HYDROLOGY

G22/D7
2 PLANS

G22/D7

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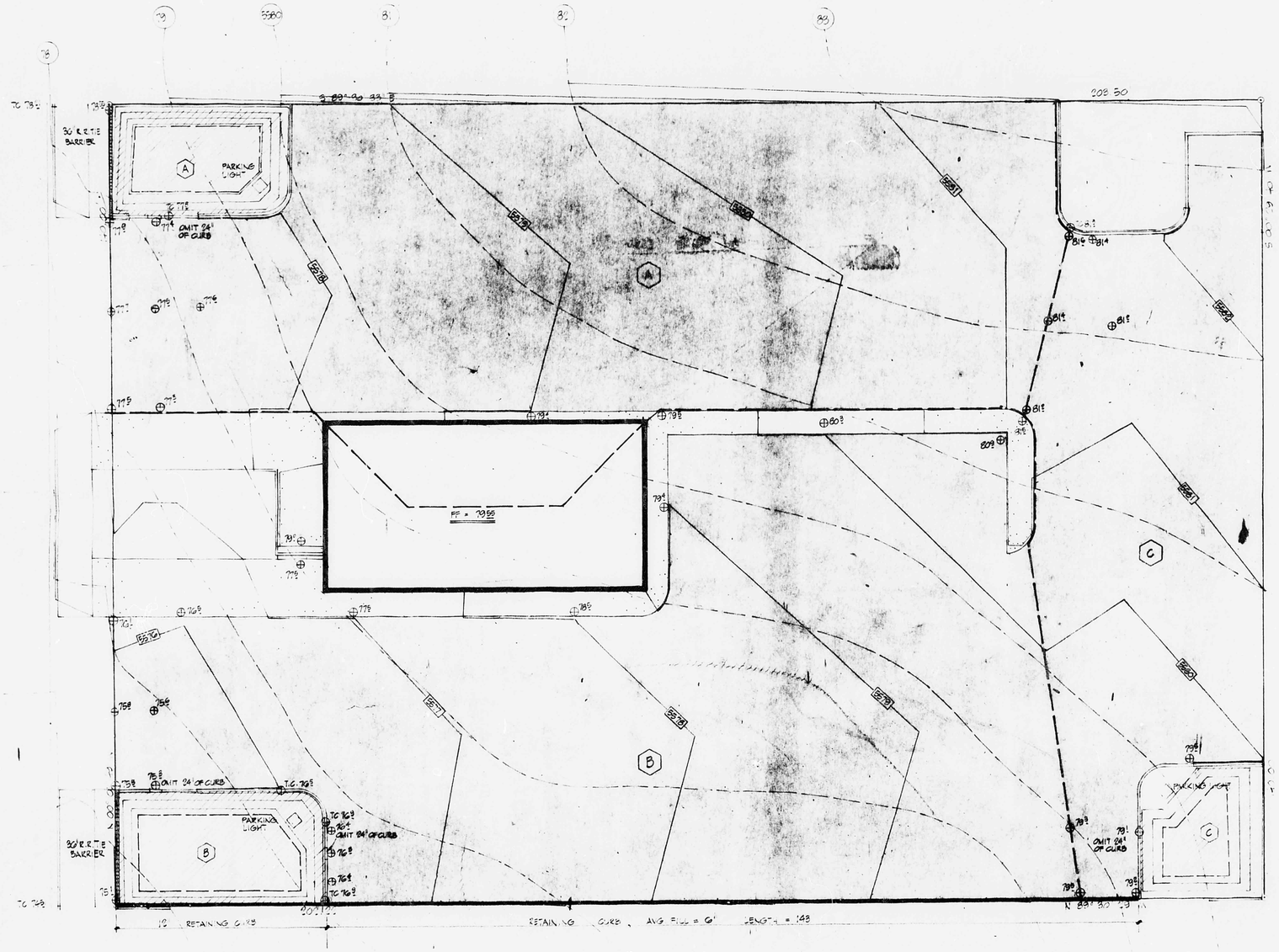


(A) POND DATA

SURFACE AREA	584 m²
BOTTOM AREA	176 m²
DEPTH	0.5 m

VOLUME
$= \frac{0.5}{3}\left[584 + 176 + \sqrt{584 \times 176}\right]$
$= \underline{181\ m^3}$ (900 REQUIRED)

(B) POND DATA

SURFACE AREA	679 m²
BOTTOM AREA	346 m²
DEPTH	0.6 m

VOLUME
$= \frac{0.6}{3}\left[679 + 346 + \sqrt{679 \times 346}\right]$
$= \underline{308\ m^3}$ (1030 REQUIRED)

(C) POND DATA

SURFACE AREA	350 m²
BOTTOM AREA	140 m²
DEPTH	0.0 m

VOLUME
$= \frac{0.0}{3}\left[350 + 140 + \sqrt{350 \times 140}\right]$
$= \underline{0\ m^3}$ (470 REQUIRED)

DRAINAGE CALCULATIONS

EXISTING

AREA	2940.00 m²
C=	.40
SLOPE	1.0 %
TIME OF CONCENTRATION	20 MIN
INTENSITY	84 MM/HR
100 YR. 6 HR. PRECIPITATION	95 MM
RUNOFF RATE	.14 CFS
RUNOFF VOLUME	330 m³

(76)

(A)	AREA	C=	RATE	VOLUME
ROOF	640	.90	.071	50
PAVEMENT	8500	.90	.942	682
OPEN	1820	.40	.201	88
	10960		1.214	820
LESS NATURAL				330
REQUIRED RETENTION				490 m³

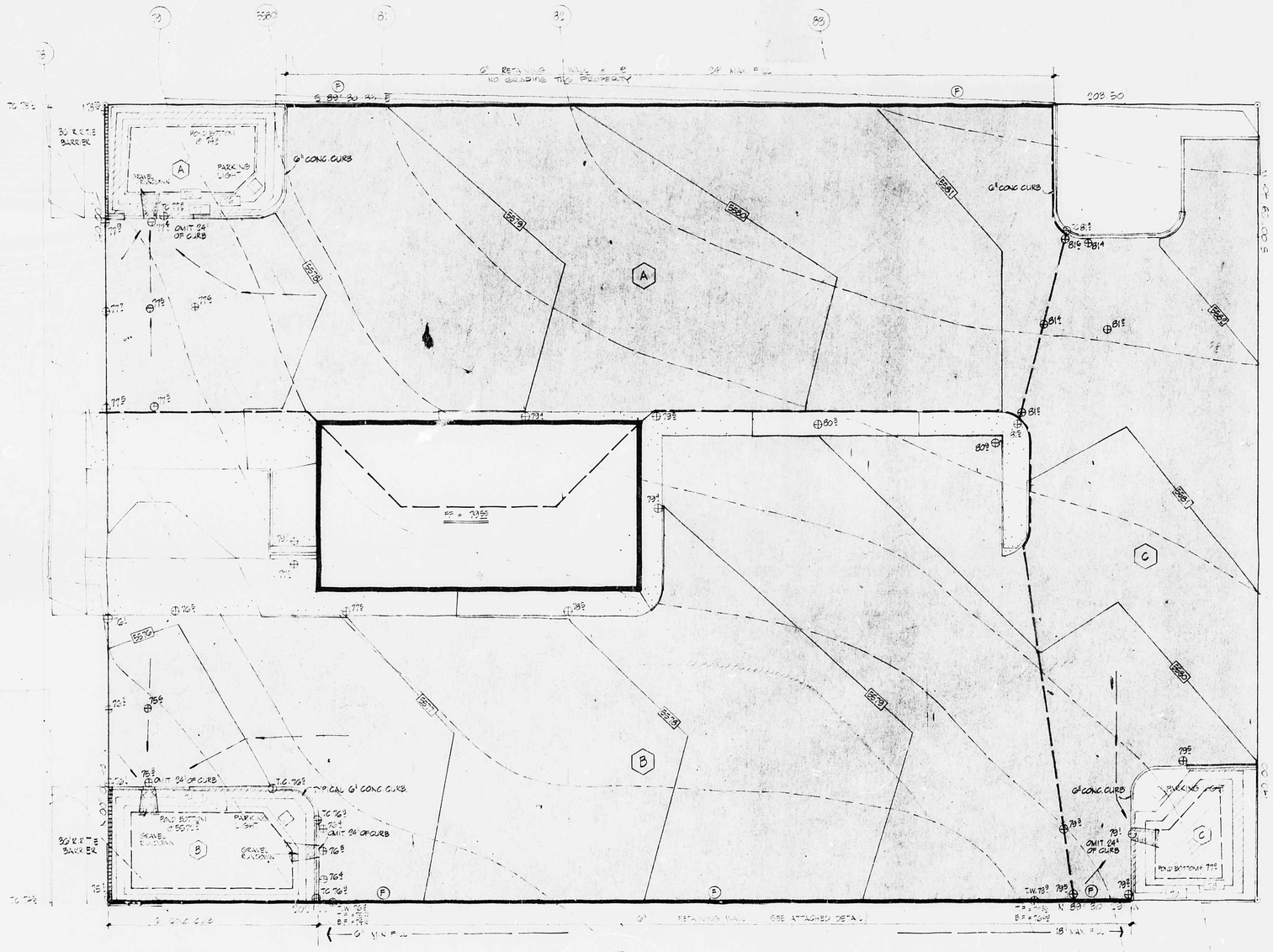
(77)

(B)	AREA	C=	RATE	VOLUME
ROOF	670	.90	.119	101
PAVEMENT	10900	.90	1.936	1638
OPEN	1180	.40	.058	33
	12750		2.064	1772
LESS NATURAL				330
REQUIRED RETENTION				1442 m³

(78)

(C)	AREA	C=	RATE	VOLUME
ROOF	700			
PAVEMENT	4340	.90	.435	366
OPEN	1110	.40	.055	33
	5460		.551	427 m³
LESS NATURAL				330
REQUIRED RETENTION				370 m³

John M. Biehl


JUAN TABO BOULEVARD, NE
6' RETAINING WALL & 8' NO BUILDING THE PROPERTY
208.50
30" REDWOOD BARRIER
6" CONC. CURB
OMIT 24" OF CURB
POND BOTTOM @ 77.5
PARKING LIGHT
GRAVEL EXCAVATION
TYP. CAL. 6" CONC. CURB
TC 76.5
TC 76.5
TC 76.5