HYDROLOGY

D18/D8e
2 PLANS

D18/D8E

2 PLANS

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

VICINITY MAP D-18

SCALE 1" = 800'

LEGEND

- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXIST SPOT ELEVATION
- PROPOSED SPOT ELEV.
- EXIST CHAINLINK FENCE
- PROPOSED CHAINLINK FENCE
- EXISTING CURBS
- PROPOSED CURBS
- PROPOSED ASPHALT
- PROPOSED CONCRETE

PROJECT BENCHMARK

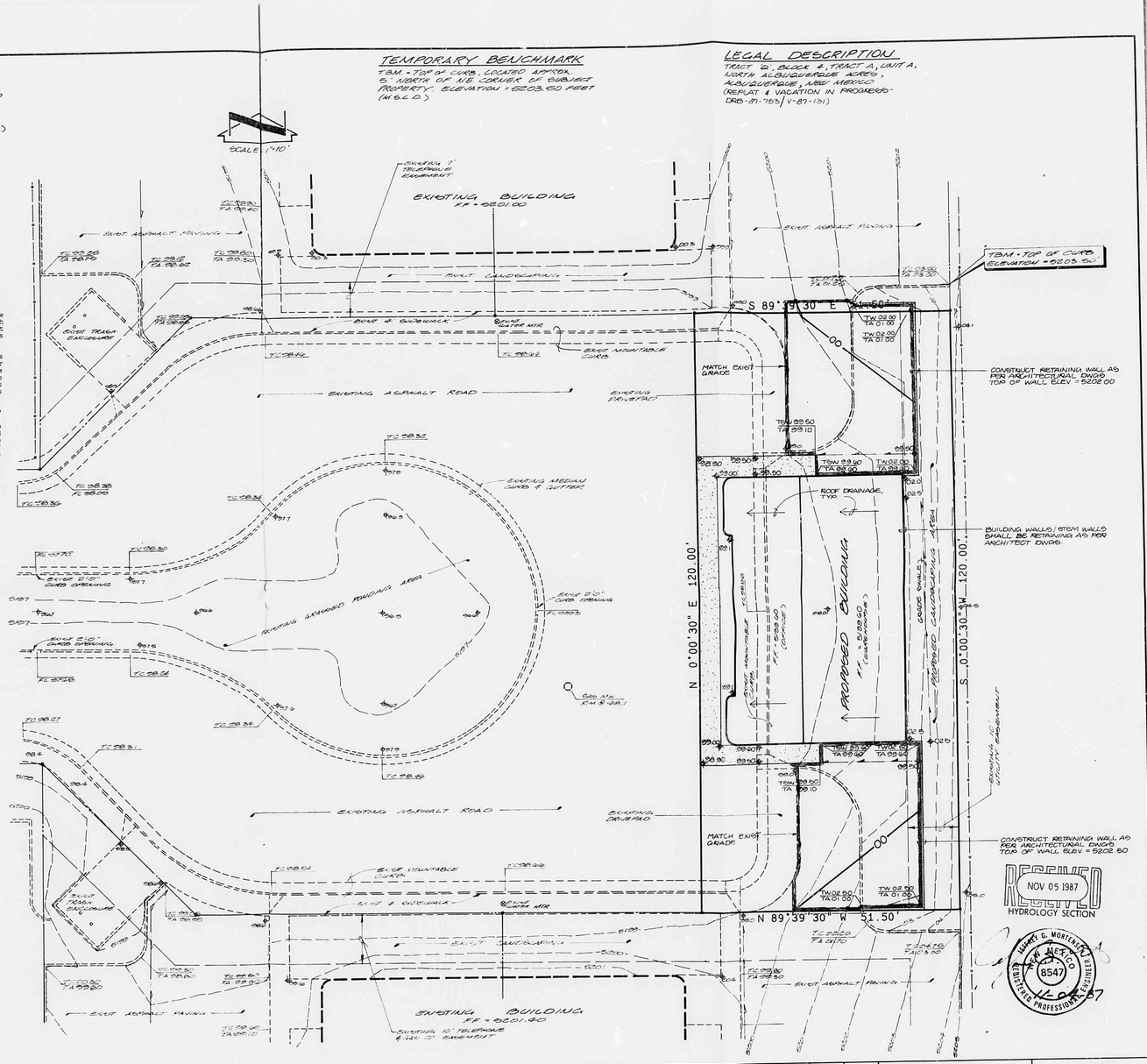
ACS BENCHMARK "7-D18", AN "X" CHISELED ON THE WEST BOUNDT BOLT OF A FIRE HYDRANT LOCATED ON THE EAST FRONTAGE ROAD ABOUT .62 MILES SOUTH OF THE JUNCTION WITH PINO AVE. N.E. ELEVATION = 5130.00 FEET (M.S.L.D.)

TEMPORARY BENCHMARK

T.B.M. - TOP OF CURB, LOCATED APPROX. 5' NORTH OF N.E CORNER OF SUBJECT PROPERTY. ELEVATION = 5203.50 FEET (M.S.L.D.)

LEGAL DESCRIPTION

TRACT Q, BLOCK 4, TRACT A, UNIT A, NORTH ALBUQUERQUE ACRES, ALBUQUERQUE, NEW MEXICO (REPLAT & VACATION IN PROGRESS- DRB-87-753 / V-87-131)



RECEIVED NOV 05 1987 HYDROLOGY SECTION

JACKIE G. MONTANEZ NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER

DRAINAGE PLAN

The following items concerning the Chisel Smith Office/Warehouse No. 3 are contained hereon:

1. Vicinity Map
2. Grading Plan
3. Calculations

As shown by the Vicinity Map, this site is located on a private entrance road just east of the Interstate Highway 25 East Frontage Road and North of Pino Avenue N.E. This site is more particularly described as Tract Q, Block 4, Tract A, Unit A, North Albuquerque Acres. At present, the site is partially developed with paving. The site has been masterplanned in a drainage report prepared by Gordon Werkenhoff and Associates, dated August 1981, Hydrology File No. D18/D4. Much of the surrounding area is currently developed, thereby making this an infill site.

As shown by Panel 10 of the Federal Emergency Management Agency Flood Boundary and Floodway Map, dated October 14, 1983, the site does not lie within a designated Flood Hazard Zone. The previously mentioned master drainage plan addresses the method for controlling drainage from this site. More particularly, this site is located in Area No. 2 as discussed by the Master Drainage Plan. Tract Q is located at the end of the private entrance roadway which is presently constructed. The runoff from this site generally flows from east to west, to the existing ponding area within the median of the private roadway. This ponding area was constructed under City Work Order (Project No. 1389). In accordance with the approved Master Drainage Plan, the runoff from this site will be freely discharged to the private roadway where it will enter the existing pond.

The Grading Plan shows 1) existing contours at 1'0" intervals, 2) proposed grades indicated by spot elevations and contours at 1'0" intervals, 3) the limit and character of the existing improvements, and 4) the limit and character of all proposed improvements. As shown by this plan, the proposed improvements consist of a building, paving, and landscaping. Flows generally flow from east to west. Major offsite flows from the east are contained in the adjacent City's Pino Yard by an 8" curb which diverts developed runoff away from the common lot line. Offsite flows from the north and south will continue to be directed through the site to the private roadway via the existing drivepads. No offsite flows are anticipated from the west. As shown by this plan, the runoff generated by this site will be directed to the existing private roadway where it will enter the existing ponding area within the median.

The Calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The Rational Method has been used to quantify the peak rate of discharge and the SCS Method has been used to quantify the volume of runoff. Both Methods have been used in accordance with the City of Albuquerque Development Process Manual, Volume II, and the Mayor's Emergency Rule adopted January 14, 1986. As shown by these calculations, the proposed improvements will result in a negligible net increase in peak runoff by 0.1 cfs.

CALCULATIONS

Ground Cover Information

From SCS Bernalillo County Soil Survey,
Plate 11: EsB - Embudo Complex
Hydrologic Soil Group: B
Existing Pervious CN = 70 (DPM Plate 22.2 C-2
Pasture or Range Land: fair condition)
Developed Pervious CN = 61 (DPM Plate 22.2 C-2
Open Spaces: good condition)

Time of Concentration/Time to Peak

$T_c = 0.0078\ L^{0.77}/S^{0.385}$ (Kirpich Equation)

$T_p = T_c = 10$ min.

Point Rainfall

$P_6 = 2.3$ in. (DPM Plate 22.2 D-1)

Rational Method

Discharge: $Q = CiA$

where C varies
$i = P_6\ (6.84)\ T_c^{-0.51} = 4.86$ in/hr
$P_6 = 2.3$ in (DPM Plate 22.2D-1)
$T_c = 10$ min (minimum)
A = area, acres

SCS Method

Volume: $V = 3630\,(DRO)\,A$

Where DRO = Direct runoff in inches
A = area, acres

Existing Condition

$A_{total} = 6{,}180$ sf = 0.142 Ac
Paved area = 2,700 sf (0.44)
Undeveloped area = 3,480 sf (0.56)
C = 0.64 (Weighted average per Emergency Rule, 1/14/86)
$Q_{100} = CiA = 0.64(4.86)0.142 = 0.5$ cfs
$A_{imp} = 2{,}700$ sf/ % impervious = 0.44%
Composite CN = 83 (DPM Plate 22.2 C-3)
DRO = 0.91 in (DPM Plate 22.2 C-4)
$V_{100} = 3630\,(DRO)A = 470$ cf

Developed Condition

$A_{total} = 6{,}180$ sf = 0.142 Ac
Roof area = 1,905 sf (0.31)
Paved area = 3,150 sf (0.51)
Landscaped area = 1,125 sf (0.18)
C = 0.81 (Weighted average per Emergency Rule, 1/14/86)
$Q_{100} = CiA = 0.81(4.86)0.142 = 0.6$ cfs
$A_{imp} = 5{,}055$ sf/ % impervious = 0.82 %
Composite CN = 92 (DPM Plate 22.2 C-3)
DRO = 1.51 in (DPM Plate 22.2 C-4)
$V_{100} = 3630\,(DRO)\,A = 780$ cf

Comparison

$\Delta Q_{100} = 0.6 - 0.5 = 0.1$ cfs (increase)
$\Delta V_{100} = 780 - 470 = 310$ cf (increase)

CONSTRUCTION NOTES:

1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE 765-1234, FOR LOCATION OF EXISTING UTILITIES.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
3. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
4. ALL CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.
5. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS UNDERTAKEN NO FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.

EROSION CONTROL MEASURES

1. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AT THE PROPERTY LINES AND WETTING THE SOIL TO KEEP IT FROM BLOWING.
2. THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.
3. THE CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" PRIOR TO BEGINNING CONSTRUCTION.

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ENGINEERS

GRADING & DRAINAGE PLAN

CHISEL SMITH OFFICE / WAREHOUSE NO. 3

DESIGN BY	P.M.L.
DRAWN BY	C.V.M.
APPROVED BY	J.G.M.

No.	Date	By	Revision

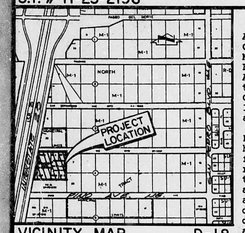
JOB NO. 61223
DATE 10-1987
SHEET 1 OF 1

D 24 C 20 B 16 A 12

CITY OF ALBUQUERQUE

C D

S.P. # 11-25-2196



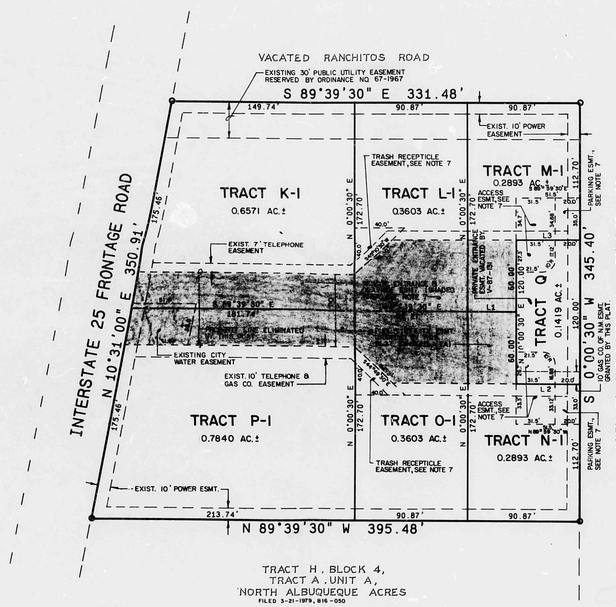
VICINITY MAP D-18

DESCRIPTION

A certain tract of land located within the Corporate Limits of the City of Albuquerque, New Mexico, comprising Tracts K - P, and the Private Entrance, Block 4, Tract A, Unit A, North Albuquerque Acres, as shown on the plat filed in the Office of the County Clerk of Bernalillo County, New Mexico, on September 18, 1981, Book C-18, Page 185, and being more particularly described as follows:

Beginning at the southwest corner of the parcel herein described, being the southwest corner of the former Tract P, and also being a point on the east right-of-way line of Interstate 25 Frontage Road; thence N 10°31'00" E a distance of 350.91 feet along said right-of-way line; thence S 89°39'30" E a distance of 331.48 feet; thence S 00°00'30" W a distance of 345.40 feet; thence N 89°39'30" W a distance of 395.48 feet to the point of beginning and containing 2.8821 acres more or less.

PLAT OF
TRACTS K-1 through P-1, & TRACT Q, BLOCK 4, TRACT A, UNIT A,
NORTH ALBUQUERQUE ACRES
ALBUQUERQUE, NEW MEXICO
NOVEMBER, 1987



SCALE : 1" = 50'

50 25 0 50

LINE	BEARING	DISTANCE
L1	S 89°39'30" E	39.37
L2	N 89°39'30" W	51.50
L3	S 89°39'30" E	51.50

Notes:

1. A field survey was not performed; no corners were found or set.
2. No street mileage was created.
3. All distances are ground distances.
4. Site located within Section 24, T11N, R3E, N.M.P.M.
5. Bearing base is plat of "Tracts K, L, M, N, O, & P and a private entrance road, Block 4, Tract A, Unit A, North Albuquerque Acres" filed in the office of the County Clerk of Bernalillo County New Mexico September 18, 1981, Book C18, Page 185.
6. The purpose of this plat is to incorporate the portion of the private entrance easement vacated by V-87-131 into Tract Q, project the property lines of former Tracts K through N to incorporate the remaining private entrance easement, and grant the necessary public utility and private drainage easements as shown.
7. The property platted hereon is subject to the Declaration of Reciprocal Easements filed 12-07-1987, bk. misc. 565-A, pg. 432-444

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ENGINEERS

JOB No. 61223

DEDICATION AND FREE CONSENT

The undersigned owners of the land shown hereon do hereby consent to the subdivision of said land in the manner shown on this plat and do hereby grant the easements shown hereon including the rights of ingress and egress and the right to trim interfering trees.

M.W. SMITH
d.b.a. CHISEL SMITH ENTERPRISES

MARY I. SMITH
d.b.a. CHISEL SMITH ENTERPRISES

ACKNOWLEDGEMENT

STATE OF NEW MEXICO)
SS
COUNTY OF BERNALILLO)

The foregoing instrument was acknowledged before me this _____ day of _____, 19__.

Notary Public

APPROVALS: D.R.B. 87-753

Planning Director, City of Albuquerque, N.M. — Date

Water Utilities, City of Albuquerque, N.M. — Date

City Engineer, City of Albuquerque — Date

A.M.A.F.C.A. — Date

Traffic Engineer, City of Albuquerque, N.M. — Date

Parks and Recreation, City of Albuquerque, N.M. — Date

Chief City Surveyor, City of Albuquerque, N.M. — Date 12-01-87

Property Manager, City of Albuquerque, N.M. — Date

Public Service Company of New Mexico — Date

Joe Dunlap — 11-30-87
Gas Company of New Mexico — Date

Mountain Bell — Date

Albuquerque Cable T.V. — Date

CERTIFICATION

I, Thomas T. Mann, Jr., a registered Land Surveyor under the laws of the State of New Mexico, do hereby certify that this plat was prepared by me or under my supervision; shows all easements noted in an easement search prepared by SOUTHWEST GUARANTY & TITLE CO. on OCTOBER 15, 1987 meets the minimum requirements of monumentation and surveys of the Albuquerque Subdivision Ordinance, and is true and correct to the best of my knowledge and belief.

Thomas T. Mann, Jr., N.M.P.E. & L.S. No. 3792 — 11-30-87 Date

REGISTERED PROFESSIONAL ENGINEER AND LAND SURVEYOR
THOMAS T. MANN, JR.
3792
NEW MEXICO

ACKNOWLEDGEMENT

STATE OF NEW MEXICO)
SS
COUNTY OF BERNALILLO)

CHARLES G. CALA, JR.
NOTARY PUBLIC - STATE OF NEW MEXICO
Notary Bond Filed with Secretary of State
My Commission Expires 5-6-89

The foregoing instrument was acknowledged before me on this 30th day of November, 1987.

Charles G. Cala Jr.
Notary Public

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

CITY OF ALBUQUERQUE