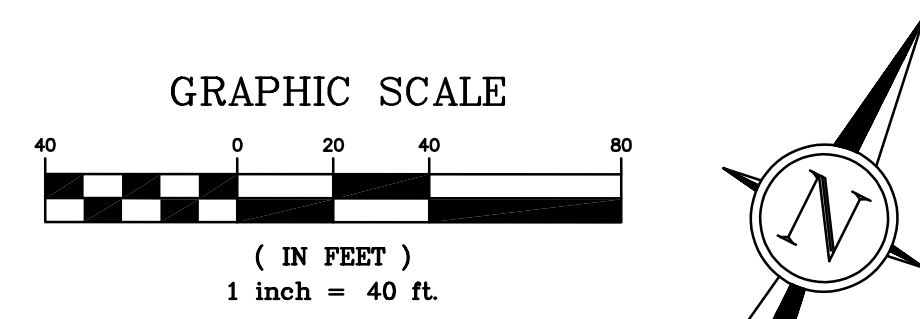


15 YEAR STORM										
STRUCTURE NUMBER	GRASS AREA (ACRES)	P.I. FACTOR (GRASS)	GRAVEL AREA (ACRES)	P.I. FACTOR (PCP)	PAVT. AREA (ACRES)	P.I. FACTOR (PVMT)	DISCONNECTED ROOF AREA (ACRES)	P.I. FACTOR	TOTAL AREA (ACRES)	TOTAL Q (CFS)
1	0.08	1.70	0.00	3.15	2.80	3.54	1.09	4.20	3.97	14.63

DIFFERENTIAL CALCS									
PROPOSED	ACRES	PIFACTOR	Q (CFS)	EXISTING	ACRES	PIFACTOR	Q (CFS)		
Roof	1.09	4.20	4.58		0.95	4.20	3.99		
Roof (disconnected)	0.00	3.54	0.00		0.00	3.54	0.00		
Pavement	2.83	3.54	10.02		2.80	3.54	9.91		
Pervious Pavement	0.00	1.70	0.00		0.00	1.70	0.00		
Grass	7.80	1.70	13.26		7.97	1.70	13.55		
Total Q (cfs)			27.86				27.45		
total Area	11.72				11.72				
Impervious Area	3.92	CN=98			3.75	CN=98			
Pervious Area	7.80	CN=80			7.97	CN=80			
Differential Runoff			86				86		

Note: Runoff Reduction Is Not Accounted For In CN Calc



LEGEND	
PROPOSED BUILDING	
EXISTING FEATURES	
PROPOSED FEATURES	
PROPERTY LINES	
PROPOSED CONCRETE SIDEWALK	
PROPOSED ASPHALT PAVEMENT	

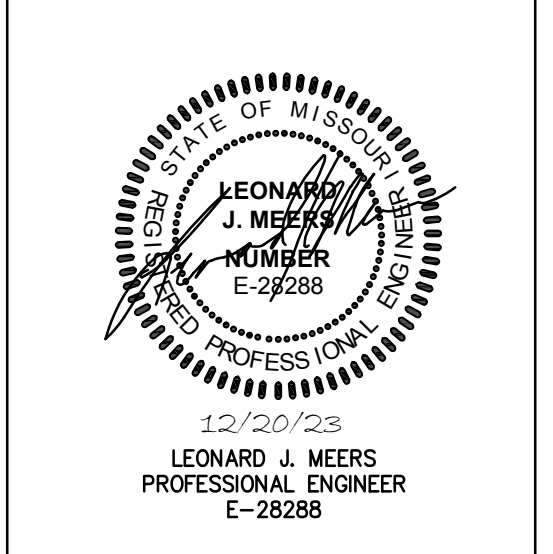
NO.	DESCRIPTION	DATE
1	CITY COMMENTS	11-30-2023
2	CITY COMMENTS	12-20-2023

PROJECT TITLE
O'FALLON YMCA

3451 PHEASANT MEADOW DRIVE
O'FALLON, MO 63368

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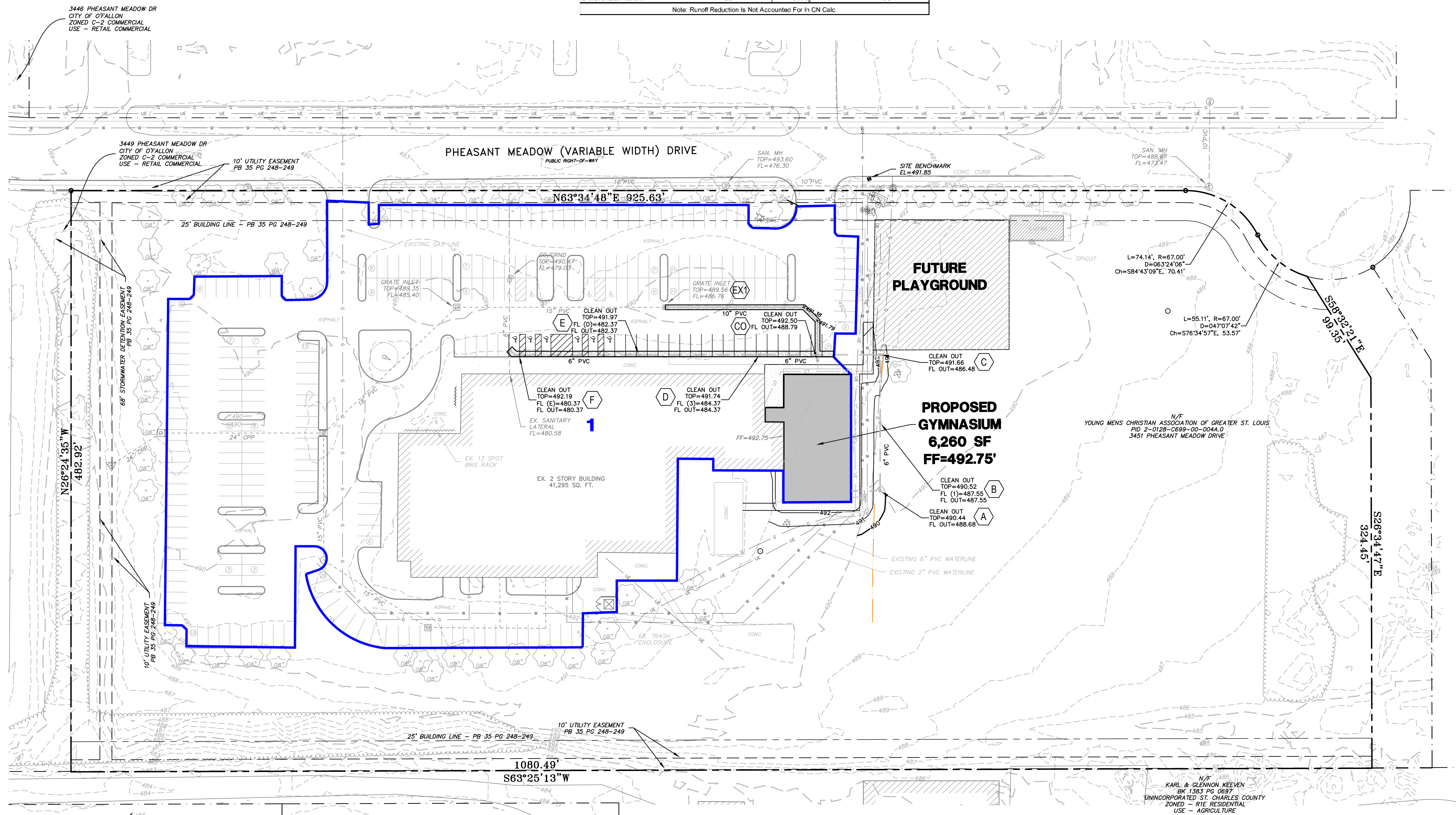


Developer / Owner Information
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Approval Date:

City No.

Page No.
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GRIMES CONSULTING, INC.																				
O'FALLON YMCA																				
Hydraflow Civil 3D 2016																				
HYDRAULIC DATA 50 YEAR STORM (EXISTING)																				
NOTES: ** Critical Depth; H-Line contain hyd jump																				
STRUCTURE	LOWER	UPPER	PIPE ID	UPPER	LOWER	LENGTH	PIPE GRADE	PIPE SIZE	PIPE	"n"	TOTAL Q	V	MINOR	ENERGY	HYD	HYD	LOWEST	PIPE	DEPTH	
						FT.	%	IN.	SHAPE	FACTOR	cfs	f.p.s.	LOSSES	LOSSES	GRADE	GRADE	OPENING***	FREELBOARD	CAPACITY	IN PIPE
10"x10" 45 DEG ELBOW	CO		P-1	488.79	488.38	32.91	0.012	10	Cir	0.012	0.59	1.97	n/a	0.10	489.13	488.72	492.50	3.37	18.68	0.34**
10"x10" 45 DEG ELBOW	EX1		P-2	488.38	488.18	16.00	1.25	10	Cir	0.012	0.59	2.86	n/a	0.00	488.72	488.52	491.79	3.07	2.65	0.34**
10"x10" 45 DEG ELBOW			P-3	488.18	486.76	115.10	1.23	10	Cir	0.012	0.59	2.86	n/a	0.00	488.52	487.10	491.38	2.86	2.64	0.34**

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