

EXISTING CONDITIONS
 ORIGINAL DRAINAGE CALCULATIONS
 TO EXIST. CONCENTRATION POINT A

Drainage Calculations (T.H.D. Hydraulic Manual)
 Rolling Terrain 1% - 3.5%
 Impervious Soil
 Commercial C = 0.6 - 0.9 (use C=0.75)
 For Dallas County
 $I_p = \frac{1.49}{(1.49 + 0.0087) \cdot 774} = 9.3 \text{ in/hr.}$
 $Q_p = C.I.A. = (0.75)(9.3)(A)$
 $Q_p = 6.95(A)$

POINT 'A' ACRES = 31.5
 $Q_{25} = 218.9 \text{ C.F.S.}$

PROPOSED CONDITIONS
 $I_{100} = \frac{100}{(10 + 8.3) \cdot 0.762} = 11.57 \text{ in/hr.}$
 $Q_{100} = C.I.A.$

DIRECT Q TO EXISTING
 SYSTEM IN BELTLINE

ACRES	C
0.8	0.35
4.3	0.75
2.2	0.85
0.6	0.95
TOTALS: 13.9 Ac.	0.84

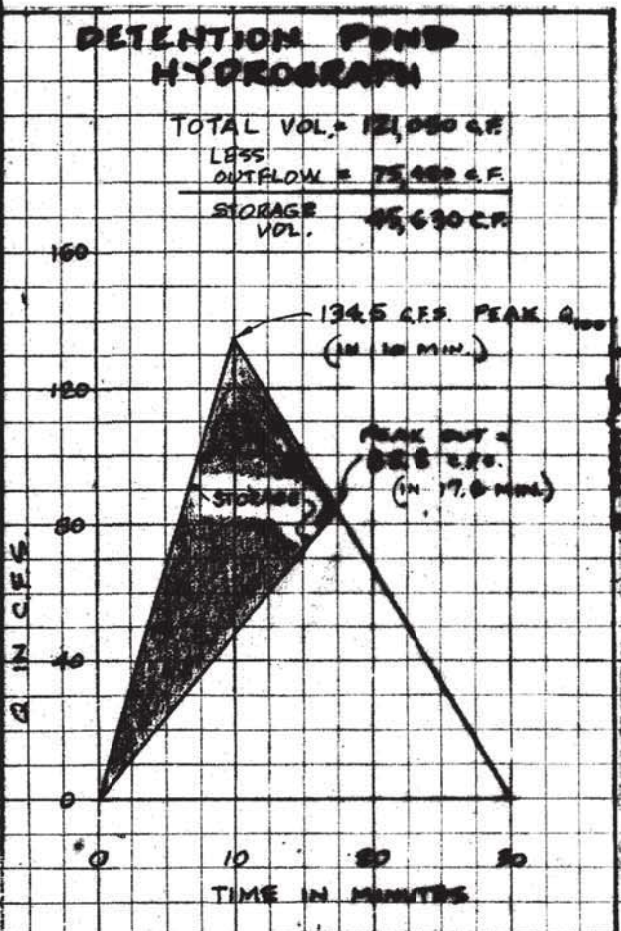
$Q_{100} = 135.1 \text{ C.F.S.}$
 DIRECT

Q₁₀₀ THRU DETENTION PONDS

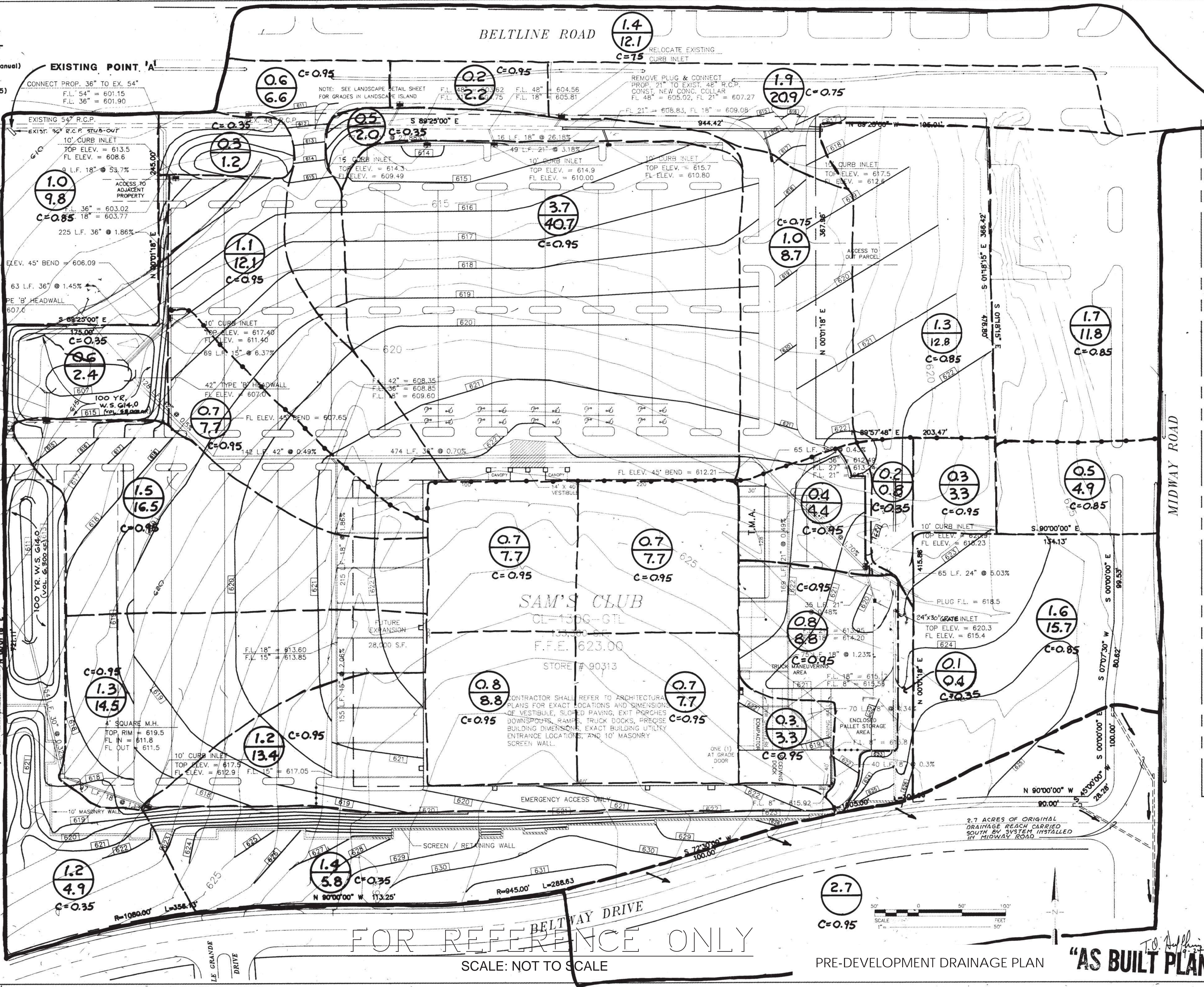
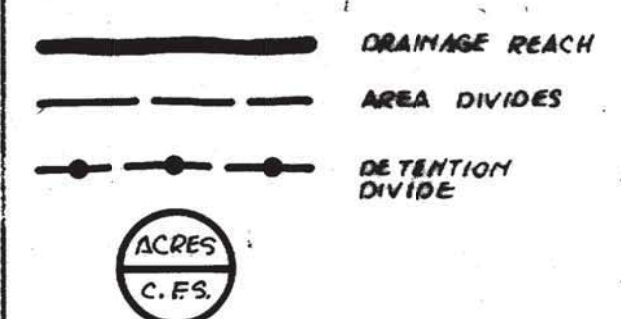
ACRES	C
3.9	0.35
0	0.75
2.1	0.85
0.9	0.95
TOTALS 14.9	0.78

$Q_{100} \text{ IN} = 134.5 \text{ C.F.S.}$

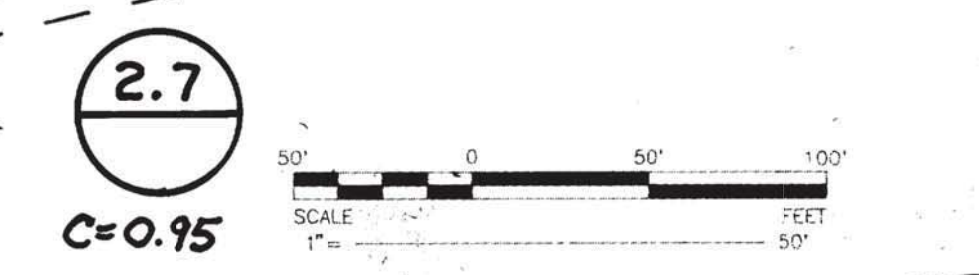
ORIGINAL Q_{25} TO POINT A = 218.9 C.F.S.
 LESS Q_{100} DIRECT TO SYSTEM = 135.1 C.F.S.
 MAX. Q_{100} OUT FROM PONDS = 83.8 C.F.S.



LEGEND



FOR REFERENCE ONLY
 SCALE: NOT TO SCALE



PRE-DEVELOPMENT DRAINAGE PLAN

"AS BUILT PLANS"

NO.	DATE	REVISION / DESCRIPTION



SHEET TITLE: **DRAINAGE MAP AND CALCULATIONS**
 PROJECT TITLE: **WAL-MART BELTLINE + MIDWAY ADDISON, TEXAS**
SAM'S CLUB

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 ENGINEERS - PLANNERS - SURVEYORS
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JOB No.	9102808
DESIGNED BY:	as/T.S.G.
CHECKED BY:	T.O.H.
DATE:	FEB 10, 1991
SCALE:	1" = 50'-0"
SHEET	5 OF 24 SHEETS