PLANS/PLATS ON FILE

FILE DESC:

S-13/D001

PLANS/PLATS 1

Tom, Mann & Associates, Inc.
Engineers
811 DALLAS, N.E. • ALBUQUERQUE • NEW MEXICO • 87110 • 505-265-5611

RECEIVED
SEP 11 1986
HYDROLOGY SECTION

60962
August 27, 1986

Mr. Dan Sabo
AMAFCA
P. O. Box 25851
Albuquerque, NM 87125

Re: Plat of Tract 9A, MRGCD Map No. 55

Dear Dan:

Transmitted herewith is the above mentioned plat, along with a flood plain analysis. As previously discussed, the developer intends to follow up his subdivision with a major subdivision. We will, at that time, prepare a complete drainage report to be included in the disclosure statement. The analysis which follows analyzes the 100-year floodplain only. The Rational Method has been used in accordance with the City of Albuquerque Development Process Manual, Volume II. The flows east of Interstate Highway 25 have previously been analyzed by the New Mexico State Highway Department and by Bohannan-Huston, in conjunction with the Mesa Del Sol study. For our analysis, the numbers generated by the Mesa Del Sol study are used. The rate of discharge has been conservatively added to the peak rate of runoff for the area west of Interstate 25. For our analysis, it was assumed that the crossing structures beneath Broadway Boulevard would eventually be upgraded to adequately handle the 100-year discharge. A Rational "C" factor of 0.40 was used. The Manning equation was utilized in analyzing the floodplain. A Manning's "n" of 0.035 was used. Cross-sections were taken as shown on the attached maps.

As previously discussed, the ultimate subdivisions will utilize 100% retention of the developed on-site-generated runoff. In addition, our disclosure statement will require routing of the offsite flows which enter Tract 9A through the on-site ponds. This routing applies only to the lots east of the private access easement within Tract 9A. This should greatly minimize ponding against the Barr Canal during the smaller storms, and reduce the peak rate of runoff and total volume during storms of greater magnitude.

If you should have any further questions or comments regarding this information, please do not hesitate to call.

Sincerely,

TOM MANN & ASSOCIATES, INC.

Steven K. Schroll
Project Engineer

SKS:djj

Enclosures
xc: Fred Aguirre

DRAINAGE INFORMATION SHEET

PROJECT TITLE: TRACT 9A MRGCD Map 55 ZONE ATLAS/DRNG. FILE #: B13 & S13

LEGAL DESCRIPTION: Same

CITY ADDRESS: Not known

ENGINEERING FIRM: Tom Mann & Assoc CONTACT: Steve Schroll

ADDRESS: 811 Dallas NE PHONE: 265-5611

OWNER: ESP Investors CONTACT: Lee Smith

ADDRESS: 3841 Midway Pl. NE PHONE: 345-8123

ARCHITECT: None CONTACT:

ADDRESS: PHONE:

SURVEYOR: Tom Mann & Assoc CONTACT: Steve Schroll

ADDRESS: See above PHONE:

CONTRACTOR: Not known CONTACT:

ADDRESS: PHONE:

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PRE-DESIGN MEETING:

___ YES

X NO

___ COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO. 86-617

EPC NO.

PROJ. NO.

TYPE OF SUBMITTAL:

X DRAINAGE REPORT

___ DRAINAGE PLAN

___ CONCEPTUAL GRADING & DRAINAGE PLAN

___ GRADING PLAN

___ EROSION CONTROL PLAN

___ ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:

___ SKETCH PLAT APPROVAL

X PRELIMINARY PLAT APPROVAL

___ SITE DEVELOPMENT PLAN APPROVAL

X FINAL PLAT APPROVAL

___ BUILDING PERMIT APPROVAL

___ FOUNDATION PERMIT APPROVAL

___ CERTIFICATE OF OCCUPANCY APPROVAL

___ ROUGH GRADING PERMIT APPROVAL

___ GRADING/PAVING PERMIT APPROVAL

___ OTHER _____ (SPECIFY)

DATE SUBMITTED: Sept. 3, 1986

BY: Steve K. Schroll

No objection to platting required

MANNING EQUATION: $Q = \frac{1.49}{n} AR^{2/3} S^{1/2}$

n = 0.035 = MANNING COEFFICIAL
A = AREA, sf
R = HYDRAULIC RADIUS, ft
S = SLOPE, ft/ft
Q = RATE OF DISCHANGE, cfs
d = DEPTH OF FLOW, ft

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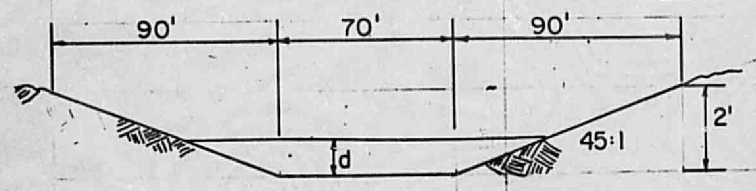
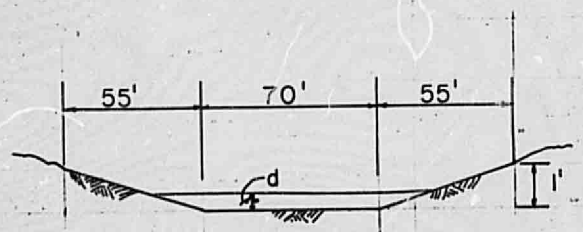


Q = 318 cfs
d = 0.7'
S = 0.027
A = 64.6 sf
V = 4.4 fps
R = 0.50'
P = 128.6'

SECTION A-A

H. 1" = 50'
V. 1" = 30'



Q = 318 cfs
S = 0.031
d = 0.65'
A = 68.8 sf
V = 4.6 fps
P = 141.6 ft
R = 0.49'

SECTION B-B

H. 1" = 50'
V. 1" = 30'

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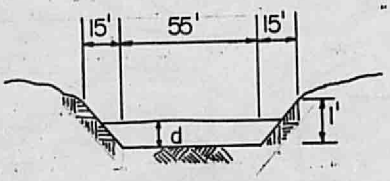
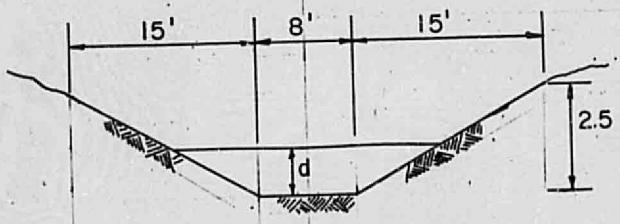
SEP 11 1986
HYDROLOGY SECTION



Q = 95 cfs
S = 0.033
d = 0.40'
A = 24.0
V = 3.9 fps
R = 0.36'
P = 66.9'

SECTION C-C

H. 1" = 50'
V. 1" = 30'



Q = 95 cfs
S = 0.028
d = 1.1'
A = 15.9 sf
V = 5.9 fps
R = 0.75'
P = 21.3'

SECTION D-D

H. 1" = 10'
V. 1" = 30'

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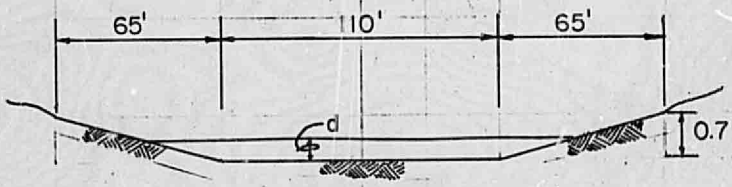
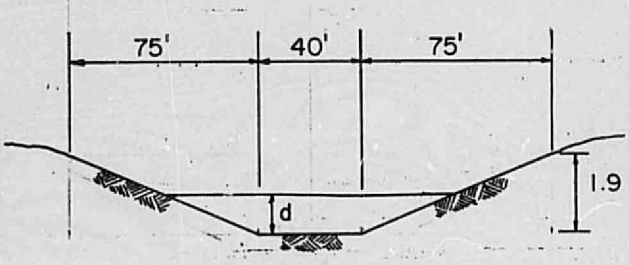


Q = 318 cfs
S = 0.032
M = 93
d = 0.50'
A = 78.8 sf
V = 40 fps
R = 0.39'
P = 203'

SECTION E-E

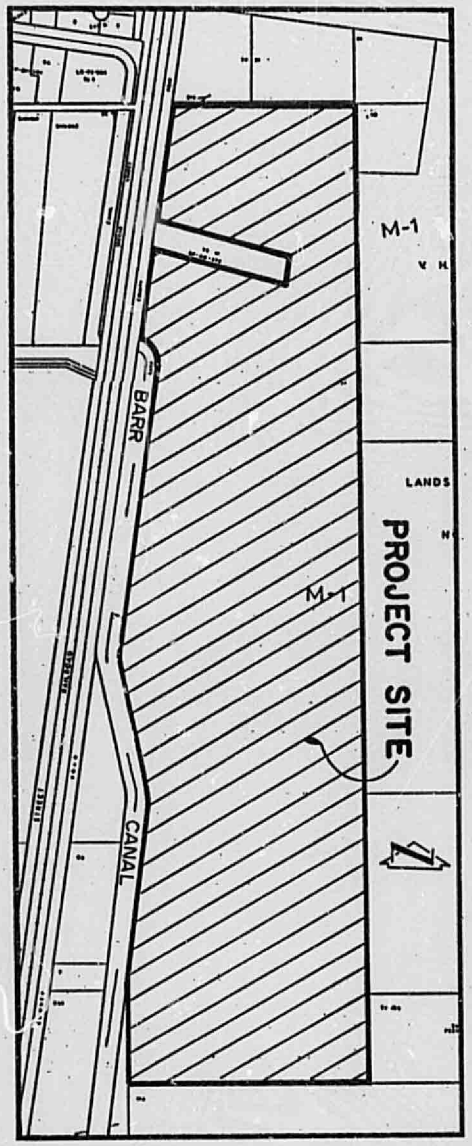
H. 1" = 50'
V. 1" = 20'



Q = 497 cfs
S = 0.0233
M = 39
d = 1.1'
A = 94 sf
V = 5.3 fps
R = 0.74'
P = 128'

SECTION F-F

H. 1" = 50'
V. 1" = 30'



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LEGAL DESCRIPTION

TRACT 9A
M.R.G.C.D. MAP # 55

VICINITY MAP **R & S 13**

SCALE : 1" = 800'

FIGURE 1

FILE COPY

BOARD OF COUNTY COMMISSIONERS
PATRICK J. PADILLA, CHAIRMAN
DISTRICT 1
ORLANDO VIGIL, MEMBER
DISTRICT 2
LENTON MALRY, MEMBER
DISTRICT 3
PATRICIA H. CASSIDY, MEMBER
DISTRICT 4
MARION M. COTTRELL, MEMBER
DISTRICT 5
ALEX ABEYTA, JR., COUNTY MANAGER

County of Bernalillo

State of New Mexico

620 LOMAS, N.W.
ALBUQUERQUE, NEW MEXICO 87102

BOB STOVER, SHERIFF
JAMES B. LEWIS, TREASURER
DOLORES C. WALLER, COUNTY CLERK
JACK H. DARLING, ASSESSOR
ROBERT H. SCOTT,
PROBATE JUDGE

September 22, 1986

Steve Schroll
Tom Mann & Associates, Inc.
811 Dallas, NE
Albuquerque, New Mexico 87110

RE: DRAINAGE PLAN FOR TRACT 9A (S-13/D1) RECEIVED SEPTEMBER 11, 1986

Dear Mr. Schroll:

We have no objection to the platting request. Please be advised that further platting will require an approved drainage plan.

If you have any questions regarding these comments, please call me at 766-7644.

Cordially,

Carlos A. Montoya

Carlos A. Montoya, P.E.
City/County Floodplain Administrator

CAM/bsj

AMAFCA
County

Basin#(s)	Area, Ac	Length, ft	Slope, ft/ft	Time of concentration minutes	Q_{100},cfs
6A	25.2	1300'	0.038	10 minutes	47.9 cfs
6D	(As per New Mexico State Highway Department)				270 cfs
6A + 6D					317.9 cfs
7A	10.2	1000'	0.040	10 minutes	19.4 cfs
7C	(As per New Mexico State Highway Department)				75 cfs
7A + 7C					94.4 cfs
4A	25.1 Ac	1600'	0.038	10 minutes	47.8 cfs
4B	32.2 Ac	2100'			
4C	21.7 Ac	1250'			
4E	(As per New Mexico State Highway Department)				180 cfs
4F	(As per New Mexico State Highway Department)				180 cfs
4A+4B+4C	79.0 Ac	3800'	0.076	12 minutes	137 cfs
4A+4B+4C+ 4E+4F					497 cfs

PLAN/PLATS

ON

FILE

1296