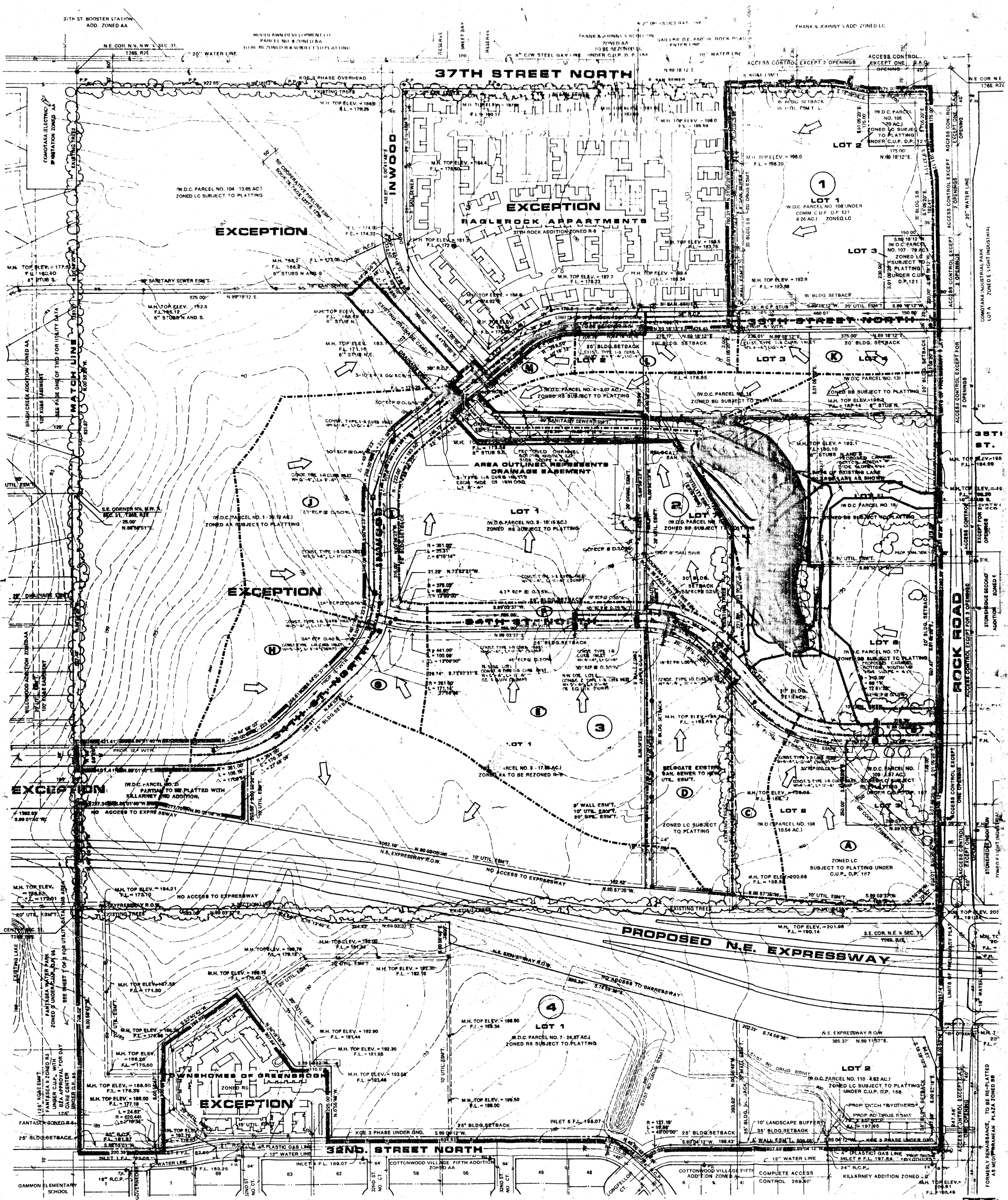

23 Feb 88
JNT

DRAINAGE & UTILITY PLAN FOR

KILLARNEY PLAZA 2ND.

MID-KANSAS
3500 NORTH
BUILDING
WICHITA, KANS

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KILLARNEY PLAZA - 2nd

PAGE #1

	DRAINAGE AREA	1 AREA (ACRES)	2 ACCUM AREA	3 C_5	4 C_{100}	5 T_c (MIN)	6 I_5 (IN/HR)	7 I_{100} (IN/HR)	8 Q_5 (CFS)	9 Q_{100} (CFS)	10 PIPE SIZE	11 PIPE SLOPE	12 INLETS
1													
2													
3	AREA 'A' LOT 5 & PART LOT 6 LIGHT COMMERCIAL	6.04		0.69	0.80	22 16	3.81	7.18	15.9	34.7	36" RCP	0.28%	SUMP 3 L(C) = 10'
4													
5	AREA 'B'												
6	NORTH ½ - 34th ST. N	0.35		0.88	0.93	15	4.56	7.37	1.4	2.4			SUMP 1 L(C) = 5'
7													
8	TOTAL TO LAKE		6.39	0.70	0.81	23 16	3.81	7.18	17.0	37.2	42" RCP	0.20%	
9													
10													
11													
12	AREA 'C' MIDDLE LOT 6 LIGHT COMMERCIAL	2.25		0.69	0.80	24 16	3.65	6.89	5.7	12.3	18" RCP	1.00%	1 L(C) = 10'
13													
14													
15	AREA 'D' WEST PART LOT 2 LIGHT COMMERCIAL	1.32		0.69	0.80	23 19	3.43	6.68	10.3	23.4	30" RCP	0.30%	ADD CLOSER OF LOT 6 L(C) = 10' (SUMP) OR SOUTH
16													
17											36" RCP	0.25%	(MH TO MH)
18													
19							34th STREET - NORTH DRAINAGE				15" RCP	0.50%	1 L(C) = 5'
20													
21													
22	AREA 'E' NE PART LOT 1 APARTMENTS 'D' SOIL	8.86		0.73	0.84	23 15	3.73	7.37	29.1	56.2	42" RCP	0.20%	W. SIDE OF LOT 1 4 L(C) = 10' (SUMP) OR SOUTH
23													
24													
25							34th STREET - NORTH DRAINAGE				42" RCP	0.35%	1 L(C) = 10' (SUMP)
26													
27	AREA 'F' NORTH ½ - 34th ST. N.	1.61		0.88	0.93	15	4.56	7.37	6.5	11.0			1 L(C) = 10' (SUMP)
28													
29	SUB-TOTAL		10.47	0.75	0.87	24 15	3.65	7.37	28.7	67.1	48" RCP	0.30%	(TO MH)
30													
31	TOTAL TO NEW CHANNEL		17.09	0.73	0.84	28 20	3.37	6.53	42.0	93.7	60" RCP	0.20%	(MH TO CHANNEL)

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KILLARNEY PLAZA - 2nd

PAGE #2

	DRAINAGE AREA	1 AREA (ACRES)	2 ACCUM AREA	3 C_5	4 C_{100}	5 T_c (MIN)	6 I_5 (IN/HR)	7 I_{100} (IN/HR)	8 Q_5 (CFS)	9 Q_{100} (CFS)	10 PIPE SIZE	11 PIPE SLOPE	12 INLETS
1													
2	AREA 'G' NW PART LOT 4 APARTMENTS AVE ½ - 34th ST. N.	1.99		0.78	0.89	20 15	4.00	7.37	6.2	12.8	24" RCP	0.40%	1 L(C) = 10' (SUMP)
3													
4													
5	AREA 'H' SINGLE FAMILY - 'D' SOIL ½ AC - 38% IMPERVIOUS AVE ½ - 34th ST. N.	3.79		0.59	0.79	27 17	3.43	7.00	7.7	21.0			1 L(C) = 10'
6													
7	SUB-TOTAL		5.77	0.66	0.82	27 17	3.43	7.00	13.1	33.1	24" RCP	0.60%	
8													
9	AREA 'I' SINGLE FAMILY - 'D' SOIL ½ AC - 33% IMPERVIOUS AVE WEST ½ - INWOOD	6.94		0.57	0.76	33 20	3.05	6.52	12.1	35.4	27" RCP	0.50%	1 L(C) = 10'
10											30" RCP	0.40%	1 L(C) = 10'
11											30" RCP	0.30%	1 L(C) = 5'
12													
13	TOTAL W. SIDE OF INWOOD												3 L(C) = 10'
14	SUMP OVER RCB		12.71	0.61	0.80	33 20	3.05	6.52	23.6	66.4			
15													
16	AREA 'J' EAST ½ - INWOOD	1.12		0.88	0.93	15	4.56	7.37	4.5	7.2			
17													
18	AREA 'K' PART LOT 3 & PART LOT 4 BUSINESS AVE SOUTH ½ - 34th ST. N.	2.31		0.74	0.83	19 15	4.10	7.32	7.0	14.1			AT SUMP 1 L(C) = 5'
19													
20	AREA 'L' PART LOT 3 & PART LOT 5 BUSINESS AVE SOUTH ½ - 34th ST. N.	1.84		0.74	0.83	12 15	4.31	7.37	5.9	11.3			AT SUMP 1 L(C) = 5'

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KILLARNEY PLAZA - 2nd

PAGE #3

	DRAINAGE AREA	1 AREA (ACRES)	2 ACCUM AREA	3 C_5	4 C_{100}	5 T_c (MIN)	6 I_5 (IN/HR)	7 I_{100} (IN/HR)	8 Q_5 (CFS)	9 Q_{100} (CFS)	10 PIPE SIZE	11 PIPE SLOPE	12 INLETS
1													
2	AREA 'M' PART LOT 3 APARTMENTS AVE ½ - 34th ST. N.	0.90		0.74	0.86	21 16	3.90	7.18	2.6	5.6			
3													
4	TOTAL TO SUMP OVER RCB SOUTH SIDE 34th ST. N. EAST SIDE INWOOD		6.17	0.77	0.85	21 16	3.90	7.18	18.5	37.7			3 L(C) = 10' (SUMP)
5													
6													
7	DRAINAGE EAST OF ROCK ROAD.	139.40		0.69	0.80	35 24	2.98	5.79	285.8	576.2			
8													
9	FROM ROCK ROAD STRUCTURES												
10		PROPOSED SOUTH CHANNEL		A 20 FT BOTTOMWIDTH 4:1 SIDESLOPES						120.0			
11		PROPOSED NORTH CHANNEL		A 20 FT BOTTOMWIDTH 4:1 SIDESLOPES						330.0			USE CFS TO INTER- SECT ON ROCK ROAD
12		TOTAL								450.0			
13													NORMAL POOL 190.5 FT (UNKNOWN)
14	UPSTREAM LAKE WEIR OPTION									612			100-YR POOL 191.9 FT (ESTIMATED)
15													NORMAL POOL 187.5 FT (ESTIMATED)
16	DOWNSTREAM LAKE WEIR OPTION									650			100-YR POOL 189.2 FT (ESTIMATED)
17		PROPOSED OUTLET CHANNEL		20 FT BOTTOMWIDTH 4:1 SIDESLOPES									
18													
19	DRAINAGE C INWOOD STRUCTURE		139.05	0.70	0.81	45 32	2.37	5.19	329.1	745.5	3 - 10' x 4' RCB		
20													
21													

KILLARNEY PLAZA 2ND ADDITION
(Preliminary)