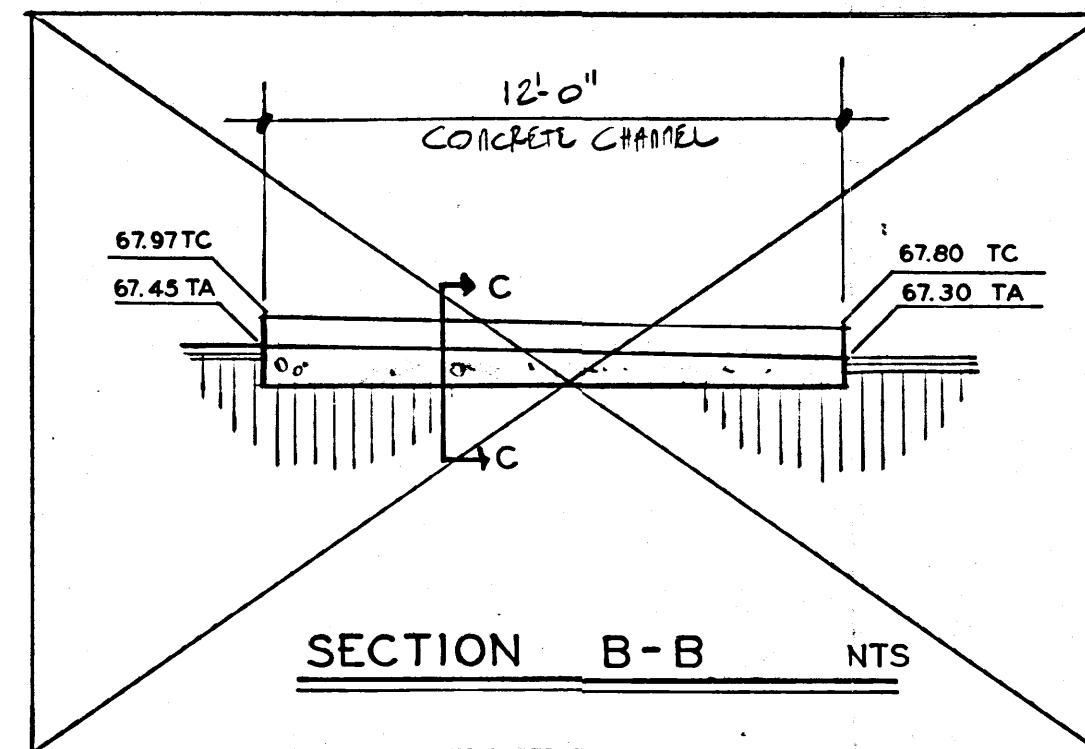
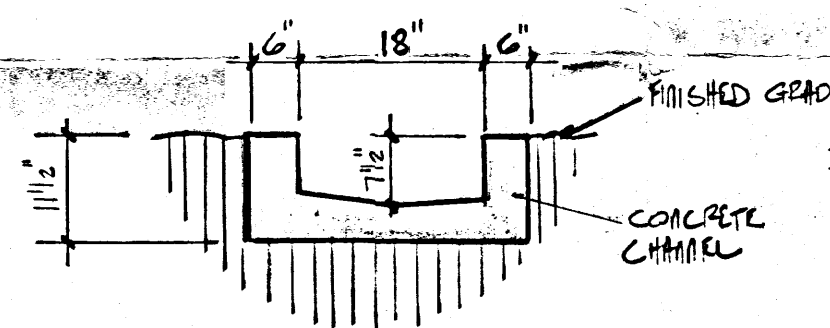


SECTION A-A NTS



SECTION B-B NTS



SECTION C-C NTS

#### CULVERT CAPACITY

$$Q = \frac{1.486}{n} A R^{2/3} S^{1/2} \text{ (MANNING EQ)}$$

$$n = 0.013 \quad R = \frac{A}{P} \quad S = 0.02\%$$

$$Q = 10.40 \text{ cfs} \quad A = 0.94 \text{ sq. ft.} \quad 2.07 \text{ ft}$$

$$\text{TOTAL RUNOFF} = 8.4 \text{ cfs}$$

$$\text{CULVERT CAPACITY} = 10.4 \text{ cfs}$$

#### DRAINAGE CALCULATIONS

##### I. REFERENCES:

- City of Albuquerque Development Process Manual (DPM) Vol. 2, Design Criteria, Chapter 22: Drainage, Flood Control, and Erosion Control.
- Soil Survey of Bernalillo County and parts of Sandoval and Valencia Counties, New Mexico, United States Department of Agriculture, Soil Conservation Service.
- Floodway, Flood Boundary and Floodway map, City of Albuquerque, New Mexico, Panel 37 of 50.
- City Zone Atlas page L-22-Z.

##### II. GENERAL INFORMATION:

- Soil Type (Ref. B, Page 20) Soil type is Tijeras gravelly fine sandy loam, (Tgb), Hydrologic Soil Group "B".
- Imperviousness:
 

Type of Surface	Existing Sq. Ft.	Existing Acres	Proposed Sq. Ft.	Proposed Acres
Building Roof	4952	0.1137	10966	0.2517
Concrete Surfaces	800	0.0184	8232	0.1890
Asphalt Surfaces	0	0.0000	53990	1.2394
Landscaping	7400	0.1699	5377	0.1234
Undeveloped Area	65413	1.5017	0	0.0000
<b>Total Site</b>	<b>78565</b>	<b>1.8036</b>	<b>78565</b>	<b>1.8036</b>
- "C" Factor (See Amendment to the DPM Jan. 19, 1986)
 

Type of Surface	"C"	Area	C x A
Proposed impervious surfaces	0.90	0.2517	0.2266
Building Roof	0.95	0.1890	0.1795
Concrete Surfaces	0.95	1.2394	1.1775
Asphalt Surfaces	0.25	0.1234	0.0309
Landscaping	0.40	0.0000	0.0000
Undeveloped Area	0.40	0.0000	0.0000
<b>TOTAL</b>	<b>1.8036</b>	<b>1.6147</b>	<b>1.6144</b>
- Existing weighted "C" Factor = 0.7629 / 1.8036 = 0.42

- Rainfall, 100-year, 6-hour, R(6); (See Ref. A, Plate 22.2 D-1); P(6) = 2.45 inches.
- Time of Concentration, Tc; Tc 10 minutes; use 10 minutes (minimum value) for calculations.
- Rainfall intensity, I; (See Ref. A, Plate 22.2 D-2)
 

P(6)	6.84 x Tc exp (-0.51)	2.45 x 6.84 x 10 exp (-0.51)	5.18 in/hr
10	6.84	16.78	5.18

##### III. PEAK DISCHARGE:

- Existing Conditions. (Use Rational Equation)
 

Q(100)	Q(10)
0.42 x 5.18 x 1.8036 = 3.92 cfs	0.657 x 3.95 = 2.59 cfs
- Developed Conditions:
 

Q(100)	Q(10)
0.90 x 5.18 x 1.8036 = 8.41 cfs	0.657 x 8.41 = 5.52 cfs

##### IV. VOLUMES:

- Existing Conditions.
 

V(100)	V(10)
3630 x DRO x Area = 3623 Cu.Ft.	3630 x DRO x Area = 11,857 Cu.Ft.
- Developed Conditions.
 

V(100)	V(10)
85.69 imp. 95 Composite CN, DRO = 1.8 inches.	85.69 imp. 95 Composite CN, DRO = 1.8 inches.

##### V. FLOOD INFORMATION:

- Proposed site does not lie within a designated flood zone. Ref. C, Panel 37 of 50.

##### VI. CONCLUSIONS:

- This is an infill development.
- All runoff generated on adjacent land discharges freely into the existing Right-of-Way.
- There are no off site flows onto this property. New construction on the property to the north prohibits any off-site flows.

##### VII. NOTICE TO CONTRACTOR

- AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN THE CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.
- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATION SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- BACKFILL COMPACTION SHALL BE TO ARTERIAL STREET USE.
- MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.

##### BENCHMARK INFORMATION:

TEMPORARY BENCHMARK AS SHOWN HEREON IS MARKED WITH ORANGE SPRAY PAINT, "TBM" SPRAY PAINTED ON TOP OF CURB BEARS ELEVATION 5562.19 (MSL) REFERENCE TO CITY BENCHMARK 15-K-14 ELEVATION 5556.78 (MSL).

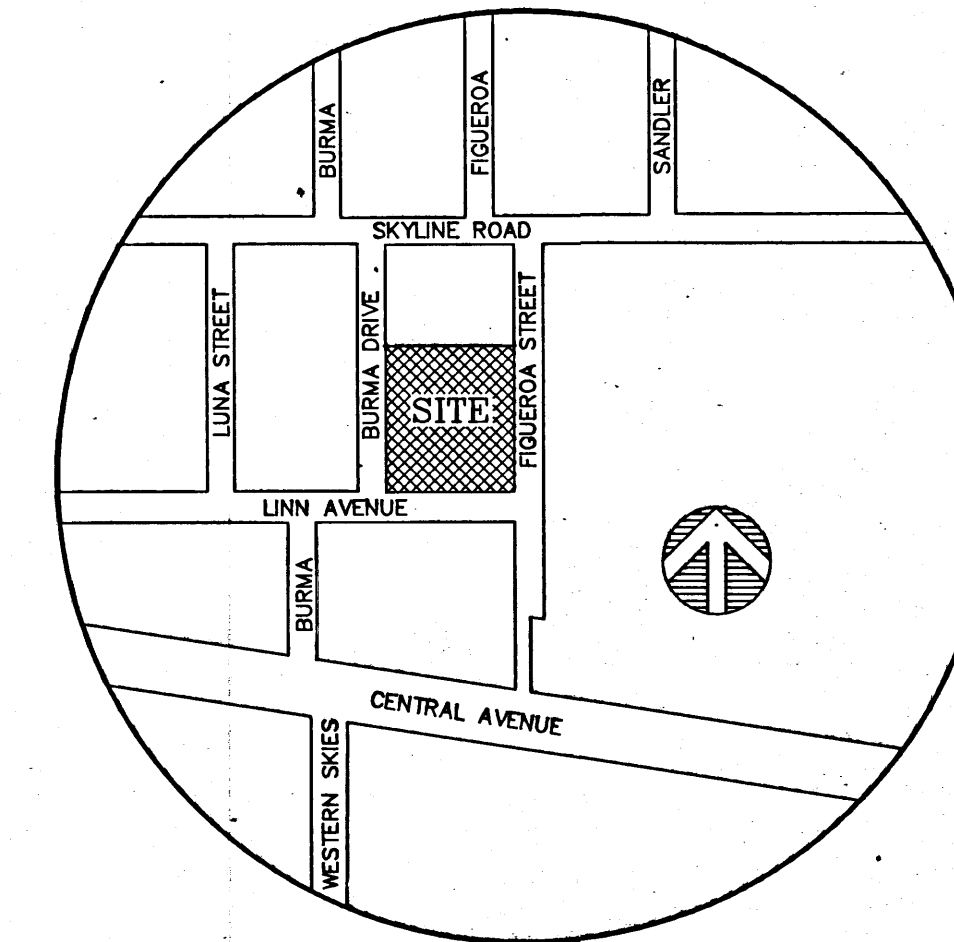
##### SYMBOL LEGEND

	Existing contour	TC	TOP OF CURB
	Direction of flow	FL	FLOWLINE
	Existing spot elevation	FG	FINISH GRADE
	Temporary benchmark	TA	TOP OF ASPHALT
	PROPOSED CONTOUR	TCP	TOP OF CONCRETE PAVING
	PROPOSED SPOT ELEVATION	TSW	TOP OF SIDEWALK
		LS	LANDSCAPING

APPROVALS	NAME	DATE
A.C.E./DESIGN		
INSPECTOR		
A.C.E. FIELD		

#### LEGAL DESCRIPTION:

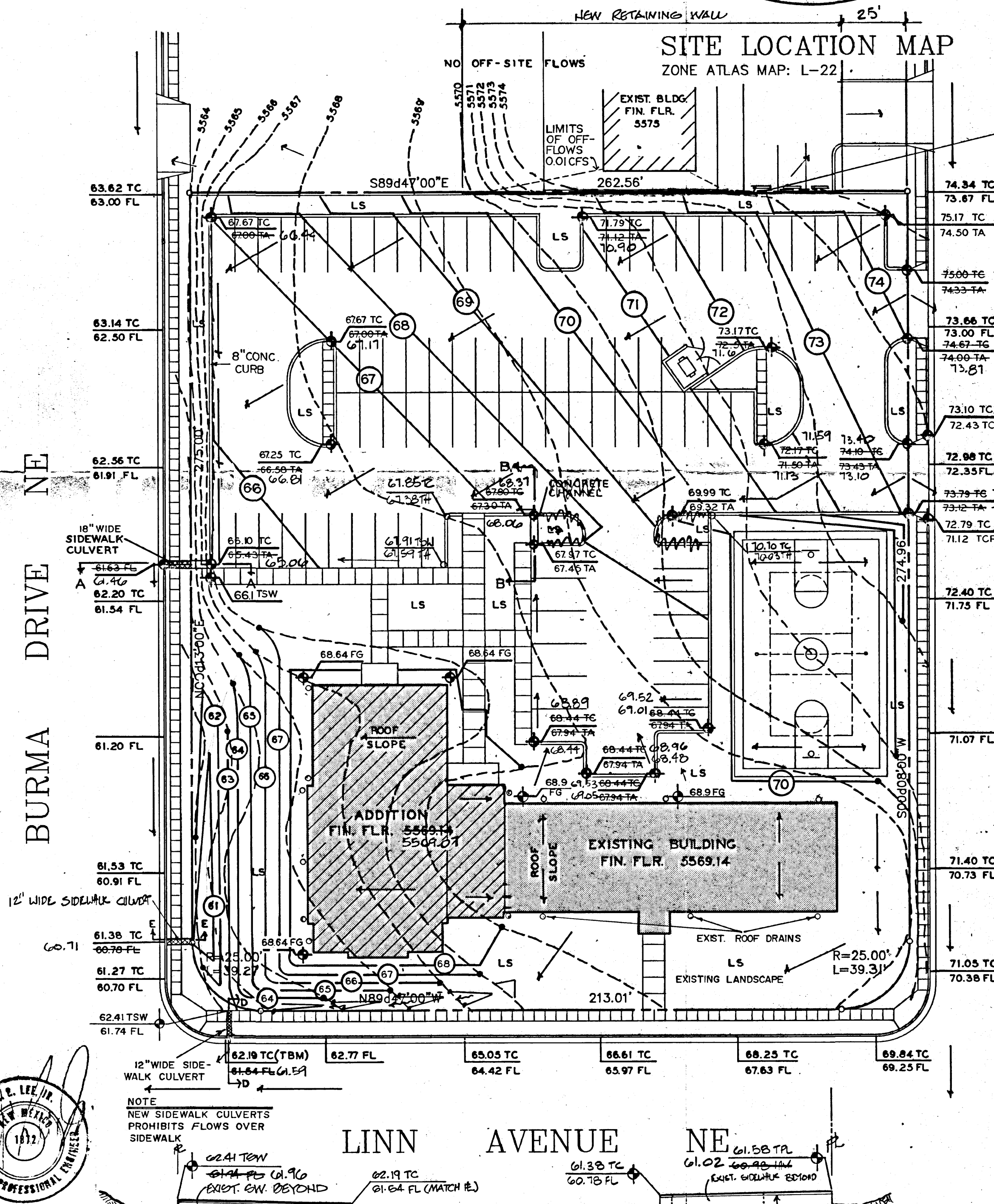
TRACT "A" (FORMERLY LOTS 4, 5, 6, 7, 11, 12, 13 & 14) BLOCK FIVE (S) OF THE GALLAGHER, ADDITION, ALBUQUERQUE, NEW MEXICO.



#### SITE LOCATION MAP

ZONE ATLAS MAP: L-22

NOTE: NEW RETAINING WALL TO BE CONSTRUCTED BY OTHERS WILL PROHIBIT ANY FLOWS ACROSS LOT LINES. WALL TO BE AT R.



#### GRADING & DRAINAGE PLAN

SCALE: 1"=30.0'

I HEREBY CERTIFY THAT I AM A LICENSED ENGINEER #1872 AND HAVE CHECKED THE FINISH FLOOR & SITE IMPROVEMENT ELEVATIONS AND FOUND THEM TO BE IN SUBSTANTIAL COMPLIANCE AS SHOWN HEREON.

RECEIVED  
NOV 16 1990  
HYDROLOGY DIVISION

12 JULY '88

C-2



APPROVALS:

TALOS LOG NUMBER

07-01-104

ZONE ATLAS INDEX NO.

L-22-Z

APPROVED

CITY OF ALBUQUERQUE/BERNALILLO COUNTY  
PLANNING DEPARTMENT

PLAT NO.

APPROVED

PROPERTY MANAGEMENT

APPROVED

TRAFFIC ENGINEERING

APPROVED

CITY ENGINEERING

APPROVED

A.M.A.F.C.A.

APPROVED

PARKS AND RECREATION DEPARTMENT

APPROVED

WATER RESOURCES DEPARTMENT

APPROVED

CITY SURVEYOR

070887

NOTE: THE INTENT AND PURPOSE OF THIS REPLAT IS TO ELIMINATE EXISTING LOT LINES AND TO CONSOLIDATE ALL EXISTING LOTS OF THE SUBJECT PROPERTY INTO ONE (1) PARCEL.

LEGAL DESCRIPTION

THE FOREGOING REPLAT OF THAT CERTAIN PARCEL OF LAND SITUATE IN SECTION 27, TOWNSHIP 10 NORTH, RANGE 4 EAST, NEW MEXICO PRINCIPAL MERIDIAN, WITHIN THE CITY LIMITS OF THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO; BEING AND COMPRISING A REPLAT OF LOTS NUMBERED FOUR (4) THROUGH SEVEN (7), INCLUSIVE, AND ELEVEN (11) THROUGH FOURTEEN (14), INCLUSIVE, IN BLOCK NUMBERED FIVE (5), OF THE GALLAGHER ADDITION, TO THE CITY OF ALBUQUERQUE, NEW MEXICO, AS THE SAME ARE SHOWN AND DESIGNATED ON THE PLAT OF SAID ADDITION FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO, ON JUNE 28, 1949, (BOOK 'C', PAGE 152), TOGETHER WITH THAT PORTION OF THE VACATED PUBLIC ALLEY LYING ADJACENT THERETO, (VACATED BY V-115 ON FEBRUARY 6, 1956.)

DEDICATION AND FREE CONSENT STATEMENT

REPLATTED AND NOW BEING IDENTIFIED AS TRACT "A", IN BLOCK FIVE (5), OF THE GALLAGHER ADDITION, TO THE CITY OF ALBUQUERQUE, NEW MEXICO, WITH THE FREE CONSENT OF, AND IN ACCORDANCE WITH THE WISHES AND DESIRES OF THE UNDERSIGNED OWNERS, THEREOF, SAID OWNERS DO HEREBY DEDICATE TO THE CITY OF ALBUQUERQUE, NEW MEXICO, THE SOUTHWEST AND SOUTHEAST CORNERS OF SAID PROPERTY, (AS SHOWN HEREON) FOR ADDITIONAL STREET RIGHT-OF-WAYS.

MANZANO BAPTIST CHURCH, INC.  
A NEW MEXICO CORPORATION  
BY: BERT SINGLETERRY

ACKNOWLEDGEMENT:

STATE OF NEW MEXICO )  
COUNTY OF BERNALILLO ) SS:

ON THIS 1 DAY OF July, 1987, BEFORE ME A NOTARY PUBLIC, IN AND FOR SAID COUNTY AND STATE, THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BY THE PERSON(S) DESCRIBED HEREIN, AND THAT SAID PERSON(S) ACKNOWLEDGED THE SAME AS THEIR OWN FREE ACT AND DEED.

NOTARY PUBLIC: Cynthia Sandy Day DATE: 7-1-87

NOTE: PRIOR TO DEVELOPMENT CITY OF ALBUQUERQUE SANITARY AND SEWER AND WATER SERVICE TO THIS PROPERTY MUST BE VERIFIED AND COORDINATED WITH THE WATER UTILITIES DEPARTMENT, CITY OF ALBUQUERQUE, VIA A REQUEST FOR A WATER AND SANITARY SEWER AVAILABILITY STATEMENT.

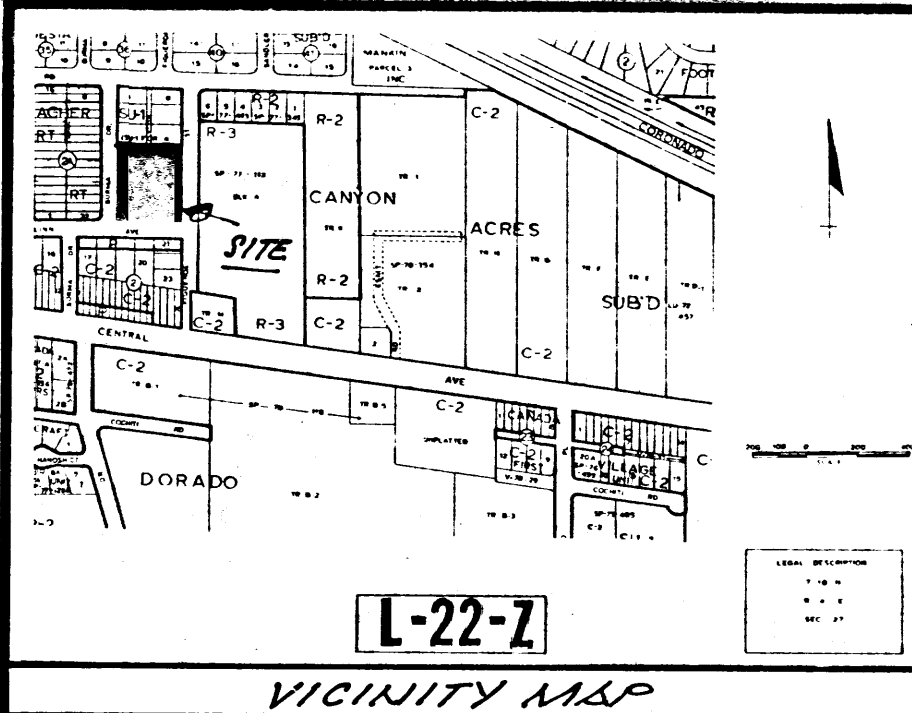
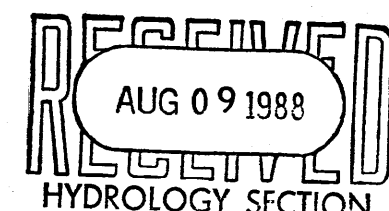
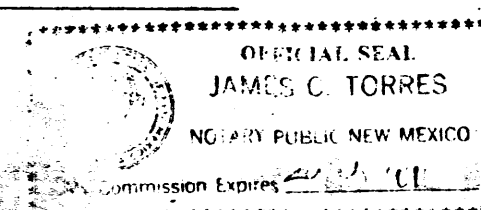
ACKNOWLEDGEMENT:

STATE OF NEW MEXICO )  
COUNTY OF BERNALILLO ) SS:

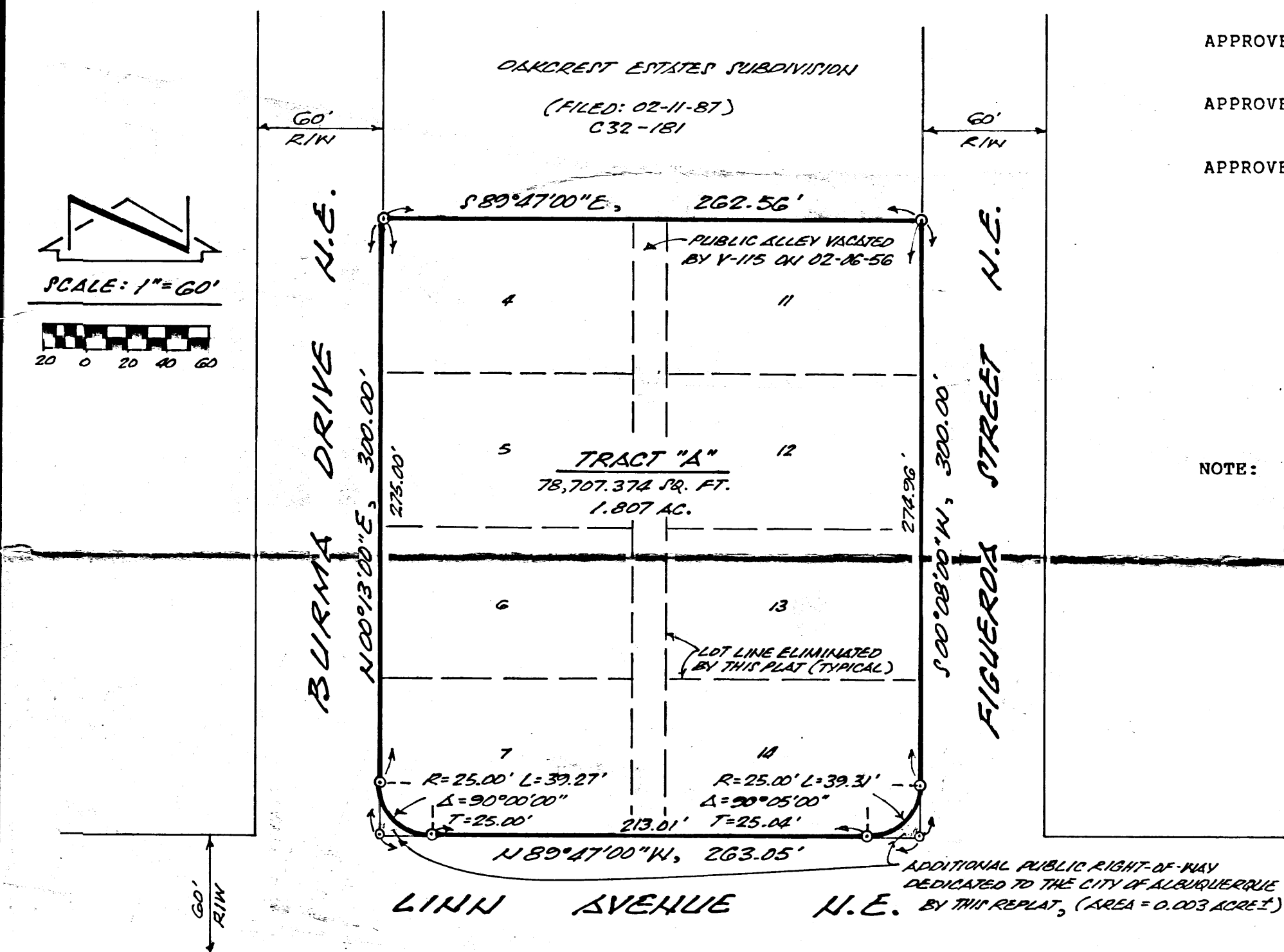
THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS 15 DAY OF July, 1987, BY JOHN B. TORRES.

MY COMMISSION EXPIRES: 4-11-11

NOTARY PUBLIC:



NOTE: BEARINGS ARE REFERENCED TO THE RECORDED PLAT OF THE GALLAGHER ADDITION, (FILED: 06-28-49).



SURVEYOR'S CERTIFICATION:

I, JOHN B. TORRES, NEW MEXICO REGISTERED PROFESSIONAL LAND SURVEYOR NO. 3221, LICENSED AND REGISTERED UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THIS PLAT WAS PREPARED BY ME OR UNDER MY SUPERVISION AND DIRECTIONS, SHOWS ALL EASEMENTS OF RECORD, MEETS MINIMUM REQUIREMENTS FOR MONUMENTATION AND SURVEYS OF THE ALBUQUERQUE SUBDIVISION ORDINANCE, AND IS ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DISCLOSURE NOTE:

THIS REPLAT WAS PREPARED FROM DATA SHOWN ON THE PLATS OF RECORD AS REFERRED TO ON THE MAP HEREON, NO ACTUAL ON THE GROUND FIELD SURVEY WORK WAS PERFORMED PER THIS REPLATTING.

JOHN B. TORRES, N.M.R.P.L.S. NO. 3221

