FILE COPY

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

April 18, 1990

Victor Chavez, P.E.
Chavez-Grieves Consulting Engineers
4600-C Montgomery Boulevard, NE
Albuquerque, New Mexico 87109

RE: REVISED CONCEPTUAL DRAINAGE PLAN FOR WYOMING COMMERCIAL COMPLEX (E-19/D25C) REVISION DATE APRIL 2, 1990

Dear Mr. Chavez:

Based on the information provided on your resubmittal, revision as indicated, is acceptable for Site Development approval.

On the previous letter identifing the concerns for building permit approval, please include the following:

1. Based on the required configuration for capacity of the proposed rip-rap channel on the south side of the property, please provide a typical section with all the required dimensions. Also include the north right-of-way line on the plan drawing.

2. Please provide the hydraulics for the proposed rip-rap channel.

3. Please indicate the platted property lines on your resubmittal.

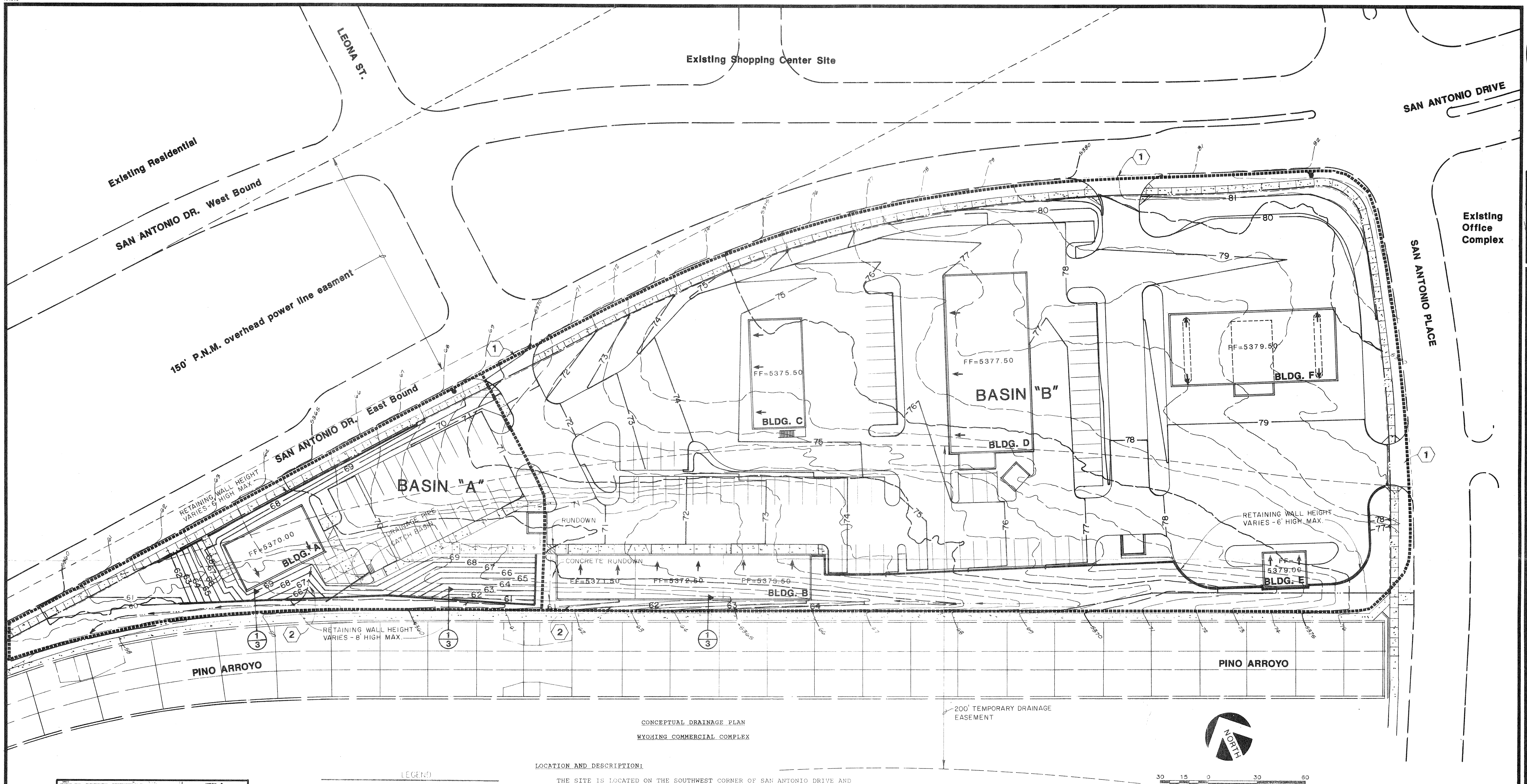
4. If phasing is going to be implemented, we will require a site specific plan for each site within each tract.

If I can be of further assistance, please feel free to call me at 768-2650.

Cordially,

for Bernie J. Montoya
Fred J. Aguirre, P.E.
Hydrologist

BJM:FA/bsj
(WP+1676)



CONCEPTUAL DRAINAGE PLAN

WYOMING COMMERCIAL COMPLEX

LOCATION AND DESCRIPTION:

THE SITE IS LOCATED ON THE SOUTHWEST CORNER OF SAN ANTONIO DRIVE AND SAN ANTONIO PLACE N.E. WITHIN UNIT 3, BELLAMAH'S LOMA DEL NORTE SUBDIVISION IN ALBUQUERQUE, NEW MEXICO. THE SITE, CONTAINING APPROXIMATELY 3.37 ACRES, IS PRESENTLY UNDEVELOPED. EXISTING SLOPES ARE FROM THE EAST TO THE WEST. THE SITE IS NOT LOCATED WITHIN A FLOOD PLAIN.

EXISTING CONDITIONS:

PRESENTLY, RUNOFF FROM THE SITE DISCHARGES TO THE PINO ARROYO THROUGH CONCRETE RUNDOWNS. NO OFF-SITE FLOWS ENTERS THE SITE DUE TO EXISTING ELEVATIONS.

PROPOSED CONDITIONS:

PROPOSED DEVELOPMENT OF THE SITE INCLUDES NEW BUILDINGS WITH RELATED PARKING AND LANDSCAPING. DUE TO PROPOSED DEVELOPMENT, RUNOFF FROM THE SITE WILL INCREASE FROM 7.12 CFS TO 12.87 CFS. THE FLOWS WILL BE ROUTED TO EXISTING RUNDOWNS AT THE PINO ARROYO.

CALCULATIONS:

Area = 3.37 acres
I = 2.2 in./hr. Plate 22.2 D-2
6-hour, 100-year rainfall = 2.4 in. Plate 22.2 D-1
i = (2.2)(2.4) = 5.28 in./hr.

EXISTING ON-SITE CONDITIONS:

SURFACE TYPE	"C" VALUE	A (ACRES)	COMPOSITE "C"X A	"C"=CXA/A
Streets, Drives, Walks	0.95			
Roofs	0.90			
Lawns & Landscaping	0.25			
Undeveloped	0.40	3.37	1.35	
TOTAL		3.37	1.35	0.40

Q(100) = (0.40)(5.28)(3.37) = 7.12 cfs
Q(10) = (0.657)(7.12) = 4.68 cfs
CN = 68 Plate 22.2 C-2
Direct Runoff = 0.3 in. Plate 22.2 C-4
V(100) = (0.3)(3.37)(43560)/12 = 3670 cu. ft.
V(10) = (0.657)(3670) = 2411 cu. ft.

PROPOSED ON-SITE CONDITIONS: BASIN "A"

SURFACE TYPE	"C" VALUE	A (ACRES)	COMPOSITE "C"X A	"C"=CXA/A
Streets, Drives, Walks	0.95	0.24	0.23	
Roofs	0.90	0.04	0.04	
Lawns & Landscaping	0.25	0.34	0.09	
Undeveloped	0.40	0.00	0.00	
TOTAL		0.62	0.35	0.56

Q(100) = (0.56)(5.28)(0.62) = 1.83 cfs
Q(10) = (0.657)(1.83) = 1.20 cfs
CN = 0.75 Plate 22.2 C-2
Direct Runoff = 0.5 in. Plate 22.2 C-4
V(100) = (0.5)(0.62)(43560)/12 = 1125 cu. ft.
V(10) = (0.657)(1125) = 739 cu. ft.

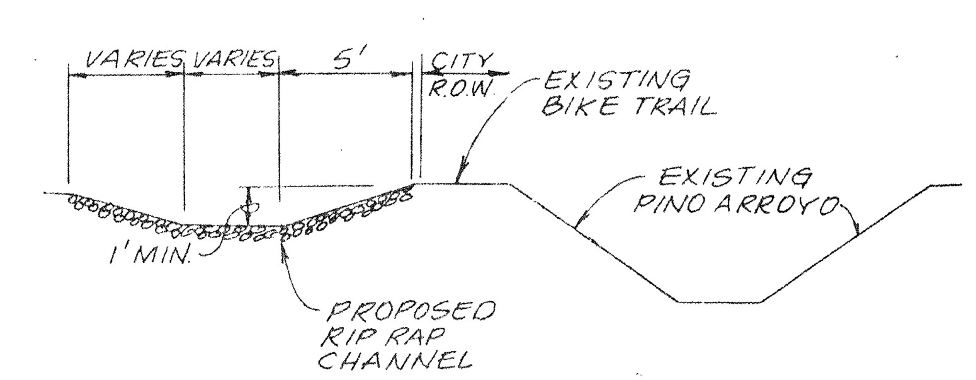
PROPOSED ON-SITE CONDITIONS: BASIN "B"

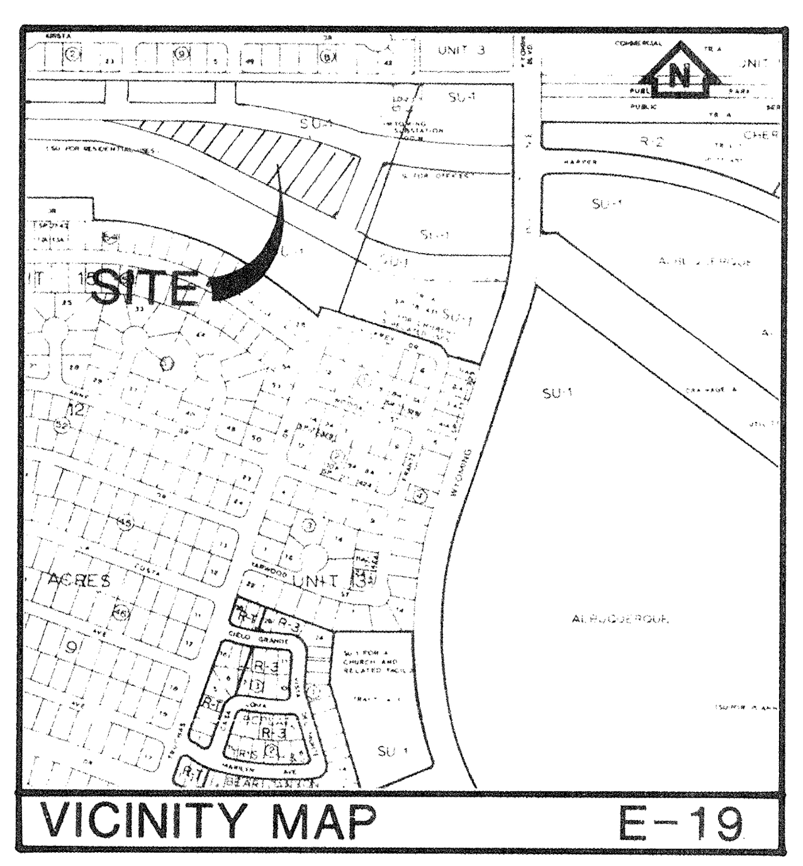
SURFACE TYPE	"C" VALUE	A (ACRES)	COMPOSITE "C"X A	"C"=CXA/A
Streets, Drives, Walks	0.95	1.61	1.53	
Roofs	0.90	0.42	0.38	
Lawns & Landscaping	0.25	0.72	0.18	
Undeveloped	0.40	0.00	0.00	
TOTAL		2.75	2.09	0.76

Q(100) = (0.76)(5.28)(2.75) = 11.04 cfs
Q(10) = (0.657)(11.04) = 7.25 cfs
CN = 0.80 Plate 22.2 C-2
Direct Runoff = 0.80 in. Plate 22.2 C-4
V(100) = (0.80)(2.75)(43560)/12 = 7986 cu. ft.
V(10) = (0.657)(7986) = 5246 cu. ft.

KEYED NOTES

1. 1' HIGH WATER BLOCK
2. RIP RAP CHANNEL





VICINITY MAP E-19

LEGEND

DESCRIPTION	NEW	EXISTING
PROPERTY LINE		
EASEMENT		
BUILDING		
CURB & GUTTER		
CURB		
VALLEY GUTTER		
SIDEWALK & CONC. SLAB		
CONTOUR	50	50
SPOT ELEV	TC 50.00 FL 50.00	~
BASIN LINE		~
ROOF DRAINS		~

LEGAL DESCRIPTION

TRACT 3, UNIT 3, BELLAMAH'S LOMA DEL NORTE SUBDIVISION.

BENCHMARK

THE STATION IS A STANDARD ACS BRASS CAP STAMPED "6-D19-1978", SET ON TOP OF A CONCRETE POST FLUSH WITH THE GROUND LOCATED AT THE NORTHWEST CORNER OF SAN ANTONIO DR. AND WYOMING BLVD. N.E.
ELEVATION = 5403.54 FT.

SURVEY DATA

SURVEY DATA PROVIDED BY ANDREWS, ASBURY & ROBERTS, ALBUQUERQUE, NEW MEXICO.

THE PROJECT BENCHMARK IS LOCATED ON THE SOUTHWEST CURB RETURN OF SAN ANTONIO DR. AND SAN ANTONIO PL.
ELEVATION = 5382.63 FT.

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Telephone: (505) 765-1020

VICTOR J. CHAVEZ, STATE OF NEW MEXICO, REGISTERED PROFESSIONAL ENGINEER 5713

PROJECT
WYOMING COMMERCIAL COMPLEX
SAN ANTONIO DRIVE & SAN ANTONIO PLACE N.E.
Albuquerque, New Mexico

REVISIONS

DATE 1-26-90

SHEET TITLE
GRADING & DRAINAGE PLAN