Structure Report

Struct No.	Structure ID	Junction Type	Rim Elev (ft)	Structure Shape	Structure Length (ft)	Structure Width (ft)	Line Out Size (in)	Line Out Shape	Line Out Invert (ft)	Line In Size (in)	Line In Shape	Line In Invert (ft)
1	02	None	567.62	n/a	n/a	n/a	18	Cir	560.97	15 15	Cir Cir	563.29 563.29
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	15 6	Cir Cir	567.03 567.30
8	1.4	None	572.84	n/a	n/a	n/a	15	Cir	568.12	12	Cir	568.32
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 Sewers v2022.00

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	02-03	11.45	18	Cir	110.0	559.87	560.97	1.000	561.37	562.26	n/a	562.26 j	End	None
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*	568.48*	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 j	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 j	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.

Storm Sewers v2022.00

MyReport

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

Storm Sewers

Hydraulic Grade Line Computations

Line	Size (in)	Q (cfs)	Downstream Invert elev (ft)	Downstream HGL elev (ft)	Downstream Depth (ft)	Downstream Area (sqft)	Downstream Vel (ft/s)	Downstream Vel head (ft)	Downstream EGL elev (ft)	Downstream Sf (%)	Len (ft)	Upstream Invert elev (ft)	Upstream HGL elev (ft)	Upstream Depth (ft)	Upstream Area (sqft)	Upstream Vel (ft/s)	Upstream Vel head (ft)	Upstream EGL elev (ft)	Upstream Sf (%)	Check Ave Sf (%)	Check Enrgy loss (ft)	JL coeff (K)	Minor loss (ft)
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 j	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 j	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 j	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

Storm Sewers v2022.00

STL WHOLESALE
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

Civil & Environmental Consultants, Inc.
3000 Little Hills Expressway · Suite 102 · St. Charles, MO 63301
314-656-4566 · 866-250-3679
www.ceiinc.com

DRAWN BY:	CHECKED BY:	APPROVED BY:	PROJECT NO:
WTS	KAS	KAS	320-510001

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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WILLIAM SCHEIDT, PE
2018007869
PROFESSIONAL CIVIL ENGINEER

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WILLIAM SCHEIDT
NUMBER
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05/23/2023
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*** 2023/05/17 ***