HYDROLOGY

G20/D18

2 PLANS

G20/D18

2 PLAN

S.P. 04-10-08-00

C24-48

84 42442

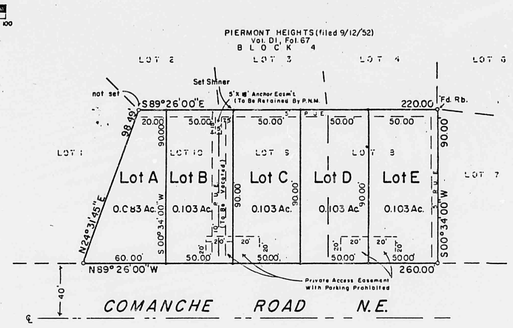
PLAT OF
LOTS A, B, C, D & E, BLOCK 4,
PIERMONT HEIGHTS

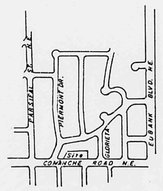
Albuquerque, New Mexico

(A Replat of Lots 8, 9 & 10, in Block 4)

APRIL, 1984

State of New Mexico) SS
County of Bernalillo
This instrument was filed for record
on JUN 6 1984 at 3:32 o'clock Pm. Recorded in Vol. ... of records of said County, Folio ... 98
Clerk & Recorder
Deputy





LOCATION MAP

Not To Scale
Site appears on City Zone Atlas Page G-20-Z
Site zoned RT

DESCRIPTION:

Lots numbered Eight (8), Nine (9) and Ten (10) in Block numbered Four (4) of PIERMONT HEIGHTS, a Subdivision in Albuquerque, New Mexico, as the same are shown and designated on the Plat thereof, filed in the office of the County Clerk of Bernalillo County, New Mexico, on September 12, 1952 in Vol. D-1, Fol. 67.

FREE CONSENT, DEDICATION

The undersigned owner(s) and proprietor(s) of the property described hereon, do hereby consent to the replatting of the property as shown hereon and the same is with their free consent and in accordance with their desires.

R. Charles Bombach — R. Charles Bombach
John P. Wilger — John P. Wilger
Wendy Bombach — Wendy Bombach

ACKNOWLEDGEMENT

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) SS

On this 24th day of APRIL, 19 84, the foregoing instrument was acknowledged before me by R. CHARLES BOMBACH, WENDY BOMBACH AND JOHN P. WILGER

My commission expires 3-15-87

Notary Public

SURVEYOR'S CERTIFICATE

I, Verlon E. Hall, New Mexico Registered Land Surveyor No. 3241, do hereby certify that this Plat was prepared by me or under my supervision, meets the minimum requirements of the Albuquerque Subdivision Ordinance, (shows all easements of record, unless otherwise noted on this Plat), and is true and correct to the best of my belief and knowledge.

Verlon E. Hall, N.M.L.S. No. 3241

REGISTERED LAND SURVEYOR — STATE OF NEW MEXICO — VERLON E. HALL — 3241

APPROVED AND ACCEPTED BY:

SUBDIVISION NO.

Charles Bombach 6-JUNE-84	Planning Director — Date	Neil C. Mutz	City Surveyor — 05/29/84 Date
Lorrie Howell	Property Management — 6/6/84 Date	Janet Saiers	Parks & Recreation — 5/30/84 Date
Frank J. Cagnino	City Engineer — 5/29/84 Date	Jon E. Eskegaard	Water Resources — 5/29/84 Date
Frank J. Cagnino	A.M.A.F.C.A. — 5/29/84 Date	Edward A. Tomaszewski	Traffic Engineer — 5-29-84 Date

DISCLOSURE STATEMENT

The purpose of this Plat is to replat Lots 8, 9 and 10, Block 4 of Piermont Heights, filed September 12, 1952, meeting the required zoning and set back requirements of the Albuquerque Subdivision Ordinance. Bearings are referenced to the Plat of Piermont Heights, filed Sept. 12, 1952. Capped rebar stamped "LS 3241" were set at all property corners, except as otherwise specified. This Plat is shown hereon subject to all recorded and unrecorded easements that are not shown on the Plat of Piermont Heights, filed Sept. 12, 1952.

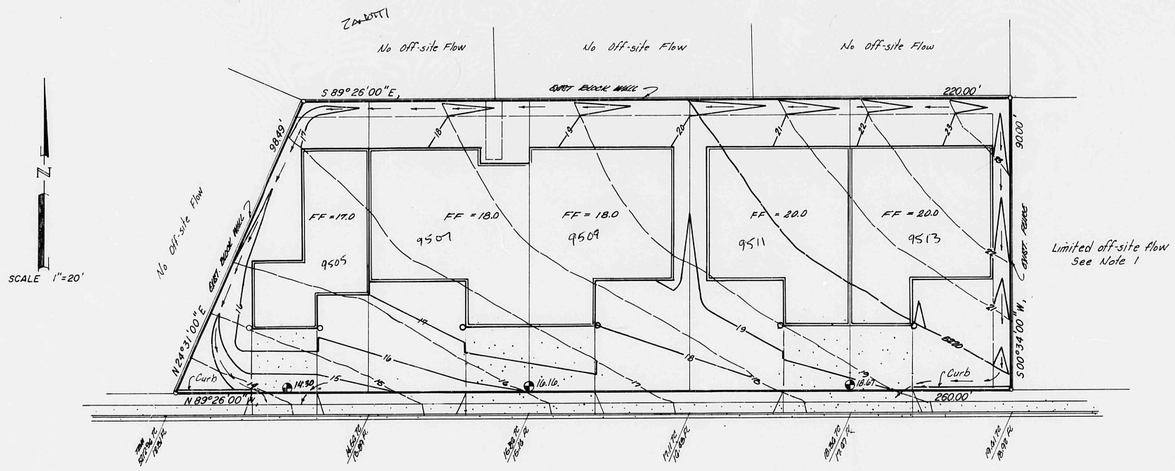
SP. 84-241

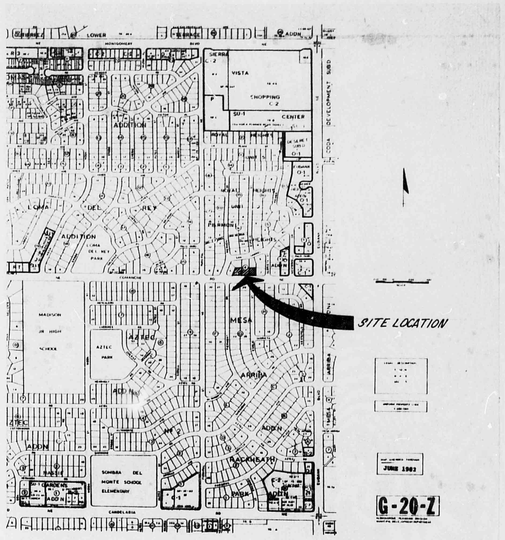
C24-48

HALL SURVEYING CO.
2625 Pennsylvania Ave.N.E., Suite 350
Albuquerque, New Mexico 87110
Phones: (505) 884-6200 & 884-6444

J-2305	F.B. 81-02	K.L.S.

DRAINAGE PLAN





Vicinity Map

COMMACHE RD. N.E.

BENCH MARK

City of Albuquerque Bench Mark 9-620 located at the S.W. corner of Parsifal St. and Commanche Rd. at the WSW curb return. Elevation 5502.412

LEGAL DESCRIPTION

Lots A, B, C, D and E, Block 4 Piermont Heights Add'n.

LEGEND

	Existing	New
Contour lines		18
Spot Elevation	⊕	
Direction of Flow		
TC = Top of curb		
FL = Flow Line		
TW = Top of wall		
Roof Drain		o

NOTES

1. Off-site flow from the east is accepted although it is minimal. The residential back yard drains directly to Commanche Road

DRAINAGE CALCULATIONS

I. EXISTING CONDITIONS:
- A. Area 21,600 SF = 0.496 Acres
- B. Soil type - EtC Embudo Tijeras Complex - Soil Group B
- C. "C" Factor from Plate 22.2 C-1 C = 0.34
- D. 6-hour 100-year rainfall (from Plate 22.2 D-1) 2.45
- E. Time of Concentration - Use 10 minutes (minimum T_c)
- F. Intensity (from Plate 22.2 D-2) $I = 2.45 \times 6.84 \times 10^{-0.51}$ = 5.18 in/hour.
- G. Undeveloped Runoff Q = CIA = 0.34 x 5.18 x 0.496 = 0.87 cfs

II. DEVELOPED CONDITIONS:
- A. Areas
  - Buildings 10,184
  - Driveways 3,120
  - Other 8,296
- B. Weighted "C" Factor
  C = (10184 + 3120 + 8296 x 0.34)/21600 = 0.75
- C. Developed Runoff Q = CIA = 0.75 x 5.18 x 0.496 = 1.93 cfs

III. JUSTIFICATION OF FREE DISCHARGE:
- A. Additional discharge caused by development.
  1.93 - 0.87 = 1.06 cfs This a comparitively small quantity.
- B. The proposed parcel is one of the few remaining parcels to be developed. (An in-fill development)
- C. Downstream conditions: Although there isflooding near Comanche and Wyoming Boulevards, drainage from the site can enter the system and be far downstream before the peak flow from the upstream drainage area reaches the site. An analysis of flow times follows:
  Storm sewer system No. 322 in Comanche extends almost to Montgomery Boulevard and Juan Tabo Boulevard intersection. The time of concentration is based on street flow velocity as obtained from City of Albuquerque Development Process Manual (DPM) Plate 22.2 B-2. Analysis Point is the first catch basin west of the site.

Summary of Street Flow Times

Street Name	Elevation High	Elevation Low	H	L	S	V	Time
Pamela Place	5704	5692	12	580	0.0218	4.0	2.29
Nelle Ave.	5692	5668	24	950	0.0253	4.15	3.82
Tara Drive	5668	5667	1.0	150	0.0067	2.2	1.13
Cielito Lindo	5667	5623	44	1500	0.0290	4.5	5.56
Morris	5623	5598	25	1500	0.0160	3.4	7.59
Comanche							
Morris to Eubank	5598	5536	62	2650	0.0234	4.1	10.77
Eubank to C.B. 1250'E. of Eubank	5536	5504	32	1250	0.0256	4.2	4.96
					Total Time		36.17

Time required for site drainage to reach the analysis point:

T_c-L = 270 H = 9' S = 0.033 $T_c = 0.0078\ (270^{0.77}/0.033^{0.385})$

T_c = 2.16

Flow time in Comanche 300' at 4.2 fps = 1.19 min

Total 3.35 min.

Conclusion: Site drainage will reach Analysis Point in 3.35 minutes. Peak flow from the overall basin will reach the Analysis Point in 36.17 minutes. Therefore, peak flow from the site should reach the flood hazard area 32.8 minutes before the peak flow.

Piermont Heights Townhouses

HALL ENGINEERING
2625 Pennsylvania Ave., N.E.
Suite 350
Albuquerque, New Mexico 87110