	0.01	1.6	285.01	285.01	0.00	0.00
P-E2-230	269.00	8	130.0	0.26	-40.1	285.01	285.02	0.01	0.05
P-E2-235	474.00	8	130.0	0.29	-44.8	285.02	285.05	0.03	0.06
P-E2-240	263.00	8	130.0	0.63	98.1	285.00	284.93	0.07	0.25
P-E2-245	259.00	8	130.0	0.00	0.3	284.93	284.93	0.00	0.00
P-E2-25	345.00	8	130.0	0.15	-24.0	285.20	285.20	0.01	0.02
P-E2-250	554.00	8	130.0	0.38	-59.1	284.93	284.99	0.05	0.10
P-E2-251	269.00	8	130.0	0.34	-53.2	284.93	284.95	0.02	0.08
P-E2-255	737.00	10	130.0	0.47	-116.2	284.99	285.07	0.08	0.11
P-E2-260	190.00	8	130.0	0.22	-34.4	284.99	284.99	0.01	0.04
P-E2-265	413.00	8	130.0	0.03	4.4	284.99	284.99	0.00	0.00
P-E2-270	297.00	8	130.0	0.26	-41.3	284.99	285.01	0.01	0.05
P-E2-275	413.00	8	130.0	0.02	3.4	285.01	285.01	0.00	0.00
P-E2-280	278.00	8	130.0	0.31	-49.1	285.01	285.03	0.02	0.07
P-E2-285	315.00	12	130.0	0.36	128.5	284.97	284.95	0.02	0.06
P-E2-290	445.00	12	130.0	0.20	70.6	284.95	284.94	0.01	0.02
P-E2-295	663.00	10	130.0	0.36	-88.4	284.94	284.99	0.05	0.07
P-E2-30	232.00	8	130.0	0.33	52.3	285.20	285.18	0.02	0.08
P-E2-300	249.00	8	130.0	0.35	54.4	284.93	284.91	0.02	0.08
P-E2-305	484.00	8	130.0	0.03	4.4	284.91	284.91	0.00	0.00
P-E2-310	256.00	8	130.0	0.29	45.4	284.91	284.90	0.02	0.06
P-E2-315	486.00	8	130.0	0.03	4.4	284.90	284.90	0.00	0.00
P-E2-320	254.00	8	130.0	0.23	35.4	284.90	284.89	0.01	0.04
P-E2-325	485.00	8	130.0	0.03	4.4	284.89	284.89	0.00	0.00
P-E2-330	250.00	8	130.0	0.16	25.4	284.89	284.88	0.01	0.02
P-E2-335	725.00	8	130.0	0.25	-39.6	284.90	284.93	0.03	0.05
P-E2-340	308.00	8	130.0	0.33	52.3	284.93	284.91	0.02	0.08
P-E2-345	249.00	8	130.0	0.07	-10.8	284.90	284.90	0.00	0.00
P-E2-35	237.00	8	130.0	0.02	2.5	285.18	285.18	0.00	0.00
P-E2-40	266.00	8	130.0	0.30	46.4	285.18	285.16	0.02	0.06
P-E2-45	238.00	8	130.0	0.02	3.4	285.16	285.16	0.00	0.00
P-E2-5	605.00	8	130.0	0.45	-70.6	285.03	285.11	0.08	0.13
P-E2-50	217.00	8	130.0	0.25	39.8	285.16	285.15	0.01	0.05
P-E2-55	499.00	12	130.0	0.51	-178.0	285.15	285.20	0.05	0.10
P-E2-60	275.00	8	130.0	0.28	44.0	285.15	285.14	0.02	0.06
P-E2-65	311.00	8	130.0	0.02	3.4	285.14	285.14	0.00	0.00
P-E2-70	266.00	8	130.0	0.24	36.8	285.14	285.13	0.01	0.04
P-E2-75	506.00	8	130.0	0.21	-32.8	285.13	285.14	0.02	0.03
P-E2-80	235.00	8	130.0	0.41	64.6	285.13	285.10	0.03	0.11

Scenario: Existing - Average Day
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-E2-85	265.00	8	130.0	0.10	-16.1	285.10	285.10	0.00	0.01
P-E2-90	249.00	8	130.0	0.20	-31.2	285.10	285.11	0.01	0.03
P-E2-95	356.00	8	130.0	0.07	11.6	285.10	285.10	0.00	0.00
P-E3-1	472.00	8	130.0	0.12	18.5	284.86	284.85	0.01	0.01
P-E3-10	400.00	12	130.0	0.54	-189.7	284.83	284.87	0.05	0.12
P-E3-100	273.00	8	130.0	0.38	59.2	284.28	284.25	0.03	0.10
P-E3-105	188.00	8	130.0	0.55	85.4	284.28	284.24	0.04	0.19
P-E3-11	299.00	8	130.0	0.26	40.9	284.85	284.84	0.01	0.05
P-E3-110	258.00	8	130.0	0.32	50.7	284.24	284.22	0.02	0.07
P-E3-120	691.00	8	130.0	0.18	28.1	284.24	284.23	0.02	0.02
P-E3-125	815.00	12	130.0	0.44	155.6	284.94	284.87	0.07	0.08
P-E3-130	217.00	8	130.0	0.23	-36.2	284.87	284.88	0.01	0.04
P-E3-135	446.00	8	130.0	0.03	4.7	284.90	284.90	0.00	0.00
P-E3-145	927.00	8	130.0	0.18	28.0	284.87	284.85	0.02	0.02
P-E3-15	174.00	8	130.0	0.22	-34.1	284.87	284.88	0.01	0.04
P-E3-150	754.00	8	130.0	0.35	-55.4	284.19	284.25	0.06	0.09
P-E3-155	429.00	8	130.0	0.09	13.6	284.21	284.21	0.00	0.01
P-E3-16	177.00	8	130.0	0.23	36.5	284.84	284.83	0.01	0.04
P-E3-160	289.00	8	130.0	0.27	42.6	284.90	284.88	0.02	0.05
P-E3-17	471.00	8	130.0	0.02	3.1	284.84	284.83	0.00	0.00
P-E3-170	281.00	8	130.0	0.11	16.7	284.21	284.21	0.00	0.01
P-E3-175	469.00	8	130.0	0.14	21.6	284.21	284.21	0.01	0.01
P-E3-180	394.00	8	130.0	0.07	-10.8	284.21	284.21	0.00	0.00
P-E3-190	128.00	8	130.0	0.13	19.6	284.22	284.21	0.00	0.01
P-E3-195	120.00	8	130.0	0.00	0.3	284.21	284.21	0.00	0.00
P-E3-20	374.00	8	130.0	0.02	3.7	284.88	284.88	0.00	0.00
P-E3-200	296.00	8	130.0	0.12	19.0	284.21	284.21	0.00	0.01
P-E3-205	295.00	8	130.0	0.10	16.2	284.21	284.21	0.00	0.01
P-E3-210	372.00	8	130.0	0.04	-7.0	284.21	284.22	0.00	0.00
P-E3-215	242.00	8	130.0	0.22	-34.1	284.21	284.22	0.01	0.03
P-E3-220	377.00	8	130.0	0.07	11.1	284.22	284.22	0.00	0.00
P-E3-225	237.00	8	130.0	0.14	-21.6	284.22	284.23	0.00	0.02
P-E3-230	233.00	8	130.0	0.19	29.2	284.22	284.22	0.01	0.03
P-E3-245	276.00	8	130.0	0.30	-46.9	284.91	284.93	0.02	0.06
P-E3-25	274.00	8	130.0	0.26	-41.0	284.88	284.89	0.01	0.05
P-E3-30	275.00	8	130.0	0.28	-44.4	284.89	284.91	0.02	0.06
P-E3-40	346.00	8	130.0	0.02	-2.5	284.87	284.87	0.00	0.00
P-E3-42	323.00	8	130.0	0.02	3.7	284.93	284.93	0.00	0.00
P-E3-45	254.00	8	130.0	0.20	30.6	284.87	284.87	0.01	0.03
P-E3-50	276.00	8	130.0	0.02	2.5	284.87	284.87	0.00	0.00
P-E3-55	223.00	8	130.0	0.02	2.5	284.87	284.87	0.00	0.00
P-E3-60	256.00	8	130.0	0.14	22.2	284.87	284.86	0.00	0.02
P-E3-65	219.00	8	130.0	0.08	13.1	284.86	284.86	0.00	0.01
P-E3-70	254.00	8	130.0	0.07	10.6	284.86	284.86	0.00	0.00
P-E3-71	417.00	8	130.0	0.03	4.7	284.86	284.86	0.00	0.00
P-E3-75	373.00	12	130.0	0.37	130.3	284.86	284.84	0.02	0.06
P-E3-80	264.00	12	130.0	0.35	-123.8	284.86	284.87	0.01	0.05
P-E3-81	374.00	8	130.0	0.02	2.5	284.86	284.86	0.00	0.00
P-E3-85	695.00	8	130.0	0.13	-21.1	284.87	284.88	0.01	0.01
P-E3-86	308.00	8	130.0	0.01	2.2	284.84	284.84	0.00	0.00
P-E3-87	185.00	12	130.0	0.36	-126.0	284.83	284.84	0.01	0.05

Scenario: Existing - Average Day
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-E3-90	257.00	8	130.0	0.09	14.3	284.88	284.88	0.00	0.01
P-E3-91	343.00	8	130.0	0.02	2.5	284.87	284.87	0.00	0.00
P-E3-95	499.00	12	130.0	1.00	-352.1	284.28	284.83	0.55	0.37
P-E4-1	327.00	8	130.0	0.15	23.0	276.99	276.99	0.01	0.02
P-E4-10	455.00	6	130.0	0.13	-11.4	276.98	276.99	0.01	0.02
P-E4-15	019.00	12	130.0	0.12	43.8	276.99	276.98	0.01	0.01
P-E4-20	274.00	10	130.0	0.11	25.8	276.99	276.99	0.00	0.01
P-E4-25	296.00	12	130.0	0.16	55.2	277.01	276.99	0.02	0.01
P-E4-30	200.00	8	130.0	0.02	2.8	276.99	276.99	0.00	0.00
P-E4-35	259.00	8	130.0	0.11	16.8	276.99	276.98	0.00	0.01
P-E4-40	255.00	8	130.0	0.02	3.3	276.98	276.98	0.00	0.00
P-E4-45	356.00	8	130.0	0.03	-4.1	276.98	276.98	0.00	0.00
P-E4-5	637.00	8	130.0	0.20	-31.4	284.17	284.19	0.02	0.03
P-E4-50	533.00	8	130.0	0.04	6.2	276.98	276.98	0.00	0.00
P-E4-55	599.00	8	130.0	0.10	15.8	284.19	284.19	0.01	0.01
P-E4-60	246.00	8	130.0	0.29	45.7	284.21	284.19	0.01	0.06
P-E4-65	450.00	8	130.0	0.09	14.4	284.19	284.19	0.00	0.01
P-E4-70	191.00	8	130.0	0.11	-17.1	284.19	284.19	0.00	0.01
P-E4-75	432.00	8	130.0	0.03	-5.2	284.19	284.19	0.00	0.00
P-E4-80	308.00	8	130.0	0.07	11.4	284.19	284.19	0.00	0.00
P-E4-85	605.00	8	130.0	0.05	7.7	284.19	284.19	0.00	0.00
P-E4-90	118.00	8	130.0	0.00	0.3	284.19	284.19	0.00	0.00
P-E5-1	036.00	10	130.0	0.05	11.0	276.96	276.96	0.00	0.00
P-E5-10	530.00	6	130.0	0.10	8.4	276.98	276.96	0.03	0.01
P-E5-15	149.00	6	130.0	0.10	8.8	276.98	276.96	0.02	0.01
P-E5-20	295.00	10	130.0	0.23	56.4	277.00	276.96	0.04	0.03
P-E5-5	990.00	10	130.0	0.02	5.5	276.96	276.96	0.00	0.00
P-F1-10	317.00	12	130.0	0.12	43.5	285.09	285.09	0.00	0.01
P-F1-15	281.00	12	130.0	0.10	34.0	285.09	285.08	0.00	0.00
P-F2-1	564.00	8	130.0	0.14	21.7	284.91	284.90	0.01	0.02
P-F2-10	983.00	12	130.0	0.06	19.7	285.08	285.08	0.00	0.00
P-F2-11	262.00	8	130.0	0.05	7.8	284.90	284.90	0.00	0.00
P-F2-16	181.00	8	130.0	0.13	20.1	284.90	284.90	0.00	0.01
P-F2-20	027.00	12	130.0	0.09	30.0	285.09	285.08	0.01	0.00
P-F2-21	440.00	8	130.0	0.03	4.4	284.90	284.90	0.00	0.00
P-F2-26	251.00	8	130.0	0.08	12.0	284.90	284.90	0.00	0.00
P-F2-31	367.00	8	130.0	0.02	3.1	284.90	284.90	0.00	0.00
P-F2-36	248.00	12	130.0	0.05	-16.0	284.91	284.91	0.00	0.00
P-F2-41	158.00	8	130.0	0.04	6.6	284.91	284.91	0.00	0.00
P-F2-46	172.00	8	130.0	0.02	3.4	284.91	284.91	0.00	0.00
P-F2-5	963.00	8	150.0	0.06	9.5	285.09	285.08	0.00	0.00
P-F2-51	319.00	8	130.0	0.02	3.1	284.91	284.91	0.00	0.00
P-F2-56	266.00	12	130.0	0.06	-22.9	284.91	284.91	0.00	0.00
P-F2-6	299.00	8	130.0	0.17	26.8	284.91	284.90	0.01	0.02
P-F2-61	313.00	8	130.0	0.02	3.7	284.91	284.91	0.00	0.00
P-F2-66	767.00	8	130.0	0.10	-16.0	284.90	284.91	0.01	0.01
P-F3-1	374.00	8	130.0	0.03	-4.4	284.88	284.89	0.00	0.00
P-F3-10	428.00	8	130.0	0.02	3.7	284.90	284.90	0.00	0.00
P-F3-100	267.00	12	130.0	0.10	-35.4	284.91	284.91	0.00	0.01
P-F3-105	269.00	12	130.0	0.11	-38.5	284.91	284.91	0.00	0.01
P-F3-11	219.00	8	130.0	0.02	2.5	284.89	284.89	0.00	0.00

Scenario: Existing - Average Day
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-F3-110	346.00	8	130.0	0.02	3.7	284.90	284.90	0.00	0.00
P-F3-115	645.00	8	130.0	0.09	14.3	284.90	284.90	0.00	0.01
P-F3-12	252.00	12	130.0	0.32	-112.7	284.87	284.89	0.01	0.04
P-F3-120	248.00	8	130.0	0.03	5.4	284.90	284.90	0.00	0.00
P-F3-125	261.00	12	130.0	0.08	-27.6	284.91	284.91	0.00	0.00
P-F3-15	257.00	8	130.0	0.01	2.2	284.90	284.90	0.00	0.00
P-F3-20	167.00	8	130.0	0.01	-1.9	284.92	284.92	0.00	0.00
P-F3-25	428.00	8	130.0	0.02	3.7	284.90	284.90	0.00	0.00
P-F3-30	493.00	8	130.0	0.03	4.4	284.90	284.90	0.00	0.00
P-F3-35	246.00	8	130.0	0.01	1.5	284.90	284.90	0.00	0.00
P-F3-40	308.00	8	130.0	0.02	2.5	284.90	284.90	0.00	0.00
P-F3-45	289.00	8	130.0	0.02	3.4	284.91	284.91	0.00	0.00
P-F3-5	259.00	12	130.0	0.35	-122.7	284.89	284.90	0.01	0.05
P-F3-50	241.00	8	130.0	0.02	-2.5	284.91	284.91	0.00	0.00
P-F3-55	212.00	8	130.0	0.01	2.2	284.91	284.91	0.00	0.00
P-F3-60	220.00	12	130.0	0.01	-4.1	284.91	284.91	0.00	0.00
P-F3-65	324.00	12	130.0	0.12	-42.9	284.91	284.92	0.00	0.01
P-F3-70	247.00	8	130.0	0.04	6.3	284.90	284.90	0.00	0.00
P-F3-75	249.00	8	130.0	0.02	-3.7	284.90	284.90	0.00	0.00
P-F3-80	258.00	8	130.0	0.08	-11.9	284.90	284.90	0.00	0.00
P-F3-85	259.00	12	130.0	0.40	-142.7	284.90	284.92	0.02	0.07
P-F3-95	266.00	12	130.0	0.09	-32.0	284.91	284.91	0.00	0.00
P-F4-1	001.00	12	130.0	0.06	21.5	276.98	276.98	0.00	0.00
P-F4-5	398.00	6	130.0	0.09	8.4	276.98	276.96	0.03	0.01

SCENARIO: EXISTING - AVERAGE DAY
STEADY STATE ANALYSIS
VALVE (PUMPS) REPORT

Pump	Model Label	Elevation (ft)	Diameter (in)	Control Status	Discharge (gpm)	From HGL (ft)	To HGL (ft)
Tank 1 - Pump 1	FCV-1	138	8	Throttling	0	285	279.9
Tank 1 - Pump 2	FCV-2	138	8	Throttling	0	285	279.9
Tank 1 - Pump 3	FCV-3	138	8	Throttling	0	285	279.9
Tank 2 - Pump 1	FCV-4	127	8	Throttling	0	285	285
Tank 2 - Pump 2	FCV-5	127	8	Throttling	0	285	285
Tank 2 - Pump 3	FCV-6	127	8	Throttling	0	285	285

Scenario: Existing - Max Day
Steady State Analysis
Junction Report

Label	Elevation (ft)	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-A1-1	130	Demand	12.9	12.9	288.52	68.58
J-A1-10	130	Demand	15.1	15.1	287.77	68.26
J-A1-15	130	Demand	0.0	0.0	287.75	68.25
J-A1-5	130	Demand	0.0	0.0	288.14	68.42
J-A2-1	130	Demand	18.7	18.7	284.34	66.78
J-A2-20	90	Demand	19.4	19.4	283.52	83.73
J-A2-35	90	Demand	16.5	16.5	283.51	83.72
J-A2-45	90	Demand	15.1	15.1	283.51	83.72
J-A2-5	90	Demand	16.5	16.5	283.55	83.74
J-A2-55	90	Demand	18.7	18.7	283.51	83.72
J-A3-1	100	Demand	12.9	12.9	283.60	79.44
J-A3-10	95	Demand	0.0	0.0	283.52	81.57
J-A3-15	90	Demand	31.6	31.6	283.51	83.72
J-A3-20	90	Demand	0.0	0.0	283.51	83.72
J-A3-25	90	Demand	30.2	30.2	283.51	83.72
J-A3-30	100	Demand	19.8	19.8	283.59	79.43
J-A3-40	100	Demand	0.0	0.0	283.63	79.45
J-A3-45	140	Demand	5.6	5.6	283.79	62.21
J-A3-5	95	Demand	55.3	55.3	283.51	81.56
J-A3-50	140	Demand	6.6	6.6	284.06	62.33
J-A3-55	140	Demand	92.0	92.0	283.24	61.97
J-A3-60	100	Demand	0.0	0.0	283.51	79.40
J-A3-65	95	Demand	0.0	0.0	283.51	81.56
J-A3-70	100	Demand	0.0	0.0	283.51	79.40
J-A4-1	140	Demand	30.2	30.2	282.02	61.45
J-A4-10	144	Demand	0.0	0.0	281.58	59.52
J-A4-15	145	Demand	59.7	59.7	279.84	58.34
J-A4-20	145	Demand	9.5	9.5	279.85	58.34
J-A4-5	144	Demand	60.4	60.4	281.60	59.53
J-B1-10	128	Demand	14.4	14.4	285.57	68.17
J-B1-100	130	Demand	19.4	19.4	287.08	67.96
J-B1-105	130	Demand	7.9	7.9	287.17	68.00
J-B1-110	130	Demand	12.2	12.2	288.86	68.73
J-B1-115	130	Demand	35.9	35.9	289.41	68.97
J-B1-120	130	Demand	0.0	0.0	291.83	70.01
J-B1-125	130	Demand	0.0	0.0	285.85	67.43
J-B1-130	128	Demand	8.6	8.6	285.58	68.18
J-B1-15	128	Demand	5.7	5.7	285.58	68.18
J-B1-20	128	Demand	0.0	0.0	285.59	68.18
J-B1-25	128	Demand	12.2	12.2	285.57	68.17
J-B1-30	128	Demand	9.3	9.3	285.57	68.17
J-B1-35	135	Demand	29.3	29.3	285.62	65.17
J-B1-45	128	Demand	0.0	0.0	285.62	68.20
J-B1-50	130	Demand	10.8	10.8	285.78	67.40
J-B1-55	130	Demand	0.0	0.0	285.78	67.40
J-B1-60	130	Demand	10.1	10.1	285.77	67.40
J-B1-65	130	Demand	10.8	10.8	286.04	67.51
J-B1-70	130	Demand	12.2	12.2	286.12	67.54
J-B1-75	130	Demand	10.1	10.1	286.16	67.56
J-B1-80	130	Demand	8.6	8.6	286.31	67.63
J-B1-85	130	Demand	25.9	25.9	286.75	67.82
J-B1-90	130	Demand	0.0	0.0	286.81	67.85

Scenario: Existing - Max Day
Steady State Analysis
Junction Report

Label	Elevation (ft)	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-B1-95	130	Demand	12.2	12.2	286.81	67.85
J-B2-1	130	Demand	18.7	18.7	284.15	66.69
J-B2-10	130	Demand	10.1	10.1	284.44	66.82
J-B2-15	130	Demand	14.4	14.4	284.80	66.98
J-B2-20	130	Demand	12.9	12.9	284.29	66.76
J-B2-25	130	Demand	33.8	33.8	284.43	66.82
J-B2-30	135	Demand	4.3	4.3	284.32	64.60
J-B2-35	130	Demand	15.1	15.1	284.31	66.76
J-B2-45	100	Demand	0.0	0.0	283.62	79.44
J-B2-5	130	Demand	6.5	6.5	284.30	66.76
J-B2-50	100	Demand	35.2	35.2	283.61	79.44
J-B2-55	135	Demand	30.2	30.2	283.80	64.38
J-B2-60	130	Demand	69.0	69.0	283.80	66.54
J-B2-65	135	Demand	27.3	27.3	283.82	64.39
J-B2-70	135	Demand	29.3	29.3	283.88	64.41
J-B2-75	130	Demand	0.0	0.0	284.56	66.87
J-B2-80	135	Demand	19.4	19.4	284.28	64.59
J-B3-1	140	Demand	0.0	0.0	283.77	62.20
J-B3-10	140	Demand	24.8	24.8	283.44	62.06
J-B3-12	140	Demand	0.0	0.0	283.04	61.89
J-B3-15	140	Demand	0.0	0.0	283.02	61.88
J-B3-25	130	Demand	48.5	48.5	282.99	66.19
J-B3-3	140	Demand	29.3	29.3	283.74	62.19
J-B3-30	130	Demand	38.3	38.3	281.77	65.66
J-B3-35	140	Demand	19.4	19.4	280.38	60.73
J-B3-40	135	Demand	0.0	0.0	280.42	62.92
J-B3-45	135	Demand	42.4	42.4	280.40	62.91
J-B3-5	140	Demand	0.0	0.0	283.46	62.07
J-B3-50	135	Demand	0.0	0.0	280.39	62.90
J-B4-10	140	Demand	30.2	30.2	280.02	60.58
J-B4-15	135	Demand	69.7	69.7	280.40	62.91
J-B4-20	138	Demand	10.1	10.1	276.45	59.90
J-B4-25	140	Demand	18.0	18.0	276.23	58.94
J-B4-30	140	Demand	0.0	0.0	278.56	59.95
J-B4-35	140	Demand	4.3	4.3	278.35	59.86
J-B4-40	140	Demand	13.7	13.7	278.24	59.81
J-B4-45	140	Demand	61.4	61.4	278.22	59.80
J-B4-5	140	Demand	65.4	65.4	279.87	60.52
J-B4-50	140	Demand	34.5	34.5	278.03	59.72
J-B4-55	140	Demand	39.9	39.9	278.03	59.72
J-B5-1	145	Demand	39.9	39.9	278.12	57.59
J-B5-10	145	Demand	0.0	0.0	276.08	56.71
J-B5-15	145	Demand	18.0	18.0	276.08	56.71
J-B5-30	140	Demand	11.5	11.5	279.86	60.51
J-B5-5	148	Demand	41.5	41.5	278.10	56.29
J-B6-1	150	Demand	49.5	49.5	277.94	55.36
J-C1-1	128	Demand	11.5	11.5	285.57	68.17
J-C1-10	128	Demand	9.3	9.3	285.57	68.18
J-C1-100	128	Demand	17.3	17.3	285.65	68.21
J-C1-105	128	Demand	38.9	38.9	287.31	68.93
J-C1-110	128	Demand	11.5	11.5	286.70	68.66
J-C1-115	128	Demand	14.4	14.4	286.34	68.51

Scenario: Existing - Max Day
Steady State Analysis
Junction Report

Label	Elevation (ft)	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-C1-120	128	Demand	0.0	0.0	285.77	68.26
J-C1-125	128	Demand	13.7	13.7	288.15	69.29
J-C1-130	128	Demand	11.5	11.5	291.11	70.57
J-C1-20	128	Demand	3.6	3.6	285.57	68.17
J-C1-25	128	Demand	5.7	5.7	285.57	68.17
J-C1-30	128	Demand	33.8	33.8	285.57	68.17
J-C1-35	128	Demand	11.5	11.5	285.57	68.17
J-C1-40	128	Demand	10.8	10.8	285.57	68.17
J-C1-45	128	Demand	25.9	25.9	285.58	68.18
J-C1-5	128	Demand	9.3	9.3	285.57	68.17
J-C1-50	128	Demand	12.2	12.2	285.65	68.21
J-C1-55	128	Demand	10.8	10.8	285.65	68.21
J-C1-60	128	Demand	9.3	9.3	285.70	68.23
J-C1-70	128	Demand	5.0	5.0	285.72	68.24
J-C1-75	128	Demand	0.0	0.0	285.67	68.22
J-C1-80	128	Demand	0.0	0.0	285.63	68.20
J-C1-85	128	Demand	18.0	18.0	285.59	68.18
J-C1-90	135	Demand	24.4	24.4	285.46	65.10
J-C1-95	128	Demand	25.2	25.2	285.79	68.27
J-C2-1	135	Demand	23.0	23.0	285.12	64.95
J-C2-10	130	Demand	13.7	13.7	284.79	66.97
J-C2-100	130	Demand	10.8	10.8	284.67	66.92
J-C2-105	130	Demand	7.9	7.9	284.90	67.02
J-C2-110	130	Demand	12.2	12.2	284.88	67.01
J-C2-115	130	Demand	0.0	0.0	284.93	67.03
J-C2-120	135	Demand	15.1	15.1	285.05	64.92
J-C2-125	128	Demand	5.7	5.7	285.90	68.31
J-C2-130	128	Demand	0.0	0.0	285.17	68.00
J-C2-135	128	Demand	5.7	5.7	285.00	67.93
J-C2-140	128	Demand	7.9	7.9	285.07	67.96
J-C2-145	128	Demand	15.1	15.1	285.03	67.94
J-C2-15	130	Demand	5.0	5.0	284.64	66.90
J-C2-150	135	Demand	9.3	9.3	284.10	64.51
J-C2-155	135	Demand	20.1	20.1	284.11	64.51
J-C2-20	130	Demand	11.5	11.5	284.64	66.90
J-C2-25	130	Demand	5.0	5.0	284.52	66.85
J-C2-30	130	Demand	10.8	10.8	284.52	66.85
J-C2-35	130	Demand	3.6	3.6	284.42	66.81
J-C2-40	130	Demand	2.9	2.9	284.42	66.81
J-C2-45	135	Demand	15.1	15.1	284.18	64.54
J-C2-5	135	Demand	11.5	11.5	284.91	64.86
J-C2-50	130	Demand	20.1	20.1	284.07	66.66
J-C2-55	130	Demand	31.6	31.6	284.12	66.68
J-C2-60	128	Demand	10.8	10.8	284.06	67.52
J-C2-65	130	Demand	15.1	15.1	284.22	66.72
J-C2-70	130	Demand	8.6	8.6	284.28	66.75
J-C2-75	130	Demand	20.1	20.1	284.39	66.80
J-C2-80	130	Demand	11.5	11.5	284.38	66.79
J-C2-85	128	Demand	14.4	14.4	284.39	67.66
J-C2-90	128	Demand	23.0	23.0	284.42	67.68
J-C2-95	130	Demand	8.6	8.6	284.48	66.84
J-C3-1	135	Demand	97.7	97.7	283.95	64.44

Scenario: Existing - Max Day
Steady State Analysis
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Label	Elevation (ft)	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-C3-10	130	Demand	0.0	0.0	283.99	66.62
J-C3-15	128	Demand	20.1	20.1	283.99	67.49
J-C3-20	130	Demand	5.0	5.0	283.94	66.60
J-C3-25	130	Demand	10.8	10.8	283.90	66.59
J-C3-30	130	Demand	7.9	7.9	283.95	66.61
J-C3-35	135	Demand	17.3	17.3	283.94	64.44
J-C3-40	135	Demand	11.5	11.5	283.94	64.44
J-C3-45	135	Demand	9.3	9.3	283.94	64.44
J-C3-5	130	Demand	28.0	28.0	283.97	66.61
J-C3-55	135	Demand	68.3	68.3	283.83	64.39
J-C3-60	135	Demand	29.5	29.5	283.74	64.35
J-C4-1	138	Demand	46.7	46.7	276.07	59.74
J-C4-10	140	Demand	30.2	30.2	275.25	58.52
J-C4-15	140	Demand	48.2	48.2	275.00	58.41
J-C4-20	140	Demand	8.9	8.9	274.71	58.28
J-C4-25	140	Demand	30.2	30.2	274.71	58.28
J-C4-30	140	Demand	34.5	34.5	275.32	58.54
J-C4-35	138	Demand	37.4	37.4	275.58	59.52
J-C4-40	140	Demand	23.0	23.0	275.43	58.59
J-C4-45	140	Demand	0.0	0.0	275.51	58.63
J-C4-46	140	Demand	0.0	0.0	275.59	58.66
J-C4-5	140	Demand	25.2	25.2	275.78	58.75
J-C4-50	140	Demand	27.3	27.3	275.58	58.66
J-C4-60	140	Demand	21.6	21.6	274.95	58.39
J-C4-65	140	Demand	43.3	43.3	275.17	58.48
J-C5-1	140	Demand	50.3	50.3	274.99	58.40
J-C5-10	145	Demand	11.6	11.6	274.34	55.96
J-C5-15	140	Demand	0.0	0.0	274.33	58.12
J-C5-20	140	Demand	0.0	0.0	274.10	58.02
J-C5-25	140	Demand	28.7	28.7	273.90	57.93
J-C5-30	140	Demand	33.8	33.8	273.75	57.87
J-C5-35	140	Demand	9.3	9.3	274.50	58.19
J-C5-5	145	Demand	11.6	11.6	274.37	55.97
J-D1-1	125	Demand	0.0	0.0	285.32	69.36
J-D1-10	125	Demand	5.0	5.0	285.25	69.33
J-D1-15	125	Demand	8.6	8.6	285.21	69.32
J-D1-20	125	Demand	13.7	13.7	285.20	69.31
J-D1-25	125	Demand	5.7	5.7	285.28	69.35
J-D1-30	123	Demand	5.7	5.7	285.26	70.20
J-D1-5	125	Demand	64.7	64.7	285.25	69.33
J-D2-1	128	Demand	8.6	8.6	285.06	67.95
J-D2-10	128	Demand	10.8	10.8	285.14	67.98
J-D2-100	128	Demand	10.1	10.1	285.02	67.94
J-D2-105	128	Demand	5.7	5.7	285.02	67.94
J-D2-110	128	Demand	18.0	18.0	285.06	67.95
J-D2-115	125	Demand	11.5	11.5	285.08	69.26
J-D2-120	128	Demand	5.7	5.7	285.08	67.96
J-D2-125	125	Demand	13.7	13.7	285.10	69.27
J-D2-130	125	Demand	13.7	13.7	285.14	69.28
J-D2-135	125	Demand	7.2	7.2	285.14	69.28
J-D2-140	125	Demand	7.9	7.9	285.14	69.28
J-D2-145	125	Demand	12.9	12.9	285.10	69.27

Scenario: Existing - Max Day
Steady State Analysis
Junction Report

Label	Elevation (ft)	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-D2-15	128	Demand	10.1	10.1	285.10	67.97
J-D2-150	125	Demand	33.8	33.8	285.10	69.27
J-D2-155	128	Demand	13.7	13.7	285.04	67.94
J-D2-160	128	Demand	23.0	23.0	285.04	67.94
J-D2-165	125	Demand	10.1	10.1	285.04	69.24
J-D2-170	125	Demand	7.2	7.2	285.04	69.24
J-D2-175	125	Demand	8.6	8.6	285.07	69.26
J-D2-180	125	Demand	5.7	5.7	285.07	69.25
J-D2-185	125	Demand	8.6	8.6	285.12	69.28
J-D2-190	125	Demand	23.0	23.0	285.15	69.29
J-D2-195	125	Demand	10.8	10.8	285.64	69.50
J-D2-20	128	Demand	5.0	5.0	285.07	67.96
J-D2-200	125	Demand	8.6	8.6	285.42	69.41
J-D2-205	125	Demand	7.2	7.2	285.32	69.36
J-D2-210	123	Demand	8.6	8.6	285.27	70.21
J-D2-215	123	Demand	10.1	10.1	285.29	70.21
J-D2-220	123	Demand	10.1	10.1	285.30	70.22
J-D2-225	123	Demand	5.7	5.7	285.22	70.18
J-D2-230	123	Demand	10.1	10.1	285.14	70.15
J-D2-25	128	Demand	13.7	13.7	285.05	67.95
J-D2-30	128	Demand	16.5	16.5	284.87	67.87
J-D2-35	128	Demand	27.7	27.7	284.42	67.68
J-D2-40	128	Demand	7.9	7.9	284.26	67.61
J-D2-45	128	Demand	20.8	20.8	284.15	67.56
J-D2-5	128	Demand	28.7	28.7	285.05	67.95
J-D2-50	128	Demand	13.7	13.7	284.07	67.52
J-D2-55	128	Demand	20.8	20.8	283.96	67.48
J-D2-60	130	Demand	23.0	23.0	283.93	66.60
J-D2-65	128	Demand	5.7	5.7	284.99	67.92
J-D2-70	128	Demand	10.8	10.8	285.00	67.93
J-D2-75	128	Demand	11.5	11.5	285.00	67.93
J-D2-80	128	Demand	5.7	5.7	285.00	67.93
J-D2-85	128	Demand	27.3	27.3	285.00	67.93
J-D2-90	128	Demand	0.0	0.0	285.00	67.93
J-D2-95	128	Demand	11.5	11.5	285.00	67.93
J-D3-1	130	Demand	8.6	8.6	283.92	66.59
J-D3-10	130	Demand	5.7	5.7	283.91	66.59
J-D3-100	135	Demand	5.0	5.0	283.89	64.42
J-D3-105	135	Demand	3.6	3.6	283.89	64.42
J-D3-110	135	Demand	6.5	6.5	283.89	64.42
J-D3-115	135	Demand	17.3	17.3	283.92	64.43
J-D3-120	135	Demand	3.6	3.6	283.89	64.42
J-D3-125	135	Demand	22.3	22.3	283.89	64.42
J-D3-130	135	Demand	5.7	5.7	283.89	64.42
J-D3-135	135	Demand	5.0	5.0	283.89	64.42
J-D3-140	135	Demand	9.3	9.3	283.90	64.42
J-D3-145	135	Demand	8.6	8.6	283.89	64.42
J-D3-15	130	Demand	20.1	20.1	283.91	66.59
J-D3-150	135	Demand	0.0	0.0	283.97	64.45
J-D3-20	130	Demand	0.0	0.0	283.90	66.58
J-D3-25	130	Demand	13.7	13.7	283.90	66.58
J-D3-30	130	Demand	3.6	3.6	283.90	66.58

Scenario: Existing - Max Day
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Label	Elevation (ft)	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-D3-35	135	Demand	33.0	33.0	283.80	64.38
J-D3-40	135	Demand	38.9	38.9	283.79	64.37
J-D3-45	135	Demand	0.0	0.0	283.88	64.41
J-D3-5	130	Demand	10.8	10.8	283.91	66.59
J-D3-50	135	Demand	9.3	9.3	283.91	64.43
J-D3-55	130	Demand	9.3	9.3	283.91	66.59
J-D3-60	130	Demand	10.1	10.1	283.92	66.59
J-D3-65	130	Demand	11.5	11.5	283.93	66.60
J-D3-70	130	Demand	23.7	23.7	283.96	66.61
J-D3-75	135	Demand	6.5	6.5	283.96	64.45
J-D3-80	128	Demand	5.0	5.0	284.92	67.89
J-D3-81	128	Demand	10.1	10.1	284.91	67.89
J-D3-82	128	Demand	7.9	7.9	284.91	67.89
J-D3-85	128	Demand	3.6	3.6	284.93	67.90
J-D3-90	125	Demand	3.6	3.6	284.95	69.20
J-D3-91	125	Demand	10.8	10.8	284.95	69.20
J-D3-95	135	Demand	13.7	13.7	283.89	64.42
J-D4-1	135	Demand	18.0	18.0	274.39	60.31
J-D4-10	135	Demand	27.3	27.3	274.30	60.27
J-D4-15	135	Demand	41.7	41.7	274.12	60.19
J-D4-20	135	Demand	43.1	43.1	273.77	60.04
J-D4-25	135	Demand	18.0	18.0	273.66	59.99
J-D4-30	130	Demand	25.9	25.9	273.60	62.13
J-D4-35	130	Demand	15.8	15.8	273.57	62.12
J-D4-40	140	Demand	23.7	23.7	273.57	57.79
J-D4-45	140	Demand	0.0	0.0	273.59	57.80
J-D4-5	140	Demand	14.4	14.4	274.56	58.22
J-D4-50	140	Demand	20.8	20.8	273.59	57.80
J-D4-55	140	Demand	72.1	72.1	273.61	57.81
J-D4-60	140	Demand	48.2	48.2	273.74	57.86
J-D4-65	140	Demand	11.5	11.5	274.55	58.21
J-D4-70	135	Demand	9.3	9.3	283.89	64.42
J-D4-75	135	Demand	10.8	10.8	283.89	64.42
J-D4-80	135	Demand	11.5	11.5	274.25	60.25
J-D4-85	140	Demand	33.8	33.8	274.02	57.98
J-D5-1	140	Demand	0.0	0.0	273.74	57.86
J-D5-10	140	Demand	30.2	30.2	273.72	57.85
J-D5-15	140	Demand	25.9	25.9	273.72	57.85
J-D5-20	140	Demand	15.8	15.8	273.63	57.81
J-D5-25	140	Demand	16.5	16.5	273.62	57.81
J-D5-30	140	Demand	14.4	14.4	273.62	57.81
J-D5-35	140	Demand	15.8	15.8	273.63	57.82
J-D5-40	140	Demand	2.9	2.9	273.59	57.80
J-D5-45	140	Demand	13.7	13.7	273.59	57.80
J-D5-5	140	Demand	36.7	36.7	273.72	57.85
J-D5-50	140	Demand	14.4	14.4	273.57	57.79
J-D5-55	140	Demand	20.8	20.8	273.57	57.79
J-D5-85	140	Demand	15.8	15.8	273.56	57.79
J-E1-1	123	Demand	7.2	7.2	285.21	70.18
J-E1-10	123	Demand	0.0	0.0	285.14	70.15
J-E1-15	123	Demand	8.6	8.6	285.10	70.13
J-E1-20	123	Demand	2.9	2.9	285.07	70.12

Scenario: Existing - Max Day
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Label	Elevation (ft)	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-E1-25	120	Demand	10.1	10.1	285.07	71.42
J-E1-30	120	Demand	10.1	10.1	285.07	71.42
J-E1-35	120	Demand	10.8	10.8	285.07	71.42
J-E1-40	120	Demand	3.6	3.6	285.07	71.42
J-E1-45	120	Demand	10.1	10.1	285.08	71.42
J-E1-5	123	Demand	5.7	5.7	285.18	70.17
J-E1-50	120	Demand	0.0	0.0	285.15	71.45
J-E2-1	123	Demand	10.1	10.1	285.21	70.18
J-E2-10	123	Demand	5.7	5.7	285.04	70.11
J-E2-100	123	Demand	10.8	10.8	285.09	70.13
J-E2-105	123	Demand	0.0	0.0	285.09	70.13
J-E2-110	123	Demand	0.0	0.0	285.14	70.15
J-E2-115	123	Demand	5.7	5.7	285.05	70.11
J-E2-120	123	Demand	7.9	7.9	285.05	70.11
J-E2-125	120	Demand	8.6	8.6	285.05	71.41
J-E2-130	120	Demand	7.9	7.9	285.05	71.41
J-E2-135	123	Demand	7.9	7.9	285.05	70.11
J-E2-140	123	Demand	5.7	5.7	285.05	70.11
J-E2-145	123	Demand	5.7	5.7	285.05	70.11
J-E2-15	123	Demand	18.0	18.0	284.98	70.08
J-E2-150	123	Demand	7.9	7.9	285.05	70.11
J-E2-155	120	Demand	7.9	7.9	285.05	71.41
J-E2-160	120	Demand	5.7	5.7	285.05	71.41
J-E2-165	120	Demand	5.7	5.7	285.05	71.41
J-E2-170	123	Demand	7.9	7.9	285.05	70.11
J-E2-175	123	Demand	7.9	7.9	285.06	70.12
J-E2-180	123	Demand	8.6	8.6	285.08	70.12
J-E2-185	123	Demand	2.9	2.9	285.08	70.12
J-E2-190	120	Demand	3.6	3.6	285.08	71.42
J-E2-195	123	Demand	5.7	5.7	285.08	70.13
J-E2-20	125	Demand	18.7	18.7	285.03	69.24
J-E2-200	123	Demand	7.9	7.9	285.08	70.12
J-E2-205	123	Demand	3.6	3.6	285.08	70.12
J-E2-210	123	Demand	10.8	10.8	285.08	70.12
J-E2-215	128	Demand	13.7	13.7	285.09	67.96
J-E2-220	128	Demand	11.5	11.5	285.05	67.95
J-E2-225	128	Demand	7.2	7.2	285.03	67.94
J-E2-230	128	Demand	5.7	5.7	285.03	67.94
J-E2-235	128	Demand	10.1	10.1	285.03	67.94
J-E2-240	125	Demand	7.9	7.9	285.03	69.24
J-E2-245	125	Demand	10.1	10.1	285.03	69.24
J-E2-25	123	Demand	10.8	10.8	285.10	70.13
J-E2-250	125	Demand	10.8	10.8	284.97	69.21
J-E2-255	123	Demand	7.9	7.9	284.97	70.08
J-E2-260	123	Demand	10.1	10.1	285.05	70.11
J-E2-265	123	Demand	12.9	12.9	285.06	70.11
J-E2-270	123	Demand	12.9	12.9	285.05	70.11
J-E2-275	123	Demand	10.1	10.1	285.05	70.11
J-E2-280	123	Demand	10.1	10.1	285.05	70.11
J-E2-285	123	Demand	10.8	10.8	285.05	70.11
J-E2-290	125	Demand	18.0	18.0	285.10	69.27
J-E2-30	123	Demand	21.6	21.6	285.12	70.14

Scenario: Existing - Max Day
Steady State Analysis
Junction Report

Label	Elevation (ft)	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-E2-35	123	Demand	19.4	19.4	285.18	70.17
J-E2-40	123	Demand	10.1	10.1	285.18	70.17
J-E2-45	123	Demand	7.9	7.9	285.16	70.16
J-E2-5	123	Demand	7.2	7.2	285.21	70.18
J-E2-50	123	Demand	5.7	5.7	285.16	70.16
J-E2-55	123	Demand	7.2	7.2	285.15	70.15
J-E2-60	123	Demand	7.9	7.9	285.15	70.15
J-E2-65	123	Demand	10.1	10.1	285.15	70.15
J-E2-70	123	Demand	8.6	8.6	285.12	70.14
J-E2-75	123	Demand	7.9	7.9	285.12	70.14
J-E2-80	123	Demand	11.5	11.5	285.11	70.14
J-E2-85	123	Demand	8.6	8.6	285.09	70.13
J-E2-90	123	Demand	7.9	7.9	285.09	70.13
J-E2-95	123	Demand	10.1	10.1	285.09	70.13
J-E3-1	125	Demand	10.8	10.8	284.93	69.19
J-E3-10	128	Demand	12.9	12.9	284.91	67.89
J-E3-100	125	Demand	7.9	7.9	285.07	69.26
J-E3-105	135	Demand	7.2	7.2	283.92	64.43
J-E3-110	130	Demand	5.7	5.7	284.07	66.66
J-E3-115	130	Demand	8.6	8.6	284.03	66.64
J-E3-120	130	Demand	15.1	15.1	283.98	66.62
J-E3-125	130	Demand	12.9	12.9	283.94	66.60
J-E3-130	135	Demand	15.1	15.1	283.94	64.44
J-E3-135	135	Demand	6.5	6.5	283.92	64.43
J-E3-140	135	Demand	6.5	6.5	283.93	64.43
J-E3-145	135	Demand	6.5	6.5	283.92	64.43
J-E3-15	125	Demand	0.0	0.0	284.91	69.19
J-E3-150	130	Demand	5.7	5.7	283.93	66.60
J-E3-155	135	Demand	0.7	0.7	283.92	64.43
J-E3-16	125	Demand	2.9	2.9	284.91	69.19
J-E3-160	135	Demand	0.7	0.7	283.92	64.43
J-E3-165	135	Demand	6.5	6.5	283.92	64.43
J-E3-17	125	Demand	7.2	7.2	284.91	69.19
J-E3-175	130	Demand	7.9	7.9	283.94	66.60
J-E3-20	125	Demand	0.0	0.0	284.93	69.20
J-E3-25	125	Demand	7.2	7.2	284.93	69.20
J-E3-30	125	Demand	8.6	8.6	284.93	69.20
J-E3-35	125	Demand	7.9	7.9	284.94	69.20
J-E3-40	125	Demand	5.7	5.7	284.94	69.20
J-E3-41	125	Demand	5.7	5.7	284.95	69.20
J-E3-42	125	Demand	8.6	8.6	284.95	69.20
J-E3-45	125	Demand	5.7	5.7	285.07	69.25
J-E3-5	128	Demand	11.5	11.5	284.91	67.89
J-E3-50	125	Demand	7.2	7.2	285.07	69.26
J-E3-55	125	Demand	7.9	7.9	285.07	69.26
J-E3-60	125	Demand	5.7	5.7	285.07	69.26
J-E3-65	125	Demand	5.7	5.7	285.07	69.26
J-E3-70	125	Demand	10.1	10.1	285.08	69.26
J-E3-71	125	Demand	10.8	10.8	285.07	69.26
J-E3-75	125	Demand	5.7	5.7	285.09	69.26
J-E3-80	125	Demand	3.6	3.6	285.11	69.27
J-E3-81	125	Demand	5.7	5.7	285.11	69.27

Scenario: Existing - Max Day
Steady State Analysis
Junction Report

Label	Elevation (ft)	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-E3-85	125	Demand	5.0	5.0	284.98	69.21
J-E3-86	125	Demand	5.0	5.0	284.97	69.21
J-E3-90	128	Demand	17.3	17.3	285.24	68.03
J-E3-91	128	Demand	5.7	5.7	285.24	68.03
J-E3-95	125	Demand	16.5	16.5	285.10	69.27
J-E4-1	135	Demand	0.0	0.0	273.56	59.95
J-E4-10	130	Demand	13.7	13.7	273.53	62.10
J-E4-15	130	Demand	0.0	0.0	273.58	62.12
J-E4-20	135	Demand	31.9	31.9	273.54	59.94
J-E4-25	135	Demand	6.5	6.5	273.56	59.95
J-E4-30	130	Demand	9.3	9.3	273.53	62.10
J-E4-35	130	Demand	7.2	7.2	273.53	62.10
J-E4-40	135	Demand	14.4	14.4	273.53	59.93
J-E4-45	135	Demand	3.6	3.6	283.90	64.42
J-E4-5	130	Demand	14.4	14.4	273.54	62.10
J-E4-50	135	Demand	9.3	9.3	283.90	64.42
J-E4-55	135	Demand	5.7	5.7	283.90	64.42
J-E4-60	135	Demand	5.0	5.0	283.90	64.42
J-E4-65	135	Demand	8.6	8.6	283.90	64.42
J-E4-70	135	Demand	0.7	0.7	283.90	64.42
J-E5-1	145	Demand	124.6	124.6	273.41	55.56
J-E5-5	140	Demand	31.9	31.9	273.40	57.72
J-F1-10	118	Demand	0.0	0.0	285.10	72.29
J-F1-15	118	Demand	34.8	34.8	285.09	72.29
J-F1-5	118	Demand	0.0	0.0	285.10	72.30
J-F2-1	125	Demand	8.6	8.6	285.15	69.29
J-F2-10	125	Demand	10.8	10.8	285.32	69.36
J-F2-15	125	Demand	8.6	8.6	285.39	69.39
J-F2-20	125	Demand	8.6	8.6	285.38	69.39
J-F2-25	125	Demand	10.1	10.1	285.38	69.39
J-F2-30	128	Demand	7.9	7.9	285.38	68.09
J-F2-35	128	Demand	7.2	7.2	285.38	68.09
J-F2-40	128	Demand	0.0	0.0	285.77	68.26
J-F2-45	128	Demand	0.7	0.7	285.79	68.27
J-F2-5	125	Demand	16.5	16.5	285.10	69.27
J-F2-50	128	Demand	0.0	0.0	285.79	68.27
J-F2-55	128	Demand	7.9	7.9	285.79	68.27
J-F2-60	128	Demand	7.2	7.2	285.79	68.27
J-F2-65	128	Demand	2.2	2.2	285.81	68.28
J-F2-70	128	Demand	8.6	8.6	285.81	68.28
J-F2-75	120	Demand	0.0	0.0	285.09	71.43
J-F2-80	120	Demand	0.0	0.0	285.09	71.43
J-F2-85	120	Demand	34.8	34.8	285.09	71.43
J-F3-1	125	Demand	8.6	8.6	285.10	69.27
J-F3-10	128	Demand	7.2	7.2	285.43	68.11
J-F3-100	128	Demand	5.0	5.0	285.90	68.31
J-F3-105	128	Demand	9.3	9.3	285.93	68.33
J-F3-11	128	Demand	5.7	5.7	285.43	68.11
J-F3-110	128	Demand	0.7	0.7	285.93	68.33
J-F3-15	130	Demand	10.1	10.1	285.64	67.34
J-F3-20	130	Demand	3.6	3.6	285.64	67.34
J-F3-25	130	Demand	5.0	5.0	285.64	67.34

Scenario: Existing - Max Day
Steady State Analysis
Junction Report

Label	Elevation (ft)	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-F3-30	130	Demand	4.3	4.3	285.97	67.48
J-F3-35	130	Demand	0.0	0.0	285.97	67.48
J-F3-40	130	Demand	10.1	10.1	285.52	67.29
J-F3-45	130	Demand	8.6	8.6	285.52	67.29
J-F3-5	128	Demand	10.1	10.1	285.43	68.11
J-F3-50	128	Demand	12.9	12.9	285.44	68.12
J-F3-55	128	Demand	10.1	10.1	285.44	68.12
J-F3-60	128	Demand	15.1	15.1	285.38	68.09
J-F3-65	128	Demand	10.1	10.1	285.38	68.09
J-F3-70	128	Demand	5.7	5.7	285.38	68.09
J-F3-75	128	Demand	2.2	2.2	285.84	68.29
J-F3-80	128	Demand	7.9	7.9	285.84	68.29
J-F3-85	128	Demand	5.7	5.7	285.86	68.30
J-F3-90	128	Demand	2.2	2.2	285.87	68.30
J-F3-95	128	Demand	2.2	2.2	285.90	68.31
J-F4-1	135	Demand	30.3	30.3	273.53	59.94
J-F5-1	135	Demand	31.9	31.9	273.40	59.88
WELL 2	139	Inflow	459.0	-459.0	284.59	62.99
WELL 3	128	Inflow	434.7	-434.7	287.05	68.81
WELL 4	129	Inflow	900.0	-900.0	295.84	72.18
WELL 5	130	Inflow	900.0	-900.0	302.81	74.77
WELL 6	139	Inflow	695.8	-695.8	283.93	62.70
WELL 7	129	Inflow	1,200.0	-1,200.0	311.79	79.09
WELL 8	125	Inflow	1,200.0	-1,200.0	296.97	74.40
WELL 9	129	Inflow	904.9	-904.9	286.15	67.99

Scenario: Existing - Max Day
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-5	25.00	8	130.0	0.00	0.0	285.00	285.00	0.00	0.00
P-10	25.00	8	130.0	0.00	0.0	280.39	280.39	0.00	0.00
P-15	25.00	8	130.0	0.00	0.0	285.00	285.00	0.00	0.00
P-20	25.00	8	130.0	0.00	0.0	280.39	280.39	0.00	0.00
P-25	25.00	8	130.0	0.00	0.0	285.00	285.00	0.00	0.00
P-30	25.00	8	130.0	0.00	0.0	280.39	280.39	0.00	0.00
P-35	50.00	10	130.0	0.00	0.0	280.39	285.00	0.00	0.00
P-40	25.00	8	130.0	0.00	0.0	285.00	285.00	0.00	0.00
P-45	25.00	8	130.0	0.00	0.0	285.00	285.00	0.00	0.00
P-50	25.00	8	130.0	0.00	0.0	285.00	285.00	0.00	0.00
P-55	25.00	8	130.0	0.00	0.0	285.00	285.00	0.00	0.00
P-60	25.00	8	130.0	0.00	0.0	285.00	285.00	0.00	0.00
P-65	25.00	8	130.0	0.00	0.0	285.00	285.00	0.00	0.00
P-70	50.00	10	130.0	0.01	1.8	285.00	285.00	0.00	0.00
P-75	84.00	12	130.0	2.57	904.9	286.15	285.97	0.18	2.11
P-A1-1	305.00	8	130.0	1.48	232.5	288.52	288.14	0.37	1.23
P-A1-10	109.00	8	130.0	0.60	93.4	287.77	287.75	0.02	0.23
P-A1-5	304.00	8	130.0	1.48	232.5	288.14	287.77	0.37	1.23
P-A2-10	724.00	6	130.0	0.87	-76.4	284.34	284.80	0.46	0.63
P-A2-15	522.00	6	130.0	0.66	57.8	284.34	284.15	0.20	0.38
P-A2-30	690.00	8	130.0	0.27	41.9	283.55	283.52	0.04	0.05
P-A2-50	543.00	8	130.0	0.14	22.5	283.52	283.51	0.01	0.02
P-A2-55	265.00	8	130.0	0.04	6.0	283.51	283.51	0.00	0.00
P-A2-75	250.00	8	130.0	0.09	-14.1	283.51	283.51	0.00	0.01
P-A2-80	320.00	8	130.0	0.21	-32.8	283.51	283.52	0.01	0.03
P-A3-1	452.00	6	130.0	0.47	41.2	283.60	283.51	0.09	0.20
P-A3-10	247.00	8	130.0	0.28	43.5	283.52	283.51	0.01	0.05
P-A3-100	899.00	10	130.0	1.81	442.4	283.24	282.02	1.22	1.36
P-A3-115	674.00	8	130.0	0.14	-21.5	285.08	285.09	0.01	0.01
P-A3-120	399.00	12	130.0	0.03	10.0	285.09	285.09	0.00	0.00
P-A3-125	562.00	12	130.0	0.05	18.8	285.09	285.09	0.00	0.00
P-A3-15	256.00	8	130.0	0.02	2.8	283.51	283.51	0.00	0.00
P-A3-20	237.00	8	130.0	0.02	2.8	283.51	283.51	0.00	0.00
P-A3-25	880.00	6	130.0	0.31	-27.4	283.51	283.59	0.08	0.10
P-A3-30	567.00	8	130.0	0.30	47.3	283.63	283.59	0.04	0.06
P-A3-35	110.00	8	130.0	0.06	-9.1	283.51	283.51	0.00	0.00
P-A3-40	237.00	8	130.0	1.06	-166.8	283.63	283.79	0.16	0.66
P-A3-45	716.00	8	130.0	0.37	-58.4	283.55	283.62	0.07	0.09
P-A3-5	056.00	8	130.0	0.07	10.9	283.61	283.60	0.00	0.00
P-A3-50	683.00	8	130.0	0.49	-76.3	283.52	283.63	0.11	0.16
P-A3-55	496.00	8	130.0	0.28	-43.3	283.60	283.63	0.03	0.05
P-A3-60	648.00	12	130.0	0.39	138.0	285.32	285.15	0.17	0.06
P-A3-70	471.00	12	130.0	0.70	-245.3	283.79	284.06	0.28	0.19
P-A3-75	297.00	10	130.0	2.65	648.1	284.06	283.24	0.82	2.76
P-A3-80	626.00	12	130.0	0.21	72.9	283.79	283.77	0.01	0.02
P-A3-85	149.00	8	130.0	0.00	0.0	283.51	283.51	0.00	0.00
P-A3-90	759.00	8	130.0	0.00	0.0	283.51	283.51	0.00	0.00
P-A3-95	296.00	6	130.0	0.00	0.0	283.51	283.51	0.00	0.00
P-A4-1	353.00	10	130.0	1.68	412.2	282.02	281.60	0.42	1.19
P-A4-10	897.00	4	130.0	1.22	47.9	281.58	279.85	1.73	1.92
P-A4-15	131.00	8	130.0	0.38	-59.7	279.84	279.85	0.01	0.10

Scenario: Existing - Max Day
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-A4-5	78.00	6	130.0	0.54	47.9	281.60	281.58	0.02	0.27
P-B1-10	810.00	12	130.0	0.07	23.2	285.58	285.58	0.00	0.00
P-B1-100	372.00	8	130.0	1.64	-257.6	288.86	289.41	0.55	1.48
P-B1-105	476.00	10	130.0	3.68	-900.0	289.41	291.83	2.41	5.07
P-B1-110	090.00	10	130.0	2.48	606.4	289.41	286.75	2.66	2.44
P-B1-115	290.00	10	130.0	1.47	360.3	286.31	286.04	0.27	0.93
P-B1-120	140.00	12	130.0	1.17	414.1	285.85	285.78	0.07	0.50
P-B1-125	254.00	8	130.0	1.57	-245.4	288.52	288.86	0.34	1.35
P-B1-130	385.00	6	130.0	1.41	124.0	287.77	287.17	0.60	1.55
P-B1-135	723.00	6	130.0	1.06	93.4	287.75	287.08	0.66	0.92
P-B1-140	407.00	6	130.0	0.00	0.2	285.57	285.57	0.00	0.00
P-B1-145	289.00	8	130.0	0.20	31.5	285.58	285.57	0.01	0.03
P-B1-15	455.00	6	130.0	0.17	14.5	285.58	285.57	0.01	0.03
P-B1-150	344.00	12	130.0	1.12	-393.3	285.62	285.78	0.15	0.45
P-B1-155	978.00	8	130.0	1.93	302.6	286.75	284.80	1.95	2.00
P-B1-20	164.00	6	130.0	0.33	29.3	285.59	285.57	0.02	0.11
P-B1-25	546.00	8	130.0	0.06	9.3	285.57	285.57	0.00	0.00
P-B1-30	144.00	12	130.0	0.25	-89.7	285.59	285.62	0.03	0.03
P-B1-40	480.00	12	130.0	0.00	0.0	285.62	285.62	0.00	0.00
P-B1-45	157.00	10	130.0	1.69	414.1	286.04	285.85	0.19	1.20
P-B1-5	435.00	12	130.0	0.17	60.4	285.59	285.58	0.01	0.01
P-B1-50	514.00	8	130.0	0.06	10.1	285.78	285.78	0.00	0.00
P-B1-55	276.00	8	130.0	0.06	10.1	285.78	285.77	0.00	0.00
P-B1-60	718.00	8	130.0	0.41	-64.5	286.04	286.12	0.08	0.11
P-B1-65	294.00	8	130.0	0.49	-76.8	286.12	286.16	0.05	0.16
P-B1-70	716.00	8	130.0	0.55	-86.8	286.16	286.31	0.14	0.20
P-B1-75	312.00	10	130.0	1.86	-455.8	286.31	286.75	0.45	1.44
P-B1-80	238.00	10	130.0	0.73	-177.8	286.75	286.81	0.06	0.25
P-B1-85	339.00	8	130.0	0.08	12.2	286.81	286.81	0.00	0.01
P-B1-90	319.00	8	130.0	1.21	-190.1	286.81	287.08	0.27	0.84
P-B1-95	268.00	8	130.0	0.74	-116.1	287.08	287.17	0.09	0.34
P-B2-1	301.00	8	130.0	0.92	-143.5	284.15	284.30	0.15	0.50
P-B2-10	346.00	8	130.0	1.35	-211.8	284.44	284.80	0.36	1.03
P-B2-100	330.00	10	130.0	0.16	40.2	283.80	283.77	0.02	0.02
P-B2-105	325.00	6	130.0	0.53	46.7	283.80	283.46	0.34	0.25
P-B2-110	309.00	6	130.0	0.85	74.9	283.82	283.02	0.80	0.61
P-B2-15	419.00	8	130.0	0.08	12.9	284.30	284.29	0.00	0.01
P-B2-20	298.00	8	130.0	0.25	38.8	284.44	284.43	0.01	0.04
P-B2-25	668.00	8	130.0	0.51	80.6	284.43	284.32	0.12	0.17
P-B2-30	400.00	8	130.0	0.10	15.1	284.32	284.31	0.00	0.01
P-B2-40	193.00	8	130.0	0.29	46.1	283.62	283.61	0.01	0.06
P-B2-45	156.00	6	130.0	1.19	-104.6	283.62	283.80	0.18	1.13
P-B2-5	234.00	8	130.0	1.04	-162.9	284.30	284.44	0.15	0.63
P-B2-50	730.00	10	130.0	0.03	7.7	283.80	283.80	0.00	0.00
P-B2-55	588.00	10	130.0	0.27	-66.3	283.80	283.82	0.02	0.04
P-B2-60	268.00	10	130.0	0.69	-168.5	283.82	283.88	0.06	0.23
P-B2-65	361.00	10	130.0	1.05	256.9	284.56	283.88	0.68	0.50
P-B2-70	304.00	10	130.0	1.24	304.0	283.88	282.99	0.89	0.68
P-B2-75	818.00	8	130.0	0.48	-75.6	284.43	284.56	0.13	0.15
P-B2-80	324.00	4	130.0	1.07	41.8	284.28	283.80	0.48	1.49
P-B2-85	356.00	8	130.0	0.39	61.2	284.32	284.28	0.04	0.10

Scenario: Existing - Max Day
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-B2-90	330.00	10	130.0	1.36	332.5	285.62	284.56	1.07	0.80
P-B2-95	322.00	10	130.0	0.75	182.6	284.15	283.80	0.35	0.26
P-B3-1	327.00	10	130.0	0.46	113.1	283.77	283.74	0.04	0.11
P-B3-10	046.00	8	130.0	0.16	24.8	283.46	283.44	0.02	0.02
P-B3-20	255.00	10	130.0	0.43	-106.3	282.99	283.02	0.02	0.10
P-B3-25	305.00	10	130.0	1.48	361.9	282.99	281.77	1.22	0.94
P-B3-3	375.00	6	130.0	0.95	-83.7	283.46	283.74	0.28	0.75
P-B3-30	803.00	10	130.0	2.06	504.6	281.77	280.38	1.39	1.74
P-B3-40	198.00	10	130.0	0.46	-113.7	280.40	280.42	0.02	0.11
P-B3-45	558.00	10	130.0	0.04	-8.8	280.40	280.40	0.00	0.00
P-B3-5	359.00	6	130.0	1.20	-105.7	283.04	283.46	0.42	1.16
P-B3-50	075.00	6	130.0	0.84	74.3	283.02	281.77	1.25	0.60
P-B3-55	241.00	10	130.0	0.43	-105.7	283.02	283.04	0.02	0.10
P-B3-60	136.00	6	130.0	1.29	-113.7	280.42	283.24	2.83	1.32
P-B3-70	168.00	10	130.0	0.33	-80.1	280.38	280.39	0.01	0.06
P-B3-75	173.00	10	130.0	0.33	-80.1	280.39	280.40	0.01	0.06
P-B4-1	345.00	8	130.0	0.83	-130.1	279.87	280.02	0.14	0.42
P-B4-10	310.00	10	130.0	0.59	143.7	276.45	276.23	0.22	0.17
P-B4-15	352.00	6	130.0	3.08	-271.2	276.23	278.56	2.33	6.62
P-B4-20	160.00	8	130.0	1.54	241.4	278.56	278.35	0.21	1.31
P-B4-25	190.00	8	130.0	0.99	-155.6	278.24	278.35	0.11	0.58
P-B4-250	974.00	10	130.0	0.92	225.4	280.40	280.02	0.38	0.39
P-B4-30	546.00	8	130.0	0.79	123.9	278.24	278.03	0.21	0.38
P-B4-35	318.00	10	130.0	1.68	411.6	276.45	276.07	0.38	1.19
P-B4-40	320.00	8	130.0	1.59	249.8	276.23	275.78	0.45	1.40
P-B4-45	832.00	10	130.0	2.31	565.3	280.38	276.45	3.92	2.14
P-B4-50	422.00	8	130.0	0.14	-21.3	279.85	279.87	0.02	0.01
P-B4-55	578.00	6	130.0	0.20	18.0	278.24	278.22	0.03	0.04
P-B4-60	772.00	10	130.0	1.24	303.9	281.60	280.40	1.20	0.68
P-B4-65	034.00	4	130.0	1.11	-43.4	278.22	279.87	1.66	1.60
P-B4-70	180.00	8	130.0	0.22	34.5	278.03	278.03	0.01	0.04
P-B5-1	404.00	8	130.0	0.27	41.5	278.12	278.10	0.02	0.05
P-B5-10	712.00	10	130.0	0.20	49.5	278.03	277.94	0.09	0.02
P-B5-15	831.00	10	130.0	0.60	147.2	276.23	276.08	0.15	0.18
P-B5-20	165.00	10	130.0	0.00	0.0	276.08	276.08	0.00	0.00
P-B5-25	655.00	6	130.0	1.47	129.2	276.08	274.99	1.10	1.68
P-B5-30	011.00	6	130.0	0.31	27.5	283.83	283.74	0.10	0.10
P-B5-40	109.00	6	130.0	13.62	-1,200.0	285.64	296.97	11.33	103.96
P-B5-45	199.00	6	130.0	13.62	-1,200.0	291.11	311.79	20.69	103.96
P-B5-5	331.00	8	130.0	0.52	81.5	278.35	278.12	0.23	0.18
P-B5-50	180.00	6	130.0	10.21	-900.0	291.83	302.81	10.98	61.02
P-B5-55	166.00	6	130.0	4.93	-434.7	284.42	287.05	2.63	15.86
P-B5-60	193.00	6	130.0	10.21	-900.0	284.06	295.84	11.78	61.02
P-B5-65	370.00	8	130.0	0.42	65.1	280.02	279.86	0.16	0.12
P-B5-70	245.00	8	130.0	3.27	512.6	279.86	278.56	1.30	5.30
P-B5-75	270.00	6	130.0	5.21	-459.0	279.86	284.59	4.73	17.54
P-C1-1	421.00	6	130.0	0.08	-6.8	285.57	285.57	0.00	0.01
P-C1-10	244.00	6	130.0	0.16	13.9	285.57	285.57	0.01	0.03
P-C1-100	488.00	6	130.0	0.55	48.8	285.79	285.65	0.13	0.28
P-C1-105	251.00	6	130.0	2.93	-258.6	285.79	287.31	1.52	6.06
P-C1-110	491.00	8	130.0	1.50	-234.3	286.70	287.31	0.61	1.24

Scenario: Existing - Max Day
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-C1-115	316.00	8	130.0	1.42	-222.8	286.34	286.70	0.36	1.13
P-C1-120	188.00	10	130.0	2.80	-684.9	285.77	286.34	0.57	3.06
P-C1-125	390.00	8	130.0	3.04	-476.4	286.34	288.15	1.80	4.63
P-C1-130	607.00	8	130.0	3.13	-490.1	288.15	291.11	2.96	4.88
P-C1-135	404.00	8	130.0	4.46	-698.4	287.31	291.11	3.80	9.40
P-C1-140	522.00	6	130.0	0.36	31.6	285.65	285.59	0.06	0.12
P-C1-145	218.00	12	130.0	0.75	-265.0	285.72	285.77	0.05	0.22
P-C1-15	428.00	6	130.0	0.09	-8.3	285.57	285.57	0.00	0.01
P-C1-150	659.00	12	130.0	0.17	-58.3	285.62	285.63	0.01	0.01
P-C1-155	068.00	8	130.0	0.31	-48.9	285.57	285.65	0.07	0.07
P-C1-20	70.00	6	130.0	0.02	-2.1	285.57	285.57	0.00	0.00
P-C1-25	270.00	6	130.0	0.09	-7.9	285.57	285.57	0.00	0.01
P-C1-30	216.00	8	130.0	0.09	14.5	285.57	285.57	0.00	0.01
P-C1-35	247.00	8	130.0	0.05	7.8	285.57	285.57	0.00	0.00
P-C1-40	556.00	8	130.0	0.07	10.8	285.57	285.57	0.00	0.00
P-C1-45	048.00	6	130.0	0.08	-7.3	285.57	285.58	0.01	0.01
P-C1-5	254.00	6	130.0	0.05	4.7	285.57	285.57	0.00	0.00
P-C1-50	518.00	6	130.0	0.38	-33.1	285.58	285.65	0.07	0.13
P-C1-55	274.00	8	130.0	0.16	-25.1	285.65	285.65	0.01	0.02
P-C1-60	342.00	6	130.0	0.39	-34.6	285.65	285.70	0.05	0.15
P-C1-65	334.00	12	130.0	0.61	-216.0	285.67	285.72	0.05	0.15
P-C1-70	424.00	8	130.0	0.28	-44.0	285.70	285.72	0.02	0.06
P-C1-75	140.00	8	130.0	0.45	-70.4	285.65	285.67	0.02	0.13
P-C1-80	538.00	12	130.0	0.41	145.6	285.67	285.63	0.04	0.07
P-C1-85	212.00	8	130.0	0.56	87.3	285.63	285.59	0.04	0.20
P-C1-90	479.00	8	130.0	0.64	101.0	285.59	285.46	0.13	0.26
P-C1-95	519.00	6	130.0	0.86	-75.9	285.46	285.79	0.32	0.63
P-C2-10	513.00	6	130.0	0.52	46.0	284.91	284.79	0.13	0.25
P-C2-100	311.00	6	130.0	0.46	-40.5	284.42	284.48	0.06	0.20
P-C2-105	262.00	6	130.0	0.93	-82.1	284.48	284.67	0.19	0.72
P-C2-110	245.00	6	130.0	1.05	-92.8	284.67	284.90	0.22	0.91
P-C2-115	233.00	10	130.0	0.45	111.0	284.42	284.39	0.02	0.11
P-C2-120	185.00	8	130.0	1.06	-165.5	284.93	285.05	0.12	0.65
P-C2-125	290.00	6	130.0	1.82	160.8	285.90	285.17	0.73	2.51
P-C2-130	285.00	6	130.0	0.83	73.5	285.17	285.00	0.17	0.59
P-C2-135	205.00	6	130.0	0.77	67.7	285.00	284.90	0.10	0.51
P-C2-140	257.00	6	130.0	0.37	-33.0	284.90	284.93	0.03	0.13
P-C2-145	499.00	8	130.0	0.56	87.3	285.17	285.07	0.10	0.20
P-C2-15	266.00	8	130.0	0.97	152.7	284.79	284.64	0.15	0.56
P-C2-150	509.00	8	130.0	0.31	48.8	285.07	285.03	0.03	0.07
P-C2-155	375.00	8	130.0	0.20	-30.6	285.06	285.07	0.01	0.03
P-C2-160	258.00	8	130.0	0.29	44.7	285.05	285.03	0.01	0.06
P-C2-165	527.00	6	130.0	1.89	-166.5	285.90	287.31	1.41	2.68
P-C2-170	605.00	6	130.0	1.23	-108.8	285.05	285.79	0.74	1.22
P-C2-175	518.00	8	130.0	0.46	-71.8	285.05	285.12	0.07	0.14
P-C2-180	608.00	8	130.0	0.97	-152.4	285.12	285.46	0.34	0.56
P-C2-185	708.00	6	130.0	0.20	17.5	284.42	284.39	0.03	0.04
P-C2-190	808.00	6	130.0	0.30	26.6	284.22	284.15	0.07	0.09
P-C2-195	396.00	8	130.0	0.82	-128.2	284.22	284.38	0.16	0.41
P-C2-20	265.00	8	130.0	0.07	11.5	284.64	284.64	0.00	0.00
P-C2-200	670.00	6	130.0	0.37	-32.9	284.39	284.48	0.09	0.13

Scenario: Existing - Max Day
Steady State Analysis
Pipe Report

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P-C2-205	292.00	8	130.0	0.06	9.3	284.11	284.10	0.00	0.00
P-C2-210	111.00	8	130.0	0.85	-132.5	284.88	284.93	0.05	0.43
P-C2-215	263.00	8	130.0	0.77	120.3	284.88	284.79	0.10	0.36
P-C2-220	522.00	10	130.0	0.69	168.7	284.07	283.95	0.12	0.23
P-C2-225	563.00	8	130.0	0.61	95.3	284.12	283.99	0.13	0.23
P-C2-230	494.00	10	130.0	1.00	-245.0	283.88	284.11	0.22	0.46
P-C2-235	140.00	10	130.0	1.12	-274.5	284.11	284.18	0.08	0.56
P-C2-25	263.00	8	130.0	0.87	136.1	284.64	284.52	0.12	0.45
P-C2-30	267.00	8	130.0	0.07	10.8	284.52	284.52	0.00	0.00
P-C2-35	274.00	8	130.0	0.77	120.3	284.52	284.42	0.10	0.36
P-C2-40	396.00	10	130.0	0.02	5.7	284.42	284.42	0.00	0.00
P-C2-45	176.00	10	130.0	1.79	437.6	284.42	284.18	0.23	1.33
P-C2-5	557.00	6	130.0	0.65	57.5	285.12	284.91	0.21	0.37
P-C2-50	664.00	10	130.0	0.60	148.0	284.18	284.07	0.12	0.18
P-C2-55	142.00	8	130.0	0.26	-40.8	284.07	284.12	0.06	0.05
P-C2-60	598.00	8	130.0	0.25	-39.5	284.12	284.15	0.03	0.05
P-C2-65	358.00	6	130.0	0.12	10.8	284.07	284.06	0.01	0.02
P-C2-70	245.00	8	130.0	0.82	-128.3	284.12	284.22	0.10	0.41
P-C2-75	295.00	6	130.0	0.47	-41.7	284.22	284.28	0.06	0.21
P-C2-80	386.00	6	130.0	0.57	-50.3	284.28	284.39	0.11	0.29
P-C2-85	251.00	10	130.0	0.30	73.5	284.39	284.38	0.01	0.05
P-C2-90	286.00	10	130.0	0.27	-66.2	284.38	284.39	0.01	0.04
P-C2-95	756.00	10	130.0	0.26	-63.1	284.39	284.42	0.03	0.04
P-C3-1	053.00	8	130.0	0.16	-24.9	283.95	283.97	0.02	0.02
P-C3-10	313.00	8	130.0	0.02	-3.6	283.99	283.99	0.00	0.00
P-C3-15	490.00	8	130.0	0.37	57.4	283.99	283.94	0.05	0.09
P-C3-20	398.00	6	130.0	0.20	17.3	283.95	283.94	0.02	0.04
P-C3-25	598.00	6	130.0	0.00	0.1	283.94	283.94	0.00	0.00
P-C3-30	398.00	6	130.0	0.13	-11.4	283.94	283.94	0.01	0.02
P-C3-35	618.00	8	130.0	0.13	20.8	283.95	283.94	0.01	0.01
P-C3-40	243.00	8	130.0	0.29	46.0	283.97	283.95	0.01	0.06
P-C3-45	668.00	6	130.0	1.21	106.8	283.74	281.77	1.96	1.18
P-C3-5	88.00	8	130.0	0.63	-98.9	283.97	283.99	0.02	0.25
P-C3-50	423.00	10	130.0	0.39	95.8	283.95	283.83	0.11	0.08
P-C4-1	304.00	6	130.0	0.49	43.5	276.07	275.78	0.29	0.22
P-C4-10	321.00	8	130.0	1.18	184.3	275.25	275.00	0.26	0.80
P-C4-15	331.00	8	130.0	1.22	191.6	275.00	274.71	0.28	0.86
P-C4-20	333.00	8	130.0	0.05	-8.4	274.71	274.71	0.00	0.00
P-C4-230	304.00	6	130.0	0.72	63.1	275.58	275.00	0.58	0.44
P-C4-25	278.00	8	130.0	0.89	-138.8	274.71	275.32	0.60	0.47
P-C4-30	693.00	10	130.0	0.90	-220.8	275.32	275.58	0.26	0.38
P-C4-35	194.00	12	130.0	1.10	-389.2	275.43	275.51	0.09	0.44
P-C4-45	417.00	6	130.0	1.11	97.7	275.58	275.17	0.42	1.00
P-C4-5	333.00	8	130.0	1.71	268.1	275.78	275.25	0.53	1.60
P-C4-50	307.00	10	130.0	1.69	413.7	275.32	274.95	0.37	1.20
P-C4-55	286.00	12	130.0	1.04	366.2	275.43	275.32	0.11	0.39
P-C4-60	662.00	10	130.0	1.31	321.3	276.07	275.58	0.50	0.75
P-C4-65	352.00	10	130.0	1.60	392.2	274.95	274.56	0.38	1.09
P-C4-75	220.00	6	130.0	7.90	-695.8	275.59	283.93	8.34	37.89
P-C4-80	449.00	8	130.0	1.16	-181.6	275.17	275.51	0.35	0.78
P-C4-85	188.00	12	130.0	0.35	125.1	275.59	275.58	0.01	0.05

Scenario: Existing - Max Day
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-C4-90	88.00	12	130.0	1.62	-570.8	275.51	275.59	0.08	0.90
P-C5-1	249.00	6	130.0	1.59	140.2	274.99	274.50	0.49	1.95
P-C5-10	317.00	12	130.0	0.31	107.7	274.34	274.33	0.01	0.04
P-C5-15	348.00	10	130.0	1.22	298.8	274.33	274.10	0.23	0.66
P-C5-20	283.00	6	130.0	0.91	79.9	274.10	273.90	0.19	0.69
P-C5-25	488.00	6	130.0	0.58	51.2	273.90	273.75	0.15	0.30
P-C5-30	807.00	6	130.0	0.61	53.7	275.25	274.99	0.27	0.33
P-C5-35	123.00	6	130.0	0.09	7.6	275.00	274.99	0.01	0.01
P-C5-40	349.00	10	130.0	0.78	191.1	274.71	274.33	0.39	0.29
P-C5-45	851.00	6	130.0	0.20	17.4	273.75	273.72	0.03	0.04
P-C5-5	297.00	10	130.0	0.49	119.3	274.37	274.34	0.04	0.12
P-C5-50	976.00	10	130.0	0.89	218.8	274.10	273.74	0.36	0.37
P-C5-60	301.00	8	130.0	0.84	130.8	274.50	274.37	0.13	0.42
P-D1-10	221.00	8	130.0	0.03	5.0	285.25	285.25	0.00	0.00
P-D1-15	253.00	12	130.0	0.60	212.1	285.25	285.21	0.04	0.14
P-D1-20	383.00	6	130.0	0.15	13.7	285.21	285.20	0.01	0.03
P-D1-25	376.00	8	130.0	0.32	49.5	285.28	285.26	0.03	0.07
P-D1-30	221.00	8	130.0	0.29	-45.5	285.26	285.27	0.01	0.06
P-D1-35	211.00	8	130.0	0.57	89.3	285.26	285.21	0.04	0.21
P-D1-40	884.00	12	130.0	1.19	419.8	285.77	285.32	0.45	0.51
P-D1-5	295.00	12	130.0	0.80	281.8	285.32	285.25	0.07	0.24
P-D2-10	267.00	8	130.0	0.33	-51.5	285.05	285.07	0.02	0.08
P-D2-100	423.00	8	130.0	0.69	107.6	285.00	284.87	0.12	0.29
P-D2-105	262.00	8	130.0	0.37	-57.6	285.00	285.02	0.02	0.09
P-D2-110	305.00	8	130.0	0.04	5.7	285.02	285.02	0.00	0.00
P-D2-115	262.00	8	130.0	0.47	-73.4	285.02	285.06	0.04	0.15
P-D2-120	417.00	12	130.0	0.27	96.8	285.06	285.05	0.01	0.03
P-D2-125	281.00	8	130.0	0.27	-42.4	285.06	285.08	0.01	0.05
P-D2-130	297.00	8	130.0	0.04	5.7	285.08	285.08	0.00	0.00
P-D2-135	260.00	8	130.0	0.38	-59.6	285.08	285.10	0.03	0.10
P-D2-140	423.00	8	130.0	0.07	-11.4	285.10	285.10	0.00	0.00
P-D2-145	246.00	8	130.0	0.48	-75.4	285.10	285.14	0.04	0.15
P-D2-15	638.00	12	130.0	0.54	189.8	285.21	285.14	0.07	0.12
P-D2-150	434.00	8	130.0	0.10	16.2	285.14	285.14	0.00	0.01
P-D2-155	266.00	8	130.0	0.10	15.1	285.14	285.14	0.00	0.01
P-D2-160	346.00	8	130.0	0.05	7.9	285.14	285.14	0.00	0.00
P-D2-165	509.00	8	130.0	0.09	13.5	285.10	285.10	0.00	0.01
P-D2-170	541.00	8	130.0	0.00	0.6	285.10	285.10	0.00	0.00
P-D2-175	519.00	8	130.0	0.42	65.3	285.10	285.04	0.06	0.12
P-D2-180	513.00	8	130.0	0.33	51.7	285.04	285.00	0.04	0.08
P-D2-185	783.00	8	130.0	0.27	-42.8	285.00	285.04	0.04	0.05
P-D2-190	265.00	8	130.0	0.03	-5.1	285.04	285.04	0.00	0.00
P-D2-195	288.00	8	130.0	0.08	12.9	285.04	285.04	0.00	0.01
P-D2-20	258.00	12	130.0	0.55	195.2	285.14	285.10	0.03	0.12
P-D2-200	229.00	8	130.0	0.04	5.7	285.04	285.04	0.00	0.00
P-D2-205	545.00	12	130.0	0.42	-147.6	285.00	285.04	0.04	0.07
P-D2-210	357.00	8	130.0	0.34	-53.7	285.04	285.07	0.03	0.08
P-D2-215	245.00	8	130.0	0.04	5.7	285.07	285.07	0.00	0.00
P-D2-220	397.00	8	130.0	0.43	-68.1	285.07	285.12	0.05	0.13
P-D2-225	255.00	8	130.0	0.40	-62.4	285.12	285.15	0.03	0.11
P-D2-230	769.00	12	130.0	0.59	208.3	285.15	285.04	0.11	0.14

Scenario: Existing - Max Day
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-D2-235	268.00	12	130.0	0.69	244.3	285.15	285.10	0.05	0.19
P-D2-240	613.00	12	130.0	1.53	-538.1	285.15	285.64	0.49	0.80
P-D2-245	193.00	12	130.0	1.85	651.2	285.64	285.42	0.22	1.15
P-D2-25	356.00	12	130.0	0.49	173.8	285.10	285.07	0.04	0.10
P-D2-250	243.00	8	130.0	0.81	126.6	285.42	285.32	0.10	0.40
P-D2-255	484.00	8	130.0	0.35	55.3	285.32	285.28	0.04	0.09
P-D2-260	236.00	8	130.0	0.35	-54.1	285.27	285.29	0.02	0.08
P-D2-265	312.00	8	130.0	0.41	-64.1	285.29	285.32	0.04	0.11
P-D2-270	254.00	12	130.0	1.12	395.6	285.42	285.30	0.12	0.46
P-D2-275	527.00	12	130.0	0.77	271.8	285.30	285.18	0.12	0.23
P-D2-280	274.00	8	130.0	0.73	113.7	285.30	285.22	0.09	0.33
P-D2-285	238.00	8	130.0	0.05	7.2	285.22	285.21	0.00	0.00
P-D2-290	280.00	8	130.0	0.64	100.7	285.22	285.14	0.07	0.26
P-D2-295	523.00	8	130.0	0.23	36.4	285.14	285.12	0.02	0.04
P-D2-30	180.00	10	130.0	0.48	117.3	285.07	285.05	0.02	0.12
P-D2-300	261.00	8	130.0	0.35	54.3	285.14	285.12	0.02	0.08
P-D2-305	532.00	8	130.0	0.26	40.0	285.12	285.10	0.02	0.05
P-D2-310	777.00	8	130.0	0.77	-120.4	285.14	285.42	0.28	0.36
P-D2-315	380.00	12	130.0	0.14	49.2	284.99	284.98	0.00	0.01
P-D2-320	434.00	8	130.0	0.16	25.7	285.04	285.03	0.01	0.02
P-D2-325	518.00	12	130.0	0.41	-145.8	285.06	285.10	0.04	0.07
P-D2-330	969.00	8	130.0	0.50	78.4	285.03	284.87	0.16	0.16
P-D2-35	550.00	10	130.0	0.82	200.4	285.05	284.87	0.17	0.31
P-D2-40	464.00	10	130.0	1.51	369.9	284.87	284.42	0.45	0.98
P-D2-45	271.00	10	130.0	1.14	279.0	284.42	284.26	0.16	0.58
P-D2-5	573.00	8	130.0	0.14	22.0	285.06	285.05	0.01	0.02
P-D2-50	244.00	8	130.0	0.89	139.4	284.26	284.15	0.12	0.48
P-D2-55	279.00	8	130.0	0.67	105.6	284.15	284.07	0.08	0.28
P-D2-60	173.00	6	130.0	1.49	131.7	284.26	283.96	0.30	1.74
P-D2-65	257.00	6	130.0	0.40	35.2	283.96	283.93	0.04	0.15
P-D2-70	309.00	12	130.0	0.35	-123.4	284.99	285.00	0.02	0.05
P-D2-75	244.00	8	130.0	0.09	13.4	285.00	285.00	0.00	0.01
P-D2-80	127.00	8	130.0	0.04	5.7	285.00	285.00	0.00	0.00
P-D2-85	562.00	8	130.0	0.04	-5.7	285.00	285.00	0.00	0.00
P-D2-90	214.00	8	130.0	0.07	11.5	285.00	285.00	0.00	0.00
P-D2-95	251.00	8	130.0	0.06	9.8	285.00	285.00	0.00	0.00
P-D3-1	253.00	8	130.0	0.28	43.8	283.92	283.91	0.01	0.06
P-D3-10	155.00	10	130.0	0.29	72.0	283.91	283.90	0.01	0.05
P-D3-100	135.00	10	130.0	0.31	75.6	283.96	283.91	0.06	0.05
P-D3-105	283.00	6	130.0	0.14	12.2	283.93	283.90	0.03	0.02
P-D3-110	680.00	10	130.0	0.44	-108.7	283.74	283.80	0.07	0.10
P-D3-115	268.00	8	130.0	0.44	68.5	284.99	284.95	0.03	0.13
P-D3-120	257.00	8	130.0	0.03	5.0	283.89	283.89	0.00	0.00
P-D3-125	253.00	8	130.0	0.07	-11.2	283.89	283.89	0.00	0.00
P-D3-130	268.00	8	130.0	0.09	-14.8	283.89	283.89	0.00	0.01
P-D3-135	559.00	12	130.0	0.43	152.7	283.96	283.92	0.04	0.08
P-D3-140	181.00	12	130.0	0.29	103.2	283.92	283.91	0.01	0.04
P-D3-145	734.00	8	130.0	0.21	-32.2	283.89	283.92	0.02	0.03
P-D3-15	258.00	8	130.0	0.03	5.0	283.90	283.90	0.00	0.00
P-D3-150	280.00	8	130.0	0.07	10.9	283.89	283.89	0.00	0.00
P-D3-155	249.00	8	130.0	0.14	22.3	283.89	283.89	0.00	0.02

Scenario: Existing - Max Day
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-D3-16	414.00	8	130.0	0.14	21.8	284.92	284.91	0.01	0.02
P-D3-160	174.00	8	130.0	0.10	-14.9	283.89	283.89	0.00	0.01
P-D3-165	267.00	8	130.0	0.07	11.7	283.89	283.89	0.00	0.00
P-D3-170	247.00	8	130.0	0.21	-32.4	283.89	283.90	0.01	0.03
P-D3-175	168.00	8	130.0	0.06	8.6	283.89	283.89	0.00	0.00
P-D3-180	142.00	12	130.0	0.49	-172.5	283.96	283.97	0.01	0.10
P-D3-185	577.00	12	130.0	0.65	-230.7	283.97	284.07	0.10	0.17
P-D3-190	771.00	8	130.0	0.37	-58.2	283.90	283.97	0.07	0.09
P-D3-195	674.00	8	130.0	0.11	16.5	283.90	283.89	0.01	0.01
P-D3-20	142.00	8	130.0	0.02	3.6	283.90	283.90	0.00	0.00
P-D3-200	404.00	8	130.0	0.01	-2.0	283.89	283.89	0.00	0.00
P-D3-25	044.00	10	130.0	0.16	38.9	283.80	283.79	0.02	0.02
P-D3-30	276.00	10	130.0	0.74	-180.6	283.80	283.88	0.07	0.26
P-D3-35	726.00	12	130.0	0.32	-113.6	283.88	283.91	0.03	0.05
P-D3-40	340.00	8	130.0	0.13	-19.7	283.91	283.91	0.00	0.01
P-D3-45	184.00	8	130.0	0.19	-29.1	283.91	283.92	0.00	0.03
P-D3-5	258.00	8	130.0	0.11	16.5	283.91	283.91	0.00	0.01
P-D3-50	294.00	8	130.0	0.25	-39.1	283.92	283.93	0.01	0.05
P-D3-55	344.00	8	130.0	0.32	-50.6	283.93	283.96	0.03	0.07
P-D3-6	243.00	8	130.0	0.11	16.5	283.91	283.91	0.00	0.01
P-D3-60	490.00	8	130.0	0.08	-13.3	283.96	283.96	0.00	0.01
P-D3-70	280.00	8	130.0	0.25	-39.8	284.92	284.93	0.01	0.05
P-D3-75	278.00	8	130.0	0.35	-54.1	284.93	284.95	0.02	0.08
P-D3-80	543.00	10	130.0	0.27	67.0	283.90	283.88	0.02	0.04
P-D3-81	274.00	8	130.0	0.02	3.8	284.91	284.91	0.00	0.00
P-D3-82	295.00	8	130.0	0.05	7.9	284.91	284.91	0.00	0.00
P-D3-85	287.00	8	130.0	0.33	52.4	283.94	283.92	0.02	0.08
P-D3-90	410.00	8	130.0	0.07	-10.8	283.90	283.91	0.00	0.00
P-D3-91	464.00	8	130.0	0.07	10.8	284.95	284.95	0.00	0.00
P-D3-95	459.00	8	130.0	0.52	81.2	284.07	283.99	0.08	0.17
P-D4-1	312.00	10	130.0	1.39	341.5	274.56	274.30	0.26	0.84
P-D4-10	512.00	10	130.0	1.25	305.6	274.12	273.77	0.35	0.69
P-D4-100	810.00	6	130.0	0.46	40.3	274.12	273.77	0.35	0.19
P-D4-105	665.00	6	130.0	1.14	100.3	274.71	274.02	0.70	1.05
P-D4-110	311.00	6	130.0	1.04	91.3	274.02	273.74	0.27	0.88
P-D4-115	939.00	4	130.0	0.63	24.8	274.55	274.02	0.53	0.57
P-D4-15	169.00	10	130.0	1.24	302.8	273.77	273.66	0.11	0.67
P-D4-20	738.00	12	130.0	0.43	152.7	273.66	273.60	0.06	0.08
P-D4-25	502.00	10	130.0	0.31	77.1	273.60	273.57	0.03	0.05
P-D4-30	592.00	8	130.0	0.03	4.5	273.57	273.57	0.00	0.00
P-D4-35	488.00	8	130.0	0.23	-36.0	273.57	273.59	0.02	0.04
P-D4-40	128.00	12	130.0	0.23	-80.5	273.59	273.59	0.00	0.02
P-D4-45	562.00	10	130.0	0.21	-51.6	273.59	273.61	0.01	0.03
P-D4-5	338.00	10	130.0	1.09	266.3	274.30	274.12	0.18	0.53
P-D4-50	452.00	8	130.0	0.69	-108.3	273.61	273.74	0.13	0.30
P-D4-55	280.00	8	130.0	0.85	133.1	274.30	273.74	0.56	0.44
P-D4-60	335.00	8	130.0	0.23	36.3	274.56	274.55	0.01	0.04
P-D4-65	545.00	12	130.0	0.14	49.8	273.60	273.59	0.01	0.01
P-D4-70	984.00	8	130.0	0.05	-7.5	283.89	283.89	0.00	0.00
P-D4-75	251.00	8	130.0	0.12	-18.8	283.89	283.89	0.00	0.01
P-D4-80	618.00	8	130.0	1.51	236.1	275.17	274.39	0.78	1.26

Scenario: Existing - Max Day
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-D4-85	317.00	8	130.0	0.85	132.8	274.39	274.25	0.14	0.43
P-D4-90	348.00	8	130.0	0.77	121.3	274.25	274.12	0.13	0.37
P-D4-95	450.00	8	130.0	0.54	85.3	274.39	274.30	0.09	0.19
P-D5-1	245.00	10	130.0	0.35	85.3	273.74	273.72	0.02	0.06
P-D5-10	133.00	10	130.0	0.01	-1.4	273.72	273.72	0.00	0.00
P-D5-100	506.00	8	130.0	0.10	15.8	273.57	273.56	0.00	0.01
P-D5-15	469.00	6	130.0	0.46	40.7	273.72	273.63	0.09	0.20
P-D5-20	362.00	6	130.0	0.16	14.1	273.63	273.62	0.01	0.03
P-D5-25	626.00	6	130.0	0.03	-2.4	273.62	273.62	0.00	0.00
P-D5-30	305.00	6	130.0	0.19	-16.8	273.62	273.63	0.01	0.04
P-D5-35	464.00	12	130.0	0.01	3.3	273.59	273.59	0.00	0.00
P-D5-40	502.00	8	130.0	0.22	34.2	273.59	273.57	0.02	0.04
P-D5-45	306.00	8	130.0	0.03	4.0	273.57	273.57	0.00	0.00
P-D5-5	397.00	10	130.0	0.05	11.4	273.72	273.72	0.00	0.00
P-D5-50	489.00	8	130.0	0.11	16.9	273.57	273.57	0.00	0.01
P-D5-55	721.00	12	130.0	0.13	44.5	273.59	273.59	0.01	0.01
P-D5-60	563.00	6	130.0	0.18	-15.4	273.61	273.63	0.02	0.03
P-D5-65	557.00	10	130.0	0.28	68.0	273.74	273.72	0.02	0.04
P-D5-70	017.00	10	130.0	0.55	133.5	273.74	273.59	0.15	0.15
P-D5-75	543.00	6	130.0	0.42	37.3	273.72	273.63	0.09	0.17
P-D5-80	609.00	6	130.0	0.05	-4.7	273.63	273.63	0.00	0.00
P-E1-10	225.00	8	130.0	0.46	72.0	285.21	285.18	0.03	0.14
P-E1-15	663.00	8	130.0	0.29	45.5	285.18	285.14	0.04	0.06
P-E1-20	166.00	8	130.0	0.66	103.3	285.14	285.10	0.05	0.27
P-E1-25	262.00	8	130.0	0.37	57.7	285.10	285.07	0.02	0.09
P-E1-30	270.00	8	130.0	0.05	7.6	285.07	285.07	0.00	0.00
P-E1-35	426.00	8	130.0	0.02	-2.5	285.07	285.07	0.00	0.00
P-E1-40	273.00	8	130.0	0.08	-12.5	285.07	285.07	0.00	0.01
P-E1-45	378.00	8	130.0	0.02	3.6	285.07	285.07	0.00	0.00
P-E1-5	371.00	8	130.0	0.06	10.1	285.21	285.21	0.00	0.00
P-E1-50	253.00	8	130.0	0.17	-26.9	285.07	285.08	0.01	0.02
P-E1-55	432.00	8	130.0	0.24	-37.0	285.08	285.10	0.02	0.04
P-E1-60	615.00	12	130.0	0.13	-46.9	285.14	285.15	0.01	0.01
P-E1-65	523.00	12	130.0	0.26	91.1	285.15	285.10	0.05	0.03
P-E2-1	660.00	8	130.0	0.33	-52.3	284.98	285.03	0.05	0.08
P-E2-10	322.00	8	130.0	0.34	-53.5	285.10	285.12	0.03	0.08
P-E2-100	252.00	8	130.0	0.01	1.0	285.09	285.09	0.00	0.00
P-E2-105	432.00	8	130.0	0.06	-9.8	285.09	285.09	0.00	0.00
P-E2-110	168.00	8	130.0	0.24	37.6	285.09	285.09	0.01	0.04
P-E2-115	741.00	10	130.0	0.38	-92.9	285.09	285.14	0.06	0.08
P-E2-120	161.00	12	130.0	0.29	-103.9	285.14	285.15	0.01	0.04
P-E2-125	544.00	12	130.0	0.03	10.9	285.14	285.14	0.00	0.00
P-E2-130	269.00	8	130.0	0.30	-47.2	285.05	285.07	0.02	0.06
P-E2-135	282.00	8	130.0	0.04	-5.7	285.05	285.05	0.00	0.00
P-E2-140	350.00	8	130.0	0.06	8.6	285.05	285.05	0.00	0.00
P-E2-145	261.00	8	130.0	0.16	24.9	285.05	285.05	0.01	0.02
P-E2-15	552.00	8	130.0	0.41	-64.6	285.12	285.18	0.06	0.11
P-E2-150	352.00	8	130.0	0.05	7.9	285.05	285.05	0.00	0.00
P-E2-155	274.00	8	130.0	0.04	5.7	285.05	285.05	0.00	0.00
P-E2-160	263.00	8	130.0	0.02	3.4	285.05	285.05	0.00	0.00
P-E2-165	287.00	8	130.0	0.04	5.7	285.05	285.05	0.00	0.00

Scenario: Existing - Max Day
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-E2-170	337.00	8	130.0	0.05	7.9	285.05	285.05	0.00	0.00
P-E2-175	258.00	8	130.0	0.12	-18.2	285.05	285.05	0.00	0.01
P-E2-180	270.00	8	130.0	0.07	11.5	285.05	285.05	0.00	0.00
P-E2-185	267.00	8	130.0	0.04	5.7	285.05	285.05	0.00	0.00
P-E2-190	257.00	8	130.0	0.24	-37.6	285.05	285.06	0.01	0.04
P-E2-195	238.00	8	130.0	0.29	-45.5	285.06	285.08	0.01	0.06
P-E2-20	221.00	8	130.0	0.24	37.9	285.18	285.18	0.01	0.04
P-E2-200	177.00	8	130.0	0.26	40.3	285.09	285.08	0.01	0.05
P-E2-205	279.00	8	130.0	0.10	-15.5	285.08	285.08	0.00	0.01
P-E2-210	279.00	8	130.0	0.12	-18.3	285.08	285.08	0.00	0.01
P-E2-215	369.00	8	130.0	0.00	-0.5	285.08	285.08	0.00	0.00
P-E2-220	331.00	8	130.0	0.13	20.7	285.08	285.08	0.00	0.01
P-E2-225	302.00	8	130.0	0.02	3.6	285.08	285.08	0.00	0.00
P-E2-230	269.00	8	130.0	0.06	9.2	285.08	285.08	0.00	0.00
P-E2-235	474.00	8	130.0	0.01	-1.6	285.08	285.08	0.00	0.00
P-E2-240	263.00	8	130.0	0.17	-26.9	285.08	285.09	0.01	0.02
P-E2-245	259.00	8	130.0	0.44	68.7	285.09	285.05	0.03	0.13
P-E2-25	345.00	8	130.0	0.13	-20.8	285.18	285.18	0.00	0.01
P-E2-250	554.00	8	130.0	0.24	36.9	285.05	285.03	0.02	0.04
P-E2-251	269.00	8	130.0	0.32	-49.4	284.95	284.97	0.02	0.07
P-E2-255	737.00	10	130.0	0.37	-90.2	285.03	285.09	0.05	0.07
P-E2-260	190.00	8	130.0	0.11	17.7	285.03	285.03	0.00	0.01
P-E2-265	413.00	8	130.0	0.06	10.1	285.03	285.03	0.00	0.00
P-E2-270	297.00	8	130.0	0.01	1.9	285.03	285.03	0.00	0.00
P-E2-275	413.00	8	130.0	0.05	7.9	285.03	285.03	0.00	0.00
P-E2-280	278.00	8	130.0	0.10	-16.1	285.03	285.03	0.00	0.01
P-E2-285	315.00	12	130.0	0.24	83.5	284.98	284.97	0.01	0.03
P-E2-290	445.00	12	130.0	0.07	23.4	284.97	284.97	0.00	0.00
P-E2-295	663.00	10	130.0	0.42	-102.2	284.97	285.03	0.06	0.09
P-E2-30	232.00	8	130.0	0.31	48.6	285.18	285.16	0.02	0.07
P-E2-300	249.00	8	130.0	0.13	20.3	285.05	285.05	0.00	0.01
P-E2-305	484.00	8	130.0	0.06	10.1	285.05	285.05	0.00	0.00
P-E2-310	256.00	8	130.0	0.00	-0.6	285.05	285.05	0.00	0.00
P-E2-315	486.00	8	130.0	0.06	10.1	285.05	285.05	0.00	0.00
P-E2-320	254.00	8	130.0	0.15	-23.6	285.05	285.06	0.00	0.02
P-E2-325	485.00	8	130.0	0.06	10.1	285.06	285.05	0.00	0.00
P-E2-330	250.00	8	130.0	0.30	-46.6	285.06	285.07	0.02	0.06
P-E2-335	725.00	8	130.0	0.13	20.3	285.10	285.09	0.01	0.01
P-E2-340	308.00	8	130.0	0.57	-88.9	285.09	285.15	0.06	0.21
P-E2-345	249.00	8	130.0	0.19	-29.4	285.10	285.10	0.01	0.03
P-E2-35	237.00	8	130.0	0.04	5.7	285.16	285.16	0.00	0.00
P-E2-40	266.00	8	130.0	0.22	35.0	285.16	285.15	0.01	0.04
P-E2-45	238.00	8	130.0	0.05	7.9	285.15	285.15	0.00	0.00
P-E2-5	605.00	8	130.0	0.39	-61.5	285.03	285.10	0.06	0.10
P-E2-50	217.00	8	130.0	0.13	19.9	285.15	285.15	0.00	0.01
P-E2-55	499.00	12	130.0	0.43	-149.9	285.15	285.18	0.04	0.08
P-E2-60	275.00	8	130.0	0.36	55.8	285.15	285.12	0.02	0.09
P-E2-65	311.00	8	130.0	0.05	7.9	285.12	285.12	0.00	0.00
P-E2-70	266.00	8	130.0	0.25	39.3	285.12	285.11	0.01	0.05
P-E2-75	506.00	8	130.0	0.17	-25.9	285.11	285.12	0.01	0.02
P-E2-80	235.00	8	130.0	0.34	53.7	285.11	285.09	0.02	0.08

Scenario: Existing - Max Day
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-E2-85	265.00	8	130.0	0.01	-2.3	285.09	285.09	0.00	0.00
P-E2-90	249.00	8	130.0	0.14	-21.3	285.09	285.10	0.00	0.01
P-E2-95	356.00	8	130.0	0.07	11.1	285.09	285.09	0.00	0.00
P-E3-1	472.00	8	130.0	0.05	-7.7	284.91	284.91	0.00	0.00
P-E3-10	400.00	12	130.0	0.35	-123.3	284.91	284.93	0.02	0.05
P-E3-100	273.00	8	130.0	0.44	69.7	284.07	284.03	0.04	0.13
P-E3-105	188.00	8	130.0	0.88	137.4	284.07	283.98	0.09	0.46
P-E3-11	299.00	8	130.0	0.05	-7.7	284.91	284.91	0.00	0.00
P-E3-110	258.00	8	130.0	0.50	77.9	283.98	283.94	0.04	0.16
P-E3-120	691.00	8	130.0	0.28	44.4	283.98	283.94	0.04	0.06
P-E3-125	815.00	12	130.0	0.33	117.7	284.97	284.93	0.04	0.05
P-E3-130	217.00	8	130.0	0.05	-7.3	285.07	285.07	0.00	0.00
P-E3-135	446.00	8	130.0	0.07	10.8	284.93	284.93	0.00	0.00
P-E3-145	927.00	8	130.0	0.08	13.0	284.92	284.91	0.01	0.01
P-E3-15	174.00	8	130.0	0.04	-5.6	284.93	284.93	0.00	0.00
P-E3-150	754.00	8	130.0	0.39	-61.1	283.96	284.03	0.08	0.10
P-E3-155	429.00	8	130.0	0.10	16.0	283.92	283.92	0.00	0.01
P-E3-16	177.00	8	130.0	0.11	-17.7	284.91	284.91	0.00	0.01
P-E3-160	289.00	8	130.0	0.06	-8.9	285.10	285.10	0.00	0.00
P-E3-17	471.00	8	130.0	0.05	7.2	284.91	284.91	0.00	0.00
P-E3-170	281.00	8	130.0	0.15	23.2	283.93	283.92	0.00	0.02
P-E3-175	469.00	8	130.0	0.16	25.8	283.93	283.92	0.01	0.02
P-E3-180	394.00	8	130.0	0.06	-9.5	283.92	283.92	0.00	0.00
P-E3-190	128.00	8	130.0	0.16	25.2	283.93	283.92	0.00	0.02
P-E3-195	120.00	8	130.0	0.00	0.7	283.92	283.92	0.00	0.00
P-E3-20	374.00	8	130.0	0.06	8.6	284.93	284.93	0.00	0.00
P-E3-200	296.00	8	130.0	0.15	23.7	283.92	283.92	0.01	0.02
P-E3-205	295.00	8	130.0	0.11	17.2	283.92	283.92	0.00	0.01
P-E3-210	372.00	8	130.0	0.05	-8.3	283.93	283.93	0.00	0.00
P-E3-215	242.00	8	130.0	0.30	-47.2	283.93	283.94	0.02	0.06
P-E3-220	377.00	8	130.0	0.11	17.8	283.94	283.94	0.00	0.01
P-E3-225	237.00	8	130.0	0.19	-29.3	283.94	283.94	0.01	0.03
P-E3-230	233.00	8	130.0	0.25	39.2	283.94	283.93	0.01	0.05
P-E3-245	276.00	8	130.0	0.22	-35.0	284.94	284.95	0.01	0.04
P-E3-25	274.00	8	130.0	0.14	-21.4	284.93	284.94	0.00	0.01
P-E3-30	275.00	8	130.0	0.19	-29.3	284.94	284.94	0.01	0.03
P-E3-40	346.00	8	130.0	0.04	-5.7	285.07	285.07	0.00	0.00
P-E3-42	323.00	8	130.0	0.06	8.6	284.95	284.95	0.00	0.00
P-E3-45	254.00	8	130.0	0.04	-5.7	285.07	285.07	0.00	0.00
P-E3-50	276.00	8	130.0	0.04	5.7	285.07	285.07	0.00	0.00
P-E3-55	223.00	8	130.0	0.04	5.7	285.07	285.07	0.00	0.00
P-E3-60	256.00	8	130.0	0.16	-25.1	285.07	285.08	0.01	0.02
P-E3-65	219.00	8	130.0	0.29	-45.9	285.08	285.09	0.01	0.06
P-E3-70	254.00	8	130.0	0.33	-51.7	285.09	285.11	0.02	0.08
P-E3-71	417.00	8	130.0	0.07	10.8	285.08	285.07	0.00	0.00
P-E3-75	373.00	12	130.0	0.99	348.0	285.11	284.98	0.13	0.36
P-E3-80	264.00	12	130.0	1.16	-409.1	285.11	285.24	0.13	0.48
P-E3-81	374.00	8	130.0	0.04	5.7	285.11	285.11	0.00	0.00
P-E3-85	695.00	8	130.0	0.56	87.1	285.24	285.10	0.14	0.20
P-E3-86	308.00	8	130.0	0.03	5.0	284.98	284.97	0.00	0.00
P-E3-87	185.00	12	130.0	0.96	-338.0	284.91	284.98	0.06	0.34

Scenario: Existing - Max Day
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-E3-90	257.00	8	130.0	0.39	61.7	285.10	285.07	0.03	0.11
P-E3-91	343.00	8	130.0	0.04	5.7	285.24	285.24	0.00	0.00
P-E3-95	499.00	12	130.0	1.26	-443.5	284.07	284.91	0.84	0.56
P-E4-1	327.00	8	130.0	0.32	50.2	273.56	273.54	0.02	0.07
P-E4-10	455.00	6	130.0	0.33	-29.4	273.53	273.58	0.05	0.11
P-E4-15	019.00	12	130.0	0.29	102.8	273.58	273.54	0.04	0.04
P-E4-20	274.00	10	130.0	0.23	56.7	273.57	273.56	0.01	0.03
P-E4-25	296.00	12	130.0	0.37	132.1	273.66	273.58	0.08	0.06
P-E4-30	200.00	8	130.0	0.04	6.5	273.56	273.56	0.00	0.00
P-E4-35	259.00	8	130.0	0.23	35.9	273.54	273.53	0.01	0.04
P-E4-40	255.00	8	130.0	0.03	5.0	273.53	273.53	0.00	0.00
P-E4-45	356.00	8	130.0	0.06	-9.3	273.53	273.53	0.00	0.00
P-E4-5	637.00	8	130.0	0.08	-13.1	283.89	283.90	0.00	0.01
P-E4-50	533.00	8	130.0	0.09	14.4	273.53	273.53	0.00	0.01
P-E4-55	599.00	8	130.0	0.07	11.1	283.90	283.90	0.00	0.00
P-E4-60	246.00	8	130.0	0.29	46.1	283.92	283.90	0.02	0.06
P-E4-65	450.00	8	130.0	0.08	12.4	283.90	283.90	0.00	0.01
P-E4-70	191.00	8	130.0	0.04	-5.5	283.90	283.90	0.00	0.00
P-E4-75	432.00	8	130.0	0.01	1.1	283.90	283.90	0.00	0.00
P-E4-80	308.00	8	130.0	0.08	13.3	283.90	283.90	0.00	0.01
P-E4-85	605.00	8	130.0	0.03	4.7	283.90	283.90	0.00	0.00
P-E4-90	118.00	8	130.0	0.00	0.7	283.90	283.90	0.00	0.00
P-E5-1	036.00	10	130.0	0.10	23.4	273.41	273.40	0.01	0.01
P-E5-10	530.00	6	130.0	0.23	20.3	273.54	273.40	0.14	0.05
P-E5-15	149.00	6	130.0	0.23	20.7	273.53	273.41	0.12	0.06
P-E5-20	295.00	10	130.0	0.52	127.3	273.59	273.41	0.18	0.14
P-E5-5	990.00	10	130.0	0.05	11.8	273.40	273.40	0.00	0.00
P-F1-10	317.00	12	130.0	0.17	59.7	285.10	285.10	0.00	0.01
P-F1-15	281.00	12	130.0	0.14	50.9	285.10	285.09	0.00	0.01
P-F2-1	564.00	8	130.0	0.35	54.6	285.15	285.10	0.05	0.08
P-F2-10	983.00	12	130.0	0.05	16.0	285.09	285.09	0.00	0.00
P-F2-11	262.00	8	130.0	0.65	-102.4	285.32	285.39	0.07	0.27
P-F2-16	181.00	8	130.0	0.21	32.4	285.39	285.38	0.01	0.03
P-F2-20	027.00	12	130.0	0.09	31.4	285.10	285.09	0.01	0.00
P-F2-21	440.00	8	130.0	0.06	10.1	285.38	285.38	0.00	0.00
P-F2-26	251.00	8	130.0	0.09	13.7	285.38	285.38	0.00	0.01
P-F2-31	367.00	8	130.0	0.05	7.2	285.38	285.38	0.00	0.00
P-F2-36	248.00	12	130.0	0.41	-143.4	285.77	285.79	0.02	0.07
P-F2-41	158.00	8	130.0	0.10	15.1	285.79	285.79	0.00	0.01
P-F2-46	172.00	8	130.0	0.05	7.9	285.79	285.79	0.00	0.00
P-F2-5	963.00	8	150.0	0.06	8.8	285.10	285.09	0.00	0.00
P-F2-51	319.00	8	130.0	0.05	7.2	285.79	285.79	0.00	0.00
P-F2-56	266.00	12	130.0	0.45	-159.2	285.79	285.81	0.02	0.08
P-F2-6	299.00	8	130.0	0.97	-152.1	285.15	285.32	0.17	0.56
P-F2-61	313.00	8	130.0	0.06	8.6	285.81	285.81	0.00	0.00
P-F2-66	767.00	8	130.0	0.92	-143.4	285.39	285.77	0.38	0.50
P-F3-1	374.00	8	130.0	0.06	-10.1	285.43	285.43	0.00	0.00
P-F3-10	428.00	8	130.0	0.06	8.6	285.64	285.64	0.00	0.00
P-F3-100	267.00	12	130.0	0.53	-187.9	285.87	285.90	0.03	0.11
P-F3-105	269.00	12	130.0	0.55	-195.1	285.90	285.93	0.03	0.12
P-F3-11	219.00	8	130.0	0.04	5.7	285.43	285.43	0.00	0.00

Scenario: Existing - Max Day
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-F3-110	346.00	8	130.0	0.06	8.6	285.10	285.10	0.00	0.00
P-F3-115	645.00	8	130.0	0.39	-60.5	285.32	285.38	0.07	0.10
P-F3-12	252.00	12	130.0	1.47	-519.2	285.24	285.43	0.19	0.75
P-F3-120	248.00	8	130.0	0.01	-1.4	285.38	285.38	0.00	0.00
P-F3-125	261.00	12	130.0	0.48	-170.0	285.81	285.84	0.02	0.10
P-F3-15	257.00	8	130.0	0.03	5.0	285.64	285.64	0.00	0.00
P-F3-20	167.00	8	130.0	0.03	-4.3	285.97	285.97	0.00	0.00
P-F3-25	428.00	8	130.0	0.06	8.6	285.52	285.52	0.00	0.00
P-F3-30	493.00	8	130.0	0.06	10.1	285.44	285.44	0.00	0.00
P-F3-35	246.00	8	130.0	0.11	17.2	285.38	285.38	0.00	0.01
P-F3-40	308.00	8	130.0	0.04	5.7	285.38	285.38	0.00	0.00
P-F3-45	289.00	8	130.0	0.05	7.9	285.84	285.84	0.00	0.00
P-F3-5	259.00	12	130.0	1.54	-542.2	285.43	285.64	0.21	0.82
P-F3-50	241.00	8	130.0	0.04	-5.7	285.86	285.87	0.00	0.00
P-F3-55	212.00	8	130.0	0.03	5.0	285.90	285.90	0.00	0.00
P-F3-60	220.00	12	130.0	0.03	-9.3	285.93	285.93	0.00	0.00
P-F3-65	324.00	12	130.0	0.58	-205.2	285.93	285.97	0.04	0.13
P-F3-70	247.00	8	130.0	0.59	-92.8	285.38	285.44	0.06	0.22
P-F3-75	249.00	8	130.0	0.74	-115.8	285.44	285.52	0.08	0.34
P-F3-80	258.00	8	130.0	0.86	-134.5	285.52	285.64	0.11	0.44
P-F3-85	259.00	12	130.0	1.97	-695.4	285.64	285.97	0.33	1.29
P-F3-95	266.00	12	130.0	0.51	-180.0	285.84	285.87	0.03	0.11
P-F4-1	001.00	12	130.0	0.14	50.5	273.54	273.53	0.01	0.01
P-F4-5	398.00	6	130.0	0.23	20.2	273.53	273.40	0.13	0.05

SCENARIO: EXISTING - MAX DAY
STEADY STATE ANALYSIS
VALVE (PUMPS) REPORT

Pump	Model Label	Elevation (ft)	Diameter (in)	Control Status	Discharge (gpm)	From HGL (ft)	To HGL (ft)
Tank 1 - Pump 1	FCV-1	138	8	Throttling	0	285	280.39
Tank 1 - Pump 2	FCV-2	138	8	Throttling	0	285	280.39
Tank 1 - Pump 3	FCV-3	138	8	Throttling	0	285	280.39
Tank 2 - Pump 1	FCV-4	127	8	Throttling	0	285	285
Tank 2 - Pump 2	FCV-5	127	8	Throttling	0	285	285
Tank 2 - Pump 3	FCV-6	127	8	Throttling	0	285	285

Scenario: Existing - Peak Hour
Steady State Analysis
Junction Report

Label	Elevation (ft)	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-A1-1	130	Demand	21.4	21.4	283.20	66.28
J-A1-10	130	Demand	24.9	24.9	282.51	65.98
J-A1-15	130	Demand	0.0	0.0	282.49	65.97
J-A1-5	130	Demand	0.0	0.0	282.86	66.13
J-A2-1	130	Demand	30.9	30.9	280.06	64.92
J-A2-20	90	Demand	32.1	32.1	279.39	81.94
J-A2-35	90	Demand	27.3	27.3	279.37	81.93
J-A2-45	90	Demand	24.9	24.9	279.37	81.93
J-A2-5	90	Demand	27.3	27.3	279.46	81.97
J-A2-55	90	Demand	30.9	30.9	279.39	81.94
J-A3-1	100	Demand	21.4	21.4	279.60	77.71
J-A3-10	95	Demand	0.0	0.0	279.42	79.79
J-A3-15	90	Demand	52.3	52.2	279.38	81.94
J-A3-20	90	Demand	0.0	0.0	279.38	81.94
J-A3-25	90	Demand	49.9	49.9	279.38	81.94
J-A3-30	100	Demand	32.8	32.8	279.61	77.71
J-A3-40	100	Demand	0.0	0.0	279.71	77.75
J-A3-45	140	Demand	9.2	9.2	280.18	60.65
J-A3-5	95	Demand	91.4	91.4	279.39	79.78
J-A3-50	140	Demand	10.9	10.9	281.28	61.13
J-A3-55	140	Demand	152.0	152.0	280.99	61.00
J-A3-60	100	Demand	0.0	0.0	279.38	77.61
J-A3-65	95	Demand	0.0	0.0	279.38	79.77
J-A3-70	100	Demand	0.0	0.0	279.38	77.61
J-A4-1	140	Demand	49.9	49.9	280.51	60.79
J-A4-10	144	Demand	0.0	0.0	280.36	58.99
J-A4-15	145	Demand	98.7	98.7	277.92	57.51
J-A4-20	145	Demand	15.7	15.7	277.96	57.52
J-A4-5	144	Demand	99.7	99.7	280.38	59.01
J-B1-10	128	Demand	23.8	23.8	280.69	66.06
J-B1-100	130	Demand	32.1	32.1	281.93	65.73
J-B1-105	130	Demand	13.1	13.1	282.00	65.76
J-B1-110	130	Demand	20.2	20.2	283.55	66.43
J-B1-115	130	Demand	59.4	59.4	284.13	66.68
J-B1-120	130	Demand	0.0	0.0	286.54	67.73
J-B1-125	130	Demand	0.0	0.0	280.98	65.32
J-B1-130	128	Demand	14.3	14.3	280.73	66.08
J-B1-15	128	Demand	9.5	9.5	280.73	66.08
J-B1-20	128	Demand	0.0	0.0	280.75	66.09
J-B1-25	128	Demand	20.2	20.2	280.70	66.07
J-B1-30	128	Demand	15.4	15.4	280.70	66.06
J-B1-35	135	Demand	48.4	48.5	280.83	63.09
J-B1-45	128	Demand	0.0	0.0	280.83	66.12
J-B1-50	130	Demand	17.8	17.8	280.93	65.30
J-B1-55	130	Demand	0.0	0.0	280.93	65.30
J-B1-60	130	Demand	16.6	16.6	280.93	65.30
J-B1-65	130	Demand	17.8	17.8	281.12	65.38
J-B1-70	130	Demand	20.2	20.2	281.17	65.40
J-B1-75	130	Demand	16.6	16.6	281.20	65.42
J-B1-80	130	Demand	14.3	14.3	281.33	65.48
J-B1-85	130	Demand	42.7	42.7	281.71	65.64
J-B1-90	130	Demand	0.0	0.0	281.75	65.65

Scenario: Existing - Peak Hour
Steady State Analysis
Junction Report

Label	Elevation (ft)	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-B1-95	130	Demand	20.2	20.2	281.75	65.65
J-B2-1	130	Demand	30.9	30.9	280.01	64.90
J-B2-10	130	Demand	16.6	16.6	280.12	64.95
J-B2-15	130	Demand	23.8	23.8	280.35	65.05
J-B2-20	130	Demand	21.4	21.4	280.05	64.92
J-B2-25	130	Demand	55.8	55.8	280.11	64.94
J-B2-30	135	Demand	7.1	7.1	280.01	62.74
J-B2-35	130	Demand	24.9	24.9	280.00	64.90
J-B2-45	100	Demand	0.0	0.0	279.62	77.71
J-B2-5	130	Demand	10.7	10.7	280.05	64.92
J-B2-50	100	Demand	58.2	58.2	279.60	77.71
J-B2-55	135	Demand	49.9	49.9	279.95	62.71
J-B2-60	130	Demand	114.0	114.0	279.95	64.87
J-B2-65	135	Demand	45.1	45.1	279.99	62.73
J-B2-70	135	Demand	48.4	48.5	280.03	62.75
J-B2-75	130	Demand	0.0	0.0	280.27	65.01
J-B2-80	135	Demand	32.1	32.1	279.99	62.73
J-B3-1	140	Demand	0.0	0.0	280.10	60.61
J-B3-10	140	Demand	40.9	40.9	279.95	60.55
J-B3-12	140	Demand	0.0	0.0	280.02	60.58
J-B3-15	140	Demand	0.0	0.0	280.02	60.58
J-B3-25	130	Demand	80.1	80.1	280.02	64.91
J-B3-3	140	Demand	48.4	48.5	280.08	60.60
J-B3-30	130	Demand	63.3	63.3	280.08	64.93
J-B3-35	140	Demand	32.1	32.1	280.38	60.73
J-B3-40	135	Demand	0.0	0.0	281.54	63.40
J-B3-45	135	Demand	70.1	70.1	281.55	63.40
J-B3-5	140	Demand	0.0	0.0	280.00	60.57
J-B3-50	135	Demand	0.0	0.0	282.08	63.64
J-B4-10	140	Demand	49.9	49.9	278.56	59.95
J-B4-15	135	Demand	115.2	115.2	280.33	62.88
J-B4-20	138	Demand	16.6	16.6	267.82	56.16
J-B4-25	140	Demand	29.7	29.7	267.13	55.00
J-B4-30	140	Demand	0.0	0.0	273.63	57.82
J-B4-35	140	Demand	7.1	7.1	273.12	57.60
J-B4-40	140	Demand	22.6	22.6	272.86	57.48
J-B4-45	140	Demand	101.5	101.5	272.83	57.47
J-B4-5	140	Demand	108.1	108.1	278.09	59.74
J-B4-50	140	Demand	57.0	57.0	272.31	57.25
J-B4-55	140	Demand	66.0	66.0	272.33	57.25
J-B5-1	145	Demand	66.0	66.0	272.53	55.18
J-B5-10	145	Demand	0.0	0.0	266.70	52.65
J-B5-15	145	Demand	29.7	29.7	266.70	52.65
J-B5-30	140	Demand	19.0	19.0	277.03	59.29
J-B5-5	148	Demand	68.6	68.6	272.48	53.86
J-B6-1	150	Demand	81.8	81.8	272.11	52.83
J-C1-1	128	Demand	19.0	19.0	280.69	66.06
J-C1-10	128	Demand	15.4	15.4	280.71	66.07
J-C1-100	128	Demand	28.5	28.5	280.84	66.13
J-C1-105	128	Demand	64.3	64.3	282.54	66.86
J-C1-110	128	Demand	19.0	19.0	281.99	66.62
J-C1-115	128	Demand	23.8	23.8	281.68	66.49

Scenario: Existing - Peak Hour
Steady State Analysis
Junction Report

Label	Elevation (ft)	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-C1-120	128	Demand	0.0	0.0	281.17	66.27
J-C1-125	128	Demand	22.6	22.6	283.40	67.23
J-C1-130	128	Demand	19.0	19.0	286.31	68.49
J-C1-20	128	Demand	5.9	5.9	280.70	66.06
J-C1-25	128	Demand	9.5	9.5	280.70	66.06
J-C1-30	128	Demand	55.8	55.8	280.70	66.07
J-C1-35	128	Demand	19.0	19.0	280.70	66.07
J-C1-40	128	Demand	17.8	17.8	280.69	66.06
J-C1-45	128	Demand	42.7	42.7	280.72	66.08
J-C1-5	128	Demand	15.4	15.4	280.69	66.06
J-C1-50	128	Demand	20.2	20.2	280.90	66.15
J-C1-55	128	Demand	17.8	17.8	280.88	66.15
J-C1-60	128	Demand	15.4	15.4	281.00	66.20
J-C1-70	128	Demand	8.3	8.3	281.06	66.22
J-C1-75	128	Demand	0.0	0.0	280.95	66.17
J-C1-80	128	Demand	0.0	0.0	280.86	66.14
J-C1-85	128	Demand	29.7	29.7	280.81	66.11
J-C1-90	135	Demand	40.4	40.4	280.70	63.04
J-C1-95	128	Demand	41.6	41.6	281.00	66.19
J-C2-1	135	Demand	38.0	38.0	280.45	62.93
J-C2-10	130	Demand	22.6	22.6	280.27	65.01
J-C2-100	130	Demand	17.8	17.8	280.19	64.98
J-C2-105	130	Demand	13.1	13.1	280.36	65.05
J-C2-110	130	Demand	20.2	20.2	280.33	65.04
J-C2-115	130	Demand	0.0	0.0	280.36	65.05
J-C2-120	135	Demand	24.9	24.9	280.42	62.92
J-C2-125	128	Demand	9.5	9.5	281.42	66.38
J-C2-130	128	Demand	0.0	0.0	280.87	66.14
J-C2-135	128	Demand	9.5	9.5	280.55	66.00
J-C2-140	128	Demand	13.1	13.1	280.85	66.13
J-C2-145	128	Demand	24.9	24.9	280.84	66.13
J-C2-15	130	Demand	8.3	8.3	280.20	64.99
J-C2-150	135	Demand	15.4	15.4	280.04	62.75
J-C2-155	135	Demand	33.2	33.2	280.04	62.75
J-C2-20	130	Demand	19.0	19.0	280.20	64.98
J-C2-25	130	Demand	8.3	8.3	280.17	64.97
J-C2-30	130	Demand	17.8	17.8	280.17	64.97
J-C2-35	130	Demand	5.9	5.9	280.15	64.96
J-C2-40	130	Demand	4.7	4.7	280.27	65.02
J-C2-45	135	Demand	24.9	24.9	280.05	62.76
J-C2-5	135	Demand	19.0	19.0	280.31	62.87
J-C2-50	130	Demand	33.2	33.2	279.61	64.73
J-C2-55	130	Demand	52.3	52.2	279.61	64.73
J-C2-60	128	Demand	17.8	17.8	279.47	65.54
J-C2-65	130	Demand	24.9	24.9	279.76	64.79
J-C2-70	130	Demand	14.3	14.3	279.86	64.84
J-C2-75	130	Demand	33.2	33.2	280.06	64.92
J-C2-80	130	Demand	19.0	19.0	280.01	64.90
J-C2-85	128	Demand	23.8	23.8	280.02	65.77
J-C2-90	128	Demand	38.0	38.0	280.02	65.77
J-C2-95	130	Demand	14.3	14.3	280.07	64.93
J-C3-1	135	Demand	161.5	161.5	279.33	62.45

Scenario: Existing - Peak Hour
Steady State Analysis
Junction Report

Label	Elevation (ft)	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-C3-10	130	Demand	0.0	0.0	279.37	64.62
J-C3-15	128	Demand	33.2	33.2	279.36	65.49
J-C3-20	130	Demand	8.3	8.3	279.29	64.59
J-C3-25	130	Demand	17.8	17.8	279.22	64.56
J-C3-30	130	Demand	13.1	13.1	279.29	64.59
J-C3-35	135	Demand	28.5	28.5	279.25	62.41
J-C3-40	135	Demand	19.0	19.0	279.25	62.41
J-C3-45	135	Demand	15.4	15.4	279.27	62.42
J-C3-5	130	Demand	46.3	46.3	279.33	64.61
J-C3-55	135	Demand	112.9	112.9	279.18	62.38
J-C3-60	135	Demand	48.7	48.7	279.19	62.38
J-C4-1	138	Demand	77.2	77.2	266.58	55.63
J-C4-10	140	Demand	49.9	49.9	264.25	53.76
J-C4-15	140	Demand	79.6	79.6	263.49	53.43
J-C4-20	140	Demand	14.7	14.7	262.61	53.05
J-C4-25	140	Demand	49.9	49.9	262.61	53.05
J-C4-30	140	Demand	57.0	57.0	263.84	53.58
J-C4-35	138	Demand	61.7	61.7	264.87	54.89
J-C4-40	140	Demand	38.0	38.0	264.02	53.66
J-C4-45	140	Demand	0.0	0.0	264.16	53.72
J-C4-46	140	Demand	0.0	0.0	264.31	53.78
J-C4-5	140	Demand	41.6	41.6	265.81	54.43
J-C4-50	140	Demand	45.1	45.1	264.28	53.77
J-C4-60	140	Demand	35.6	35.6	262.92	53.18
J-C4-65	140	Demand	71.5	71.5	263.32	53.36
J-C5-1	140	Demand	83.1	83.1	263.48	53.43
J-C5-10	145	Demand	19.1	19.1	261.64	50.46
J-C5-15	140	Demand	0.0	0.0	261.60	52.61
J-C5-20	140	Demand	0.0	0.0	260.98	52.34
J-C5-25	140	Demand	47.5	47.5	260.46	52.12
J-C5-30	140	Demand	55.8	55.8	260.06	51.94
J-C5-35	140	Demand	15.4	15.4	262.11	52.83
J-C5-5	145	Demand	19.1	19.1	261.74	50.51
J-D1-1	125	Demand	0.0	0.0	281.03	67.51
J-D1-10	125	Demand	8.3	8.3	281.00	67.49
J-D1-15	125	Demand	14.3	14.3	280.99	67.49
J-D1-20	125	Demand	22.6	22.6	280.97	67.48
J-D1-25	125	Demand	9.5	9.5	281.20	67.58
J-D1-30	123	Demand	9.5	9.5	281.16	68.43
J-D1-5	125	Demand	106.9	106.9	281.00	67.49
J-D2-1	128	Demand	14.3	14.3	280.85	66.13
J-D2-10	128	Demand	17.8	17.8	280.99	66.19
J-D2-100	128	Demand	16.6	16.6	281.08	66.23
J-D2-105	128	Demand	9.5	9.5	281.08	66.23
J-D2-110	128	Demand	29.7	29.7	281.06	66.22
J-D2-115	125	Demand	19.0	19.0	281.04	67.51
J-D2-120	128	Demand	9.5	9.5	281.04	66.21
J-D2-125	125	Demand	22.6	22.6	281.04	67.51
J-D2-130	125	Demand	22.6	22.6	281.05	67.51
J-D2-135	125	Demand	11.9	11.9	281.04	67.51
J-D2-140	125	Demand	13.1	13.1	281.04	67.51
J-D2-145	125	Demand	21.4	21.4	281.09	67.53

Scenario: Existing - Peak Hour
Steady State Analysis
Junction Report

Label	Elevation (ft)	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-D2-15	128	Demand	16.6	16.6	280.99	66.19
J-D2-150	125	Demand	55.8	55.8	281.17	67.57
J-D2-155	128	Demand	22.6	22.6	281.14	66.26
J-D2-160	128	Demand	38.0	38.0	281.40	66.37
J-D2-165	125	Demand	16.6	16.6	281.23	67.59
J-D2-170	125	Demand	11.9	11.9	281.22	67.59
J-D2-175	125	Demand	14.3	14.3	281.22	67.59
J-D2-180	125	Demand	9.5	9.5	281.21	67.59
J-D2-185	125	Demand	14.3	14.3	281.22	67.59
J-D2-190	125	Demand	38.0	38.0	281.33	67.64
J-D2-195	125	Demand	17.8	17.8	281.68	67.79
J-D2-20	128	Demand	8.3	8.3	280.97	66.18
J-D2-200	125	Demand	14.3	14.3	281.41	67.67
J-D2-205	125	Demand	11.9	11.9	281.26	67.61
J-D2-210	123	Demand	14.3	14.3	281.18	68.44
J-D2-215	123	Demand	16.6	16.6	281.21	68.45
J-D2-220	123	Demand	16.6	16.6	281.28	68.48
J-D2-225	123	Demand	9.5	9.5	281.23	68.46
J-D2-230	123	Demand	16.6	16.6	281.20	68.45
J-D2-25	128	Demand	22.6	22.6	280.97	66.18
J-D2-30	128	Demand	27.3	27.3	280.74	66.08
J-D2-35	128	Demand	45.8	45.8	280.05	65.78
J-D2-40	128	Demand	13.1	13.1	279.80	65.68
J-D2-45	128	Demand	34.4	34.4	279.63	65.60
J-D2-5	128	Demand	47.5	47.5	280.86	66.14
J-D2-50	128	Demand	22.6	22.6	279.49	65.54
J-D2-55	128	Demand	34.4	34.4	279.31	65.46
J-D2-60	130	Demand	38.0	38.0	279.24	64.57
J-D2-65	128	Demand	9.5	9.5	281.30	66.32
J-D2-70	128	Demand	17.8	17.8	281.53	66.43
J-D2-75	128	Demand	19.0	19.0	283.70	67.36
J-D2-80	128	Demand	9.5	9.5	283.70	67.36
J-D2-85	128	Demand	45.1	45.1	281.59	66.45
J-D2-90	128	Demand	0.0	0.0	284.60	67.76
J-D2-95	128	Demand	19.0	19.0	281.14	66.25
J-D3-1	130	Demand	14.3	14.3	279.25	64.57
J-D3-10	130	Demand	9.5	9.5	279.22	64.56
J-D3-100	135	Demand	8.3	8.3	279.09	62.34
J-D3-105	135	Demand	5.9	5.9	279.10	62.34
J-D3-110	135	Demand	10.7	10.7	279.11	62.35
J-D3-115	135	Demand	28.5	28.5	279.22	62.40
J-D3-120	135	Demand	5.9	5.9	279.10	62.34
J-D3-125	135	Demand	36.8	36.8	279.09	62.34
J-D3-130	135	Demand	9.5	9.5	279.10	62.34
J-D3-135	135	Demand	8.3	8.3	279.09	62.34
J-D3-140	135	Demand	15.4	15.4	279.11	62.35
J-D3-145	135	Demand	14.3	14.3	279.09	62.34
J-D3-15	130	Demand	33.2	33.2	279.23	64.56
J-D3-150	135	Demand	0.0	0.0	279.29	62.43
J-D3-20	130	Demand	0.0	0.0	279.22	64.56
J-D3-25	130	Demand	22.6	22.6	279.22	64.56
J-D3-30	130	Demand	5.9	5.9	279.22	64.56

Scenario: Existing - Peak Hour
Steady State Analysis
Junction Report

Label	Elevation (ft)	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-D3-35	135	Demand	54.5	54.5	279.18	62.38
J-D3-40	135	Demand	64.2	64.2	279.14	62.36
J-D3-45	135	Demand	0.0	0.0	279.21	62.39
J-D3-5	130	Demand	17.8	17.8	279.23	64.56
J-D3-50	135	Demand	15.4	15.4	279.22	62.40
J-D3-55	130	Demand	15.4	15.4	279.22	64.56
J-D3-60	130	Demand	16.6	16.6	279.22	64.56
J-D3-65	130	Demand	19.0	19.0	279.23	64.57
J-D3-70	130	Demand	39.2	39.2	279.26	64.58
J-D3-75	135	Demand	10.7	10.7	279.27	62.42
J-D3-80	128	Demand	8.3	8.3	280.95	66.18
J-D3-81	128	Demand	16.6	16.6	280.92	66.16
J-D3-82	128	Demand	13.1	13.1	280.91	66.16
J-D3-85	128	Demand	5.9	5.9	281.03	66.21
J-D3-90	125	Demand	5.9	5.9	281.15	67.56
J-D3-91	125	Demand	17.8	17.8	281.14	67.55
J-D3-95	135	Demand	22.6	22.6	279.09	62.34
J-D4-1	135	Demand	29.7	29.7	261.51	54.73
J-D4-10	135	Demand	45.1	45.1	261.32	54.65
J-D4-15	135	Demand	68.9	68.9	260.87	54.46
J-D4-20	135	Demand	71.2	71.2	260.02	54.09
J-D4-25	135	Demand	29.7	29.7	259.75	53.97
J-D4-30	130	Demand	42.7	42.7	259.62	56.08
J-D4-35	130	Demand	26.1	26.1	259.55	56.05
J-D4-40	140	Demand	39.2	39.2	259.55	51.72
J-D4-45	140	Demand	0.0	0.0	259.60	51.74
J-D4-5	140	Demand	23.8	23.8	261.97	52.77
J-D4-50	140	Demand	34.4	34.4	259.61	51.75
J-D4-55	140	Demand	119.1	119.1	259.65	51.77
J-D4-60	140	Demand	79.6	79.6	260.00	51.92
J-D4-65	140	Demand	19.0	19.0	261.94	52.76
J-D4-70	135	Demand	15.4	15.4	279.09	62.34
J-D4-75	135	Demand	17.8	17.8	279.09	62.34
J-D4-80	135	Demand	19.0	19.0	261.18	54.59
J-D4-85	140	Demand	55.8	55.8	260.72	52.23
J-D5-1	140	Demand	0.0	0.0	259.99	51.92
J-D5-10	140	Demand	49.9	49.9	259.95	51.90
J-D5-15	140	Demand	42.7	42.7	259.95	51.90
J-D5-20	140	Demand	26.1	26.1	259.70	51.79
J-D5-25	140	Demand	27.3	27.3	259.68	51.78
J-D5-30	140	Demand	23.8	23.8	259.68	51.78
J-D5-35	140	Demand	26.1	26.1	259.71	51.79
J-D5-40	140	Demand	4.7	4.7	259.59	51.74
J-D5-45	140	Demand	22.6	22.6	259.59	51.74
J-D5-5	140	Demand	60.6	60.6	259.95	51.90
J-D5-50	140	Demand	23.8	23.8	259.54	51.72
J-D5-55	140	Demand	34.4	34.4	259.54	51.72
J-D5-85	140	Demand	26.1	26.1	259.53	51.71
J-E1-1	123	Demand	11.9	11.9	281.11	68.41
J-E1-10	123	Demand	0.0	0.0	281.01	68.36
J-E1-15	123	Demand	14.3	14.3	280.92	68.32
J-E1-20	123	Demand	4.7	4.7	280.87	68.30

Scenario: Existing - Peak Hour
Steady State Analysis
Junction Report

Label	Elevation (ft)	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-E1-25	120	Demand	16.6	16.6	280.87	69.60
J-E1-30	120	Demand	16.6	16.6	280.87	69.60
J-E1-35	120	Demand	17.8	17.8	280.87	69.60
J-E1-40	120	Demand	5.9	5.9	280.87	69.60
J-E1-45	120	Demand	16.6	16.6	280.88	69.61
J-E1-5	123	Demand	9.5	9.5	281.08	68.39
J-E1-50	120	Demand	0.0	0.0	281.00	69.66
J-E2-1	123	Demand	16.6	16.6	281.11	68.41
J-E2-10	123	Demand	9.5	9.5	281.22	68.45
J-E2-100	123	Demand	17.8	17.8	281.04	68.38
J-E2-105	123	Demand	0.0	0.0	281.02	68.37
J-E2-110	123	Demand	0.0	0.0	281.04	68.38
J-E2-115	123	Demand	9.5	9.5	280.85	68.29
J-E2-120	123	Demand	13.1	13.1	280.85	68.29
J-E2-125	120	Demand	14.3	14.3	280.85	69.59
J-E2-130	120	Demand	13.1	13.1	280.84	69.59
J-E2-135	123	Demand	13.1	13.1	280.85	68.29
J-E2-140	123	Demand	9.5	9.5	280.84	68.29
J-E2-145	123	Demand	9.5	9.5	280.85	68.29
J-E2-15	123	Demand	29.7	29.7	281.15	68.42
J-E2-150	123	Demand	13.1	13.1	280.85	68.29
J-E2-155	120	Demand	13.1	13.1	280.85	69.59
J-E2-160	120	Demand	9.5	9.5	280.86	69.60
J-E2-165	120	Demand	9.5	9.5	280.86	69.60
J-E2-170	123	Demand	13.1	13.1	280.87	68.30
J-E2-175	123	Demand	13.1	13.1	280.91	68.32
J-E2-180	123	Demand	14.3	14.3	280.97	68.35
J-E2-185	123	Demand	4.7	4.7	280.97	68.35
J-E2-190	120	Demand	5.9	5.9	280.97	69.64
J-E2-195	123	Demand	9.5	9.5	280.99	68.35
J-E2-20	125	Demand	30.9	30.9	281.12	67.54
J-E2-200	123	Demand	13.1	13.1	280.97	68.35
J-E2-205	123	Demand	5.9	5.9	280.97	68.35
J-E2-210	123	Demand	17.8	17.8	280.97	68.35
J-E2-215	128	Demand	22.6	22.6	281.04	66.21
J-E2-220	128	Demand	19.0	19.0	281.02	66.20
J-E2-225	128	Demand	11.9	11.9	281.02	66.21
J-E2-230	128	Demand	9.5	9.5	281.03	66.21
J-E2-235	128	Demand	16.6	16.6	281.06	66.22
J-E2-240	125	Demand	13.1	13.1	281.06	67.52
J-E2-245	125	Demand	16.6	16.6	281.03	67.51
J-E2-25	123	Demand	17.8	17.8	281.11	68.41
J-E2-250	125	Demand	17.8	17.8	281.07	67.53
J-E2-255	123	Demand	13.1	13.1	281.02	68.37
J-E2-260	123	Demand	16.6	16.6	281.00	68.36
J-E2-265	123	Demand	21.4	21.4	281.01	68.36
J-E2-270	123	Demand	21.4	21.4	281.00	68.36
J-E2-275	123	Demand	16.6	16.6	281.00	68.36
J-E2-280	123	Demand	16.6	16.6	281.00	68.36
J-E2-285	123	Demand	17.8	17.8	281.00	68.36
J-E2-290	125	Demand	29.7	29.7	281.06	67.52
J-E2-30	123	Demand	35.6	35.6	281.11	68.41

Scenario: Existing - Peak Hour
Steady State Analysis
Junction Report

Label	Elevation (ft)	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-E2-35	123	Demand	32.1	32.1	281.12	68.41
J-E2-40	123	Demand	16.6	16.6	281.08	68.39
J-E2-45	123	Demand	13.1	13.1	281.06	68.39
J-E2-5	123	Demand	11.9	11.9	281.23	68.46
J-E2-50	123	Demand	9.5	9.5	281.06	68.39
J-E2-55	123	Demand	11.9	11.9	281.05	68.38
J-E2-60	123	Demand	13.1	13.1	281.05	68.38
J-E2-65	123	Demand	16.6	16.6	281.05	68.38
J-E2-70	123	Demand	14.3	14.3	281.05	68.38
J-E2-75	123	Demand	13.1	13.1	281.05	68.38
J-E2-80	123	Demand	19.0	19.0	281.05	68.38
J-E2-85	123	Demand	14.3	14.3	281.04	68.38
J-E2-90	123	Demand	13.1	13.1	281.06	68.38
J-E2-95	123	Demand	16.6	16.6	281.05	68.38
J-E3-1	125	Demand	17.8	17.8	281.03	67.51
J-E3-10	128	Demand	21.4	21.4	280.91	66.16
J-E3-100	125	Demand	13.1	13.1	281.04	67.51
J-E3-105	135	Demand	11.9	11.9	279.12	62.36
J-E3-110	130	Demand	9.5	9.5	279.44	64.65
J-E3-115	130	Demand	14.3	14.3	279.38	64.63
J-E3-120	130	Demand	24.9	24.9	279.25	64.57
J-E3-125	130	Demand	21.4	21.4	279.16	64.54
J-E3-130	135	Demand	24.9	24.9	279.17	62.37
J-E3-135	135	Demand	10.7	10.7	279.12	62.35
J-E3-140	135	Demand	10.7	10.7	279.13	62.36
J-E3-145	135	Demand	10.7	10.7	279.12	62.35
J-E3-15	125	Demand	0.0	0.0	280.90	67.45
J-E3-150	130	Demand	9.5	9.5	279.14	64.52
J-E3-155	135	Demand	1.2	1.2	279.13	62.36
J-E3-16	125	Demand	4.7	4.7	280.90	67.45
J-E3-160	135	Demand	1.2	1.2	279.13	62.36
J-E3-165	135	Demand	10.7	10.7	279.12	62.35
J-E3-17	125	Demand	11.9	11.9	280.90	67.45
J-E3-175	130	Demand	13.1	13.1	279.16	64.53
J-E3-20	125	Demand	0.0	0.0	280.95	67.47
J-E3-25	125	Demand	11.9	11.9	280.95	67.47
J-E3-30	125	Demand	14.3	14.3	280.95	67.47
J-E3-35	125	Demand	13.1	13.1	280.96	67.48
J-E3-40	125	Demand	9.5	9.5	280.99	67.49
J-E3-41	125	Demand	9.5	9.5	281.02	67.50
J-E3-42	125	Demand	14.3	14.3	281.02	67.50
J-E3-45	125	Demand	9.5	9.5	281.03	67.51
J-E3-5	128	Demand	19.0	19.0	280.91	66.16
J-E3-50	125	Demand	11.9	11.9	281.04	67.51
J-E3-55	125	Demand	13.1	13.1	281.04	67.51
J-E3-60	125	Demand	9.5	9.5	281.04	67.51
J-E3-65	125	Demand	9.5	9.5	281.04	67.51
J-E3-70	125	Demand	16.6	16.6	281.06	67.52
J-E3-71	125	Demand	17.8	17.8	281.06	67.52
J-E3-75	125	Demand	9.5	9.5	281.11	67.54
J-E3-80	125	Demand	5.9	5.9	281.18	67.57
J-E3-81	125	Demand	9.5	9.5	281.18	67.57

Scenario: Existing - Peak Hour
Steady State Analysis
Junction Report

Label	Elevation (ft)	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-E3-85	125	Demand	8.3	8.3	280.99	67.49
J-E3-86	125	Demand	8.3	8.3	280.99	67.49
J-E3-90	128	Demand	28.5	28.5	281.39	66.36
J-E3-91	128	Demand	9.5	9.5	281.39	66.36
J-E3-95	125	Demand	27.3	27.3	281.07	67.53
J-E4-1	135	Demand	0.0	0.0	259.53	53.88
J-E4-10	130	Demand	22.6	22.6	259.44	56.00
J-E4-15	130	Demand	0.0	0.0	259.56	56.05
J-E4-20	135	Demand	52.8	52.8	259.46	53.85
J-E4-25	135	Demand	10.7	10.7	259.53	53.88
J-E4-30	130	Demand	15.4	15.4	259.44	56.00
J-E4-35	130	Demand	11.9	11.9	259.44	56.00
J-E4-40	135	Demand	23.8	23.8	259.43	53.84
J-E4-45	135	Demand	5.9	5.9	279.09	62.34
J-E4-5	130	Demand	23.8	23.8	259.47	56.01
J-E4-50	135	Demand	15.4	15.4	279.10	62.34
J-E4-55	135	Demand	9.5	9.5	279.09	62.34
J-E4-60	135	Demand	8.3	8.3	279.09	62.34
J-E4-65	135	Demand	14.3	14.3	279.09	62.34
J-E4-70	135	Demand	1.2	1.2	279.09	62.34
J-E5-1	145	Demand	205.8	205.8	259.14	49.38
J-E5-5	140	Demand	52.8	52.8	259.12	51.54
J-F1-10	118	Demand	0.0	0.0	280.95	70.50
J-F1-15	118	Demand	57.6	57.6	280.95	70.50
J-F1-5	118	Demand	0.0	0.0	280.96	70.51
J-F2-1	125	Demand	14.3	14.3	281.15	67.56
J-F2-10	125	Demand	17.8	17.8	281.44	67.68
J-F2-15	125	Demand	14.3	14.3	281.57	67.74
J-F2-20	125	Demand	14.3	14.3	281.55	67.73
J-F2-25	125	Demand	16.6	16.6	281.55	67.73
J-F2-30	128	Demand	13.1	13.1	281.55	66.43
J-F2-35	128	Demand	11.9	11.9	281.55	66.43
J-F2-40	128	Demand	0.0	0.0	282.33	66.77
J-F2-45	128	Demand	1.2	1.2	282.36	66.78
J-F2-5	125	Demand	27.3	27.3	281.07	67.52
J-F2-50	128	Demand	0.0	0.0	282.36	66.78
J-F2-55	128	Demand	13.1	13.1	282.36	66.78
J-F2-60	128	Demand	11.9	11.9	282.35	66.78
J-F2-65	128	Demand	3.6	3.6	282.40	66.80
J-F2-70	128	Demand	14.3	14.3	282.40	66.80
J-F2-75	120	Demand	0.0	0.0	280.96	69.64
J-F2-80	120	Demand	0.0	0.0	280.95	69.64
J-F2-85	120	Demand	57.6	57.6	280.95	69.63
J-F3-1	125	Demand	14.3	14.3	281.07	67.52
J-F3-10	128	Demand	11.9	11.9	281.72	66.51
J-F3-100	128	Demand	8.3	8.3	282.58	66.88
J-F3-105	128	Demand	15.4	15.4	282.65	66.91
J-F3-11	128	Demand	9.5	9.5	281.72	66.51
J-F3-110	128	Demand	1.2	1.2	282.65	66.91
J-F3-15	130	Demand	16.6	16.6	282.11	65.81
J-F3-20	130	Demand	5.9	5.9	282.10	65.81
J-F3-25	130	Demand	8.3	8.3	282.10	65.81

Scenario: Existing - Peak Hour
Steady State Analysis
Junction Report

Label	Elevation (ft)	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-F3-30	130	Demand	7.1	7.1	282.74	66.08
J-F3-35	130	Demand	0.0	0.0	282.74	66.08
J-F3-40	130	Demand	16.6	16.6	281.85	65.70
J-F3-45	130	Demand	14.3	14.3	281.85	65.70
J-F3-5	128	Demand	16.6	16.6	281.72	66.51
J-F3-50	128	Demand	21.4	21.4	281.67	66.49
J-F3-55	128	Demand	16.6	16.6	281.67	66.48
J-F3-60	128	Demand	24.9	24.9	281.56	66.44
J-F3-65	128	Demand	16.6	16.6	281.55	66.43
J-F3-70	128	Demand	9.5	9.5	281.55	66.43
J-F3-75	128	Demand	3.6	3.6	282.46	66.83
J-F3-80	128	Demand	13.1	13.1	282.45	66.82
J-F3-85	128	Demand	9.5	9.5	282.51	66.85
J-F3-90	128	Demand	3.6	3.6	282.51	66.85
J-F3-95	128	Demand	3.6	3.6	282.58	66.88
J-F4-1	135	Demand	50.1	50.1	259.44	53.84
J-F5-1	135	Demand	52.8	52.8	259.12	53.70
WELL 2	139	Inflow	659.7	-659.7	286.30	63.73
WELL 3	128	Inflow	625.0	-625.0	285.43	68.11
WELL 4	129	Inflow	900.0	-900.0	293.06	70.98
WELL 5	130	Inflow	900.0	-900.0	297.52	72.48
WELL 6	139	Inflow	1,000.0	-1,000.0	280.62	61.27
WELL 7	129	Inflow	1,200.0	-1,200.0	306.99	77.01
WELL 8	125	Inflow	1,200.0	-1,200.0	293.01	72.69
WELL 9	129	Inflow	1,300.0	-1,300.0	283.09	66.67

Scenario: Existing - Peak Hour
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-5	25.00	8	130.0	6.38	1,000.0	285.00	284.54	0.46	18.27
P-10	25.00	8	130.0	6.38	1,000.0	282.54	282.08	0.46	18.27
P-15	25.00	8	130.0	6.38	1,000.0	285.00	284.54	0.46	18.27
P-20	25.00	8	130.0	6.38	1,000.0	282.54	282.08	0.46	18.27
P-25	25.00	8	130.0	0.00	0.0	285.00	285.00	0.00	0.00
P-30	25.00	8	130.0	0.00	0.0	282.08	282.08	0.00	0.00
P-35	50.00	10	130.0	0.00	0.0	282.08	285.00	0.00	0.00
P-40	25.00	8	130.0	4.06	636.3	285.00	284.80	0.20	7.91
P-45	25.00	8	130.0	4.06	636.3	284.80	284.60	0.20	7.91
P-50	25.00	8	130.0	4.06	636.3	285.00	284.80	0.20	7.91
P-55	25.00	8	130.0	4.06	636.3	284.80	284.60	0.20	7.91
P-60	25.00	8	130.0	0.00	0.0	285.00	285.00	0.00	0.00
P-65	25.00	8	130.0	0.00	0.0	284.60	284.60	0.00	0.00
P-70	50.00	10	130.0	0.00	0.0	284.60	285.00	0.00	0.00
P-75	84.00	12	130.0	3.69	1,300.0	283.09	282.74	0.35	4.12
P-A1-1	305.00	8	130.0	1.43	223.6	283.20	282.86	0.35	1.14
P-A1-10	109.00	8	130.0	0.54	85.0	282.51	282.49	0.02	0.19
P-A1-5	304.00	8	130.0	1.43	223.6	282.86	282.51	0.35	1.14
P-A2-10	724.00	6	130.0	0.67	-59.4	280.06	280.35	0.29	0.40
P-A2-15	522.00	6	130.0	0.32	28.5	280.06	280.01	0.05	0.10
P-A2-30	690.00	8	130.0	0.41	64.1	279.46	279.39	0.08	0.11
P-A2-50	543.00	8	130.0	0.20	32.1	279.39	279.37	0.02	0.03
P-A2-55	265.00	8	130.0	0.03	4.7	279.37	279.37	0.00	0.00
P-A2-75	250.00	8	130.0	0.16	-25.6	279.39	279.39	0.01	0.02
P-A2-80	320.00	8	130.0	0.36	-56.5	279.39	279.42	0.03	0.09
P-A3-1	452.00	6	130.0	0.75	65.8	279.60	279.39	0.22	0.48
P-A3-10	247.00	8	130.0	0.48	74.8	279.42	279.38	0.04	0.15
P-A3-100	899.00	10	130.0	1.09	266.7	280.99	280.51	0.48	0.53
P-A3-115	674.00	8	130.0	0.17	26.0	280.97	280.96	0.01	0.02
P-A3-120	399.00	12	130.0	0.13	44.8	280.96	280.95	0.00	0.01
P-A3-125	562.00	12	130.0	0.14	47.9	280.95	280.95	0.01	0.01
P-A3-15	256.00	8	130.0	0.02	2.4	279.38	279.38	0.00	0.00
P-A3-20	237.00	8	130.0	0.02	2.4	279.38	279.38	0.00	0.00
P-A3-25	880.00	6	130.0	0.54	-47.5	279.38	279.61	0.23	0.26
P-A3-30	567.00	8	130.0	0.51	80.2	279.71	279.61	0.10	0.17
P-A3-35	110.00	8	130.0	0.13	-20.2	279.37	279.38	0.01	0.01
P-A3-40	237.00	8	130.0	1.93	-302.6	279.71	280.18	0.47	2.00
P-A3-45	716.00	8	130.0	0.58	-91.4	279.46	279.62	0.16	0.22
P-A3-5	056.00	8	130.0	0.02	-3.8	279.60	279.60	0.00	0.00
P-A3-50	683.00	8	130.0	0.84	-131.3	279.42	279.71	0.29	0.43
P-A3-55	496.00	8	130.0	0.58	-91.0	279.60	279.71	0.11	0.22
P-A3-60	648.00	12	130.0	0.14	48.4	281.03	281.00	0.02	0.01
P-A3-70	471.00	12	130.0	1.47	-517.4	280.18	281.28	1.10	0.75
P-A3-75	297.00	10	130.0	1.52	371.7	281.28	280.99	0.29	0.99
P-A3-80	626.00	12	130.0	0.58	205.6	280.18	280.10	0.08	0.14
P-A3-85	149.00	8	130.0	0.00	0.0	279.38	279.38	0.00	0.00
P-A3-90	759.00	8	130.0	0.00	0.0	279.38	279.38	0.00	0.00
P-A3-95	296.00	6	130.0	0.00	0.0	279.38	279.38	0.00	0.00
P-A4-1	353.00	10	130.0	0.89	216.9	280.51	280.38	0.13	0.36
P-A4-10	897.00	4	130.0	1.46	57.2	280.36	277.96	2.40	2.67
P-A4-15	131.00	8	130.0	0.63	-98.7	277.92	277.96	0.03	0.25

Scenario: Existing - Peak Hour
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-A4-5	78.00	6	130.0	0.65	57.2	280.38	280.36	0.03	0.37
P-B1-10	810.00	12	130.0	0.11	38.4	280.73	280.73	0.00	0.01
P-B1-100	372.00	8	130.0	1.69	-265.1	283.55	284.13	0.58	1.56
P-B1-105	476.00	10	130.0	3.68	-900.0	284.13	286.54	2.41	5.07
P-B1-110	090.00	10	130.0	2.35	575.5	284.13	281.71	2.41	2.21
P-B1-115	290.00	10	130.0	1.30	318.5	281.33	281.12	0.21	0.74
P-B1-120	140.00	12	130.0	0.99	347.8	280.98	280.93	0.05	0.36
P-B1-125	254.00	8	130.0	1.56	-245.0	283.20	283.55	0.34	1.35
P-B1-130	385.00	6	130.0	1.29	113.7	282.51	282.00	0.51	1.32
P-B1-135	723.00	6	130.0	0.96	85.0	282.49	281.93	0.56	0.77
P-B1-140	407.00	6	130.0	0.00	0.4	280.69	280.69	0.00	0.00
P-B1-145	289.00	8	130.0	0.33	52.3	280.73	280.71	0.02	0.08
P-B1-15	455.00	6	130.0	0.27	24.1	280.73	280.69	0.03	0.07
P-B1-150	344.00	12	130.0	0.89	-313.3	280.83	280.93	0.10	0.30
P-B1-155	978.00	8	130.0	1.59	249.4	281.71	280.35	1.36	1.40
P-B1-20	164.00	6	130.0	0.56	49.0	280.75	280.70	0.05	0.28
P-B1-25	546.00	8	130.0	0.10	15.4	280.70	280.70	0.00	0.01
P-B1-30	144.00	12	130.0	0.42	-149.2	280.75	280.83	0.09	0.07
P-B1-40	480.00	12	130.0	0.00	0.0	280.83	280.83	0.00	0.00
P-B1-45	157.00	10	130.0	1.42	347.8	281.12	280.98	0.14	0.87
P-B1-5	435.00	12	130.0	0.28	100.2	280.75	280.73	0.02	0.04
P-B1-50	514.00	8	130.0	0.11	16.6	280.93	280.93	0.00	0.01
P-B1-55	276.00	8	130.0	0.11	16.6	280.93	280.93	0.00	0.01
P-B1-60	718.00	8	130.0	0.30	-47.1	281.12	281.17	0.05	0.06
P-B1-65	294.00	8	130.0	0.43	-67.3	281.17	281.20	0.04	0.12
P-B1-70	716.00	8	130.0	0.54	-83.9	281.20	281.33	0.13	0.19
P-B1-75	312.00	10	130.0	1.70	-416.6	281.33	281.71	0.38	1.22
P-B1-80	238.00	10	130.0	0.54	-133.3	281.71	281.75	0.04	0.15
P-B1-85	339.00	8	130.0	0.13	20.2	281.75	281.75	0.00	0.01
P-B1-90	319.00	8	130.0	0.98	-153.5	281.75	281.93	0.18	0.57
P-B1-95	268.00	8	130.0	0.64	-100.6	281.93	282.00	0.07	0.26
P-B2-1	301.00	8	130.0	0.48	-74.5	280.01	280.05	0.04	0.15
P-B2-10	346.00	8	130.0	1.06	-166.3	280.12	280.35	0.23	0.66
P-B2-100	330.00	10	130.0	0.48	-116.4	279.95	280.10	0.15	0.11
P-B2-105	325.00	6	130.0	0.20	-17.6	279.95	280.00	0.06	0.04
P-B2-110	309.00	6	130.0	0.14	-12.0	279.99	280.02	0.03	0.02
P-B2-15	419.00	8	130.0	0.14	21.4	280.05	280.05	0.01	0.01
P-B2-20	298.00	8	130.0	0.28	43.1	280.12	280.11	0.02	0.05
P-B2-25	668.00	8	130.0	0.48	74.9	280.11	280.01	0.10	0.15
P-B2-30	400.00	8	130.0	0.16	24.9	280.01	280.00	0.01	0.02
P-B2-40	193.00	8	130.0	0.35	54.4	279.62	279.60	0.02	0.08
P-B2-45	156.00	6	130.0	1.65	-145.8	279.62	279.95	0.33	2.10
P-B2-5	234.00	8	130.0	0.68	-106.6	280.05	280.12	0.07	0.29
P-B2-50	730.00	10	130.0	0.03	-7.1	279.95	279.95	0.00	0.00
P-B2-55	588.00	10	130.0	0.38	-92.8	279.95	279.99	0.04	0.08
P-B2-60	268.00	10	130.0	0.51	-126.0	279.99	280.03	0.04	0.13
P-B2-65	361.00	10	130.0	0.60	147.7	280.27	280.03	0.24	0.18
P-B2-70	304.00	10	130.0	0.10	24.1	280.03	280.02	0.01	0.01
P-B2-75	818.00	8	130.0	0.56	-87.6	280.11	280.27	0.16	0.20
P-B2-80	324.00	4	130.0	0.27	10.7	279.99	279.95	0.04	0.12
P-B2-85	356.00	8	130.0	0.27	42.8	280.01	279.99	0.02	0.05

CITY OF RIVERBANK

WATER SUPPLY STUDY AND WATER MASTER PLAN

Volume Two

November 2007

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Appendices:

APPENDIX A

LAND USE AND WATER DEMANDS DATA

Table A-1
City of Riverbank Water Supply Study and Water Master Plan
Land Use within City Limits by Geographic Area

Category	Existing System (ac)	Existing System at Buildout (ac)
RESIDENTIAL		
Medium Density Residential (MDR)		
MDR #1	206.0	206.0
IN #1		3.0
IN #2		14.5
MDR #2	335.3	335.3
IN #3		2.1
IN #4		3.8
IN #6		8.2
IN #7		2.4
IN #8		4.7
IN #9		4.7
MDR #3	359.3	359.3
IN #5		2.4
IN #10		15.5
MDR #4	444.0	444.0
IN #12		1.3
IN #13		3.2
IN #14		5.1
IN #15		
IN #16		1.9
IN #17		2.0
IN #18		1.6
IN #19		4.8
IN #20		5.4
MDR #5		14.3
MDR #6	53.2	53.2
IN #11		2.0
MDR #7		21.7
MDR #8		6.3
MDR #9	28.8	28.8
Total Areas for Medium Density Residential=	*1426.5*	*1557.5*
Low Density Residential (LDR)		
LDR #1	99.2	99.2
LDR #2	21.1	21.1
LDR #3	27.8	27.8
LDR #4	31.1	
LDR #5	46.9	
LDR #6	23.5	
Total Areas for Low Density Residential=	*249.6*	*148.1*
Total Areas for Residential =	*1676.0*	*1705.6*
COMMERCIAL		
Commercial (C)		
C #1	122.4	122.4
C #2	20.2	20.2
C #3	68.8	68.8
C #4		6.3
C #5		1.1

Category	Existing System (ac)	Existing System at Buildout (ac)
Total Areas for Commercial =	*211.5*	*218.8*
INDUSTRIAL		
Industrial (I)		
I #1	208.9	208.9
I #2		35.0
Total Areas for Industrial =	*208.9*	*244.0*
GOVERNMENT		
School (SC)		
SC #1	7.5	7.5
SC #2		10.8
SC #3	16.5	16.5
SC #4	5.3	5.3
SC #5	40.2	40.2
Total Areas for Government =	*69.4*	*80.2*
OTHER		
Park (PK)		
PK #1	5.9	5.9
PK #2	5.4	5.4
PK #3	1.8	1.8
PK #4	0.8	0.8
PK #5	1.6	1.6
PK #6	1.6	1.6
PK #7	12.0	12.0
PK #8	4.6	4.6
PK #9	5.4	5.4
Total Areas for Other =	*39.0*	*39.0*
OPEN SPACE (Future Parks)		
Open Space (OS)		
OS #1	4.9	4.9
OS #2	1.3	1.3
OS #3	3.2	3.2
OS #4	2.1	2.1
OS #5	1.1	1.1
OS #6	17.2	17.2
Total Areas for Open Space =	*29.8*	*29.8*
Total Areas (ac) =	**2235**	**2317**

Table A-2
City of Riverbank Water Supply Study and Water Master Plan
Existing City Water Sytem Water Demands

Category	Gross Area (ac)	Net Area (ac)	Density (Units/ac)	DUs	Demand Factor: Residential (gpd/DU)	Demand Factor: Non-Residential (gpd/acre)	Average Day Demand (gpd)
RESIDENTIAL							
Medium Density Residential (MDR)							
MDR #1	206.0	144.2	5.5	793	600		475,759
IN #1							
IN #2							
MDR #2	335.3	234.7	6.0	1408	600		844,961
IN #3							
IN #4							
IN #6							
IN #7							
IN #8							
IN #9							
MDR #3	359.3	251.5	6.5	1635	600		980,780
IN #5							
IN #10							
MDR #4	444.0	310.8	6.0	1865	600		1,118,773
IN #12							
IN #13							
IN #14							
IN #15							
IN #16							
IN #17							
IN #18							
IN #19							
IN #20							
MDR #5							
MDR #6	53.2	37.3	6.0	224	600		134,174
IN #11							
MDR #7							
MDR #8							
MDR #9	28.8	20.1	5.5	111	600		66,418
Total Areas for Medium Density Res. =	*1426*	*999*			*Medium Density Residential ADD =*		*3,620,865 gpd*
Low Density Residential (LDR)							
LDR #1	99.2	99.2				1000	99,210
LDR #2	21.1	21.1	2.3	48	1000		48,482
LDR #3	27.8	27.8	1.5	42	1000		41,687
LDR #4	31.1	31.1				1000	31,125
LDR #5	46.9	46.9				1000	46,890
LDR #6	23.5	23.5	1.5	35	1000		35,205
Total Areas for Low Density Res.=	*250*	*250*			*Low Density Residential ADD =*		*302,599 gpd*
Total Areas for Residential =	*1676*	*1248*			*Residential ADD =*		*3,923,464 gpd*
COMMERCIAL							
Commercial (C)							
C #1	122.4	85.7				1900	162,853
C #2	20.2	14.1				1900	26,882
C #3	68.8	48.2				1900	91,515
C #4							
C #5							
Total Areas for Commercial =	*211*	*148*			*Commercial ADD =*		*281,250 gpd*

Category	Gross Area (ac)	Net Area (ac)	Density (Units/ac)	DUs	Demand Factor Residential (gpd/DU)	Demand Factor Non-Residential (gpd/acre)	Average Day Demand (gpd)
INDUSTRIAL							
Industrial (I)							
I #1	208.9	146.3				430	62,893
I #2							
Total Areas for Industrial =	*209*	*146*				*Industrial ADD =*	*62,893 gpd*
GOVERNMENT							
School (SC)							
SC #1	7.5	7.5				400	3,015
SC #2							
SC #3	16.5	16.5				400	6,583
SC #4	5.3	5.3				400	2,103
SC #5	40.2	40.2				400	16,071
Total Areas for Government =	*69*	*69*				*Government ADD =*	*27,772 gpd*
OTHER							
Park (PK)							
PK #1	5.9	5.9				1900	11,266
PK #2	5.4	5.4				1900	10,191
PK #3	1.8	1.8				1900	3,502
PK #4	0.8	0.8				1900	1,523
PK #5	1.6	1.6				1900	2,971
PK #6	1.6	1.6				1900	2,994
PK #7	12.0	12.0				1900	22,767
PK #8	4.6	4.6				1900	8,682
PK #9	5.4	5.4				1900	10,270
Total Areas for Other =	*39*	*39*				*Other ADD =*	*74,167 gpd*
OPEN SPACE							
Open Space (OS)							
OS #1	4.9	4.9				0	0
OS #2	1.3	1.3				0	0
OS #3	3.2	3.2				0	0
OS #4	2.1	2.1				0	0
OS #5	1.1	1.1				0	0
OS #6	17.2	17.2				0	0
Total Areas for Open Space =	*30*	*30*				*Open Space ADD =*	*0 gpd*
Total Areas for Existing System =	**2235**	**1681**	**acres**			**Total Existing System ADD =**	**4,369,500 gpd**
						Total Annual Demand =	**4,890 ac-ft/yr**

Table A-3
City of Riverbank Water Supply Study and Water Master Plan
Existing City Water System Buildout Water Demands

Category	Gross Area (ac)	Net Area (ac)	Density (Units/ac)	DUs	Demand Factor: Residential (gpd/DU)	Demand Factor: Non-Residential (gpd/acre)	Average Day Demand (gpd)
RESIDENTIAL							
Medium Density Residential (MDR)							
MDR #1	206.0	144.2	5.5	793	600		475,759
IN #1	3.0	2.1	6.0	13	600		7,590
IN #2	14.5	10.1	6.0	61	600		36,530
MDR #2	335.3	234.7	6.0	1408	600		844,961
IN #3	2.1	1.5	6.0	9	600		5,361
IN #4	3.8	2.7	6.0	16	600		9,592
IN #6	8.2	5.7	6.0	34	600		20,591
IN #7	2.4	1.7	6.0	10	600		6,156
IN #8	4.7	3.3	6.0	20	600		11,965
IN #9	4.7	3.3	6.0	20	600		11,902
MDR #3	359.3	251.5	6.5	1635	600		980,780
IN #5	2.4	1.7	6.0	10	600		6,061
IN #10	15.5	10.9	6.0	65	600		39,092
MDR #4	444.0	310.8	6.0	1865	600		1,118,773
IN #12	1.3	0.9	6.0	5	600		3,172
IN #13	3.2	2.2	6.0	13	600		7,981
IN #14	5.1	3.6	6.0	21	600		12,874
IN #16	1.9	1.3	6.0	8	600		4,697
IN #17	2.0	1.4	6.0	8	600		5,094
IN #18	1.6	1.1	6.0	7	600		4,056
IN #19	4.8	3.4	6.0	20	600		12,173
IN #20	5.4	3.8	6.0	23	600		13,541
MDR #5	14.3	10.0	6.0	60	600		36,075
MDR #6	53.2	37.3	6.0	224	600		134,174
IN #11	2.0	1.4	6.0	8	600		5,009
MDR #7	21.7	15.2	6.0	91	600		54,681
MDR #8	6.3	4.4	6.0	27	600		16,001
MDR #9	28.8	20.1	5.5	111	600		66,418
Total Areas for Medium Density Res. =	*1558*	*1090*			*Medium Density Residential ADD =*		*3,951,059 gpd*
Low Density Residential (LDR)							
LDR #1	99.2	99.2				1000	99,210
LDR #2	21.1	21.1	2.3	48	1000		48,482
LDR #3	27.8	27.8	1.5	42	1000		41,687
Total Areas for Low Density Res.=	*148*	*148*			*Low Density Residential ADD =*		*189,379 gpd*
Total Areas for Residential =	*1706*	*1238*				*Residential ADD =*	*4,140,439 gpd*
COMMERCIAL							
Commercial (C)							
C #1	122.4	85.7				1920	164,567 [a]
C #2	20.2	14.1				2000	28,296
C #3	68.8	48.2				2000	96,332
C #4	6.3	4.4				2000	8,780
C #5	1.1	0.8				2000	1,515
Total Areas for Commercial =	*219*	*153*				*Commercial ADD =*	*299,490 gpd*

Category	Gross Area (ac)	Net Area (ac)	Density (Units/ac)	DUs	Demand Factor Residential (gpd/DU)	Demand Factor Non-Residential (gpd/acre)	Average Day Demand (gpd)
INDUSTRIAL							
Industrial (I)							
I #1	208.9	146.3				2000	292,526
I #2	35.0	24.5				430	10,539 [a]
Total Areas for Industrial =	*244*	*171*				*Industrial ADD =*	*303,065 gpd*
GOVERNMENT							
School (SC)							
SC #1	7.5	7.5				560	4,222 [a]
SC #2	10.8	10.8				2000	21,628
SC #3	16.5	16.5				400	6,583 [a]
SC #4	5.3	5.3				2000	10,516
SC #5	40.2	40.2				2000	80,354
Total Areas for Government =	*80*	*80*				*Government ADD =*	*123,303 gpd*
OTHER							
Park (PK)							
PK #1	5.9	5.9				2500	14,824
PK #2	5.4	5.4				2500	13,409
PK #3	1.8	1.8				2020	3,723 [a]
PK #4	0.8	0.8				1900	1,523 [a]
PK #5	1.6	1.6				2500	3,909
PK #6	1.6	1.6				2500	3,940
PK #7	12.0	12.0				2500	29,957
PK #8	4.6	4.6				1900	8,682 [a]
PK #9	5.4	5.4				2500	13,513
Open Space (OS) (Converted to Parks)							
OS #1	4.9	4.9				2500	12,162
OS #2	1.3	1.3				2500	3,265
OS #3	3.2	3.2				2500	8,066
OS #4	2.1	2.1				2500	5,152
OS #5	1.1	1.1				2500	2,771
OS #6	17.2	17.2				2500	43,054
Total Areas for Other =	*69*	*69*				*Other ADD =*	*167,950 gpd*
Total Areas for Existing System =	**2317**	**1711**	**acres**			**Total Existing and Future ADD =**	**5,034,200 gpd**
						Total Annual Demand =	**5,640 ac-ft/yr**

[a] Areas of overlap with General Plan areas - Water demands have been reduced to account for future development in General Plan Infill Opportunity Areas

Table A-4
City of Riverbank Water Supply Study and Water Master Plan
General Plan Areas Buildout Water Demands

Category	Gross Area (ac)	Net Area (ac)	Density (Units/ac)	DUs	Demand Factor: Residential (gpd/DU)	Demand Factor: Non-Residential (gpd/acre)	Average Day Demand (gpd)
PLANNING SUB-AREA 1							
Buffer Greenway Open Space							
BGOS7	8.0	8.0				0	0
BGOS10	3.4	3.4				0	0
BGOS11	51.8	51.8				0	0
BGOS15	31.0	31.0				0	0
BGOS16	9.1	9.1				0	0
High Density Residential							
HDR10	25.8	18.1	18.0	325	435		141,405
Infill Opp Area							
IOA1	214.2					2000	19,224
IOA Downtown Non-Residential		9.6					81,724
IOA Downtown Residential (HDR)		10.4	18.0	188	435		
IOA2	163.7					2000	6,268
IOA West Riverbank Non-Residential		3.1					113,389
IOA West Riverbank Residential (HDR)		14.5	18.0	260.7	435		
IOA3	63.8					2000	2,442
IOA West Riverbank Non-Residential		1.2					44,179
IOA West Riverbank Residential (HDR)		5.6	18.0	101.6	435		
Medium Density Residential							
MDR20	46.9	32.8	10.0	328	600		197,046
School-Civic						2000	3,341
SC11	1.7	1.7				2000	4,084
SC12	2.0	2.0					
Total Areas for Planning Sub-Area 1 =	*621*	*202*				*Planning Sub-Area 1 ADD =*	*613,103 gpd*
PLANNING SUB-AREA 2							
Agricultural Resource Conservation Area						0	0
ARCA2	577.3	577.3					
Buffer Greenway Open Space						0	0
BGOS4	6.5	6.5				0	0
BGOS5	35.7	35.7				0	0
BGOS8	5.2	5.2					
Clustered Rural Residential							38,659
CRR1	161.1	161.1	0.2	32	1200		25,918
CRR2	108.0	108.0	0.2	22	1200		13,621
CRR3	56.8	56.8	0.2	11	1200		5,013
CRR4	20.9	20.9	0.2	4	1200		
High Density Residential							24,561
HDR4	4.5	3.1	18.0	56	435		25,199
HDR11	4.6	3.2	18.0	58	435		
Low Density Residential							238,436
LDR4	109.0	76.3	5.0	381	625		151,257
LDR5	69.1	48.4	5.0	242	625		155,069
LDR6	70.9	49.6	5.0	248	625		27,310
LDR7	12.5	8.7	5.0	44	625		109,053
LDR8	49.9	34.9	5.0	174	625		8,223
LDR13	3.8	2.6	5.0	13	625		
Medium Density Residential							139,220
MDR4	33.1	23.2	10.0	232	600		249,286
MDR5	59.4	41.5	10.0	415	600		101,554
MDR6	24.2	16.9	10.0	169	600		84,416
MDR7	20.1	14.1	10.0	141	600		52,655
MDR8	12.5	8.8	10.0	88	600		53,260
MDR18	12.7	8.9	10.0	89	600		

Category	Gross Area (ac)	Net Area (ac)	Density (Units/ac)	DUs	Demand Factor: Residential (gpd/DU)	Demand Factor: Non-Residential (gpd/acre)	Average Day Demand (gpd)
MDR19	8.8	6.1	10.0	61	600		36,820
Mixed Use Office Retail Residential							
MUORR4	4.5						
MUORR Non-Residential		2.5				2000	5,093
MUORR Residential		0.6	18.0	11	435		4,985
MUORR6	2.5						
MUORR Non-Residential		1.4				2000	2,784
MUORR Residential		0.3	18.0	6	435		2,725
Multi Use Recreation							
MUR3	14.4	14.4				2000	28,898
MUR4	9.6	9.6				2000	19,280
MUR5	2.4	2.4				2000	4,761
MUR6	1.9	1.9				2000	3,709
Park							
P7	29.5	29.5				2500	73,699
P8	9.9	9.9				2500	24,786
P9	2.2	2.2				2500	5,460
P11	5.3	5.3				2500	13,184
School-Civic							
SC4	5.4	5.4				2000	10,841
SC5	5.1	5.1				2000	10,221
Total Areas for Planning Sub-Area 2 =	*1,559*	*1,409*				*Planning Sub-Area 2 ADD =*	*1,749,955 gpd*
PLANNING SUB-AREA 3							
Buffer Greenway Open Space							
BGOS9	4.2	4.2				0	0
BGOS14	17.6	17.6				0	0
Clustered Rural Residential							
CRR5	117.1	117.1	0.2	23	1200		28,107
CRR8	6.9	6.9	0.2	1	1200		1,657
High Density Residential							
HDR5	3.2	2.2	18.0	40	435		17,316
Industrial-Business Park							
IBP1	30.5	21.3				2000	42,657
IBP2	161.1	112.8				2000	225,539
IBP3	51.5	36.1				2000	72,122
IBP4	8.6	6.0				2000	12,093
IBP5	11.6	8.2				2000	16,306
Low Density Residential							
LDR9	69.9	48.9	5.0	245	625		152,826
LDR15	20.6	14.4	5.0	72	625		45,136
Medium Density Residential							
MDR9	17.5	12.2	10.0	122	600		73,413
MDR10	38.2	26.7	10.0	267	600		160,319
MDR11	10.2	7.2	10.0	72	600		43,010
MDR12	19.2	13.4	10.0	134	600		80,439
Mixed Use Office Retail Residential							
MUORR5	29.3						
MUORR Non-Residential		20.5				2000	41,073
Multi Use Recreation							
MUR7	12.4	12.4				2000	24,830
Park							
P10	0.4	0.4				2500	879
P12	1.7	1.7				2500	4,288
P13	1.0	1.0				2500	2,416
P14	1.0	1.0				2500	2,416

Category	Gross Area (ac)	Net Area (ac)	Density (Units/ac)	DUs	Demand Factor: Residential (gpd/DU)	Demand Factor: Non-Residential (gpd/acre)	Average Day Demand (gpd)
P15	2.0	2.0				2500	4,902
Total Areas for Planning Sub-Area 3 =	*636*	*494*				*Planning Sub-Area 3 ADD =*	*1,051,743 gpd*
PLANNING SUB-AREA 4							
Agricultural Resource Conservation Area							
ARCA3	120.4	120.4				0	0
Buffer Greenway Open Space							
BGOS2	9.6	9.6				0	0
BGOS3	19.7	19.7				0	0
BGOS13	22.1	22.1				0	0
Clustered Rural Residential							
CRR6	489.0	489.0	0.2	98	1200		117,349
High Density Residential							
HDR6	4.8	3.4	18.0	61	435		26,474
HDR7	5.3	3.7	18.0	67	435		29,007
HDR8	4.1	2.9	18.0	52	435		22,681
HDR9	5.4	3.8	18.0	68	435		29,453
Low Density Residential							
LDR10	506.6	354.6	5.0	1,773	625		1,108,156
LDR11	32.1	22.5	5.0	112	625		70,212
LDR12	1.6	1.1	5.0	6	625		3,555
Medium Density Residential							
MDR13	33.0	23.1	10.0	231	600		138,499
MDR14	26.4	18.5	10.0	185	600		110,791
MDR15	20.1	14.1	10.0	141	600		84,582
MDR16	123.7	86.6	10.0	866	600		519,412
MDR17	31.8	22.2	10.0	222	600		133,495
Mixed Use Office Retail Residential							
MUORR7	5.0						
MUORR Non-Residential		2.8				2000	5,614
MUORR Residential		0.7	18.0	13	435		5,495
MUORR8	6.1						
MUORR Non-Residential		3.4				2000	6,876
MUORR Residential		0.9	18.0	15	435		6,730
MUORR9	60.2						
MUORR Non-Residential		42.1				2000	84,288
Multi Use Recreation							
MUR8	90.9	90.9				2000	181,754
Park							
P16	1.0	1.0				2500	2,603
P17	1.5	1.5				2500	3,735
P18	5.2	5.2				2500	13,112
P19	1.1	1.1				2500	2,695
P20	19.2	19.2				2500	48,023
P21	4.9	4.9				2500	12,285
P22	5.0	5.0				2500	12,518
P23	12.7	12.7				2500	31,872
P24	4.9	4.9				2500	12,285
P25	1.0	1.0				2500	2,590
P26	2.1	2.1				2500	5,164
P27	1.0	1.0				2500	2,590
P28	1.0	1.0				2500	2,590
P29	2.1	2.1				2500	5,164
P30	2.7	2.7				2500	6,662
School-Civic							
SC6	14.9	14.9				2000	29,830
SC7	15.6	15.6				2000	31,296
SC8	2.1	2.1				2000	4,125
SC9	21.1	21.1				2000	42,164

Category	Gross Area (ac)	Net Area (ac)	Density (Units/ac)	DUs	Demand Factor Residential (gpd/DU)	Demand Factor Non-Residential (gpd/acre)	Average Day Demand (gpd)
SC10	81.1	81.1				2000	162,206
Total Areas for Planning Sub-Area 4 =	*1,818*	*1,558*				*Planning Sub-Area 4 ADD =*	*3,117,932 gpd*
PLANNING SUB-AREA 5							
Agricultural Resource Conservation Area							
ARCA1	483.0	483.0				0	0
ARCA4	39.9	39.9				0	0
Buffer Greenway Open Space							
BGOS1	147.2	147.2				0	0
BGOS6	5.8	5.8				0	0
BGOS12	22.7	22.7				0	0
Clustered Rural Residential							
CRR7	306.8	306.8	0.2	61	1200		73,627
High Density Residential							
HDR2	7.0	4.9	18.0	89	435		38,510
HDR3	8.1	5.6	18.0	102	435		44,183
Low Density Residential							
LDR2	167.3	117.1	5.0	586	625		366,024
LDR3	79.5	55.6	5.0	278	625		173,800
LDR14	39.4	27.6	5.0	138	625		86,117
Medium Density Residential							
MDR2	103.1	72.2	10.0	722	600		433,036
MDR3	15.1	10.6	10.0	106	600		63,539
Mixed Use Office Retail Residential							
MUORR1	3.1						
MUORR Non-Residential		1.7				2000	3,486
MUORR Residential		0.4	18.0	8	435		3,412
MUORR2	38.4						
MUORR Non-Residential		21.5				2000	43,043
MUORR Residential		5.4	18.0	97	435		42,128
MUORR3	8.6						
MUORR Non-Residential		4.8				2000	9,606
MUORR Residential		1.2	18.0	22	435		9,401
Multi Use Recreation							
MUR2	7.6	7.6				2000	15,281
Park							
P2	4.9	4.9				2500	12,348
P3	1.1	1.1				2500	2,743
P4	1.0	1.0				2500	2,590
P5	8.1	8.1				2500	20,201
P6	1.2	1.2				2500	2,965
School-Civic							
SC2	2.1	2.1				2000	4,229
SC3	12.8	12.8				2000	25,645
Total Areas for Planning Sub-Area 5 =	*1,514*	*1,373*				*Planning Sub-Area 5 ADD =*	*1,475,912 gpd*
Total Areas for General Plan =	**6,148**	**5,036**	**acres**			**Total General Plan ADD =**	**8,008,646 gpd**
						+ Existing City Buildout Water Demand =	5,034,200 gpd
							13,042,800 gpd
						Total Annual Demand =	**14,610 ac-ft/yr**

APPENDIX B

NODE DEMAND ALLOCATIONS FOR EXISTING CONDITIONS COMPUTER MODEL

SA0154211

City of Riverbank
Existing Conditions Water Model
Demand Allocations

Junction Node Number	MDR Residential Land Use				LDR Residential Land Use				Industrial Land Use				Park Land Use				School Land Use				Commercial Land Use				Total Node Demand gpd
	Area	du	Demand Factor gpd/du	Demand gpd	Area	du	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	
J-A1-1	MDR#1	18	450	8,100																					8,100
J-A1-10	MDR#1	21	450	9,450																					9,450
J-A1-15	MDR#1	0	450	0																					0
J-A1-5	MDR#1	0	450	0																					0
J-A2-1	MDR#1	26	450	11,700																					11,700
J-A2-20	MDR#1	27	450	12,150																					12,150
J-A2-35	MDR#1	23	450	10,350																					10,350
J-A2-45	MDR#1	21	450	9,450																					9,450
J-A2-5	MDR#1	23	450	10,350																					10,350
J-A2-55	MDR#1	26	450	11,700																					11,700
J-A3-1	MDR#1	18	450	8,100																					8,100
J-A3-10	MDR#1	0	450	0																					0
J-A3-15	MDR#1	44	450	19,800																					19,800
J-A3-20	MDR#1	0	450	0																					0
J-A3-25	MDR#1	42	450	18,900																					18,900
J-A3-30	MDR#1	0	450	0									PK#2	5.4	2300	12420									12,420
J-A3-40	MDR#1	0	450	0																					0
J-A3-45		0	0	0					I#2	17.5	200	3500													3,500
J-A3-5	MDR#1	77	450	34,650																					34,650
J-A3-50		0	0	0									PK#3	1.8	2300	4140									4,140
J-A3-55	MDR#4	128	450	57,600																					57,600
J-A3-60	MDR#4	0	450	0																					0
J-A3-65	MDR#4	0	450	0																					0
J-A3-70	MDR#4	0	450	0																					0
J-A4-1	MDR#4	42	450	18,900																					18,900
J-A4-10	MDR#4	0	450	0																					0
J-A4-15	MDR#4	79	450	35,550									PK#4	0.8	2300	1840									37,390
J-A4-20		0	0	0													SC#3	16.5	360	5940					5,940
J-A4-5	MDR#4	84	450	37,800																					37,800
J-B1-10	MDR#2	20	450	9,000																					9,000
J-B1-100	MDR#1	27	450	12,150																					12,150
J-B1-105	MDR#1	11	450	4,950																					4,950
J-B1-110	MDR#1	17	450	7,650																					7,650
J-B1-115	MDR#1	50	450	22,500																					22,500
J-B1-120	MDR#1	0	450	0																					0
J-B1-125	MDR#1	0	450	0																					0
J-B1-130	MDR#1	12	450	5,400																					5,400
J-B1-15	MDR#2	8	450	3,600																					3,600
J-B1-20	MDR#2	0	450	0																					0
J-B1-25	MDR#2	17	450	7,650																					7,650
J-B1-30	MDR#2	13	450	5,850																					5,850
J-B1-35		0	0	0																	C#1	30.6	600	18360	18,360
J-B1-45	MDR#2	0	450	0																					0
J-B1-50	MDR#1	15	450	6,750																					6,750
J-B1-55	MDR#1	0	450	0																					0
J-B1-60	MDR#1	14	450	6,300																					6,300
J-B1-65	MDR#1	15	450	6,750																					6,750
J-B1-70	MDR#1	17	450	7,650																					7,650
J-B1-75	MDR#1	14	450	6,300																					6,300

City of Riverbank
Existing Conditions Water Model
Demand Allocations

Junction Node Number	MDR Residential Land Use				LDR Residential Land Use				Industrial Land Use				Park Land Use				School Land Use				Commercial Land Use				Total Node Demand gpd
	Area	du	Demand Factor gpd/du	Demand gpd	Area	du	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	
J-B1-80	MDR#1	12	450	5,400																					5,400
J-B1-85	MDR#1	36	450	16,200																					16,200
J-B1-90	MDR#1	0	450	0																					0
J-B1-95	MDR#1	17	450	7,650																					7,650
J-B2-1	MDR#1	26	450	11,700																					11,700
J-B2-10	MDR#1	14	450	6,300																					6,300
J-B2-15	MDR#1	20	450	9,000																					9,000
J-B2-20	MDR#1	18	450	8,100																					8,100
J-B2-25	MDR#1	47	450	21,150																					21,150
J-B2-30		0	0	0													SC#1	7.5	360	2700					2,700
J-B2-35	MDR#1	21	450	9,450																					9,450
J-B2-45	MDR#1	0	450	0																					0
J-B2-5	MDR#1	9	450	4,050																					4,050
J-B2-50	MDR#1	49	450	22,050																					22,050
J-B2-55	MDR#1	42	450	18,900																					18,900
J-B2-60	MDR#1	96	450	43,200																					43,200
J-B2-65	MDR#1	38	450	17,100																					17,100
J-B2-70		0	0	0																	C#1	30.6	600	18360	18,360
J-B2-75	MDR#1	0	450	0																					0
J-B2-80	MDR#1	27	450	12,150																					12,150
J-B3-1	MDR#1	0	450	0																					0
J-B3-10	MDR#1	0	450	0	LDR#2	12	1,000	12,000	I#2	17.5	200	3500													15,500
J-B3-12	MDR#1	0	450	0																					0
J-B3-15	MDR#1	0	450	0																					0
J-B3-25		0	0	0	LDR#2	12	1,000	12,000													C#1	30.6	600	18360	30,360
J-B3-3		0	0	0																	C#1	30.6	600	18360	18,360
J-B3-30		0	0	0	LDR#2	24	1,000	24,000																	24,000
J-B3-35		0	0	0					I#1	52.2	200	10445													10,445
J-B3-40	MDR#4	0	450	0																					0
J-B3-45	MDR#4	59	450	26,550																					26,550
J-B3-5	MDR#1	0	450	0																					0
J-B3-50	MDR#4	0	450	0																					0
J-B4-10	MDR#4	42	450	18,900																					18,900
J-B4-15	MDR#4	97	450	43,650																					43,650
J-B4-20	MDR#4	14	450	6,300																					6,300
J-B4-25	MDR#4	25	450	11,250																					11,250
J-B4-30	MDR#4	0	450	0																					0
J-B4-35	MDR#4	6	450	2,700																					2,700
J-B4-40	MDR#4	19	450	8,550																					8,550
J-B4-45	MDR#4	62	450	27,900									PK#8	4.6	2300	10580									38,480
J-B4-5	MDR#4	91	450	40,950																					40,950
J-B4-50	MDR#4	48	450	21,600																					21,600
J-B4-55		0	0	0	LDR#3	25	1,000	25,000																	25,000
J-B5-1		0	0	0	LDR#3	25	1,000	25,000																	25,000
J-B5-10	MDR#4	0	450	0																					0
J-B5-15	MDR#4	25	450	11,250																					11,250
J-B5-30	MDR#4	16	450	7,200																					7,200
J-B5-5		0	0	0	LDR#3	26	1,000	26,000																	26,000
J-B6-1		0	0	0	LDR#4	31	1,000	31,000																	31,000

City of Riverbank
Existing Conditions Water Model
Demand Allocations

Junction Node Number	MDR Residential Land Use				LDR Residential Land Use				Industrial Land Use				Park Land Use				School Land Use				Commercial Land Use				Total Node Demand gpd
	Area	du	Demand Factor gpd/du	Demand gpd	Area	du	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	
J-C1-1	MDR#2	16	450	7,200																					7,200
J-C1-10	MDR#2	13	450	5,850																					5,850
J-C1-100	MDR#2	24	450	10,800																					10,800
J-C1-105	MDR#2	24	450	10,800									PK#1	5.9	2300	13570									24,370
J-C1-110	MDR#2	16	450	7,200																					7,200
J-C1-115	MDR#2	20	450	9,000																					9,000
J-C1-120	MDR#2	0	450	0																					0
J-C1-125	MDR#2	19	450	8,550																					8,550
J-C1-130	MDR#2	16	450	7,200																					7,200
J-C1-20	MDR#2	5	450	2,250																					2,250
J-C1-25	MDR#2	8	450	3,600																					3,600
J-C1-30	MDR#2	47	450	21,150																					21,150
J-C1-35	MDR#2	16	450	7,200																					7,200
J-C1-40	MDR#2	15	450	6,750																					6,750
J-C1-45	MDR#2	36	450	16,200																					16,200
J-C1-5	MDR#2	13	450	5,850																					5,850
J-C1-50	MDR#2	17	450	7,650																					7,650
J-C1-55	MDR#2	15	450	6,750																					6,750
J-C1-60	MDR#2	13	450	5,850																					5,850
J-C1-70	MDR#2	7	450	3,150																					3,150
J-C1-75	MDR#2	0	450	0																					0
J-C1-80	MDR#2	0	450	0																					0
J-C1-85	MDR#2	25	450	11,250																					11,250
J-C1-90	MDR#2	34	450	15,300																					15,300
J-C1-95	MDR#2	35	450	15,750																					15,750
J-C2-1	MDR#2	32	450	14,400																					14,400
J-C2-10	MDR#2	19	450	8,550																					8,550
J-C2-100	MDR#2	15	450	6,750																					6,750
J-C2-105	MDR#2	11	450	4,950																					4,950
J-C2-110	MDR#2	17	450	7,650																					7,650
J-C2-115	MDR#2	0	450	0																					0
J-C2-120	MDR#2	21	450	9,450																					9,450
J-C2-125	MDR#2	8	450	3,600																					3,600
J-C2-130	MDR#2	0	450	0																					0
J-C2-135	MDR#2	8	450	3,600																					3,600
J-C2-140	MDR#2	11	450	4,950																					4,950
J-C2-145	MDR#2	21	450	9,450																					9,450
J-C2-15	MDR#2	7	450	3,150																					3,150
J-C2-150	MDR#2	13	450	5,850																					5,850
J-C2-155	MDR#2	28	450	12,600																					12,600
J-C2-20	MDR#2	16	450	7,200																					7,200
J-C2-25	MDR#2	7	450	3,150																					3,150
J-C2-30	MDR#2	15	450	6,750																					6,750
J-C2-35	MDR#2	5	450	2,250																					2,250
J-C2-40	MDR#2	4	450	1,800																					1,800
J-C2-45	MDR#2	21	450	9,450																					9,450
J-C2-5	MDR#2	16	450	7,200																					7,200
J-C2-50	MDR#2	28	450	12,600																					12,600
J-C2-55	MDR#2	44	450	19,800																					19,800

City of Riverbank
Existing Conditions Water Model
Demand Allocations

Junction Node Number	MDR Residential Land Use				LDR Residential Land Use				Industrial Land Use				Park Land Use				School Land Use				Commercial Land Use				Total Node Demand gpd
	Area	du	Demand Factor gpd/du	Demand gpd	Area	du	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	
J-C2-60	MDR#2	15	450	6,750																					6,750
J-C2-65	MDR#2	21	450	9,450																					9,450
J-C2-70	MDR#2	12	450	5,400																					5,400
J-C2-75	MDR#2	28	450	12,600																					12,600
J-C2-80	MDR#2	16	450	7,200																					7,200
J-C2-85	MDR#2	20	450	9,000																					9,000
J-C2-90	MDR#2	32	450	14,400																					14,400
J-C2-95	MDR#2	12	450	5,400																					5,400
J-C3-1	MDR#2	136	450	61,200																					61,200
J-C3-10	MDR#2	0	450	0																					0
J-C3-15	MDR#2	28	450	12,600																					12,600
J-C3-20	MDR#2	7	450	3,150																					3,150
J-C3-25	MDR#2	15	450	6,750																					6,750
J-C3-30	MDR#2	11	450	4,950																					4,950
J-C3-35	MDR#2	24	450	10,800																					10,800
J-C3-40	MDR#2	16	450	7,200																					7,200
J-C3-45	MDR#2	13	450	5,850																					5,850
J-C3-5	MDR#2	39	450	17,550																					17,550
J-C3-55	MDR#2	68	450	30,600					I#1	52.2	200	10445													41,045
J-C3-60	MDR#2	41	450	18,450																					18,450
J-C4-1	MDR#4	65	450	29,250																					29,250
J-C4-10	MDR#4	42	450	18,900																					18,900
J-C4-15	MDR#4	67	450	30,150																					30,150
J-C4-20		0	0	0									PK#6	1.6	2300	3680	SC#4	5.3	360	1908					5,588
J-C4-25	MDR#4	42	450	18,900																					18,900
J-C4-30	MDR#4	48	450	21,600																					21,600
J-C4-35	MDR#4	52	450	23,400																					23,400
J-C4-40	MDR#4	32	450	14,400																					14,400
J-C4-45	MDR#4	0	450	0																					0
J-C4-5	MDR#4	35	450	15,750																					15,750
J-C4-50	MDR#4	38	450	17,100																					17,100
J-C4-60	MDR#4	30	450	13,500																					13,500
J-C4-65	MDR#4	52	450	23,400									PK#5	1.6	2300	3680									27,080
J-C5-1	MDR#4	70	450	31,500																					31,500
J-C5-10		0	0	0													SC#5	20.1	360	7236					7,236
J-C5-15	MDR#4	0	450	0																					0
J-C5-20	MDR#4	0	450	0																					0
J-C5-25	MDR#4	40	450	18,000																					18,000
J-C5-30	MDR#4	47	450	21,150																					21,150
J-C5-35	MDR#4	13	450	5,850																					5,850
J-C5-5		0	0	0													SC#5	20.1	360	7236					7,236
J-D1-1	MDR#4	0	450	0																					0
J-D1-10	MDR#3	7	450	3,150																					3,150
J-D1-15	MDR#3	12	450	5,400																					5,400
J-D1-20	MDR#3	19	450	8,550																					8,550
J-D1-25	MDR#3	8	450	3,600																					3,600
J-D1-30	MDR#3	8	450	3,600																					3,600
J-D1-5	MDR#3	90	450	40,500																					40,500
J-D2-1	MDR#3	12	450	5,400																					5,400

City of Riverbank
Existing Conditions Water Model
Demand Allocations

Junction Node Number	MDR Residential Land Use				LDR Residential Land Use				Industrial Land Use				Park Land Use				School Land Use				Commercial Land Use				Total Node Demand gpd
	Area	du	Demand Factor gpd/du	Demand gpd	Area	du	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	
J-D2-10	MDR#3	15	450	6,750																					6,750
J-D2-100	MDR#3	14	450	6,300																					6,300
J-D2-105	MDR#3	8	450	3,600																					3,600
J-D2-110	MDR#3	25	450	11,250																					11,250
J-D2-115	MDR#3	16	450	7,200																					7,200
J-D2-120	MDR#3	8	450	3,600																					3,600
J-D2-125	MDR#3	19	450	8,550																					8,550
J-D2-130	MDR#3	19	450	8,550																					8,550
J-D2-135	MDR#3	10	450	4,500																					4,500
J-D2-140	MDR#3	11	450	4,950																					4,950
J-D2-145	MDR#3	18	450	8,100																					8,100
J-D2-15	MDR#3	14	450	6,300																					6,300
J-D2-150	MDR#3	47	450	21,150																					21,150
J-D2-155	MDR#3	19	450	8,550																					8,550
J-D2-160	MDR#3	32	450	14,400																					14,400
J-D2-165	MDR#3	14	450	6,300																					6,300
J-D2-170	MDR#3	10	450	4,500																					4,500
J-D2-175	MDR#3	12	450	5,400																					5,400
J-D2-180	MDR#3	8	450	3,600																					3,600
J-D2-185	MDR#3	12	450	5,400																					5,400
J-D2-190	MDR#3	32	450	14,400																					14,400
J-D2-195	MDR#3	15	450	6,750																					6,750
J-D2-20	MDR#3	7	450	3,150																					3,150
J-D2-200	MDR#3	12	450	5,400																					5,400
J-D2-205	MDR#3	10	450	4,500																					4,500
J-D2-210	MDR#3	12	450	5,400																					5,400
J-D2-215	MDR#3	14	450	6,300																					6,300
J-D2-220	MDR#3	14	450	6,300																					6,300
J-D2-225	MDR#3	8	450	3,600																					3,600
J-D2-230	MDR#3	14	450	6,300																					6,300
J-D2-25	MDR#3	19	450	8,550																					8,550
J-D2-30	MDR#3	23	450	10,350																					10,350
J-D2-35	MDR#2	11	450	4,950									PK#9	5.4	2300	12420									17,370
J-D2-40	MDR#2	11	450	4,950																					4,950
J-D2-45	MDR#2	29	450	13,050																					13,050
J-D2-5	MDR#3	40	450	18,000																					18,000
J-D2-50	MDR#2	19	450	8,550																					8,550
J-D2-55	MDR#2	29	450	13,050																					13,050
J-D2-60	MDR#2	32	450	14,400																					14,400
J-D2-65	MDR#3	8	450	3,600																					3,600
J-D2-70	MDR#3	15	450	6,750																					6,750
J-D2-75	MDR#3	16	450	7,200																					7,200
J-D2-80	MDR#3	8	450	3,600																					3,600
J-D2-85	MDR#3	38	450	17,100																					17,100
J-D2-90	MDR#3	0	450	0																					0
J-D2-95	MDR#3	16	450	7,200																					7,200
J-D3-1	MDR#2	12	450	5,400																					5,400
J-D3-10	MDR#2	8	450	3,600																					3,600
J-D3-100	MDR#6	7	450	3,150																					3,150

City of Riverbank
Existing Conditions Water Model
Demand Allocations

Junction Node Number	MDR Residential Land Use				LDR Residential Land Use				Industrial Land Use				Park Land Use				School Land Use				Commercial Land Use				Total Node Demand gpd
	Area	du	Demand Factor gpd/du	Demand gpd	Area	du	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	
J-D3-105	MDR#6	5	450	2,250																					2,250
J-D3-110	MDR#6	9	450	4,050																					4,050
J-D3-115	MDR#2	24	450	10,800																					10,800
J-D3-120	MDR#6	5	450	2,250																					2,250
J-D3-125	MDR#2	31	450	13,950																					13,950
J-D3-130	MDR#2	8	450	3,600																					3,600
J-D3-135	MDR#2	7	450	3,150																					3,150
J-D3-140	MDR#2	13	450	5,850																					5,850
J-D3-145	MDR#2	12	450	5,400																					5,400
J-D3-15	MDR#2	28	450	12,600																					12,600
J-D3-150	MDR#2	0	450	0																					0
J-D3-20	MDR#2	0	450	0																					0
J-D3-25	MDR#2	19	450	8,550																					8,550
J-D3-30	MDR#2	5	450	2,250																					2,250
J-D3-35	MDR#2	33	450	14,850																					14,850
J-D3-40		0	0	0					I#1	104.5	200	20890									C#2	10.1	600	6060	20,910
J-D3-45	MDR#2	0	450	0																					20,890
J-D3-5	MDR#2	15	450	6,750																					0
J-D3-50		0	0	0																					6,750
J-D3-55	MDR#2	13	450	5,850																	C#2	10.1	600	6060	6,060
J-D3-60	MDR#2	14	450	6,300																					5,850
J-D3-65	MDR#2	16	450	7,200																					6,300
J-D3-70	MDR#2	33	450	14,850																					7,200
J-D3-75	MDR#2	9	450	4,050																					14,850
J-D3-80	MDR#3	7	450	3,150																					4,050
J-D3-81	MDR#3	14	450	6,300																					3,150
J-D3-82	MDR#3	11	450	4,950																					6,300
J-D3-85	MDR#3	5	450	2,250																					4,950
J-D3-90	MDR#3	5	450	2,250																					2,250
J-D3-91	MDR#3	15	450	6,750																					2,250
J-D3-95	MDR#6	19	450	8,550																					6,750
J-D4-1	MDR#4	25	450	11,250																					8,550
J-D4-10	MDR#4	38	450	17,100																					11,250
J-D4-15	MDR#4	58	450	26,100																					17,100
J-D4-20	MDR#4	60	450	27,000																					26,100
J-D4-25	MDR#4	25	450	11,250																					27,000
J-D4-30	MDR#4	36	450	16,200																					11,250
J-D4-35	MDR#4	22	450	9,900																					16,200
J-D4-40	MDR#4	33	450	14,850																					9,900
J-D4-45	MDR#4	0	450	0																					14,850
J-D4-5	MDR#4	20	450	9,000																					0
J-D4-50	MDR#4	29	450	13,050																					9,000
J-D4-55	MDR#4	39	450	17,550									PK#7	12.0	2300	27600									13,050
J-D4-60	MDR#4	67	450	30,150																					45,150
J-D4-65	MDR#4	16	450	7,200																					30,150
J-D4-70	MDR#6	13	450	5,850																					7,200
J-D4-75	MDR#6	15	450	6,750																					5,850
J-D4-80	MDR#4	16	450	7,200																					6,750
J-D4-85	MDR#4	47	450	21,150																					7,200
																									21,150

City of Riverbank
Existing Conditions Water Model
Demand Allocations

Junction Node Number	MDR Residential Land Use				LDR Residential Land Use				Industrial Land Use				Park Land Use				School Land Use				Commercial Land Use				Total Node Demand gpd
	Area	du	Demand Factor gpd/du	Demand gpd	Area	du	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	
J-D5-1	MDR#4	0	450	0																					0
J-D5-10	MDR#4	42	450	18,900																					18,900
J-D5-15	MDR#4	36	450	16,200																					16,200
J-D5-20	MDR#4	22	450	9,900																					9,900
J-D5-25	MDR#4	23	450	10,350																					10,350
J-D5-30	MDR#4	20	450	9,000																					9,000
J-D5-35	MDR#4	22	450	9,900																					9,900
J-D5-40	MDR#4	4	450	1,800																					1,800
J-D5-45	MDR#4	19	450	8,550																					8,550
J-D5-5	MDR#4	51	450	22,950																					22,950
J-D5-50	MDR#4	20	450	9,000																					9,000
J-D5-55	MDR#4	29	450	13,050																					13,050
J-D5-85	MDR#4	22	450	9,900																					9,900
J-E1-1	MDR#3	10	450	4,500																					4,500
J-E1-10	MDR#3	0	450	0																					0
J-E1-15	MDR#3	12	450	5,400																					5,400
J-E1-20	MDR#3	4	450	1,800																					1,800
J-E1-25	MDR#3	14	450	6,300																					6,300
J-E1-30	MDR#3	14	450	6,300																					6,300
J-E1-35	MDR#3	15	450	6,750																					6,750
J-E1-40	MDR#3	5	450	2,250																					2,250
J-E1-45	MDR#3	14	450	6,300																					6,300
J-E1-5	MDR#3	8	450	3,600																					3,600
J-E1-50	MDR#3	0	450	0																					0
J-E2-1	MDR#3	14	450	6,300																					6,300
J-E2-10	MDR#3	8	450	3,600																					3,600
J-E2-100	MDR#3	15	450	6,750																					6,750
J-E2-105	MDR#3	0	450	0																					0
J-E2-110	MDR#3	0	450	0																					0
J-E2-115	MDR#3	8	450	3,600																					3,600
J-E2-120	MDR#3	11	450	4,950																					4,950
J-E2-125	MDR#3	12	450	5,400																					5,400
J-E2-130	MDR#3	11	450	4,950																					4,950
J-E2-135	MDR#3	11	450	4,950																					4,950
J-E2-140	MDR#3	8	450	3,600																					3,600
J-E2-145	MDR#3	8	450	3,600																					3,600
J-E2-15	MDR#3	25	450	11,250																					11,250
J-E2-150	MDR#3	11	450	4,950																					4,950
J-E2-155	MDR#3	11	450	4,950																					4,950
J-E2-160	MDR#3	8	450	3,600																					3,600
J-E2-165	MDR#3	8	450	3,600																					3,600
J-E2-170	MDR#3	11	450	4,950																					4,950
J-E2-175	MDR#3	11	450	4,950																					4,950
J-E2-180	MDR#3	12	450	5,400																					5,400
J-E2-185	MDR#3	4	450	1,800																					1,800
J-E2-190	MDR#3	5	450	2,250																					2,250
J-E2-195	MDR#3	8	450	3,600																					3,600
J-E2-20	MDR#3	26	450	11,700																					11,700
J-E2-200	MDR#3	11	450	4,950																					4,950

City of Riverbank
Existing Conditions Water Model
Demand Allocations

Junction Node Number	MDR Residential Land Use				LDR Residential Land Use				Industrial Land Use				Park Land Use				School Land Use				Commercial Land Use				Total Node Demand gpd
	Area	du	Demand Factor gpd/du	Demand gpd	Area	du	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	
J-E2-205	MDR#3	5	450	2,250																					2,250
J-E2-210	MDR#3	15	450	6,750																					6,750
J-E2-215	MDR#3	19	450	8,550																					8,550
J-E2-220	MDR#3	16	450	7,200																					7,200
J-E2-225	MDR#3	10	450	4,500																					4,500
J-E2-230	MDR#3	8	450	3,600																					3,600
J-E2-235	MDR#3	14	450	6,300																					6,300
J-E2-240	MDR#3	11	450	4,950																					4,950
J-E2-245	MDR#3	14	450	6,300																					6,300
J-E2-25	MDR#3	15	450	6,750																					6,750
J-E2-250	MDR#3	15	450	6,750																					6,750
J-E2-255	MDR#3	11	450	4,950																					4,950
J-E2-260	MDR#3	14	450	6,300																					6,300
J-E2-265	MDR#3	18	450	8,100																					8,100
J-E2-270	MDR#3	18	450	8,100																					8,100
J-E2-275	MDR#3	14	450	6,300																					6,300
J-E2-280	MDR#3	14	450	6,300																					6,300
J-E2-285	MDR#3	15	450	6,750																					6,750
J-E2-290	MDR#3	25	450	11,250																					11,250
J-E2-30	MDR#3	30	450	13,500																					13,500
J-E2-35	MDR#3	27	450	12,150																					12,150
J-E2-40	MDR#3	14	450	6,300																					6,300
J-E2-45	MDR#3	11	450	4,950																					4,950
J-E2-5	MDR#3	10	450	4,500																					4,500
J-E2-50	MDR#3	8	450	3,600																					3,600
J-E2-55	MDR#3	10	450	4,500																					4,500
J-E2-60	MDR#3	11	450	4,950																					4,950
J-E2-65	MDR#3	14	450	6,300																					6,300
J-E2-70	MDR#3	12	450	5,400																					5,400
J-E2-75	MDR#3	11	450	4,950																					4,950
J-E2-80	MDR#3	16	450	7,200																					7,200
J-E2-85	MDR#3	12	450	5,400																					5,400
J-E2-90	MDR#3	11	450	4,950																					4,950
J-E2-95	MDR#3	14	450	6,300																					6,300
J-E3-1	MDR#3	15	450	6,750																					6,750
J-E3-10	MDR#9	18	450	8,100																					8,100
J-E3-100	MDR#3	11	450	4,950																					4,950
J-E3-105	MDR#6	10	450	4,500																					4,500
J-E3-110	MDR#6	8	450	3,600																					3,600
J-E3-115	MDR#6	12	450	5,400																					5,400
J-E3-120	MDR#6	21	450	9,450																					9,450
J-E3-125	MDR#6	18	450	8,100																					8,100
J-E3-130	MDR#6	21	450	9,450																					9,450
J-E3-135	MDR#6	9	450	4,050																					4,050
J-E3-140	MDR#6	9	450	4,050																					4,050
J-E3-145	MDR#6	9	450	4,050																					4,050
J-E3-15	MDR#3	0	450	0																					0
J-E3-150	MDR#6	8	450	3,600																					3,600
J-E3-155	MDR#6	1	450	450																					450

City of Riverbank
Existing Conditions Water Model
Demand Allocations

Junction Node Number	MDR Residential Land Use				LDR Residential Land Use				Industrial Land Use				Park Land Use				School Land Use				Commercial Land Use				Total Node Demand gpd
	Area	du	Demand Factor gpd/du	Demand gpd	Area	du	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	
J-E3-16	MDR#9	4	450	1,800																					1,800
J-E3-160	MDR#6	1	450	450																					450
J-E3-165	MDR#6	9	450	4,050																					4,050
J-E3-17	MDR#9	10	450	4,500																					4,500
J-E3-175	MDR#6	11	450	4,950																					4,950
J-E3-20	MDR#3	0	450	0																					0
J-E3-25	MDR#3	10	450	4,500																					4,500
J-E3-30	MDR#3	12	450	5,400																					5,400
J-E3-35	MDR#3	11	450	4,950																					4,950
J-E3-40	MDR#3	8	450	3,600																					3,600
J-E3-41	MDR#3	8	450	3,600																					3,600
J-E3-42	MDR#3	12	450	5,400																					5,400
J-E3-45	MDR#3	8	450	3,600																					3,600
J-E3-5	MDR#3	16	450	7,200																					7,200
J-E3-50	MDR#3	10	450	4,500																					4,500
J-E3-55	MDR#3	11	450	4,950																					4,950
J-E3-60	MDR#3	8	450	3,600																					3,600
J-E3-65	MDR#3	8	450	3,600																					3,600
J-E3-70	MDR#3	14	450	6,300																					6,300
J-E3-71	MDR#3	15	450	6,750																					6,750
J-E3-75	MDR#3	8	450	3,600																					3,600
J-E3-80	MDR#9	5	450	2,250																					2,250
J-E3-81	MDR#9	8	450	3,600																					3,600
J-E3-85	MDR#9	7	450	3,150																					3,150
J-E3-86	MDR#9	7	450	3,150																					3,150
J-E3-90	MDR#3	24	450	10,800																					10,800
J-E3-91	MDR#9	8	450	3,600																					3,600
J-E3-95	MDR#3	23	450	10,350																					10,350
J-E4-1	MDR#6	0	450	0																					0
J-E4-10	MDR#4	19	450	8,550																					8,550
J-E4-15	MDR#4	0	450	0																					0
J-E4-20		0	0	0	LDR#1	20	1,000	20,000																	20,000
J-E4-25	MDR#4	9	450	4,050																					4,050
J-E4-30	MDR#4	13	450	5,850																					5,850
J-E4-35	MDR#4	10	450	4,500																					4,500
J-E4-40	MDR#4	20	450	9,000																					9,000
J-E4-45	MDR#6	5	450	2,250																					2,250
J-E4-5	MDR#4	20	450	9,000																					9,000
J-E4-50	MDR#6	13	450	5,850																					5,850
J-E4-55	MDR#6	8	450	3,600																					3,600
J-E4-60	MDR#6	7	450	3,150																					3,150
J-E4-65	MDR#6	12	450	5,400																					5,400
J-E4-70	MDR#6	1	450	450																					450
J-E5-1		0	0	0	LDR#1	78	1,000	78,000																	78,000
J-E5-5		0	0	0	LDR#1	20	1,000	20,000																	20,000
J-F1-15		0	0	0																	C#3	34.4	600	20640	20,640
J-F2-1	MDR#3	12	450	5,400																					5,400
J-F2-10	MDR#3	15	450	6,750																					6,750
J-F2-15	MDR#3	12	450	5,400																					5,400

City of Riverbank
Existing Conditions Water Model
Demand Allocations

Junction Node Number	MDR Residential Land Use				LDR Residential Land Use				Industrial Land Use				Park Land Use				School Land Use				Commercial Land Use				Total Node Demand gpd
	Area	du	Demand Factor gpd/du	Demand gpd	Area	du	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	Area	acres	Demand Factor gpd/du	Demand gpd	
J-F2-20	MDR#3	12	450	5,400																					5,400
J-F2-25	MDR#3	14	450	6,300																					6,300
J-F2-30	MDR#3	11	450	4,950																					4,950
J-F2-35	MDR#3	10	450	4,500																					4,500
J-F2-40	MDR#3	0	450	0																					0
J-F2-45	MDR#3	1	450	450																					450
J-F2-5	MDR#3	23	450	10,350																					10,350
J-F2-50	MDR#3	0	450	0																					0
J-F2-55	MDR#3	11	450	4,950																					4,950
J-F2-60	MDR#3	10	450	4,500																					4,500
J-F2-65	MDR#3	3	450	1,350																					1,350
J-F2-70	MDR#3	12	450	5,400																					5,400
J-F2-85		0	0	0																	C#3	34.4	600	20640	20,640
J-F3-1	MDR#3	12	450	5,400																					5,400
J-F3-10	MDR#9	10	450	4,500																					4,500
J-F3-100	MDR#3	7	450	3,150																					3,150
J-F3-105	MDR#9	13	450	5,850																					5,850
J-F3-11	MDR#9	8	450	3,600																					3,600
J-F3-110	MDR#3	1	450	450																					450
J-F3-15	MDR#9	14	450	6,300																					6,300
J-F3-20	MDR#9	5	450	2,250																					2,250
J-F3-25	MDR#9	7	450	3,150																					3,150
J-F3-30	MDR#9	6	450	2,700																					2,700
J-F3-35	MDR#3	0	450	0																					0
J-F3-40	MDR#3	14	450	6,300																					6,300
J-F3-45	MDR#3	12	450	5,400																					5,400
J-F3-5	MDR#3	14	450	6,300																					6,300
J-F3-50	MDR#3	18	450	8,100																					8,100
J-F3-55	MDR#3	14	450	6,300																					6,300
J-F3-60	MDR#3	21	450	9,450																					9,450
J-F3-65	MDR#3	14	450	6,300																					6,300
J-F3-70	MDR#3	8	450	3,600																					3,600
J-F3-75	MDR#3	3	450	1,350																					1,350
J-F3-80	MDR#3	11	450	4,950																					4,950
J-F3-85	MDR#3	8	450	3,600																					3,600
J-F3-90	MDR#3	3	450	1,350																					1,350
J-F3-95	MDR#3	3	450	1,350																					1,350
J-F4-1		0	0	0	LDR#1	19	1,000	19,000																	19,000
J-F5-1		0	0	0	LDR#1	20	1,000	20,000																	20,000
				3,578,850				312,000				48780				89930				25020				126840	4,181,420

APPENDIX C

MODEL SIMULATION RESULTS FOR EXISTING CONDITIONS COMPUTER MODEL

Scenario: Existing - Average Day
Steady State Analysis
Junction Report

Label	Elevation (ft)	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-E2-1	123	Demand	4.4	4.4	285.25	70.20
J-E2-5	123	Demand	3.1	3.1	285.25	70.20
J-E2-10	123	Demand	2.5	2.5	285.05	70.11
J-E2-15	123	Demand	7.8	7.8	284.97	70.08
J-E2-20	125	Demand	8.1	8.1	285.03	69.24
J-E2-25	123	Demand	4.7	4.7	285.11	70.14
J-E2-30	123	Demand	9.4	9.4	285.14	70.15
J-E2-35	123	Demand	8.4	8.4	285.20	70.18
J-E2-40	123	Demand	4.4	4.4	285.20	70.17
J-E1-5	123	Demand	2.5	2.5	285.20	70.18
J-E2-45	123	Demand	3.4	3.4	285.18	70.17
J-E2-50	123	Demand	2.5	2.5	285.18	70.17
J-E2-55	123	Demand	3.1	3.1	285.16	70.16
J-E2-60	123	Demand	3.4	3.4	285.16	70.16
J-E2-65	123	Demand	4.4	4.4	285.15	70.16
J-E2-70	123	Demand	3.7	3.7	285.14	70.15
J-E2-75	123	Demand	3.4	3.4	285.14	70.15
J-E2-80	123	Demand	5.0	5.0	285.13	70.14
J-E2-85	123	Demand	3.7	3.7	285.10	70.13
J-E2-90	123	Demand	3.4	3.4	285.10	70.13
J-E2-95	123	Demand	4.4	4.4	285.10	70.13
J-E2-100	123	Demand	4.7	4.7	285.10	70.13
J-E2-105	123	Demand	0.0	0.0	285.07	70.12
J-E2-110	123	Demand	0.0	0.0	285.14	70.15
J-E1-10	123	Demand	0.0	0.0	285.13	70.14
J-E2-115	123	Demand	2.5	2.5	285.07	70.12
J-E2-120	123	Demand	3.4	3.4	285.07	70.12
J-E1-20	123	Demand	1.3	1.3	285.09	70.13
J-E2-125	120	Demand	3.7	3.7	285.07	71.42
J-E2-130	120	Demand	3.4	3.4	285.06	71.41
J-E2-135	123	Demand	3.4	3.4	285.06	70.12
J-E2-140	123	Demand	2.5	2.5	285.06	70.12
J-E2-145	123	Demand	2.5	2.5	285.05	70.11
J-E2-150	123	Demand	3.4	3.4	285.05	70.11
J-E2-155	120	Demand	3.4	3.4	285.05	71.41
J-E2-160	120	Demand	2.5	2.5	285.05	71.41
J-E2-165	120	Demand	2.5	2.5	285.05	71.41
J-E2-170	123	Demand	3.4	3.4	285.05	70.11
J-E2-175	123	Demand	3.4	3.4	285.05	70.11
J-E2-180	123	Demand	3.7	3.7	285.05	70.11
J-E2-190	120	Demand	1.6	1.6	285.04	71.41
J-E2-195	123	Demand	2.5	2.5	285.00	70.09
J-E2-200	123	Demand	3.4	3.4	285.01	70.09
J-E2-205	123	Demand	1.6	1.6	285.01	70.09
J-E2-210	123	Demand	4.7	4.7	285.02	70.10
J-E2-215	128	Demand	5.9	5.9	284.93	67.90
J-E2-220	128	Demand	5.0	5.0	284.93	67.90
J-E2-225	128	Demand	3.1	3.1	284.99	67.92
J-E2-230	128	Demand	2.5	2.5	284.99	67.92
J-E2-235	128	Demand	4.4	4.4	285.01	67.93
J-E2-240	125	Demand	3.4	3.4	285.01	69.23
J-E2-245	125	Demand	4.4	4.4	284.99	69.22

Scenario: Existing - Average Day
Steady State Analysis
Junction Report

Label	Elevation (ft)	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-E2-250	125	Demand	4.7	4.7	284.95	69.20
J-E2-255	123	Demand	3.4	3.4	284.94	70.06
J-E2-260	123	Demand	4.4	4.4	284.89	70.04
J-E2-265	123	Demand	5.6	5.6	284.89	70.04
J-E2-270	123	Demand	5.6	5.6	284.90	70.04
J-E2-275	123	Demand	4.4	4.4	284.90	70.04
J-E2-280	123	Demand	4.4	4.4	284.91	70.05
J-E2-285	123	Demand	4.7	4.7	284.91	70.05
J-E2-290	125	Demand	7.8	7.8	284.90	69.18
J-E3-100	125	Demand	3.4	3.4	284.88	69.17
J-F2-1	125	Demand	3.7	3.7	284.91	69.18
J-F2-5	125	Demand	7.2	7.2	284.90	69.18
J-E1-1	123	Demand	3.1	3.1	285.25	70.20
J-E1-15	123	Demand	3.7	3.7	285.10	70.13
J-E1-25	120	Demand	4.4	4.4	285.09	71.43
J-E1-30	120	Demand	4.4	4.4	285.09	71.43
J-E1-35	120	Demand	4.7	4.7	285.09	71.43
J-E1-40	120	Demand	1.6	1.6	285.09	71.43
J-E1-45	120	Demand	4.4	4.4	285.10	71.43
J-E1-50	120	Demand	0.0	0.0	285.12	71.44
J-D1-1	125	Demand	0.0	0.0	285.12	69.28
J-D1-5	125	Demand	28.1	28.1	285.11	69.27
J-D1-10	125	Demand	2.2	2.2	285.11	69.27
J-D1-15	125	Demand	3.7	3.7	285.10	69.27
J-D1-20	125	Demand	5.9	5.9	285.10	69.27
J-D1-25	125	Demand	2.5	2.5	285.33	69.37
J-D1-30	123	Demand	2.5	2.5	285.30	70.22
J-D2-210	123	Demand	3.7	3.7	285.32	70.23
J-D2-5	128	Demand	12.5	12.5	285.01	67.93
J-D2-1	128	Demand	3.7	3.7	285.01	67.93
J-D2-20	128	Demand	2.2	2.2	285.04	67.95
J-D2-10	128	Demand	4.7	4.7	285.09	67.96
J-D2-15	128	Demand	4.4	4.4	285.07	67.96
J-D2-25	128	Demand	5.9	5.9	285.03	67.94
J-D2-30	128	Demand	7.2	7.2	284.83	67.85
J-D2-35	128	Demand	12.1	12.1	284.27	67.61
J-D2-40	128	Demand	3.4	3.4	284.16	67.56
J-D2-45	128	Demand	9.1	9.1	284.02	67.50
J-D2-50	128	Demand	5.9	5.9	283.99	67.49
J-D2-55	128	Demand	9.1	9.1	284.05	67.51
J-D2-60	130	Demand	10.0	10.0	284.03	66.64
J-D2-65	128	Demand	2.5	2.5	284.98	67.92
J-D2-70	128	Demand	4.7	4.7	285.00	67.93
J-D2-75	128	Demand	5.0	5.0	285.00	67.93
J-D2-80	128	Demand	2.5	2.5	285.00	67.93
J-D2-85	128	Demand	11.9	11.9	285.00	67.93
J-D2-95	128	Demand	5.0	5.0	285.00	67.93
J-D2-105	128	Demand	2.5	2.5	285.03	67.94
J-D2-115	125	Demand	5.0	5.0	285.07	69.25
J-D2-120	128	Demand	2.5	2.5	285.07	67.96
J-D2-125	125	Demand	5.9	5.9	285.09	69.26
J-D2-130	125	Demand	5.9	5.9	285.12	69.28

Scenario: Existing - Average Day
Steady State Analysis
Junction Report

Label	Elevation (ft)	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-D2-135	125	Demand	3.1	3.1	285.12	69.27
J-D2-140	125	Demand	3.4	3.4	285.12	69.27
J-D2-145	125	Demand	5.6	5.6	285.09	69.26
J-D2-150	125	Demand	14.7	14.7	285.10	69.27
J-D2-155	128	Demand	5.9	5.9	285.05	67.95
J-D2-160	128	Demand	10.0	10.0	285.05	67.95
J-D2-165	125	Demand	4.4	4.4	285.05	69.25
J-D2-170	125	Demand	3.1	3.1	285.05	69.25
J-D2-175	125	Demand	3.7	3.7	285.09	69.26
J-D2-180	125	Demand	2.5	2.5	285.09	69.26
J-D2-185	125	Demand	3.7	3.7	285.14	69.28
J-D2-190	125	Demand	10.0	10.0	285.16	69.29
J-D2-195	125	Demand	4.7	4.7	285.67	69.51
J-D2-200	125	Demand	3.7	3.7	285.45	69.42
J-D2-205	125	Demand	3.1	3.1	285.37	69.38
J-D2-215	123	Demand	4.4	4.4	285.34	70.24
J-D2-220	123	Demand	4.4	4.4	285.33	70.23
J-D2-225	123	Demand	2.5	2.5	285.25	70.20
J-D2-230	123	Demand	4.4	4.4	285.17	70.16
J-C2-1	135	Demand	10.0	10.0	284.49	64.68
J-C2-5	135	Demand	5.0	5.0	284.39	64.63
J-C2-10	130	Demand	5.9	5.9	284.32	66.77
J-C2-15	130	Demand	2.2	2.2	284.19	66.71
J-C2-20	130	Demand	5.0	5.0	284.19	66.71
J-C2-25	130	Demand	2.2	2.2	284.07	66.66
J-C2-30	130	Demand	4.7	4.7	284.07	66.66
J-C2-35	130	Demand	1.6	1.6	283.96	66.61
J-C2-40	130	Demand	1.3	1.3	283.75	66.52
J-C2-45	135	Demand	6.6	6.6	283.60	64.29
J-C2-50	130	Demand	8.8	8.8	283.68	66.49
J-C2-55	130	Demand	13.8	13.8	283.94	66.60
J-C2-65	130	Demand	6.6	6.6	283.98	66.62
J-C2-70	130	Demand	3.7	3.7	283.99	66.62
J-C2-75	130	Demand	8.8	8.8	283.99	66.63
J-C2-80	130	Demand	5.0	5.0	284.02	66.64
J-C2-85	128	Demand	6.2	6.2	284.10	67.54
J-C2-90	128	Demand	10.0	10.0	284.12	67.55
J-C2-95	130	Demand	3.7	3.7	284.15	66.69
J-C2-100	130	Demand	4.7	4.7	284.30	66.76
J-C2-105	130	Demand	3.4	3.4	284.46	66.83
J-C2-115	130	Demand	0.0	0.0	284.45	66.82
J-C2-120	135	Demand	6.6	6.6	284.49	64.68
J-C2-125	128	Demand	2.5	2.5	285.69	68.22
J-C2-130	128	Demand	0.0	0.0	285.04	67.94
J-C2-135	128	Demand	2.5	2.5	284.70	67.80
J-C2-140	128	Demand	3.4	3.4	285.01	67.93
J-C2-145	128	Demand	6.6	6.6	285.00	67.92
J-C1-105	128	Demand	16.9	16.9	286.90	68.75
J-C1-95	128	Demand	10.9	10.9	285.09	67.96
J-C1-90	135	Demand	10.6	10.6	284.54	64.70
J-C2-110	130	Demand	5.3	5.3	284.41	66.80
J-C1-1	128	Demand	5.0	5.0	284.09	67.53

Scenario: Existing - Average Day
Steady State Analysis
Junction Report

Label	Elevation (ft)	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-C1-20	128	Demand	1.6	1.6	284.12	67.55
J-C1-10	128	Demand	4.1	4.1	284.07	67.53
J-C1-5	128	Demand	4.1	4.1	284.07	67.53
J-C1-25	128	Demand	2.5	2.5	284.15	67.56
J-C1-30	128	Demand	14.7	14.7	284.26	67.60
J-C1-35	128	Demand	5.0	5.0	284.21	67.58
J-C1-40	128	Demand	4.7	4.7	284.21	67.58
J-C1-55	128	Demand	4.7	4.7	284.66	67.78
J-C1-50	128	Demand	5.3	5.3	284.68	67.79
J-C1-75	128	Demand	0.0	0.0	284.72	67.81
J-C1-80	128	Demand	0.0	0.0	284.47	67.70
J-C1-85	128	Demand	7.8	7.8	284.52	67.72
J-C1-100	128	Demand	7.5	7.5	284.79	67.83
J-C1-60	128	Demand	4.1	4.1	284.89	67.88
J-C1-70	128	Demand	2.2	2.2	284.96	67.91
J-C1-120	128	Demand	0.0	0.0	285.17	68.00
J-C1-115	128	Demand	6.2	6.2	285.81	68.28
J-C1-125	128	Demand	5.9	5.9	287.70	69.09
J-C1-130	128	Demand	5.0	5.0	290.71	70.40
J-C1-45	128	Demand	11.3	11.3	284.50	67.71
J-C1-110	128	Demand	5.0	5.0	286.22	68.46
J-A1-1	130	Demand	5.6	5.6	283.59	66.45
J-A1-5	130	Demand	0.0	0.0	283.59	66.45
J-A1-10	130	Demand	6.6	6.6	283.59	66.45
J-A1-15	130	Demand	0.0	0.0	283.59	66.45
J-B1-10	128	Demand	6.2	6.2	284.07	67.52
J-B1-15	128	Demand	2.5	2.5	284.07	67.52
J-B1-20	128	Demand	0.0	0.0	284.06	67.52
J-B1-25	128	Demand	5.3	5.3	284.16	67.56
J-B1-30	128	Demand	4.1	4.1	284.16	67.56
J-B1-35	135	Demand	12.8	12.8	284.02	64.47
J-B1-50	130	Demand	4.7	4.7	283.94	66.60
J-B1-55	130	Demand	0.0	0.0	283.94	66.60
J-B1-60	130	Demand	4.4	4.4	283.94	66.60
J-B1-65	130	Demand	4.7	4.7	283.83	66.56
J-B1-70	130	Demand	5.3	5.3	283.78	66.54
J-B1-75	130	Demand	4.4	4.4	283.77	66.53
J-B1-80	130	Demand	3.7	3.7	283.74	66.51
J-B1-85	130	Demand	11.3	11.3	283.60	66.45
J-B1-90	130	Demand	0.0	0.0	283.59	66.45
J-B1-95	130	Demand	5.3	5.3	283.59	66.45
J-B1-100	130	Demand	8.4	8.4	283.59	66.45
J-B1-105	130	Demand	3.4	3.4	283.59	66.45
J-B1-110	130	Demand	5.3	5.3	283.59	66.45
J-B1-115	130	Demand	15.6	15.6	283.59	66.45
J-B1-120	130	Demand	0.0	0.0	283.59	66.45
J-B2-1	130	Demand	8.1	8.1	282.39	65.93
J-B2-5	130	Demand	2.8	2.8	282.57	66.01
J-B2-10	130	Demand	4.4	4.4	282.72	66.07
J-B2-15	130	Demand	6.2	6.2	282.84	66.13
J-B2-20	130	Demand	5.6	5.6	282.57	66.01
J-B2-25	130	Demand	14.7	14.7	282.74	66.08

Scenario: Existing - Average Day
Steady State Analysis
Junction Report

Label	Elevation (ft)	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-B2-30	135	Demand	1.9	1.9	282.68	63.89
J-B2-35	130	Demand	6.6	6.6	282.68	66.06
J-B2-45	100	Demand	0.0	0.0	281.60	78.57
J-B2-50	100	Demand	15.3	15.3	281.55	78.55
J-B2-55	135	Demand	13.1	13.1	281.98	63.59
J-B2-60	130	Demand	30.0	30.0	282.20	65.85
J-B2-65	135	Demand	11.9	11.9	282.46	63.80
J-B2-70	135	Demand	12.8	12.8	282.67	63.89
J-B2-75	130	Demand	0.0	0.0	283.06	66.22
J-A2-1	130	Demand	8.1	8.1	282.55	66.00
J-A2-5	90	Demand	7.2	7.2	281.51	82.86
J-A3-1	100	Demand	5.6	5.6	281.38	78.47
J-A3-5	95	Demand	24.1	24.1	281.34	80.62
J-A3-10	95	Demand	0.0	0.0	281.35	80.62
J-A3-15	90	Demand	13.8	13.8	281.35	82.79
J-A3-20	90	Demand	0.0	0.0	281.34	82.79
J-A3-25	90	Demand	13.1	13.1	281.34	82.79
J-A3-30	100	Demand	8.6	8.6	281.34	78.46
J-A3-40	100	Demand	0.0	0.0	281.35	78.46
J-A3-45	140	Demand	2.4	2.4	281.33	61.15
J-A3-50	140	Demand	2.9	2.9	280.88	60.95
J-A3-55	140	Demand	40.0	40.0	280.66	60.86
J-B3-1	140	Demand	0.0	0.0	281.48	61.21
J-B3-5	140	Demand	0.0	0.0	281.72	61.31
J-B3-10	140	Demand	10.8	10.8	281.71	61.31
J-B3-25	130	Demand	21.1	21.1	281.75	65.66
J-B3-30	130	Demand	16.7	16.7	281.01	65.33
J-B3-35	140	Demand	7.3	7.3	279.91	60.53
J-B3-40	135	Demand	0.0	0.0	279.90	62.69
J-C3-1	135	Demand	42.5	42.5	283.69	64.33
J-C3-5	130	Demand	12.2	12.2	283.88	66.58
J-C3-15	128	Demand	8.8	8.8	283.96	67.48
J-C3-20	130	Demand	2.2	2.2	283.98	66.62
J-C3-25	130	Demand	4.7	4.7	284.00	66.63
J-C3-30	130	Demand	3.4	3.4	283.88	66.58
J-C3-35	135	Demand	7.5	7.5	283.88	64.41
J-C3-40	135	Demand	5.0	5.0	283.88	64.41
J-C3-45	135	Demand	4.1	4.1	283.88	64.41
J-C3-55	135	Demand	28.5	28.5	283.69	64.33
J-D3-1	130	Demand	3.7	3.7	283.99	66.62
J-D3-5	130	Demand	4.7	4.7	284.00	66.63
J-D3-10	130	Demand	2.5	2.5	284.00	66.63
J-D3-15	130	Demand	8.8	8.8	284.02	66.64
J-D3-20	130	Demand	0.0	0.0	284.02	66.64
J-D3-25	130	Demand	5.9	5.9	284.02	66.64
J-D3-30	130	Demand	1.6	1.6	284.02	66.64
J-D3-35	135	Demand	14.5	14.5	283.94	64.44
J-D3-40	135	Demand	14.5	14.5	283.93	64.44
J-D3-45	135	Demand	0.0	0.0	284.02	64.47
J-D3-50	135	Demand	4.2	4.2	284.12	64.52
J-D3-55	130	Demand	4.1	4.1	284.14	66.69
J-D3-60	130	Demand	4.4	4.4	284.14	66.69

Scenario: Existing - Average Day
Steady State Analysis
Junction Report

Label	Elevation (ft)	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-D3-65	130	Demand	5.0	5.0	284.16	66.70
J-D3-70	130	Demand	10.3	10.3	284.19	66.71
J-D3-75	135	Demand	2.8	2.8	284.19	64.55
J-D3-80	128	Demand	2.2	2.2	284.87	67.87
J-D3-85	128	Demand	1.6	1.6	284.90	67.88
J-D3-90	125	Demand	1.6	1.6	284.94	69.20
J-E3-1	125	Demand	4.7	4.7	284.90	69.18
J-E3-5	128	Demand	5.0	5.0	284.86	67.86
J-E3-10	128	Demand	5.6	5.6	284.85	67.86
J-E3-15	125	Demand	0.0	0.0	284.83	69.15
J-E3-20	125	Demand	0.0	0.0	284.87	69.17
J-E3-25	125	Demand	3.1	3.1	284.88	69.17
J-E3-30	125	Demand	3.7	3.7	284.88	69.17
J-E3-35	125	Demand	3.4	3.4	284.89	69.18
J-E3-40	125	Demand	2.5	2.5	284.91	69.19
J-E3-45	125	Demand	2.5	2.5	284.87	69.17
J-E3-50	125	Demand	3.1	3.1	284.87	69.17
J-E3-55	125	Demand	3.4	3.4	284.87	69.17
J-E3-60	125	Demand	2.5	2.5	284.87	69.17
J-E3-65	125	Demand	2.5	2.5	284.87	69.17
J-E3-70	125	Demand	4.4	4.4	284.86	69.16
J-E3-75	125	Demand	2.5	2.5	284.86	69.16
J-E3-80	125	Demand	1.6	1.6	284.86	69.16
J-E3-85	125	Demand	2.2	2.2	284.84	69.15
J-E3-90	128	Demand	7.5	7.5	284.87	67.87
J-E3-95	125	Demand	7.2	7.2	284.88	69.17
J-E3-110	130	Demand	2.5	2.5	284.28	66.75
J-E3-115	130	Demand	3.7	3.7	284.25	66.74
J-E3-120	130	Demand	6.6	6.6	284.24	66.73
J-E3-125	130	Demand	5.6	5.6	284.22	66.73
J-E3-130	135	Demand	6.6	6.6	284.23	64.56
J-F2-10	125	Demand	4.7	4.7	284.90	69.18
J-F2-15	125	Demand	3.7	3.7	284.90	69.18
J-F2-20	125	Demand	3.7	3.7	284.90	69.18
J-F2-25	125	Demand	4.4	4.4	284.90	69.18
J-F2-30	128	Demand	3.4	3.4	284.90	67.88
J-F2-35	128	Demand	3.1	3.1	284.90	67.88
J-F2-40	128	Demand	0.0	0.0	284.91	67.89
J-F2-45	128	Demand	0.3	0.3	284.91	67.89
J-F2-50	128	Demand	0.0	0.0	284.91	67.89
J-F2-65	128	Demand	0.9	0.9	284.91	67.89
J-F3-1	125	Demand	3.7	3.7	284.90	69.18
J-F3-5	128	Demand	4.4	4.4	284.88	67.88
J-F3-10	128	Demand	3.1	3.1	284.89	67.88
J-F3-15	130	Demand	4.4	4.4	284.90	67.02
J-F3-20	130	Demand	1.6	1.6	284.90	67.02
J-F3-25	130	Demand	2.2	2.2	284.90	67.02
J-F3-30	130	Demand	1.9	1.9	284.92	67.02
J-F3-40	130	Demand	4.4	4.4	284.90	67.02
J-F3-45	130	Demand	3.7	3.7	284.90	67.02
J-F3-50	128	Demand	5.6	5.6	284.90	67.88
J-F3-55	128	Demand	4.4	4.4	284.90	67.88

Scenario: Existing - Average Day
Steady State Analysis
Junction Report

Label	Elevation (ft)	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-F3-60	128	Demand	6.6	6.6	284.90	67.88
J-F3-65	128	Demand	4.4	4.4	284.90	67.88
J-F3-70	128	Demand	2.5	2.5	284.90	67.88
J-F3-75	128	Demand	0.9	0.9	284.91	67.89
J-F3-80	128	Demand	3.4	3.4	284.91	67.89
J-F3-85	128	Demand	2.5	2.5	284.91	67.89
J-F3-90	128	Demand	0.9	0.9	284.91	67.89
J-F3-95	128	Demand	0.9	0.9	284.91	67.89
J-F3-100	128	Demand	2.2	2.2	284.91	67.89
J-F3-105	128	Demand	4.1	4.1	284.91	67.89
J-F3-110	128	Demand	0.3	0.3	284.91	67.89
J-A4-1	140	Demand	13.1	13.1	280.32	60.71
J-A4-5	144	Demand	26.2	26.3	280.20	58.93
J-A4-10	144	Demand	0.0	0.0	280.19	58.92
J-A4-15	145	Demand	26.0	26.0	279.47	58.18
J-A4-20	145	Demand	4.1	4.1	279.48	58.18
J-B4-5	140	Demand	28.4	28.4	279.48	60.34
J-B4-10	140	Demand	13.1	13.1	279.51	60.36
J-B4-20	138	Demand	4.4	4.4	278.00	60.57
J-B4-25	140	Demand	7.8	7.8	277.89	59.66
J-B4-30	140	Demand	0.0	0.0	278.56	59.95
J-B4-35	140	Demand	1.9	1.9	278.53	59.93
J-B5-1	145	Demand	17.4	17.4	278.48	57.75
J-B5-5	148	Demand	18.1	18.1	278.47	56.45
J-C4-1	138	Demand	20.3	20.3	277.81	60.49
J-C4-5	140	Demand	10.9	10.9	277.72	59.59
J-C4-10	140	Demand	13.1	13.1	277.53	59.50
J-C4-15	140	Demand	20.9	20.9	277.42	59.46
J-C4-20	140	Demand	3.9	3.9	277.30	59.40
J-C4-25	140	Demand	13.1	13.1	277.29	59.40
J-C4-30	140	Demand	15.0	15.0	277.32	59.41
J-C4-35	138	Demand	16.3	16.3	277.53	60.37
J-C4-40	140	Demand	10.0	10.0	277.32	59.41
J-C4-50	140	Demand	11.9	11.9	277.32	59.41
J-C4-60	140	Demand	9.4	9.4	277.25	59.38
J-C5-1	140	Demand	21.9	21.9	277.43	59.46
J-C5-5	145	Demand	5.0	5.0	277.22	57.21
J-C5-10	145	Demand	5.0	5.0	277.21	57.20
J-C5-15	140	Demand	0.0	0.0	277.21	59.36
J-C5-20	140	Demand	0.0	0.0	277.14	59.34
J-C5-25	140	Demand	12.5	12.5	277.09	59.31
J-C5-30	140	Demand	14.7	14.7	277.05	59.29
J-D4-1	135	Demand	7.8	7.8	277.13	61.49
J-D4-5	140	Demand	6.2	6.2	277.17	59.35
J-D4-10	135	Demand	11.9	11.9	277.12	61.49
J-D4-15	135	Demand	18.1	18.1	277.09	61.48
J-D4-20	135	Demand	18.8	18.8	277.03	61.45
J-D4-25	135	Demand	7.8	7.8	277.01	61.44
J-D4-30	130	Demand	11.3	11.3	277.00	63.60
J-D4-35	130	Demand	6.9	6.9	276.99	63.60
J-D4-40	140	Demand	10.3	10.3	276.99	59.27
J-D4-45	140	Demand	0.0	0.0	277.00	59.27

Scenario: Existing - Average Day
Steady State Analysis
Junction Report

Label	Elevation (ft)	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-D4-55	140	Demand	31.4	31.4	277.00	59.27
J-D4-60	140	Demand	20.9	20.9	277.04	59.29
J-D5-1	140	Demand	0.0	0.0	277.04	59.29
J-D5-5	140	Demand	15.9	15.9	277.03	59.29
J-D5-10	140	Demand	13.1	13.1	277.03	59.29
J-D5-20	140	Demand	6.9	6.9	277.01	59.28
J-D5-25	140	Demand	7.2	7.2	277.01	59.28
J-D5-30	140	Demand	6.2	6.2	277.01	59.28
J-D5-35	140	Demand	6.9	6.9	277.01	59.28
J-D5-40	140	Demand	1.3	1.3	277.00	59.27
J-D5-45	140	Demand	5.9	5.9	277.00	59.27
J-D5-50	140	Demand	6.2	6.2	276.99	59.27
J-D5-55	140	Demand	9.1	9.1	276.99	59.27
J-E4-1	135	Demand	0.0	0.0	276.99	61.43
J-E4-5	130	Demand	6.2	6.2	276.99	63.59
J-E4-10	130	Demand	5.9	5.9	276.98	63.59
J-E4-15	130	Demand	0.0	0.0	276.99	63.60
J-E4-20	135	Demand	13.9	13.9	276.98	61.43
J-E5-1	145	Demand	54.2	54.2	276.96	57.09
J-E5-5	140	Demand	13.9	13.9	276.96	59.25
J-F5-1	135	Demand	13.9	13.9	276.96	61.42
J-F4-1	135	Demand	13.2	13.2	276.98	61.43
J-B2-80	135	Demand	8.4	8.4	282.66	63.88
J-B3-12	140	Demand	0.0	0.0	281.75	61.33
J-B3-3	140	Demand	12.8	12.8	281.50	61.22
J-B4-45	140	Demand	26.7	26.7	278.51	59.93
J-B1-125	130	Demand	0.0	0.0	283.91	66.59
J-C5-35	140	Demand	4.1	4.1	277.27	59.39
J-D4-65	140	Demand	5.0	5.0	277.17	59.35
J-C2-155	135	Demand	8.8	8.8	283.38	64.20
J-E4-25	135	Demand	2.8	2.8	276.99	61.43
J-E4-30	130	Demand	4.1	4.1	276.98	63.59
J-E4-35	130	Demand	3.1	3.1	276.98	63.59
J-E4-40	135	Demand	6.2	6.2	276.98	61.43
J-D3-95	135	Demand	5.9	5.9	284.15	64.53
J-D3-100	135	Demand	2.2	2.2	284.15	64.53
J-D3-105	135	Demand	1.6	1.6	284.15	64.53
J-D3-110	135	Demand	2.8	2.8	284.15	64.53
J-D3-115	135	Demand	7.5	7.5	284.14	64.53
J-D3-120	135	Demand	1.6	1.6	284.16	64.53
J-D3-125	135	Demand	9.7	9.7	284.16	64.53
J-D3-130	135	Demand	2.5	2.5	284.16	64.54
J-D3-135	135	Demand	2.2	2.2	284.16	64.54
J-D3-140	135	Demand	4.1	4.1	284.17	64.54
J-D3-145	135	Demand	3.7	3.7	284.16	64.54
J-D3-150	135	Demand	0.0	0.0	284.20	64.55
J-D4-75	135	Demand	4.7	4.7	284.17	64.54
J-D4-70	135	Demand	4.1	4.1	284.16	64.54
J-E3-105	135	Demand	3.1	3.1	284.21	64.56
J-E3-135	135	Demand	2.8	2.8	284.21	64.56
J-E3-145	135	Demand	2.8	2.8	284.21	64.56
J-E3-150	130	Demand	2.5	2.5	284.22	66.72

Scenario: Existing - Average Day
Steady State Analysis
Junction Report

Label	Elevation (ft)	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-E3-155	135	Demand	0.3	0.3	284.21	64.56
J-E3-160	135	Demand	0.3	0.3	284.21	64.56
J-E3-165	135	Demand	2.8	2.8	284.21	64.56
J-E4-45	135	Demand	1.6	1.6	284.19	64.55
J-E4-50	135	Demand	4.1	4.1	284.19	64.55
J-E4-55	135	Demand	2.5	2.5	284.19	64.55
J-E4-60	135	Demand	2.2	2.2	284.19	64.55
J-E4-65	135	Demand	3.7	3.7	284.19	64.55
J-E4-70	135	Demand	0.3	0.3	284.19	64.55
J-E3-140	135	Demand	2.8	2.8	284.21	64.56
J-E3-175	130	Demand	3.4	3.4	284.22	66.72
J-A3-60	100	Demand	0.0	0.0	281.34	78.46
J-A3-65	95	Demand	0.0	0.0	281.34	80.62
J-A3-70	100	Demand	0.0	0.0	281.34	78.46
J-B4-15	135	Demand	30.3	30.3	279.86	62.67
J-B3-45	135	Demand	18.4	18.4	279.90	62.69
J-B4-40	140	Demand	5.9	5.9	278.51	59.93
J-B4-50	140	Demand	15.0	15.0	278.47	59.91
J-B4-55	140	Demand	17.4	17.4	278.47	59.91
J-B6-1	150	Demand	21.5	21.5	278.45	55.57
J-C4-65	140	Demand	18.8	18.8	277.26	59.38
J-D4-80	135	Demand	5.0	5.0	277.11	61.48
J-B5-10	145	Demand	0.0	0.0	277.84	57.47
J-B5-15	145	Demand	7.8	7.8	277.84	57.47
J-C2-60	128	Demand	4.7	4.7	283.99	67.49
J-C3-10	130	Demand	0.0	0.0	283.91	66.59
J-C3-60	135	Demand	12.8	12.8	283.78	64.37
J-D5-15	140	Demand	11.3	11.3	277.03	59.29
J-E2-185	123	Demand	1.3	1.3	285.05	70.11
J-F3-35	130	Demand	0.0	0.0	284.92	67.02
WELL 8	125	Inflow	1,200.0	-1,200.0	297.00	74.42
WELL 7	129	Inflow	1,200.0	-1,200.0	311.40	78.92
WELL 5	130	Demand	0.0	0.0	283.59	66.45
WELL 3	128	Inflow	90.3	-90.3	283.90	67.45
WELL 4	129	Demand	0.0	0.0	280.88	65.71
J-B3-15	140	Demand	0.0	0.0	281.75	61.33
WELL 6	139	Inflow	144.4	-144.4	277.77	60.04
J-C4-45	140	Demand	0.0	0.0	277.32	59.41
J-C4-46	140	Demand	0.0	0.0	277.32	59.41
J-B5-30	140	Demand	5.0	5.0	278.86	60.08
WELL 2	139	Inflow	95.1	-95.1	279.11	60.62
J-D4-50	140	Demand	9.1	9.1	277.00	59.27
J-D2-100	128	Demand	4.4	4.4	285.03	67.94
J-D2-110	128	Demand	7.8	7.8	285.06	67.95
J-B3-50	135	Demand	0.0	0.0	279.90	62.69
J-D2-90	128	Demand	0.0	0.0	285.00	67.93
J-B1-130	128	Demand	3.7	3.7	284.07	67.52
J-B1-45	128	Demand	0.0	0.0	284.02	67.50
J-C2-150	135	Demand	4.1	4.1	283.38	64.20
J-A2-20	90	Demand	8.4	8.4	281.44	82.83
J-A2-35	90	Demand	7.2	7.2	281.41	82.81
J-A2-45	90	Demand	6.6	6.6	281.39	82.81

Scenario: Existing - Average Day
Steady State Analysis
Junction Report

Label	Elevation (ft)	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-A2-55	90	Demand	8.1	8.1	281.34	82.79
J-D3-91	125	Demand	4.7	4.7	284.94	69.20
J-D3-81	128	Demand	4.4	4.4	284.86	67.87
J-D3-82	128	Demand	3.4	3.4	284.86	67.87
J-D4-85	140	Demand	14.7	14.7	277.10	59.32
J-D5-85	140	Demand	6.9	6.9	276.99	59.27
J-F3-11	128	Demand	2.5	2.5	284.89	67.88
J-E3-91	128	Demand	2.5	2.5	284.87	67.87
J-E3-81	125	Demand	2.5	2.5	284.86	69.16
J-E3-86	125	Demand	2.2	2.2	284.84	69.15
J-E3-16	125	Demand	1.3	1.3	284.84	69.15
J-E3-17	125	Demand	3.1	3.1	284.83	69.15
J-E3-71	125	Demand	4.7	4.7	284.86	69.16
J-E3-41	125	Demand	2.5	2.5	284.93	69.19
J-E3-42	125	Demand	3.7	3.7	284.93	69.19
J-F2-55	128	Demand	3.4	3.4	284.91	67.89
J-F2-70	128	Demand	3.7	3.7	284.91	67.89
J-F2-60	128	Demand	3.1	3.1	284.91	67.89
J-F1-5	118	Demand	0.0	0.0	285.09	72.29
J-F1-10	118	Demand	0.0	0.0	285.09	72.29
J-F1-15	118	Demand	14.3	14.3	285.08	72.29
J-F2-75	120	Demand	0.0	0.0	285.08	71.42
J-F2-80	120	Demand	0.0	0.0	285.08	71.42
J-F2-85	120	Demand	14.3	14.3	285.08	71.42
WELL 9	129	Inflow	187.5	-187.5	284.93	67.46

Scenario: Existing - Average Day
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-5	25.00	8	130.0	0.00	0.0	285.00	285.00	0.00	0.00
P-10	25.00	8	130.0	0.00	0.0	279.90	279.90	0.00	0.00
P-15	25.00	8	130.0	0.00	0.0	285.00	285.00	0.00	0.00
P-20	25.00	8	130.0	0.00	0.0	279.90	279.90	0.00	0.00
P-25	25.00	8	130.0	0.00	0.0	285.00	285.00	0.00	0.00
P-30	25.00	8	130.0	0.00	0.0	279.90	279.90	0.00	0.00
P-35	50.00	10	130.0	0.00	0.0	279.90	285.00	0.00	0.00
P-40	25.00	8	130.0	0.00	0.0	285.00	285.00	0.00	0.00
P-45	25.00	8	130.0	0.00	0.0	285.00	285.00	0.00	0.00
P-50	25.00	8	130.0	0.00	0.0	285.00	285.00	0.00	0.00
P-55	25.00	8	130.0	0.00	0.0	285.00	285.00	0.00	0.00
P-60	25.00	8	130.0	0.00	0.0	285.00	285.00	0.00	0.00
P-65	25.00	8	130.0	0.00	0.0	285.00	285.00	0.00	0.00
P-70	50.00	10	130.0	0.06	13.6	285.00	285.00	0.00	0.00
P-75	84.00	12	130.0	0.53	187.5	284.93	284.92	0.01	0.11
P-A1-1	305.00	8	130.0	0.01	-2.1	283.59	283.59	0.00	0.00
P-A1-10	109.00	8	130.0	0.03	-4.0	283.59	283.59	0.00	0.00
P-A1-5	304.00	8	130.0	0.01	-2.1	283.59	283.59	0.00	0.00
P-A2-10	724.00	6	130.0	0.67	-59.2	282.55	282.84	0.29	0.40
P-A2-15	522.00	6	130.0	0.58	51.1	282.55	282.39	0.16	0.30
P-A2-30	690.00	8	130.0	0.38	58.9	281.51	281.44	0.07	0.10
P-A2-50	543.00	8	130.0	0.32	50.5	281.44	281.41	0.04	0.07
P-A2-55	265.00	8	130.0	0.28	43.3	281.41	281.39	0.01	0.05
P-A2-75	250.00	8	130.0	0.00	0.2	281.34	281.34	0.00	0.00
P-A2-80	320.00	8	130.0	0.05	-7.9	281.34	281.35	0.00	0.00
P-A3-1	452.00	6	130.0	0.28	24.3	281.38	281.34	0.03	0.08
P-A3-10	247.00	8	130.0	0.07	-10.2	281.35	281.35	0.00	0.00
P-A3-100	899.00	10	130.0	0.91	222.4	280.66	280.32	0.34	0.38
P-A3-115	674.00	8	130.0	0.29	-44.8	285.04	285.08	0.04	0.06
P-A3-120	399.00	12	130.0	0.04	-14.8	285.08	285.08	0.00	0.00
P-A3-125	562.00	12	130.0	0.02	-5.4	285.08	285.08	0.00	0.00
P-A3-15	256.00	8	130.0	0.08	12.8	281.35	281.34	0.00	0.01
P-A3-20	237.00	8	130.0	0.08	12.8	281.34	281.34	0.00	0.01
P-A3-25	880.00	6	130.0	0.00	-0.4	281.34	281.34	0.00	0.00
P-A3-30	567.00	8	130.0	0.06	9.0	281.35	281.34	0.00	0.00
P-A3-35	110.00	8	130.0	0.23	36.7	281.39	281.35	0.04	0.04
P-A3-40	237.00	8	130.0	0.27	42.0	281.35	281.33	0.01	0.05
P-A3-45	716.00	8	130.0	0.42	-66.1	281.51	281.60	0.09	0.12
P-A3-5	056.00	8	130.0	0.50	78.6	281.55	281.38	0.17	0.16
P-A3-50	683.00	8	130.0	0.01	2.3	281.35	281.35	0.00	0.00
P-A3-55	496.00	8	130.0	0.31	48.7	281.38	281.35	0.03	0.07
P-A3-60	648.00	12	130.0	0.04	12.9	285.12	285.12	0.00	0.00
P-A3-70	471.00	12	130.0	0.91	321.1	281.33	280.88	0.45	0.31
P-A3-75	297.00	10	130.0	1.30	318.2	280.88	280.66	0.22	0.74
P-A3-80	626.00	12	130.0	0.80	-281.5	281.33	281.48	0.15	0.24
P-A3-85	149.00	8	130.0	0.00	0.0	281.34	281.34	0.00	0.00
P-A3-90	759.00	8	130.0	0.00	0.0	281.34	281.34	0.00	0.00
P-A3-95	296.00	6	130.0	0.00	0.0	281.34	281.34	0.00	0.00
P-A4-1	353.00	10	130.0	0.86	209.3	280.32	280.20	0.12	0.34
P-A4-10	897.00	4	130.0	0.76	29.7	280.19	279.48	0.71	0.79
P-A4-15	131.00	8	130.0	0.17	-26.0	279.47	279.48	0.00	0.02

Scenario: Existing - Average Day
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-A4-5	78.00	6	130.0	0.34	29.7	280.20	280.19	0.01	0.11
P-B1-10	810.00	12	130.0	0.00	-1.3	284.07	284.07	0.00	0.00
P-B1-100	372.00	8	130.0	0.06	-8.9	283.59	283.59	0.00	0.00
P-B1-105	476.00	10	130.0	0.00	0.0	283.59	283.59	0.00	0.00
P-B1-110	090.00	10	130.0	0.10	-24.5	283.59	283.60	0.01	0.01
P-B1-115	290.00	10	130.0	0.85	-207.8	283.74	283.83	0.10	0.34
P-B1-120	140.00	12	130.0	0.74	-261.3	283.91	283.94	0.03	0.21
P-B1-125	254.00	8	130.0	0.02	-3.5	283.59	283.59	0.00	0.00
P-B1-130	385.00	6	130.0	0.05	-4.6	283.59	283.59	0.00	0.00
P-B1-135	723.00	6	130.0	0.05	-4.0	283.59	283.59	0.00	0.00
P-B1-140	407.00	6	130.0	0.13	-11.3	284.07	284.07	0.01	0.02
P-B1-145	289.00	8	130.0	0.20	-31.0	284.07	284.07	0.01	0.03
P-B1-15	455.00	6	130.0	0.06	-5.1	284.07	284.07	0.00	0.00
P-B1-150	344.00	12	130.0	0.77	270.4	284.02	283.94	0.08	0.22
P-B1-155	978.00	8	130.0	1.16	181.6	283.60	282.84	0.76	0.78
P-B1-20	164.00	6	130.0	0.84	-74.0	284.06	284.16	0.10	0.60
P-B1-25	546.00	8	130.0	0.03	4.1	284.16	284.16	0.00	0.00
P-B1-30	144.00	12	130.0	0.29	103.8	284.06	284.02	0.04	0.04
P-B1-40	480.00	12	130.0	0.00	0.0	284.02	284.02	0.00	0.00
P-B1-45	157.00	10	130.0	1.07	-261.3	283.83	283.91	0.08	0.51
P-B1-5	435.00	12	130.0	0.08	-29.8	284.06	284.07	0.00	0.00
P-B1-50	514.00	8	130.0	0.03	4.4	283.94	283.94	0.00	0.00
P-B1-55	276.00	8	130.0	0.03	4.4	283.94	283.94	0.00	0.00
P-B1-60	718.00	8	130.0	0.31	48.8	283.83	283.78	0.05	0.07
P-B1-65	294.00	8	130.0	0.28	43.5	283.78	283.77	0.02	0.06
P-B1-70	716.00	8	130.0	0.25	39.1	283.77	283.74	0.03	0.05
P-B1-75	312.00	10	130.0	0.99	243.2	283.74	283.60	0.14	0.45
P-B1-80	238.00	10	130.0	0.11	25.8	283.60	283.59	0.00	0.01
P-B1-85	339.00	8	130.0	0.03	5.3	283.59	283.59	0.00	0.00
P-B1-90	319.00	8	130.0	0.13	20.5	283.59	283.59	0.00	0.01
P-B1-95	268.00	8	130.0	0.05	8.1	283.59	283.59	0.00	0.00
P-B2-1	301.00	8	130.0	0.99	-155.8	282.39	282.57	0.18	0.58
P-B2-10	346.00	8	130.0	0.74	-116.1	282.72	282.84	0.12	0.34
P-B2-100	330.00	10	130.0	0.90	221.0	281.98	281.48	0.50	0.38
P-B2-105	325.00	6	130.0	0.65	57.0	282.20	281.72	0.49	0.37
P-B2-110	309.00	6	130.0	0.80	70.5	282.46	281.75	0.71	0.55
P-B2-15	419.00	8	130.0	0.04	5.6	282.57	282.57	0.00	0.00
P-B2-20	298.00	8	130.0	0.33	-52.5	282.72	282.74	0.02	0.08
P-B2-25	668.00	8	130.0	0.37	57.3	282.74	282.68	0.06	0.09
P-B2-30	400.00	8	130.0	0.04	6.6	282.68	282.68	0.00	0.00
P-B2-40	193.00	8	130.0	0.60	93.9	281.60	281.55	0.04	0.23
P-B2-45	156.00	6	130.0	1.82	-160.0	281.60	281.98	0.39	2.49
P-B2-5	234.00	8	130.0	1.05	-164.2	282.57	282.72	0.15	0.64
P-B2-50	730.00	10	130.0	0.80	-195.3	281.98	282.20	0.22	0.30
P-B2-55	588.00	10	130.0	0.99	-241.9	282.20	282.46	0.26	0.44
P-B2-60	268.00	10	130.0	1.32	-324.2	282.46	282.67	0.21	0.77
P-B2-65	361.00	10	130.0	0.78	190.2	283.06	282.67	0.39	0.28
P-B2-70	304.00	10	130.0	1.27	310.1	282.67	281.75	0.92	0.70
P-B2-75	818.00	8	130.0	0.79	-124.4	282.74	283.06	0.31	0.38
P-B2-80	324.00	4	130.0	1.03	40.4	282.66	282.20	0.45	1.40
P-B2-85	356.00	8	130.0	0.31	48.8	282.68	282.66	0.02	0.07

Scenario: Existing - Average Day
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-B2-90	330.00	10	130.0	1.29	314.6	284.02	283.06	0.96	0.72
P-B2-95	322.00	10	130.0	0.81	198.8	282.39	281.98	0.41	0.31
P-B3-1	327.00	10	130.0	0.25	-60.5	281.48	281.50	0.01	0.03
P-B3-10	046.00	8	130.0	0.07	10.8	281.72	281.71	0.00	0.00
P-B3-20	255.00	10	130.0	0.05	12.7	281.75	281.75	0.00	0.00
P-B3-25	305.00	10	130.0	1.13	276.3	281.75	281.01	0.74	0.57
P-B3-3	375.00	6	130.0	0.83	73.3	281.72	281.50	0.22	0.59
P-B3-30	803.00	10	130.0	1.82	444.3	281.01	279.91	1.10	1.37
P-B3-40	198.00	10	130.0	0.23	-55.7	279.90	279.90	0.01	0.03
P-B3-45	558.00	10	130.0	0.37	91.2	279.90	279.86	0.04	0.07
P-B3-5	359.00	6	130.0	0.31	27.1	281.75	281.72	0.03	0.09
P-B3-50	075.00	6	130.0	0.64	56.1	281.75	281.01	0.74	0.36
P-B3-55	241.00	10	130.0	0.11	27.1	281.75	281.75	0.00	0.01
P-B3-60	136.00	6	130.0	0.63	-55.7	279.90	280.66	0.75	0.35
P-B3-70	168.00	10	130.0	0.22	53.9	279.91	279.90	0.00	0.03
P-B3-75	173.00	10	130.0	0.22	53.9	279.90	279.90	0.00	0.03
P-B4-1	345.00	8	130.0	0.39	-61.2	279.48	279.51	0.04	0.10
P-B4-10	310.00	10	130.0	0.40	98.0	278.00	277.89	0.11	0.08
P-B4-15	352.00	6	130.0	1.57	-138.6	277.89	278.56	0.67	1.91
P-B4-20	160.00	8	130.0	0.58	91.5	278.56	278.53	0.03	0.22
P-B4-25	190.00	8	130.0	0.35	-54.2	278.51	278.53	0.02	0.08
P-B4-250	974.00	10	130.0	0.88	214.3	279.86	279.51	0.35	0.36
P-B4-30	546.00	8	130.0	0.34	53.9	278.51	278.47	0.04	0.08
P-B4-35	318.00	10	130.0	1.15	280.8	278.00	277.81	0.19	0.59
P-B4-40	320.00	8	130.0	0.93	145.5	277.89	277.72	0.16	0.51
P-B4-45	832.00	10	130.0	1.57	383.2	279.91	278.00	1.91	1.04
P-B4-50	422.00	8	130.0	0.00	-0.4	279.48	279.48	0.00	0.00
P-B4-55	578.00	6	130.0	0.06	-5.7	278.51	278.51	0.00	0.01
P-B4-60	772.00	10	130.0	0.63	153.4	280.20	279.86	0.34	0.19
P-B4-65	034.00	4	130.0	0.83	-32.4	278.51	279.48	0.96	0.93
P-B4-70	180.00	8	130.0	0.10	15.0	278.47	278.47	0.00	0.01
P-B5-1	404.00	8	130.0	0.12	18.1	278.48	278.47	0.00	0.01
P-B5-10	712.00	10	130.0	0.09	21.5	278.47	278.45	0.02	0.01
P-B5-15	831.00	10	130.0	0.34	83.4	277.89	277.84	0.05	0.06
P-B5-20	165.00	10	130.0	0.00	0.0	277.84	277.84	0.00	0.00
P-B5-25	655.00	6	130.0	0.86	75.6	277.84	277.43	0.41	0.62
P-B5-30	011.00	6	130.0	0.30	-26.9	283.69	283.78	0.09	0.09
P-B5-40	109.00	6	130.0	13.62	-1,200.0	285.67	297.00	11.33	103.96
P-B5-45	199.00	6	130.0	13.62	-1,200.0	290.71	311.40	20.69	103.96
P-B5-5	331.00	8	130.0	0.23	35.4	278.53	278.48	0.05	0.04
P-B5-50	180.00	6	130.0	0.00	0.0	283.59	283.59	0.00	0.00
P-B5-55	166.00	6	130.0	1.02	-90.3	283.75	283.90	0.14	0.86
P-B5-60	193.00	6	130.0	0.00	0.0	280.88	280.88	0.00	0.00
P-B5-65	370.00	8	130.0	0.89	140.0	279.51	278.86	0.66	0.48
P-B5-70	245.00	8	130.0	1.47	230.1	278.86	278.56	0.29	1.20
P-B5-75	270.00	6	130.0	1.08	-95.1	278.86	279.11	0.26	0.95
P-C1-1	421.00	6	130.0	0.29	-25.2	284.09	284.12	0.03	0.08
P-C1-10	244.00	6	130.0	0.05	-4.8	284.07	284.07	0.00	0.00
P-C1-100	488.00	6	130.0	0.85	75.2	285.09	284.79	0.30	0.62
P-C1-105	251.00	6	130.0	3.22	-283.9	285.09	286.90	1.81	7.20
P-C1-110	491.00	8	130.0	1.57	-246.5	286.22	286.90	0.67	1.37

Scenario: Existing - Average Day
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-C1-115	316.00	8	130.0	1.54	-241.5	285.81	286.22	0.42	1.31
P-C1-120	188.00	10	130.0	2.96	-723.9	285.17	285.81	0.64	3.39
P-C1-125	390.00	8	130.0	3.12	-488.7	285.81	287.70	1.89	4.85
P-C1-130	607.00	8	130.0	3.16	-494.6	287.70	290.71	3.01	4.96
P-C1-135	404.00	8	130.0	4.47	-700.4	286.90	290.71	3.82	9.45
P-C1-140	522.00	6	130.0	0.77	67.7	284.79	284.52	0.26	0.51
P-C1-145	218.00	12	130.0	1.68	-593.1	284.96	285.17	0.21	0.96
P-C1-15	428.00	6	130.0	0.34	30.2	284.12	284.07	0.05	0.11
P-C1-150	659.00	12	130.0	1.40	-493.9	284.02	284.47	0.45	0.69
P-C1-155	068.00	8	130.0	0.79	-123.1	284.26	284.66	0.40	0.38
P-C1-20	70.00	6	130.0	0.65	-56.9	284.12	284.15	0.03	0.37
P-C1-25	270.00	6	130.0	0.67	-59.4	284.15	284.26	0.11	0.40
P-C1-30	216.00	8	130.0	0.59	93.1	284.26	284.21	0.05	0.22
P-C1-35	247.00	8	130.0	0.53	-83.4	284.16	284.21	0.05	0.18
P-C1-40	556.00	8	130.0	0.03	4.7	284.21	284.21	0.00	0.00
P-C1-45	048.00	6	130.0	0.50	-44.2	284.26	284.50	0.24	0.23
P-C1-5	254.00	6	130.0	0.23	-20.2	284.07	284.09	0.01	0.05
P-C1-50	518.00	6	130.0	0.63	-55.4	284.50	284.68	0.18	0.35
P-C1-55	274.00	8	130.0	0.31	-49.3	284.66	284.68	0.02	0.07
P-C1-60	342.00	6	130.0	0.89	-78.4	284.66	284.89	0.23	0.67
P-C1-65	334.00	12	130.0	1.44	-508.4	284.72	284.96	0.24	0.72
P-C1-70	424.00	8	130.0	0.53	-82.5	284.89	284.96	0.08	0.18
P-C1-75	140.00	8	130.0	0.70	-110.0	284.68	284.72	0.04	0.31
P-C1-80	538.00	12	130.0	1.13	398.4	284.72	284.47	0.25	0.46
P-C1-85	212.00	8	130.0	0.61	-95.5	284.47	284.52	0.05	0.24
P-C1-90	479.00	8	130.0	0.23	-35.6	284.52	284.54	0.02	0.04
P-C1-95	519.00	6	130.0	1.14	-100.6	284.54	285.09	0.55	1.05
P-C2-10	513.00	6	130.0	0.38	33.7	284.39	284.32	0.07	0.14
P-C2-100	311.00	6	130.0	0.29	-26.0	284.12	284.15	0.03	0.09
P-C2-105	262.00	6	130.0	0.84	-73.6	284.15	284.30	0.15	0.59
P-C2-110	245.00	6	130.0	0.89	-78.3	284.30	284.46	0.16	0.66
P-C2-115	233.00	10	130.0	0.56	-136.6	283.96	283.99	0.04	0.15
P-C2-120	185.00	8	130.0	0.61	-96.2	284.45	284.49	0.04	0.24
P-C2-125	290.00	6	130.0	1.71	150.6	285.69	285.04	0.65	2.23
P-C2-130	285.00	6	130.0	1.22	107.8	285.04	284.70	0.34	1.20
P-C2-135	205.00	6	130.0	1.19	105.3	284.70	284.46	0.24	1.15
P-C2-140	257.00	6	130.0	0.27	23.6	284.46	284.45	0.02	0.07
P-C2-145	499.00	8	130.0	0.27	42.8	285.04	285.01	0.03	0.05
P-C2-15	266.00	8	130.0	0.91	142.2	284.32	284.19	0.13	0.49
P-C2-150	509.00	8	130.0	0.23	35.4	285.01	285.00	0.02	0.04
P-C2-155	375.00	8	130.0	0.03	-3.9	285.01	285.01	0.00	0.00
P-C2-160	258.00	8	130.0	0.32	50.7	285.01	285.00	0.02	0.07
P-C2-165	527.00	6	130.0	1.74	-153.1	285.69	286.90	1.21	2.29
P-C2-170	605.00	6	130.0	1.10	-97.1	284.49	285.09	0.60	0.99
P-C2-175	518.00	8	130.0	0.04	-5.6	284.49	284.49	0.00	0.00
P-C2-180	608.00	8	130.0	0.35	-54.3	284.49	284.54	0.05	0.08
P-C2-185	708.00	6	130.0	0.18	16.0	284.12	284.10	0.02	0.03
P-C2-190	808.00	6	130.0	0.20	-17.7	283.98	284.02	0.03	0.04
P-C2-195	396.00	8	130.0	0.38	-60.3	283.98	284.02	0.04	0.10
P-C2-20	265.00	8	130.0	0.03	5.0	284.19	284.19	0.00	0.00
P-C2-200	670.00	6	130.0	0.50	-43.9	283.99	284.15	0.15	0.23

Scenario: Existing - Average Day
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Hazen-Williams C	Velocity (ft/s)	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-C2-205	292.00	8	130.0	0.03	4.1	283.38	283.38	0.00	0.00
P-C2-210	111.00	8	130.0	0.76	-119.8	284.41	284.45	0.04	0.36
P-C2-215	263.00	8	130.0	0.73	114.5	284.41	284.32	0.09	0.33
P-C2-220	522.00	10	130.0	0.16	-39.3	283.68	283.69	0.01	0.02
P-C2-225	563.00	8	130.0	0.26	41.3	283.94	283.91	0.03	0.05
P-C2-230	494.00	10	130.0	1.87	-456.8	282.67	283.38	0.71	1.44
P-C2-235	140.00	10	130.0	1.92	-469.7	283.38	283.60	0.21	1.52
P-C2-25	263.00	8	130.0	0.86	135.0	284.19	284.07	0.12	0.45
P-C2-30	267.00	8	130.0	0.03	4.7	284.07	284.07	0.00	0.00
P-C2-35	274.00	8	130.0	0.82	128.1	284.07	283.96	0.11	0.41
P-C2-40	396.00	10	130.0	1.07	263.1	283.96	283.75	0.21	0.52
P-C2-45	176.00	10	130.0	1.44	352.2	283.75	283.60	0.16	0.89
P-C2-5	557.00	6	130.0	0.44	38.7	284.49	284.39	0.10	0.18
P-C2-50	664.00	10	130.0	0.51	-124.0	283.60	283.68	0.09	0.13
P-C2-55	142.00	8	130.0	0.60	-93.5	283.68	283.94	0.26	0.23
P-C2-60	598.00	8	130.0	0.44	-68.3	283.94	284.02	0.08	0.13
P-C2-65	358.00	6	130.0	0.05	4.7	283.99	283.99	0.00	0.00
P-C2-70	245.00	8	130.0	0.51	-80.2	283.94	283.98	0.04	0.17
P-C2-75	295.00	6	130.0	0.10	-8.8	283.98	283.99	0.00	0.01
P-C2-80	386.00	6	130.0	0.14	-12.6	283.99	283.99	0.01	0.02
P-C2-85	251.00	10	130.0	0.47	-114.0	283.99	284.02	0.03	0.11
P-C2-90	286.00	10	130.0	0.73	-179.3	284.02	284.10	0.07	0.26
P-C2-95	756.00	10	130.0	0.69	-169.6	284.10	284.27	0.17	0.23
P-C3-1	053.00	8	130.0	0.53	-83.4	283.69	283.88	0.19	0.18
P-C3-10	313.00	8	130.0	0.47	-74.3	283.91	283.96	0.05	0.15
P-C3-15	490.00	8	130.0	0.22	-34.7	283.96	283.98	0.02	0.04
P-C3-20	398.00	6	130.0	0.09	7.5	283.88	283.88	0.00	0.01
P-C3-25	598.00	6	130.0	0.00	0.0	283.88	283.88	0.00	0.00
P-C3-30	398.00	6	130.0	0.06	-5.0	283.88	283.88	0.00	0.00
P-C3-35	618.00	8	130.0	0.06	9.0	283.88	283.88	0.00	0.00
P-C3-40	243.00	8	130.0	0.13	20.0	283.88	283.88	0.00	0.01
P-C3-45	668.00	6	130.0	1.46	128.6	283.78	281.01	2.77	1.66
P-C3-5	88.00	8	130.0	0.74	-115.6	283.88	283.91	0.03	0.34
P-C3-50	423.00	10	130.0	0.01	1.6	283.69	283.69	0.00	0.00
P-C4-1	304.00	6	130.0	0.26	22.7	277.81	277.72	0.09	0.07
P-C4-10	321.00	8	130.0	0.72	113.2	277.53	277.42	0.10	0.32
P-C4-15	331.00	8	130.0	0.79	124.1	277.42	277.30	0.13	0.38
P-C4-20	333.00	8	130.0	0.21	33.4	277.30	277.29	0.01	0.03
P-C4-230	304.00	6	130.0	0.28	24.9	277.53	277.42	0.10	0.08
P-C4-25	278.00	8	130.0	0.18	-28.5	277.29	277.32	0.03	0.03
P-C4-30	693.00	10	130.0	0.80	-196.5	277.32	277.53	0.21	0.30
P-C4-35	194.00	12	130.0	0.08	-26.5	277.32	277.32	0.00	0.00
P-C4-45	417.00	6	130.0	0.40	35.1	277.32	277.26	0.06	0.15
P-C4-5	333.00	8	130.0	1.00	157.3	277.72	277.53	0.20	0.59
P-C4-50	307.00	10	130.0	0.69	169.6	277.32	277.25	0.07	0.23
P-C4-55	286.00	12	130.0	0.05	16.5	277.32	277.32	0.00	0.00
P-C4-60	662.00	10	130.0	0.97	237.7	277.81	277.53	0.29	0.43
P-C4-65	352.00	10	130.0	0.65	160.2	277.25	277.17	0.07	0.21
P-C4-75	220.00	6	130.0	1.64	-144.4	277.32	277.77	0.45	2.06
P-C4-80	449.00	8	130.0	0.45	-71.0	277.26	277.32	0.06	0.14
P-C4-85	188.00	12	130.0	0.13	46.9	277.32	277.32	0.00	0.01