Hydrology K17/D40 Mazzio's Pizza

K17/D40

Mazzio's Pizza

1 Plan

GRADING & DRAINAGE PLAN

FOR

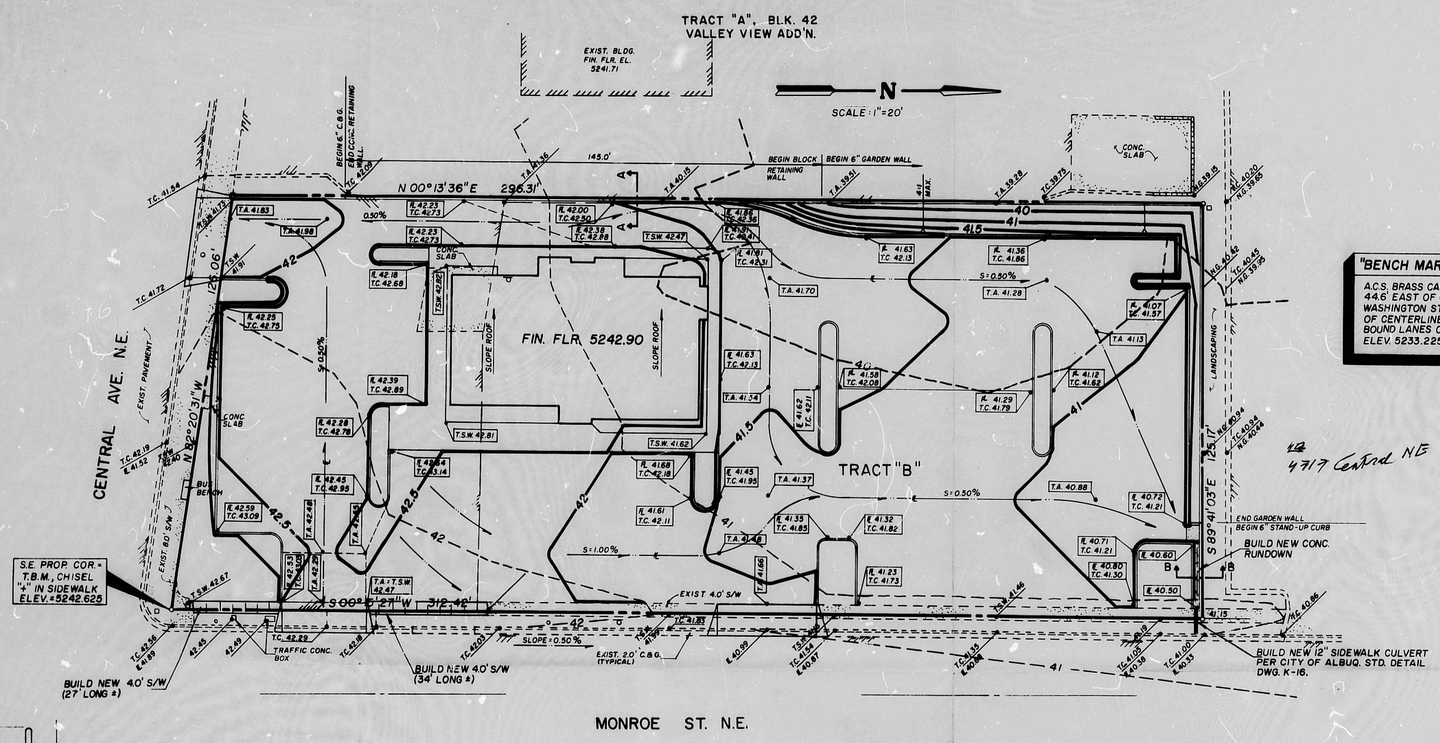
MAZZIO'S PIZZA

TRACT "B", BLOCK 42

VALLEY VIEW ADDITION

CITY MAP NO. K-17

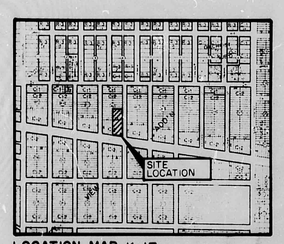
ALBUQUERQUE, NEW MEXICO



4717 Central NE

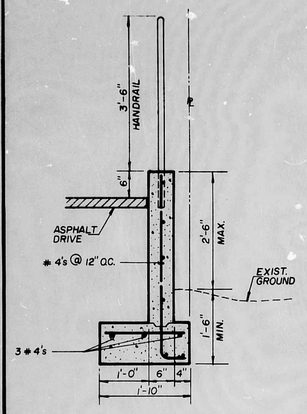
"BENCH MARK"

A.C.S. BRASS CAP 5-K17, LOCATED 44.6' EAST OF CENTERLINE ON WASHINGTON ST. AND 25.8' SOUTH OF CENTERLINE AT THE WEST BOUND LANES ON CENTRAL AVE. ELEV. 5233.225

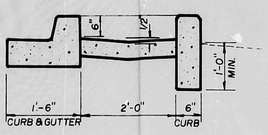


LOCATION MAP K-17

FLOODWAY MAP NO. 29



SECTION A-A



SECTION B-B

LEGEND

—41—	FINISHED CONTOUR
- - -41- - -	EXISTING CONTOUR
F.E. 41.23 / T.C. 41.73	FINISHED SPOT ELEV.
T.C. 41.54	EXIST. SPOT ELEV.
	FLOW LINE
	EXIST. PAVEMENT
	CONCRETE
	EXIST. BUILDING
	EXIST. CURB & GUTTER
	PROPERTY LINE
T.C.	TOP OF CURB
T.A.	TOP OF ASPHALT

NOTES:

1. CONTRACTOR SHALL PLAN HIS OPERATION TO MINIMIZE EROSION DURING THE CONSTRUCTION PHASE.
2. THE ENGINEER WILL SUBMIT TO THE CITY OF ALBUQUERQUE, HYDROLOGY DEPT., A STATEMENT OF PROJECT COMPLETION WITH REFERENCE TO GENERAL COMPLIANCE WITH INFORMATION AND CRITERIA SET FORTH HEREIN.

EXISTING CONDITIONS

PARTIALL IMPROVED LAND WITH HYDROLOGICAL SOILS "B" FROM S.C.S. BERNALILLO COUNTY, PLATE 31

TOTAL ARE IN ACRES = 0.8740

IMPERVIOUS AREA = 30%

C = 0.48 FROM PLATE 22.2 C-1

SIX HOUR RAINFALL VOLUME-100 YR. FREQUENCY = 2.3" FROM PLATE 22.2 D-2

I = 4.86 FROM PLATE 22.2 D-2

Q = CIA
Q = (0.48) X (4.86) X (0.8740)
Q = 2.04 CFS

DEVELOPED CONDITIONS

PERCENT IMPERVIOUS = 95%

C = 0.92 FROM PLATE 22.2 C-1

I = 4.86 FROM PLATE 22.2 D-2

A = 0.8740

Q = (0.92) X (4.86) X (0.8740)
Q = 3.91 CFS

SIDEWALK CULVERT CAPACITY

Q = AV

$$V = \frac{1.49 \times 0.29^{2/3} \times 0.02^{-1/2}}{0.012}$$

V = 7.55 FPS

A = 1.0 X 0.67
A = 0.67
Q = 0.67 X 7.55
Q = 5.06 CFS

SANTIAGO ROMERO JR. NEW MEXICO 7397 REGISTERED PROFESSIONAL ENGINEER

Santiago Romero Jr. 9/12/85

RECEIVED OCT 02 1985 HYDROLOGY SECTION

Santiago Romero Jr. 9/12/85
REGUBMITTAL 9/12/85

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K17/D40