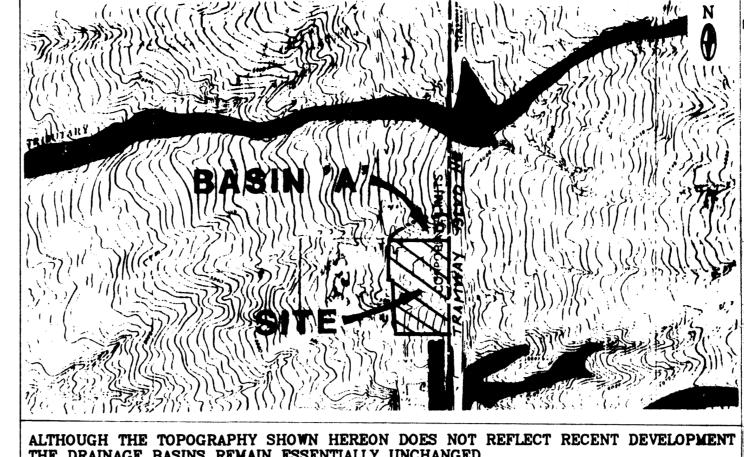


TEMPORARY EROSION CONTROL BERM

NOT TO SCALE

1 inch = 40 ft.



THE DRAINAGE BASINS REMAIN ESSENTIALLY UNCHANGED

FLOODWAY & OFFSITE DRAINAGE MAP

E-22 1"=500'

LOCATION MAP

1"=800'

GRADING & DRAINAGE PLAN

PURPOSE AND SCOPE

The purpose of this Grading and Drainage Plan is to establish the drainage management criteria for controlling surface runoff from Lots 1-4, Tract A-1, Albuquerque Ranch Estates and contributing off-site areas in a manner which is acceptable to the City of Albuquerque and the Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA). The Plan studies the existing and developed conditions of the project site and affected areas, and analyzes both conditions at the 100 year duration storm event. The plan outlines drainage criteria for development of the project site.

The scope of this Plan is to ensure that the project site will be protected from storm runoff and that the development of this project will not increase the flooding potential of adjacent and downstream properties.

Approval of this Plan will facilitate Preliminary and Final Subdivision Plat approval.

EXISTING DRAINAGE CONDITIONS

The project site, presently described as Tract A-1, Albuquerque Ranch Estates, Is located on Royal Oak Street NE, within the Albuquerque Ranch Estates Subdivision. The site is presently partially developed. An existing building is located on Lot 1, which is being used as an office building. Lots 2 & 3 are vacant; an existing home is located on Lot 4. All properties have existing street, water, sanitary sewer and drainage

Existing site drainage flows westward to Royal Oak Street, which conveys runoff south through Royal Oak Subdivision. Offsite flow from a small undeveloped basin located north of Lot 1 drains into the site and is conveyed to Royal Oak Street by a recently constructed erosion control berm located along the west property line of Lot 1. Existing street and drainage improvements carry flows to the watershed outfall, a storm drain located in Lowell Street which drains to the Juan Tabo Dam. Offsite flow from the Tramway right-of-way is conveyed south to the 888 channel by a swale located east of the site. No flows enter the site from the east, west or south.

DEVELOPED DRAINAGE CONDITIONS

The drainage management criteria for this project is outlined in the "Drainage Report for Albuquerque Ranch Estates", prepared by Brasher Engineering, dated 3-11-93. In accordance with the approved report, drainage improvements were constructed by City project No. 4310.90 to manage developed runoff from Albuquerque Ranch Estates, which includes Tract A-1, In order to

safely convey developed flow from Tract A-1 downstream improvements were made at an existing channel located between Royal Oak Avenue and Teakwood Court. The improvements consisted of reconstructing the channel entrance to accept increased developed flows from Albuquerque Ranch Estates.

The development of Tract A-1 will be in complete accordance with the approved drainage report and construction improvements. Since all required drainage improvements were provided by Project 4310.90, no additional storm drainage improvements are required to support this development. Lot 1 will not be altered and will continue to drain to Royal Oak Street. Lot 4, the McKay residence, will also continue to drain to Royal Oak Street. The development of Lots 2 & 3 will require the import of engineered fill to establish finish floor elevations above adjacent streets. Lots 2 & 3 will drain into McKay Way, a private street, which drains into Royal Oak Street.

EROSION CONTROL

Temporary erosion control measures will be required on Lots 2 & 3 to limit sediment discharge into the downstream street network. Sedimentation basins sized to retain the 2 year storm will be constructed on each lot per details provided on the plan. Maintenance of these basins will be the responsibility of the Owner. When the lots are developed the basins may be removed provided permanent landscaping improvements are in place.

CALCULATIONS

The hydrologic calculations shown hereon are per the Rational Method for computing runoff as outlined in the Development Process Manual, Volume II, Chapter 22.2, as revised January 1993. The Rational Method was selected to estimate excess runoff in order to demonstrate compliance with the approved Masterplan for Albuquerque Ranch Estates.

LEGEND

6001	EXISTING CONTOUR ELEVATION
02.5 ×	EXISTING SPOT ELEVATION
01	PROPOSED CONTOUR ELEVATION
: 	PROPERTY LINE
01.5 �	PROPOSED SPOT ELEVATION
·	DIRECTION OF FLOW
	DRAINAGE SWALE
•	DRAINAGE BASIN DIVIDE

PROPERTY ADDRESS

Royal Oak Street NE

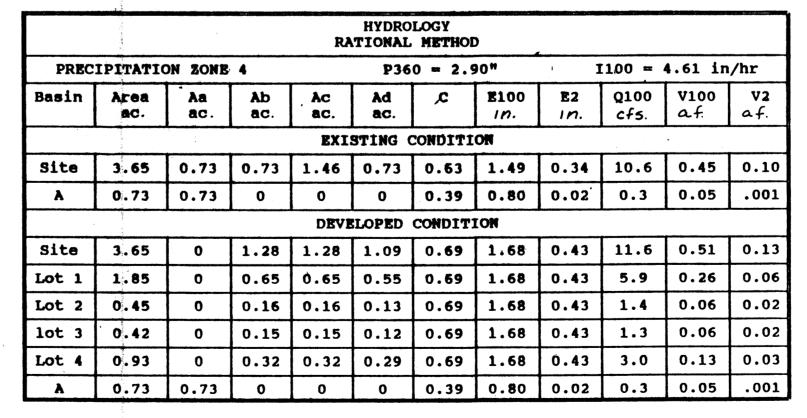
LEGAL DESCRIPTION

Lots 1-4, Tract A-1, Albuquerque Ranch Estates PROJECT BENCHMARK

TBM: Top of north mountable curb, located at the east end of McKay Way. Elevation 5988.93 feet

SURVEY

Topographic and Improvement survey by Professional Contracting Services Dated August, 1992



LAND TREATMENT ASSUMPTIONS

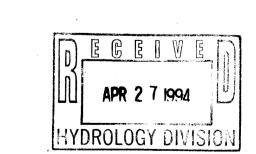
EXISTING CONDITIONS:

Aa = 20% Ab = 20% Ac = 40% Ad = 20%

DEVELOPED CONDITIONS:

Assume possible future subdivision of Lot 1 This projects to 2.5 DU/acre Per DPM, Vol II, Chp 22.2, Table A.5 @ N = 2.5: Ad = 30%

Aa = 0% Ab = 35% Ac = 35% Ad = 30%



LOTS 1-4, TRACT A-1ALBUQUERQUE RANCH ESTATES GRADING & DRAINAGE PLAN



BRASHER ENGINEERING, INC. 4425 JUAN TABO BLVD. N.E., SUITE 202 ALBUQUERQUE, NEW MEXICO 87111 (505)296-0422

DATE: APRIL 1994 DRAWN BY: STAFF CHECKED BY: D.A.L. SHEET 1 OF 1