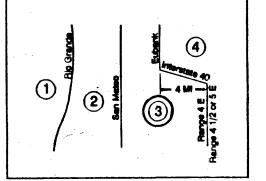


EXISTING CONCRETE, ASPHALT PAVING, GAS STORAGE TANKS, ETC., TO BE REMOVED.

Bernafillo County's four precipitation zones are indicated in TABLE A-1 and on

<u> </u>	TABLE A-1. PRECIPITATION ZONES						
	Zone	Location					
	1	West of the Rio Grande					
	2	Between the Rio Grande and San Mateo					
	3	Between San Mateo and Eubank, North of Interstate 40; and between San Mateo and the East boundary of Range 4 East, South of Interstate 40					
	4	East of Eubank, North of Interstate 40; and East of the East boundary of Range 4 East, South of Interstate 40					



DPM SECTION 22.2 - HYDROLOGY

Treatment	Land Condition
Α	Soil uncompected by human activity with 0 to 10 percent slopes. Netive grasses, weeds and shrubs in typical densities with minimal disturbance to grading, groundcover and infiltration capacity. Croplands. Unlined arroyos.
В	Irrigated lewns, parks and golf courses with 0 to 10 percent slopes. Native grasses, weeds and strubs, and soil uncompacted by human activity with slopes greater than 10 percent and less than 20 percent.
C .	Soil compacted by human activity. Minimal vegetation. Unpaved parking, roads, trails. Most vecant lots. Gravel or rock on plastic (desert landscaping). Imgeted lawns and parks with slopes greater than 10 percent. Native grasses, weeds and shrubs, and soil uncompacted by human activity with slopes at 20 percent or greater. Native grass, weed and shrub areas with day or day loam soils and other soils of very low permeability as classified by SCS Hydrologic Soil Group D.
D	Impervious areas, pavement and roofs.

treatment D, the areal percentages in TABLE A-5 may be employed.

TABLE A-10. P	TABLE A-10. PEAK INTENSITY (IN/HR at t _c = 0.2 hour)					
100-YR Zone Intensity [2-YR, 10-YR						
1	4.70 [1.84, 3.14]					
2	5.05 [2.04, 3.41]					
3	5.38 [2.21, 3.65]					
4	5.61 [2.34, 3.83]					

	TABLE A-9. PEAK DISCHARGE (cfs/scre)						
r P)		Treatment			100-YR [2-YR, 10-YR]		
	Zone	A	8	С	D		
	1	1.29 [0.00, 0.24]	2.03 [0.03, 0.76]	2.87 [0.47, 1.49]	4.37 [1.69, 2.89]		
	2	1.56 [0.00, 0.38]	2.26 [0.08, 0.95]	3.14 [0.60, 1.71]	4.70 [1.86, 3.14]		
	3	1.87 [0.00, 0.58]	2.60 [0.21, 1.19]	3.45 [0.78, 2.00]	5.02 [2.04, 3.39]		
الصند	4	2.20 [0.05, 0.87]	2.92 [0.38, 1.45]	3.73 [1.00, 2.26]	5.25 [2.17, 3.57]		

DRAINAGE COMMENTS AND CALCULATIONS:

AS SHOWN ON THE VICINITY MAP HEREON, THE SUBJECT SITE IS LOCATED AT THE NORTHWEST INTERSECTION OF GIBSON BLVD. S.E. AND SAN PEDRO DRIVE S.E., IN THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.

watershed extends across a zone boundary, use the zone which contains

the largest portion of the

THE SUBJECT SITE, 1.) IS PRESENTLY A FULLY DEVELOPED COMMERCIAL SITE THAT IS NOT OCCUPIED AT THE PRESENT TIME, 2.) ACCORDING TO F.E.M.A. FLOODWAY AND FIRM PANEL 36 OF 50 IS TOTALLY LOCATED WITHIN A DESIGNATED FLOODPLAIN SHOWN AS A AO-1' DEPTH, 3.) DOES NOT CONTRIBUTE AND WILL NOT CONTRIBUTE TO THE OFF-SITE FLOWS OF THE ADJACENT PROPERTIES, 4.) DOES NOT ACCEPT OFFSITE FLOWS FROM ADJACENT PROPERTIES, 5.) DOES NOT ADJACENT TO A NATURAL OR ARTIFICIAL WATER COURSE, 6.) IS TO FREE DISCHARGE THE PROPOSED DEVELOPED FLOWS INTO THE AD-JACENT PUBLIC STREETS SHOWN ON THE PLAN HEREON, SAID FLOWS WILL NOT AGGRAVATE THE FLOODING CONDITIONS IN SAID STREETS, (REFER TO CALCULATIONS HEREON).

CALCULATIONS:

PER SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2., DESIGN CRITERIA FOR THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, DATED JANUARY 1993.

SITE AREA: 0.33 ACRE PRECIPITATION ZONE: THREE (3), TABLE A-1.

PEAK INTENSITY: IN./HR. AT T = TWELVE (12) MINUTES, 100-YR. =5.38

LAND TREATMENT FOR THE CALCULATION OF "Q", TABLES A-8 & A-9.

"LAND TREATMENT FACTORS", TABLE A-4.

EXISTING CONDITIONS:

j J	TREATMENT	AREA/ACRES		FACTOR		CFS
	C	0.01	X	3.45	= =	0.03
	D	0.32	Х	5.02	=	1.61
	$^{"}Q_{p}^{"} = 1.64 \text{ CFS}$					
) [-		CONDITIONS:				
1. H	TREATMENT	AREA/ACRES		FACTOR		CFS
	C	0.03	X	3.45	=	0.10
\ \	D	0.30	X	5.02	=	1.51
	"O " = 1.61 CFS					

$"Q_D" = 1.61 \text{ CFS}$

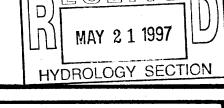
**** DECREASE OF FLOWS = 0.03 CFS

GENERAL NOTES:

- 1.) NO PERIMETER BOUNDARY CORNERS HAVE BEEN FIELD ESTABLISHED PER THIS SURVEY OF THE SUBJECT PROPERTY.
- 2.) NO SEARCH HAS BEEN MADE FOR EASEMENTS OF RECORD OTHER THAN SHOWN ON THE PLAT OF RECORD.
- 3.) TOPOGRAPHY SURVEY INFORMATION PROVIDED BY TORRES SURVEYING COMPANY, ALBUQUERQUE, NEW MEXICO.
- 4.) CONTRACTOR IS TO PROVIDE POSITIVE SLOPE AWAY FROM ALL STRUCTURES.

5.) REFER TO "ARCHITECT'S SITE PLAN" FOR LAYOUT DIMENSIONS OF PROPOSED IMPROVEMENTS.

NOTE: PER CITY OF ALBUQUERQUE FLOOD ORDINANCE THE PROPOSED FINISHED FLOOR ELEVATION OF THE PROPOSED BUILDING STRUCTURE WAS ESTAB-LISHED AT 2.0' ABOVE THE HIGHEST CURB FLOWLINE ELEVATION WHERE POTENTIAL FLOODING CONDITIONS WOULD OCCUR; FLOOD HAZARD INSUR-EGEIVE [. ANCE MAY BE REQUIRED.

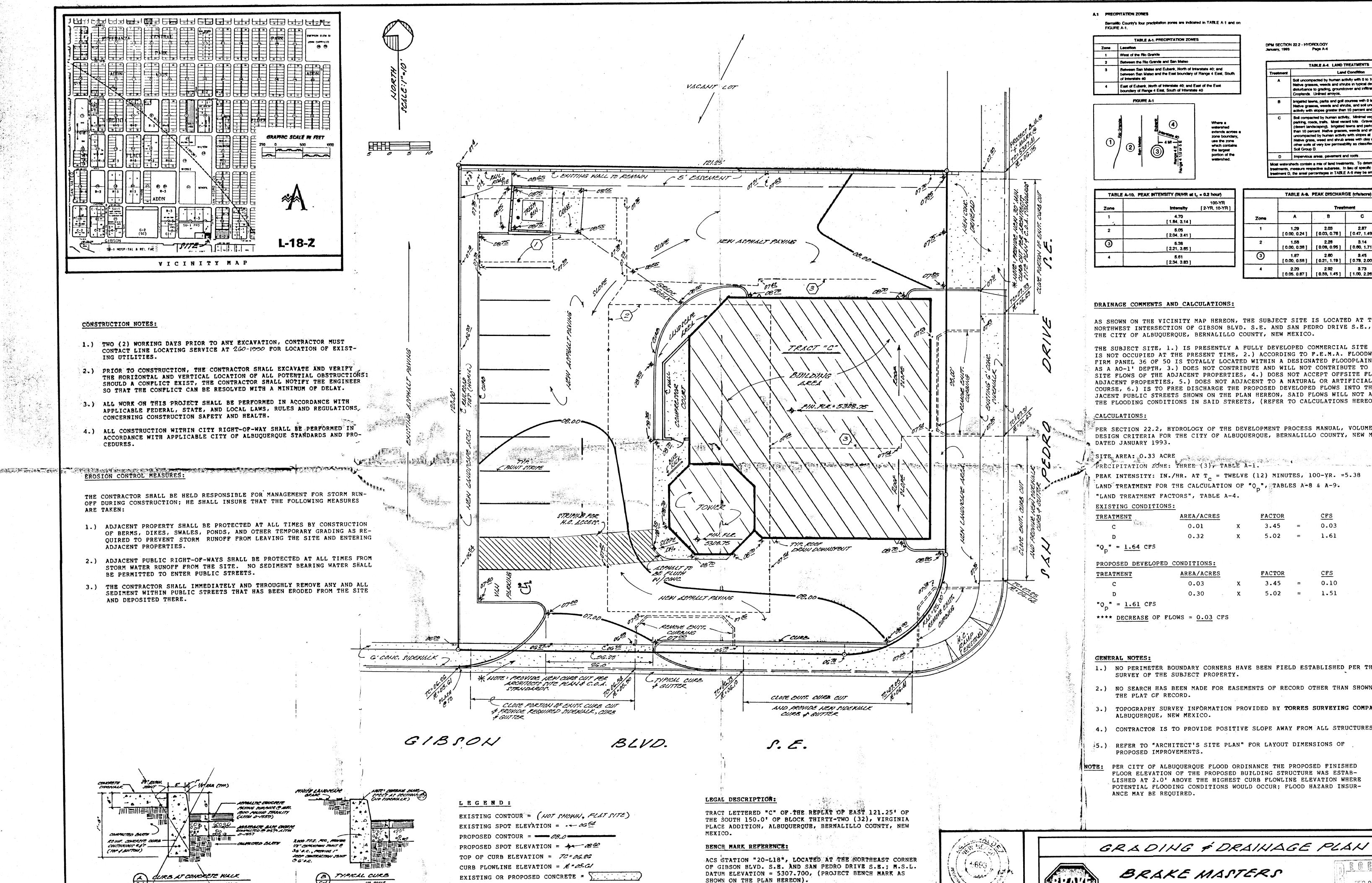




ENGINEER'S SEAL

BRAKE MASTERS

5749 GIBSON BLVD. S.E. ALBUQUERQUE, NEW MEXICO DECEMBER , 1996 (ENGINEER'S CERTIFICATION: 05-19-97)



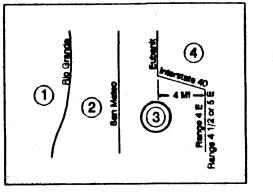
EXISTING BUILDING STRUCTURE AND CONCRETE TO BE REMOVED.

EXISTING BUILDING, GAS PUMP ISLANDS, AND CONCRETE TO BE REMOVED.

EXISTING CONCRETE, ASPHALT PAVING, GAS STORAGE TANKS, ETC., TO BE REMOVED.

Bernalillo County's four precipitation zones are indicated in TABLE A-1 and on

West of the Rio Grands Between the Rio Grande and San Mateo boundary of Range 4 East, South of Interstate 40



DPM SECTION 22.2 - HYDROLOGY

Treatment	Land Condition
A	Soil uncompacted by human activity with 0 to 10 percent slopes. Native grasses, weeds and shrubs in typical densities with minimal disturbance to grading, groundcover and infiltration capacity. Croplands. Unlined arroyos.
8	Irrigated lawns, parks and golf courses with 0 to 10 percent stopes. Native grasses, weeds and shrubs, and soil uncompacted by human activity with stopes greater than 10 percent and less than 20 percent
С	Soil compacted by human activity. Minimal vegetation. Unpaved parking, roads, traits. Most vecent lots. Gravel or rock on plastic (desert tandscaping). Irrigated tewns and parks with stopes greater than 10 percent. Native grasses, weeds and shrubs, and soil uncompacted by human activity with slopes at 20 percent or greater. Native grass, weed and shrub areas with clay or clay loam soils and other soils of very low permeability as classified by SCS Hydrologic Soil Group D.
D	Impervious areas, pavement and roofs.

treatment D, the areal percentages in TABLE A-5 may be employed

Zone	Intensity	100-YR [2-YR, 10-YR]
1	4.70 [1.84, 3.14]	
2	5.05 { 2.04, 3.41 }	
3	5.38 [2.21, 3.65]	3
4		:

		TABLE A-A	PEAK DISCHAR	GE (cfs/scre)		
R]		100- Treatment [2-YR, 1				
	Zone	A	B	С	D	
	1	1.29 [0.00, 0.24]	2.03 [0.03, 0.76]	2.87 [0.47, 1.49]	4.37 [1.69, 2.89]	
	2	1.56 [0.00, 0.38]	2.28 [0.08, 0.95]	3.14 [0.60, 1.71]	4.70 [1.86, 3.14]	
	3	1.87 [0.00, 0.58]	2.60 [0.21, 1.19]	3.45 [0.78, 2.00]	5.02 [2.04, 3.3 9]	
	4	2.20 [0.05, 0.87]	2.92 [0.38, 1.45]	3.73 [1.00, 2.26]	5.25 [2.17, 3.57]	

DRAINAGE COMMENTS AND CALCULATIONS:

AS SHOWN ON THE VICINITY MAP HEREON, THE SUBJECT SITE IS LOCATED AT THE NORTHWEST INTERSECTION OF GIBSON BLVD. S.E. AND SAN PEDRO DRIVE S.E., IN THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.

zone boundary, use the zone which contains the largest portion of the

THE SUBJECT SITE, 1.) IS PRESENTLY A FULLY DEVELOPED COMMERCIAL SITE THAT IS NOT OCCUPIED AT THE PRESENT TIME, 2.) ACCORDING TO F.E.M.A. FLOODWAY AND FIRM PANEL 36 OF 50 IS TOTALLY LOCATED WITHIN A DESIGNATED FLOODPLAIN SHOWN AS A AO-1' DEPTH, 3.) DOES NOT CONTRIBUTE AND WILL NOT CONTRIBUTE TO THE OFF-SITE FLOWS OF THE ADJACENT PROPERTIES, 4.) DOES NOT ACCEPT OFFSITE FLOWS FROM ADJACENT PROPERTIES, 5.) DOES NOT ADJACENT TO A NATURAL OR ARTIFICIAL WATER COURSE, 6.) IS TO FREE DISCHARGE THE PROPOSED DEVELOPED FLOWS INTO THE AD-JACENT PUBLIC STREETS SHOWN ON THE PLAN HEREON, SAID FLOWS WILL NOT AGGRAVATE THE FLOODING CONDITIONS IN SAID STREETS, (REFER TO CALCULATIONS HEREON).

PER SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2., DESIGN CRITERIA FOR THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, DATED JANUARY 1993.

SITE AREA: 0.33 ACRE
PRECIPITATION ZONE: THREE (3) TABLE A-1.

PEAK INTENSITY: IN./HR. AT T = TWELVE (12) MINUTES, 100-YR. =5.38 LAND TREATMENT FOR THE CALCULATION OF "Q", TABLES A=8 & A-9.

"LAND TREATMENT FACTORS", TABLE A-4.

EXISTING CONDITIONS:

•	TREATMENT	<u>C</u>	AREA/ACRES		FACTOR		CFS
	С		0.01	X	3.45	= '	0.03
	Ď		0.32	X	5.02	. =	1.61
	$^{n}Q_{p}^{n} = \underline{1}$.64 CFS					

PROPOSED DEVELOPED CONDITIONS: AREA/ACRES TREATMENT 0.10 0.03 3.45 0.30 1.51 5.02

 $"Q_{D}" = 1.61 \text{ CFS}$

**** DECREASE OF FLOWS = 0.03 CFS

GENERAL NOTES:

- 1.) NO PERIMETER BOUNDARY CORNERS HAVE BEEN FIELD ESTABLISHED PER THIS SURVEY OF THE SUBJECT PROPERTY.
- 2.) NO SEARCH HAS BEEN MADE FOR EASEMENTS OF RECORD OTHER THAN SHOWN ON THE PLAT OF RECORD.
- 3.) TOPOGRAPHY SURVEY INFORMATION PROVIDED BY TORRES SURVEYING COMPANY, ALBUQUERQUE, NEW MEXICO.
- 4.) CONTRACTOR IS TO PROVIDE POSITIVE SLOPE AWAY FROM ALL STRUCTURES.
- 5.) REFER TO "ARCHITECT'S SITE PLAN" FOR LAYOUT DIMENSIONS OF

PROPOSED IMPROVEMENTS.

NOTE: PER CITY OF ALBUQUERQUE FLOOD ORDINANCE THE PROPOSED FINISHED FLOOR ELEVATION OF THE PROPOSED BUILDING STRUCTURE WAS ESTAB-LISHED AT 2.0' ABOVE THE HIGHEST CURB FLOWLINE ELEVATION WHERE POTENTIAL FLOODING CONDITIONS WOULD OCCUR; FLOOD HAZARD INSUR-ANCE MAY BE REQUIRED.

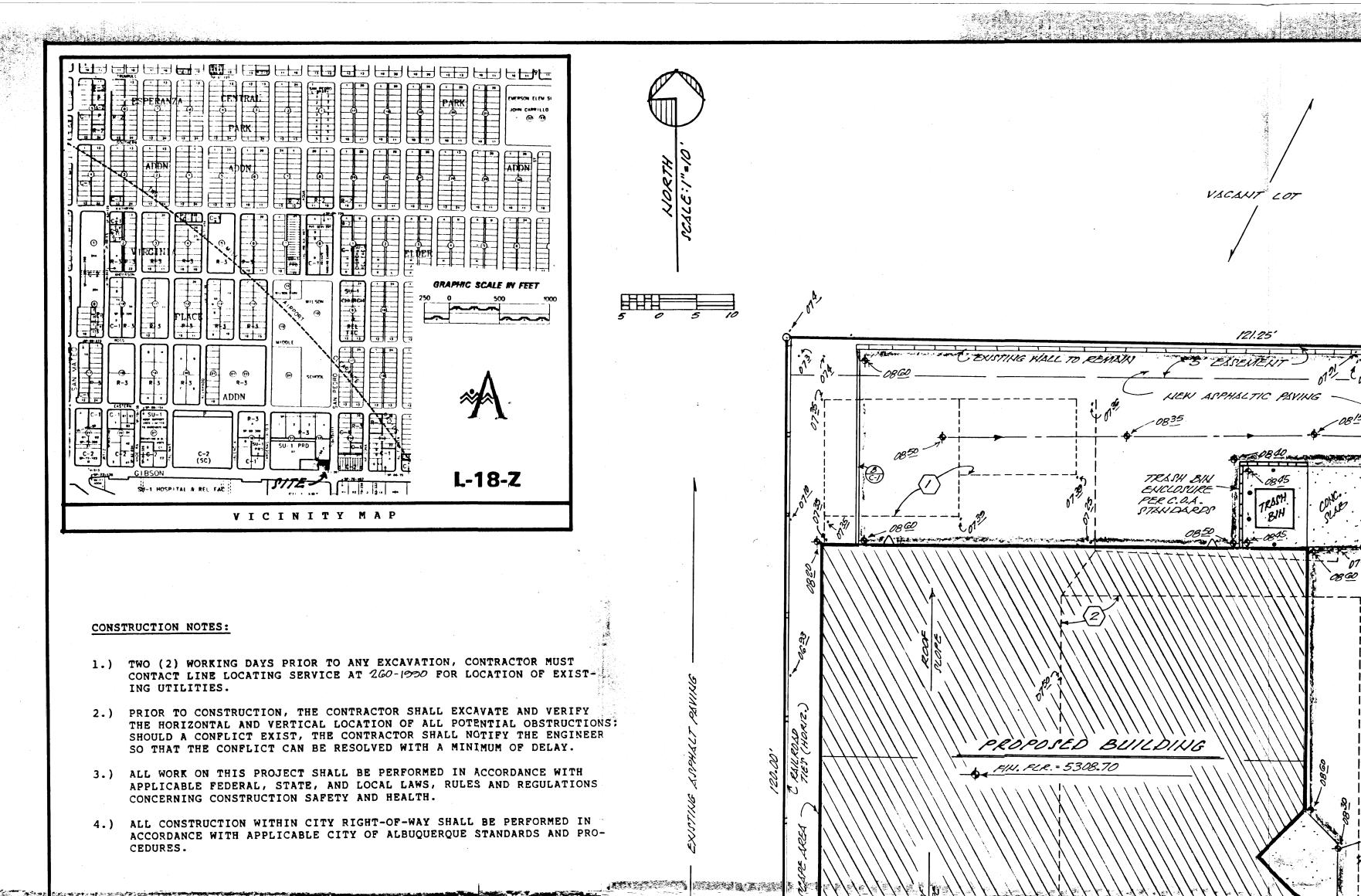


BRAKE MASTERS 5749 GIBSON BLVD. S.E. SLBUQUERQUE, NEW MEXICO

DECEMBER, 199G

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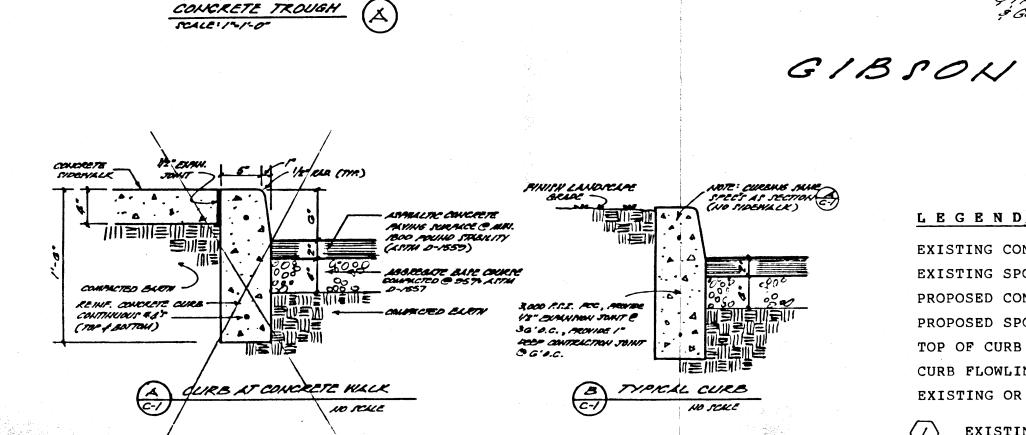
ENGINEER'S SEAL



EROSION CONTROL MEASURES:

THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT FOR STORM RUN-OFF DURING CONSTRUCTION; HE SHALL INSURE THAT THE FOLLOWING MEASURES ARE TAKEN:

- 1.) ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY CONSTRUCTION OF BERMS, DIKES, SWALES, PONDS, AND OTHER TEMPORARY GRADING AS RE-QUIRED TO PREVENT STORM RUNOFF FROM LEAVING THE SITE AND ENTERING ADJACENT PROPERTIES.
- 2.) ADJACENT PUBLIC RIGHT-OF-WAYS SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUNOFF FROM THE SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER PUBLIC STREETS.
- 3.) THE CONTRACTOR SHALL IMMEDIATELY AND THROUGHLY REMOVE ANY AND ALL SEDIMENT WITHIN PUBLIC STREETS THAT HAS BEEN ERODED FROM THE SITE AND DEPOSITED THERE.



LEGEND:

G' CONC. SIDENISCK

EXISTING CONTOUR = (NOT SHOWN, FLAT SITE)

CLOSE PORTION OF EXIST CURB CUT

& PROVIDE REQUIRED SIDEWALK, CURB

PROPOSED CONTOUR = --- 08.0 PROPOSED SPOT ELEVATION = 4 08 60 TOP OF CURB ELEVATION = TC = 06.26

EXISTING OR PROPOSED CONCRETE =

CURB FLOWLINE ELEVATION = # 05.G/

ROOF DRAIN -08GD DOWNSPORT

HEW CONC. DRIVERSD.

PROVIDE LIEKI 30' CURB CUT

EXISTING BUILDING STRUCTURE AND CONCRETE TO BE REMOVED.

EXISTING BUILDING, GAS PUMP ISLANDS, AND CONCRETE TO BE REMOVED.

EXISTING CONCRETE, ASPHALT PAVING, GAS STORAGE TANKS, ETC., TO BE REMOVED

VACANT COT

MEN ASPHALTIC PAYING

FIN.FLR.=5308.70

L-----<u>-</u>----

EXIST. G'CONC. SIDEKINLK

-TYPICAL CURB & GUTTER

I ASPHALTIC PAVING

BLVD.

.06.25

ENCLOSURE PER C.O.A. STENDERDS SKILLE E

TRACT "C"

CLOSE EXIST. CURB CUT

CURB & GUTTER

TRACT LETTERED "C" OF THE REPLAT OF EAST 121.25' OF

THE SOUTH 150.0' OF BLOCK THIRTY-TWO (32), VIRGINIA

PLACE ADDITION, ALBUQUERQUE, BERNALILLO COUNTY, NEW

ACS STATION "20-L18", LOCATED AT THE NORTHEAST CORNER

OF GIBSON BLVD. S.E. AND SAN PEDRO DRIVE S.E.; M.S.L.

DATUM ELEVATION = 5307.700, (PROJECT BENCH MARK AS

S.E.

LEGAL DESCRIPTION:

BENCH MARK, REFERENCE:

SHOWN ON THE PLAN HEREON).

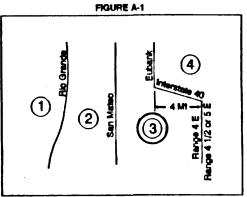
MEXICO.

AND PROVIDE HEN SIDEKILL

A.1 PRECIPITATION ZONES

Bernalillo County's four precipitation zones are indicated in TABLI A-1 and on

	TABLE A-1. PRECIPITATION ZONES						
Zone	Location						
1	West of the Rio Grande						
2	Between the Rio Grande and San Mateo						
3	Between San Mateo and Eubank, North of Interstate 40; and between San Mateo and the East boundary of Range 4 East South of Interstate 40						
4	East of Eubank, North of Interstate 40; and East of the East boundary of Range 4 East, South of Interstate 40						



use the zone the largest portion of the watershed,

TABLE A-4. LAND TREATMENTS acted by human activity with 0 to 10 percent slope tive grasses, weeds and shrubs in typical densities with mit (desert tandscaping). Impated tewns and parks with slopes great compacted by human activity with slopes at 20 percent or greate Native grass, weed and shrub areas with clay or clay loam soils and other soils of very low permeability as classified by SCS Hydrologic D Impervious areas, pavement and roofs. treatments, measure respective subareas. In lieu of specific measure treatment D, the areal percentages in TABLE A-5 may be employed.

DPM SECTION 22.2 - HYDROLOGY

TABLE A-10. P	EAK INTENSITY (IN/HR at	ic = 0.2 Hour)
Zone	Intensity	100-YR [2-YR, 10-YR]
1	4.70 [1.84, 3.14]	
2	5.05 [2.04, 3.41]	
3	5.38 [2.21, 3.65]	
4	5.61 [2.34, 3.83]	

		TABLE A-9.	PEAK DISCHAR	GE (cfs/acre)			
			Treatment				
	Zone	A	В	С	D		
	1	1.29 [0.00, 0.24]	2.03 [0.03, 0.76]	2.87 [0.47, 1.49]	4.37 [1.69, 2.89]		
	2	1.56 [0.00, 0.38]	2.28 [0.08, 0.95]	3.14 [0.60, 1.71]	4.70 [1.86, 3.14]		
	3	1.87 [0.00, 0.58]	2.60 [0.21, 1.19]	3.45 [0.78, 2.00]	5.02 [2.04, 3.39]		
J	4	2.20 [0.05, 0.87]	2.92 [0.38, 1.45]	3.73 [1.00, 2.26]	5.25 [2.17, 3.57]		

DRAINAGE COMMENTS AND CALCULATIONS:

AS SHOWN ON THE VICINITY MAP HEREON, THE SUBJECT SITE IS LOCATED AT THE NORTHWEST INTERSECTION OF GIBSON BLVD. S.E. AND SAN PEDRO DRIVE S.E., IN THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.

THE SUBJECT SITE, 1.) IS PRESENTLY A FULLY DEVELOPED COMMERCIAL SITE THAT IS NOT OCCUPIED AT THE PRESENT TIME, 2.) ACCORDING TO F.E.M.A. FLOODWAY AND FIRM PANEL 36 OF 50 IS TOTALLY LOCATED WITHIN A DESIGNATED FLOODPLAIN SHOWN AS A AO-1' DEPTH, 3.) DOES NOT CONTRIBUTE AND WILL NOT CONTRIBUTE TO THE OFF-SITE FLOWS OF THE ADJACENT PROPERTIES, 4.) DOES NOT ACCEPT OFFSITE FLOWS FROM ADJACENT PROPERTIES, 5.) DOES NOT ADJACENT TO A NATURAL OR ARTIFICIAL WATER COURSE, 6.) IS TO FREE DISCHARGE THE PROPOSED DEVELOPED FLOWS INTO THE AD-JACENT PUBLIC STREETS SHOWN ON THE PLAN HEREON, SAID FLOWS WILL NOT AGGRAVATE THE FLOODING CONDITIONS IN SAID STREETS, (REFER TO CALCULATIONS HEREON).

PER SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2., DESIGN CRITERIA FOR THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, DATED JANUARY 1993.

SITE AREA: 0.33 ACRE

PRECIPITATION ZONE: THREE (3), TABLE A-1.

PEAK INTENSITY: IN./HR. AT T = TWELVE (12) MINUTES, 100-YR. =5.38 LAND TREATMENT FOR THE CALCULATION OF Q", TABLES A-8 & A-9. "LAND TREATMENT FACTORS", TABLE A-4.

FYISTING CONDITIONS:

1	EXISTING CONDITIO			ş.		
	TREATMENT	AREA/ACRES		FACTOR		CFS
	С	0.01	X'	3.45	=	0.03
\$. ·	D	0.32	X	5.02	=	1.61
ģ.						

 $"Q_D" = 1.64 \text{ CFS}$

* <u>P</u>	ROPOSED DEVELO	PED CONDITIONS:				
T	REATMENT	AREA/ACRES		FACTOR		CFS
	С	0.03	X	3.45	= ;	0.1
	D	0.30	X	5.02	=	1.5

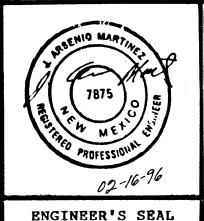
 $Q_{p} = 1.61 \text{ CFS}$

**** DECREASE OF FLOWS = 0.03 CFS

GENERAL NOTES:

- 1.) NO PERIMETER BOUNDARY CORNERS HAVE BEEN FIELD ESTABLISHED PER THIS SURVEY OF THE SUBJECT PROPERTY.
- 2.) NO SEARCH HAS BEEN MADE FOR EASEMENTS OF RECORD OTHER THAN SHOWN ON THE PLAT OF RECORD.
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FEB 2 0 1996



BRAKE MASTERS

GRADING & DRAINAGE PLAN

5749 GIBSON BLVD. S.E. ALBUQUERQUE, NEW MEXICO FEBRUARY, 1996