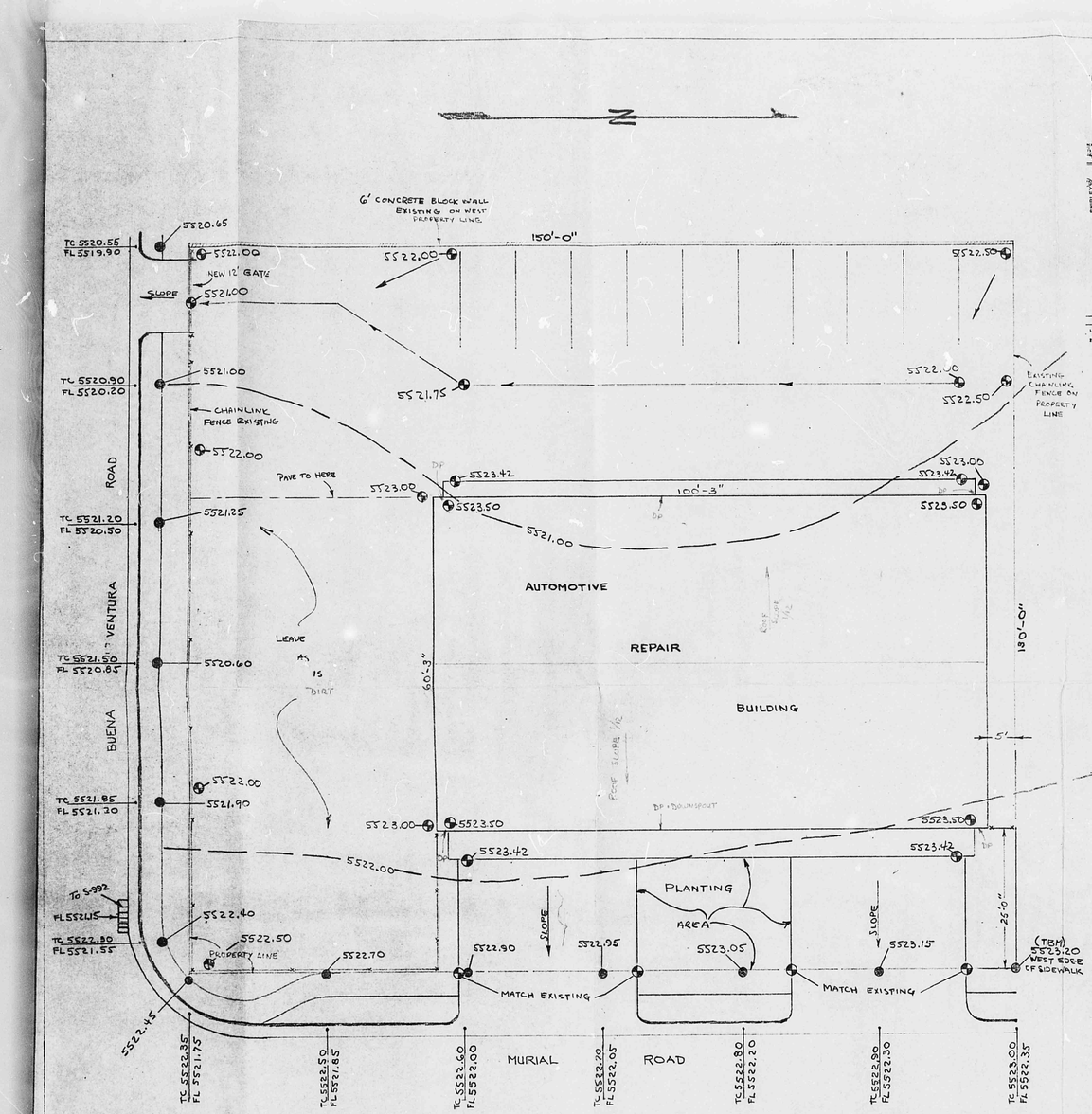
HYDROLOGY K21/D13 1 PLAN

K21/D13

1 Plan

D 24 | C 20 | B 16 | A 12 | CITY OF ALBUQUERQUE | C | D



SYMBOLS

- PROPOSED DESIGN ELEVATIONS
- EXISTING ELEVATIONS SIDEWALK
- TC = TOP OF CURB
- FL = GUTTER FLOW LINE
- SCALE 1" = 10'-0"
- —X— EXISTING FENCE
- EXISTING BLOCKWALL
- 5522.00 EXISTING CONTOURS
- DP = DOWNSPOUT FROM GUTTERS

LEGAL DESCRIPTION

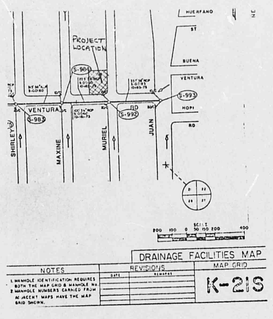
LOTS 30, 31 & 32 BLOCK 20
EAST CENTRAL BUSINESS ADDITION
APPROVED 18TH DAY MARCH 1942
BY EDMUND ROSS, COUNTY SURVEYOR
FILED BY MAY CLEGHORN, COUNTY CLERK.

M.S.L.D.

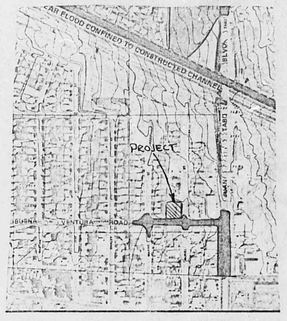
BM = WNW SQUAR IN CURB
JUAN TABO & BUENA VENTURA
5530.096 MSL

CURB CUTS

CITY OF ALBUQUERQUE
STD. DWG. P-411-1



DRAINAGE FACILITIES MAP



FLOOD HAZARD BOUNDRY MAP

DRAINAGE PLAN

CALCULATIONS

GROUND COVER INFORMATION

SOIL TYPE FROM BERNALILLO COUNTY SOIL SURVEY, PLATE 22, TyB TIERRAS GRAVELLY, FINE SANDY LOAM, HYDROLOGIC SOIL GROUP B.

RATIONAL METHOD $Q = CiA$ WHERE C VARIES

$i = P_6(6.84)T_c^{-0.51} = 2.45(6.84)T_c^{-0.51} = 5.18$ "/hr.

A = 130'x150' = 19,500 sf = 0.45 ACRES

P_6 = 2.45" (DPM PLATE 22.2 D-1)

T_c = 10 min (MINIMUM)

VOLUME: $V = CP_6A(1/12)$ WHERE C VARIES

P_6 = 2.45" (DPM PLATE 22.2 D-1)

A = 19,500 sf

EXISTING CONDITIONS

A_{TOTAL} = 130'x150' = 19,500 sf

A_{imp} = 0 sf ; % imp = 0%

C = 0.34 (DPM PLATE 22.2 C-1)

$Q_{100} = CiA = (0.34)(5.18)(0.45) = 0.79$ cfs

$V_{100} = CP_6A(1/12) = (0.34)(\frac{2.45}{12})(19,500) = 1354$ cf

DEVELOPED CONDITIONS

A_{TOTAL} = 19,500 sf = 0.45 ACRES

A_{imp} = 14,815 sf = % imp = 76%

C = 0.74 (DPM PLATE 22.2 C-1)

$Q_{100} = CiA = (0.74)(5.18)(0.45) = 1.72$ cfs

$V_{100} = \frac{CP_6A}{12} = (0.74)(\frac{2.45}{12})(19,500) = 2946$ cf

NOTES:

1. THE ALBUQUERQUE MASTER DRAINAGE STUDY SHOWS THAT A 100 yr. FLOOD DOWN BUENA VENTURA ROAD WILL JUST TOP EXISTING CURB (0.90' ABOVE GUTTER FLOWLINE)
2. THERE ARE NO OFF SITE FLOWS.
3. THESE LOTS ARE IN A INFILL AREA ALL READY DEVELOPED.
4. LOTS ARE IN BOTTOM OF DRAINAGE AREA AND ANY FLOOD RUNOFF SHOULD BE GONE BEFORE FLOOD WATERS FROM UPPER AREAS ARRIVE.
5. THE BUILDING EXTENDS ON ALL THREE LOTS AND CANNOT BE DIVIDED AND MUST BE FIGURED AS ONE PARCEL.
6. 34% OF RUNOFF FROM AREA WILL DRAIN INTO S-992 THE BALANCE DRAIN INTO S-984

July 16-1985
Anthony J. Opstedal
ANTHONY J. OPSTEDAL
REGISTERED PROFESSIONAL ENGINEER
CERTIFICATE # 5079 NEW MEXICO

AUTOMOTIVE REPAIR BUILDING

LEGAL DESCRIPTION
LOTS 30, 31 & 32 BLOCK 20
EAST CENTRAL BUSINESS ADDITION

ADDRESS:

OWNER:
GILBERT & DAVID RIZZY
318 MURIAL N.E. 836-6860

DESIGN & ENGINEERING
ANTHONY J. OPSTEDAL
REGISTERED PROFESSIONAL ENGINEER
CERTIFICATE # 5079 NEW MEXICO

SCALE
1" = 10'-0"

RECEIVED
JUL 16 1985
HYDROLOGY SECTION

CITY OF ALBUQUERQUE
THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT

D 24 C 20 B 16 A 12 | CITY OF ALBUQUERQUE | C D