



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

March 13, 1995

Ken Hightower
Ultima Custom Homes
3736 Eubank Suite B-1
Albuquerque, NM 87111

RE: DRAINAGE COMPLIANCE @ 1721 VALDEZ NE (J23-D19)

Dear Mr. Hightower:

Based on the field inspection conducted on March 10, 1995, changes to the drainage concept as discussed and constructed are acceptable.

The changes discussed with you in our field meeting on February 28, 1995 are listed below:

1. Guttering the rear porch canals toward the southwest corner of the house and exiting down towards the street, thus eliminating the need for the ponding area on the top terrace.
2. Digging the inside corner of the cinder block wall where it meets the retaining wall and installing an impervious membrane to eliminate the possibility of undermining.
3. Installation of the small retaining wall at the far northwest corner of the property.

If some unforeseen reason the undermining still occurs, other precautions may need to be implemented.

If I can be of further assistance, please feel free to contact me at 768-2667.

Sincerely,

Bernie J. Montoya

Bernie J. Montoya, CE
Engineering Associate

BJM/dl

c: Andrew Garcia
Leroy Chavez
File



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

June 30, 1992

W. Reed Edgel
Rodriguez & Associates
12800 San Juan Road, NE
Albuquerque, New Mexico 87123

RE: DRAINAGE PLAN FOR A RESIDENCE @ 1721 VALDEZ, NE
(J-23/D19) REBONITO SUBDIVISION, BLOCK 2, LOT 4
ENGINEER'S STAMP DATED JUNE 18, 1992

Dear Mr. Edgel:

Based on the information provided on your submittal of June 18, 1992, the above referenced plan is approved for Building Permit.

Please attach a copy of this plan to the construction sets prior to sign-off by Hydrology.

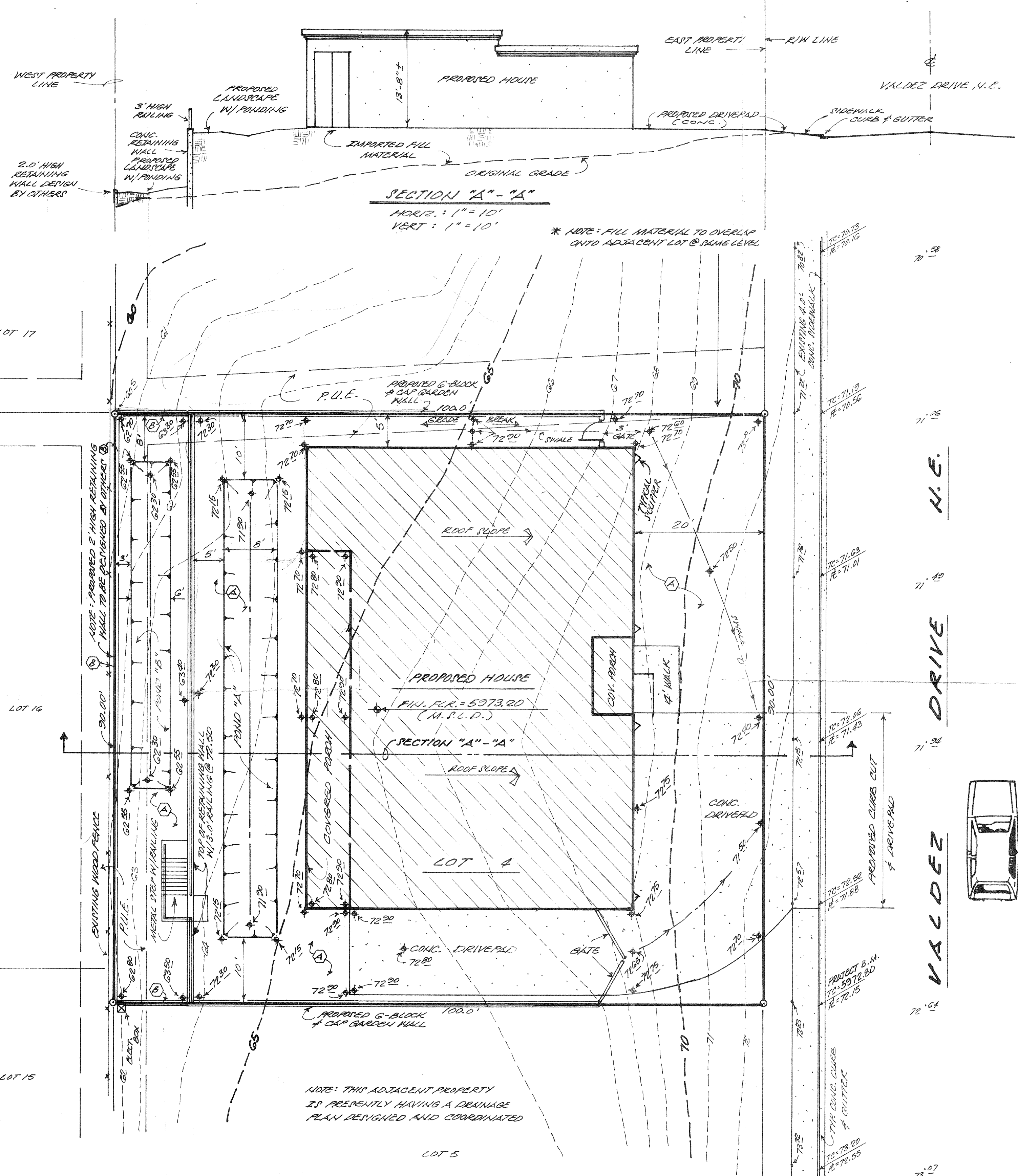
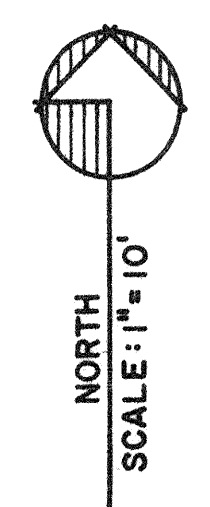
If I can be of further assistance, please feel free to call me at 768-2650.

Cordially,

Bernie J. Montoya, C.E.
Engineering Assistant

xc: Alan Martinez

BJM/bsj
(WP+3444)



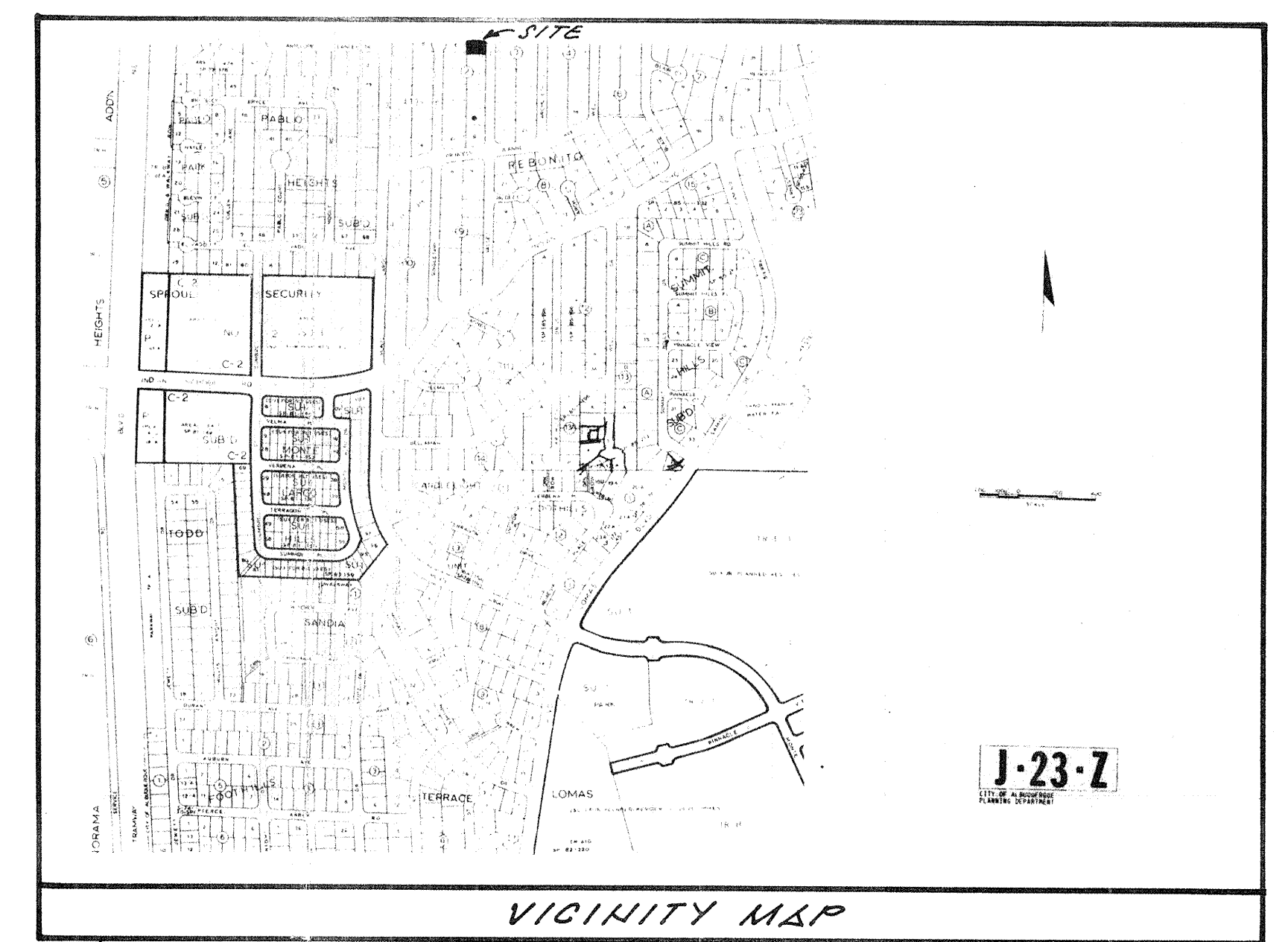
- LEGEND:**
- T.C. = 71.10 = TOP OF CURB ELEVATION
 - R. = 70.56 = CURB ROW LINE ELEVATION
 - = EXISTING OR PROPOSED CONCRETE
 - - - = EXISTING CONTOUR
 - - - = PROPOSED CONTOUR
 - - - = EXISTING FENCE
 - 78.20 = PROPOSED FRT ELEVATION
 - = PROPOSED LIMITS OF NEW PAVING

- NOTES:**
- (A) LANDSCAPED AREA
 - (B) RETAINING WALL (8' HIGH) TO BE DESIGNED BY OTHERS

- NOTICE TO CONTRACTOR:**
- AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.
 - ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH "CONTRACT DOCUMENTS FOR CITY WIDE UTILITIES AND CASH PAVING NO. 31".
 - TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE (260-1990), FOR LOCATION OF EXISTING OF SURFACE AND SUBSURFACE UTILITIES.
 - PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS; SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY FOR THE PROJECT.

NOTE: TOPOGRAPHY SURVEY OF THE SUBJECT PROPERTY AS SHOWN HEREON WAS OBTAINED FROM SURVEY MAP PREPARED BY GEORGE MARQUEZ, JR., DATED: JANUARY 27, 1992; NO FIELD ELEVATIONS WERE OBTAINED BY THE PROVIDER OF THIS DRAINAGE PLAN.

- GENERAL NOTES:**
- NO PERIMETER BOUNDARY CORNERS HAVE BEEN FIELD ESTABLISHED PER THIS SURVEY OF THE SUBJECT PROPERTY.
 - NO SEARCH HAS BEEN MADE FOR EASEMENTS OF RECORD WITHIN THE SUBJECT SITE OTHER THAN THOSE SHOWN ON THE PLAT OF RECORD.
 - REFER TO "ARCHITECTURAL SITE PLAN" FOR FIELD LAYOUT OF THE PROPOSED IMPROVEMENTS.



DRAINAGE COMMENTS:

AS SHOWN ON THE VICINITY MAP HEREON, THE SUBJECT PROPERTY IS LOCATED ON VALDEZ DRIVE N.E. APPROXIMATELY TWO (2) BLOCKS NORTH OF INDIAN SCHOOL ROAD N.E., IN THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO; BASED ON A SITE INVESTIGATION AND A TOPOGRAPHY FIELD SURVEY OF THE SUBJECT SITE, IT HAS BEEN DETERMINED THAT THE DEVELOPED RUNOFF OF THE PROPOSED IMPROVEMENTS ARE TO BE DIRECTED EASTERLY TOWARDS AND INTO VALDEZ DRIVE N.E. (A PUBLIC STREET); THE REMAINING RUNOFF OF THE EXISTING NORTHERLY, SOUTHERLY, AND WESTERLY AREAS THAT ARE TO BE LANDSCAPED ARE TO BE DIRECTED TOWARDS AND INTO A PROPOSED RETENTION POND(S) (POND AREAS "A" AND "B") WHICH ARE SHOWN ON THE PLAN HEREON. ALL DEVELOPED RUNOFF IS TO BE DIVERSED TOWARDS AND INTO VALDEZ DRIVE N.E. VIA ROOF SCUPPERS OR DOWNSPOUTS AND DRAINAGE SWALES AS SHOWN HEREON.

DRAINAGE CALCULATIONS:

RATIONAL METHOD: $Q_{100} = CIA$
 $6 \text{ HR.} = 100 \text{ YR. RAINFALL} = 2.55 \text{ IN.}$
 $T_C = \text{TEN (10) MINUTES MINIMUM}$
 $"I" = (2.55) (6.84) (10)^{-0.51} = 5.39 \text{ IN.}$

DEVELOPED CONDITIONS:

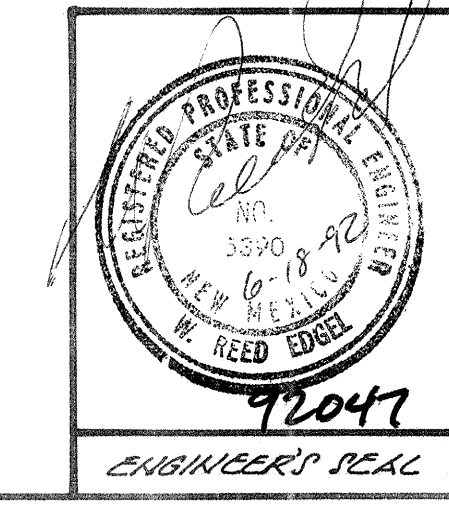
TOTAL AREA (90' X 100')	= 9,000.0 SQ. FT. = 0.21 AC.
HARD SURFACE (ASPHALT/CONC.)	= 1,352.0 SQ. FT. = 0.03 AC.
BUILDING ROOF AREA	= 3,620.0 SQ. FT. = 0.08 AC.
LANDSCAPE AREA (RUNOFF TO ST.)	= 1,195.0 SQ. FT. = 0.03 AC.
LANDSCAPE AREA(S) TO POND	= 2,833.0 SQ. FT. = 0.065 AC.
RUNOFF TO STREET: (6,167.0 SQ. FT. = 0.14 AC.)	
HARD SURFACE (ASPHALT/CONC.)	= 0.03 AC. = $21\% \times (C=0.95) = 0.20$
BUILDING ROOF AREA	= 0.08 AC. = $58\% \times (C=0.90) = 0.52$
LANDSCAPED AREA	= 0.03 AC. = $21\% \times (C=0.25) = 0.05$
"C" FACTOR	= 0.77
$Q_{100} = CIA = 0.77 \times 5.39 \times 0.14 = 0.58 \text{ CPS (DEVELOPED RUNOFF TO STREET)}$	

POND CALCULATIONS:

TOTAL AREA TO POND = 2,833.0 SQ. FT. = 0.065 AC.	
POND AREA "A" = 1,753.0 SQ. FT. = 0.04 AC.	
POND AREA "B" = 1,080.0 SQ. FT. = 0.02 AC.	
"A" $V_{100} = 0.25 \times (2.55/12) \times 1,753.0 = 93.1 \text{ CU. FT.}$	
"B" $V_{100} = 0.25 \times (2.55/12) \times 1,080.0 = 57.4 \text{ CU. FT.}$	
TOTAL PONDING = 150.5 CU. FT. REQUIRED	
POND SIZE "A" = $0.25' \times 8.0' \times 70.0' = 140.0 \text{ CU. FT.}$	
POND SIZE "B" = $0.25' \times 6.0' \times 50.0' = 75.0 \text{ CU. FT.}$	
PROVIDED TOTAL = 215.0 CU. FT. > 150.5 CU. FT.	

LEGAL DESCRIPTION:
LOT FOUR (4), BLOCK TWO (2), REBONITO SUBDIVISION, ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.

BENCH MARK REFERENCE: ACS BRASS CAP STATION "16-J23", M.S.L.D. ELEVATION = 5933.885, LOCATED AT THE SOUTHEAST CORNER OF MONTE LARGO DRIVE N.E. AND PRINCESS JEANNE AVE. N.E.; PROJECT B.M. AS SHOWN ON PLAN HEREON.



DRAINAGE PLAN
FOR HOUSE LOCATED AT
1721 VALDEZ DRIVE N.E.
ALBUQUERQUE, NEW MEXICO
JUNE, 1992

