



STORM SEWER CALCULATIONS
FOR
The Village at Discovery
Lots 5-8

PROJECT NO.
230286

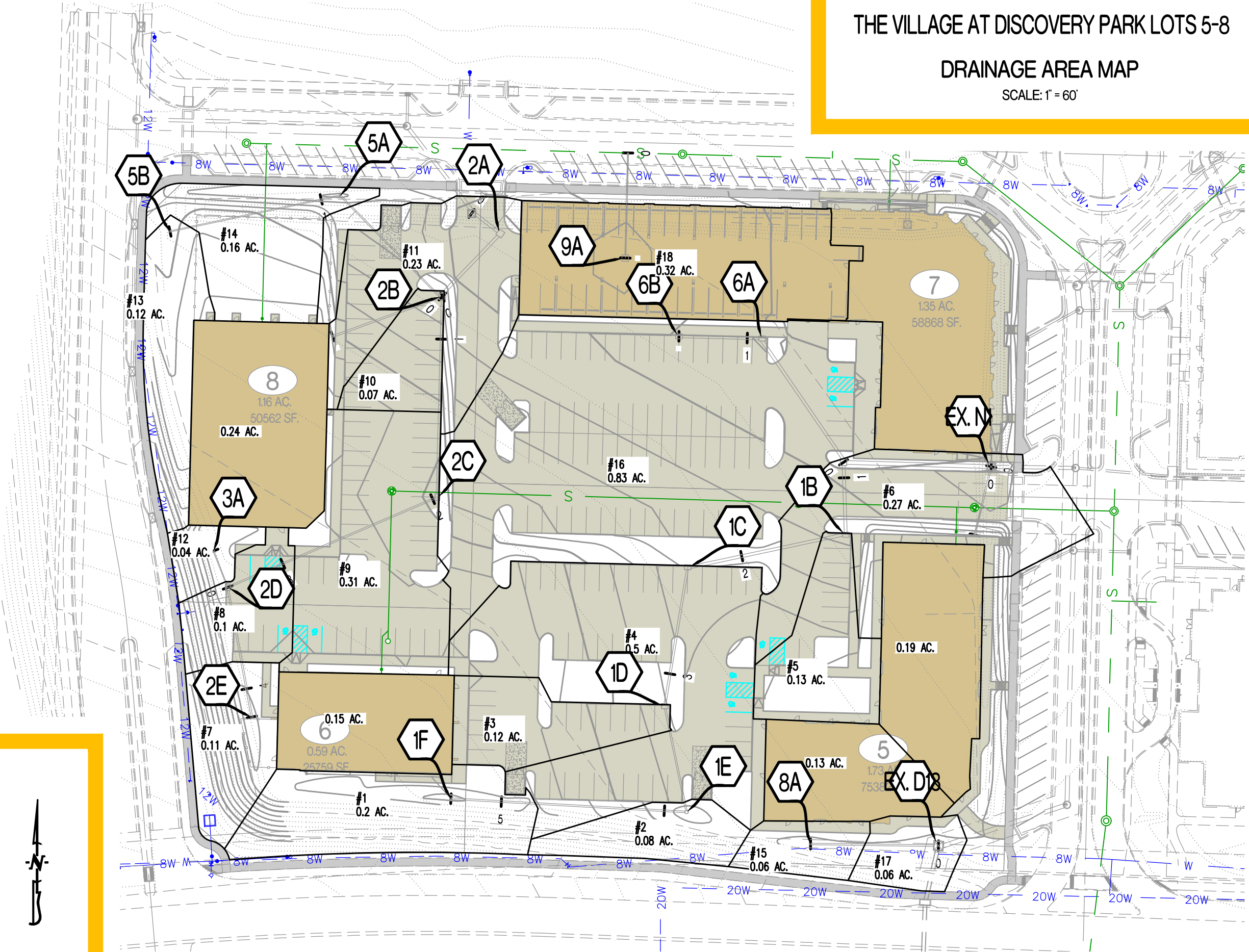


May 22, 2024

THE VILLAGE AT DISCOVERY PARK LOTS 5-8

DRAINAGE AREA MAP

SCALE: 1" = 60'



PREPARED BY:

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STORM DRAIN PIPE SIZE

DESCRIPTION		STORM DRAIN HYDRAULICS										NOTES	
AREA NO.	UPSTREAM STRUCTURE LABEL	TIME OF CONCENTRATION	CA		RAINFALL INTENSITY	RUNOFF	STORM DRAIN SLOPE	STORM DRAIN DIAMETER	STORM DRAIN MATERIAL	CAPACITY FLOWING FULL	VELOCITY FLOWING FULL		
			ADDED	CUMUL.									RCP, CMP, PVC, OR HDPE
			min	acres									acres
LINE 1													
1+ROOF (LOT 6)	1F	<5		0.21	7.35	1.53	0.010	10	PVC	2.59	4.75		
2	1E	<5	0.02	0.23	7.35	1.71	0.020	10	PVC	3.66	6.71		
3	1D	<5	0.10	0.33	7.35	2.42	0.010	12	HDPE	3.86	4.91		
4	1C	<5	0.41	0.73	7.35	5.40	0.010	18	HDPE	11.37	6.44		
5	1B	<5	0.11	0.84	7.35	6.17	0.010	18	HDPE	11.37	6.44		
LINE 6	1A	<5	0.67	1.51	7.35	11.12	0.016	24	HDPE	30.98	9.87		
LINE 2													
7	2E	<5		0.03	7.35	0.24	0.010	10	PVC	2.59	4.75		
8 + LINE 3	2D	<5	0.09	0.13	7.35	0.93	0.020	10	PVC	3.66	6.71		
9	2C	<5	0.25	0.38	7.35	2.77	0.010	15	HDPE	6.99	5.70		
10 + LINES 4 & 5	2B	<5	0.38	0.76	7.35	5.55	0.010	18	HDPE	11.37	6.44		
11	2A	<5	0.19	0.94	7.35	6.92	0.010	18	HDPE	11.37	6.44		
LINE 3													
12	3A	<5		0.01	7.35	0.09	0.040	6	PVC	1.33	6.75		
LINE 4													
ROOF (LOT 8)	4A	<5		0.24	7.35	1.75	0.030	12	HDPE	6.68	8.51		
LINE 5													
13	5B	<5		0.04	7.35	0.26	0.010	8	PVC	1.43	4.09		
14	5A	<5	0.05	0.08	7.35	0.62	0.030	8	PVC	2.47	7.09		
LINE 6													
16	6A	<5		0.67	7.35	4.94	0.010	18	HDPE	11.37	6.44		
LINE 7													
1/2 ROOF (LOT 5)	7A	<5		0.19	7.35	1.38	0.010	10	PVC	2.59	4.75		
LINE 8													
1/2 ROOF (LOT 5) + 15	8A	<5		0.15	7.35	1.08	0.010	10	PVC	2.59	4.75		
LINE 8													
18	9A	<5		0.16	7.35	1.18	0.100	8	PVC	4.51	12.94		