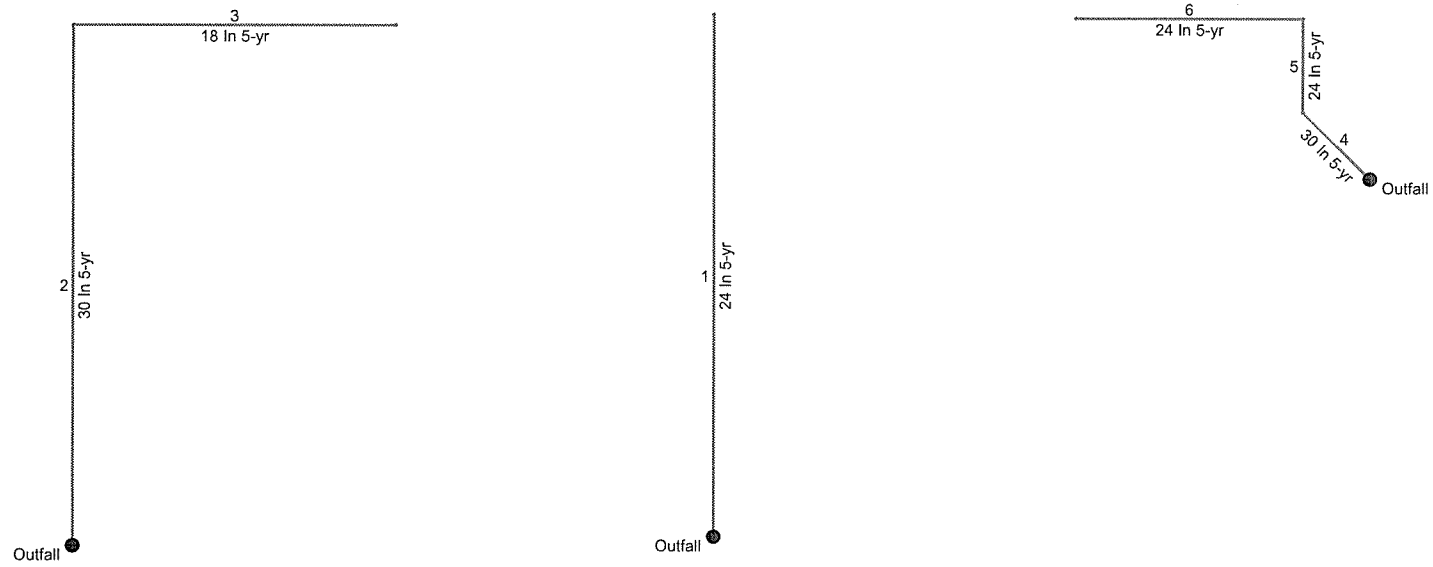


Hydraflow Storm Sewers Extension for AutoCAD® Civil 3D® 2009 Plan



Project File: Fox Ridge Plaza Prelim Sizes.stm

Number of lines: 6

Date: 02-05-2014

Inlet Report

Line No	Inlet ID	Q = CIA (cfs)	Q carry (cfs)	Q capt (cfs)	Q byp (cfs)	Junc type	Curb Inlet		Grate Inlet			Gutter						Inlet			Byp line No	
							Ht (in)	L (ft)	area (sqft)	L (ft)	W (ft)	So (ft/ft)	W (ft)	Sw (ft/ft)	Sx (ft/ft)	n	Depth (ft)	Spread (ft)	Depth (ft)	Spread (ft)		Depr (in)
1		12.33	0.00	12.33	0.00	Curb	6.0	5.00	0.00	0.00	0.00	Sag	2.00	0.031	0.031	0.000	0.73	23.50	0.90	23.50	2.0	Off
2		15.85	0.00	15.85	0.00	Curb	6.0	5.00	0.00	0.00	0.00	Sag	2.00	0.031	0.031	0.000	0.95	30.64	1.12	30.64	2.0	Off
3		5.28	0.00	5.28	0.00	Curb	6.0	5.00	0.00	0.00	0.00	Sag	2.00	0.031	0.031	0.000	0.41	13.32	0.58	13.32	2.0	Off
4		0.00	0.00	0.00	0.00	MH	6.0	5.00	0.00	0.00	0.00	Sag	2.00	0.031	0.031	0.000	0.00	0.00	0.00	0.00	0.0	Off
5		7.04	0.00	7.04	0.00	Curb	6.0	5.00	0.00	0.00	0.00	Sag	2.00	0.031	0.031	0.000	0.50	16.15	0.67	16.15	2.0	Off
6		15.26	0.00	15.26	0.00	Curb	6.0	5.00	0.00	0.00	0.00	Sag	2.00	0.031	0.031	0.000	1.54	49.71	1.54	49.71	0.0	Off

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NOTES: Inlet N-Values = 0.016 ; Intensity = 52.62 / (Inlet time + 11.20) ^ 0.75; Return period = 5 Yrs. ; * Indicates Known Q added. All curb inlets are throat.

Storm Sewer Tabulation

Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr (ac)	Total (ac)		Incr	Total	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	1400.000	2.10	2.10	0.90	1.89	1.89	5.0	5.0	6.5	12.33	14.30	4.55	24	0.40	1344.00	1349.60	1346.24	1351.02	1348.00	1355.00	24 In 5-yr
2	End	1400.000	2.70	3.60	0.90	2.43	3.24	5.0	9.7	5.4	17.44	25.94	4.89	30	0.40	1344.00	1349.60	1346.40	1351.00	1348.00	1355.00	30 In 5-yr
3	2	850.000	0.90	0.90	0.90	0.81	0.81	5.0	5.0	6.5	5.28	6.64	3.94	18	0.40	1349.70	1353.10	1351.00	1354.03	1355.00	1355.00	18 In 5-yr
4	End	250.000	0.00	3.80	0.90	0.00	3.42	5.0	7.7	5.8	19.85	25.94	4.19	30	0.40	1344.00	1345.00	1346.68	1347.20	1348.00	1355.00	30 In 5-yr
5	4	250.000	1.20	3.80	0.90	1.08	3.42	5.0	7.1	6.0	20.40	14.30	7.03	24	0.40	1345.85	1346.85	1347.45	1349.77	1355.00	1355.00	24 In 5-yr
6	5	600.000	2.60	2.60	0.90	2.34	2.34	5.0	5.0	6.5	15.26	14.30	4.86	24	0.40	1346.20	1348.60	1350.75	1353.48	1355.00	1355.00	24 In 5-yr

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NOTES: Intensity = 52.62 / (Inlet time + 11.20) ^ 0.75; Return period = 5 Yrs. ; c = cir e = ellip b = box

Storm Sewer Summary Report

Line No.	Line ID	Flow rate (cfs)	Line size (in)	Line shape	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line slope (%)	HGL down (ft)	HGL up (ft)	Minor loss (ft)	HGL Junct (ft)	Dns line No.	Junction Type
1	24 In 5-yr	12.33	24	Cir	1400.000	1344.00	1349.60	0.400	1346.24	1351.02	0.42	1351.43	End	Curb-
2	30 In 5-yr	17.44	30	Cir	1400.000	1344.00	1349.60	0.400	1346.40	1351.00	0.89	1351.00	End	Curb-
3	18 In 5-yr	5.28	18	Cir	850.000	1349.70	1353.10	0.400	1351.00	1354.03	0.33	1354.36	2	Curb-
4	30 In 5-yr	19.85	30	Cir	250.000	1344.00	1345.00	0.400	1346.68	1347.20	0.22	1347.42	End	Manhole
5	24 In 5-yr	20.40	24	Cir	250.000	1345.85	1346.85	0.400	1347.45*	1349.77*	0.98	1350.75	4	Curb-
6	24 In 5-yr	15.26	24	Cir	600.000	1346.20	1348.60	0.400	1350.75*	1353.48*	0.37	1353.85	5	Curb-

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Run Date: 02-05-2014

NOTES: Return period = 5 Yrs. ; *Surcharged (HGL above crown).

Storm Sewer Inventory Report

Line No.	Alignment				Flow Data				Physical Data								Line ID
	Dnstr line No.	Line length (ft)	Defl angle (deg)	Junc type	Known Q (cfs)	Drng area (ac)	Runoff coeff (C)	Inlet time (min)	Invert El Dn (ft)	Line slope (%)	Invert El Up (ft)	Line size (in)	Line shape	N value (n)	J-loss coeff (K)	Inlet/ Rim El (ft)	
1	End	1400.000	-90.000	Curb	0.00	2.10	0.90	5.0	1344.00	0.40	1349.60	24	Cir	0.013	1.00	1355.00	24 In 5-yr
2	End	1400.000	-90.000	Curb	0.00	2.70	0.90	5.0	1344.00	0.40	1349.60	30	Cir	0.013	1.50	1355.00	30 In 5-yr
3	2	850.000	90.000	Curb	0.00	0.90	0.90	5.0	1349.70	0.40	1353.10	18	Cir	0.013	1.00	1355.00	18 In 5-yr
4	End	250.000	-135.000	MH	0.00	0.00	0.90	5.0	1344.00	0.40	1345.00	30	Cir	0.013	0.75	1355.00	30 In 5-yr
5	4	250.000	45.000	Curb	0.00	1.20	0.90	5.0	1345.85	0.40	1346.85	24	Cir	0.013	1.50	1355.00	24 In 5-yr
6	5	600.000	-90.000	Curb	0.00	2.60	0.90	5.0	1346.20	0.40	1348.60	24	Cir	0.013	1.00	1355.00	24 In 5-yr
Project File: Fox Ridge Plaza Prelim Sizes.stm												Number of lines: 6				Date: 02-05-2014	