HYDROLOGY

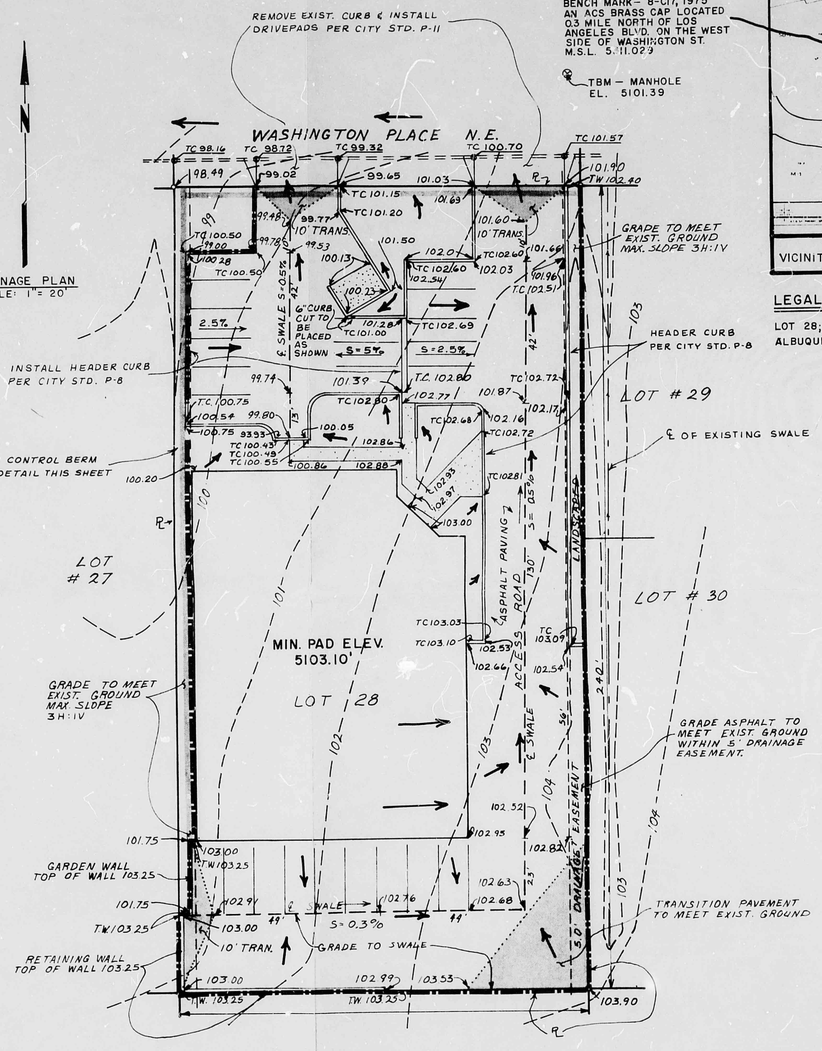
C17/D1V

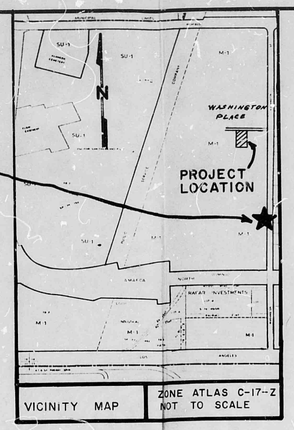
ONE PLAN

1 PLAN FOR

LEE COMPANIES OFFICE

CM-DIV





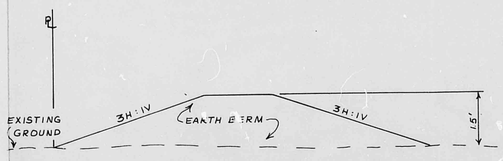
LEGAL DESCRIPTION

LOT 28; CLIFFORD INDUSTRIAL PARK II
ALBUQUERQUE, NEW MEXICO.

LEGEND	
	TRANSITION AREA
	FLOW DIRECTION
	DRAINAGE DIVIDE
	NEW CONCRETE
600	EXISTING SPOT ELEVATION
250	PROPOSED ELEVATION
T.C.12.31	TOP OF CURB ELEVATION

EROSION CONTROL PLAN

TEMPORARY 15' HIGH BERM TO BE CONSTRUCTED ALONG NORTH AND WEST PROPERTY LINES TO REMAIN UNTIL CONSTRUCTION IS COMPLETE.



TEMPORARY EROSION CONTROL BERM
TYPICAL SECTION

GENERAL

Zone Atlas Page C-17; Flood Hazard Zone C

LAND USE - Present, vacant lot with frontage onto Washington Place NE which has standard curbs and gutters and is paved.

Proposed, office warehouse development

SOIL TYPE - Embudo - Gravelly fine sandy loam and gravelly sandy loam, Hydrologic Soil Group B.

LOT SIZE - 240 ft. x 120 ft. = 28,800 sq. ft. or 0.661 ac.

ON-SITE HYDROLOGY

TIME OF CONCENTRATION
Flow Length = 311 ft.
Slope = 2.1 %
Tc = 2.86 min.; velocity = 1.8 fps
Adjusted velocity = 0.87 fps (DPM Plate 22.2 B-1)
Adjusted Tc = 5.9 min.; use 10 min.

6-HOUR RAINFALL DEPTH
10-yr. = 1.45 in.
100-yr. = 2.20 in.

RAINFALL INTENSITY
10-YR. = 3.15 in./hr.
100-yr. = 4.77 in./hr.

RUNOFF COEFFICIENTS

Existing condition C = 0.3
Developed conditin C = 0.8
3,906 sq. ft. landscape C = 0.15
24,894 sq. ft. impervious C = 0.90
Composiite C = 0.80

RUNOFF RATES
Undeveloped Conditions
10-yr. = 0.6 cfs
100-yr. = 0.9 cfs
Developed Conditions
10-yr. = 1.7 cfs
100-yr. = 2.5 cfs

RUNOFF VOLUME
Undeveloped Condition
10-yr. = 1,044 cu. ft.
100-yr. = 1,584 cu. ft.
Developed Condition
10-yr. = 2,784 cu. ft.
100-yr. = 4,224 cu. ft.

OFF-SITE FLOW

Adjacent lots to the east & west are graded to drain north into Washington Place NE via a swale on the west side of the lots. The lot to the south is graded south away from this site so there is no off-site drainage onto the lot.

ON-SITE DRAINAGE

This project site, Lot 28, is part of Clifford Industrial Park. A master drainage plan was done in August 1982 for the industrial park and approved by the City of Albuquerque. The planned drainage scheme for Lot 28 as stated in the master plan calls for runoff to drain north to Washington Place as shown on this drainage plan, then west to a 10-foot wide concrete lined drainage swale. The concrete swale will continue to carry the flow west to another drainage swale which conveys the runoff south to the AMAFCA North Diversion Channel.

The master plan, however, used a C factor of 0.7 for the basin which includes Lot 28 (Basin B). The flowrate for the entire basin draining to the concrete lined swale is 38.3 cfs. Development of this site will increase the C factor to 0.8. The flowrate for Basin B using the higher C factor of 0.8 increases from 38.3 cfs to 43.2 cfs.

The 10-foot wide, 2 feet deep concrete lined drainage swale would have no problem conveying this increased flow. The total capacity of the concrete swale flowing full is 1,630 cfs.

RECEIVED
APR 18 1986
HYDROLOGY SECTION

DESIGNED BY: E.D. S.D.	DRAINAGE & GRADING PLAN FOR LEE COMPANIES OFFICE WAREHOUSE ON WASHINGTON PLACE, NE
DRAWN BY: G.S.	
CHECKED BY: S.D.	
DATE: APRIL 1986	PREPARED BY: RESOURCE TECHNOLOGY INC.

C17/D17