HYDROLOGY G11/D2 ONE PLAN

G11-D2

1 PLAN

LEVERTON ENGINEERING

4022-H RIO GRANDE BLVD., N.W.
ALBUQUERQUE, NEW MEXICO 87107
(505) 345-5479

March 3, 1978

Mr. Bruno Conegliano
Asst. City Engineer, Hydrology
Public Works Department

Re: Drainage Plan
Katherine Village Addition
Zone Atlas G-11

Dear Mr. Conegliano;

The following drainage study and plan for the captioned subdivision is respectfully submitted for your consideration and your approval is requested.

Attached are:

1. A sketch of the area showing upland or off-site drainage patterns which contribute storm water run off to the general area of the subject subdivision.
2. A drawing of the subdivision which indicates the existing topography, the planned lotting, and street improvements. Upon this we have imposed the effect of the planned grading which will result in the drainage patterns and quantities of storm water flow indicated.

For the purposes of this study we used a 2.65 inch per hour rainfall, the rational formula to determine resultant run-off there from; determined rainfall intensity "i" by reference to the "Sellye" nomograph, and assigned values to the run-off coefficient "c" according to the nature and shape of the run-off surface involved.

The salient features of the drainage plan which evolved during the course of the study are:

1. Lots shall be graded to drain from the front of the dwelling at the 20' street set back line to the rear to effect rear yard storm water retention.
2. The finished grade of the subdivision along the easterly boundary shall be established a minimum of 8" above the existing ground to preclude the small amount of upland drainage from entering.
3. Lots 1, 2, & 3 in Block 1 shall not be used for construction of dwelling units with the area being given over to use as a drainage management pond. The pond shall have a no-free-board volume of at least 16,000 cubic feet with a maximum depth of 2.5'.

This drainage study and plan demonstrates the following:

1. There will be less storm water run-off as the result of a 100 year frequency storm <u>after</u> development than in the natural state.

Present run-off 19.4 acres total
i = 3.8
c = o.35 Q = <u>25.8 cfs</u>

Run-off after development:

The sum of the run-off from the 10 sub drainage areas shown minus the Q directed to the storage basin is 24.5 cfs.

It should be noted that a summation of the Q from these relatively small areas results in a Q which corresponds to point rainfall which is greater than would be calculated considering the entire subdivision.

2. The volume of runoff after development resulting from a 100 year storm will be decreased as compared to the natural state.

   Volume of run-off from the 10 sub areas shown after development:

   9.4 acres total drainage area
   Coefficient of run-off-0.60
   2.65 inches of rainfall

   Vol = 9.4 X 0.60 X 43560 X 2.65/12 = 54,250 cubic feet
   minus 16,000 cubic feet directed to storage
   Net volume after development is 38,250 cubic feet.

   Volume of run off prior to development

   19.4 acres
   Coefficient of run-off-0.35
   2.65 inches of rainfall

   Vol = 19.4 X 0.35 X 43560 X 2.65/12 = 65,300 cubic feet.

3. The hydraulic capacity of the streets built to the standard residential street City standard section of 32' with 8" curbs at the minimum grade planned of 0.0030 will be in excess of that required to convey the run-off of a 100 year storm. Thus, homes may be built within the subdivision will not be damaged by a 100 year storm.

4. Rear yard storm water retention ponds to be built to contain a volume of 300 cubic feet.

If you should require further information or discussion please let me know.

John G. Leverton
PE No. 1874

Attachments

City of Albuquerque
P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

April 3, 1978

John Leverton
Leverton Engineering
4022H Rio Grande Blvd.,NW
Albuquerque, New Mexico

RE: Katherine Village Addition

Dear Mr. Leverton:

I have reviewed the drainage report for the above referenced addition and I am in agreement with the concepts submitted.

The drainage report is therefore hereby approved.

Very truly yours,

Bruno Conegliano
Asst. City Engineer-Hydrology

cc; V.M. Kimmick
Jim Smith
Drainage file

City of Albuquerque
P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

July 18, 1978

611-D2

Mr. John Leverton
4022-H Rio Grande Blvd. N.W.
Albuquerque, N.M. 87107

SUBJECT: TEST TURNKEY PROJECT WORK AUTHORIZATION #T-8
KATHERINE VILLAGE SUBDIVISION

Dear Mr. Leverton:

Under the provisions of the Test Turnkey Project procedures, this letter is the Work Authorization to begin field work on the project.

Sincerely,

V. M. Kimmick
City Engineer

VMK/fs

cc - H. R. Orr
Kent Nowlin Construction Co.
Ray Dawson
Water Resources
Dwayne Sheppard
Bob Kielich
LaMonte Urban
Bruno Conegliano
Bill Mueller

City of Albuquerque
P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

MAYOR
David Rusk

July 28, 1980

G11-D2

Mr. Misch Lehrer
Katherine Village Association
3429 Abbey Court N. W.
Albuquerque, New Mexico

Re: Drainage Management Basin (Katherine Village)

Dear Mr. Lehrer:

On July 9, 1980 a field inspection of the above reference site was made after a complaint was filed with our office. Our field inspection has found some concerns with the Management Basin on the southeast corner of the subdivision. The following concerns are:

1. The Management Basin is suppose to hold a certain amount of runoff from within the subdivision and at the same time percolate into the ground. Our field inspections indicate that this is not the case.

2. On the northeast corner of the Basin unauthorized changes have been made which alters the approved scheme which could very well cause damages to the adjacent property owner.

3. Street runoff is ponding within the intersection of Corona Drive and Redlands Road. This was not the intent. The storm runoff was intended to enter the Basin.

Since your association is responsible for this Basin, we must therefore hold you accountable for these problems.

If you have any questions, feel free to contact our office at your convenience.

Sincerely yours,

Bernie J Montoya

Bernie J Montoya
Hydrologic Engineering Technician

BJM:pp
cc: R. Heller
B. Conegliano

MUNICIPAL DEVELOPMENT DEPARTMENT
Richard S. Heller, P.E., City Engineer ENGINEERING DIVISION Telephone (505) 766-7467

August 9, 1980

(E11-D2)

Mr. Richard S. Heller
City Engineer
Municipal Development Department
Public Works Division
P.O. Box 1293
Albuquerque, New Mexico 87103

RE: COMMUNITY PONDING FACILITY - KATHERINE VILLAGE UNIT I

Dear Mr. Heller:

I have recently received a letter from Mr. Bernie Montoya of your office regarding the referenced subdivision (copy enclosed), the problems of which I am sure you are aware of. In response to this letter I have the following concerns:

1) Mr. Montoya has seemingly ignored the fact that a) it was in fact the City of Albuquerque who required that Mr. Roberson construct the referenced ponding facility to begin with, b) under the City's review process the construction plans for this pond were processed and subsequently approved and, c) the physical construction of the pond was ostensibly inspected by the City to assure that this construction was in accordance with the approved plans.

2) Based on these items, one would ask Mr. Montoya why the pond is not functioning properly after both the design and construction were both reviewed by the City. In addition, Mr. Montoya seems unwillingly to accept the fact that it is the City of Albuquerque who has perpetrated the myth that within a 24-hour time frame the storm water in these ponds would percolate into the soil, while any layman can see from the myriad of ponds in Albuquerque that this is in fact not the case. Rather these facilities become open sewers. As a consequence, one would also ask why the pond was allowed to be constructed with no facilities for outfall.

3) Mr. Montoya also seems to refuse to accept the responsibility on behalf of the City for these items ennumerated above. I think what he fails to realize is that it was the City's policies which led to the creation of the facility and on behalf of the community in general it is the City's responsibility to make an attempt to rectify a problem which has in effect been created by the City.

At any rate, our community association is very disturbed about the City's cavalier attitude towards this problem, particularly when we receive responses to our problems such as that found in Mr. Montoya's correspondence.

August 9, 1980

We have made an honest attempt to have these problems rectified and unfortunately see no other recourse at this point but to proceed with our concerns to our City Councilor and also the Mayor if necessary.

Should you have any response to our concerns, we would greatly appreciate it if you would contact me.

Sincerely,

Misch Lehrer

MISCH LEHRER
Katherine Village Association
3429 Abbey Court, N.W.
Albuquerque, New Mexico 87120

0116

CITY OF ALBUQUERQUE

ALBUQUERQUE, NEW MEXICO

INTER-OFFICE CORRESPONDENCE August 13, 1980 REF. NO. _____

G11-D2

RECEIVED
AUG 15 1980
CITY ENGINEER

TO: Richard Heller, City Engineer

FROM: George E. Paul, Street Maintenance Engineer GEP

SUBJECT: CONTINUOUS MAINTENANCE PROBLEM

At the Kathryn Village Subdivision of Redlands N. W., Street Maintenance was requested by you and Bruno Conegliano to pump out a "community pond". We were informed that this would be a one-time operation and that other arrangements would be made in the future.

It turned out that with a high fence completely around the pond and no gate or access, we had a very difficult time pumping down this pond in any event. Furthermore, the pond refills every night as a result of lawn watering by the residents of the area and the subsequent waste of water.

If you recall, the Street Maintenance budget was cut by approximately $225,000 and were reduced to only one water truck. Technically, we do not have any facilities for pumping whatsoever and are doing this on an emergency basis. Obviously, we cannot continue to pump out that one community pond on a daily basis, or even weekly basis.

Please give this item your early attention and see if a more workable solution can be achieved since the basic concept was approved in the Municipal Development Department.

cc: E. L. Beck, Director of Transportation
G. D. Davenport, Director of M. D. D.
Avenago Valles, Acting Supt. / Fred Chavez, Unpaved St. Mnt. Foreman

GEP/sgt

Bruno - I don't see a "Community pond" on the plat - how cum it's a City maint. Responsibility?

RSH	RSH	ADM	
HRO		SUR	
CDS		COUN	
DES		SEC	
INSP		FILE	
HYDRO		RETURN	

Please handle

DRAFT

August 15, 1980

G11-02

AMAFCA TENTATIVE
CONSTRUCTION SCHEDULE

FUNDS AVAILABLE	MILLIONS OF DOLLARS	BEGIN CONSTRUCTION
Mariposa Phase I; Design, Land Acquisition, etc.	3	Jan. '81
~~North Domingo Baca~~ Design, Land Acquisition, Contingencies	1	
	4	
FIRST BOND ISSUE (Jan. '81)		
Westgate Phase I	2	Jun. '81
North Domingo Baca Dam	2	Nov. '81
Mariposa Phase II[1]	0.5	Jun. '82
South Valley ~~Pumping Station~~ Drainage Phase I[2]	1	Jan. '83
Contingencies Amole del Norte (City Funds)	1.5	
	8	
SECOND BOND ISSUE (Fall '83)		
Westgate Phase II	2	Winter '83/4
Skyview Channel Phase I[1]	2	Spring '84
Camino Dam	3	Fall '84
Tramway Crossing(s)	1	
Tijeras Arroyo Drainage	1	
South Valley ~~Pump~~ Station Drainage Phase II[2]	1.5	
Contingencies	1.5	
	12	
FUTURE PROJECTS		
Piedras Marcadas	1.5	
Don Felipe, Raymac, & Dennison Park Dams	5	
Skyview Channel Phase II	1	
	7.5	

FOOTNOTES:

1. ~~Contingent on land availability~~ Drainage 2×10^6 City participation
2. Contingent on cooperation from others

DRAFT

PROJECT	79 BOND PERIOD (FY 81 & FY 82)	81 BOND PERIOD (FY 83 & FY 84)	83 BOND PERIOD (FY 85 & FY 86)	FUTURE PROJECTS
19. South Valley Pool Parking			25,000	
20. Northeast Heights Community Center			750,000	
TOTAL PER BOND ISSUE	$1,651,735	$1,826,749	$1,810,000	
~~SERVICES DEPARTMENT~~				
1. Convention Center Rehabilitation	$ 299,475			
2. Vehicle Maintenance Rehabilitation	83,663			
3. Vehicle Maintenance Expansion	42,501			
4. Building Space/Security/Satellite Planning	65,319			
5. Vehicle Maintenance Expansion		$ 617,806		
TOTAL PER BOND ISSUE	$ 485,959	$ 617,806		
MUNICIPAL DEVELOPMENT DEPARTMENT				
STORM DRAINAGE				
1. Paving District, Block-to-Block, Miscellaneous	$2,000,000	$ 2,200,000	$2,500,000	
2. Advance Engineering	800,000	550,000	550,000	
3. Community Development Areas	206,000	200,000		
4. Tramway East	650,000	750,000	750,000	
5. East Arroyos				
Advance Engineering	119,000	2,000,000	1,000,000	
Construction	319,000	360,000	300,000	
6. Crossing Structures	877,000	400,000		
7. Arroyo del Oso Dam Rehabilitation	700,000			
8. North Hahn & Julie Arroyos	4,214,500	1,164,500		
9. Wyoming Storm Sewer	-5-			

Need: 419.1 /each
For Vol 2 & 6/3

Living Res. Earth
Also must Recognize
way (N) Crossing
Structures

Paving Bacon I-25 to Carstow
Atrisco Business Park (Const & for Outlet) & Coronado N of I-40
Bear Arroyo around TVI (Juan Tabo Eubank)
Odelia Pond, San Mateo Brandes
X-ing Structures Wyo & Pino, Wyo & N. Pino

PROJECT	79 BOND PERIOD (FY 81 & FY 82)	81 BOND PERIOD (FY 83 & FY 84)	83 BOND PERIOD (FY 85 & FY 86)	FUTURE PROJECTS
10. Piedra Lisa Dam and Outlet	456,300	225,000		
11. Alameda Storm Drain				
Riverside Drain to I-40		2,500,000		
I-40 North	0		2,265,000	
12. Alameda Pump Station Construction		3,000,000		
13. Tijeras Arroyo: Rebuild Existing Crossg Struct.		214,000		
14. Pino Arroyo Improvements		695,000	500,000	
15. W. Mesa S. of Central/Snow Vista/Amole Arroyo		805,000		
16. Eubank System at Central		793,800		
17. San Antonio/Boca Negra/Mariposa System(NMFCA)		2,000,000		
TOTAL PER BOND ISSUE	$4,991,800	$16,692,800	$7,945,000	
~~TRANSPORTATION~~				
A. STREET MAINTENANCE				
1. Major Paving Rehabilitation	$3,640,000	$4,797,037	$3,333,621	
2. Repaving Major Intersections	900,000	2,000,000	1,500,000	
3. City-wide Storm Drainage Rehabilitation	842,600			
4. Expansion of Facilities Satellite	139,300			
5. Light Paving Construction for Dust Contr.	716,000			
6. Replace the Street Maintenance Division Heavy Equipment	806,000	959,600	599,000	
7. Development of Street Maintenance Satellite Station #4		30,000	[illegible]	
8. Development of Street Maintenance Satellite Station #5		251,000		
9. New Paving Maintenance Responsibilities		295,000	242,000	

Ithink should go to 1.6

Ph 2. - Relate to Pueblo del Norte A.M.A.F.C.A. commitment

2nd that - Split to put 1,000,000 to be left to complete AMAFCA (Aspen & Central Ave)

3rd that 300,000 Planning @ Central W. & I-7 San Antonio.

CITY OF ALBUQUERQUE

ALBUQUERQUE, NEW MEXICO

INTER-OFFICE CORRESPONDENCE September 3, 1980 REF. NO._____

TO: George Paul, Street Maintenance Engineer

FROM: Richard S. Heller, City Engineer RSH

SUBJECT: KATHRYN VILLAGE DRAINAGE

This memorandum is written to request that the ponding area at the Southwest corner of the Kathryn Village Addition be pumped from the surface water which has accumulated. A storm sewer is being designed to serve the area South of the Lands of University of Albuquerque to relieve the drainage problems, but the construction is not anticipated before next year. In the interim, it will be necessary to provide periodic removal of the waters conveyed by the public streets in the ponding area mentioned above, in order to remove the nuisance caused by the standing water.

Since the ponding has not worked as anticipated, my office will work with the Engineer for the Developer, Mr. John Leverton and with the Developer, Mr. Coda Roberson to investigate a possible means of improving the infiltration characteristics of the pond.

RSH/BC/tsl

cc: Bill Gooden, Mayors Office
John Leverton, Leverton Engineering
Coda Roberson, Developer

349

CITY OF ALBUQUERQUE

ALBUQUERQUE, NEW MEXICO

RECEIVED

INTER-OFFICE CORRESPONDENCE September 11, 1980 REF. NO._____

SEP 16 1980

CITY ENGINEER

TO: Richard Heller, City Engineer, Engineering Division

FROM: Edwin L. Beck, Director, Transportation Department

SUBJECT: KATHRYN VILLAGE DRAINAGE

The Street Maintenance Division is completely overloaded with emergency type flood and street repair work at this time.

As you are aware, the Division has eight less people to do street maintenance than they had last year.

I would recommend that the Developer hire a contractor to pump the pond out, as it may be sometime before personnel can be assigned from Street Maintenance Division.

ELB/lg

cc: George Paul, Street Maintenance Engineer, Street Maintenance
Bill Gooden, Community Liaison, Mayor's Office

RSH		ADM	
HRO		SUR	
CDS		COUN	
DES		SEC	
INSP		FILE	
HYDRO		RETURN	

c/ sent to Action

CITY OF ALBUQUERQUE
Albuquerque, New Mexico

From the office of . . .

Q. R. KIELICH
Asst. City Engineer-Design

17 Sep.

Bruno

Please inform developer of subject area that Street Maintenance cannot pump out their pond; therefore, the developer should accomplish the dewatering of the pond at his expense.

QK

[illegible] file
copy [illegible] file

DRAINAGE COMPLAINT REPORT

Jeweston

Location: Redlands, NW (East of Coors)

Project:

Reported by: Lisa Madison or Cheryl Martinez

Phone: 821-3511

Address: Vaughan Co.

Ext.

Complainant:

Phone

Address:

Ext.

Taken by: Brian Burnett

Date: 3/4/82

COMPLAINT: Neighbors in area have been complaining about the upkeep of a pond on Redlands (south side of street when travelling east on Redlands).

Referred to: B. Montoya

INVESTIGATION — Cause:

Recommendation:

Investigated by:

Date

We need to find out if we are responsible for the upkeep. I think it is a Roberson Subdivision. Thanks BGB

Plan No.

Sheet No.

Drainage Map

Approved

Date

Bernie

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

September 23, 1982

G11-D2

Mr. Coda Roberson
Roberson Property Management, Inc.
9212 Trumbull Ave. S.E.
Albuquerque, N.M. 87123

RE: COMMUNITY PONDING FACILITY - KATHERINE VILLAGE UNIT 1

Dear Coda:

I am writing in regards to the ponding facility located at the corner of Corona Dr. and Redlands Rd. which is used to store runoff generated by the Katherine Village Subdivision.

As you know, the pond stands water for extended periods of time because of poor infiltration characteristics and leaking upstream water services. In a recent phone conversation with Mr. Steve Smiley of Environmental Health, he expressed their concern about the health and maintenance problems associated with the ponded water. The City is working on the upstream problems, but this alone will not solve the problem.

We are very interested in formulating a solution to this problem. Please contact me to discuss the arrangements for conducting the work.

Very truly yours,

Charles M. Easterling
Princ. Asst. City Eng./Hydrology

CME/BGB/tsl

cc: Steve Smiley, Environmental Health Dept.
Bernie Montoya, Hydrology Dept.

DR

CITY OF ALBUQUERQUE

ALBUQUERQUE, NEW MEXICO

INTER-OFFICE CORRESPONDENCE

October 27, 1982

RECEIVED

OCT 28 1982

CITY ENGINEER

REF. NO. _____

G11-D2

TO: Brian Burnett, City Engineering/Hydrology

FROM: Stephen C. Smiley, Sanitarian II, Environmental Health and Energy SCS

SUBJECT: Ponding Facilities: Katherine Village, Unit I - Galles Oldsmobile Property

I am taking this opportunity to reaffirm the interest that this division has in reconciling the situation which has been shown to exist at both of the cited ponding facilities.

Further, I wish to make you aware of a recently implemented reorganization of Environmental Health and the creation of an Environmental Services Division, with responsibilities including Water Pollution, Hazardous Waste, and Vector Control. The Division Manager is William Allen, with water related areas handled by Chester Rail and hazardous wastes by Roy Anglada.

Perhaps, you might wish to include these individuals in problem solving or planning sessions on this or other similar circumstances.

Environmental Services may be reached at 766-7002 or at the Albuquerque Environmental Health & Energy Department offices at 924 Park S.W.

Thank you again for keeping me advised of your actions on behalf of the welfare of the citizens and of the environment in general.

Please do not hesitate to contact me if I may be of assistance to you.

SCS:cjp

xc: Dave E. Carpenter
Darrel Bone
William Allen

12/10/84

8 AM

G11-D21

Robinson
Jake Borodenko
Fred Jaquivac
Duane Sheppard

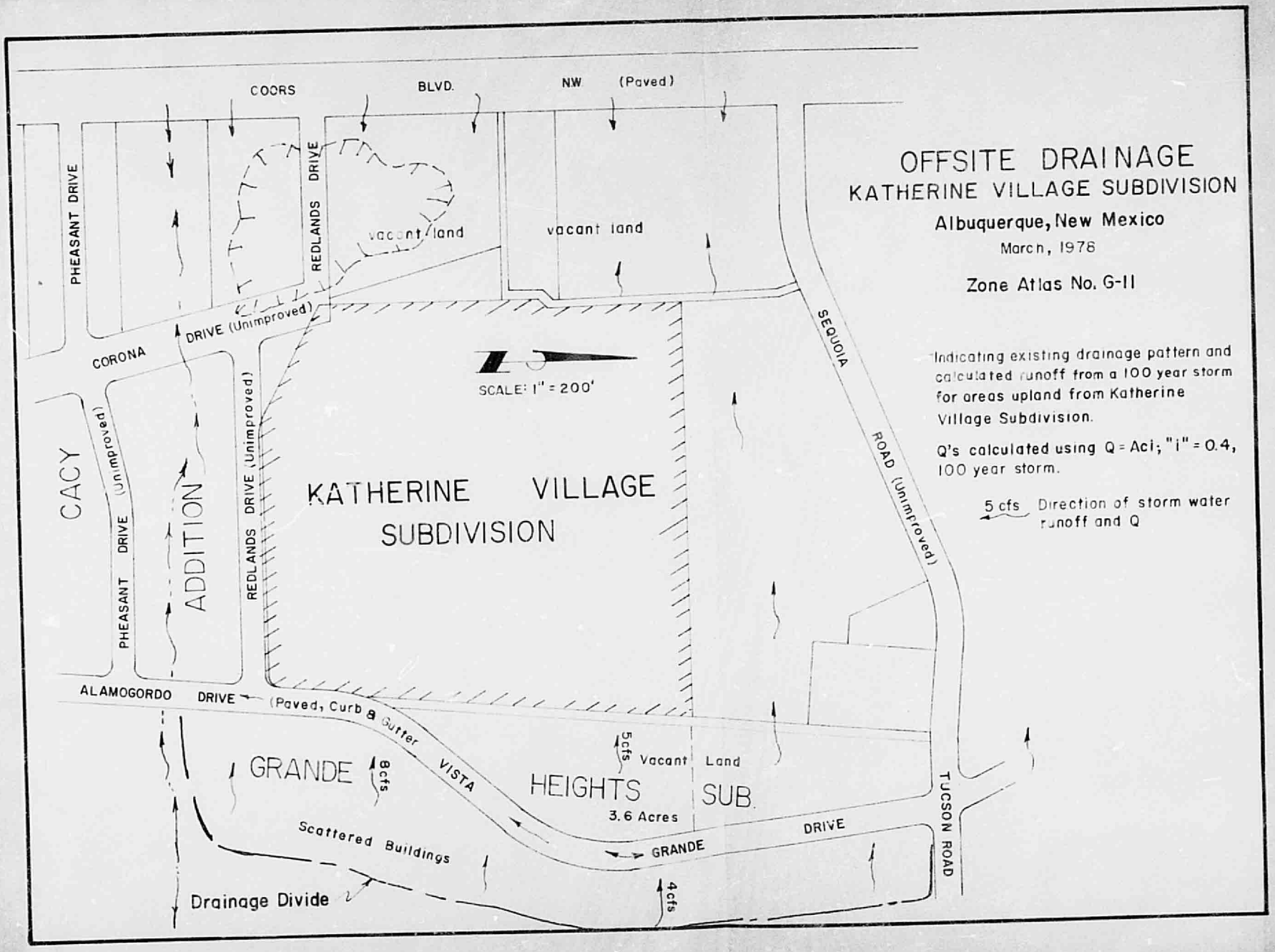
FNM Ponds

- CONVENAT FROM CODA W/ ENCROACHMENT FROM PUD TO COMM
route rough draft
The ~~two~~ one document referenced adequately (i.e. the covenant references the encroachment.)

- Joint Pond facility
1. Easement as provides route to legal
Concerns
- Hold Harmless
- maintenance responsibilities for the private facilities
-

- Rough Grading Two Phases
1 Phase exclude FNM Pond relocation
2. Phase include FNM pond relocation with ~~Pt~~ Phase III

FJA 12/10/84


OFFSITE DRAINAGE
KATHERINE VILLAGE SUBDIVISION
Albuquerque, New Mexico
March, 1978
Zone Atlas No. G-11
Indicating existing drainage pattern and calculated runoff from a 100 year storm for areas upland from Katherine Village Subdivision.
Q's calculated using Q = Aci; "i" = 0.4, 100 year storm.
5 cfs Direction of storm water runoff and Q
COORS BLVD. NW (Paved)
PHEASANT DRIVE
REDLANDS DRIVE
vacant land
vacant land
CORONA DRIVE (Unimproved)
SCALE: 1" = 200'
SEQUOIA ROAD (Unimproved)
CACY ADDITION
PHEASANT DRIVE (Unimproved)
REDLANDS DRIVE (Unimproved)
KATHERINE VILLAGE SUBDIVISION
ALAMOGORDO DRIVE (Paved, Curb & Gutter)
GRANDE VISTA HEIGHTS SUB.
8cfs
5cfs
Vacant Land
3.6 Acres
GRANDE DRIVE
TUCSON ROAD
Scattered Buildings
4cfs
Drainage Divide