City of Albuquerque
P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

December 13, 1994

Dan Aguirre, P.E.
Wilson & Company
4775 Indian School NE Suite 200
Albuquerque, N.M. 87110

A13/D14

RE: REV. GRADING & DRAINAGE PLAN FOR APS SEVEN BAR LOOP ~~(B-13/D111)~~
RECEIVED DECEMBER 13, 1994 FOR GRADING PERMIT APPROVAL
ENGINEER'S STAMP DATED 12-13-94

Dear Mr. Aguirre:

Based on the information included in the submittal referenced above, City Hydrology approves a Grading Permit for this project.

Engineer's Certification of grading & drainage, per DPM checklist is required for this project. Include calculations of the as-built volume provided in the Certification.

If you have any questions about this project, You may contact me at 768-2727.

Sincerely,

John P. Curtin

John P. Curtin, P.E.
Civil Engineer/Hydrology

c: Andrew Garcia

City of Albuquerque
P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

December 12, 1994

Dan Aguirre, P.E.
Wilson & Company
4775 Indian School NE Suite 200
Albuquerque, N.M. 87110

A13/D14

RE: GRADING & DRAINAGE PLAN FOR APS SEVEN BAR LOOP ~~(B-13/D11)~~
RECEIVED NOVEMBER 28, 1994 FOR GRADING PERMIT APPROVAL
ENGINEER'S STAMP DATED 11-23-94

Dear Mr. Aguirre:

Based on the information included in the submittal referenced above, City Hydrology approves a Grading Permit for this project.

Engineer's Certification of grading & drainage, per DPM checklist is required for this project. Include calculations of the as-built volume provided in the Certification.

If you have any questions about this project, You may contact me at 768-2727.

Sincerely,

John P. Curtin

John P. Curtin, P.E.
Civil Engineer/Hydrology

c: Andrew Garcia

COMP. _____ **WILSON & COMPANY** LOC. _____ FILE _____

CK. _____ PROJ. Pond Calculations SHEET _____

DATE 11/22/94 SUBJ. APS Seven Bar Loop School Site OF _____

43,560 ft² = 1 acre

$V_{100yr/1oday} = 0.58$ ac-ft = 25,265 ft²

Area within exterior of pond = $(70' * \cancel{130'}\ 120') = 9,100$ ft² (~~8,400~~)

$\frac{25,265}{9,100} = 2.77$

5' deep with 3:1 side slopes

Bottom Area = $(\cancel{130}\ 120 - 30')(70' - 30') = 4,000$ ft² (~~3,600~~)

$4000 ft^2 * 5 ft = 20,000 ft^3$

$(9,100 - 4,000)\left(\frac{5}{2}\right) = 12,750 ft^3$

$32,750 ft^3$ ✓ 30,000 cf

Sufficient Capacity

$$\frac{25,265 ft^3}{(4000 ft^2) + \left(\frac{5100 ft^2}{2}\right)} = \frac{25,265}{6550} = 3.86'$$

3.86' < 5', 1 ft. of freeboard

69' + 3.86' = 72.86

$$E_{360} = \frac{4.25(0.99) + 0.81(1.97)}{5.06} = \frac{5.80''}{5.06} = 1.15''$$

$$V_{360} = \left(\frac{1.15}{12}\right) 5.06 = 0.483 Ac\text{-}Ft$$

$V_{10day} = 0.48 + 0.81(3.67 - 2.20)/12 = 0.583 Ac\text{-}Ft$

25,395 cf