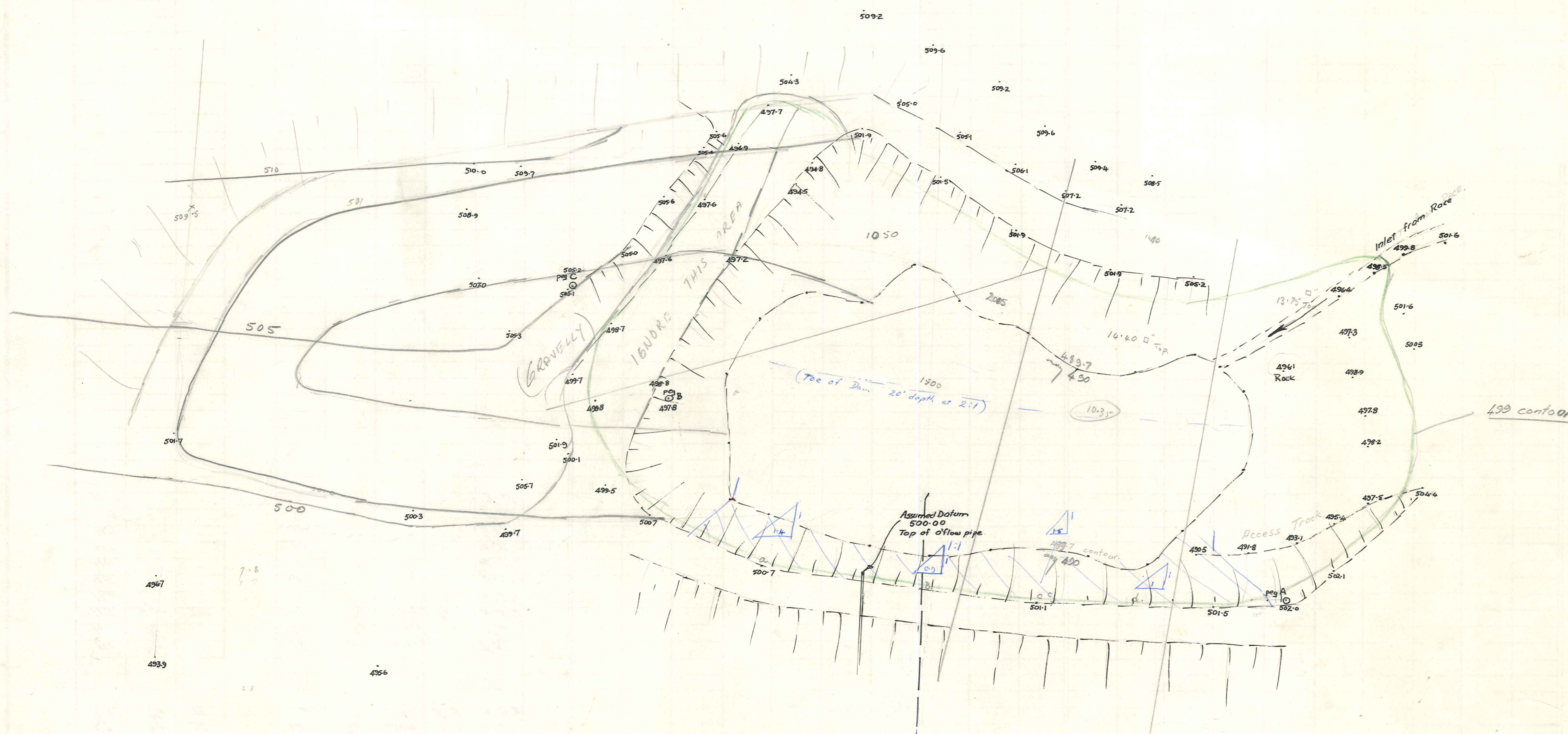


Extension Area of Surface (420') 13,800 sq. ft.
 Area of Bottom (475') 5,700 sq. ft.
 Capacity of Extension. $9,750 \times 20 \times \frac{2.5}{4}$ galls.
 1,220,000 galls.

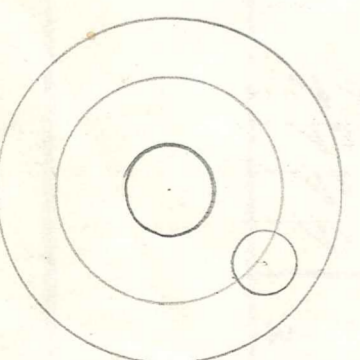
$1' = 400'$
 $\frac{36.43}{400}$
 $13,77,200$
 $\frac{14.30}{400}$
 $5,720,000$
 $\frac{13.75}{400}$
 14.40
 20.05
 10.50
 58.70
 $\frac{400}{23,43,000}$
 $\frac{25.35}{400}$
 $10,14,000$

Existing Surface Area. 499' contour 23,500 sq. ft.
 Area 490' contour 10,000 sq. ft.
 33,500
 Volume between 499 & 490 = $9 \times 16,750 \times \frac{2.5}{4}$ galls.
 941,000 galls.



Earthworks $110' \times 120' \times \frac{9}{2} = 594,000$ cu ft.
 $+ 13,750 \times 20 = 1,950,000$
 $\frac{2,544,000}{9,440}$ cu yds.
 Total Earthworks any 10,000 cu yds.

PLAN OF RESERVOIR (after cleaning Jan. 1965)
 Scale 20 ft. to an inch.

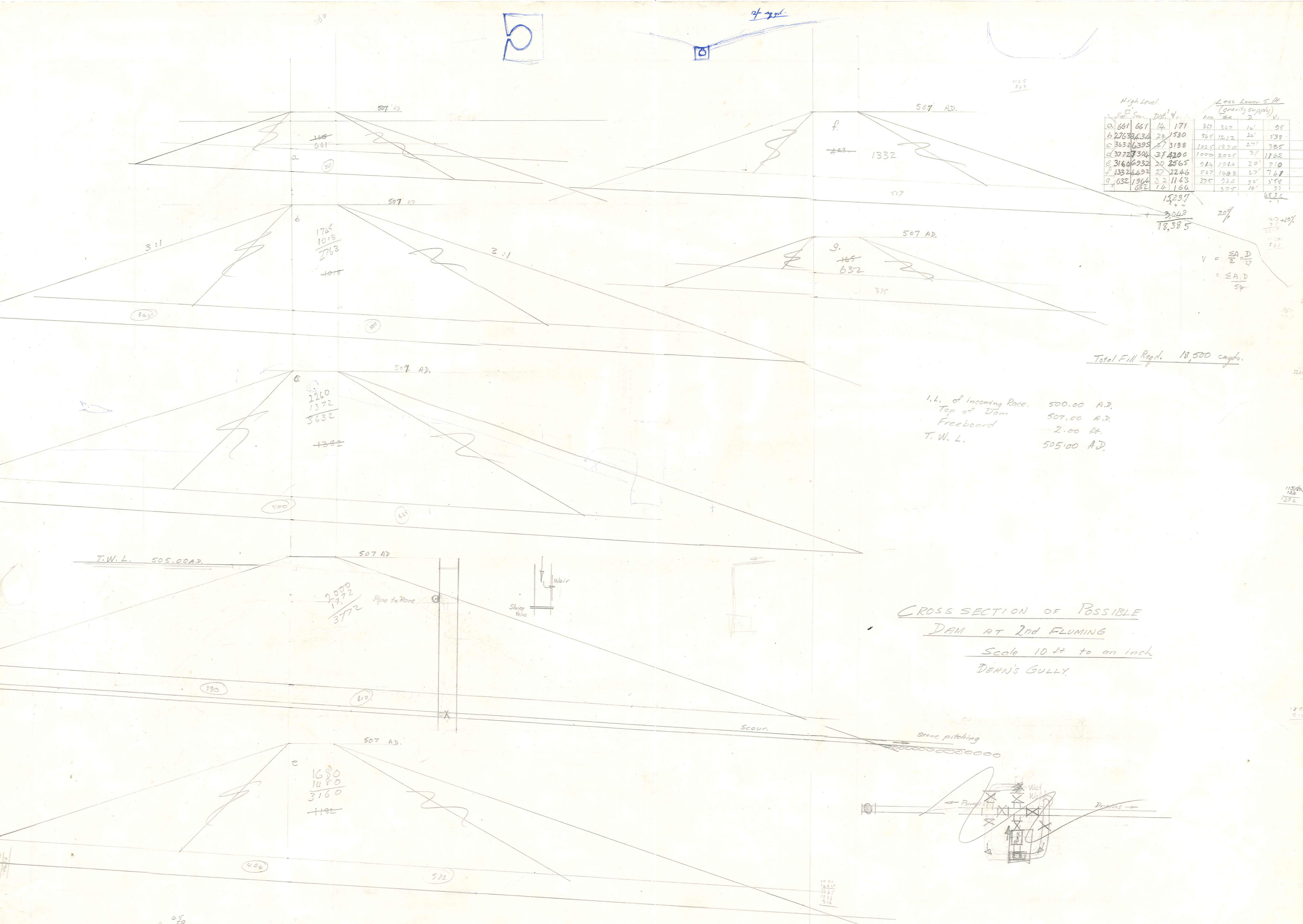


VINCENT COUNTY COUNCIL.

CLYDE RESERVOIR.

Jan 1965 ABB.

4512/1
 Fbk 202

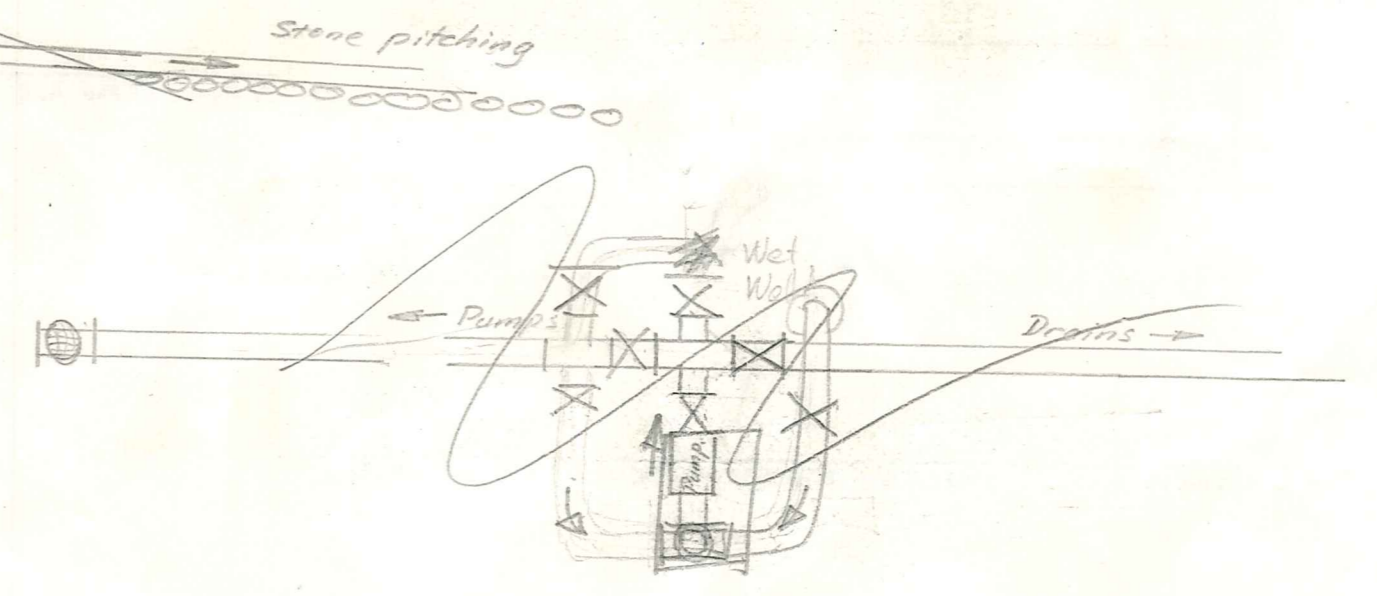


High Level.				Less Lower 5 ft (Gravity supply)				
Sec.	Sum	Dist.	V.	Area	Dist.	V.		
a	661	661	14	171	367	367	16'	95
b	2763	634	24	1530	765	1812	26'	538
c	3632	6395	27	3138	1025	1870	27'	985
d	3722	7304	31	4200	1000	2025	31'	1162
e	3160	6932	20	2565	916	1916	20'	710
f	1332	4492	27	2246	567	1083	27'	747
g	632	1964	32	1163	375	922	32'	558
			14	164		375	16'	97
					15237			4836
					3048		20%	100+20%
					18385			507

Total Fill Reqd. 18,500 cu yds.

I.L. of incoming Race. 500.00 A.D.
 Top of Dam 507.00 A.D.
 Freeboard 2.00 ft.
 T.W.L. 505.00 A.D.

CROSS SECTION OF POSSIBLE DAM AT 2nd FLUMING
 Scale 10 ft to an inch
 DEAN'S GULLY.



V.C.C.

CLYDE WATER SUPPLY

4512/2
 A.B. Fox 200.

Off-peak usage at Schedule D 18 hrs Available.

Assume: 330 g.p.m. augmentation.

Static lift 31 ft.

Length, say 140 ft.

Dia 6" class A. (4 = 4.5 ft/sec)

at 330 g.p.m.

L.O.H = 1.0 ft/100 ft. say 2 ft.

W.H.P. = $\frac{3.3 \times 3300}{33000} = 3.3$ h.p.

Pump H.P. = $\frac{3.3}{.75} = 4.4$ say 5 h.p. motor.

Motor H.P. incl. compl. = $\frac{4.4}{.90} = 4.9$ H.P. say 5 h.p. motor, 3.75 K.W.

Assume 30% Load Factor. for charging purposes.

i.e. 12 pence/unit.

As the above is virtually peak augmentation only take initial usage at 25%

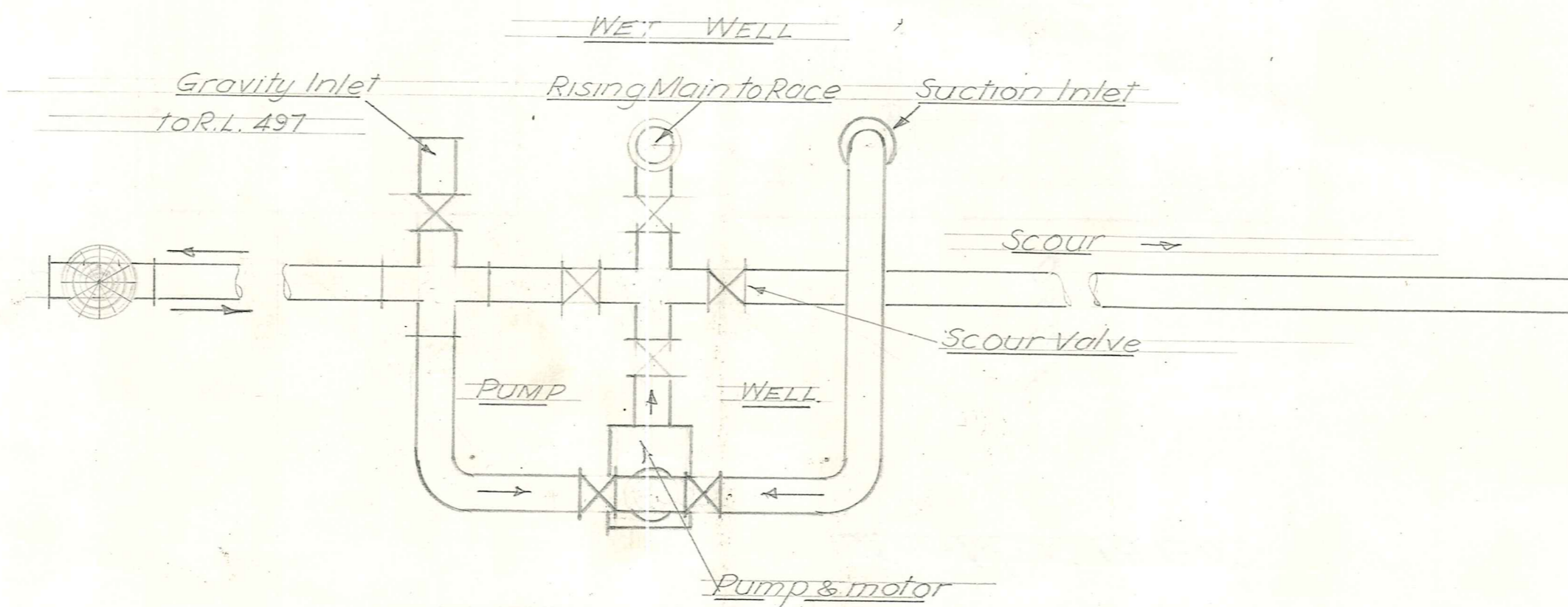
Take consumption at 4 k.w.

4 x 6 hr x 12 = 28.8 pence/day + £2/month

For 2 mths. = £7-4 (but min = £10)

Min Charge for 12 hrs. = (400 x 4 x 1.2 + 2) 5 = £60

Total Charge for Power for 12 mths = £60



DIAGRAMMATIC LAYOUT AT PUMP CHAMBER

AT DAM SITE (DEAN'S GULLY)

Not to Scale.

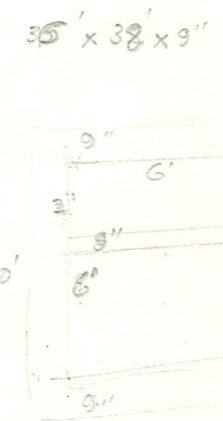
Capital Costs

Clearing Site.	L.S.	£100-0-0
Construction of Dam	18,500 cu yds. 2000	£2000-0-0
Piping of race across dam.	200 lin ft. 450	£450-0-0
Construction of pumping chamber etc.	L.S.	£1300-0-0
Pump & motor with starter	L.S.	300-0-0
Piping 6" dia. C.A.	250 lin ft. say	200-0-0
Valves & specials.		210-0-0
Gen'ing.		400-0-0
		<u>5060-0-0</u>

Engineering & Supervising at scale.

Estimate

Shuttering Est. 3635
Int 36 x 60
Total 36 x 75
2750 sq ft.
51.5



$$\frac{36 \times 38}{5} \times \frac{1}{4}$$

$$\frac{30 \times 38}{5} \times \frac{1}{4}$$

Pump Chamber Conc. 35 cu yds.

120
48
8
8
210

V.C.C.

CLYDE WATER AUGMENTATION

4512/3

ASB.

