HYDROLOGY

H16/D45

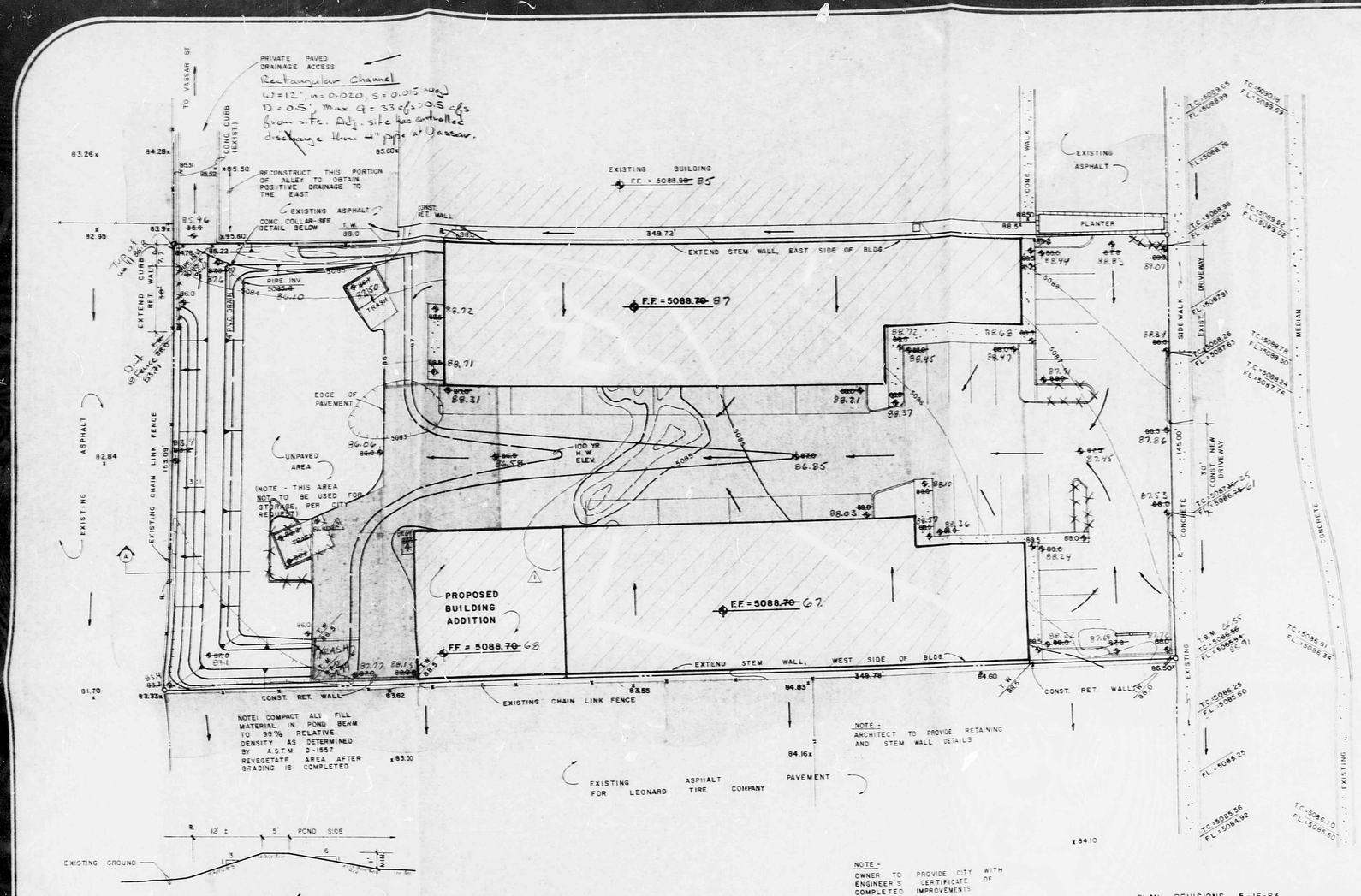
ONE PLAN

1 PLAN FOR

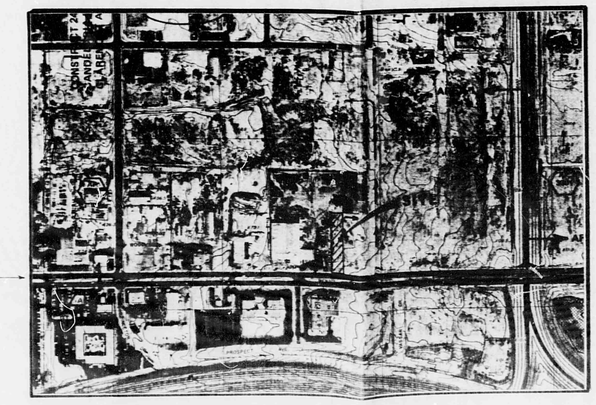
MENAUL OFFICE WAREHOUSE

BIDG.

H 16- D45



SECTION A



FLOOD HAZARD MAP

I, Christopher L. Weiss, hereby certify that an as-built survey was performed on 3-16-84 and that the Drainage and Grading plan is in substantial compliance with the approval plan.

#6653 Date

NOTES

1. Legal: Lot 2 of the Brunacini Industrial Park, Unit 5, Albuquerque, NM.
2. Surveyor: Ron Forstbauer Surveying Co., 1/83.
3. BM - City BM Brass Cap 140-12. Elevation = 5114.55
4. TBM - T.C. west lot line projection, elevation 5086.56.
5. SCS Soil Type is Cu (Map #31) Soil Hydrologic Group 'A'.
6. Site is not located in a flood hazard area.
7. All top of walks, curbs are 0.5' above adjacent pavement elevations.

DESIGN

In a pre-design meeting with Fred Aguirre, City Hydrology Department, the following criteria was established:

1. Provide for a 100 yr. pond volume for developed conditions.
2. Provide for a positive drainage, a 4" pipe of 24 hr. drain time, at an 18" head, whichever obtains the longest drain time.
3. Route everything through pond with discharge into alley at NE corner of site.

Discharge into alley provided for by previous agreement between Developer, Mr. Dave Walker, and City.

PLAN REVISIONS 5-16-83

1. ADDITIONAL BLDG. ADDED TO REAR OF WEST STRUCTURE
2. POND & CORRESPONDING GRADES AROUND POND ADJUSTED DOWN TO COMPENSATE FOR DECREASED SURFACE AREA.

CALCS

- Area of site draining to pond = 1.23 Ac.
- Vol.$_{100}$ routed to pond = (2.2/12)(0.60)(1.2 Ac.) = 5750 ft.^{3}
- Peak Q_{100} to pond = (2.2)(2.15)(0.6)(1.2) = 3 cfs
- Peak discharge rate from a 4" outlet with a 1'-0" head = 0.5 cfs
- Peak volume stored while outflowing 0.5 cfs = 4625 ft.^{3} at a peak time of 1 hr.-15 min. (programable calculator).
- Pond volume available -

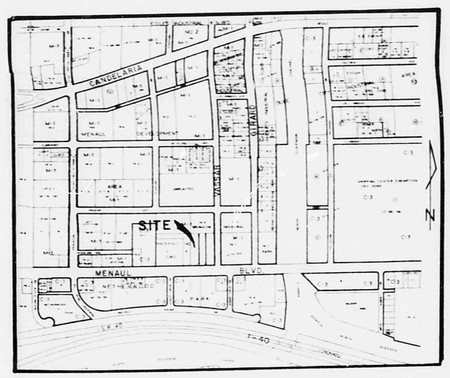
Approximate High Water Elevation = 5086.70

Elev.	Area	Avg.	Depth Interval	Vol.
85.8	0			
86.0	4600 ft.^{2}	2300	0.2	460 ft.^{3}
86.7	8300 ft.^{2}	6450	0.7	4515 ft.^{3}
				4975 > Peak volume of 4625 ft.^{3}

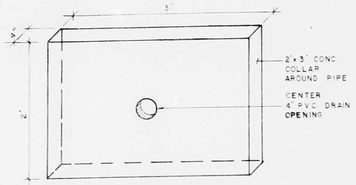
0 10 20 40

LEGEND

12.7	EXISTING SPOT ELEVATION
12	EXISTING CONTOUR
12.7 / 12.6	PROPOSED SPOT ELEVATION / Existing As-Built of Improvements
12	PROPOSED FINISHED CONTOUR
	SURFACE FLOW DIRECTION
	DRAINAGE BOUNDARY



VICINITY MAP - H-16



CONC. COLLAR DETAIL

H16/D45

CONSULTANTS (WORK 501) INC
ALBUQUERQUE OFFICE 2000 B. ALVARADO N.E. ALBUQUERQUE, N. MEX. 87110 266-3444
SANDIA PARK OFFICE P.O. BOX 142 SANDIA PARK, N. MEX. 87047 281-1931

Revisions	Date
1 BLDG. ADD'N	5-83
2 POND REVISION	5-83

Designed	C.L.W.	2-83
Drawn	M.W.	2-83
Checked	C.L.W.	2-83

GRADING/DRAINAGE PLAN FOR

Menaul Office/Warehouse Bldg.

CHRISTOPHER L. WEISS N.M. REG. 6653 REGISTERED PROFESSIONAL ENGINEER

SHEET 1 OF 1