

25 YR.  
 $c=0.7$   $t=10$  MIN.  $I=0.5$   
 $Q = 4.55$  cfs/AE

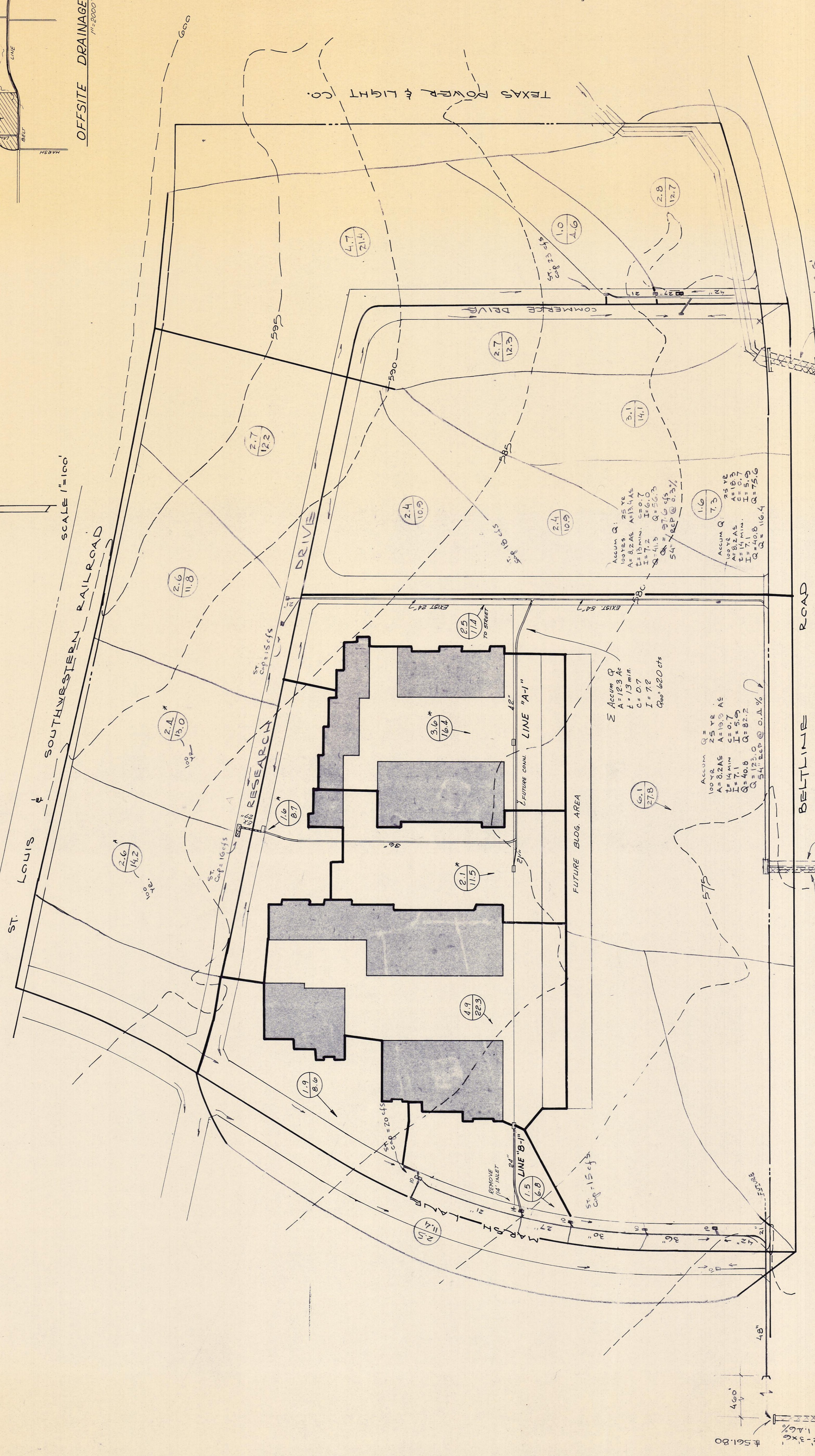
100 YR.  
 $c=0.7$   $t=10$  MIN.  $I=7.8$   
 $Q = 5.46$  cfs/AE

2.6 AREA (IN ACRES)  
 11.8 RUNOFF (45) 25 YR. FREQ.  
 UNLESS NOTED OTHERWISE.

APPROVED  
 FOR CONSTRUCTION  
 CITY OF ADDISON

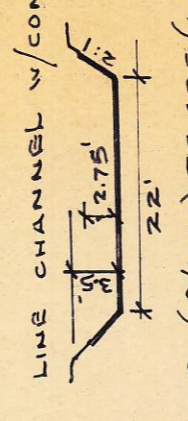
OFFSITE DRAINAGE  
 1"=200'

SCALE 1"=100'



CHANNEL  
 $A = 382$  AE  $C_{AVG} = 0.7$   
 T.O.C.  
 2700' GUTTER FLOW @ 1.07% = 18 MIN.  
 1000' OVERLAND FLOW @ 0.87% = 35 MIN.  
 3500 IMPROV. CHANNEL @ 0.87% = 30 MIN.  
 TOTAL 83 MIN. SAT 1HR 20 MIN.  
 $I_{25} = 2.8$   $I_{100} = 3.5$   
 $Q_{25} = 382(7) 2.8 = 750$  cfs  
 $Q_{100} = 382(7) 3.5 = 936$  cfs

CULVERT  
 $Q_{100} = 936 + 52 \text{ ONITE} = 988$  cfs.  
 LINE CHANNEL w/ CONC. FOR 25 YRS:  
 $Q = (84 \text{ MIN}) 75025 (1.07) 0.0707 = 770$  cfs  
 USE 2-10 X 15 BOX CULVERTS.  
 $Q = (99.07) 45 (1.7768) 0.0707 = 560$  cfs  
 $V = 988/50 = 11.0$  FPS.



Accum Q:  
 $A = 82$  AE  $I = 7.2$   
 $Q = 413$  cfs  
 $54\% \text{ REP @ } 0.5\%$

Accum Q:  
 $A = 123$  AE  $I = 7.2$   
 $Q = 620$  cfs

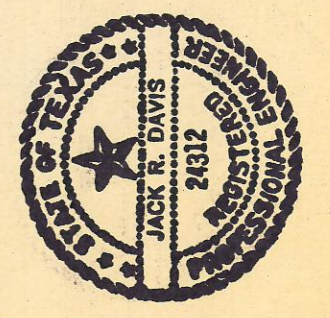
Accum Q:  
 100 YR  $I = 14.2$   
 $A = 0.24$  AE  $I = 14.2$   
 $Q = 40.8$  cfs  
 $54\% \text{ REP @ } 0.5\%$

EXIST. 2-8.5 X 8.5  
 $C_{AVG} w/ 1/2" = 1.0 = 1105$  cfs.

\*NOTE: LINE "A" DESIGNED ON  
 100 YR. BASIS

EXIST. "A2"  
 $C_{AVG} @ 1.42\% = 70$  cfs

EXIST. "A2"  
 $C_{AVG} @ 1.42\% = 70$  cfs



DRAINAGE AREA			
BELT LINE - MARSH OFFICE PARK			
ADDISON, TEXAS			
BROCKETTE / DAVIS / DRAKE, INC.			
CONSULTING ENGINEERS			
CIVIL	STRUCTURAL	SUPERVISING	
8302 CARLEISLE STREET DALLAS, TEXAS 75204			
DESIGN	DRAWN	DATE	SCALE
J.R.D.	C.J.Z.	9/7/79	1"=100'
NOTES	FILE		
			NO.
			C7