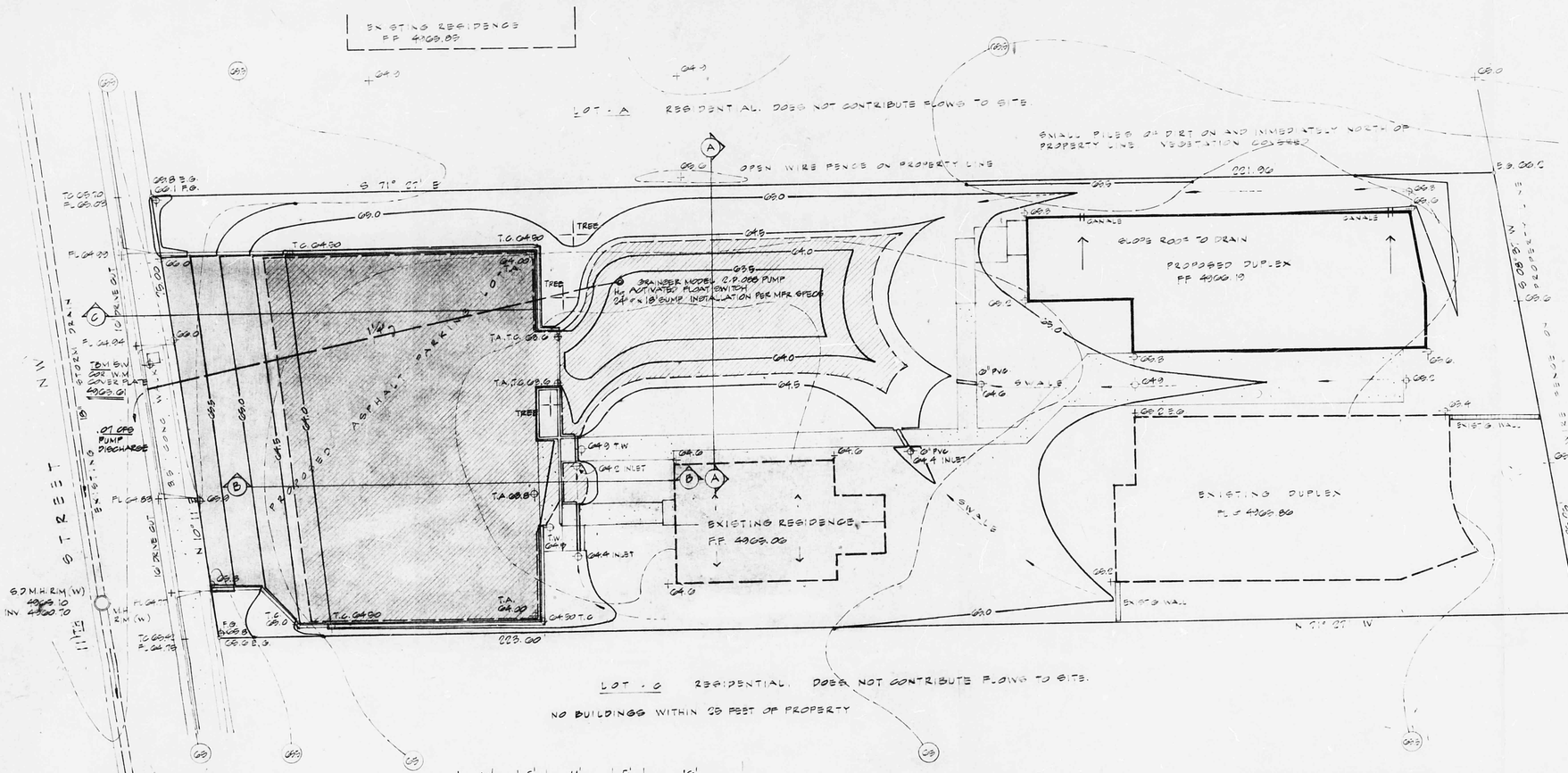
HYDROLOGY

G14/18
ONE PLAN

G 14- D18

1 Plan



CALCULATIONS

TOTAL LOT AREA	16588 SQ FT. (.38 AC)
DEVELOPED AREA	SAME.
SURFACE CHARACTER	ASPHALT PAVEMENT AND ROOF 100% IMPERVIOUS
SOIL IS BLADON (SD)	PER S.C.S. SOIL SURVEY OF BERNALILLO COUNTY AND PARTS OF SANDOVAL AND VALENCIA COUNTIES
HYDROLOGIC SOIL GROUP	B
LENGTH OF RUN	175 MAX.
TOTAL IMPERVIOUS AREA	7200 SQ FT.
% IMPERVIOUS	43%
ADJUSTED RUNOFF COEFF	.55 (PL 22.0, DH, DPM)
INTENSITY	4.86 IN/HR (PL 22.0, 10, DPM)
Q100 = .55 x 4.86 x .38	= 1.01 CFS
Q10 = .43 x 1.01	= .44 CFS

FLOWS TO BE DIRECTED TO DROP INLET IN WEST CENTER OF LOT. DRAIN TO BE TO EXISTING STORM SEWER STUB OUT

BENCH MARK

B. 614-A □ 3" BRASS IN SIDEWALK @ SE COR OF INTERSECTION OF 10TH STREET & SANDOVAL RD. NW

ELEV. 4000.53

TBM

SW CORNER OF WATER METER COVER PLATE @ FRONT OF PROPERTY

ELEV. 4003.01

LEGEND

CONTOUR INTERVAL (.5 FT. ONE-HALF FOOT)

64 — PROPOSED CONTOUR

(64) — EXISTING CONTOUR

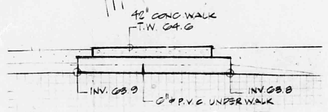
+ 64.0 — EXISTING SPOT ELEVATION

+ 64.0 — PROPOSED SPOT ELEVATION

* PROPOSED ELEVATIONS AND CONTOURS ARE GIVEN TO FINISHED SURFACES. CONTRACTOR SHALL DETERMINE NECESSARY SUBGRADES

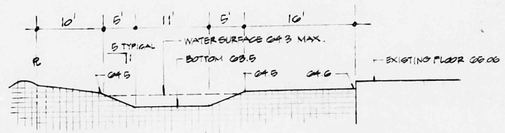
— AREA OF PONDING (NO ADVERSE OUTFALL)

— EXTENT OF PONDING



UNDER WALK DRAIN

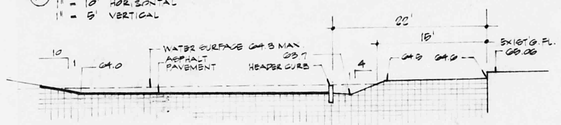
1" = 1'-0"



(A) SITE SECTION

1" = 10' HORIZONTAL

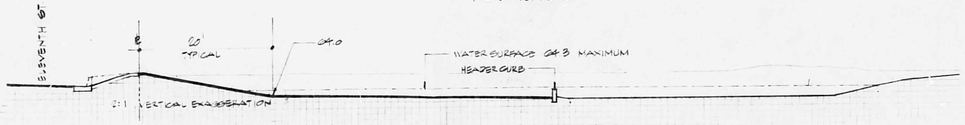
1" = 5' VERTICAL



(B) SITE SECTION

1" = 10' HORIZONTAL

1" = 5' VERTICAL



(C) SITE SECTION

1" = 10' HORIZONTAL

1" = 5' VERTICAL

RUNOFF VOLUME

SEE CALCULATION DATA ABOVE, RIGHT

$V = 16588 \times .55 \times \frac{2.2}{12} = 1668$ CU. FT.

POND VOLUME.

AREA WITHIN 64.3 ELEVATION = 3000 SQ FT

AREA WITHIN 64.0 CONTOUR = 3216 SQ FT.

$VOL = \frac{.3}{3} \times (3000 + 3216 + \sqrt{3000 \times 3216})$

= 1035 CU FT.

VOLUME WITHIN PARKING LOT 64.0 CONTOUR TO 63.6 INLET

$= \frac{2908 \text{ S.F.} \times .4 \text{ DEPTH}}{3} = 310$ CU FT.

VOLUME WITHIN INFILTRATION AREA 64.0 CONTOUR TO 63.6 CONTOUR

$= \frac{.6}{3} \times (991 + 600 + \sqrt{991 \times 600})$

= 370 CU. FT.

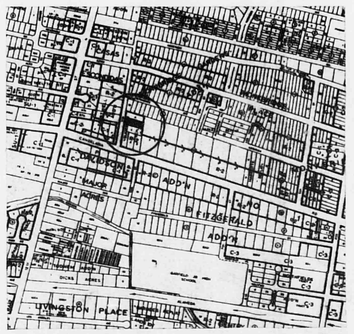
1718 CU. FT.

∴ THE POND SURFACE WOULD APPROXIMATE THE ELEVATION 4004.3 AS INDICATED.

THIS SITE IS NOT CROSSED BY NOR IS IT ADJACENT ANY FLOW LINE OR DRAINAGEWAY.

FLOWS GENERATED ON SITE COLLECT IN A DEPRESSION TO THE NORTHWEST OF THE EXISTING RESIDENCE

DUE TO THE SMALL DIFFERENCE IN ELEVATION BETWEEN THE FLOOR OF THE EXISTING RESIDENCE (4009.00) AND CURB FLOWLINE @ THE SW CORNER OF THE PROPERTY (4006.50), DISCHARGE OF STORMWATER TO SEVENTH STREET IS NOT POSSIBLE.



VICINITY MAP NO SCALE

G-14-Z

DRAINAGE PLAN

8724 11TH STREET, NW

LOT - B GLASSBROOKS REPLAT

MONKBRIDGE ADDITION

ALBUQUERQUE, NEW MEXICO

FOR

RIFFENBURGH

REVISION : 1-10-84

NOVEMBER 15, 1983

PREPARED BY

ENCHANTMENT ENGINEERING

8810 INDIAN SCHOOL ROAD, NE

ALBUQUERQUE, NM

294-8833

G14/D18