HYDROLOGY

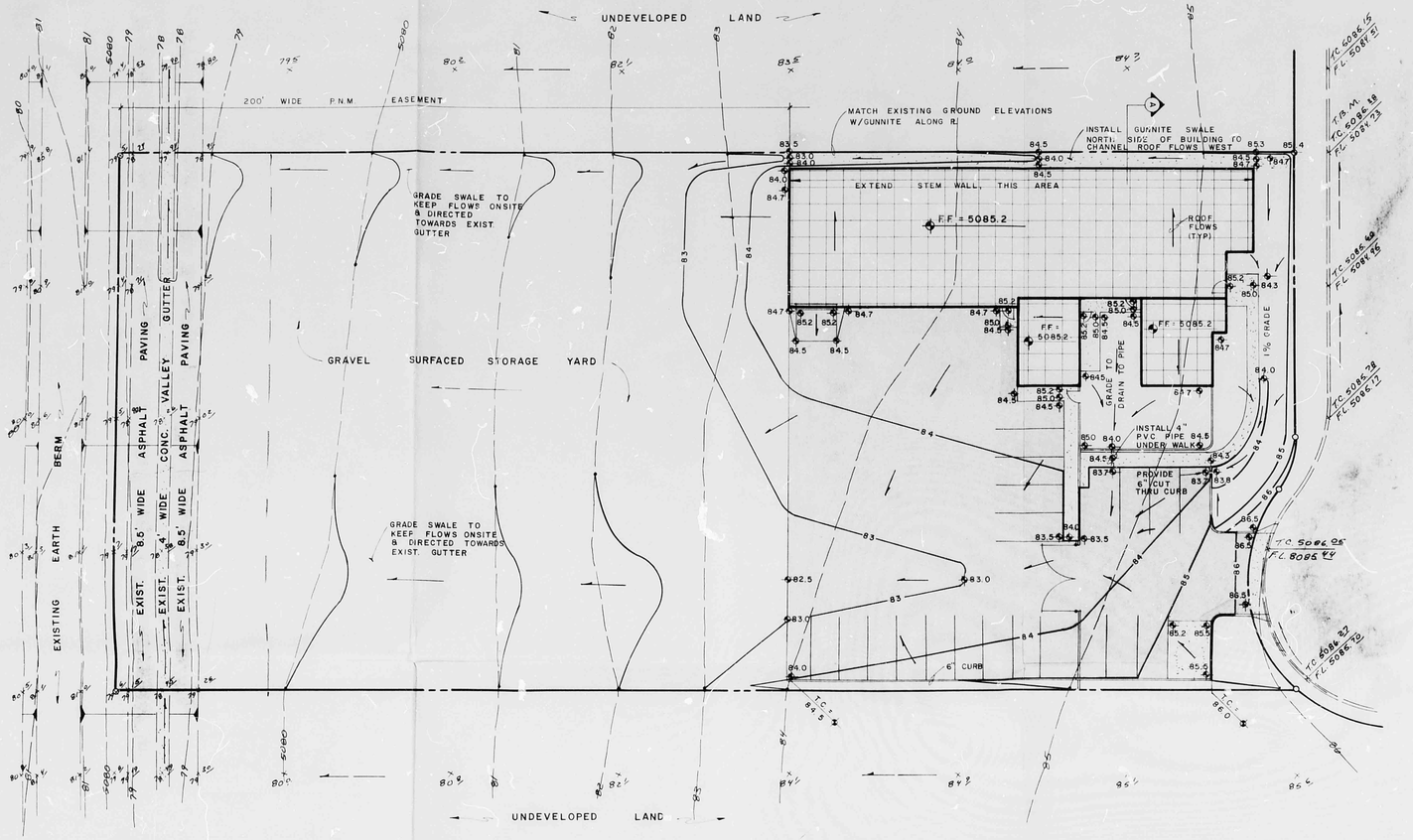
C17/D1T

ONE PLAN

I PLAN FOR

WESCON, INC.

CM- DIT



SCALE: 1" = 20'

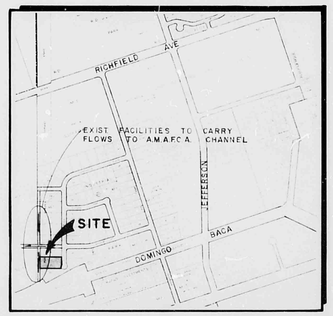
WASHINGTON PLACE N.E.

LEGEND

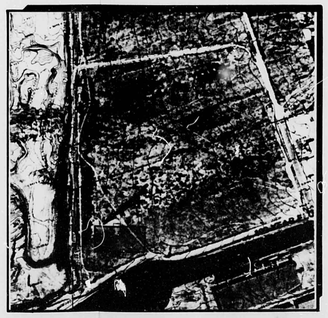
	SIDEWALK, CURB & GUTTER (EXISTING, PROPOSED)
	PROPOSED ASPHALT
	BUILDING (EXISTING, PROPOSED)
	PROPERTY LINE
12.7x	EXISTING SPOT ELEVATION
	EXISTING CONTOUR
12.6	PROPOSED SPOT ELEVATION
10	PROPOSED CONTOUR
	SURFACE FLOW DIRECTION (EXISTING, PROPOSED)
L.A.	LANDSCAPED AREA
T.G.W.	TOP OF GRADE WALL (LESS THAN 18" HIGH)
T.R.W.	TOP OF RETAINING WALL (MORE THAN 18" HIGH)
T.A.	TOP OF ASPHALT
T.C.	TOP OF CURB
F.L.	FLOW LINE
F.F.	FINISHED FLOOR

CONSTRUCTION NOTES

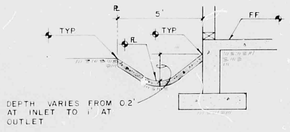
1. Before construction, the Contractor shall check and verify pertinent figures shown hereon and shall make all applicable field measurements. Should any conflict, error or discrepancy be discovered, the contractor shall notify the Engineer at once to resolve the problem. It is recommended that the Contractor meet with the Engineer for a pre-design conference to discuss the scope of work and critical areas involved.
2. The Contractor shall be responsible for following the plans using his best skill and attention. Any departure from the plans must be approved by the Engineer and the City Hydrology Department prior to construction.
3. The Contractor shall check the site plan for locations of existing utilities within or adjacent to streets and shall take all necessary precautions and efforts to locate and protect these utilities. He shall give 48 hours notice to Line Locating Service, 765-1234, for any work that may interfere with said utilities.



VICINITY MAP C-17



FLOOD HAZARD BOUNDARY MAP



SECTION A

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SCOPE:

Proposed improvements are comprised of an office/warehouse building with a new drive pad, asphalt parking and gravel surfaced storage yard.

The present site is undeveloped. Washington Place is paved with curb and gutter. The drainage swale along the west side of the property is in place. The land slopes from east to west at a 2.5% grade with flows being caught in the drainage swale and routed north to an existing rundown which channels runoff to the AMAFCA North Channel.

The intent of this plan is to show:

a) Grading relationships between the existing ground elevations and proposed finished elevations in order to facilitate positive drainage to designated discharge points.

b) The extent of proposed site improvements, including buildings, walks and pavement.

c) The flow rate/volume of rainfall runoff across or around these improvements and methods of handling these flows to meet City requirements for drainage management.

d) The relationship of onsite improvements with existing neighboring property to insure an orderly transition between proposed and surrounding grades.

GENERAL NOTES

LEGAL: Lot #48 of Clifford Industrial Park, Albuquerque, New Mexico.

SURVEY: David Clausen Survey Co., October 1985.

B.M.: U.C.S. Brass Cap #8-C-17 cemented in a drill hole in top of concrete curb 0.1 miles north of the intersection of Ion Ingalls and Washington N.E. Elevation = 5111.03

T.B.M. Curb Scribe on top of concrete curb opposite N.E. property corner. Elevation = 5085.38

SOILS: S.C.S. Map #11; soil type EmB; Hydrologic Soil Group "B".

FLOOD HAZARD: F.E.M.A. Map #9: Site is located north of the Domingo Baca Channel and East of the AMAFCA North Diversion Channel, neither of which affect the site. No flood hazard areas exist south of Richfield Ave. or west of San Mateo Ave.

OFF-SITE DRAINAGE: According to the 1984 Bohannan-Huston Master Plan this lot is included in Drainage Basin H which means that flows will be directed west to the drainage swale, then be carried to the AMAFCA Channel. There is one lot south of Lot 48, flows from it will be run across Lot 48, but will be contained within the swale provided. The lot north runs west then north without crossing Lot 48.

EROSION CONTROL: The Contractor will be responsible for controlling any temporary runoff generated from construction.

CALCULATIONS:

Calculations are based on the City of Albuquerque D.P.M. Manual, Vol. II for the 100 year-6 hour storm, using the Rational Formula to compare the existing and proposed runoff rates.

RATIONAL METHOD- Q = CIA

Area of site: 56,056 sq.ft. = 1.29 Ac.

Run-off Coefficients:

Existing site:	Developed Site:
% imp. = 0.075 Ac	% imp. = 1.19 Ac
% imp. = 6.1%	% imp. = 92%
"C" = 0.37 (DPM 22.2 C-1)	"C" = 0.88 (DPM 22.2 C-1)

Rainfall Intensity:

$= P_6 (6.84 T_c^{-0.51}) = 4.65$" per hour

Here P_6 = 2.2" (DPM 22.2 D-1)

T_c = 10 minutes

Existing Conditions:	Developed Conditions:
Q_{100} = (0.37)(4.65)(1.29) = 2.2 cfs	Q_{100} = (0.88)(4.65)(1.29) = 5.3 cfs
V_{100} = (2.2)(50T.)(60 sec/min)/2 = 3300 cu. ft.	V_{100} = (5.3)(50)(60)/2 = 7950 cu. ft.

SUMMARY

Downstream capacity has been provided for in the Bohannan-Huston Master Plan. See Vicinity Map for routing of flows across site to A.M.F.C.A. Channel.

Q_{100} = (5.3)-(2.2) = 3.1 cfs (increase)

V_{100} = (7950)-(3300) = 4650 cu. ft. (increase)

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WEISS-HINES ENGINEERING INC.
1100 ALVARADO N.E. SUITE B
ALBUQUERQUE, NEW MEXICO 87110
(505) 266 - 3444

REVISIONS	DATE
DESIGNED W.J.	10-25-85
DRAWN	10-25-85
CHECKED	10-25-85

DRAINAGE / GRADING PLAN
OFFICE & WAREHOUSE FOR
WESCON, INC.

ENGINEERING

CARLOS DORER
NEW MEXICO
9532
REGISTERED PROFESSIONAL ENGINEER

SHEET 1 OF 1