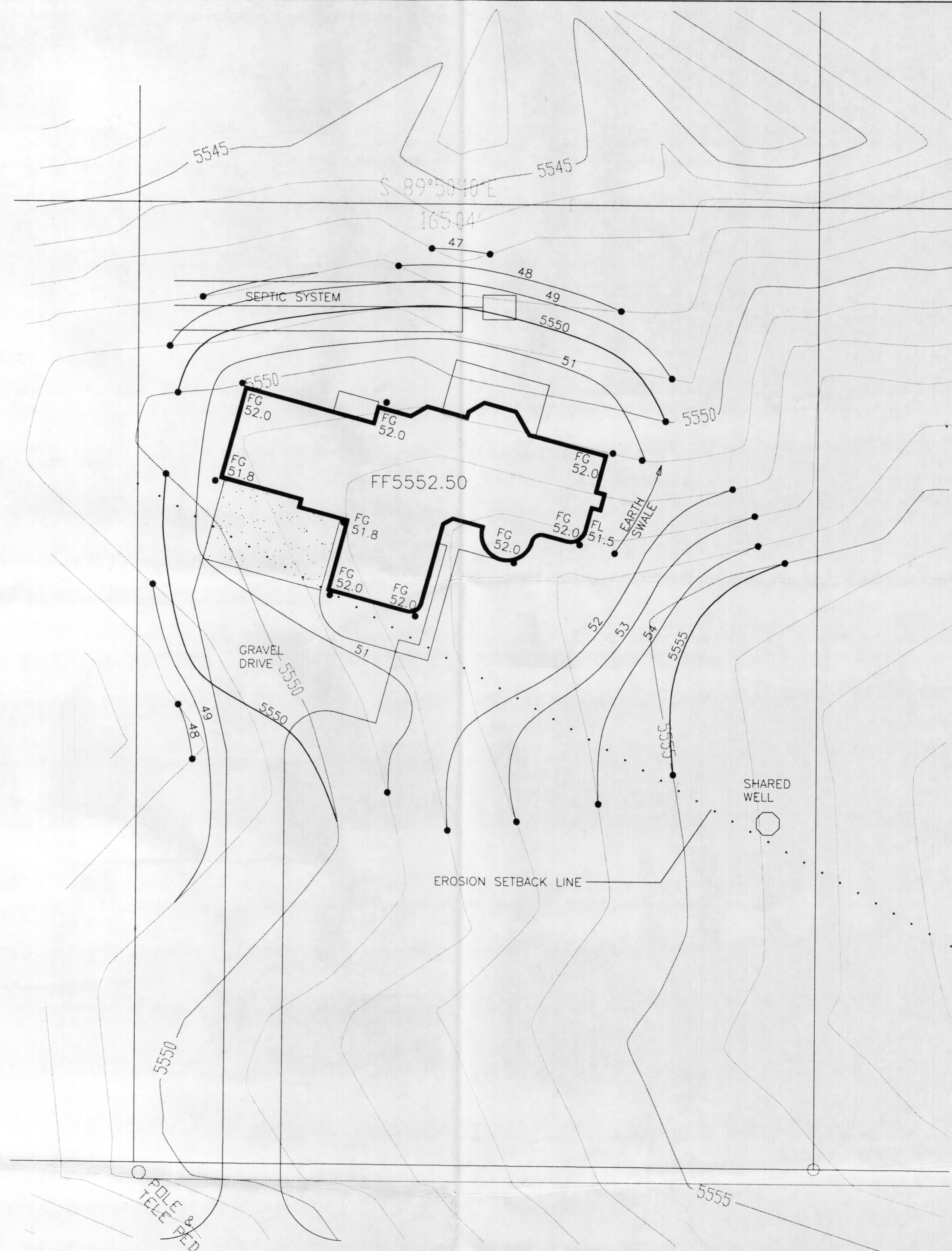
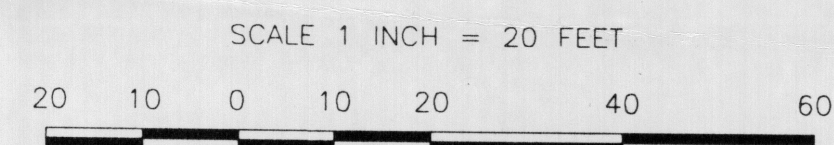




RICHFIELD AVE.



LEGAL DESCRIPTION

LOT 20, BLOCK 3, TRACT 3, UNIT 3, NORTH ALBUQUERQUE ACRES

PERMANENT BENCHMARK

ACS 1-B20 ELEVATION 5474.533

GRADING CERTIFICATION

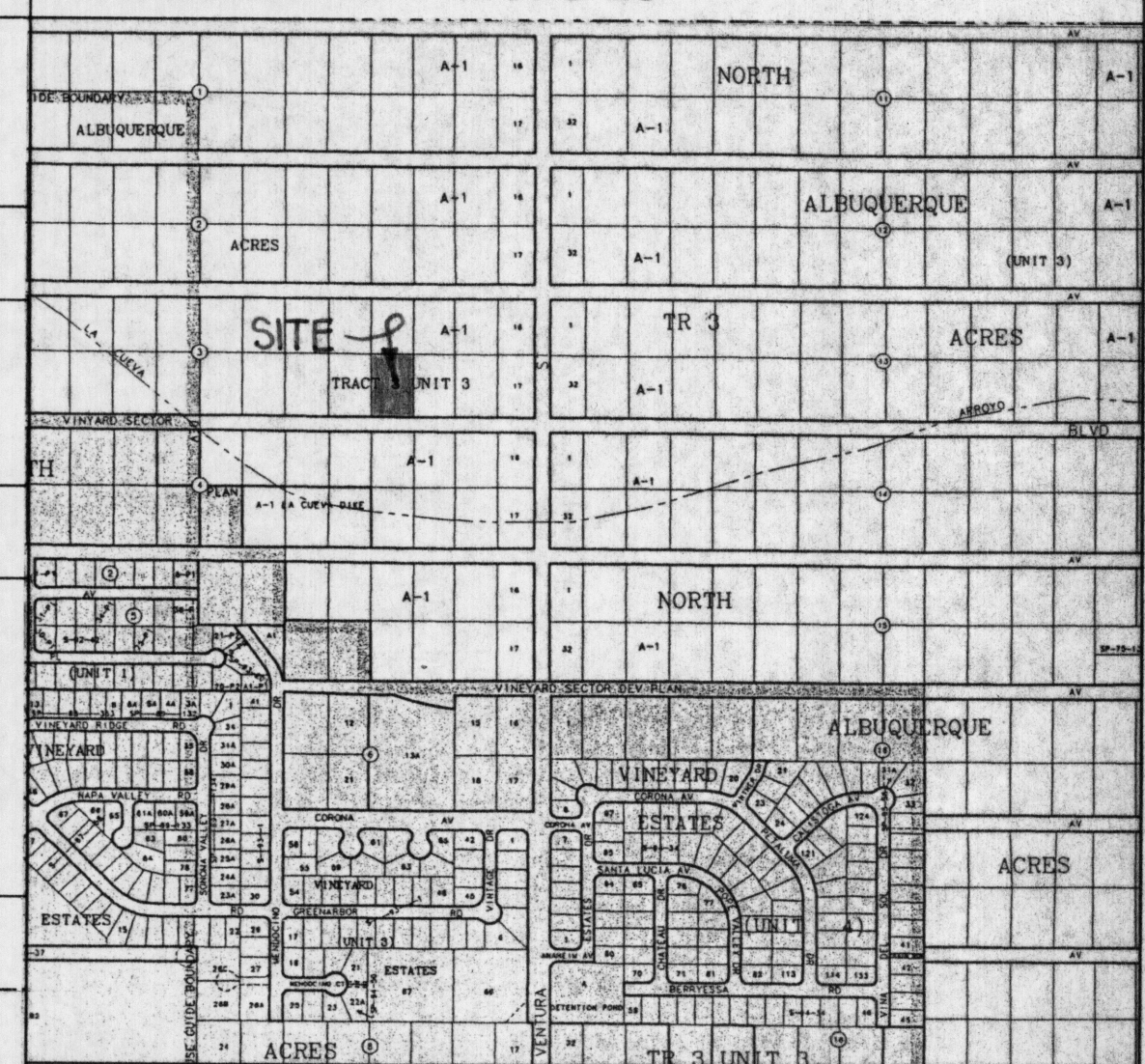
I, Jean J. Bordenave, New Mexico Professional Engineer and Land Surveyor No. 5110, hereby certify that I have personally inspected the property shown hereon and that it appears that no grading, filling or excavation has occurred thereon since the contour map shown hereon was prepared.

Jean J. Bordenave, NM PE & PS No. 5110

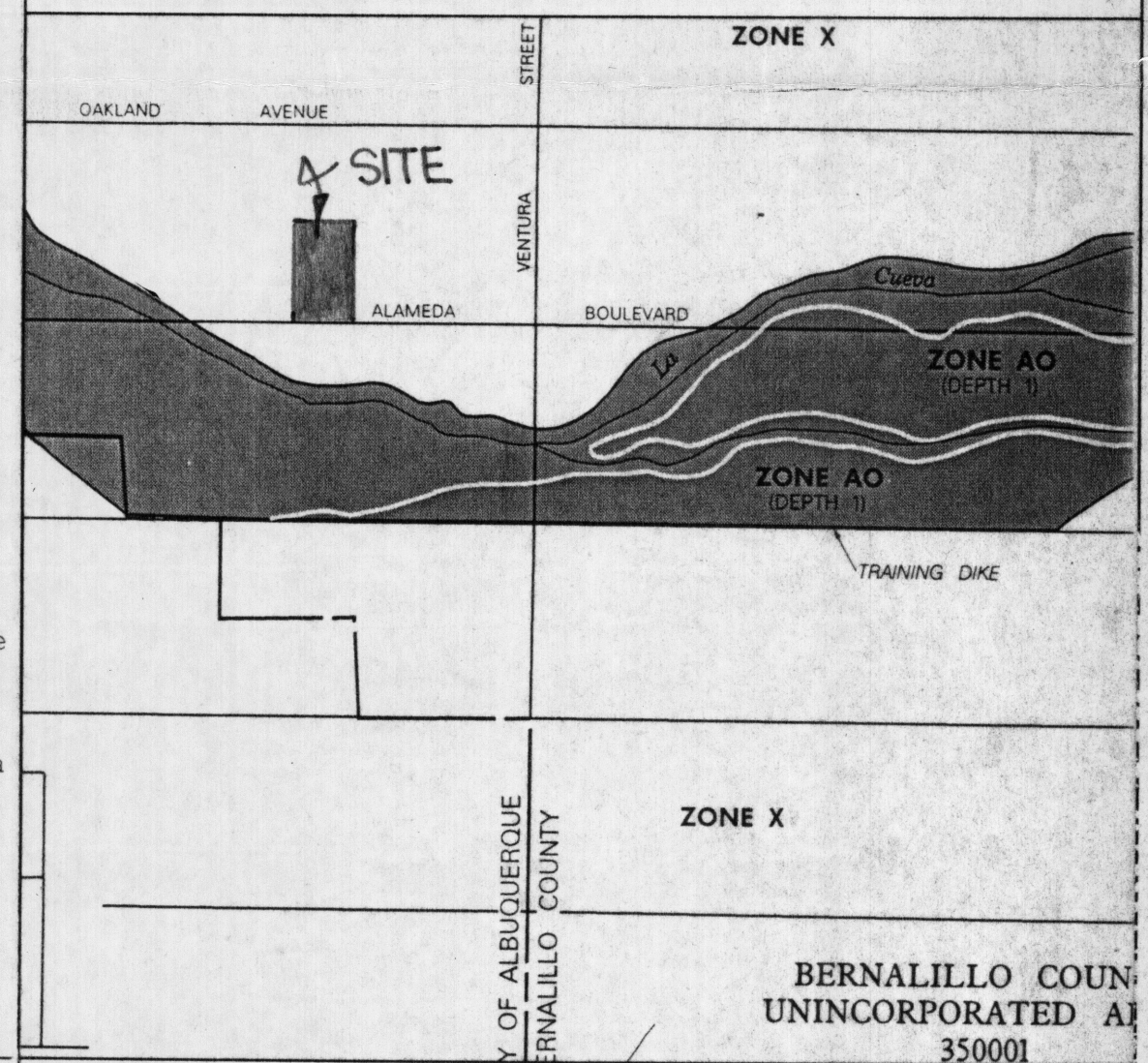
GENERAL NOTES

- There is a flow increase of 0.53 and 0.60 cfs for the 10 year and 100 year storms respectively. The 6 hour runoff volumes for the two storms increase by 701 and 973 cubic feet. The peak 100 year flow rate for the proposed development 0.28 cfs less than the accepted average for the area.
- The proposed development is located on the north bank of the La Cueva Arroyo. The structure has been located so that it is outside the calculated erosion setback line for the arroyo. In addition the site is approximately ten feet higher than the arroyo flood plain. There are no waterways of significance crossing the subject site; offsite drainage being limited to sheet flow from a basin less than one-quarter acre in size.
- The site is not located in a designated flood hazard area per FEMA FIRM Panel No. 141, dated September 20, 1996.
- Topography shown on this sheet was obtained by E. Maxwell Doak, dated 01/25/98.
- Earth surfaces disturbed in the construction process will either be treated with formal landscaping (lawn, flower beds, etc.) or with native plant seeding. City of Albuquerque Standard Specification No.1012 shall be used to control native plant seeding when the permanent structure is built.
- No perimeter fencing is to be installed on the site in such a manner that it will interfere with cross lot drainage.

VICINITY MAP NO. C-20



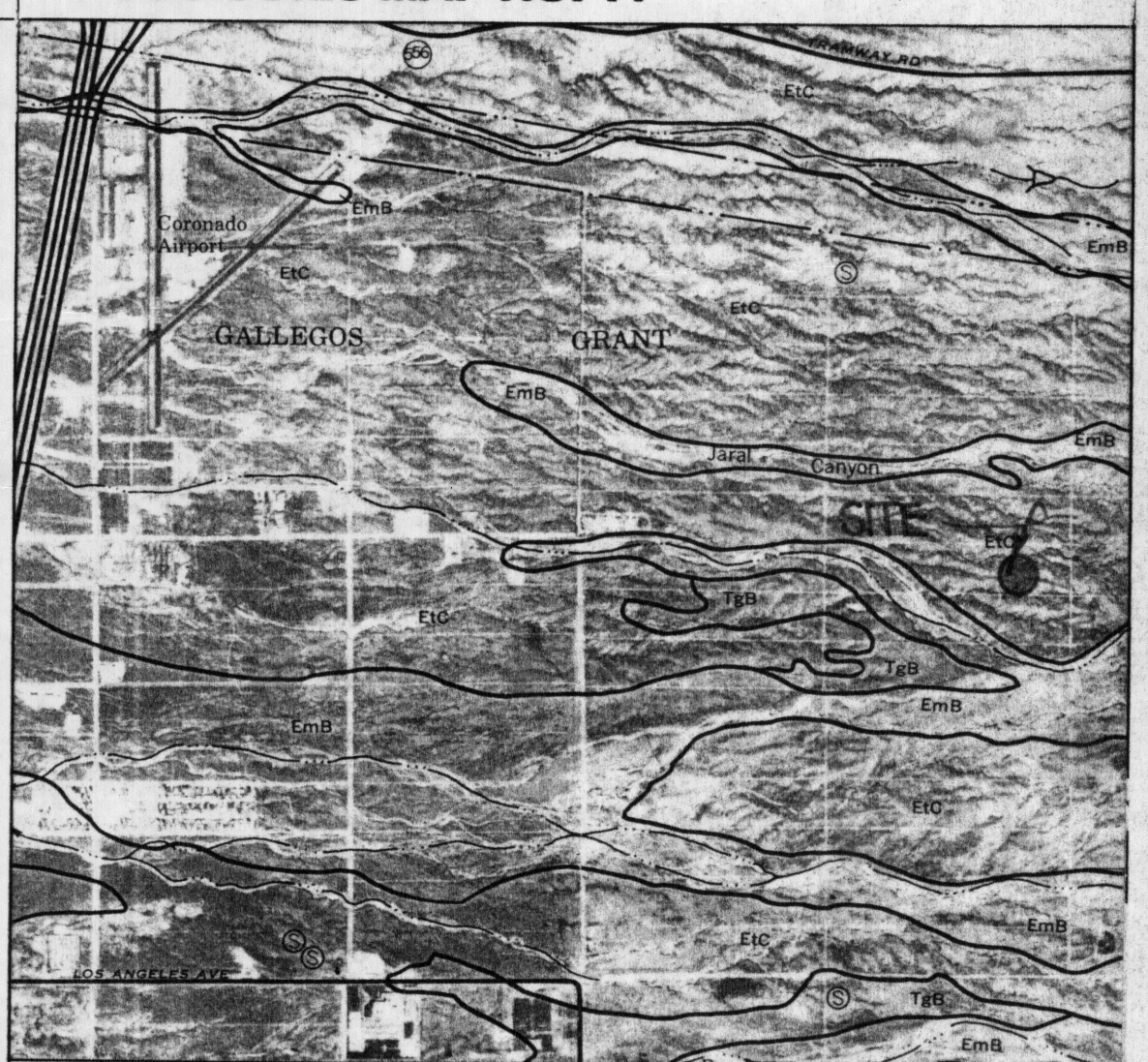
FEMA FIRM PANEL NO. 141



LEGEND

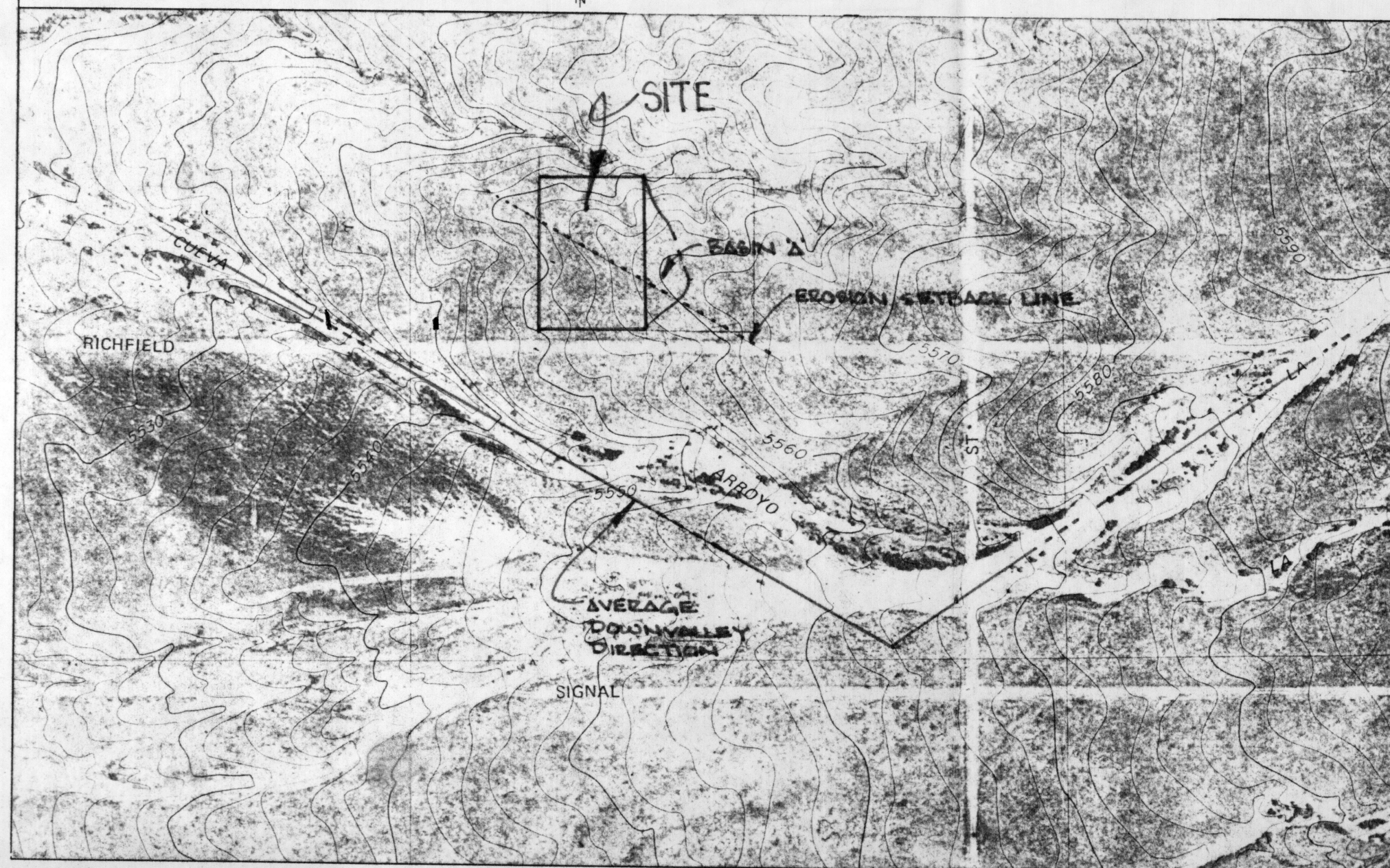
TBM	TEMPORARY BENCHMARK
FF	FINISH FLOOR
FG	FINISH GRADE
FL	FLOWLINE
TA	TOP OF ASPHALT
TCP	TOP OF CONCRETE
TC	TOP OF CURB
TP	TOP OF EARTH PAD
TS	TOP OF SIDEWALK
TW	TOP OF WALL
FH	FIRE HYDRANT
WM	WATER METER
WV	WATER VALVE
MH	MANHOLE
CB	CATCH BASIN GRATE
GM	GAS METER
GV	GAS VALVE
LP	LIGHT POLE
PP	POWER POLE
CW	GUY WIRE
PED	ELEC. OR TEL. PEDESTAL
RD	ROOF DRAINAGE POINT

SCS SOILS MAP NO. 11



OFFSITE DRAINAGE MAP

SCALE 1" = 200'



DRAINAGE DATA

CONDITION	STORM RETURN PERIOD	TREATMENT TYPE	TREATMENT AREA	EXCESS PRECIPITATION	PEAK RUNOFF	RUNOFF VOLUME	RUNOFF RATE
	year	(table 4)	sq. ft.	in.	(table 8)	(table 9)	
EXISTING	10	A	38577	0.19	0.58	611	0.51
		B	0	0.36	1.19	0	0.00
		C	0	0.62	2	0	0.00
		D	0	1.5	3.39	0	0.00
		TOTAL	38577			611	0.51
DEVELOPED	10	A	38577	0.66	1.87	2122	1.66
		B	0	0.92	2.6	0	0.00
		C	0	1.29	3.45	0	0.00
		D	0	2.36	5.02	0	0.00
		TOTAL	38577			2122	1.66
ON SITE	100	A	19552	0.19	0.58	310	0.26
		B	11145	0.36	1.19	334	0.30
		C	4315	0.62	2	223	0.20
		D	3565	1.5	3.39	446	0.28
		TOTAL	38577			1312	1.04
ON SITE	100	A	19552	0.66	1.87	1075	0.84
		B	11145	0.92	2.6	854	0.67
		C	4315	1.29	3.45	464	0.34
		D	3565	2.36	5.02	701	0.41
		TOTAL	38577			3095	2.26
ON SITE	100	A(43%)	16588	0.66	1.87	912	0.71
		B(20%)	7715	0.92	2.6	592	0.46
		C(20%)	7715	1.29	3.45	829	0.61
		D(17%)	1293	2.36	5.02	1290	0.76
		TOTAL	38577			3623	2.54
A	100	A(43%)	3270	0.66	1.87	180	0.14
		B(20%)	1521	0.92	2.6	117	0.09
		C(20%)	1521	1.29	3.45	164	0.12
		D(17%)	1293	2.36	5.02	254	0.15
		TOTAL	7605			714	0.50

EROSION SETBACK LINE

PER AMAFCA SEDG
DRAINAGE DATA FROM RTI RESTUDY OF AREA

$Q_{100} = 4904$ cfs

$Q_c = (0.2)(Q_{100}) = 981$ cfs

$BANK\ OFFSET = (0.92 + 4.6 \log Q_c) Q_c^{0.4} = 231$ ft

$W_c = 4.6 Q_c^{0.4} = 72$ ft

$CENTERLINE\ OFFSET = BANK\ OFFSET + 0.5 W_c = 267$ ft

FEMA FLOODPLAIN BOUNDARY
DRAINAGE BASIN BOUNDARY
EROSION SETBACK
EXISTING CONTOUR
PROPOSED CONTOUR
EXISTING SPOT ELEVATION
PROPOSED SPOT ELEVATION
RECORD SPOT ELEVATION

REVISIONS

project title	LT CONSTRUCTION CORP. RICHFIELD AVE. NE ALBUQUERQUE, NM		
sheet title	GRADING & DRAINAGE PLAN		
sheet date	design by	project no.	
02/26/98	JJB	9804	
		sheet	of



BORDENAVE DESIGNS
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