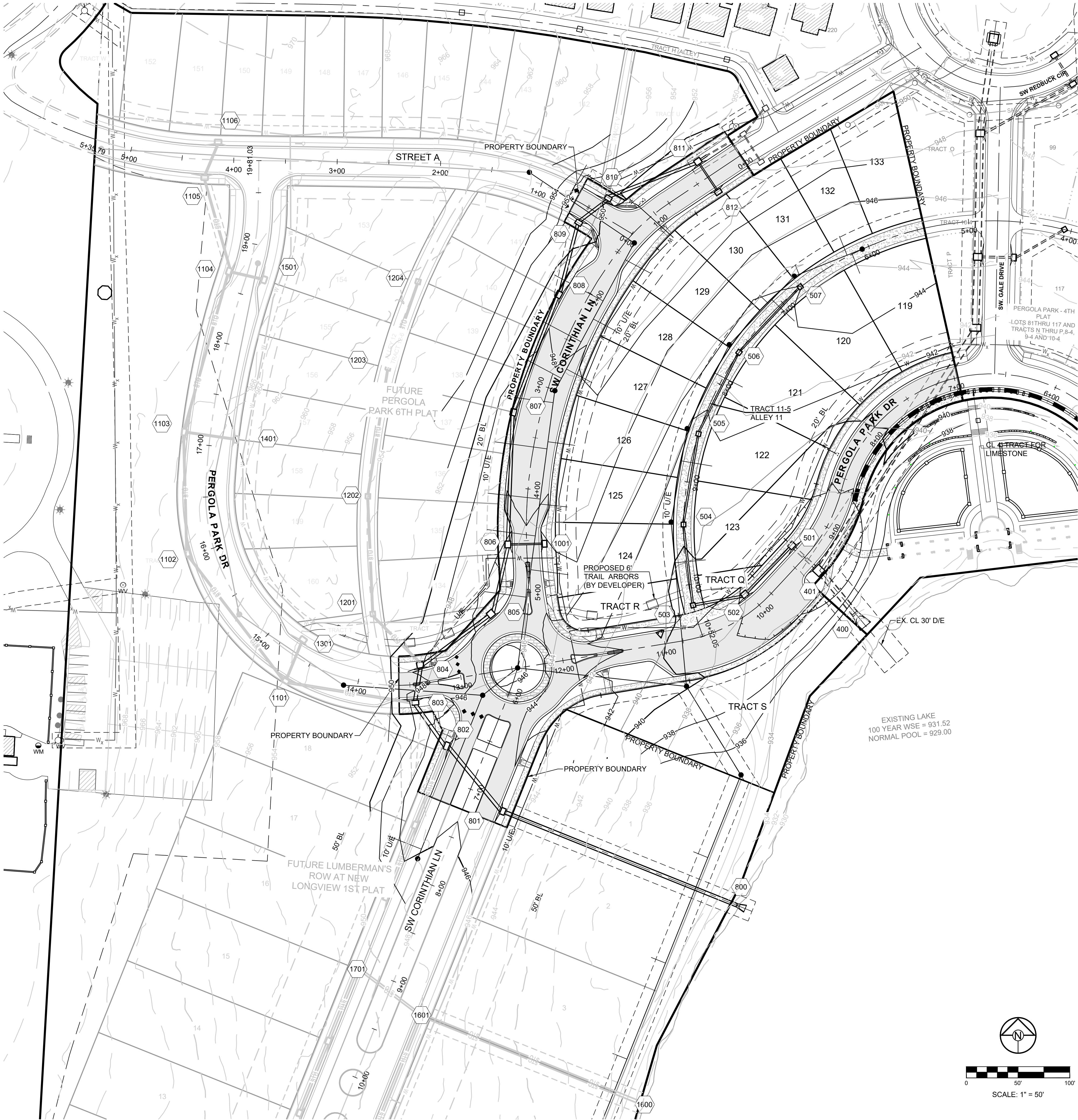




Accepted
Master Drainage Plan

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RECORD DRAWING

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Date: 5/22/2023
Certified by: BAL
Title: Design Engineer
Firm: Schlager and Associates, P.A.

NOTE:

THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATIONS.

- _____ DENOTES PROPOSED MAJOR CONTOUR
- _____ DENOTES PROPOSED MINOR CONTOUR
- _____ DENOTES EXISTING MAJOR CONTOUR
- _____ DENOTES EXISTING MINOR CONTOUR
- _____ DENOTES AS-BUILT MAJOR CONTOUR
- _____ DENOTES AS-BUILT MINOR CONTOUR

MISSOURI GEOGRAPHIC REFERENCE SYSTEM
BENCH MARK:

BM JA-148, IS A STAMPED KC METRO DISK SET IN CONCRETE LOCATED 2 MILES WEST OF THE INTERSECTION OF HIGHWAY 50 AND 3RD ST. IT IS 44 FT NORTH OF THE CENTER OF 3RD ST. AND 102.5 FT WEST OF THE CENTER OF THE EXIT FROM THE ADJACENT PARKING LOT.

ELEV. 935.18

PROJECT BENCHMARK:

CHISELED “SQUARE” ON STORM CURB INLET AT NORTHWEST INTERSECTION OF SW. TOWER PARK DRIVE AND SW. LONGVIEW BOULEVARD.

NORTHING: 998893.4148
EASTING: 2803318.5413
ELEV. 1004.09

PREPARED BY:



SCHLAGEL & ASSOCIATES, P.A.

PERGOLA PARK 5TH PLAT
STREET, STORMWATER, MASTER DRAINAGE
PLAN & EROSION AND SEDIMENT CONTROL
- LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION
1 2-4-22	CITY COMMENTS
2 3-30-22	CITY COMMENTS
3 11-9-22	STREET TIE INS
4 5-22-23	AS-BUILTS
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MASTER
DRAINAGE PLAN
- GRADING PLAN

SHEET

3



LOT TYPE TABLE					
LOT #	BASEMENT TYPE	FRONT MBOE	REAR MBOE	AS-BUILT	
				FRONT MBOE	REAR MBOE
119	STANDARD	942.35	945.60	942.25	945.20
120	STANDARD	942.10	945.60	942.10	944.30
121	STANDARD	941.00	944.20	940.90	944.00
122	STANDARD	939.80	943.00	939.50	942.30
123	STANDARD	940.50	943.85	938.50	941.50
124	STANDARD	946.80	941.00	946.55	941.10
125	STANDARD	947.40	941.65	947.20	941.85
126	STANDARD	948.30	942.35	948.30	942.60
127	STANDARD	949.50	943.00	949.00	943.20
128	STANDARD	950.20	943.60	949.55	943.50
129	STANDARD	950.20	944.20	949.40	944.20
130	STANDARD	949.75	944.70	948.60	944.50
131	STANDARD	949.10	945.20	949.10	945.20
132	STANDARD	950.10	945.65	950.10	945.00
133	STANDARD	950.85	946.20	950.85	946.00

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 Title: Design Engineer
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- | | |
|---|--------------------------------|
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|  | DENOTES PROPOSED MINOR CONTOUR |
|  | DENOTES EXISTING MAJOR CONTOUR |
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ELEV. 935.18

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INTERSECTION OF SW. TOWER PARK DRIVE AND SW. LONGVIEW
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PREPARED BY:



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PERGOLA PARK 5TH PLAT
STREET, STORMWATER, MASTER DRAINAGE
PLAN & EROSION AND SEDIMENT CONTROL
- LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION
1. 2-4-22	CITY COMMENTS
2. 3-30-22	CITY COMMENTS
3. 11-9-22	STREET TIE INS
4. 5-22-23	AS-BUILT'S
5.	
6.	
7.	
8.	
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MASTER
DRAINAGE PLAN
- LOT INFO

SHEET

RECORD DRAWING

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- DENOTES AS-BUILT MINOR CONTOUR



PREPARED BY:



SCHLAGER & ASSOCIATES, P.A.

PERGOLA PARK 5TH PLAT
STREET, STORMWATER, MASTER DRAINAGE
PLAN & EROSION AND SEDIMENT CONTROL
- LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION
2-4-22	CITY COMMENTS
3-30-22	CITY COMMENTS
11-9-22	STREET TIE INS
5-22-23	AS-BUILTS

DRAWN BY:	BAL
CHECKED BY:	MAB
DATE PREPARED:	11-16-2021
PROJ. NUMBER:	20-189

MASTER
DRAINAGE PLAN
- DRAINAGE MAP

SHEET

5

MISSOURI GEOGRAPHIC REFERENCE SYSTEM
BENCHMARK:

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Design Storm:			10																														
"K" Value:			1.00																														
"F" Factor:			1.00																														
Runoff Calculations																						Pipe Properties											
Inlet #	Area (acres)	"C" Value	Cumul. Area (acres)	Cumul. Cx	Tc	Intensity	Runoff To Inlet	Cumul. Runoff	Pipe Cap.	Pipe Vel.		Up Piped Inlet 1	Up Piped Inlet 2	Up Area (acres)	Up Cx	Up Inlet	Down Inlet	Pipe Type	"n" Value	Pipe Size	Pipe Length	Slope %	Drop In Inlet	FL Up	FL Down	Inlet Top	HGL Elev.						
EXISTING LINE 400																																	
401	2.40	0.66	46.76	30.86	5.7	7.13	11.29	220.00	220.00	220.00	9.27	501		3.38	2.23	401	400	RCP	0.013	66	53.87	0.43	0.50	927.98	927.75	DS TAILWATER @ STR #400	929.00	933.27					
402	0.04	0.66	40.98	27.05	5.4	7.24	0.19	195.88	286.92	12.08				402	401	RCP	0.013	66	279.37	0.73	0.50	930.42	928.38			941.97	935.25						
403	0.07	0.66	40.94	27.02	5.3	7.27	0.34	196.43	300.36	12.64				403	402	RCP	0.013	66	68.66	0.80	0.50	931.17	930.62			947.37	936.00						
404	0.06	0.66	39.97	26.38	5.1	7.32	0.29	193.18	270.74	11.40				404	403	RCP	0.013	66	119.40	0.65	1.00	932.35	931.57			948.40	937.14						
405	38.50	0.66	38.50	25.41	5.0	7.35	186.84	186.84	251.06	15.79				405	404	RCP	0.013	54	92.89	1.63	N/A	934.86	933.35			947.96	940.00						
EXISTING LINE 600																																	
601	0.56	0.66	0.50	0.59	5.1	7.33	1.74	4.35	19.45	11.00				0.00	0.00	601	403	HDPE	0.012	18	36.00	2.92	0.50	936.02	934.97		944.39	937.04					
602	0.34	0.66	0.54	0.36	5.0	7.35	1.62	4.62	13.70	11.16				0.00	0.00	602	401	HDPE	0.012	15	55.86	3.83	N/A	936.03	936.39		946.23	939.31					
EXISTING LINE 700																																	
701	1.14	0.66	1.41	0.93	5.1	7.32	5.51	6.82	9.26	7.54				0.00	0.00	701	404	PEP	0.012	15	102.48	1.75	0.50	941.69	939.90		949.19	943.04					
702	0.27	0.66	0.27	0.18	5.0	7.35	1.31	1.31	7.10	5.79				0.00	0.00	702	701	PEP	0.012	15	33.00	1.03	N/A	942.48	942.14		949.13	943.04					
LINE 500																																	
501	1.06	0.66	3.38	2.23	6.2	7.01	4.90	15.64	28.10	5.73				0.00	0.00	501	401	PEP	0.012	30	35.50	0.40	0.45	931.12	930.98		936.98	933.39					
502	0.57	0.66	2.32	1.53	6.0	7.05	2.65	10.79	24.51	7.80				0.00	0.00	502	501	PEP	0.012	24	65.53	1.00	0.50	932.23	931.57		937.83	933.65					
503	0.26	0.66	1.75	1.16	5.9	7.08	1.22	8.18	24.51	7.80				0.00	0.00	503	502	PEP	0.012	24	51.05	1.00	0.50	933.24	932.73		939.40	934.46					
504	0.29	0.66	1.49	0.98	5.7	7.13	1.37	7.02	12.47	7.05				0.00	0.00	504	503	PEP	0.012	18	78.60	1.20	0.50	934.68	933.74		940.30	935.94					
505	0.33	0.66	1.20	0.79	5.5	7.20	1.57	5.70	11.38	6.44				0.00	0.00	505	504	PEP	0.012	18	88.86	1.00	0.50	936.07	935.18		941.62	937.19					
506	0.29	0.66	0.87	0.57	5.3	7.28	1.39	4.18	7.34	5.98				0.00	0.00	506	505	PEP	0.012	1													

FUTURE

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