#### EXISTING CONDITIONS:

The site is located north of Paseo Del Norte between Jefferson and I-25. The site is accessed via a frontage road and a private access easement. The site is Tract 3-A-3, Lands of Los Angeles Investors. There is a master grading and drainage plan that covers the site which was prepared by Easterling & Associates, Inc., Hydrology File No. C-17/D-7. The site is presently undeveloped and slopes from east to west. East of the site is a development which discharges all of its runoff to the Domingo Baca Arroyo. North of the site the property is developed and drains to the Domingo Baca Arroyo. There is an inlet in the existing cul de sac that drains to the Domingo Baca Arroyo via a 15' cmp. The property to the south is undeveloped. There is a railroad spur on the south property line of the site.

#### PROPOSED CONDITIONS:

It is proposed to construct an office/warehouse complex on the site as shown. No ponding is required because the allowable discharge for the site is 3.80 cfs which is in excess of the amount of discharged that the proposed development will generate. All runoff from the site will be discharged into the cul de sac where it will enter the existing inlet and be discharged via the 15' cmp to the Domingo Baca Arroyo.

The calculations shown on this plan were prepared in accordance with Section 22.2, Hydrology of the Development Process Manual, Volume 2, Design Criteria, for the City of Albuquerque, in cooperation with Bernalillo County, New Mexico and the Albuquerque Metropolitan Arroyo Flood Control Authority, January, 1993.

#### PRECIPITATION ZONE:

The site is between the Rio Grande River and San Mateo Blvd. and is, therefore, in Precipitation Zone 2.

# LAND TREATMENT AREAS, EXCESS PRECIPITATION AND UNIT PEAK DISCHARGE:

The peak discharge per acre and excess precipitation are shown for the four land treatments in Zone 2 in the table below, and the values shown are from the Albuquerque D. P. M. Also shown are the existing and proposed land treatment areas.

LAND TREATMENT		5/ac) r. 10-yr.	E (in 100-vr.		Exs %	isting Site Sa. Ft.	Areas Acres	Deve %	eloped Sit Sa. Ft.	te Areas Acres
A	1. 56	0, 38	0. 53	0. 13	100. 0	35, 632	0. 8180	0. 0	0	0. 0000
В	2, 28	0. 95	0. 78	0. 28	0.0	0	0.0000	14. 0	5,000	0. 1148
C	3. 14	1. 71	1. 13	0. 52	0. 0	0	0. 0000	22. 6	8,050	0. 1848
D	4. 70	3. 14	2. 12	1. 34	0.0	0	0.0000	63. 4	22, 582	0. 5184
Totals					100.0	35, 632	0. 8180	100. 0	35, 632	0. 8180

# PEAK DISCHARGE:

#### EXISTING CONDITIONS:

Q100 = 0.8180 \* 1.56 = 1.28 cfsQ10 = 0.8180 \* 0.38 = 0.31 cfs

#### DEVELOPED CONDITIONS:

Q100 = 0.1148 \* 2.28 + 0.1848 \* 3.14 + 0.5184 \* 4.70 = 3.28 cfsQ10 = 0.1148 \* 0.95 + 0.1848 \* 1.71 + 0.5184 \* 3.14 = 2.05 cfs

## VOLUME, 100-YEAR, 6-HOUR

EXISTING CONDITIONS:

V100 = (35,632 \* 0.53) / 12 = 1,574 cf

V100 = (35,632 \* 0.13) / 12 = 386 cf

## DEVELOPED CONDITIONS:

V100 = (5,000 \* 0.78 + 8,050 \* 1.13 + 22,582 \* 2.12) / 12 = 5,073 cfV10 = (5,000 \* 0.28 + 8,050 \* 0.52 + 22,582 \* 1.34) / 12 = 2,987 cf

## SUMMARY OF ON-SITE VOLUMES AND PEAK DISCHARGE RATES:

	V100(CF)	V10(CF)	Q100(CFS)	Q10(CFS)
DEVELOPED	5, 073	2, 987	3. 28	2. 05
EXISTING	1, 574	386	1, 28	0. 31
INCREASE	3, 499	2, 601	2. 00	1. 74

## ANALYSIS OF DOWNSTREAM CAPACITY:

THE DEVELOPMENT OF TRACTS 3-A-1 THROUGH 3-A-4, LANDS OF LOS ANGELES INVESTORS

INCLUDED PAVING OF THE ACCESS EASEMENT AND PROVISION OF A STORM DRAINAGE INLET AND 15' CMP DUTFALL PIPE THAT EXTENDS TO THE DOMINGO BACA ARROYD. FROM THE END OF THE CMP IT IS A REASONABLY SHORT DISTANCE TO THE NORTH DIVERSION CHANNEL. SITE RUNOFF DOES NOT EXCEED THE ALLOWABLE.

## ANALYSIS OF OFF-SITE FLOW:

THE SITE DOES NOT HAVE ANY OFF-SITE FLOW ASSOCIATED WITH IT. PROPERTY EAST, OR UPHILL, FROM THE SITE IS GRADED TO DRAIN TO THE DOMINGO BACA ARROYD.

# ANALYSIS OF SWALE NORTH OF BUILDING - SURBASIN "A":

D.	
SLOPE = 0.0050 FT. /FT. DEPTH = 0.56'3'-0'	
TREAT. B = $450 \text{ SF} = 0.0103 \text{ AC}$ . $69 3.49 \text{ SLOPE VARIE}$	<u>`</u> //
TREAT. C = 900 SF = 0. 0207 AC.	
TREAT. $D = 2,700 \text{ SF} = 0.0602 \text{ AC}$ . $A = 0.33 \text{ SF} \text{ P} = 2.$	10'
TDTAL 4, 050 SF = 0. 0930 AC. $R = A/P = 0.157$	

Q100 = 0.0103 \* 2.28 + 0.0207 \* 3.14 + 0.0620 \* 4.70 = 0.38 CFS

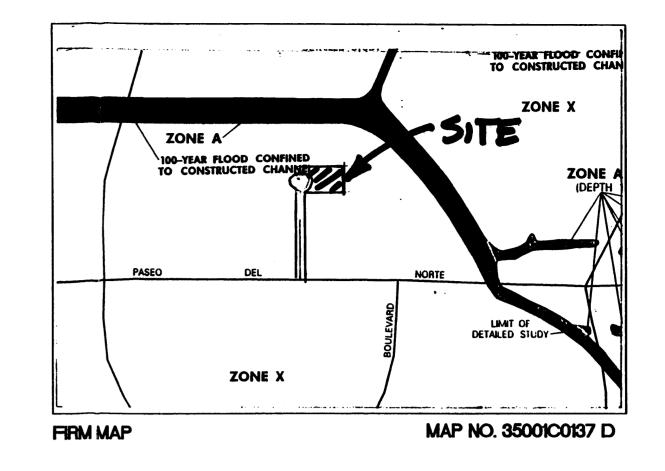
 $V = (1.486 / 0.023) (0.157)^{2/3} (0.0050)^{1/2} = 1.32 \text{ CFS}$ Q = AV = 0.33 \* 1.32 = 0.44 CFS > 0.38 CFS DK

# LEGEND:

#### ● Found Boundary Cor. PPO Utility Pole

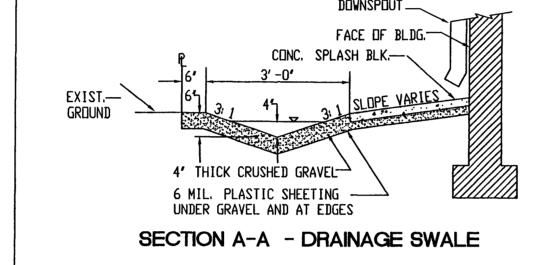
- ----- Overhead Lines c 🗆 CATV Pedestal
- e Electric Pedestal
- to Telephone Pedestal g 🗆 Gas Meter
- em ♦ Electric Meter
- wm> Water Meter w ◇ Water Valve
- g♦ Gas Valve Sanitary Sewer MH
- (W) Storm Sewer Manhole
- --5140.0- EXISTING CONTOUR
- SD Storm Drain Catch Basin -🌣 Light Pole
- <del>x x</del> Fence Arroyo or watercourse
- → Fire Hydrant Exist. Spot Elev. New Spot Elevation
  - ----40 ----NEW CONTOUR
  - FLOW DIRECTION ROOF SLOPE

M-1  RAFAR INVESTMENTS  SU-2 M-1  SU	M-1 RAPAB INVESTMENTS 5	SU-2 M-1  S ANGELES  SU-1 STATE OF STAT
ASEO DEL NORIE		M 9



C1	STANCE	C	4	LT	DE	LENGTH	RADIUS	٧o.
C2   99.04'   113' 29' 16"   S 03' 11' 13" W, 85   25.00'   23.18'   53' 07' 48"   S 26' 59' 31" W, 2	25.88	)"	,	00	30°	26.18'		21
C3   25.00'   23.18'   53' 07' 48"   S 26' 59' 31" W, 2	33.62	"	1	29	113°	99.04'		02
DOWNSPOUT	22.36'	3"	,	07	53°	23.18'		23
							23.00	
		חחע				· · · · · · · · · · · · · · · · · · ·		
EACE DE DING I 11////A	Γ							
FACE UF BLUG.				-NO	01			

**CURVE TABLE** 

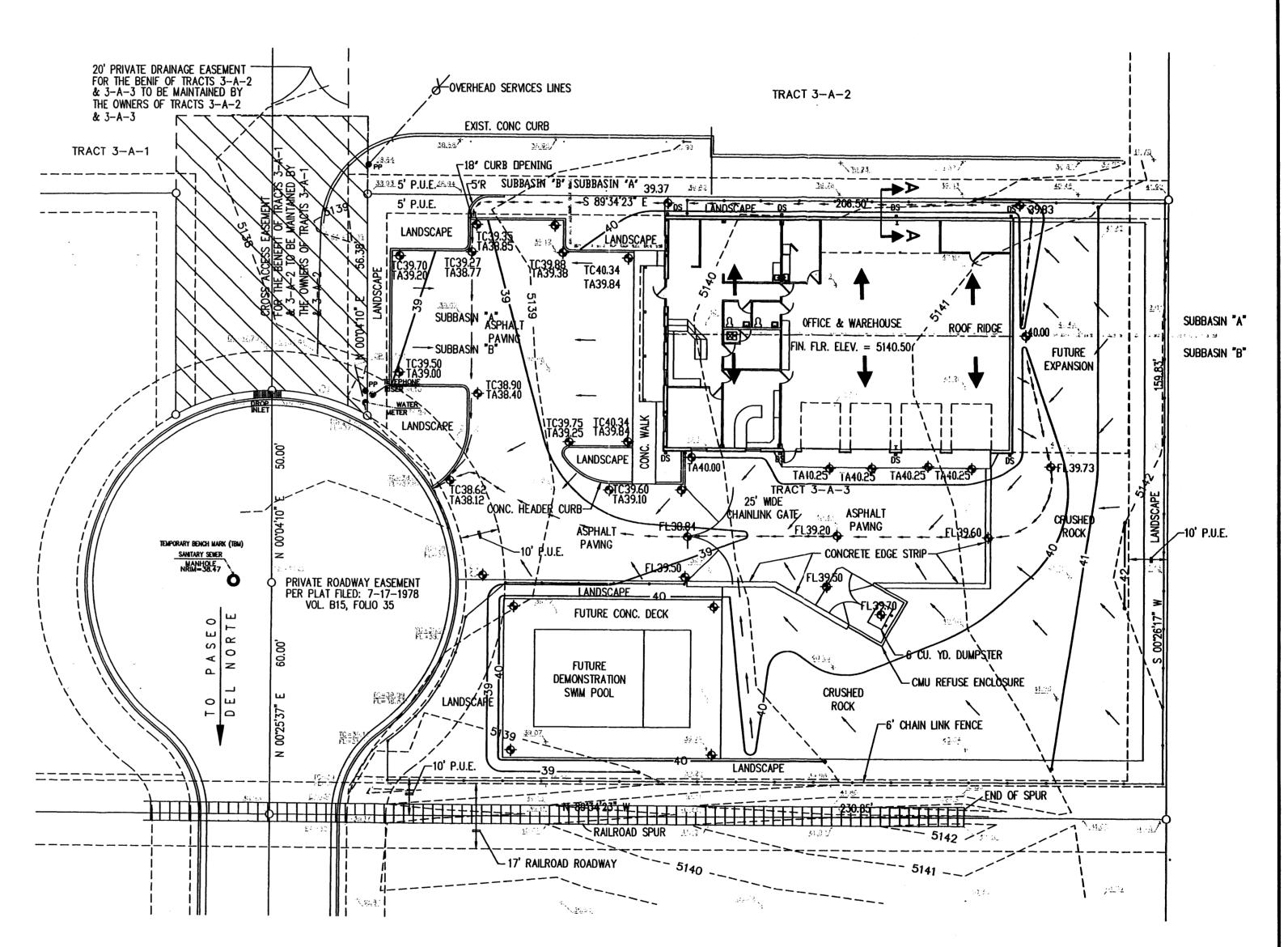


# **GENERAL NOTES:**

- 1. ALL WORK DETAILED ON THESE PLANS, EXCEPT AS OTHERWISE STATED OR. PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION - 1986 EDITION - AS AMENDED THROUGH UPDATE NO. 6 -
- JULY 1995.
  2. A CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.
- 3. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 260-1990, FOR LOCATION OF EXISTING

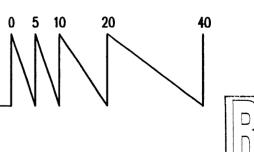
## UTILITIES.

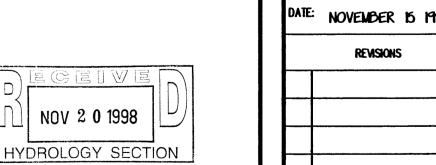
- 4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATED AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- 5. MAINTENANCE OF DRAINAGE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY ON WHICH THEY ARE CONSTRUCTED. ROOF DRAINS AND APPURTENANCES SHALL BE REGULARLY INSPECTED AND OBSTRUCTIONS REMOVED.
- 6. ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO
- PAVING. 7. DISPOSAL OF ALL WASTE MATERIAL SHALL BE THE RESPONSIBILITY OF THE
- 8. CONSTRUCTION SAFETY: THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE CONTRACTOR'S SOLE RESPONSIBILITY.
- 9. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AT THE PROPERTY LINES AND WETTING THE SOIL TO KEEP IT FROM BLOWING.
- 10. THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.
- 11. THE CONTRACTOR SHALL EXERCISE CARE SO AS NOT TO DISTURB OR DAMAGE EXISTING FEATURES TO REMAIN DURING ALL PHASES OF CONSTRUCTION.





GRADING AND DRAINAGE PLAN SCALE: 1-20.0'



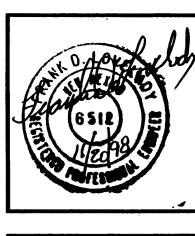


## GENERAL TOPOGRAPHIC NOTES AND BENCH MARK:

- 1. ADD 5200 TO SPOT ELEVATIONS TO SHOW TRUE ELEVATION.
- 2. CONTOUR INTERVAL IS ONE (1) FOOT.
- ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE CONTROL STATION
   <u>"ACS 11-D18"</u>, HAVING AN ELEVATION OF <u>5235.67</u> FEET ABOVE SEA LEVEL.

**LEGAL DESCRIPTION:** 

TRACT THREE-A-THREE (3-A-3), LANDS OF LOS ANGELES INVESTORS, (BEING A REPLAT OF TRACT 3-A, LANDS OF LOS ANGELES INVESTORS), CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.



Facil onstruction mainsoin

JOB 1	<sup>10:</sup> 9806
DATE:	NOVEMBER 15 1998
	REVISIONS

SHEET NO. -

