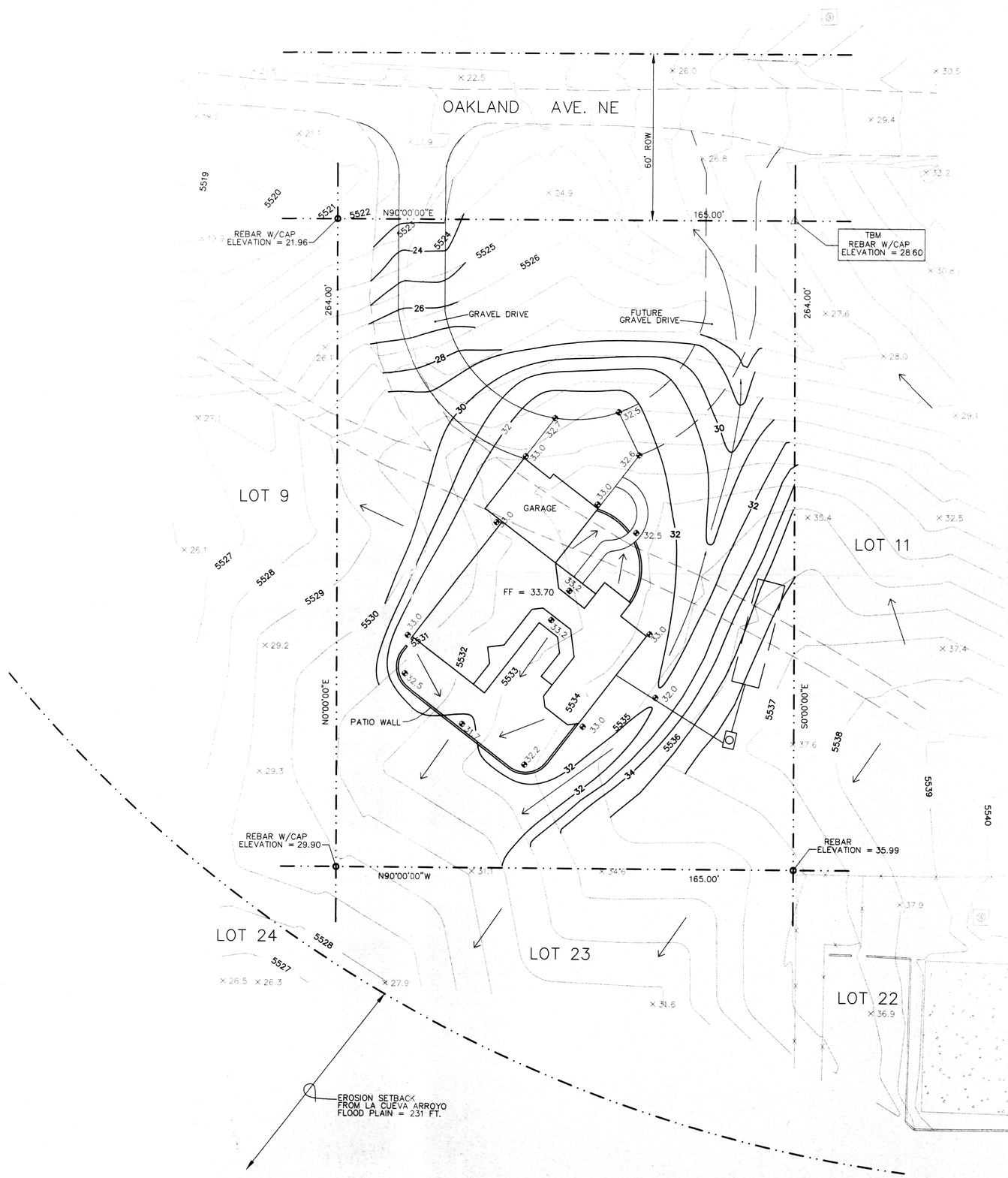
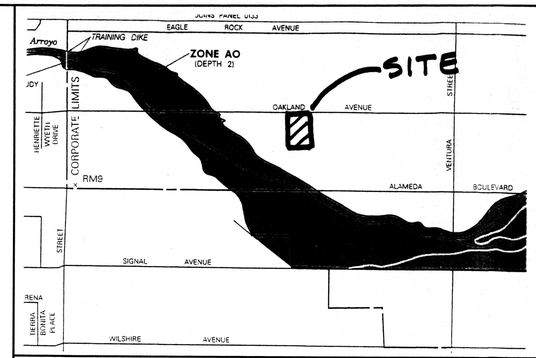
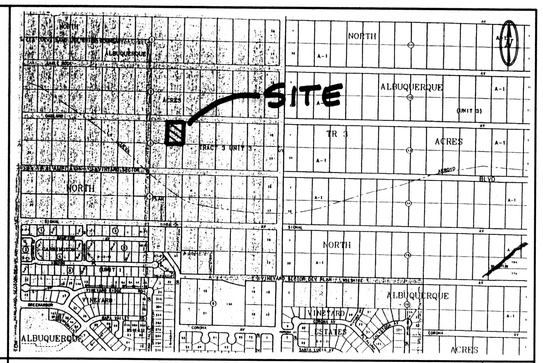




FIRM PANEL



D – 22 LOCATION MAP 1" = 800'

GRADING AND DRAINAGE PLAN

PURPOSE AND SCOPE

Pursuant to the established Drainage Ordinance for the City of Albuquerque and the Development Process Manual, this Grading and Drainage Plan outlines the drainage management criteria for controlling developed runoff from the project site. A single-family residence is proposed on the one-acre lot, together with associated access, landscaping, drainage and utility improvements.

EXISTING CONDITIONS

Presently the 0.88-acre project site is undeveloped. The site is located on Oakland Avenue NE, between Barstow and Ventura. The site is bounded on the south, east and west by developing residential properties and on the north by Oakland Avenue NE. The site is well-vegetated with native grasses and shrubs. The site topography slopes from east to west at approximately 5 percent.

The El Camino Arroyo (3709-cfs) flows southwest of the site. The arroyo is a natural braided stream network typical of arroyos in the area. As shown by the attached FIRM Panel, this property is not impacted by a mapped flood hazard zone.

A 9.5-acre off-site drainage basin flows through the northeast corner of the site, discharging into Oakland Avenue.

PROPOSED CONDITIONS

As shown on the Plan, one single family home is planned for this development. Access will be taken from Oakland Avenue, which is a public roadway.

Drainage flows will be managed on-site by grading and drainage improvements recommended by this plan. All flows will drain around and away from proposed pad sites by drainage swales. Care will be taken not to direct concentrated flows at downstream properties. All roof drains should discharge onto splash blocks to dissipate energy prior to release downstream.

The proposed residence is positioned outside of the calculated erosion setback for the La Cueva, which measures 231-feet north form the centerline of the arroyo. Complete Erosion Setback calculations are submitted separately for review and approval.

As required, the plan also illustrates the location of the well site and individual liquid waste system

CALCULATIONS

The calculations contained herein define the 100-year/6-hour design storm falling within the project area under existing and developed conditions. The hydrology is per "Chapter 22, Development Process Manual, Vol. 2", 1997 Revision.

DRAINAGE PLAN NOTES

1. BLI recommends that the Owner obtain a Geotechnical Evaluation of the on–site soils prior to foundation/structural design.
2. This Plan recommends positive drainage away from all structures to prohibit ponding of runoff which may cause structural settlement. Future alteration of grades adjacent to the proposed structures is not recommended.
3. Irrigation within 10 feet of any proposed structure is not recommended. Introduction of irrigation water into subsurface soils adjacent to the structure could cause settlement.
4. This Plan is prepared to establish on–site drainage and grading criteria only. BLI assumes no responsibility for subsurface analysis, foundation/structural design, or utility design.
5. Local codes may require all footings to be placed in natural undisturbed soil. If the Contractor plans to place footings on engineered fill, a certification by a registered Professional Engineer will be required. If the contractor wishes BLI to prepare the Certification, we must be notified PRIOR to placement of the fill.
6. BLI recommends that the Owner obtain the services of a Geotechnical Engineer to test and inspect all earthwork aspects of the project.
7. The property boundary shown on this Plan is given for information only to describe the project limits. Property boundary information shown hereon does not constitute a boundary survey. A boundary survey performed by a licensed New Mexico Registered Professional Surveyor is recommended prior to construction.

HYDROLOGY – HYMO

Zone 4 P360 = 2.60in P1440 = 3.10in

Basin	Basin area (Ac)	Land Treatment (acre) A	B	C	D	Ew (in)	V100 (af)	Q100 (cfs)
Undeveloped								
SITE	0.89	0.89	0.00	0.00	0.00	0.66	0.0487	1.7
OS–1	9.54	9.54	0.00	0.00	0.00	0.66	0.5250	17.8
Developed								
SITE	0.89	0.38	0.18	0.24	0.09	1.05	0.0780	2.4
OS–1	9.54	4.10	1.91	1.91	1.62	1.13	0.8960	27.4

LEGEND

- EXISTING CONTOUR ELEVATION
- EXISTING SPOT ELEVATION
- PROPOSED CONTOUR ELEVATION
- PROPERTY LINE
- PROPOSED SPOT ELEVATION
- DIRECTION OF FLOW
- DRAINAGE SWALE
- DRAINAGE BASIN DIVIDE
- HEC 2 SECTION I.D.

PROPERTY ADDRESS

Oakland Ave. N.E.

LEGAL DESCRIPTION

LOT 10, B3, T3, U3, NAA

PROJECT BENCHMARK

TBM: N.E.property corner, a 1/2" rebar with cap. Elevation 5528.60 feet

SURVEY

Topographic and Field Measurement by Brasher & Lorenz, Inc.
Dated June 2000

N

20 0 10 20

1 inch = 20 ft.

CADENA RESIDENCE

GRADING & DRAINAGE PLAN

DENNIS A. LORENZ NEW MEXICO 9847 REGISTERED PROFESSIONAL ENGINEER

6-16-00

BRASHER & LORENZ, INC.
Consulting Engineers
2201 San Pedro NE Building 1 Suite 220
Albuquerque, New Mexico 87110
Ph: 505-888-6088 Fax: 505-888-6188

DRAWN BY: R.M	DATE: JUNE, 2000
CHECKED BY: D.A.L.	SHEET 1 OF 1
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