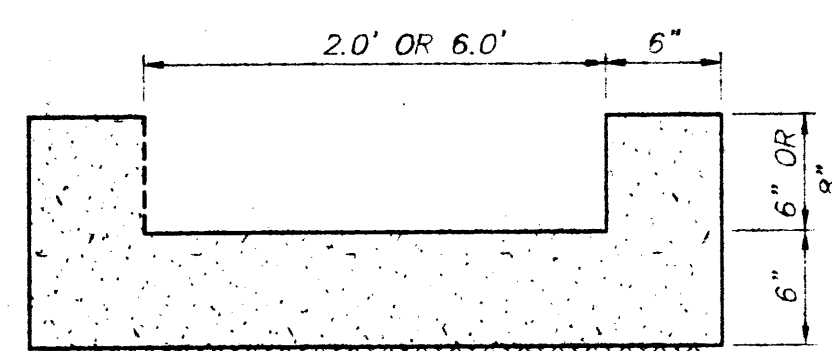


- 12" COMPACTED SUBGRADE 95%
COMPACTION ASTM D 1557

TYPICAL PAVEMENT SECTION

SCALE: NONE



CONCRETE SWALE & SPILLWAY

NTS

DRAINAGE CALCULATIONS

EXISTING CONDITIONS

AREA = 1.949 Ac.
 $P(100-6) = 2.35$ IN.
 $DT = 0.0333$ HR.
 $T_p = 0.1333$ HR.
 $Q(100-6) = 3.32$ cfs
 $Vol.(100-6) = 0.0935$ Ac. Ft.

PROPOSED CONDITIONS

BASIN A
 AREA = 1.480 Ac.
 $P(100-6) = 2.35$ IN.
 $DT = 0.0333$ HR.
 $T_p = 0.1333$ HR.
 $Q(100-6) = 6.61$ cfs
 $Vol.(100-6) = 0.2445$ Ac. Ft.

BASIN B

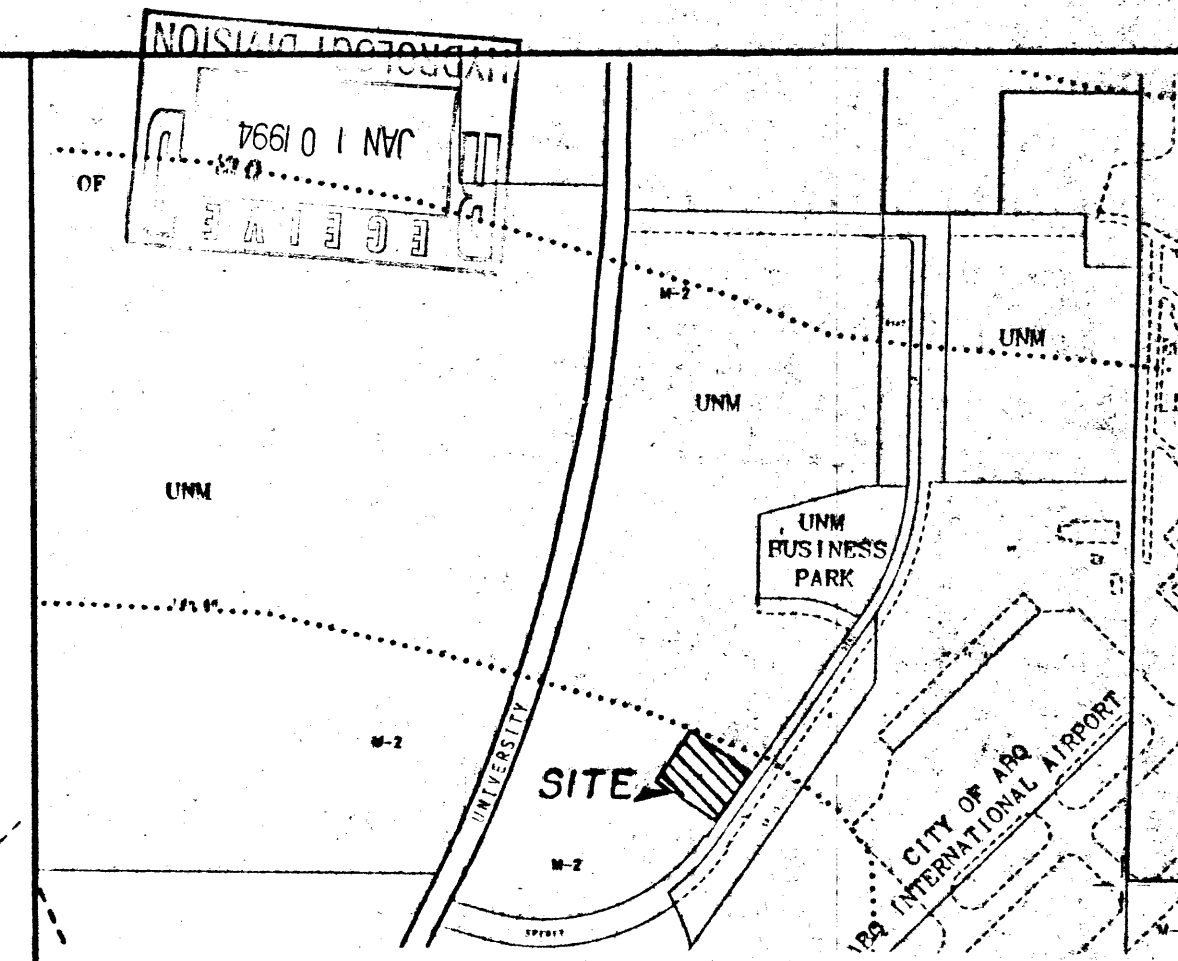
$AREA = 0.469 \text{ Ac.}$
 $P(100-6) = 2.35 \text{ IN.}$
 $DT = 0.0333 \text{ HR.}$
 $T_p = 0.1333 \text{ HR.}$
 $Q(100-6) = 2.12 \text{ cfs}$
 $Vol.(100-6) = 0.0779 \text{ Ac. Ft.}$

ELEVATE TOP OF
BERM TO EL.=5312.00

SPIRIT DRIVE

— FUTURE 8" SAS

SCALE: 1" = 20'



VICINITY MAP

ZONE MAP: N-15-Z

TBM (TEMPORARY BENCHMARK)

TOP OF REBAR IN SPIRIT DRIVE MEDIAN, OFF NORTHEAST CORNER OF PROPERTY
ELEVATION = 5307.31 MSL

ACS BENCHMARK

THE STATION IS LOCATED 1200± NORTHEAST OF THE INTERSECTION OF BROADWAY AND AMAFCA SOUTH VALLEY DIVERSION CHANNEL. STATION IS AMAFCA BRASS TABLET STAMPED "SDC 9-1" SET ON A CONCRETE POST PROJECTING 0.4 FEET ABOVE THE GROUND.

X = 382,513.71 Y = 1,466,695.34 Z = 5020.40

GENERAL NOTES

1. THIS SITE DOES NOT LIE WITHIN A FLOOD ZONE ACCORDING TO FIRM PAIN NO. 350002-0041-C DATED 10/14/83.
2. TOPOGRAPHIC SURVEY PERFORMED BY BOHANNAN-HUSTON, INC.
3. CONTRACTOR SHALL CONSTRUCT EROSION CONTROL BERM ALONG THE WEST AND NORTH PROPERTY LINES.
4. UTILITY LINE TIE-IN POINTS ARE APPROXIMATE. REFER TO MECHANICAL PLAN FOR FURTHER DETAIL.
5. PER SCS, THE SOIL TYPE IS BKD (BLUEPOINT FINE SANDY LOAM WITH KANAN GRAVEL)
6. CITY OF ALBUQUERQUE STANDARD SPECIFICATION FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION, SHALL GOVERN ALL WORK.
7. AT THE TIME OF THIS DESIGN, SPIRIT DRIVE WAS UNDER CONSTRUCTION. CONTRACTOR SHALL VERIFY SPIRIT DRIVE ELEVATIONS AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

FLEXIBLE PAVING NOTES

1. SUBGRADE SHALL BE COMPACTED TO A MINIMUM OF 95 PERCENT OF THE ASTM D-1557 MAXIMUM DRY DENSITY, AT OPTIMUM TO 2 PERCENT ABOVE OPTIMUM WATER CONTENT.
2. SOFT SPOTS IN THE SUBGRADE SHOULD BE OVEREXCAVATED AND RECOMPACTED PRIOR TO PLACEMENT OF THE BASE COURSE.
3. THE BASE COURSE SHOULD BE COMPACTED TO A MINIMUM OF 95 PERCENT OF THE ASTM D-1557 MAXIMUM DRY DENSITY AT 1 PERCENT BELOW TO 2 PERCENT ABOVE OPTIMUM WATER CONTENT.
4. ASPHALT CONCRETE SHOULD BE COMPACTED SUCH THAT THE AVERAGE OF ALL TESTS IS NOT LESS THAN 98 PERCENT OF THE DENSITY AS DETERMINED BY THE MARSHALL METHOD, EMPLOYING 75 BLOWS ON EACH FACE OF EACH SPECIMEN.

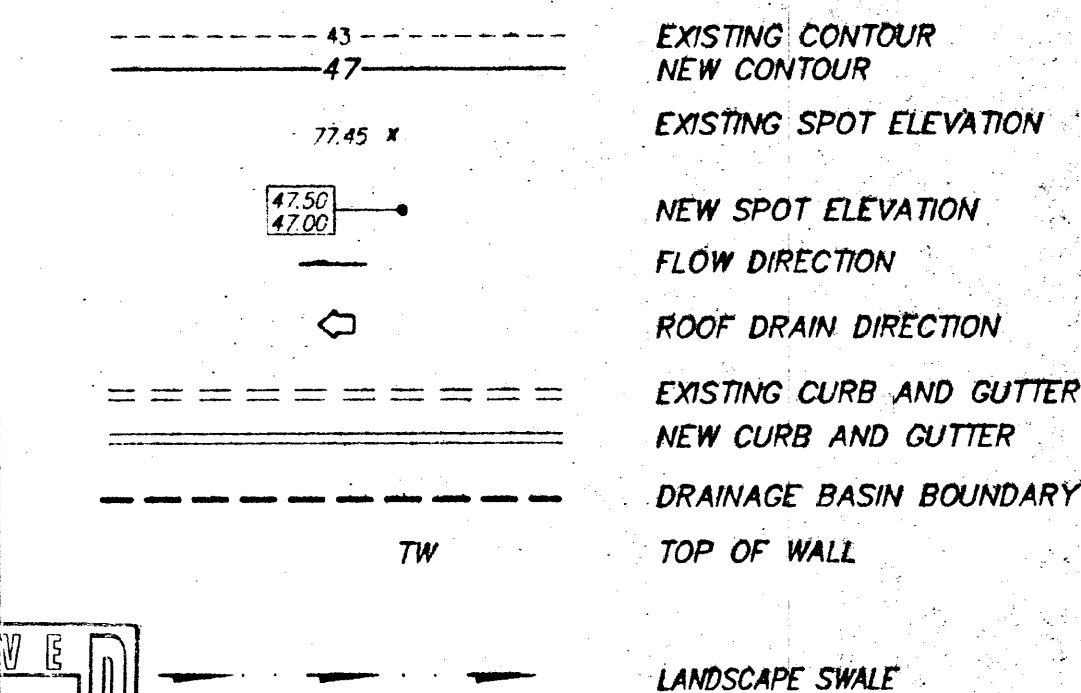
CONCRETE NOTES

1. ALL EXPOSED CONCRETE SHALL BE AIR ENTRAINED WITH 5-1/2 PERCENT AIR AND SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3000 PSI.
2. THE SUBGRADE SHALL BE COMPACTED TO NO LESS THAN 95 PERCENT OF ASTM D-1557 MAXIMUM DRY DENSITY, AT OPTIMUM TO 2 PERCENT ABOVE OPTIMUM WATER CONTENT.

LEGAL DESCRIPTION

UNM BUSINESS PARK, TRACT 1

LEGEND



U.N.M. PRESS BUILDING

GRADING & DRAINAGE PLAN

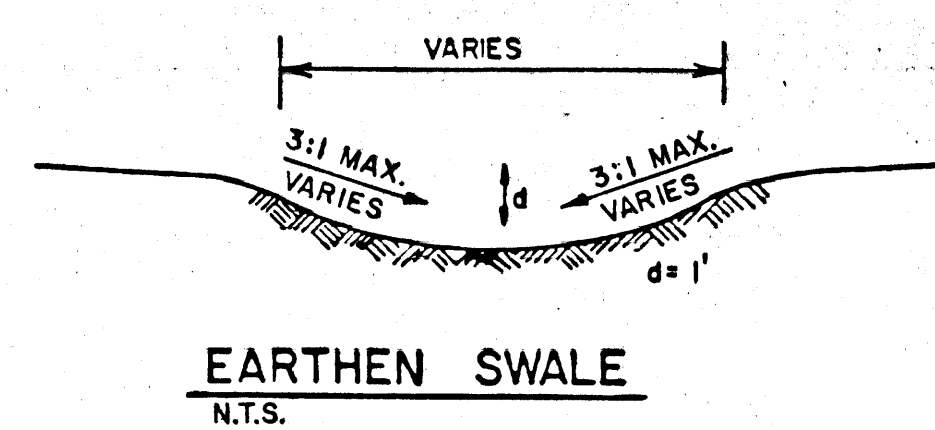
dmg

D. MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS & SURVEYORS

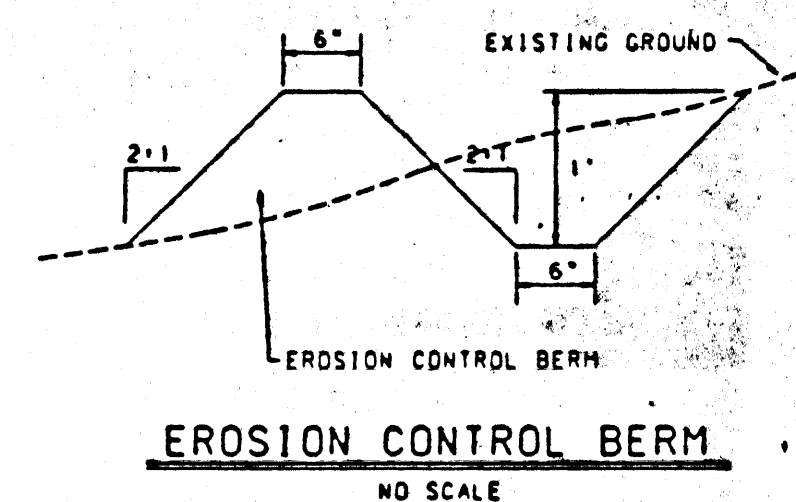
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200

Designed: JMM	Drawn: STAFF	Checked: DMG	Sheet 1 of 1
Scale: 1"=20'	Date: 9/93	Job: 9227	

UNM/GD20A



During construction no storm water or sediment is allowed to leave the site in any direction and shall be contained on site. Sediment and erosion will be controlled by constructing a temporary erosion control berm around the project perimeter. A berm with the dimensions shown in the detail below shall be maintained during construction until completion of all storm drainage and grading improvements. In all cases erosion control berms will be constructed such that contributing offsite flows can enter the site.



SWALE

PROPOSED SPOT ELEVATION

EXISTING CONTOUR

PROPOSED CONTOUR

TRACT BOUNDARY

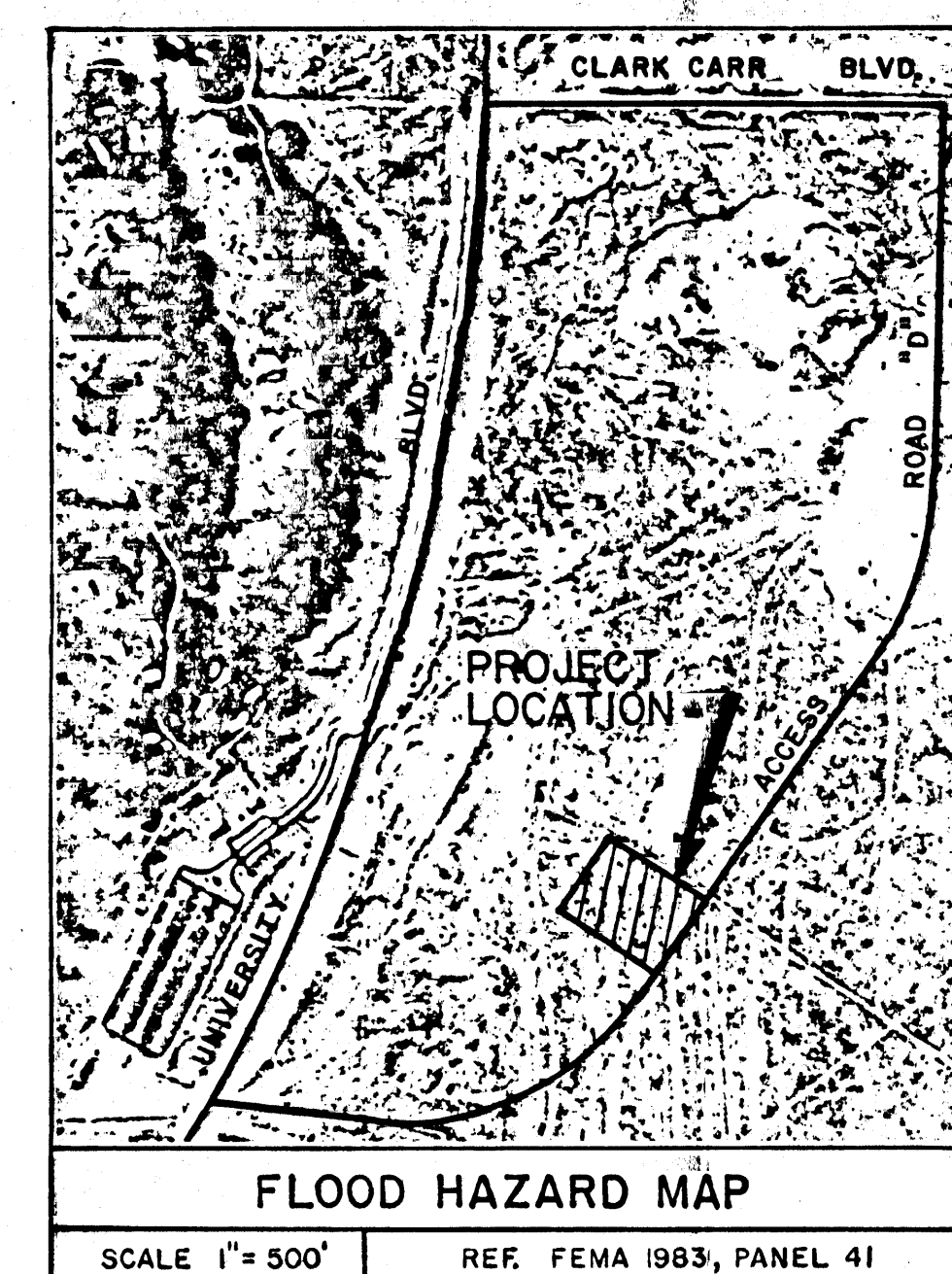
TOP OF CURB ELEVATION

VERTICAL CURVE P.I.

BASIN BOUNDARY

FLOW DIRECTION

6" CURB



This drainage plan is for the proposed UNM Press Warehouse site located in the southeast quadrant of Albuquerque on the west side of Access Road 2 approximately 1/4 mile east of University Boulevard. More specifically it is located between the University Business Park (see Legal Description on this sheet), being located on the edge of the mesa near the Albuquerque International Airport, the grades slope gently west near the roadway but increase in slope further west of the property. Drainage generated on the site is directed to a temporary retention pond. This pond is to remain temporary until permanent storm drainage structures are constructed. The retention pond is situated off of Tract 1 but within a drainage easement.

No significant offsite flows or flowpaths pass through this site. The site is also not located within an established floodplain. Offsite flows from the east are intercepted by Access Road "D". Offsite flows to the north and south of Tract 1 are diverted around Tract 1 by drainage swales located within easements.

Hydrological analysis is based on methods and procedures determined by the City of Albuquerque Design Procedures Manual (DPM), Volume 2, Section 22.2, Revised August, 1991. The retention pond is conservatively designed using two 100-year/6 hour storms applied back to back. The entire site is treated as impervious. Therefore, all precipitation was considered to drain into the retention pond. Based on this criteria the applied storm volume is 4.7" in 12 hours (2-2.35 in/6 hrs), and the excess precipitation also is 4.7".

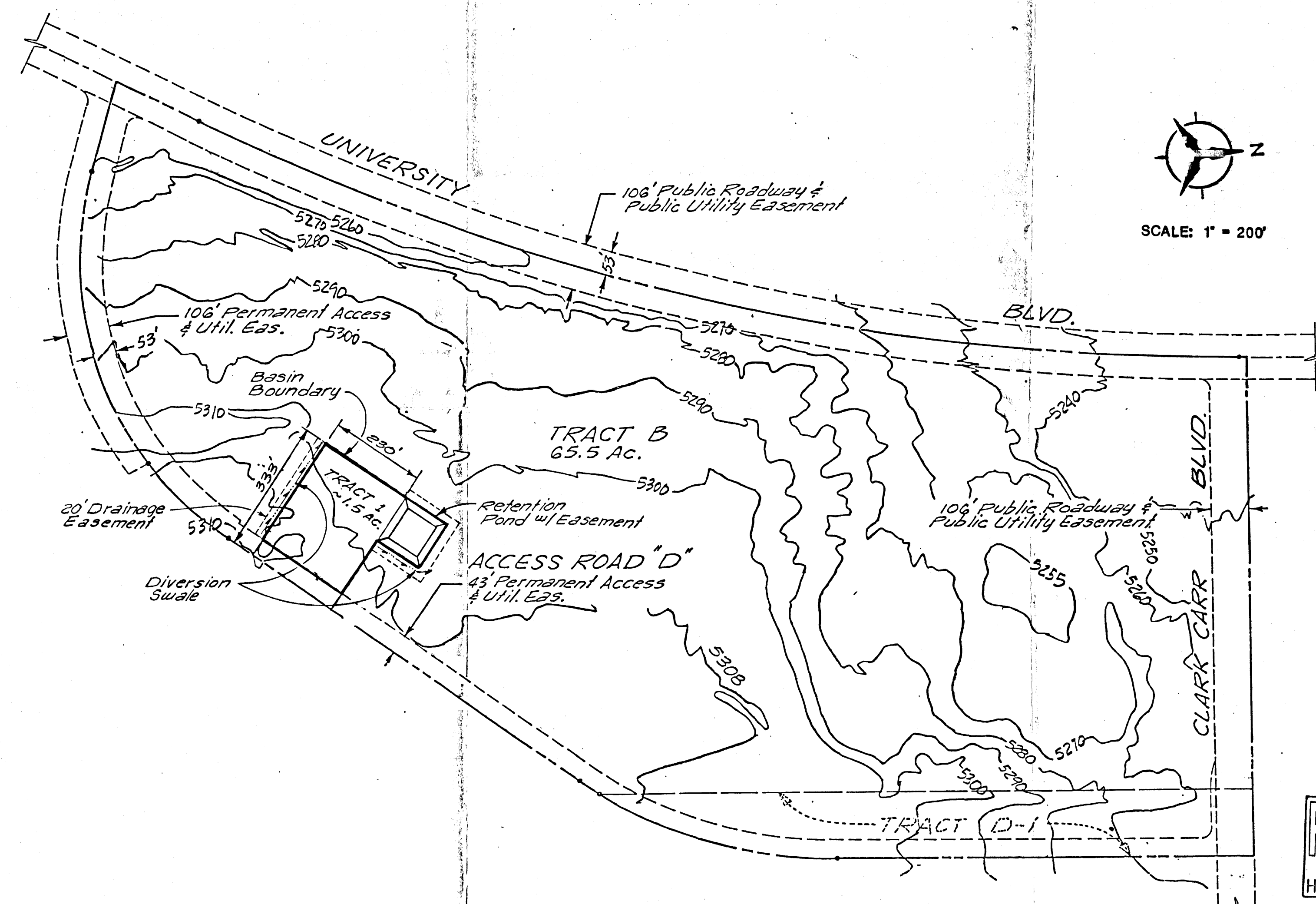
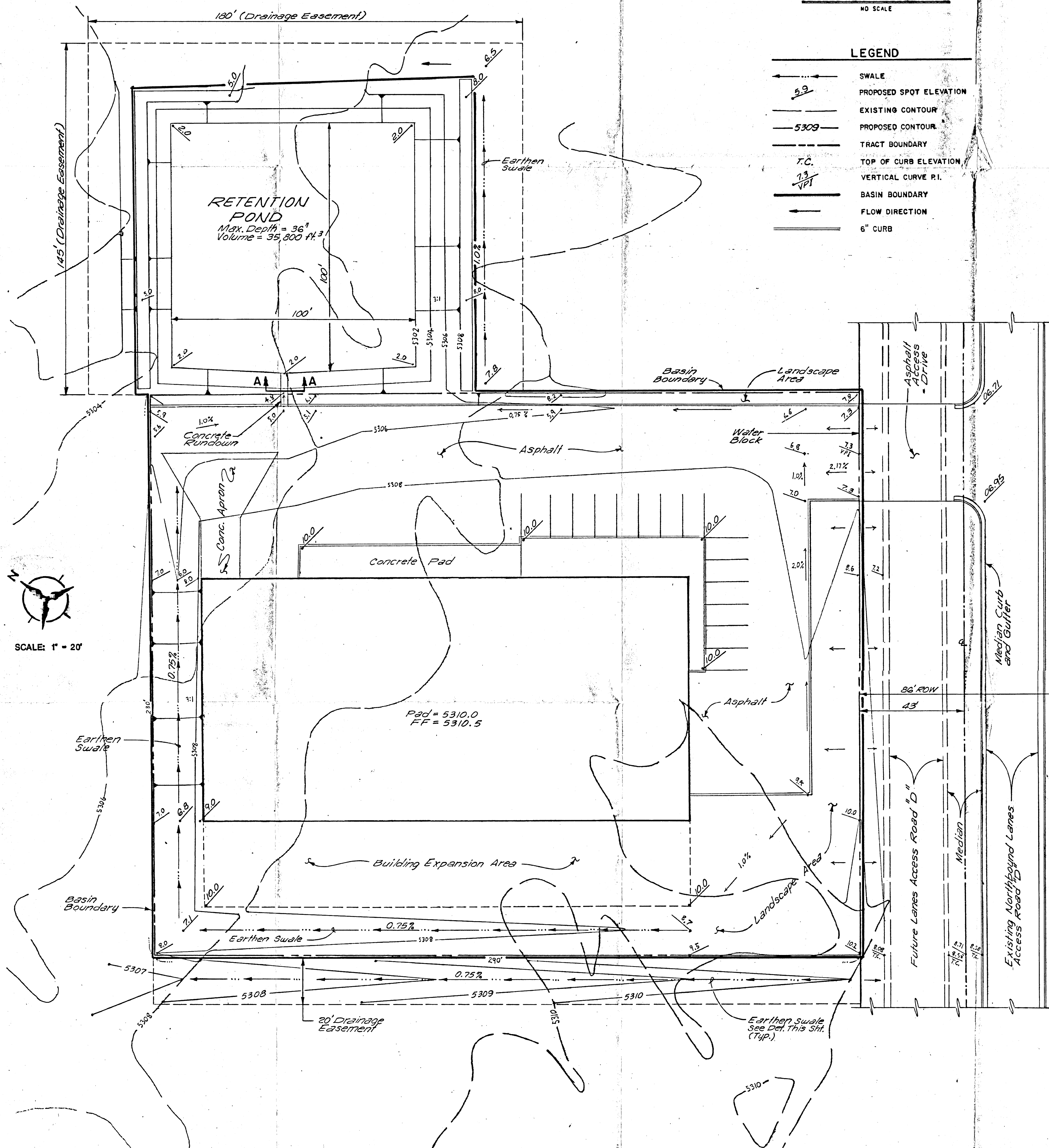
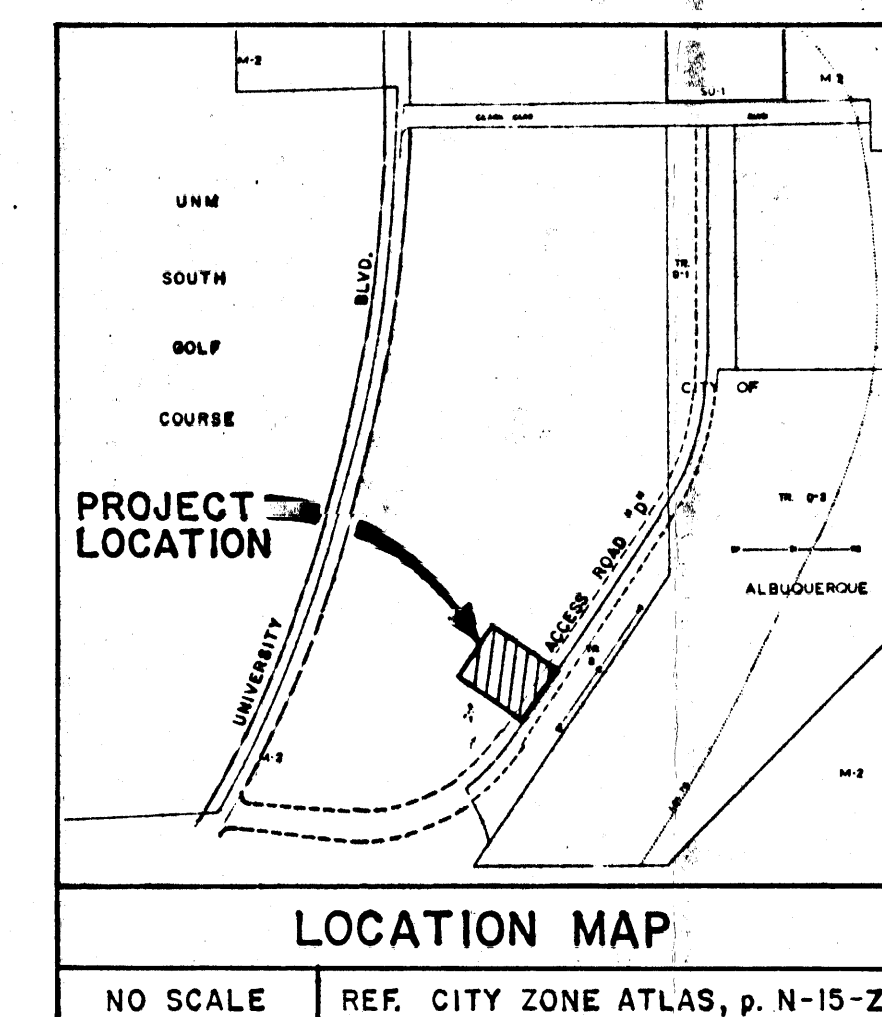
Retention pond design criteria includes a maximum depth of 36" and maximum side slopes of 3:1. All areas on site are directed to the retention pond. A high point/water block is proposed for the driveway entrance at Access Road D. The water block is designed to keep runoff in the street from entering the site.

PROPOSED CONDITIONS:	CONTRIBUTING BASIN AREA (AC)	RUNOFF VOLUME (AC-FT)
<u>SUBBASIN</u>		
SITE	1.531	0.60
RETENTION POND	0.331	0.13
TOTAL	1.861	0.73
RETENTION POND DESIGN VOLUME	= 0.73 AC-FT = 31,800 FT ³	
VOLUME PROVIDED	= 35,800 FT ³	

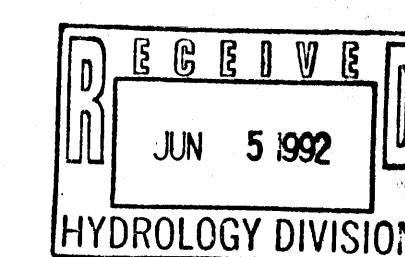
A certain tract of land situate within The Lands of The University of New Mexico and in Section 4, T9N, R3E, N.M.P.M., Bernalillo County, New Mexico, and being more particularly described by New Mexico State Plane Grid Bearings (Central Zone) and ground distances as follows:

BEGINNING at the northeast corner of the tract herein described, a point on the westerly boundary of Tract B, Lands of the University of New Mexico, as the same is shown and designated on the plat thereof filed in office of the County Clerk of Bernalillo County, New Mexico on August 9, 1991 in Volume 106-187-119; thence S56°02'04"W, a distance of 333.00 feet west to the boundary of said Tract B begins N33°57'56"E, a distance of 724.78 feet and whence the UNM monument, "A-GIN" a metal tablet set in concrete (having New Mexico State Plane Grid Coordinates for Central Zone: X=387,872.34 and Y=66,044.66) is located; thence S56°02'04"W, a distance of 336 feet west to said point of beginning running thence along the easterly boundary of said tract herein described and also along the westerly boundary of said Tract B, N33°57'56"W, a distance of 230.00 feet to the southeast corner of the tract herein described; thence NS6°02'04"W, a distance of 333.00 feet to the southwest corner of the tract herein described; thence, N33°57'56"E, a distance of 230.00 feet to the northwest corner of the tract herein described; thence NS6°02'04"E, a distance of 333.00 feet to the point and place of beginning.

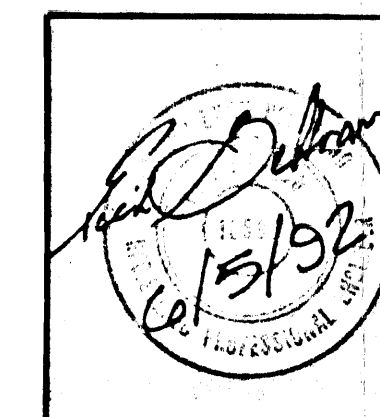
Tract contains 1.7583 acres, more or less.



SCALE: 1" = 200'



No.	DATE	REMARKS			BY
REVISIONS					
DRAINAGE & GRADING PLAN					
UNIVERSITY OF NEW MEXICO BUSINESS PARK TRACT 1					
 BOHANNAN-HUSTON, INC. TAKO JEFFERSON HILL ALBUQUERQUE, NEW MEX				SHEET 1 OF 1	



APPROVED	
HYDROLOGY ENGINEER	DATE