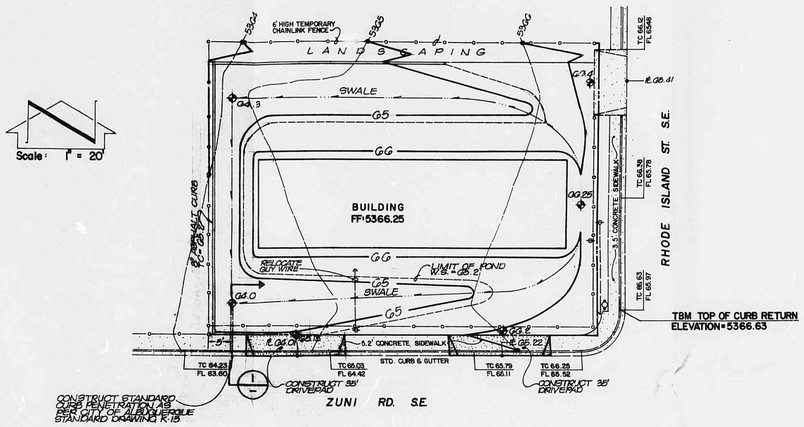
HYDROLOGY K19/D14 1 PLAN

K19/D14

1 Plan

THIS PLAN SHOT TWICE
ONCE ON LIGHT AND
ONCE ON DARK.

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



LEGEND

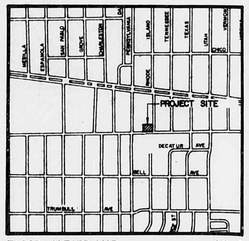
- EXIST. CONTOURS
- PROPOSED CONTOURS
- EXIST. SPOT ELEVATIONS
- PROPOSED SPOT ELEVATIONS

SECTION 1
SCALE: 1" = 6'0"

LEGAL DESCRIPTION

LOTS 12 & 13, UNITY ADDITION

VICINITY MAP K-19



FLOOD HAZARD MAP NO. 6

DRAINAGE PLAN

The following items concerning the carwash facilities on Zuni S.E. Drainage Plan are contained hereon:

1. Vicinity Map
2. Flood Hazard Map
3. Grading Plan
4. Calculations

The proposed building is located at the northwest corner of the intersection of Zuni S.E. and Rhode Island S.E. The facility will be a carwash with associated parking.

Rhode Island borders the project site on the east and is slightly higher than the project site. Zuni borders the project site on the south and is approximately parallel to the project site. The project site is higher than the land to the west and is approximately even with the land to the north; therefore, any flows that could enter the site from offsite areas, would be from Rhode Island, and the flows would just be routed through the drainage facilities and out onto Zuni. Offsite flows do not pose a serious problem; however, due to downstream drainage restrictions, ponding will be required. The project (1) does not lie in a flood plain, (2) does not lie adjacent to a natural or artificial water course and (3) has no drainage easements on the property.

The Grading Plan shows (1) existing contours at 1'0" intervals, (2) proposed grades indicated by spot elevations and contours, (3) swales, (4) continuity between proposed and existing elevations, (5) that sidewalks are adjacent to the curb line, (6) that all runoff will be conveyed into a pond before leaving the site, (7) that retaining walls will not be required and (8) that erosion will not result from upland runoff or the proposed construction activity.

CALCULATIONS

Area of Parcel 100 x 135 = 13500 sf = 0.31 ac

Impervious Area = 12555 sf = 0.29 ac

Composite C_N = 79(0.07) + 98(0.93) = 97

From Plate 4 Farmington % ponding = 56%

Required Pond Volume = 13500(.56)2.5 ÷ 12 = 1575 cf

Pond Volume = $\frac{11.3 + 6.9}{2}(400)(0.2) + \frac{6.9 + 1.5}{2}(400)(0.5) + \frac{1.5 + 0}{2}(400)(0.5)$ = 1718 cf (at elev. 65.2)

Q_s = 0.4(5.4)0.31 = 0.67 cfs

From Cameron

Q = 19.636(0.6)(4)$^2\sqrt{1}$ ÷ (60 x 7.5) = 0.43 cfs

Use 1-4" cast iron outlet.

APPROVED FOR DRAINAGE
9-22-81
DATE
SUPERVISOR DRAINAGE INSPECTOR
TITLE
NOTE: NO GRADING EXECUTED
Note
① Special Drawing 19
② Drainage Covenant

RECEIVED
SEP 16 1981
ENGINEERING

REGISTERED PROFESSIONAL ENGINEER
STATE OF NEW MEXICO
THOMAS T. MANN, JR.
3792
AND LAND SURVEYOR
9/14/81

APPROVED FOR CONSTRUCTION

CITY ENGINEER DATE

JOB NO. 1-091

AS BUILT INFORMATION

CONTRACTOR
WORK STAKED BY
SURVEY CHECK BY DATE
ACCEPTANCE BY
FIELD CHECK BY DATE
VERIFICATION BY
CORRECTED BY DATE
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS

CITY OF ALBUQUERQUE BRASS CAP 6-K-19
LOCATED AT CENTRAL & PENNSYLVANIA.

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

REFERENCES

MAP NO.	W.O. NO.
K-19	
EST. NO.	

REMARKS

NO.	DATE	REMARKS	BY

MACKENZIE & ASSOCIATES
ENGINEERS

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

TITLE: CAR WASH FACILITY
DRAINAGE PLAN

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		
A.C.E.-Design			Traffic		
A.C.E.-Hydrology			Water		

DRAWING NO. SHEET 1 OF 1

THIS PLAN SHOT TWICE ONCE ON LIGHT AND ONCE ON DARK.

D 24 C 20 B 16 A 12

CITY OF ALBUQUERQUE

C D