C

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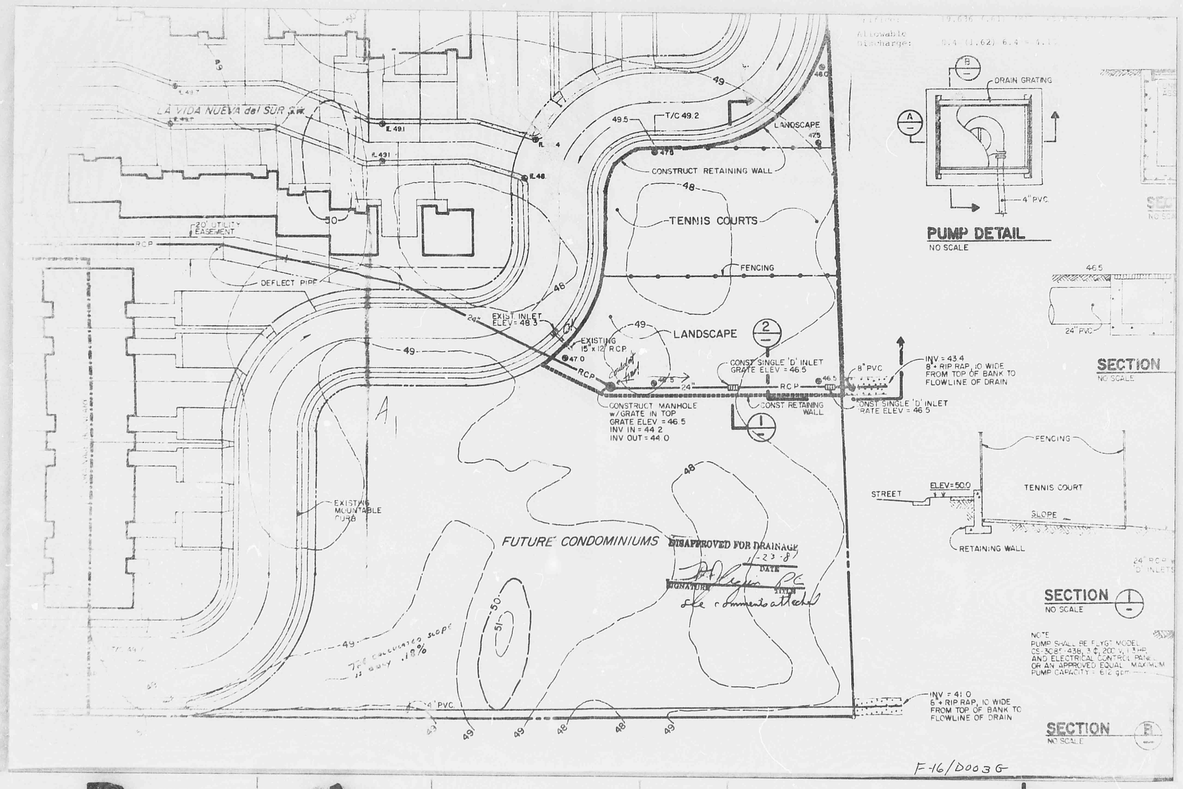

C

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R# 21 DATE 2-24-93 OP ESP

CITY OF ALBUQUERQUE

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Karen Acree

CITY CLERK RECORDER

OFFICIAL SEAL
NORBERTA SANCHEZ
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: MAY 8 1995

Norberta Sanchez

CITY OF ALBUQUERQUE
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PLANS/PLATS ON FILE

FILE DESC: F-16/D003G

PLANS/PLATS 3

C 20 B 16 A 12

CITY OF ALBUQUERQUE

C

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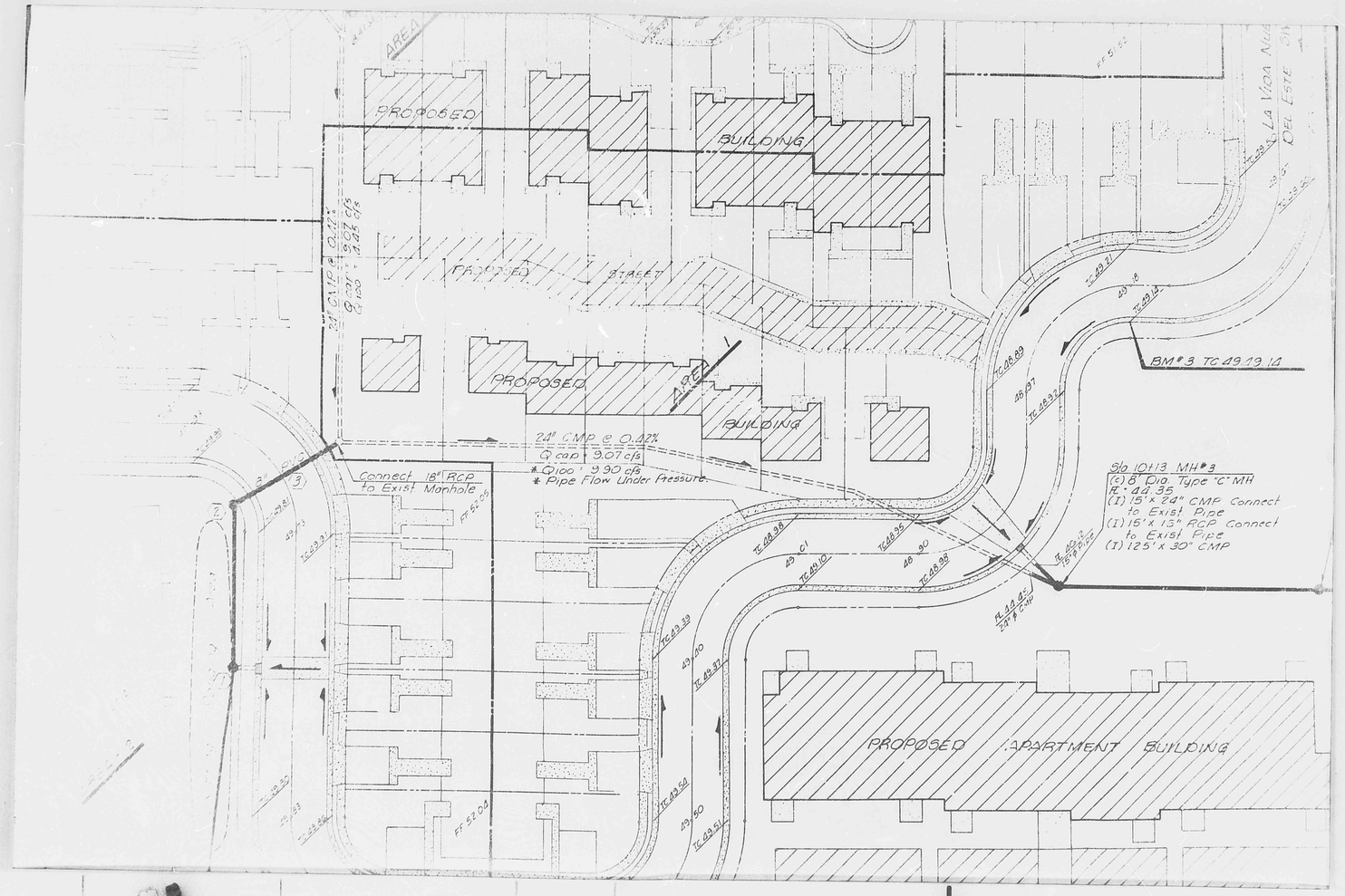

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Karen Acuna
CITY CLERK RECORDER

OFFICIAL SEAL
NORBERTA SANCHEZ
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: MAY 8 1995
Norberta Sanchez

B 16

A 12

CITY OF ALBUQUERQUE

DRAINAGE PLAN

LOCATION AND DESCRIPTION:

The site is located on Montbel Place N.E. in Albuquerque, New Mexico. This site is located within the Renaissance Center Subdivision. The site, containing approximately 1.0390 acres, is presently undeveloped. The site, which sits up from Montbel Place approximately 2 feet, slopes in two directions: The southern portion of the site slopes approximately 40 percent from south to north. The middle portion of the site slopes from east to west with grades of approximately 1.5 percent. This site is not located within a flood plain.

EXISTING CONDITIONS:

Presently, runoff from the site discharges to the east. No offsite runoff enters the site due to existing grades and elevations.

PROPOSED CONDITIONS:

Proposed development of the site includes a building with related parking and landscaping. A storm water retention pond will be incorporated into the development. This pond is required as outlined in the Master Drainage Report on the Renaissance Center by Andrews, Asbury & Roberts. A discharge rate of 0.1 cfs/acre is also specified. The proposed grading plan will direct runoff (ponded and unponded) to Montbel Place. Once in Montbel Place, the runoff will travel north where it will enter a detention facility constructed as a result of the Master Drainage Plan.

CALCULATIONS:

Area = 1.0390 acres
I = 2.2 in./hr. Plate 22.2 D-2
6-hour, 100-year rainfall = 2.2 in. Plate 22.2 D-1
i = (2.2)(2.2) = 4.84 in./hr.

EXISTING ON-SITE CONDITIONS:

SURFACE TYPE	"C" VALUE	A (ACRES)	"C"X A	COMPOSITE "C"=CXA/A
Streets, Drives, Walks	0.95			
Roofs	0.90			
Lawns & Landscaping	0.25			
Undeveloped	0.40	1.0390	0.4156	
TOTAL		1.0390	0.4156	0.40

Q(100) = (0.4)(4.84)(1.0390) = 2.0115 cfs
Q(10) = (0.657)(2.0115) = 1.3216 cfs
CN = 68 Plate 22.2 C-2
Direct Runoff = 0.55 in. Plate 22.2 C-4
V(100) = (1.0390)(0.55)(43560)/12 = 2074.4 cu. ft.
V(10) = (0.657)(2074.4) = 1,362.9 cu. ft.

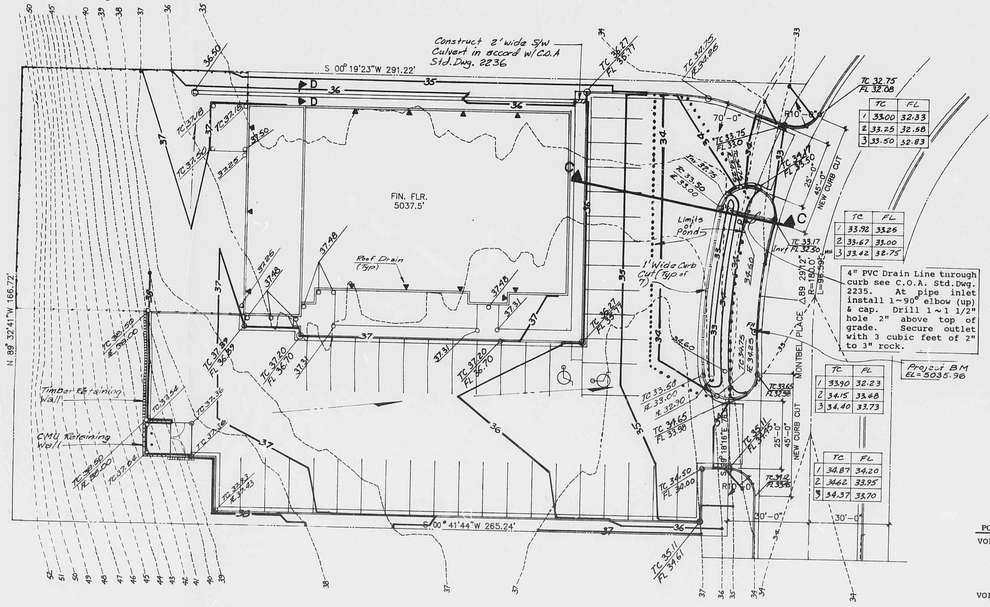
PROPOSED ON-SITE CONDITIONS:

SURFACE TYPE	"C" VALUE	A (ACRES)	"C"X A	COMPOSITE "C"=CXA/A
Streets, Drives, Walks	0.95	0.5242	0.4980	
Roofs	0.90	0.1983	0.1785	
Lawns & Landscaping	0.25	0.0562	0.0141	
Undeveloped	0.40	0.2603	0.1041	
TOTAL		1.0390	0.7947	0.77

Q(100) = (0.77)(4.84)(1.0390) = 3.8721 cfs
Q(10) = (0.657)(3.8721) = 2.5440 cfs
CN = 85 Plate 22.2 C-2
Direct Runoff = in. Plate 22.2 C-4
V(100) = (1.0)(1.0390)(43560)/12 = 3,771.6 cu. ft.
V(10) = (0.657)(3,771.6) = 2,477.9 cu. ft.

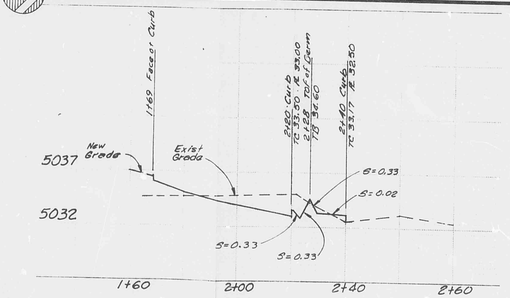
POND CALCS:

Volume required:
V = (0.77 - 0.40)(1.0390 X 43560)/12
= 1395.5 = 1400 CF



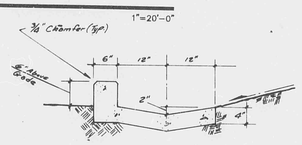
GRADING AND DRAINAGE PLAN

1"=20'-0"



SECTION C-C

VERT. 1"=5'
HORIZ. 1"=20'



CONC. VALLEY GUTTER SEC.D-D

Ref 1'-0"

NOTICE TO CONTRACTOR

1. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE "CITY OF ALBUQUERQUE, STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986" (COA STND).
2. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.
3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR SURVEYOR SO THAT THE CONFLICT CAN BE RESOLVED WITH MINIMUM AMOUNT OF DELAY.
4. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.
5. BACKFILL COMPACTION SHALL BE ACCORDING TO ARTERIAL STREET USE.
6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
7. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A PERMIT TO CONSTRUCT FACILITIES WITHIN CITY RIGHT-OF-WAY.

POND VOLUME

VOLUME WITHIN CURB:
WATER ELEVATION 34.25
=[1/2(34.25-32.80)(4)+1/2(34.25-32.80)(4)]15
=(2.9+2.9)75
=435 CF

VOLUME IN PARKING AREA:
=1/2(34.25-33.00)(18)(90)
=1012.5 CF

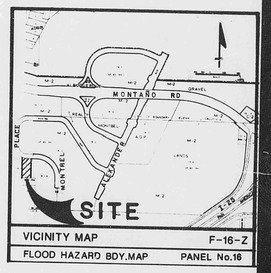
TOTAL VOLUME = 1447.50 CF

ORIFICE EQUATION

TRY r = 0.75"
$A = \pi r^2$
$= \pi (0.75/12)^2$
= 0.0123

$Q = CcCvA\sqrt{2gh}$
$= (1.0)(0.8)(0.0123)\sqrt{2(32.2)(1.25)}$
= 0.0881 cfs < 0.103 cfs allowed o.k.

Drill 1 ~ 1 1/2" hole in pipe



VICINITY MAP F-16-Z
FLOOD HAZARD BDY.MAP PANEL No.16

LEGAL DESCRIPTION

TRACT 18, RENAISSANCE CENTER ABQ.,NM

BENCHMARK - ACS & PROJECT

THE STATION IS A STANDARD ACS BRASS TABLET STAMPED "2-F16" SET ON A CONCRETE POST IN MEDIAN NEXT TO DROP INLET 61.0' WEST OF THE I-25 BRIDGE WING WALLS ON MONTANO RD. NE. ELEVATION = 5062.08.

PROJECT BM IS ON THE TOP BOLT NORTH SIDE OF FIRE HYDRANT MARKED WITH A "+" AND PAINTED RED. SEE PLAN FOR LOCATION ELEVATION = 5035.96.

SURVEY DATA

SURVEY DATA PROVIDED BY ANDREW, ASBURY & ROBERT, INC. & STEVENS MALLORY & CAMPBELL, ALBUQUERQUE, NM.

LEGEND:

PROPERTY LINE	
CONTOUR (EXISTING)	30
CONTOUR (NEW)	30
SPOT ELEVATION (EXISTING)	30.5
SPOT ELEVATION (NEW)	30.5
DIRECTION OF FLOW	

Frank Rogers

RECEIVED SEP 08 1988 HYDROLOGY SECTION

DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY	
TITLE RENAISSANCE CENTER DRIVEPADS+DRAINLINE THROUGH CURB	
PERMIT NO.	MAP NO. F-16-Z
DESIGN APPROVAL: Hydrology Section	Date 9/2/88
INSPECTION APPROVAL: Construction Section	Date
ACCEPTANCE: Construction Section/Permits	Date

F-16/D036

STEVENS MALLORY PEARL & CAMPBELL, P.A.
ARCHITECTS 115 AMHERST S.E. ALBUQUERQUE, NEW MEXICO 87108

CHECKED RGS
DRAWN BT
DATE 7-19-88
CHANNEL 2
ABQ.,NM

S-5

VICTOR M. MAYEZ NEW MEXICO 5713 REGISTERED PROFESSIONAL ENGINEER

CITY OF ALBUQUERQUE
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CITY CLERK RECORDER

OFFICIAL SEAL NORBERTA SANCHEZ NOTARY PUBLIC STATE OF NEW MEXICO
My Commission Expires MAY 8 1993

D 24 C 20 B 16 A 12 CITY OF ALBUQUERQUE C D