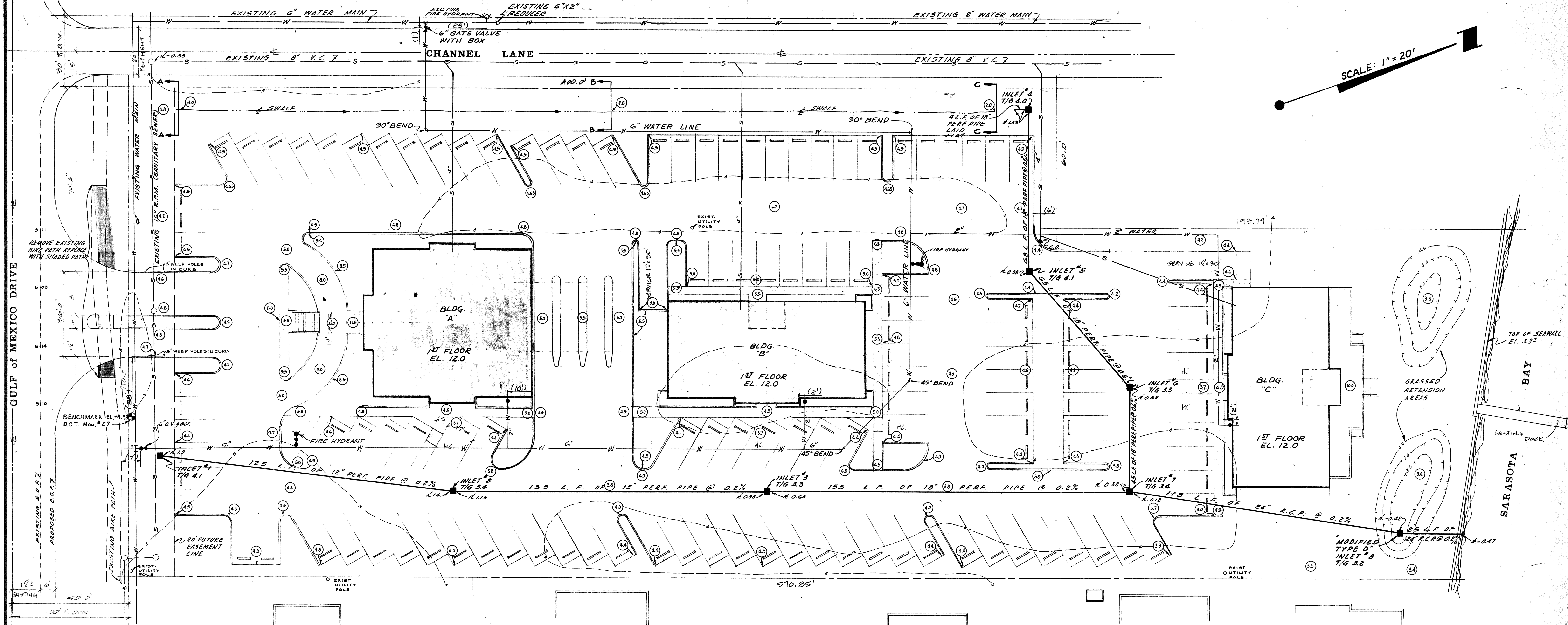


NOTE: SEE SHEET 2 FOR GULF OF MEXICO DRIVE PAV'T. WIDENING DETAIL.



SCALE: 1" = 20'

DRAINAGE CALCULATIONS

Undeveloped Runoff
 Time of Concentration = 40 min.
 $i = 3.8 \text{ in./hr.}^*$
 $c = 0.25$
 Area = 2.56 Acres
 $Q_u = c i a = 0.25 (3.8) (2.56) = 2.43 \text{ CFS}$

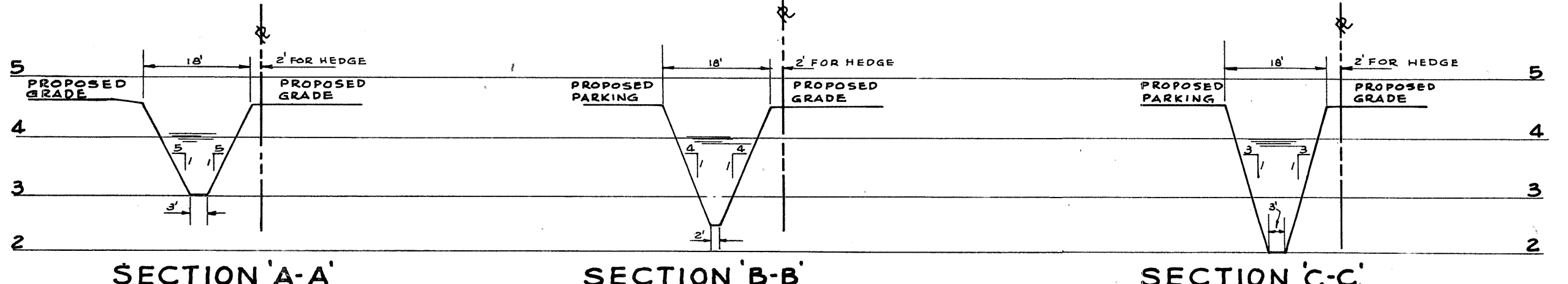
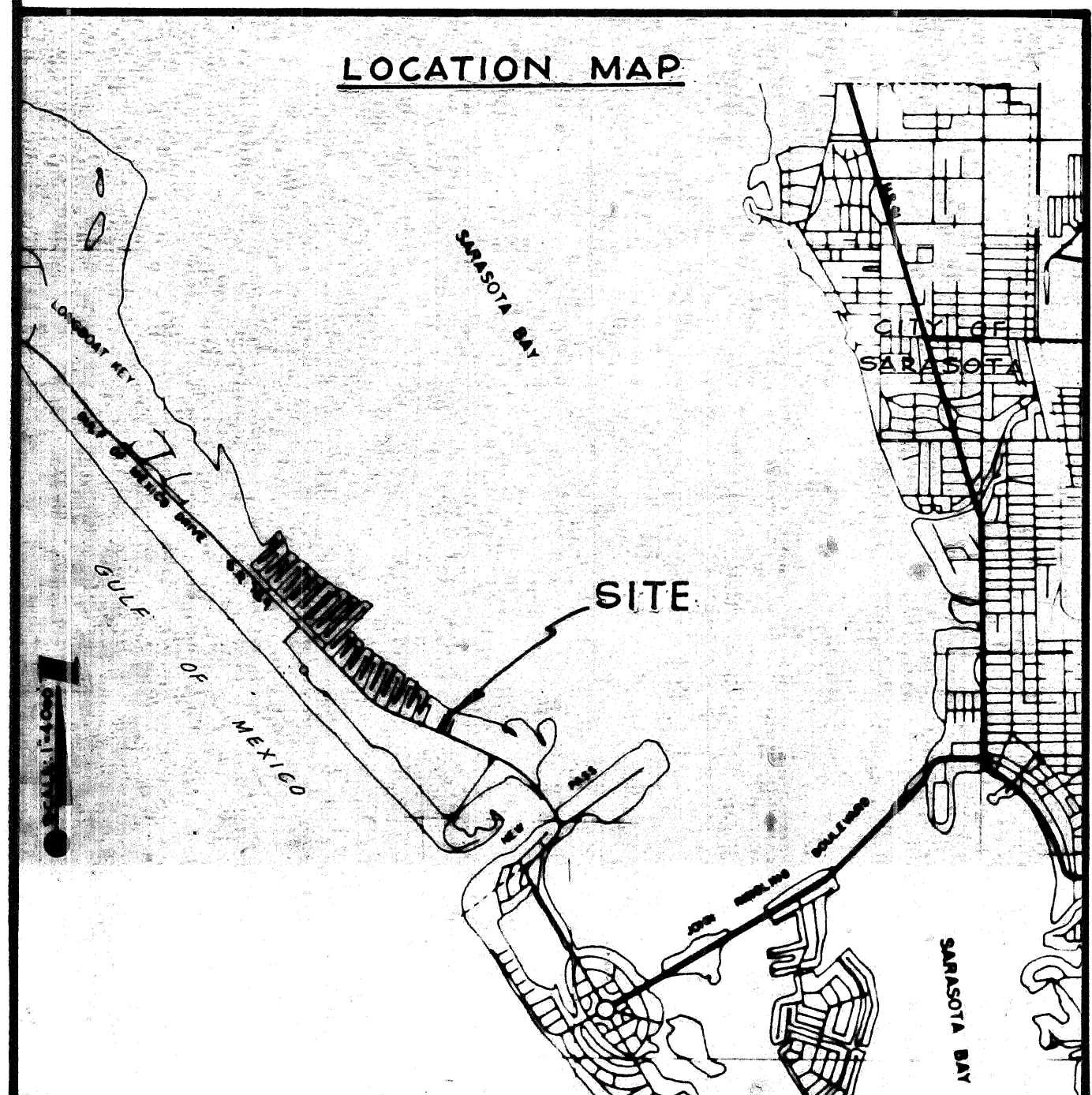
Developed Runoff
 Time of Concentration = 30 min.
 $i = 4.5 \text{ in./hr.}^*$
 $c = 0.64$
 Area = 2.56 Acres
 $Q_d = c i a = 0.64 (4.5) (2.56) = 7.37 \text{ CFS}$

Required Impoundment
 $\text{Volume} = (7.37) (30) (60) - 2.43 (40) (60) = 13,266 - 5,832 = 7,434 \text{ CF}$

Provided Impoundment
 Swale = 5840
 Pipe in trench = 2290
 8130 CF

* Derived from 10 year return period storm.

NOTE: ALL PERFORATED DRAINAGE PIPE SHALL BE LAID IN A GRAVEL TRENCH. SEE TYPICAL UNDERDRAIN - SHEET 3.



SWALE SECTIONS

SCALE: HORIZ. 1" = 20' VERT. 1" = 2'

- LEGEND**
- 5.11 EXISTING SPOT ELEVATION
 - - - EXISTING CONTOURS
 - - - PROPOSED CONTOURS
 - ⊙ PROPOSED SPOT ELEVATION
 - PROPOSED DRAINAGE PIPE & INLET
 - PROPOSED SANITARY SENEER CLEANOUT
 - PROPOSED WATER SERVICE LINE & METER
 - PROPOSED SENEER SERVICE LINE
 - PROPOSED SWALE
 - ⊙ BENCHMARK

AS BUILT PLANS

Date 6-15-81 BY M.J.Y.

REVISION 1	FOR: HARRY A. MACWEN, ARCHITECT		LTR.	DATE	REVISION	BY	SCALE:	DATE	DESIGNED BY
	DRAINAGE & GRADING PLAN		7A	6-10-80	ADDED 6" WATER LOOP AND REFINED SERVICES	M.J.Y.	1" = 20'	MAY 1980	M.J.Y.
	SAILBOAT SQUARE		7B	10/11/80	REVISED WATER LINE ALONG CHANNEL LANE	M.J.Y.			
SMALLY, WELLFORD & NALVEN, Inc.			CONSULTING ENGINEERS & SURVEYORS			DRAWN BY A.L.B., P.E.M.		CHECKED BY PROJECT NO. 2041	DESIGNED BY DONALD J. SMALLY, P.E. FLA. CERT. NO. 5051
SARASOTA, FLA.									