HYDROLOGY

J17/D2
2 PLANS

J17/D2

2 Plans

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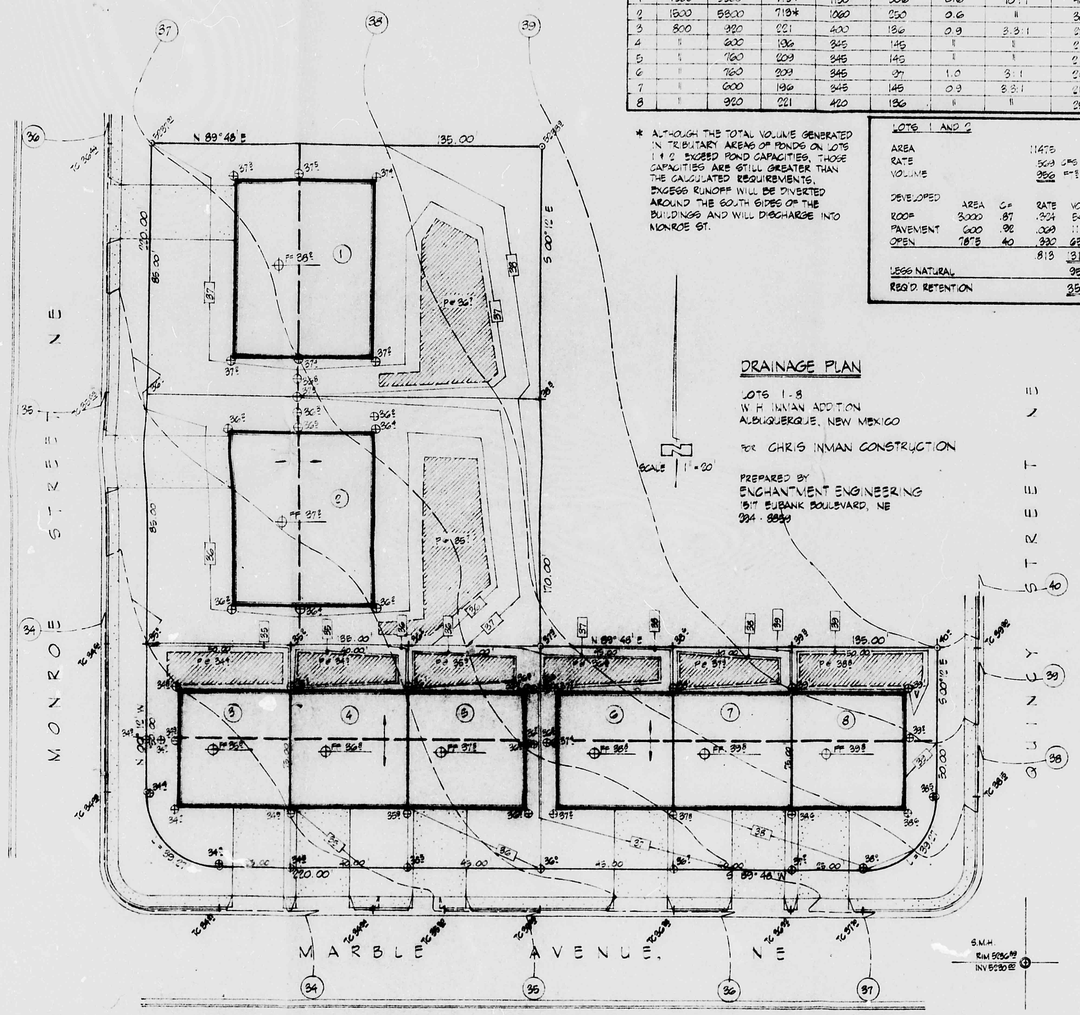


POND DATA

LOT	TRIBUTARY AREA ft² ROOF	TRIBUTARY AREA ft² OPEN	VOLUME	POND DIMENSIONS SURFACE	BOTTOM	DEPTH	SIDE SLOPE	CAPACITY
1	1600	5800	718*	1130	300	0.6	10:1	404 ✱
2	1600	5800	718*	1060	250	0.6	"	364 ✱
3	800	920	221	420	136	0.9	3.3:1	250
4	"	600	196	345	145	"	"	214
5	"	760	209	345	145	"	"	214
6	"	760	209	345	97	1.0	3:1	209
7	"	600	196	345	145	0.9	3.3:1	214
8	"	920	221	420	136	"	"	256

✱ ALTHOUGH THE TOTAL VOLUME GENERATED IN TRIBUTARY AREAS OF PONDS ON LOTS 1 & 2 EXCEED POND CAPACITIES, THOSE CAPACITIES ARE STILL GREATER THAN THE CALCULATED REQUIREMENTS. EXCESS RUNOFF WILL BE DIVERTED AROUND THE SOUTH SIDES OF THE BUILDINGS AND WILL DISCHARGE INTO MONROE ST.

DRAINAGE CALCULATIONS

LOTS 1-8 W.H. INMAN ADDITION

TOTAL AREA	42230 ft²
NATURAL RUNOFF COEFFICIENT	.40
EXISTING SLOPE	2-8.5%
TIME OF CONCENTRATION	< 10 MIN
INTENSITY	5.4 IN/HR
100-YEAR, 6-HOUR PRECIPITATION	2.5 IN
RUNOFF RATE	2.3 CFS
TOTAL RUNOFF VOLUME	3318 ft³

LOTS 1 AND 2

AREA			1147 ft²	
RATE			.509 CFS	
VOLUME			986 ft³	
DEVELOPED	AREA	C*	RATE	VOLUME
ROOF	3000	.87	.304	544
PAVEMENT	600	.92	.009	115
OPEN	7875	.40	.330	686
			.813	1345 ft³
USED NATURAL				986
REQ'D RETENTION				359 ft³

LOTS 3 AND 8

AREA			3015 ft²	
RATE			.179 CFS	
VOLUME			301 ft³	
DEVELOPED	AREA	C*	RATE	VOLUME
ROOF	1600	.87	.179	290
PAVEMENT	360	.92	.041	69
OPEN	1055	.40	.082	138
			.295	497 ft³
USED NATURAL				301
REQ'D RETENTION				196 ft³

LOTS 4 AND 7

AREA			3000 ft²	
RATE			.140 CFS	
VOLUME			250 ft³	
DEVELOPED	AREA	C*	RATE	VOLUME
ROOF	1600	.87	.179	290
PAVEMENT	360	.92	.041	69
OPEN	1040	.40	.052	87
			.265	446 ft³
USED NATURAL				250
REQ'D RETENTION				196 ft³

LOTS 5 AND 6

AREA			3575 ft²	
RATE			.187 CFS	
VOLUME			313 ft³	
DEVELOPED	AREA	C*	RATE	VOLUME
ROOF	1600	.87	.179	290
PAVEMENT	360	.92	.041	69
OPEN	1415	.40	.070	118
			.288	477 ft³
USED NATURAL				281
REQ'D RETENTION				196 ft³

DRAINAGE PLAN

LOTS 1-8
W.H. INMAN ADDITION
ALBUQUERQUE, NEW MEXICO

FOR CHRIS INMAN CONSTRUCTION

PREPARED BY
ENCHANTMENT ENGINEERING
1517 BUBANK BOULEVARD, NE
884-8889

NOTES:

1. ROOF & PAVEMENT AREAS ARE ASSUMED
2. NATURAL DATA GIVEN IN OVERALL CALCS APPLIES TO INDIVIDUAL LOTS.

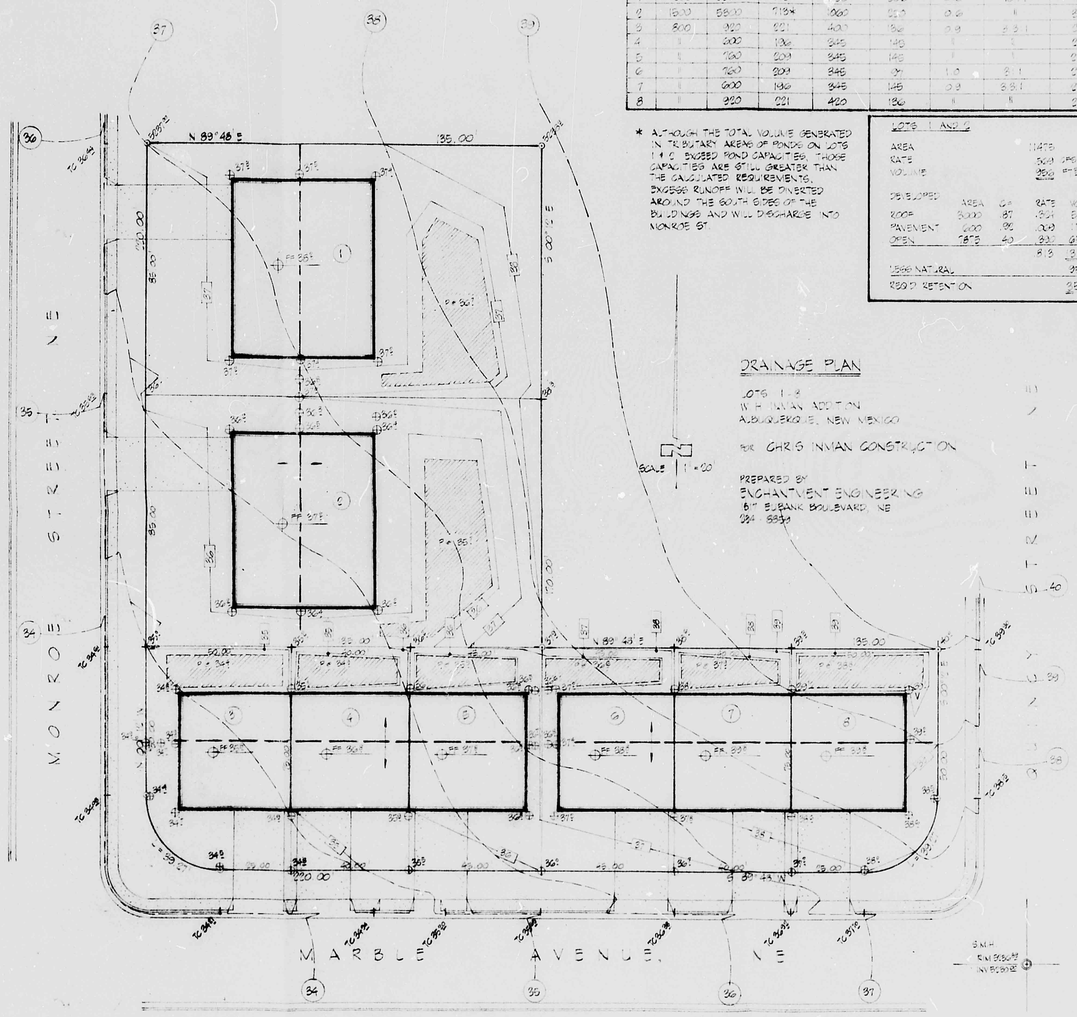
⊥ EXISTING GRADE ELEVATIONS
⊕ PROPOSED FINISHED ELEVATIONS
EXISTING CONTOURS (40)
PROPOSED CONTOURS 40

BENCH MARK

ACS 1-J17 SQUARE IN TOP OF CURB WNW CURB REF OF LOVING & MONROE NE

ELEVATION: 5025.223

CITY OF ALBUQUERQUE
THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT



DRAINAGE PLAN

LOTS 1-8
WH INVAN ADDITION
ALBUQUERQUE, NEW MEXICO

FOR CHRIS INVAN CONSTRUCTION

PREPARED BY
ENCHANTMENT ENGINEERING
1811 ELBANK BOULEVARD NE
294-8884

POND DATA

LOT	TRIBUTARY AREA FT² ROOF	OPEN	VOLUME	POND DIMENSIONS SURFACE	BOTTOM	DEPTH	SIDE SLOPE	CAPACITY
1	1500	5800	718*	1120	308	0.6	10:1	401*
2	1500	5800	718*	1060	210	0.6	8	304*
3	800	320	221	420	196	0.8	3.8:1	250
4	"	200	196	345	145	"	"	214
5	"	160	209	345	145	"	"	214
6	"	160	209	345	145	1.0	3:1	209
7	"	600	196	345	145	0.8	3.8:1	214
8	"	320	221	420	196	"	"	256

* ALTHOUGH THE TOTAL VOLUME GENERATED IN TRIBUTARY AREAS OF RANGE ON LOTS 1 & 2 EXCEED POND CAPACITIES, THOSE CAPACITIES ARE STILL GREATER THAN THE CALCULATED REQUIREMENTS. EXCESS RUNOFF WILL BE DIVERTED AROUND THE SOUTH SIDES OF THE BUILDINGS AND WILL DISCHARGE INTO MONROE ST.

DRAINAGE CALCULATIONS

LOTS 1 & 2 W.H. INVAN ADDITION

TOTAL AREA	43320 FT²
NATURAL RUNOFF COEFFICIENT	.40
EXISTING RUNOFF	0.887
TIME OF CONCENTRATION	6.10 MIN
INTENSITY	3.4 IN/HR
100 YEAR 6 HOUR PRECIPITATION	2.5 IN
RUNOFF RATE	0.8 CFS
TOTAL RUNOFF VOLUME	1374 FT³

LOTS 1 AND 2

AREA			11478	
RATE			500 CFS	
VOLUME			2500 FT³	
DEVELOPED	AREA	C#	RATE	VOLUME
ROOF	3000	.87	.521	544
PAVEMENT	3000	.95	.569	1.8
OPEN	5478	.40	.240	1314
			4.3	1913 FT³
LESS NATURAL				1374
REQ'D RETENTION				539 FT³

LOTS 3 AND 6

AREA			3000 FT²	
RATE			.22 CFS	
VOLUME			200 FT³	
DEVELOPED	AREA	C#	RATE	VOLUME
ROOF	1600	.87	.192	289
PAVEMENT	1600	.95	.14	.24
OPEN	1600	.40	.096	384
			.395	437 FT³
LESS NATURAL				200
REQ'D RETENTION				237 FT³

LOTS 4 AND 5

AREA			3000 FT²	
RATE			.22 CFS	
VOLUME			200 FT³	
DEVELOPED	AREA	C#	RATE	VOLUME
ROOF	1600	.87	.192	289
PAVEMENT	1600	.95	.14	.24
OPEN	1600	.40	.096	384
			.395	437 FT³
LESS NATURAL				200
REQ'D RETENTION				237 FT³

LOTS 7 AND 8

AREA			3000 FT²	
RATE			.22 CFS	
VOLUME			200 FT³	
DEVELOPED	AREA	C#	RATE	VOLUME
ROOF	1600	.87	.192	289
PAVEMENT	1600	.95	.14	.24
OPEN	1600	.40	.096	384
			.395	437 FT³
LESS NATURAL				200
REQ'D RETENTION				237 FT³

NOTES

1. ROOF & PAVEMENT AREAS ARE ASSUMED
2. NATURAL DATA GIVEN IN OVERALL DRAINAGE APPLIES TO INDIVIDUAL LOTS

— EXISTING GRADE ELEVATIONS
⊕ PROPOSED FINISHED ELEVATIONS
EXISTING CONTOURS
PROPOSED CONTOURS

BENCH MARK

ADD 1 UNIT BRASS IN TOP OF CURB INLET OPPOSITE 1 MONROE NE
ELEVATION: 5005.[illegible]

CITY OF ALBUQUERQUE
THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT