



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

November 24, 2003

Jackie McDowell, P.E.
McDowell Engineering
7820 Beverly Hills Ave. NE
Albuquerque, NM 87122

**Re: Lowe/Rivera Sauvignon #4, 11509 Zinfandel Ave, Grading and Drainage
Plan**

Engineer's Stamp dated 10-29-03 (E22/D7F5)

Dear Ms. McDowell,

Based upon the information provided in your submittal received 11-06-03, the above referenced plan is approved for Building Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

If you have any questions, you can contact me at 924-3981.

Sincerely,

Kristal D. Metro
Engineering Associate, Planning Dept.
Development and Building Services

Bub

C: file

25-Sep-03

Calculations: Total Basin

Calculations are based on "Section 22.2 Hydrology of the Development Process Manual, Volume 2, Design Criteria for the City of Albuquerque, New Mexico, January 1993 - basins < 40 acres".

LOWE/RIVERA

SAUVIGNON #4

Precipitation Zone = 4

Depth at 100-year, 6-hour storm: (Table A-2)

P = 2.90 inches

Land Treatments:

From Table 5 - Percent Treatment D

Single Family Residential =

$7 \cdot \text{SQR}((N \cdot N) + (5 \cdot N))$

where N = units/acre

N = ----- = -----, ok < 6

N = 0.00

Therefore Percent Treatment D = 0.00%

(includes local streets)

| Areas: (acres) | Existing | Proposed |
|-----------------|----------|----------|
| Treatment A | 0.00 | 0.00 |
| Treatment B | 0.00 | 0.30 |
| Treatment C | 0.52 | 0.00 |
| Treatment D | 0.00 | 0.22 |
| Total (acres) = | 0.52 | 0.52 |

| Volume | 100 year Existing | 100 year Proposed | 10 year Existing | 10 year Proposed | 2 year Existing | 2 year Proposed |
|-----------------------|----------------------|----------------------|---------------------|---------------------|--------------------|--------------------|
| Volume (acre-feet) = | 0.06 | 0.08 | 0.03 | 0.04 | 0.01 | 0.02 |
| Volume (cubic feet) = | 2,756 | 3,284 | 1,378 | 1,851 | 510 | 926 |

| Total Q(p), cfs: | 100 year Existing Q(p)*A | 100 year Proposed Q(p)*A | 10 year Existing Q(p)*A | 10 year Proposed Q(p)*A | 2 year Existing Q(p)*A | 2 year Proposed Q(p)*A |
|------------------|--------------------------------|--------------------------------|-------------------------------|-------------------------------|------------------------------|------------------------------|
| Treatment A | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Treatment B | 0.00 | 0.88 | 0.00 | 0.44 | 0.00 | 0.11 |
| Treatment C | 1.94 | 0.00 | 1.18 | 0.00 | 0.52 | 0.00 |
| Treatment D | 0.00 | 1.16 | 0.00 | 0.79 | 0.00 | 0.48 |
| Total Q (cfs) = | 1.94 | 2.03 | 1.18 | 1.22 | 0.52 | 0.59 |