HYDROLOGY

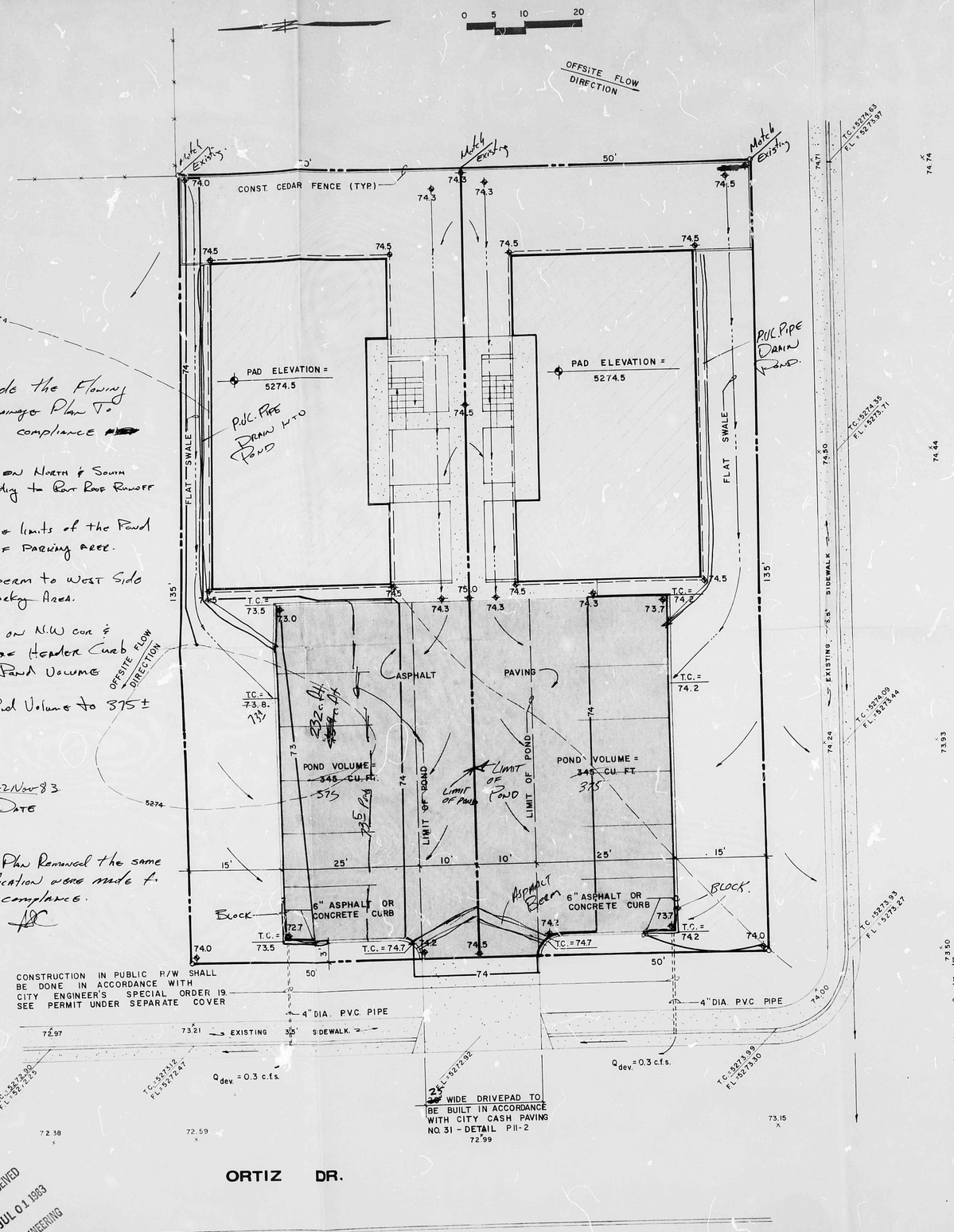
L18/D14

ONE PLAN

1 PLAN FOR

538 + 540 ORTIZ S.E.

L18 — D14



Owner has made the Flowing Changes to Drainage Plan To Bring Site into compliance ~~[illegible]~~

1.) 6" P.V.C Pipe on North & South Side of Building to Run Roof Runoff to Pond

2.) Increased the limits of the Pond to center of Parking area.

3.) Add Asphalt berm to West Side of Asphalt Parking Area.

4.) Added Block on N.W cor & S.W Cor of Header Curb to Maintain Pond Volume

5.) Increase Pond Volume to 375 ±

D. M. Denton 22 Nov 83
Owner Date

Overall drainage Plan Remained the same minor ~~[illegible]~~ modification were made to Bring site into compliance.

CONSTRUCTION IN PUBLIC R/W SHALL BE DONE IN ACCORDANCE WITH CITY ENGINEER'S SPECIAL ORDER 19 SEE PERMIT UNDER SEPARATE COVER

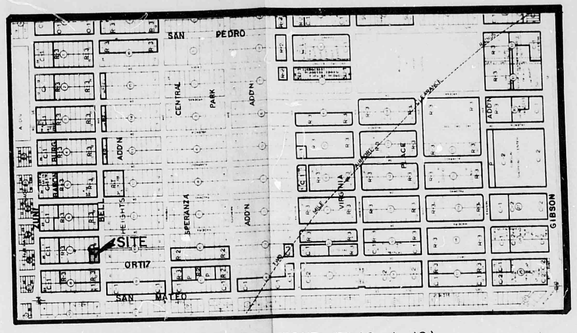
RECEIVED JUL 01 1983 ENGINEERING

LEGEND

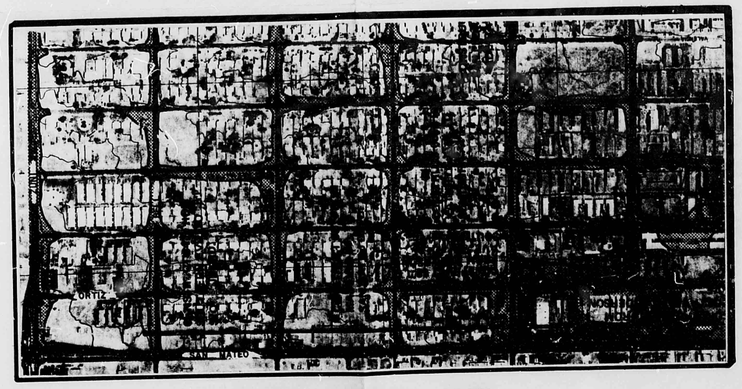
- ASPHALT PAVING
- LANDSCAPED AREA
- PROPERTY LINE
- EXISTING CURB & GUTTER W/SIDEWALK
- 12.7 EXISTING SPOT ELEVATION
- 12 EXISTING CONTOUR
- 12.7 PROPOSED SPOT ELEVATION
- 12 PROPOSED FINISHED CONTOUR
- SURFACE FLOW DIRECTION
- BUILDING STRUCTURE

GENERAL NOTES

- SURVEY BENCH MARK: City of Albuquerque 4-L18. Square Chiseled on top of Concrete Curb in S.E. Quadrant of the Intersection of San Mateo & Katherine S.E. Elevation = 5279.27
- ZONING: R-3
- SOIL TYPE: From the U.S.D.A. Soil Survey, the Soil is a Plastic Sandy Loam of the Wink Series and Defined as Type 'B' Soil
- LEGAL DESCRIPTION: Lots 13 & 14, Block 7, of Baronburg Heights Addition



VICINITY MAP (ZONE ATLAS L-18)



FLOOD HAZARD MAP

Drainage Notes

Flood Hazard Area Consideration: This site is shown to be in the flood plain on the flood hazard maps. However system 206-01A has been installed upstream from this site. As per the A.M.D.S. the system 206-01A will effectively remove the flooding on Bell (page 15, Volume II of the A.M.D.S.). Subject to a Letter of Map Amendment for this development, it is hereby requested that any flood plain requirements be waived for this development due to construction of system 206-01A.

Drainage Management Plan

Due to flooding on San Mateo and Zuni, the City Engineer's office requires controlled discharge from this site. The following is the calculations for detentirn pond volumes which are released thru a 4" minimum pipe.

Undeveloped Condition (per lot)

Typical lot size = 50'x135' = 6750 sq. ft. = 0.155 acres
0% impervious = C = 0.4 on "B" soil (DPM Plate 22.2C-1)
I = (2.4)(2.15) = 5.16 in./hr. (DPM Plate 22.2D-1 and 22.2D-2)
Q = CIA = (0.4)(5.16)(0.155) = 0.3 c.f.s.

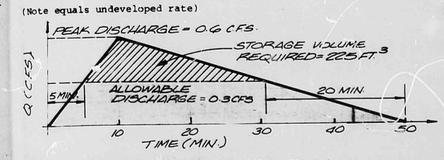
Developed Condition (per lot)

4511 s.f. impervious divided by 6750 sq. ft total = 67% impervious
C = 0.7 (DPM Plate 22.2C-1)
Q_{100} = CIA = (0.7)(5.16)(0.155) = 0.6 c.f.s.
V_{100} = 1/2 (50)(60)(.6) = 900 c.ft.

Detention Pond Size Requirements

$Q_{outfall} = Ca\sqrt{2gh} = (.6)(.085)\sqrt{64.6(.5)} = 0.3$ c.f.s.

(Note equals undeveloped rate)



Storage volume = 1/2 (.6-.3)(25 min.)(60) = 225 c.ft.
Pond volume provided = 345 c.ft. max.

L18/D14

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SANDIA PARK OFFICE - P.O. BOX 142 SANDIA PARK, N. MEX., 87047 281-1931

Revisions	Date

Designed	A.H.	7-83
Drawn	M.W.	7-83
Checked	C.L.W.	7-83

Drainage Plan for 538 & 540 ORTIZ S.E.

SHEET 1 OF 1