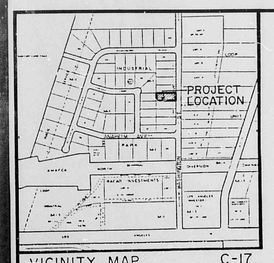
HYDROLOGY C17/D1a^2 3 PLANS

C17/D1a2

3 Plans

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



VICINITY MAP C-17

SCALE 1" = 800

LEGEND

- EXIST. SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- 5100 EXIST. CONTOUR
- 00 PROPOSED CONTOUR
- PROPOSED CONCRETE
- PROPOSED ASPHALT
- CHAINLINK FENCE
- SWALE
- EXIST. SIDE SLOPE
- PROPOSED RETAINING
- T W TOP OF WALL
- T A TOP OF ASPHALT
- B W BOTTOM OF WALL

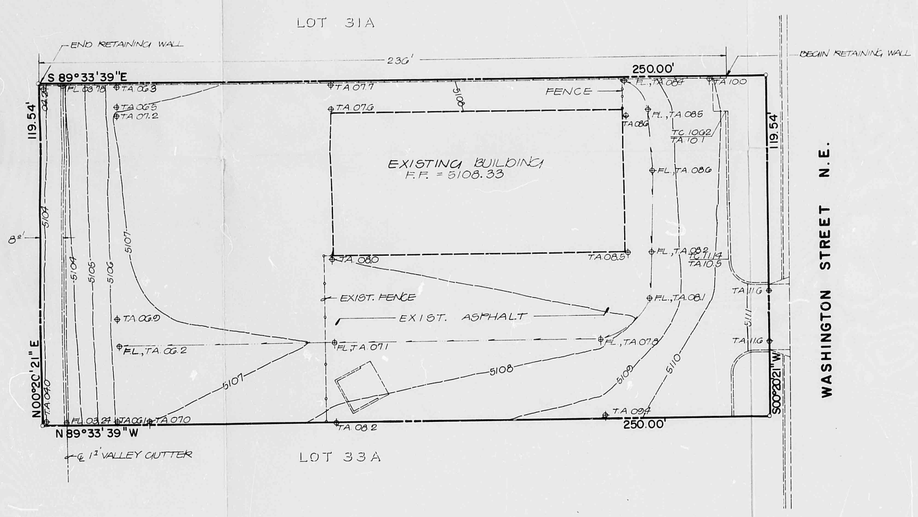
PROJECT BENCHMARK

A STANDARD A.C.S. BRASS CAP, NE-2 CT. LOCATED 0.3 MI. NORTH OF THE INTERSECTION OF LOS ANGELES ST. NE & WASHINGTON ST. NE ELEVATION = 5111.03' (M.S.L.L.)

LEGAL DESCRIPTION

LOT 32A CLIFFORD INDUSTRIAL PARK.

SCALE 1" = 20'



This drawing represents the "as built" conditions on the project site. All storm waters flow to the channel on the west property line in substantial compliance with the approved grading and drainage plan.

1-13-87

Thomas T. M[illegible] J[illegible] No. 3792 Date

RECEIVED JAN 14 1987 HYDROLOGY SECTION

811 DALLAS N.E. · ALBUQUERQUE · NEW MEXICO · 87110
ENGINEERS

NO.	DATE	BY	REVISIONS

DESIGNED BY R.P.
DRAWN BY J.M.C.
APPROVED T.T.M.

JOB NO. 60712
DATE 1-87

DRAINAGE CERTIFICATION

LOT 32A, CLIFFORD INDUSTRIAL PARK

FILE NO.

SHEET 1 OF 1

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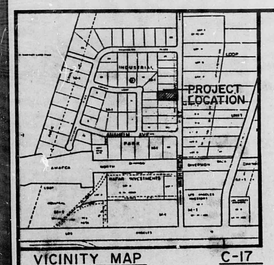
CITY OF ALBUQUERQUE

C D



VICINITY MAP C-17

SCALE : 1" = 800'

LEGEND

✦	EXIST. SPOT ELEVATION
✦	PROPOSED SPOT ELEVATION
5100	EXIST. CONTOUR
00	PROPOSED CONTOUR
	PROPOSED CONCRETE
	PROPOSED ASPHALT
	CHAINLINK FENCE
	SWALE
	EXIST. SIDE SLOPE
	PROPOSED RETAINING
T.W	TOP OF WALL
T.A	TOP OF ASPHALT
B.W	BOTTOM OF WALL

PROJECT BENCHMARK

A STANDARD A.C.S. BRASS CAP, NS-8-C17, LOCATED 0.3 MI. NORTH OF THE INTERSECTION OF LOS ANGELES DR. NE & WASHINGTON ST. NE. ELEVATION @ 5111.03 FEET (M.S.L.D.)

LEGAL DESCRIPTION

LOT 32A CLIFFORD INDUSTRIAL PARK.

SCALE : 1" = 20'

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 ASCERTAIN 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.

DRAINAGE PLAN

The following items concerning Lot 32-A, Clifford Industrial Park Drainage Plan are contained hereon:

1. Vicinity Map
2. Grading Plan
3. Calculations

The proposed improvements, as shown by the Vicinity Map are located on the west side of Washington Street N.E. and on the north side of Anaheim Avenue N.E. At present, the site is undeveloped. Several of the surrounding sites are developed. As shown by Plate C-17 of the Albuquerque Master Drainage Study, the site does not lie within a designated Flood Hazard Zone. A Master Drainage Report for the Clifford Industrial Park dated August 1982 was prepared by Bohannan Huston. This report outlines the drainage criteria and schematics for the entire subdivision of which this site is one lot.

The Grading Plans shows 1) existing and proposed grades indicated by spot elevations and contours at 1'0" intervals, 2) the continuity between existing and proposed elevations, 3) the limit and character of the existing improvements, and 4) the limit and character of the proposed improvements. As shown by this plan, the proposed improvements consist of the construction of a warehouse office building and associated landscaping and paving. At present, the site drains from east to west. The site is lower than Washington Street. It is approximately parallel with Lot 33-A and Lot 31-A to the north and higher than the lot to the west. There is a storm sewer system in Washington Street that intercepts the flows in the street. Therefore, offsite flows are negligible. The site will be graded such that all flows go to the parking lot drainage swale located within a 15 feet drainage easement along the westerly property line as proposed by the Bohannan Report. Construction for said drainage swale will begin in May. This will allow the runoff to flow into the drainage system that was established by the Bohannan Report. The Bohannan Report calls for uncontrolled discharge for this site.

The Calculations which appear below analyze the existing and developed conditions for the 100-year, 6-hour rainfall event. The Soil Conservation Service Method has been used for this analysis in accordance with the City of Albuquerque Development Process Manual, Volume II. As shown by these Calculations, the proposed improvements will result in an increase in runoff discharged from the site. This pattern of runoff is consistent with the Master Drainage Plan.

CALCULATIONS

Ground Cover Information

From SCS Bernalillo County Soil Survey,
Plate: 22
Hydrologic Soil Group: Embudo EmB, Type 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)

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

$P_6 = 2.2$ in. (DPM Plate 22.2 D-1)

Existing Condition

$A_{total} = 29{,}885$ sf $= 0.69$ Ac

$A_{imp} = 2{,}988$ sf; % impervious = 10 %
Composite CN = 73 (DPM Plate 22.2 C-3)
DRO = 0.45 in (DPM Plate 22.2 C-4)
$q_p = 45.4\ A/T_p = 3.1$ cfs/in runoff

$Q_{100} = Q_{peak} = q_p$ (DRO) = 1.4 cfs

$V_{100} = 3630$ (DRO)A = 1,127 cf

Developed Condition

$A_{total} = 29{,}885$ sf $= 0.69$ Ac

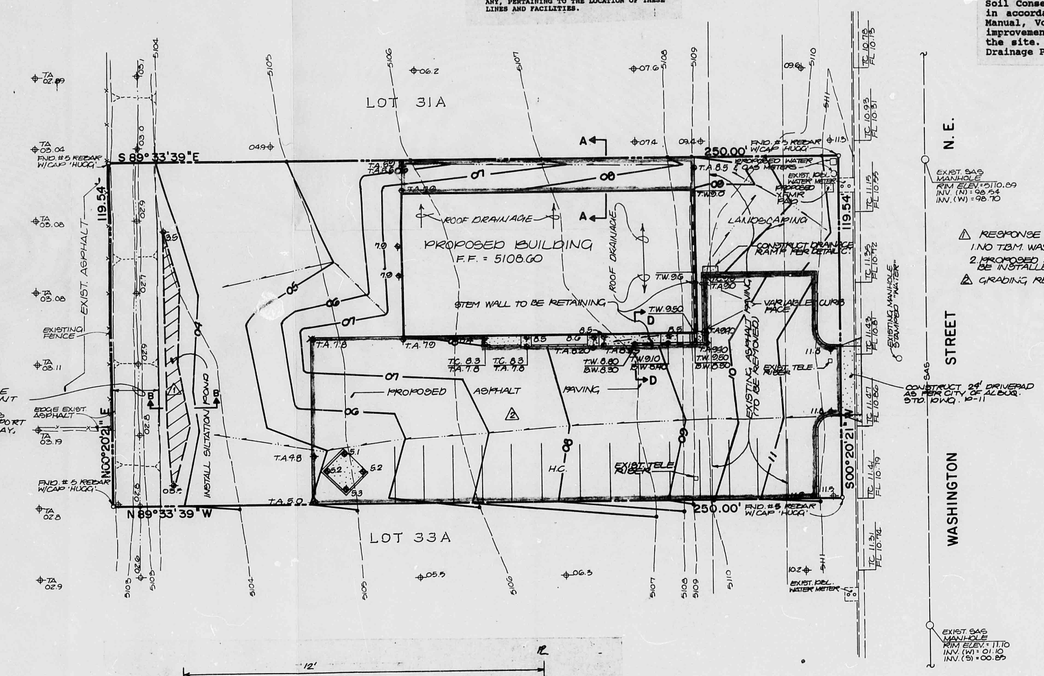
$A_{imp} = 20{,}530$ sf; % impervious = 69 %
Composite CN = 87 (DPM Plate 22.2 C-3)
DRO = 1.1 in (DPM Plate 22.2 C-4)
$q_p = 45.4\ A/T_p = 3.1$ cfs/in runoff

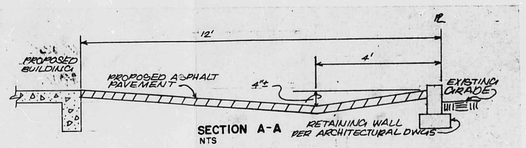
$Q_{100} = Q_{peak} = q_p$ (DRO) = 3.4 cfs

$V_{100} = 3630$ (DRO) A = 2,755 cf

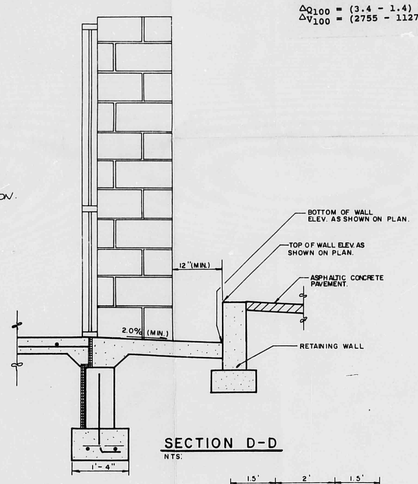
Comparison

$\Delta Q_{100} = (3.4 - 1.4) = 2.0$ cfs (increase)
$\Delta V_{100} = (2755 - 1127) = 1{,}628$ cf (increase)

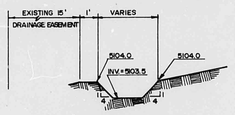




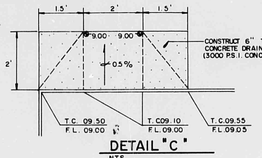
SECTION A-A
NTS



SECTION D-D
NTS:



△ SECTION B-B
NTS



DETAIL "C"
NTS.

RECEIVED
JUN 10 1986
HYDROLOGY SECTION

REGISTERED PROFESSIONAL ENGINEER
STATE OF NEW MEXICO
TERRY T. MORRIS
8467
NEW MEXICO
AND LAND SURVEYOR

6-20-86 5-30-86

BOHANNAN-HUSTON INC.
8111 DALLAS N.E. · ALBUQUERQUE · NEW MEXICO · 87110
ENGINEERS

NO.	DATE	BY	REVISIONS
△1	5-30-86	R.P.	RESPONSE TO 5-23-86 LETTER; SILTATION
			POND DETAIL
△2	6-12-86	R.P.	REVISED GRADING AS SHOWN

DESIGNED BY R.P.
DRAWN BY S.G.H.
APPROVED T.T.M.

JOB NO. 60701
DATE 4-86

GRADING AND DRAINAGE PLAN
LOT 32A, CLIFFORD INDUSTRIAL PARK

FILE NO.
SHEET 1 OF 1

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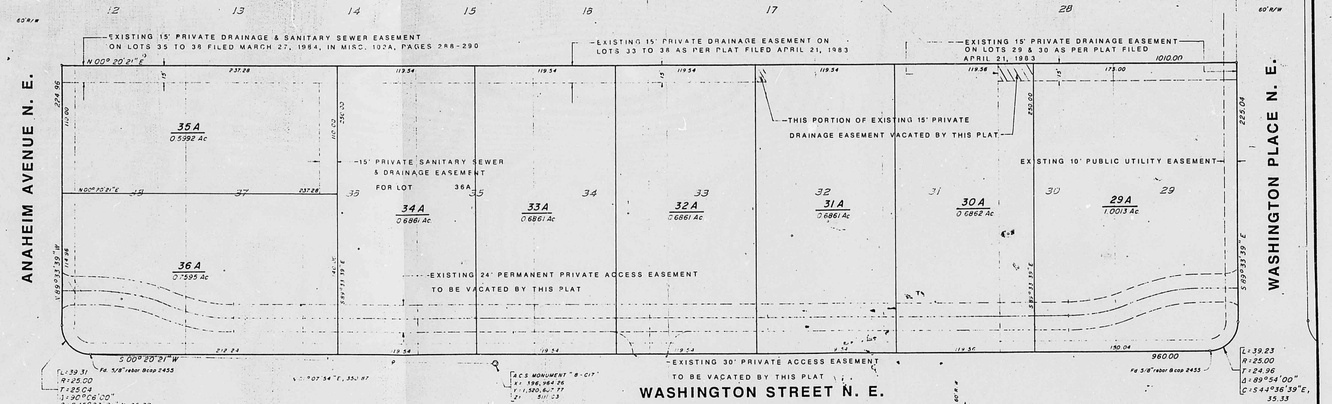
LOTS 29A THRU 36A
CLIFFORD INDUSTRIAL PARK

CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO
JULY, 1985

CLIFFORD INDUSTRIAL PARK
FILED APRIL 21 1983 C21-44



Scale 1" = 50'

ACKNOWLEDGEMENT

STATE OF NEW MEXICO
COUNTY OF BERNALILLO SS

[illegible] 12th [illegible] AUGUST [illegible] 1985, before me the undersigned, [illegible] was acknowledged by Robert G. [illegible]

Stephen J Vogel
NOTARY PUBLIC

My Commission Expires:
4-4-88

SHEET 2 OF 2

Hugg Surveying Co.
1701 Grande N.E. Rio Rancho, New Mexico 87124 Phone (505) 892-8875

Very light & Faded

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CITY OF ALBUQUERQUE

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