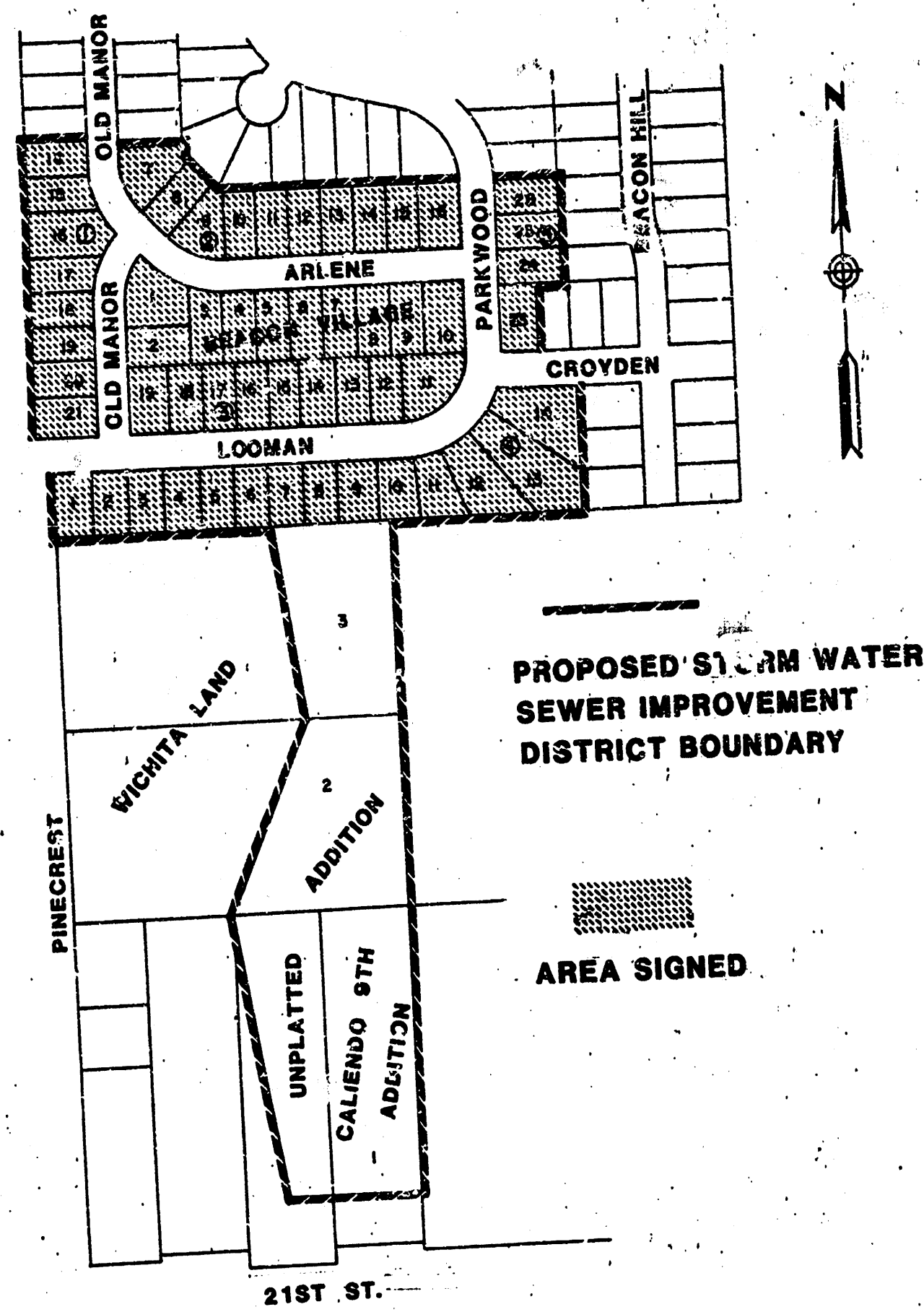




May 16, 1980

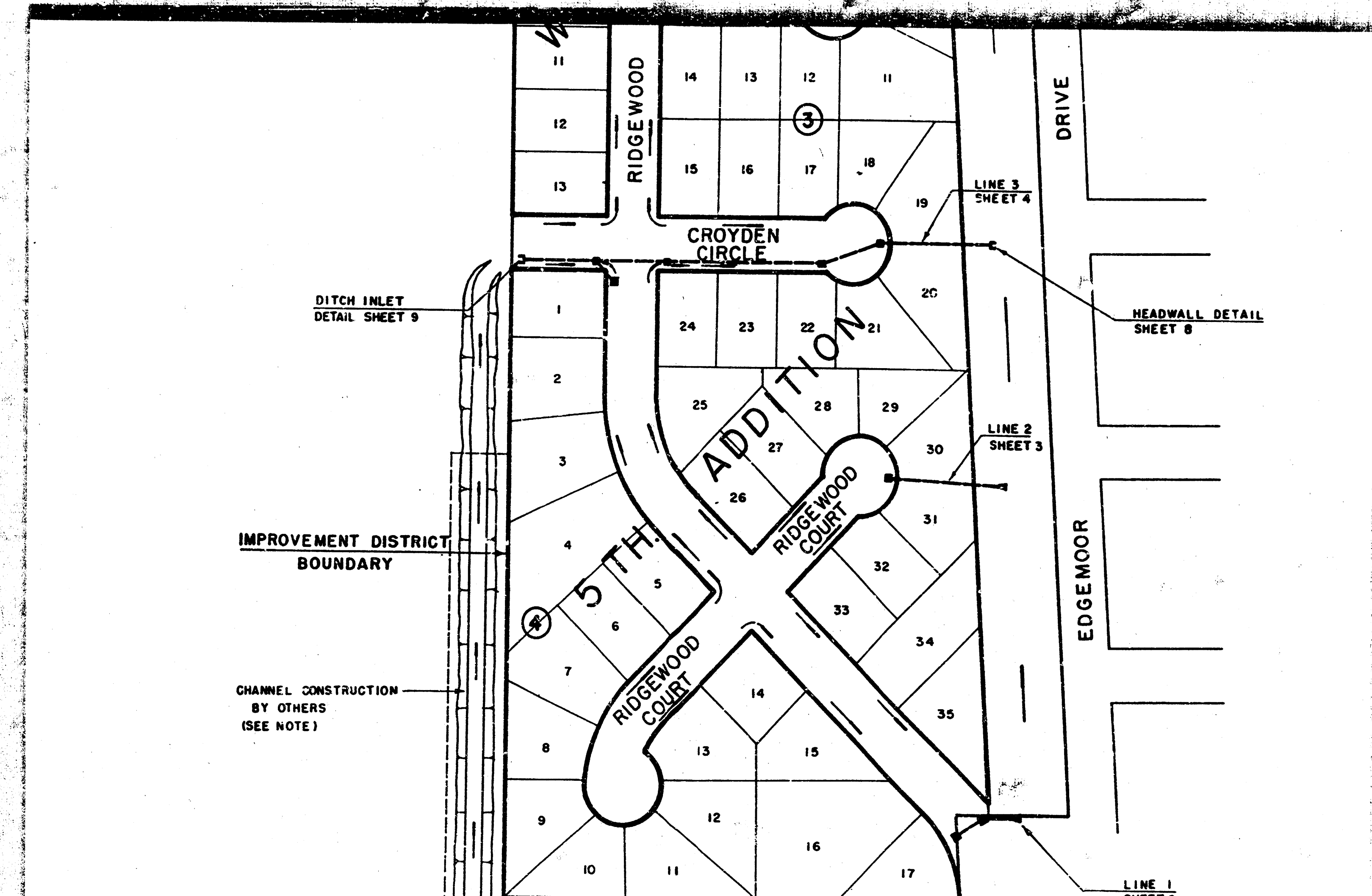
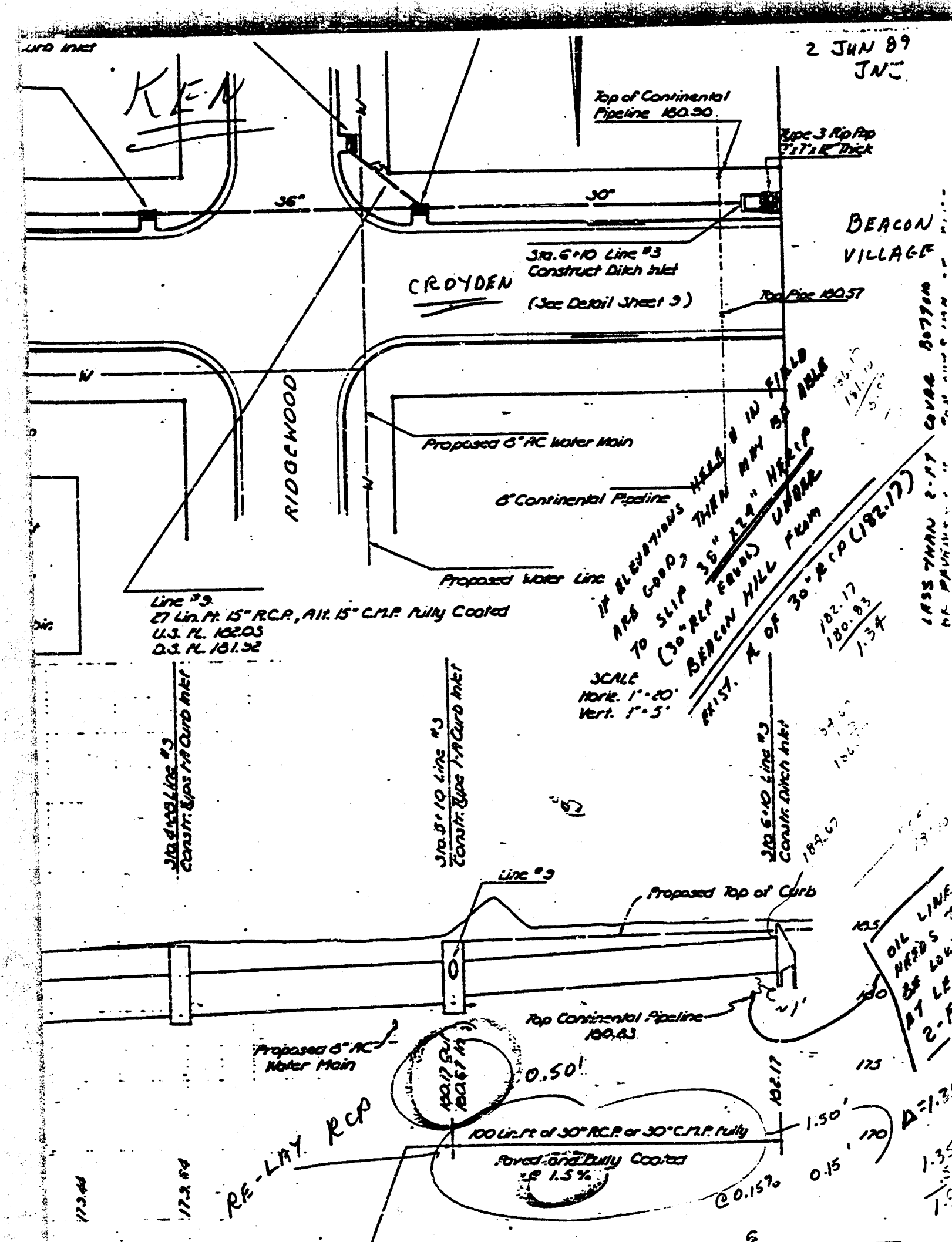
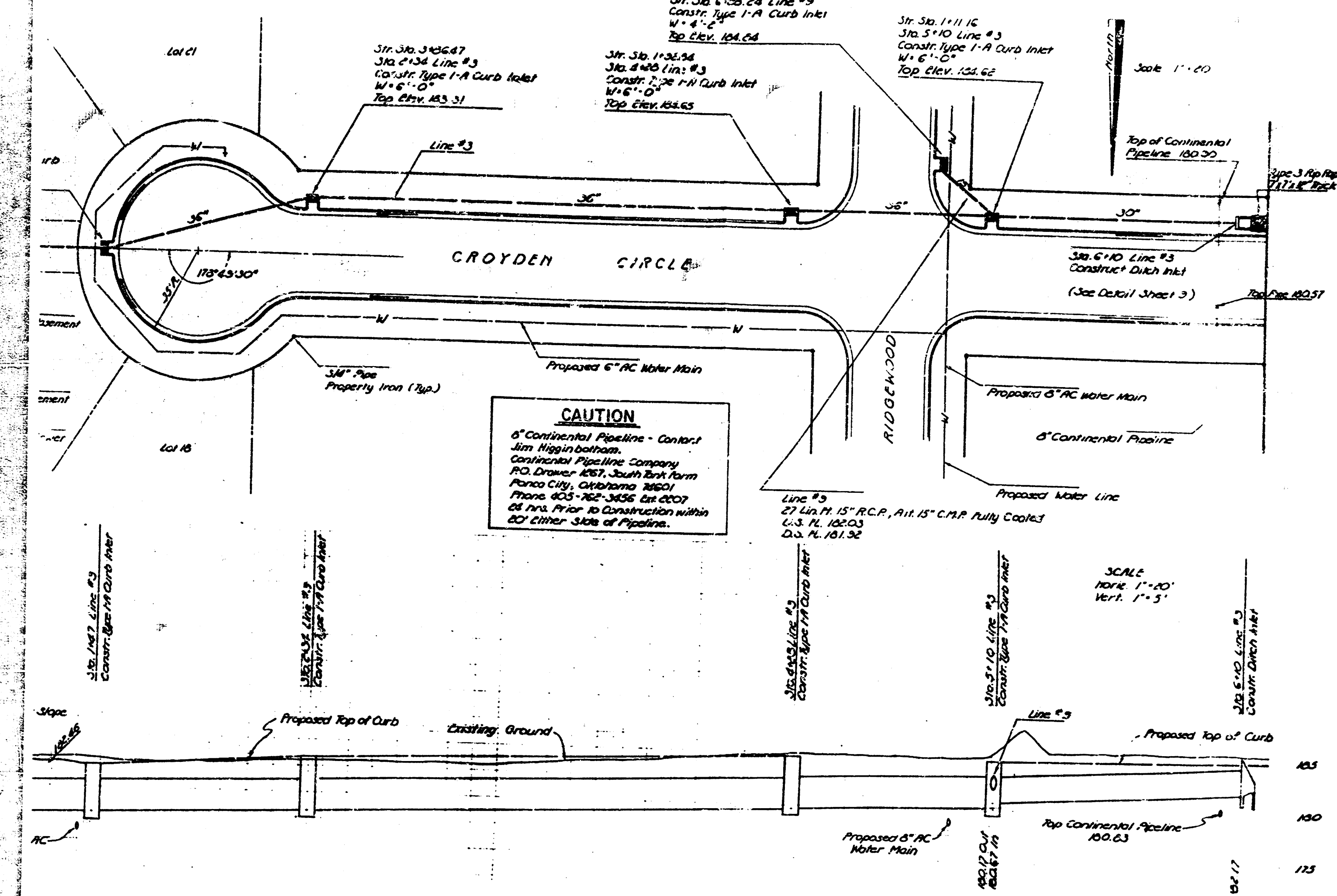
Stacy Hargis
Engineering Department
405 W. Main, 7th Floor
Wichita, KS 67202

Dear Mr. [Name]:

1. Review the contract documents and the site plan for the proposed water sewer improvement project.
2. Review the site plan for the proposed water sewer improvement project.
3. Review the site plan for the proposed water sewer improvement project.
4. Review the site plan for the proposed water sewer improvement project.

If you have any questions or comments, please contact me at the above address.

Sincerely,
Stacy Hargis
Project Engineer



BEACON VILLAGE - REVISED DRAINAGE PLAN (PARKWOOD SYSTEM TO MAINS GATE)

PAGE #1

DRAINAGE AREA	AREA (ACRES)	ACCUM AREA	C _s	C ₁₀₀	T _c (MIN)	I _s (IN/HR)	I ₁₀₀ (IN/HR)	Q _s (CFS)	Q ₁₀₀ (CFS)	PIPE SIZE	PIPE SLOPE	INLETS
AREA 'I' DIE-SIZE DRAINAGE OF EASEMENT IN WICHITA LAND ADDITION	15.47		0.77	0.86	20	15	4.00	7.37	41.5	85.4	30" RCP	1.20% AREA MANHOLE (SUMP)
AREA 'II' RESIDENTIAL - SINGLE FAMILY 1/2 AC 50% IMPERVIOUS	2.24		0.54	0.67	24	20	2.90	6.53	3.5	9.8	21" RCP	0.40% 11(12) 10'
AREA 'III' RESIDENTIAL - SINGLE FAMILY 1/2 AC 50% IMPERVIOUS	0.88		0.54	0.67	33	25	2.52	5.90	1.2	3.5		11(12) 5'
SUB-TOTAL	16.59		0.73	0.82	24	20	2.90	6.53	35.1	88.8	30" RCP	0.80%
AREA 'IV' RESIDENTIAL - SINGLE FAMILY 1/2 AC 50% IMPERVIOUS	1.90		0.54	0.67	29	22	2.72	6.26	2.4	8.0	21" RCP	0.25% 11(12) 10'
AREA 'V' RESIDENTIAL - SINGLE FAMILY 1/2 AC 50% IMPERVIOUS	0.88		0.54	0.67	22	17	3.17	7.00	1.5	4.1		11(12) 5'
SUB-TOTAL	19.37		0.70	0.80	24	20	2.90	6.53	37.3	101.2	30" RCP	1.00%

BEACON VILLAGE - REVISED DRAINAGE PLAN (BEACON HILL - MAINS GATE THEN PARKWOOD)

PAGE #2

DRAINAGE AREA	AREA (ACRES)	ACCUM AREA	C _s	C ₁₀₀	T _c (MIN)	I _s (IN/HR)	I ₁₀₀ (IN/HR)	Q _s (CFS)	Q ₁₀₀ (CFS)	PIPE SIZE	PIPE SLOPE	INLETS
AREA 'VI' RESIDENTIAL - SINGLE FAMILY 1/2 AC 50% IMPERVIOUS	2.16		0.54	0.67	40	31	2.24	5.32	2.4	7.7	21" RCP	0.25% 11(12) 5' (SUMP)
AREA 'VII' RESIDENTIAL - SINGLE FAMILY 1/2 AC 50% IMPERVIOUS	1.43		0.54	0.67	38	27	2.44	5.69	2.1	6.2		11(12) 5' (SUMP)
SUB-TOTAL	3.59		0.54	0.67	40	31	2.24	5.32	4.4	13.9	24" RCP	0.40%
AREA 'VIII' RESIDENTIAL - SINGLE FAMILY 1/2 AC 50% IMPERVIOUS	5.51		0.54	0.67	38	27	2.32	5.49	4.9	20.3		21(12) 10' (SUMP)
SUB-TOTAL	9.30		0.54	0.67	40	31	2.24	5.32	11.2	33.1	36" RCP	0.30%
AREA 'IX' RESIDENTIAL - SINGLE FAMILY 1/2 AC 50% IMPERVIOUS	1.87		0.54	0.67	22	17	3.17	7.00	3.2	8.8		11(12) 10' (SUMP)
PARKWOOD - SUB-TOTAL	19.37		0.70	0.80	24	20	2.90	6.53	37.3	101.2		
SUB-TOTAL	30.54		0.64	0.75	26	20	2.90	6.53	56.7	149.6	54" RCP	0.40%
AREA 'X' RESIDENTIAL - SINGLE FAMILY 1/2 AC 50% IMPERVIOUS	2.14		0.54	0.67	29	22	2.72	6.26	3.4	10.3	24" RCP	0.25% 11(12) 10'
TOTAL - MAINS GATE BEACON HILL SYSTEM	33.00		0.63	0.74	29	22	2.72	6.26	56.5	152.9	54" RCP	0.60% 11(12) 5'

15 APRIL 1987
PAGE 3

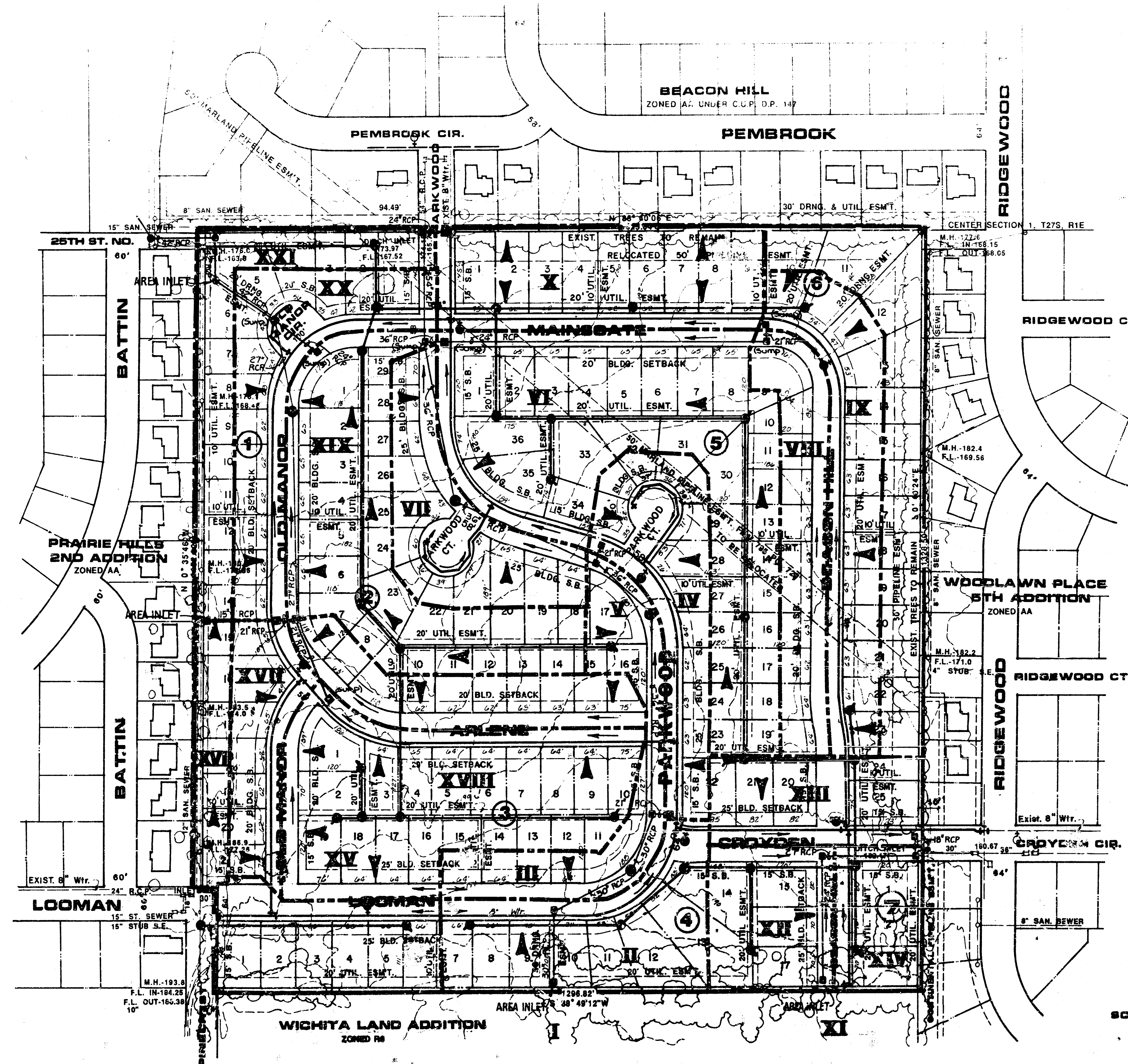
BEACON VILLAGE - REVISED DRAINAGE PLAN (CROYDEN SYSTEM TO EAST)

1	2	3	4	5	6	7	8	9	10	11	12
DRAINAGE AREA	AREA (ACRES)	ACCUM AREA	C ₁	C ₁₀₀	T _C (MIN)	I ₁₀₀ (IN/HR)	Q ₁₀₀ (CFS)	Q ₁₀₀ (CFS)	PIPE SIZE	PIPE SLOPE	INLETS
AREA 'II' - DIFFUSE DRAINAGE OF UNDEVELOPED LAND & APARTMENTS	13.09		0.57	0.73	28	2.78	6.53	21.5	24" RCP	1.00%	AREA INLET
AREA 'III' - RESIDENTIAL - SINGLE FAMILY 18' SOILS - 70 AC 50% IMPERVIOUS	1.35		0.54	0.67	22	3.17	7.00	2.3	-	-	1140' ± 5'
SUB-TOTAL	14.44		0.59	0.72	28	2.78	6.53	23.7	27" RCP	0.60%	-
AREA 'XIII' - RESIDENTIAL - SINGLE FAMILY 18' SOILS - 70 AC 50% IMPERVIOUS	1.45		0.54	0.67	22	2.78	6.24	2.2	18" RCP	0.40%	1140' ± 5'
AREA 'XIV' - RESIDENTIAL - SINGLE FAMILY 18' SOILS - 70 AC 50% IMPERVIOUS	0.96		0.54	0.67	18	3.51	7.87	1.8	-	-	1140' ± 5'
TOTAL - EAST INTO CROYDEN SYSTEM	16.85		0.58	0.71	28	2.78	6.24	27.2	30" RCP	0.50%	-

15 APRIL 1987
PAGE 4

BEACON VILLAGE - REVISED DRAINAGE PLAN (OLD MANOR SYSTEM TO NORTHWEST)

1	2	3	4	5	6	7	8	9	10	11	12
DRAINAGE AREA	AREA (ACRES)	ACCUM AREA	C ₁	C ₁₀₀	T _C (MIN)	I ₁₀₀ (IN/HR)	Q ₁₀₀ (CFS)	Q ₁₀₀ (CFS)	PIPE SIZE	PIPE SLOPE	INLETS
AREA 'XV' - RESIDENTIAL - SINGLE FAMILY 18' SOILS - 70 AC 50% IMPERVIOUS	4.00		0.54	0.67	31	2.62	6.01	5.7	21" RCP	1.00%	1140' ± 10' (SUMP)
AREA 'XVI' - RESIDENTIAL - SINGLE FAMILY 18' SOILS - 70 AC 50% IMPERVIOUS	0.77		0.54	0.67	20	3.33	7.37	1.4	15" RCP	0.40%	AREA INLET
AREA 'XVII' - RESIDENTIAL - SINGLE FAMILY 18' SOILS - 70 AC 50% IMPERVIOUS	1.20		0.54	0.67	22	3.17	7.00	2.1	-	-	1140' ± 5'
SUB-TOTAL	1.97		0.54	0.67	22	3.17	7.00	3.4	21" RCP	0.40%	-
AREA 'XVIII' - RESIDENTIAL - SINGLE FAMILY 18' SOILS - 70 AC 50% IMPERVIOUS	1.49		0.54	0.67	29	2.72	6.13	2.2	-	-	1140' ± 5'
SUB-TOTAL	7.46		0.54	0.67	31	2.62	6.01	10.6	27" RCP	1.00%	-
AREA 'XIX' - RESIDENTIAL - SINGLE FAMILY 18' SOILS - 70 AC 50% IMPERVIOUS	3.48		0.54	0.67	30	2.67	6.13	5.0	24" RCP	0.50%	1140' ± 10' (SUMP)
AREA 'XX' - RESIDENTIAL - SINGLE FAMILY 18' SOILS - 70 AC 50% IMPERVIOUS	2.24		0.54	0.67	25	2.96	6.68	3.6	-	-	1140' ± 10' (SUMP)
SUB-TOTAL	13.20		0.54	0.67	31	2.62	6.01	18.7	42" RCP	0.30%	-
AREA 'XXI' - RESIDENTIAL - SINGLE FAMILY 18' SOILS - 70 AC 50% IMPERVIOUS	1.93		0.54	0.67	28	2.78	6.39	2.7	-	-	AREA INLET
TOTAL - NORTHWEST TO BATTIN	15.03		0.54	0.67	31	2.62	6.01	21.3	48" RCP	0.20%	-

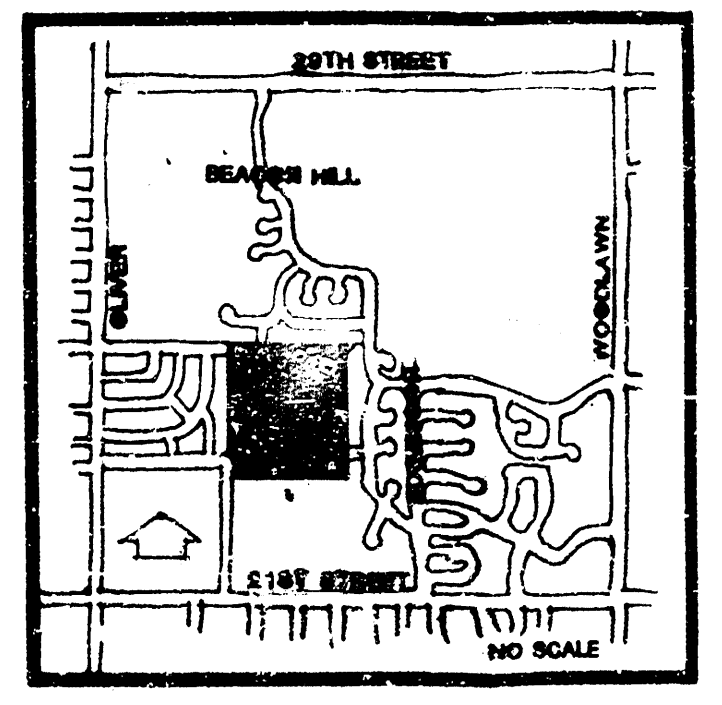


NOTES:

BENCH MARK: SQUARE CUT IN TOP OF CURB AT N.W. CORNER OF LOT 9, BLOCK 2, BEACON HILL ADDITION. ELEV. 1177.34

RELOCATION OF MARLAND PIPELINE IS TO BE DONE BY OWNER AT NO EXPENSE TO THE CITY OF WICHITA.

TOPOGRAPHIC SURVEY FLOWN BY MILES AIR PHOTO IN FALL OF 1987.



BEACON VILLAGE
DRAINAGE & UTILITY PLAN

Design: JNJ
Checked: RSM/KKL
Date: 4.25.89
No. 00

DRAINAGE & UTILITY PLAN