

Marvin R Kortum

JUN 6 1997

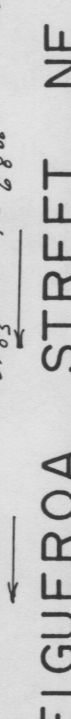
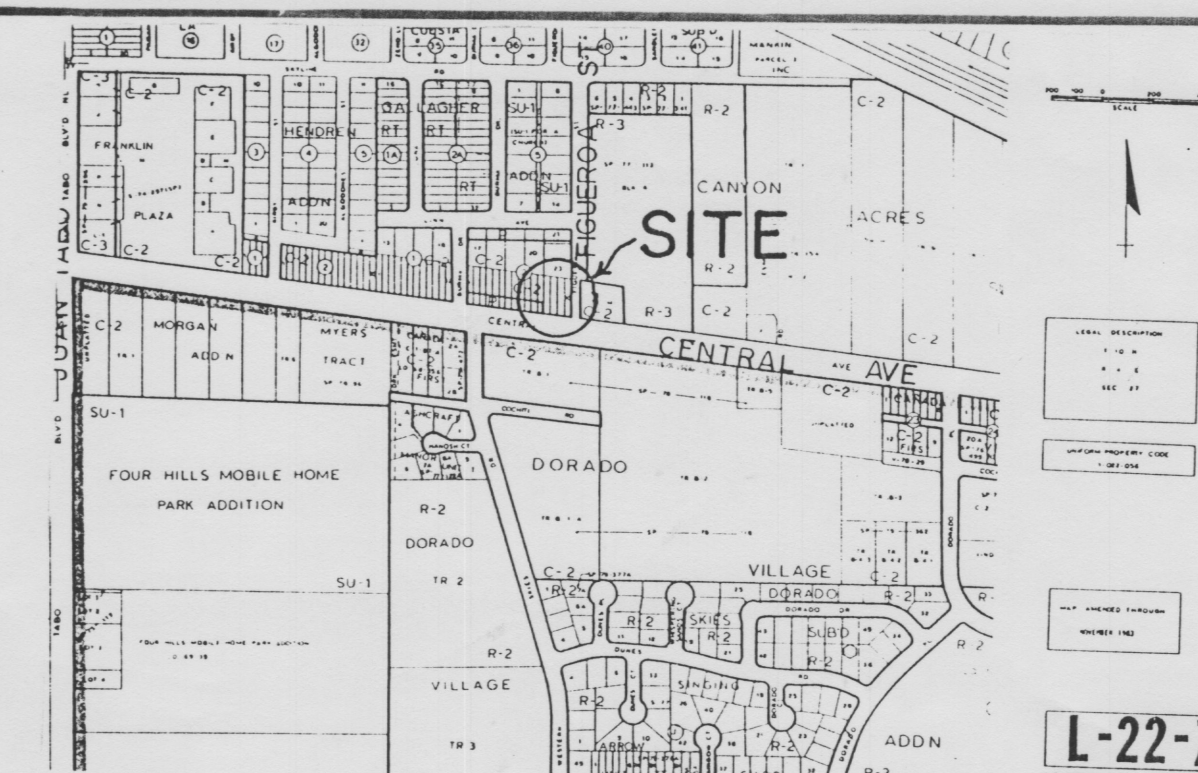
BENCHMARK: Station 7-L22, located at intersection of Central Avenue and Burma Drive, NE, an A. C. S. 1 3/4" aluminum disk set on top of curb at the NNW curb return. Elevation is 5556.869

A. The streets in the public right-of-way of Figueroa Street and Central Avenue are presently surfaced with an asphalt surface with a standard 8" high curb and gutter.

B-1: Asphalt surface
B-2: Portland cement surface

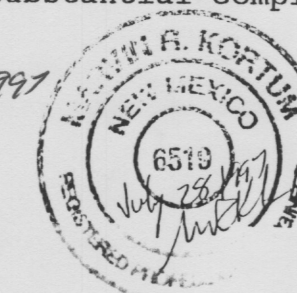
D. Existing swale within the impervious surface area.

F. All berms and earthwork supporting non-building structures must be compacted to 95% of maximum dry density (Modified Proctor Test) to depth of undisturbed earth. Buildings may require separate subsurface soils testing and preparation.



Marvin R Kortum
NMPE 6519

July 28/99
Date



July 28, 1997

MARVIN R. KORTUM, P.E.
Civil Engineering
NM PE 6519

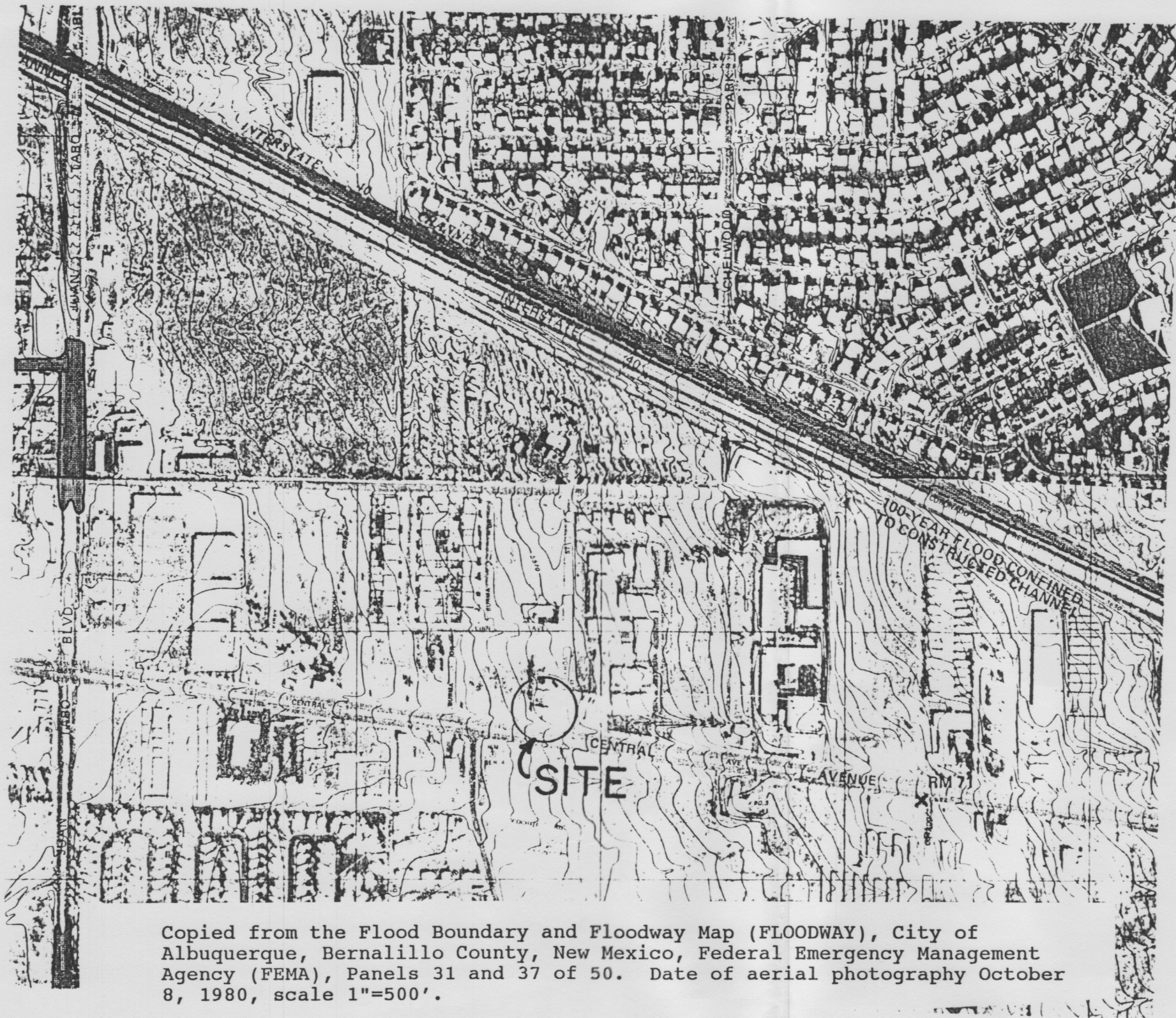
5 Speakman Drive, S.E.
 Albuquerque, New Mexico 87123
 (505) 299-0774

GRADING AND DRAINAGE PLAN
LOTS 13, 14, 15, & 16, BLOCK 2, GALLAGHER ADD.
12609 CENTAL AVE, NE

JUL 28 1997

PROJECT NO. L-22/D-51 MAP NO. L-22 SHEET 2 OF 2

LEGEND	EXISTING	PROPOSED
CONTOUR LINE	--- 55.8 ---	--- 68 ---
SPOT ELEVATION		
TOP OF WALL	TW ^X	TW
TOP OF PAVEMENT	TP	TP
FLOW LINE INVERT	FL	FL
TOP OF GROUND	TG	X
BOTTOM OF FOOTER	BF	BF
STRUCTURE	-----	=====
SWALE	→ - - - - - →	→ - - - - - →
ROOF SLOPE	→	→
ROOF GUTTER	→	→



Copied from the Flood Boundary and Floodway Map (FLOODWAY), City of Albuquerque, Bernalillo County, New Mexico, Federal Emergency Management Agency (FEMA), Panels 31 and 37 of 50. Date of aerial photography October 8, 1980, scale 1"=500'.

January 6, 1997
RUNOFF FOR LOTS 13, 14, 15, AND 16, BLOCK 2, GALLAGHER ADDITION
(MARQUIS AUTO REPAIR, 12609 CENTRAL AVENUE, AT THE INTERSECTION OF CENTRAL AVENUE AND FIGUEROA STREET, NE)

TABLE A
Runoff Estimate: For On-site Basin of 0.3758 acres, onto Central Avenue

Runoff Factors			CURRENT USE				PROPOSED USE			
Zone 3										
Land use	Peak	Total	Area	Percent	Peak	Total	Area	Percent	Peak	Total
	CFS/acre	inches	SF		Runoff	Runoff	SF		Runoff	Runoff
					CFS	CF			CFS	CF
A	1.87	0.66	16370.00	1.000	0.7	900.3	0.00	0.000	0.00	0.0
B	2.60	0.92	0.00	0.000	0.0	0.0	700.00	0.043	0.04	53.7
C	3.45	1.29	0.00	0.000	0.0	0.0	0.00	0.000	0.00	0.0
D	5.02	2.36	0.00	0.000	0.0	0.0	15670.00	0.957	1.81	3081.8
TOTALS			16370.00	1.000	0.7	900.3	16370.00	1.000	1.85	3135.4
			0.3758 acre				0.3758 acre			

NOTES:

- Runoff factors from Section 22.2, DPM, January, 1993
- Land use descriptions: A. Uncompacted soil
B. Landscaped areas, lawns
C. Compacted soil
D. Impervious areas
- Peak runoff = Area (acres) x factor (CFS/acre) = CFS
- Total runoff = Area (SF) x factor (inches) / 12 (inches /foot) = CF
- Peak and total runoff is based on 6 hour, 100 year frequency storm

PURPOSE:

The purpose of this grading and drainage plan is to obtain approval for a building permit for a commercial storage building on the existing parking area.

SOILS:

Soils on the site are identified by reference C as Tijeras gravelly fine sandy loam, 1 to 5 percent slopes. Runoff is moderate and the hazard of water erosion is moderate. The area has moderate limitations for buildings due to shrink/swell potential.

DISCUSSION:

A. The existing site is presently developed with a 3 bay auto repair shop and an office, apparently converted from a gasoline service station that has been on that site for over 30 years. The site has had fill added to the lot to direct all out-flow toward Central Avenue, with a concrete curb along the southwest side. The site is completely impervious, with the existing building, and all remaining area surfaced with asphalt or portland cement concrete, except for a narrow 8 feet wide strip along the north property line that originally had been platted as an alley (since vacated), and a small landscaped area at the southeast corner. All runoff within the site is directed by a swale to leave the site over the driveway pads along Central Avenue.

B. The proposed construction (a 100 feet by 30 feet storage building) is to be located on the existing asphalt surfaced hardstand. Runoff from the building will be directed by gutters and downspouts to the hardstand on the south side of the building, where it will flow over the existing surface and swales toward Central Avenue.

C. Off-site flows from the north and west of the site will not enter the site because the site is elevated from the surface of those sites. There will be minor flows along the north property line where flow from the two sites co-mingle within the common undeveloped area, a strip about 5 feet wide by 110 feet long. It is proposed that this area be landscaped to reduce the erosion.

D. Off-site flows from the east are controlled within the curbs and gutters of Figueroa Street, with flows entering the existing storm drain through a catch basin near the northeast corner of the site.

E. Off-site flows along Central Avenue are controlled within the curbs and gutters of Central Avenue, with flows entering the subsurface storm drain system within the Central Avenue right-of-way. The subsurface storm drain system adjacent to the Figueroa Street-Central Avenue intersection is a 30" RCP, increasing in steps to 36", 42" and 54" to a 60" pipe at Juan Tabo, then continuing west along Central Avenue, increasing to a 66" pipe to Eubank Boulevard, then turning to the north, flowing into the I-40 channel. The off-site flow of 1.85 CFS from the site, and increase of 1.15 CFS over the estimated 0.7 CFS from the area if undeveloped, will have minor impact on the total flows within the system. Table A shows the estimated runoff computations.

F. The lot is not within an identified flood plain.

CONCLUSIONS:

A. The proposed construction is not within a designated 100 year floodplain.

B. Construction as proposed will not increase the hazard from flooding to downstream properties.

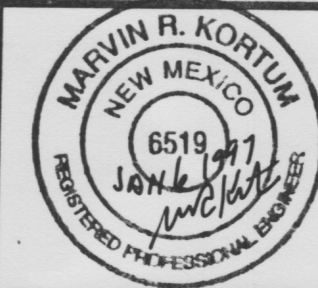
C. This Grading and Drainage Plan does not propose changes to the FLOODWAY or FIRM maps.

REFERENCES:

- Bernalillo County Ordinance No. 96-5.
- Section 22.2, Hydrology, of the Development Process Manual, Volume 2, Design Criteria, for the City of Albuquerque...Bernalillo County...AMAFCA, January 1993.
- Soil Survey of Bernalillo County and Parts of Sandoval and Valencia Counties, New Mexico, USDA-SCS.
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- Flood Boundary and Floodway Map (FLOODWAY), City of Albuquerque, Bernalillo County, New Mexico, Federal Emergency Management Agency (FEMA), Panel 37 of 50. Date of aerial photography October 8, 1980, scale 1"=500'.

CERTIFICATION
PRELIMINARY
APPROVALS, REVISIONS

MARK
JAN 6, 1997



July 28, 1997
M.R.K.

MARVIN R. KORTUM, P.E.
Civil Engineering
NM PE 6519

1605 Speakman Drive, S.E.
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(505) 299-0774

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LOTS 13, 14, 15, & 16, BLOCK 2, GALLAGHER ADD.
12609 CENTAL AVE, NE

PROJECT NO. L-22/D-51
MAP NO. L-22
SHEET 2 OF 2

I certify that I have personally inspected the Lots 13, 14, 15, and 16, Block 2, Gallagher Addition, site and the surrounding terrain. The representation of the land and the contours are as presented on these drawings and the accompanying text as of January 1997.

Marvin R Kortum
JAN 6 1997

Topography by Marvin R Kortum, December 1996

LEGAL DESCRIPTION
LOTS 13, 14, 15, AND 16, BLOCK 2, GALLAGHER ADDITION, ALBUQUERQUE,
BERNALILLO COUNTY, NEW MEXICO

BENCHMARK: Station 7-L22, located at intersection of Central Avenue and
Burma Drive, NE, an A. C. S. 1 3/4" aluminum disk set on top of curb at the
NNW curb return. Elevation is 5556.869

NOTES

A. The streets in the public right-of-way of Figueroa Street and Central Avenue are presently surfaced with an asphalt surface with a standard 8" high curb and gutter.

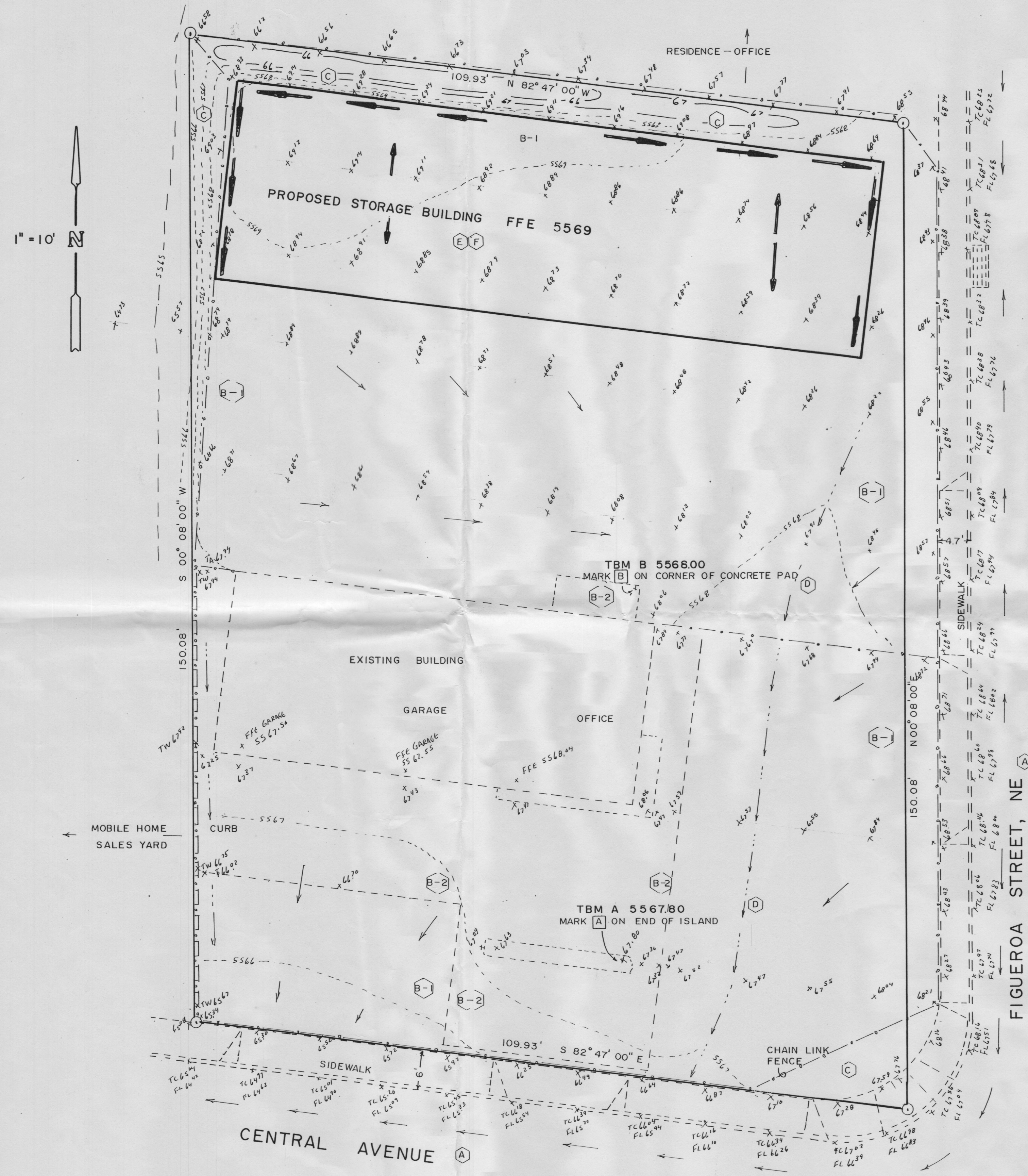
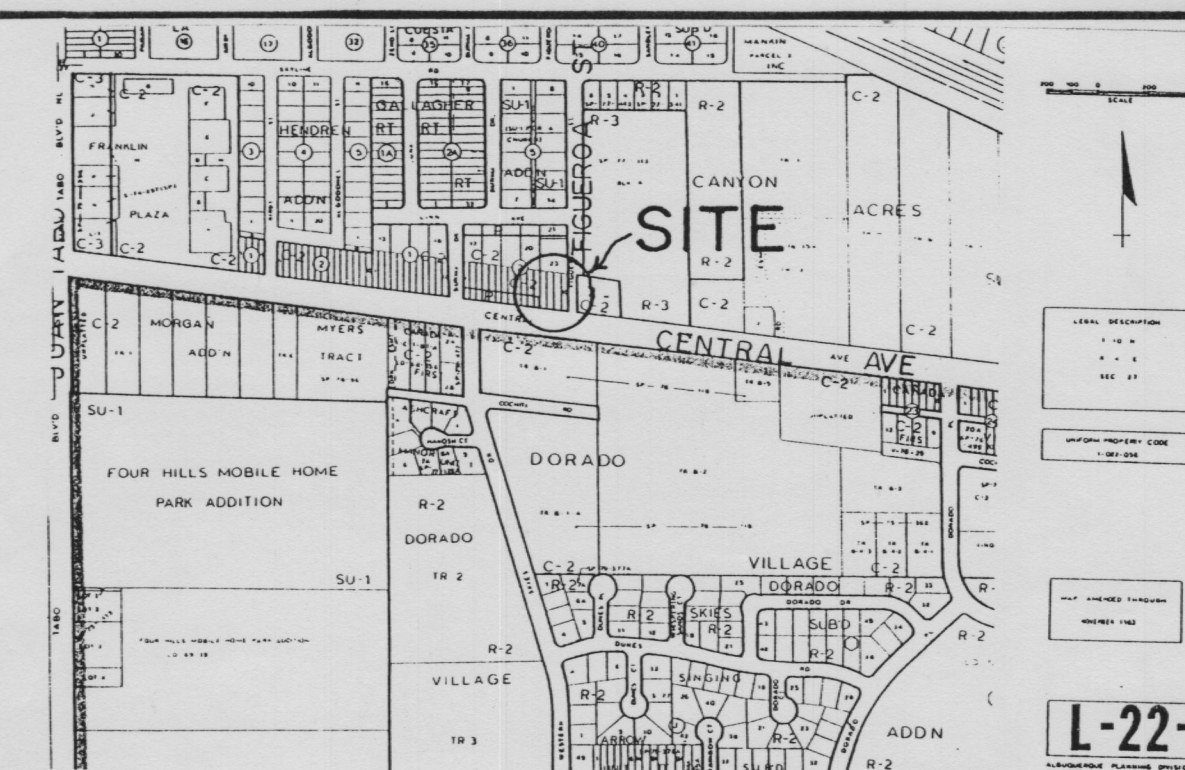
B. The driveway and parking area within the lot are presently surfaced with impervious surface materials.
B-1: Asphalt surface
B-2: Portland cement surface

C. Landscaped area.

D. Existing swale within the impervious surface area.

E. For detailed building dimensions see architectural drawings.

F. All berms and earthwork supporting non-building structures must be compacted to 95% of maximum dry density (Modified Proctor Test) to depth of undisturbed earth. Buildings may require separate subsurface soils testing and preparation.



LEGEND

CONTOUR LINE
SPOT ELEVATION
TOP OF WALL
TOP OF PAVEMENT
FLOW LINE INVERT
TOP OF GROUND
BOTTOM OF FOOTER

STRUCTURE

SWALE

ROOF SLOPE

ROOF GUTTER

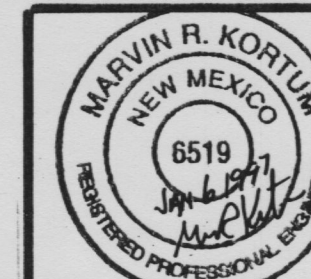
EXISTING

--- 5568 ---
TW
TP
FL
X
BF

PROPOSED

68
TW
TP
FL
X
BF

PRELIMINARY MRK JAN 6, 1997
APPROVALS, REVISIONS BY DATE

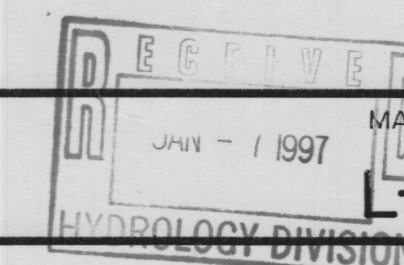


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LOTS 13, 14, 15, & 16, BLOCK 2, GALLAGHER ADD.
12609 CENTAL AVE, NE

PROJECT NO. L-22/D MAP NO. L-22 SHEET OF 2
JAN - 1 1997





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PRELIMINARY M.R.K. JAN 6, 1997
APPROVALS, REVISIONS BY DATE



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SHEET 2 OF 2

HYDROLOGY DIVISION