HYDROLOGY H22/D16

H22/D16

5 PLANS

ENCHANTMENT ENGINEERING Inc.
1529-F EUBANK BLVD. N.E.
ALBUQUERQUE, N.M. Ph.294-8850

AUGUST 3, 1977

#22/D16

DRAINAGE CALCULATIONS

12217 MENAUL BOULEVARD, NE
LOT - 21-A
BLOCK - 7
BRENTWOOD HILLS
for H.G. PICKARD + ASSOCIATES

UNDEVELOPED

AREA UNDER CONSIDERATION	.207 ACRE
EXISTING SLOPE	4.0%
NATURAL RUNOFF COEFFICIENT	.40
TIME OF CONCENTRATION	10 MINUTES
INTENSITY $\frac{189}{TC+25}$	5.4 IN/HR
100-YEAR, 6-HOUR PRECIPITATION	2.7 IN
RATE OF NATURAL RUNOFF	.447 CFS
VOLUME OF NATURAL RUNOFF	.019 AC-FT

DEVELOPED

	AREA (AC)	C =	A x C	RATE (CFS)	VOLUME (AC-FT)
FLAT ROOF	.090	.875	.0788	.425	.0177
PAVEMENT	.047	.92	.0432	.233	.0097
LANDSCAPING	.060	.40	.0240	.130	.0054
INTENSITY = 5.4 IN/HR x			.146 =	.788 CFS	.0328 AC FT

REQUIRED RETENTION

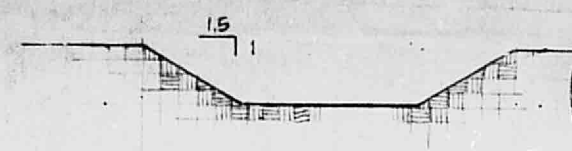
.0328 AC.FT. (DEV.) - .019 AC FT (NAT) = .0138 AC.FT. (602 CU.FT.)

TO BE RETAINED

	VOLUME (AC-FT)
ROOF (66%)	.0117
LANDSCAPING (89%)	.0048
	.0165 AC.FT (719 CU.FT.)

POND SECTION

SEE SITE PLAN FOR LOCATION + DEPTH



REGISTERED PROFESSIONAL ENGINEER AND LAND SURVEYOR
NEW MEXICO
JOHN W. BETTIS

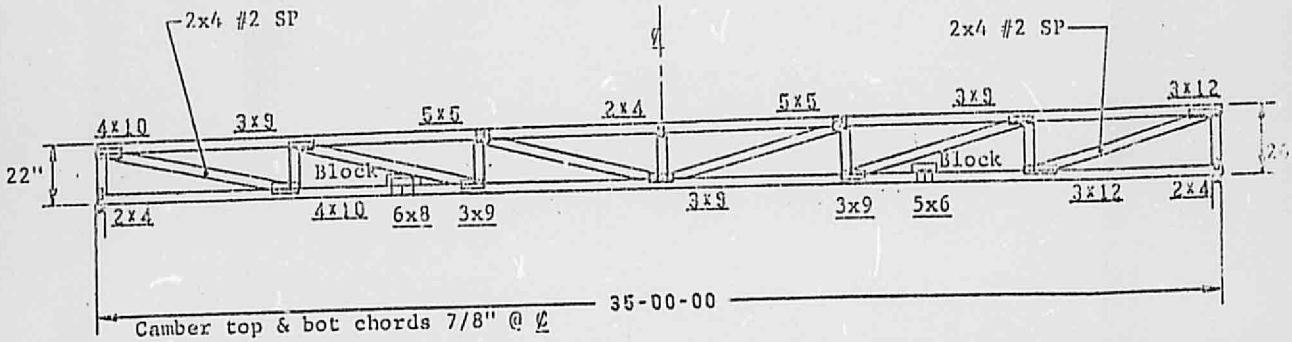
TO BE DISCHARGED

	RATE (CFS)	VOLUME (AC-FT)
ROOF (33%)	.140	.006
PAVEMENT (100%)	.233	.0097
LANDSCAPING (11%)	.014	.0006
	.387 CFS	.0163 AC.FT.

per

Top Chord : 2x4 #1 Dense Southern Pine
Bot Chord : 2x4 #1 Dense Southern Pine
Webs : 2x4 #3 Southern Pine
except as otherwise shown

Plates designed in accordance with I.C.B.O. Criteria



ALPINE TRUSS

Dr. By GAG Chkd. By OAG Date 12/30/7

Loading		
Top Chord	30	psf
Bot Chord	10	psf
Tot. Load	40	psf
Dur. Factor	15%	
Spacing	2'0" O.C.	

Dwg A104.479
Length 35'0"
Depth 22" min.
Type FLAT