

Structure Report

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Struct No.	Structure ID	Junction Type	Rim Elev (ft)	Structure			Line Out			Line In		
				Shape	Length (ft)	Width (ft)	Size (in)	Shape	Invert (ft)	Size (in)	Shape	Invert (ft)
1	02	None	567.62	n/a	n/a	n/a	18	Cir	560.97	15	Cir	563.29
2	2.1	None	576.60	n/a	n/a	n/a	15	Cir	568.77	15	Cir	568.87
3	2.2	None	575.69	n/a	n/a	n/a	15	Cir	569.68			
4	1.1	None	575.53	n/a	n/a	n/a	15	Cir	564.86	15	Cir	566.43
5	1.2	None	575.56	n/a	n/a	n/a	15	Cir	566.80	15	Cir	565.50
6	1.3	None	573.59	n/a	n/a	n/a	15	Cir	566.02	15	Cir	566.22
7	TD CON.	None	568.55	n/a	n/a	n/a	15	Cir	567.03	6	Cir	567.03
8	1.4	None	572.84	n/a	n/a	n/a	15	Cir	568.12	12	Cir	567.30
9	1.5	None	573.67	n/a	n/a	n/a	12	Cir	569.20			
10	3.0	None	574.02	n/a	n/a	n/a	6	Cir	572.48			

Project File: Hydraulics.stm Number of Structures: 10 Run Date: 5/16/2023

Storm Sewer Summary Report

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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	02-03	11.45	18	Cir	110.0	559.87	560.97	1.000	561.37	562.26	n/a	562.26		End
2	2.1-02	3.40	15	Cir	274.2	563.29	568.77	1.998	563.77	569.51	0.07	569.51	1	None
3	2.2-2.1	3.40	15	Cir	81.0	568.87	569.68	1.000	569.51	570.42	0.31	570.42	2	None
4	1.1-02	6.53	15	Cir	157.0	563.29	564.86	1.000	564.18	565.89	0.32	565.89	1	None
5	1.2-1.1	6.53	15	Cir	18.6	566.43	566.80	1.991	567.13	567.83	0.36	567.83	4	None
6	1.3-1.2	6.53	15	Cir	51.9	565.50	566.02	1.003	567.83	568.21	0.14	568.34	5	None
7	TD-1.3	3.13	15	Cir	81.0	566.22	567.03	1.000	568.34	568.45	0.10	568.58	6	None
8	1.4-TD	3.02	15	Cir	108.8	567.03	568.12	1.002	568.58	568.82	n/a	568.82	7	None
9	1.5-1.4	1.50	12	Cir	68.5	568.32	569.20	1.285	568.82	569.72	n/a	569.72	8	None
10	3.0-TD	0.11	6	Cir	59.0	567.30	572.48	8.780	568.58	572.64	n/a	572.64	7	None

Project File: Hydraulics.stm Number of lines: 10 Run Date: 5/16/2023

NOTES: * Known Qs only ; * Surcharged (HGL above crown) ; j - Line contains hyd. jump.

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Line No.	Capac Full (cfs)	Flow Rate (cfs)
1	12.41	11.45
2	10.79	3.40
3	7.63	3.40
4	7.63	6.53
5	10.77	6.53
6	7.64	6.53
7	7.63	3.13
8	7.64	3.02
9	4.77	1.50
10	1.96	0.11

Project File: Hydraulics.stm Number of lines: 10 Date: 5/16/2023

NOTES: ** Critical depth

Hydraulic Grade Line Computations

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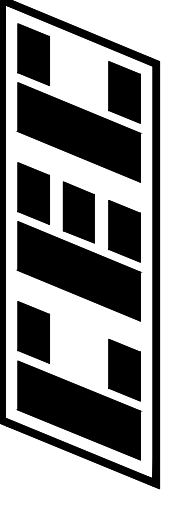
Line	Size (in)	Q (cfs)	Downstream							Len (ft)	Upstream							Check Ave SF (%)	Energy loss (ft)	JL Coeff (K)	Minor loss (ft)		
			Invert elev (ft)	HGL elev (ft)	Depth (ft)	Area (sqft)	Vel (ft/s)	Vel head (ft)	EGL elev (ft)		Sf (%)	Invert elev (ft)	HGL elev (ft)	Depth (ft)	Area (sqft)	Vel (ft/s)	Vel head (ft)					EGL elev (ft)	Sf (%)
1	18	11.45	559.87	561.37	1.50	1.62	6.48	0.65	562.02	0.852	110.0	560.97	562.26	1.29**	1.62	7.08	0.78	563.04	0.788	0.820	n/a	0.74	0.58
2	15	3.40	563.29	563.77	0.48*	0.44	7.78	0.31	564.08	0.000	274.2	568.77	569.51	0.74**	0.76	4.47	0.31	569.82	0.000	0.000	n/a	0.22	0.07
3	15	3.40	568.87	569.51	0.64	0.64	5.34	0.31	569.82	0.000	81.0	569.68	570.42	0.74**	0.76	4.47	0.31	570.73	0.000	0.000	n/a	1.00	0.31
4	15	6.53	563.29	564.18	0.89*	0.93	6.99	0.57	564.75	0.000	157.0	564.86	565.89	1.03**	1.08	6.04	0.57	566.46	0.000	0.000	n/a	0.57	0.32
5	15	6.53	566.43	567.13	0.70*	0.71	9.19	0.57	567.70	0.000	18.6	566.80	567.83	1.03**	1.08	6.04	0.57	568.40	0.000	0.000	n/a	0.63	0.36
6	15	6.53	565.50	567.83	1.25	1.23	5.32	0.44	568.27	0.732	51.9	566.02	568.21	1.25	1.23	5.32	0.44	568.65	0.732	0.732	0.380	0.31	0.14
7	15	3.13	566.22	568.34	1.25	1.23	2.55	0.10	568.45	0.168	81.0	567.03	568.48	1.25	1.23	2.55	0.10	568.58	0.168	0.168	0.136	1.00	0.10
8	15	3.02	567.03	568.58	1.25	0.71	2.46	0.09	568.68	0.157	108.8	568.12	568.82	0.70**	0.71	4.28	0.29	569.10	0.434	0.295	n/a	0.96	n/a
9	12	1.50	568.32	568.82	0.50	0.39	3.84	0.21	569.03	0.000	68.5	569.20	569.72	0.52**	0.41	3.65	0.21	569.93	0.000	0.000	n/a	1.00	n/a
10	6	0.11	567.30	568.58	0.50	0.06	0.56	0.00	568.59	0.028	59.0	572.48	572.64	0.16**	0.06	1.96	0.06	572.70	0.510	0.269	n/a	1.00	0.06

Project File: Hydraulics.stm Number of lines: 10 Run Date: 5/16/2023

Notes: * depth assumed; ** Critical depth; j-Line contains hyd. jump ; c = cir e = ellip b = box

STL WHOLESAL
CONSTRUCTION PLANS
PROFILES

A TRACT OF LAND BEING ADJUSTED LOT 14 OF LONESTAR INDUSTRIAL PARK PLAT ONE AS RECORDED ON PLAT BOOK 48, PAGE 315, TOWNSHIP 47 NORTH, RANGE 2 EAST, CITY OF O'FALLON, ST. CHARLES COUNTY, MISSOURI



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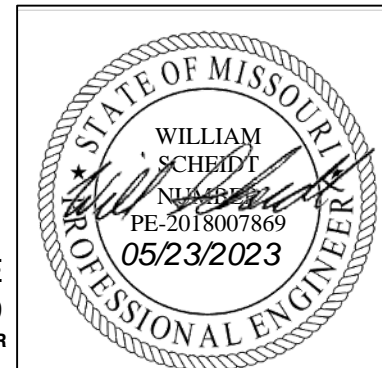
*** 2023/05/17 ***

DRAWN BY:	WTS
CHECKED BY:	KAS
APPROVED BY:	KAS
PROJECT NO:	320-910001

Owner:
Pinkerton Properties LLC
801 Texas Court
O'Fallon MO 63366
City of O'Fallon Site Plan

P+Z No: 22-012944
Approval Date:
MARCH 2, 2023
City No. 23-003172

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