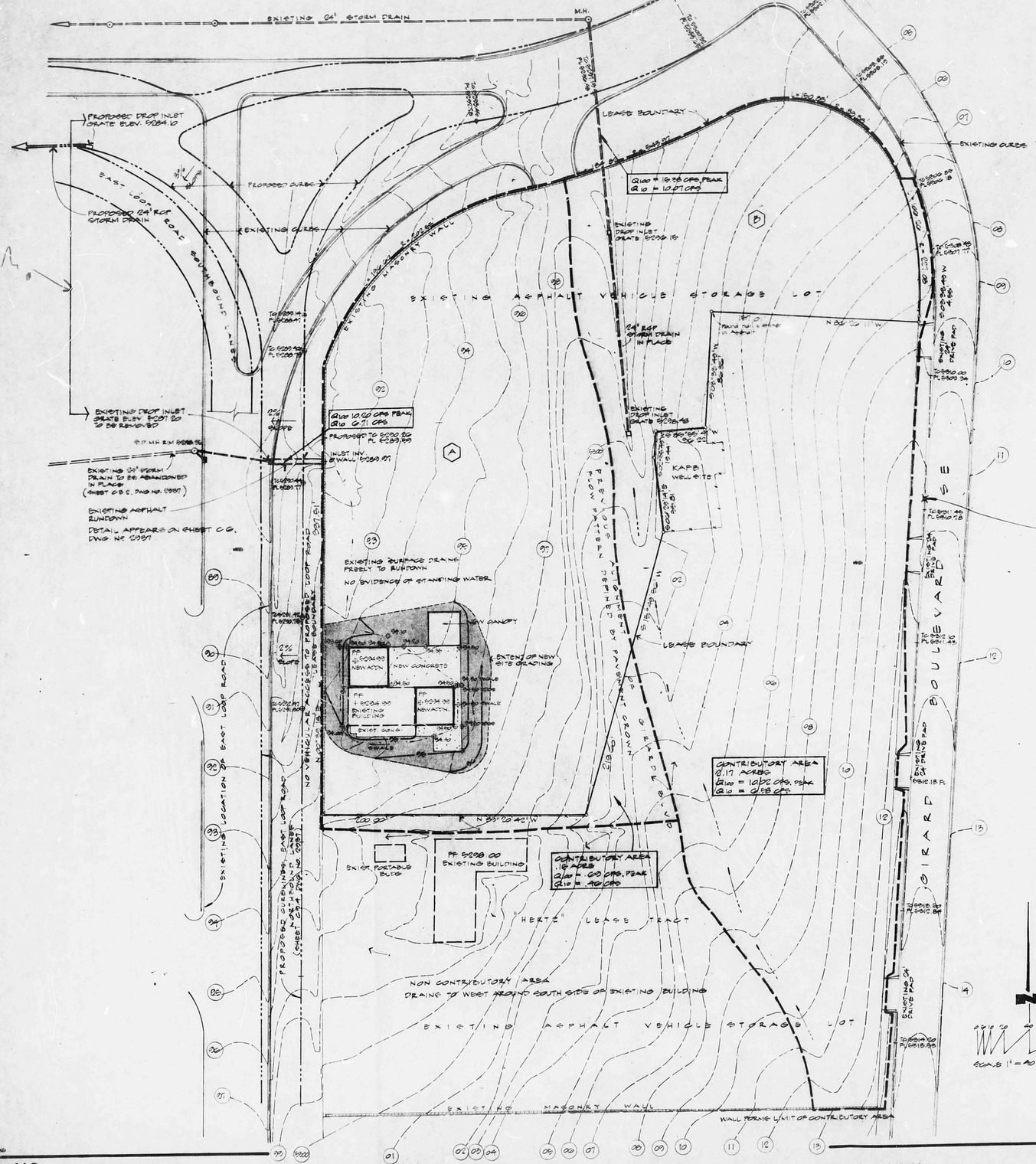
HYDROLOGY

M16/D24A
ONE PLAN

M 16/ D24A

1 PLAN



DISPOSAL ROUTING

FROM AREA (A)

PROPOSED INTERCEPTOR DRAIN WILL LIE ~ 230 FEET NORTH OF EXISTING LINE WHICH IS TO BE ABANDONED ACCORDING TO NOTES APPEARING ON SHEET C8.2, DRAWING NO 0097 "EXISTING SITE CONDITIONS AND DEMOLITION - EAST — ALBUQUERQUE INTERNATIONAL AIRPORT MASTER PLAN IMPROVEMENTS 1980"

FLOWS EXITING SITE WILL BE DIRECTED TO WEST CURBLINE OF NORTHBOUND LANES OF THE EAST LOOP ROAD, THENCE NORTH TO THE PROPOSED NEW DROP INLET. A NEW 24" RCP DRAIN WILL BE EXTENDED TO THE WEST AND WILL TIE INTO AN EXISTING 30" STORM DRAIN (~ 800 FEET WEST OF SITE)

FROM AREA (B)

EXISTING DROP INLETS INTERCEPT RUNOFF. 24" RCP DRAIN DIRECTS FLOWS TO SAME 30" STORM DRAIN MENTIONED ABOVE.

SYSTEM IN PLACE EXTENDS WEST ACROSS YALE BOULEVARD, SE TO DAYLIGHT IN CONCRETE-LINED CHANNEL ~ 200 FT. WEST OF YALE.

CHANNEL FEEDS A.M.A.F.C.A. SOUTH DIVERSION CHANNEL.

SITE DOES NOT LIE IN A 100-YR. FLOOD ZONE NOR IS IT CONTRIBUTORY TO ANY FLOOD ZONE UNCONFINED TO CHANNEL(S).

NO NATURAL WATERCOURSES AENT OR CROSS THIS SITE

CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROL AND ABATEMENT OF SEDIMENT FROM SITE ONTO ADJOINING PARCELS OR RIGHTS-OF-WAY.

BENCH MARK

"HV-2" BRASS CAP SET IN CONCRETE PLUGGED WITH GROUND LOCATED ~ 14 FEET NNW OF LIGHT POLE IN SE QUADRANT OF THE INTERSECTION OF KIRTLAND DRIVE AND GIRARD BOULEVARD

ELEV. 5516.56

T.B.M.

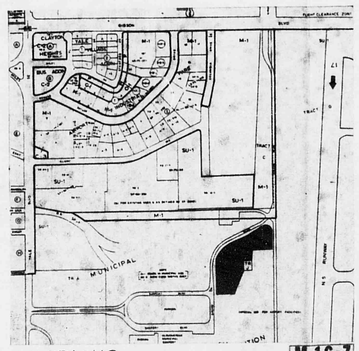
SQUARE CHISELED ON HEAD OF WEST CURB OF GIRARD BOULEVARD, SE AND MARKED WITH BLUE PAINT.

ELEV. 5511.36

LEGEND

- EXISTING WALL
- EXISTING FENCE
- CONTOUR INTERVAL ONE-FOOT (1.0)
- 98 — EXISTING CONTOUR
- 98 — PROPOSED CONTOUR
- +00.0 EXISTING SPOT ELEVATION
- ⊕ 00.0 PROPOSED SPOT ELEVATION
- OUTLINE OF EXISTING BUILDING
- DIVISION OF CONTRIBUTORY AREAS

PROPOSED SPOT ELEVATIONS AND CONTOURS AS SHOWN ARE TO FINISHED SURFACES. CONTRACTOR SHALL DETERMINE APPROPRIATE SUBGRADES.



VICINITY MAP

M-16-Z

DATA

AREA OF LEASE	139 880 SQ.FT. (3.2108 SQ.FT.)
SLOPE	4% AVERAGE
SOILS GROUP	N/A
LENGTH OF RUN	300 FT. MAXIMUM
TIME OF CONCENTRATION	< 10 MINUTES
RAINFALL (PL 88-6, D-1, D.F.M.)	2.3 INCHES
INTENSITY (PL 88-6, D-2, D.F.M.)	4.80 IN/HR.

EXISTING ON-SITE CONDITIONS

ASPHALT-COVERED VEHICLE STORAGE LOT. PREVIOUS ALIGNMENT OF GIRARD BOULEVARD, SE DIVIDES SITE AND UPSTREAM CONTRIBUTORY AREAS INTO TWO DISTINCT DRAINAGE BASINS. DROP INLETS, STORM SEWER EXTENSION AND IMPROVED RUNDOWN EXIST ON SITE. THERE IS NO VEGETATION OR OPEN, UNPAVED AREA WITHIN THIS SITE AS DEFINED ON LEASE.

ONE BUILDING (APPROX 1600 SQ.FT.) EXISTS ON SITE.

IMPERVIOUS COVERAGE — 100%

C FACTOR .89

Q100 = .89 x 4.80 IN/HR x 3.21 AC = 14.00 CFS, PEAK

Q10 = .67 Q100 = 9.37 CFS

THESE FIGURES REPRESENT TOTAL SITE DISCHARGE RATES. AREA BREAKDOWN IS AS FOLLOWS:

(A) DISCHARGES VIA ASPHALT RUNDOWN TO EAST LOOP ROAD

2.00 ACRES, IMPERVIOUS

Q100 = .95 x 4.80 IN/HR x 2.00 AC = 9.12 CFS, PEAK

Q10 = .67 Q100 = 6.16 CFS

(B) DISCHARGES VIA 24" R.C.P. & DROP INLETS TO AIRPORT STORM SEWER SYSTEM

1.15 ACRES, IMPERVIOUS

Q100 = .95 x 4.80 IN/HR x 1.15 AC = 5.21 CFS, PEAK

Q10 = .67 Q100 = 3.49 CFS

UPSTREAM CONTRIBUTORY FLOWS

TO AREA (A)

.16 ACRES, ASPHALT SURFACE, 100% C = .95

Q100 = .95 x 4.80 IN/HR x .16 AC = .60 CFS, PEAK

Q10 = .67 Q100 = .40 CFS

SHEET FLOW ENTRY ON PAVED SURFACE.

TO AREA (B)

2.17 ACRES, ASPHALT SURFACE 100% C = .95

Q100 = .95 x 4.80 IN/HR x 2.17 AC = 10.00 CFS, PEAK

Q10 = .67 Q100 = 6.70 CFS

PROPOSED SITE RUNOFF

IMPROVEMENTS TO SITE CONSTITUTE ABOUT 1800 SQUARE FEET OF ADDITIONAL BUILDING AREA. BUILDING OVERLAYS AREA CURRENTLY COVERED W/ ASPHALT MAT.

NO PROPOSED INCREASE IN RATE OR VOLUME OF RUNOFF FROM EITHER DISCHARGE POINT IS ANTICIPATED.

DISCHARGE VIA RUNDOWN FROM AREA (A) AND UPSTREAM AREA

Q100 = 9.21 CFS + .60 CFS = 10.00 CFS, PEAK

Q10 = 6.20 CFS + .40 CFS = 6.71 CFS

DISCHARGE VIA STORM DRAIN FROM AREA (B) AND UPSTREAM AREA

Q100 = 5.21 CFS + 10.00 CFS = 15.20 CFS, PEAK

Q10 = 3.49 CFS + 6.70 CFS = 10.07 CFS

SINCE T_c ≤ 10 MINUTES IN ALL INSTANCES, RATES HAVE BEEN SUMMED ALGEBRAICALLY.

FIELD NOTES TAKEN DECEMBER 4, 1986

RICHARD V. HALL REGISTERED PROFESSIONAL ENGINEER 7918

Richard Hall

12-24-86

DESCRIPTION OF PROPERTY

NATIONAL LEASE SITE
A TRACT OF LAND IN MUNICIPAL ADDITION No. 9
WITHIN SECTION 34, T-10-N, R-3-E, N.M.P.M.
ALBUQUERQUE, NEW MEXICO

PREPARED FOR
S & J ENTERPRISES
AGENT FOR
NATIONAL CAR RENTAL

DECEMBER, 1986

RECEIVED DEC 24 1986 HYDROLOGY SECTION

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