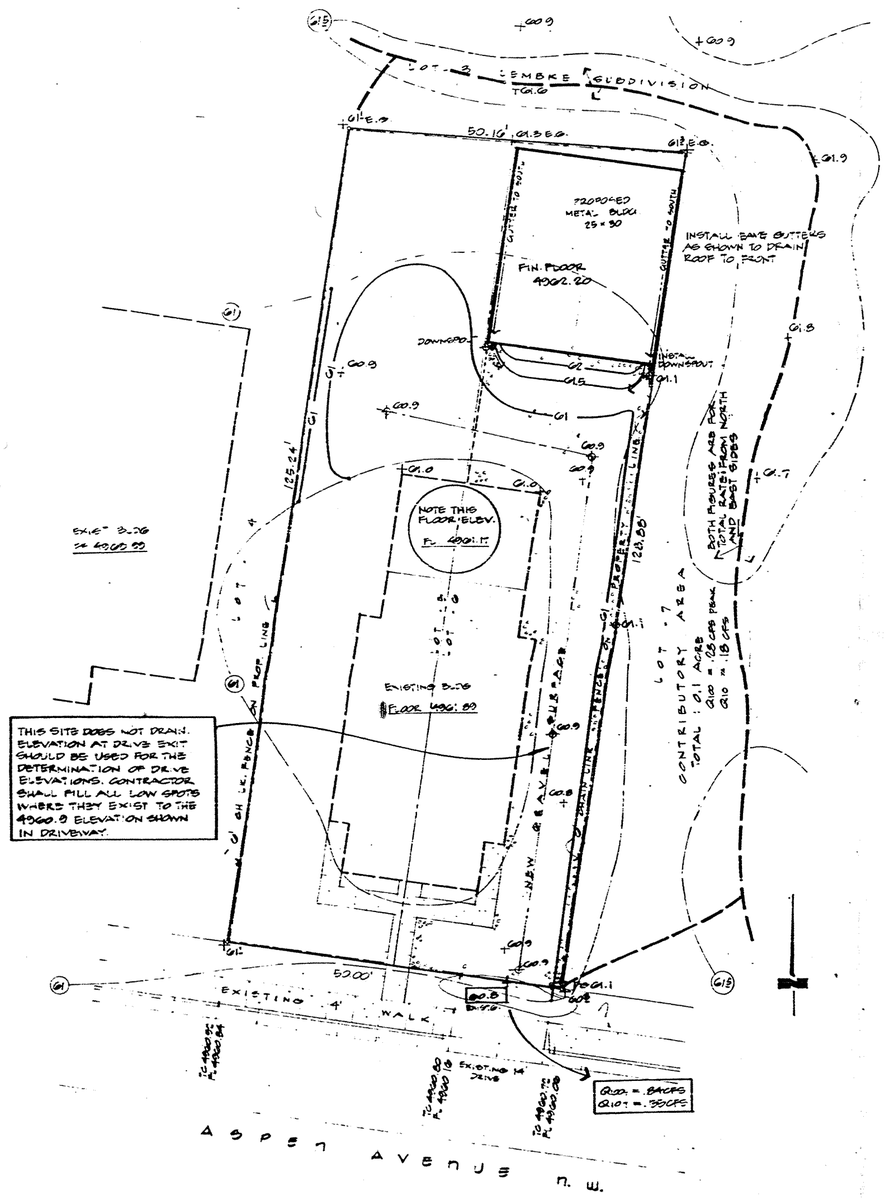
J14/D49



VICINITY MAP NO SCALE

BENCH MARK

K014 SQUARE, B, CHISELED ON TOP OF CONCRETE CURB & NNE CURB RETURN AT INTERSECTION OF 4TH STREET & CONSTITUTION NW

ELEV 4990.194

TBM

TOP OF CURB ON NORTH SIDE OF ASPEN AVENUE ADJACENT TO SW CORNER OF SITE.

ELEV. 4960.96

LEGEND

CONTOUR INTERVAL - ONE-HALF FOOT

(60) EXISTING CONTOUR

60 PROPOSED CONTOUR

+60.0 EXISTING SPOT ELEVATION

60.0 PROPOSED SPOT ELEVATION

PROPOSED CONTOURS AND SPOT ELEVATIONS ARE TO FINISH SURFACES. CONTRACTOR SHALL DETERMINE APPROPRIATE SUBGRADES.

INTERNAL DIVISION OF FLOWS

PLAN SCALE 1" = 10'

CALCULATIONS

AREA OF SITE	4359 SQ FT (.10 AC)
SLOPE	2.0%
SOIL GROUP	B
DEVELOPED COVERAGE (REMAINDER GRAVELED DRIVE)	45%
MODIFIED C FACTOR	.81
100-YR RAINFALL	2.0 IN.
TIME OF CONCENTRATION	10 MINUTES
INTENSITY	4.6 IN/HR

ON-SITE RUNOFF

Q100 = .81 x 4.6 x .18 = .66 CFS PEAK

Q10 = .057 Q100 = .37 CFS

OFF-SITE CONTRIBUTORY RUNOFF

NO DISCERNIBLE FLOWLINES. POTENTIAL CONTRIBUTORY AREA 0.1 ACRE. C = .60 Q100 = .18 CFS FROM EAST

Q10 = .18 CFS

DISPOSAL

PROPOSED CONSTRUCTION IS URBAN INFILL, FREE DISCHARGE TO ASPEN AVENUE ALLOWABLE.

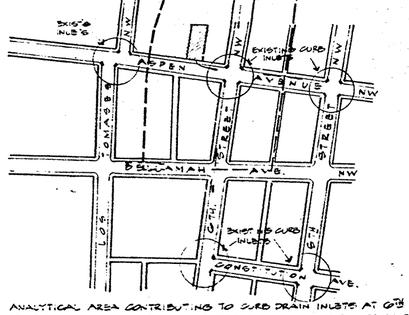
FLOWS CONTRIBUTE TO A DEFINED 100-YEAR FLOOD ZONE IN ASPEN AVENUE AS IT APPEARS ON FLOOD BOUNDARY MAP, CITY OF ALBUQUERQUE, NEW MEXICO, PANEL 26 OF 50.

FINISH FLOOR SHOWN FOR NEW BUILDING, 4962.20, IS PER FLOODPROOFING REQUIREMENT AS OUTLINED IN PRE-DESIGN CONFERENCE

TOTAL DISCHARGE TO STREET — SAWMILL SPUR

Q100 = .36 CFS + .18 CFS = .54 CFS

Q10 = .37 CFS + .18 CFS = .55 CFS



ANALYTICAL AREA CONTRIBUTING TO CURB DRAIN INLETS AT 6TH & ASPEN IS 0.5 ACRES MORE OR LESS. STREETS HAVE ESSENTIALLY NO SLOPE. THEREFORE, CONTRIBUTORY AREA LIMIT HAS BEEN SET EQUIDISTANT BETWEEN DRAIN LOCATIONS. C (URBAN, DEVELOPED) = .70 T_c = 10 MIN. I = 4.64 IN/HR

Q = .70 x 4.64 x 0.5 = 1.62 CFS V = 0.5 x 43560 x .70 x 1.0/12 = 1270 CU.FT.

DRAIN INLETS ARE IN FACES OF CURBS (NOT GUTTERS) EACH HAS 7.66 FT. OF TOTAL OPENING. GIVEN A 1.0' FLOW DEPTH (PER P.A.D.M.), EACH HAS A CAPACITY OF (.02 x 1.7) x √(2 x 32.16 x 1) 3.5 CFS PEAK x 4 = 14 CFS (≫ 1.62 CFS). ∴ DRAINS EXIST BUT ARE OF LESS CAPACITY THAN PEAK EXPECTED FLOW.

DRAINAGE PLAN

609 ASPEN AVENUE, NW
LOTS 5 & 6
BLOCK - 9
IVES ADDITION
ALBUQUERQUE, NEW MEXICO

FOR

M & T AUTO

JANUARY 29, 1985

RECEIVED FEB 13 1985 HYDROLOGY SECTION

TECH Inc.
333 East Main
Farmington
New Mexico

DRAINAGE PLAN

M&T AUTO

revised	
date	02.02.85
drawn	B.W. Kipps
project no.	5085.026.0030
sheet	of

CITY OF ALBUQUERQUE