



November 16, 1998

Mark Goodwin  
Mark Goodwin & Associates  
P. O. Box 90606  
Albuquerque, new Mexico 87199

RE: ENGINEER CERTIFICATION FOR FUDDRUKER'S (F17-<sup>D80</sup>~~D71~~) CERTIFICATION  
STATEMENT DATED 10/20/98

Dear Mr. Goodwin:

Based on the information provide on your October 21, 1998 submittal, Engineer Certification for the above referenced site is acceptable.

If I can be of further assistance, please feel free to contact me at 924-3986.

C: Andrew Garcia  
File —

Sincerely

*Bernie J. Montoya*  
Bernie J. Montoya CE  
Associate Engineer

Good for You, Albuquerque!



# DRAINAGE INFORMATION SHEET

F-17/D80

PROJECT TITLE: FUDDRUCKER'S ZONE ATLAS/DRNG, FILE#: F-17/D80

DRB #: \_\_\_\_\_ EPC #: \_\_\_\_\_ WORK ORDER #: \_\_\_\_\_

LEGAL DESCRIPTION: Tract A-1-C-2, within Section 35, Township 11 North, Range 3 East, NMPM, City of Albuquerque, Bernalillo County, New Mexico, October 1997

CITY ADDRESS: \_\_\_\_\_

ENGINEERING FIRM: Mark Goodwin & Associates CONTACT: David Soule

ADDRESS: PO Box 90606 PHONE: 828-2200

OWNER: Fuddruckers CONTACT: Jim Lewis

ADDRESS: \_\_\_\_\_ PHONE: 247-1529

ARCHITECT: SLNB Architects CONTACT: Ken Duck

ADDRESS: 1620 CENTRAL PHONE: 247-1529

SURVEYOR: Aldrich Land Surveyors CONTACT: Tim Aldrich

ADDRESS: \_\_\_\_\_ PHONE: 884-1990

CONTRACTOR: \_\_\_\_\_ CONTACT: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

## TYPE OF SUBMITTAL:

## CHECK TYPE OF APPROVAL SOUGHT:

- ☐ DRAINAGE REPORT
- ☒ DRAINAGE PLAN
- ☐ CONCEPTUAL GRADING & DRAINAGE PLAN
- ☒ GRADING PLAN
- ☐ EROSION CONTROL PLAN
- ☐ ENGINEER'S CERTIFICATION
- ☐ OTHER

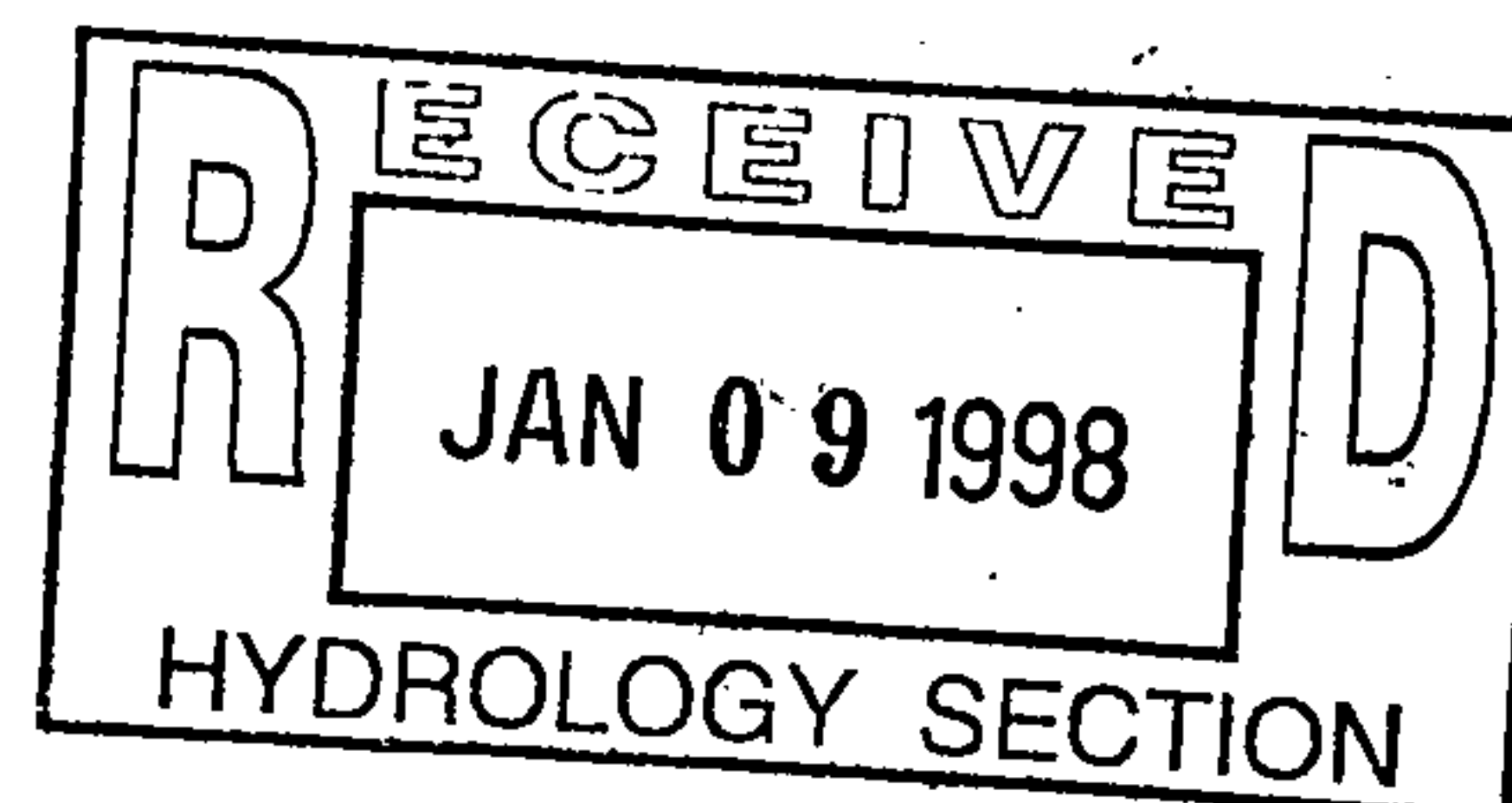
- ☐ SKETCH PLAT APPROVAL
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ S. DEV. PLAN FOR SUB'D APPROVAL
- ☐ S. DEV. PLAN FOR BLDG PERMIT APPROVAL
- ☐ SECTOR PLAN APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ FOUNDATION PERMIT APPROVAL
- ☒ BUILDING PERMIT APPROVAL
- ☐ CERTIFICATION OF OCCUPANCY APPROVAL
- ☐ GRADING PERMIT APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☐ S.A.D. DRAINAGE REPORT
- ☐ DRAINAGE REQUIREMENTS
- ☐ OTHER \_\_\_\_\_ (Specify)

## PRE-DESIGN MEETING:

- ☐ YES
- ☒ NO
- ☐ COPY PROVIDED

DATE SUBMITTED: January 8, 1997

BY: David Soule  
David Soule





D. Mark Goodwin & Associates, P.A.  
Consulting Engineers

P.O. BOX 90606, ALBUQUERQUE, NM 87199  
(505) 828-2200 FAX 797-9539  
e-mail: dmgs@swcp.com

January 8, 1998

Ms. Lisa Ann Manwill, P.E.  
Hydrology Division  
City of Albuquerque  
200 Lomas NW  
Albuquerque, New Mexico 87102

Re: **Fuddrucker's (F17-D74) Grading and Drainage Plan Resubmittal for Building Permit Approval**

Dear Ms. Manwill:

Attached is the revised Grading and Drainage plan for Fuddrucker's Restaurant site located north of the I-25 frontage road between Montgomery and Jefferson. The revised plan addresses your written comments dated December 4, 1997. The following is a summary of how your comments were incorporated into our grading and drainage plan:

- Comment #1- The weir equation variables which were used are shown on the plans drainage information legend.
- Comment #2- The site discharges to a preexisting bar ditch located along the I-25 frontage road. This ditch currently conveys the developed storm discharge for one half of the road for approximately 2300 feet. This offsite basin is shown on the attached orthophoto topographic map. This basin has a predicted 100 year developed flow discharge of 9.07 cfs. The bar ditch has an average depth of 2 feet. The attached calculations show that the bar ditch needs to be 18" deep to adequately convey the existing flows and the additional flows generated from the development of this site. The bar ditch discharges to an existing inlet where it enters an 24" CMP that out falls to the AMAFCA North diversion Channel. The attached calculations show all the down stream facilities are adequate to properly convey the 100 year developed storm runoff to the AMAFCA North Diversion Channel.
- Comment #3- The historical discharge rate is 2.29. The site currently discharges upon an adjacent westerly parcel.
- Comment #4- The development of this site corrects the adverse drainage pattern which currently occurs. The developed storm runoff is directed to a landscaped channel running along the western boundary of the site. This channel carries the flow to a preexisting bar ditch running along the northern edge of the I-25 frontage road. This bar ditch will convey the flows generated from 1/2 of this road and the additional runoff from this site to an inlet located adjacent to the AMAFCA North Diversion Channel. The attached calculations show the development of this site is designed with excepted engineering practices and the down stream facilities are adequate to accommodate the development.

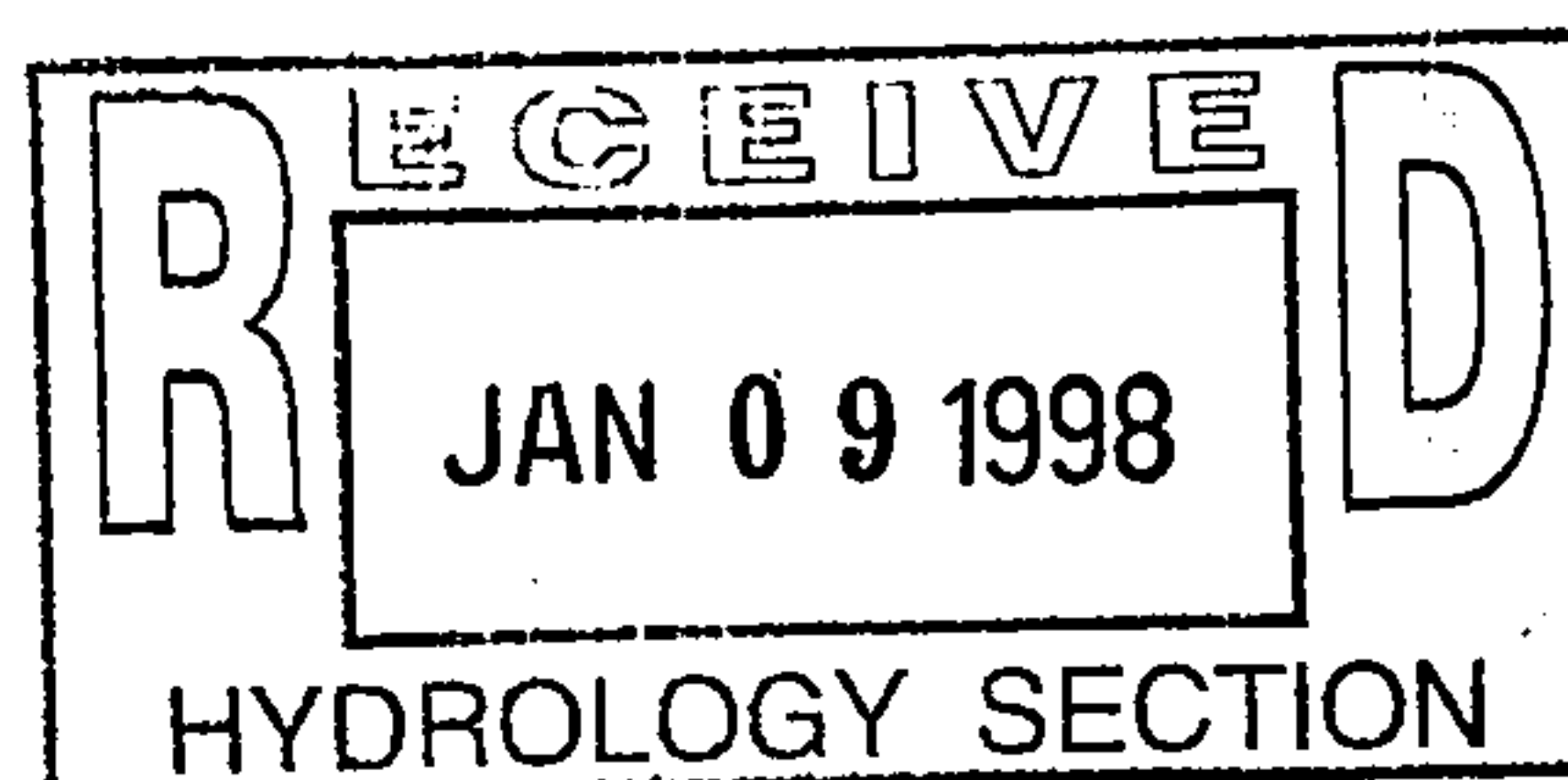
Feel free to contact me if there are any questions.

Sincerely,

MARK GOODWIN & ASSOCIATES, P.A.

*David Soule*

David Soule  
Staff Engineer



f:\buena.off\drainage.rev

*ascott@qcc.com*





# ***City of Albuquerque***

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

December 4, 1997

David Soule  
Mark Goodwin & Associates  
P.O. Box 90606  
Albuquerque, NM 87199

*D80*

***RE: FUDRUCKER'S (F17-~~DEF~~). GRADING AND DRAINAGE PLAN FOR BUILDING  
PERMIT APPROVAL. ENGINEER'S STAMP DATED NOVEMBER 12, 1997.***

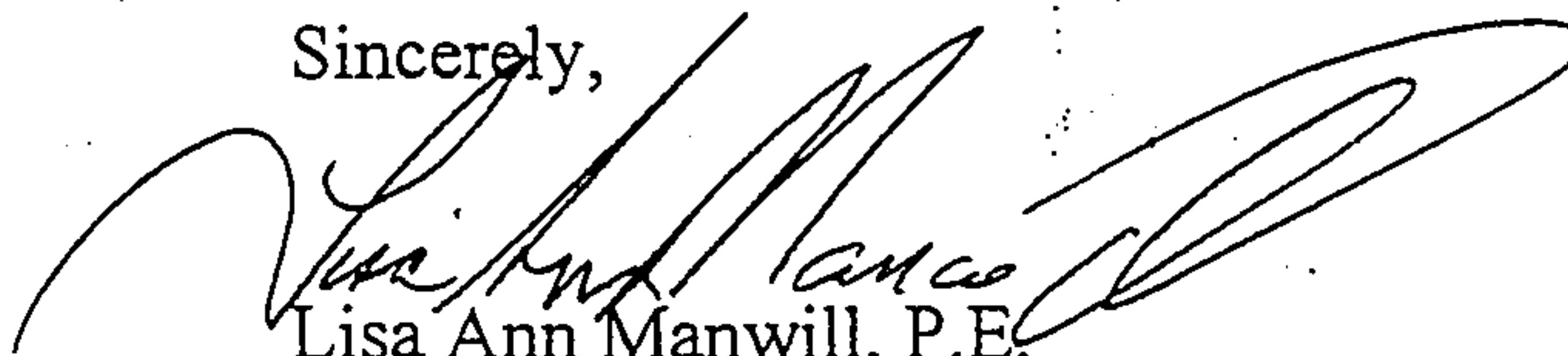
Dear Mr. Soule:

Based on the information provided on your November 12, 1997 submittal, City Hydrology has the following comments:

1. What numbers are you using in your weir equations (Basins A and B) for length and height?
2. What is downstream capacity and allowable discharge?
3. What is historical discharge?
4. Please provide a general explanation of the project and define what happens to flow once it leaves the site.

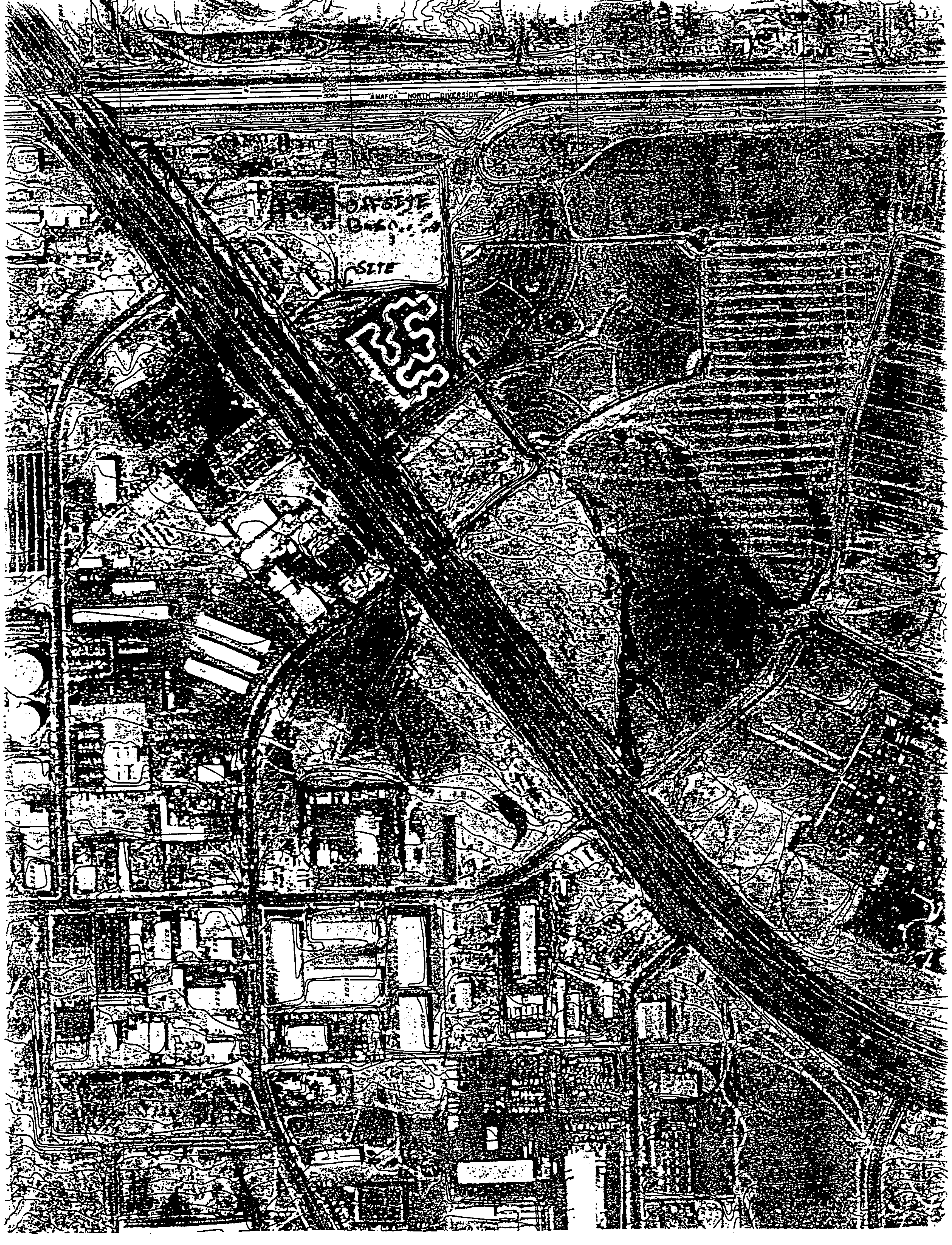
If I can be of further assistance, please feel free to contact me at 924-3984.

Sincerely,

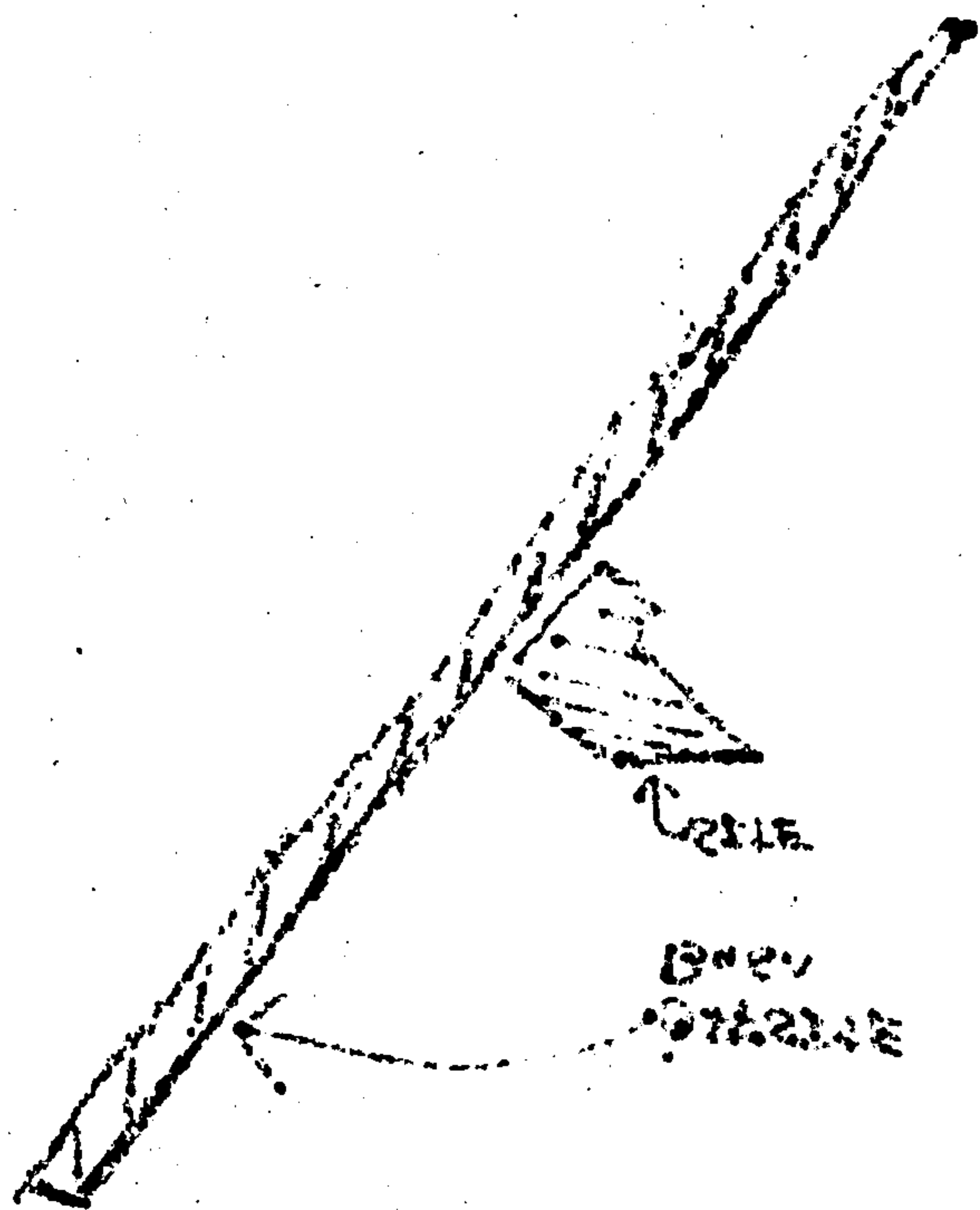
  
Lisa Ann Manwill, P.E.  
Hydrology

c: Andrew Garcia  
File

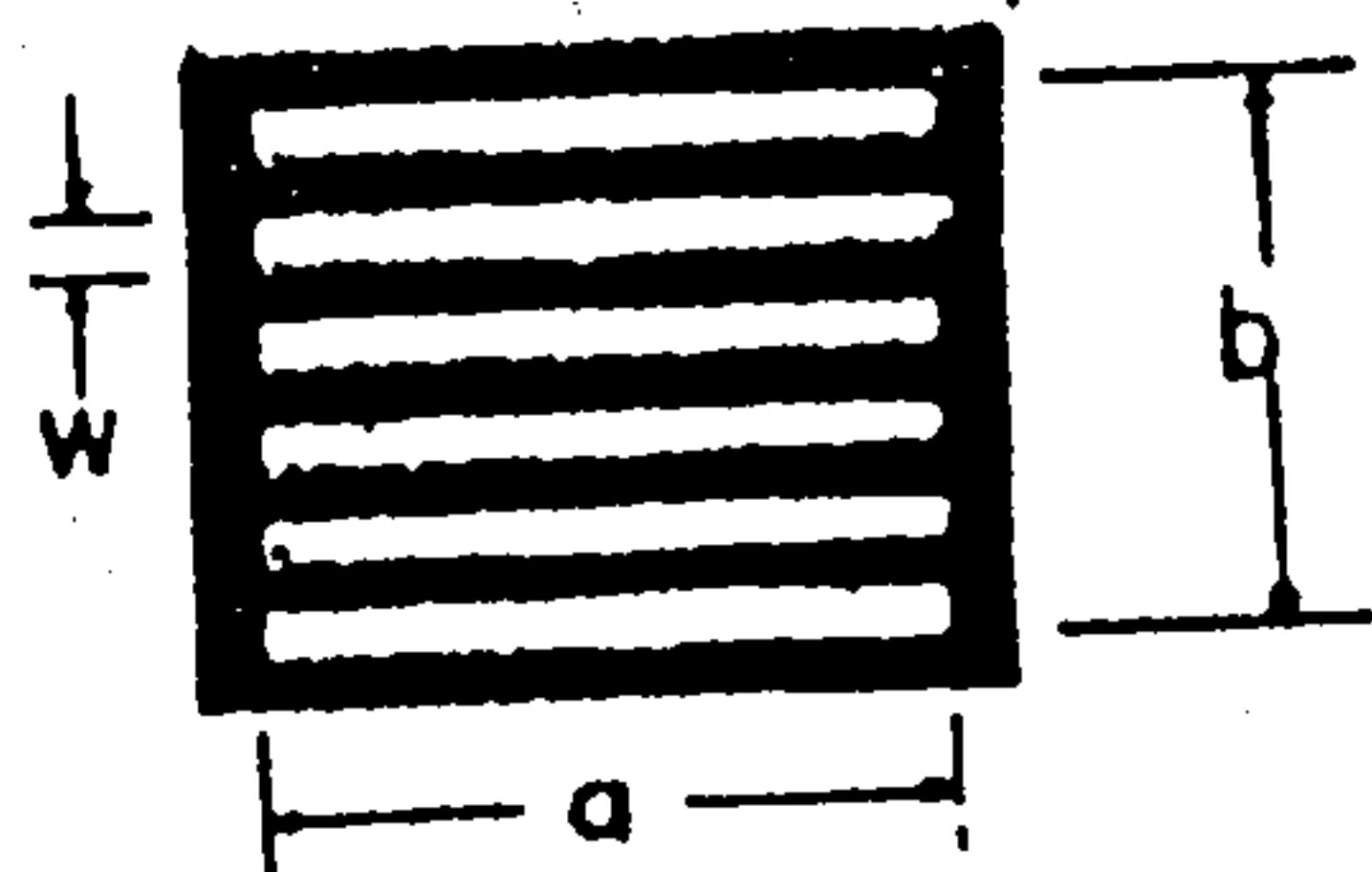








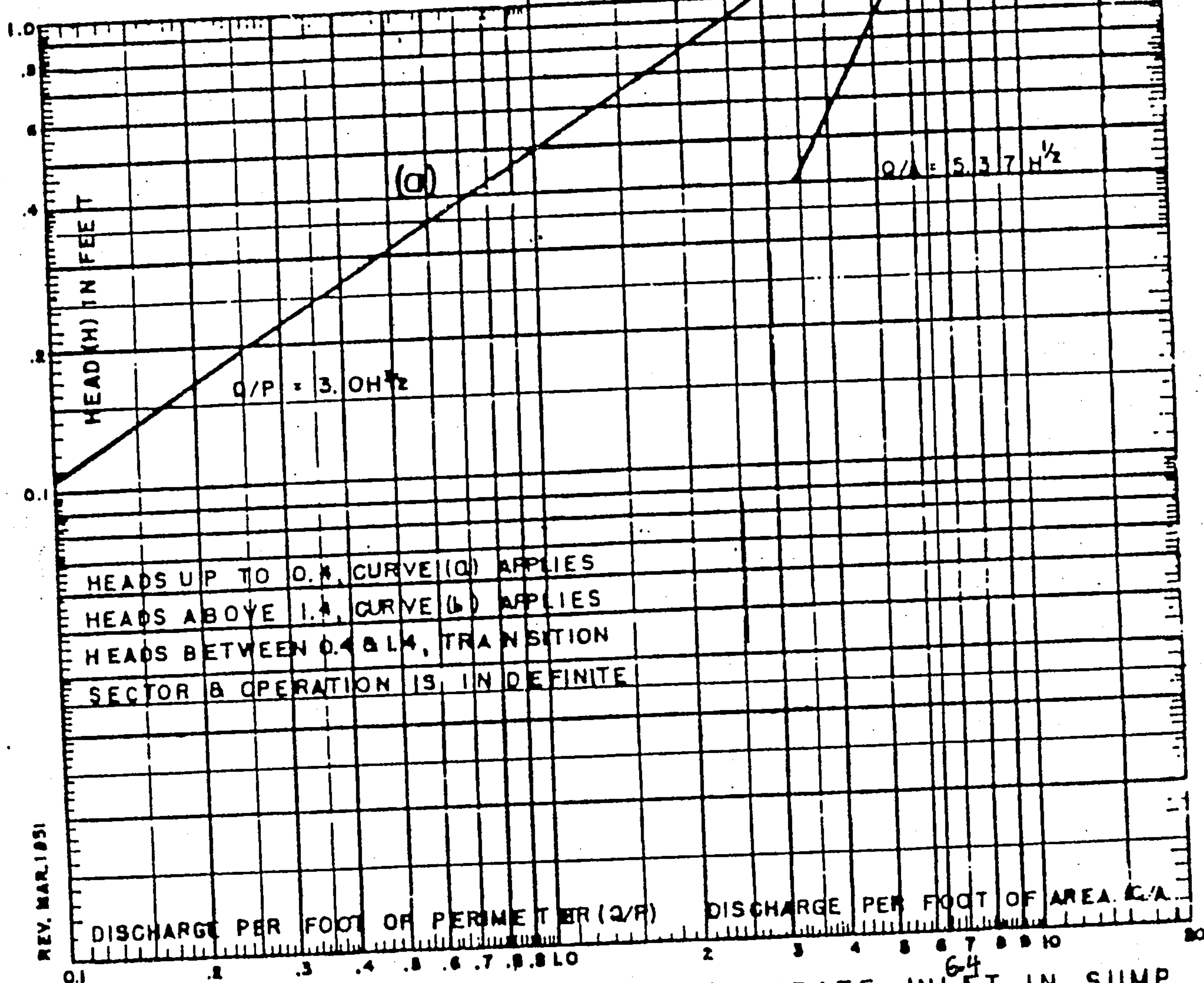
1073.02



$$P = 2(a + b)$$

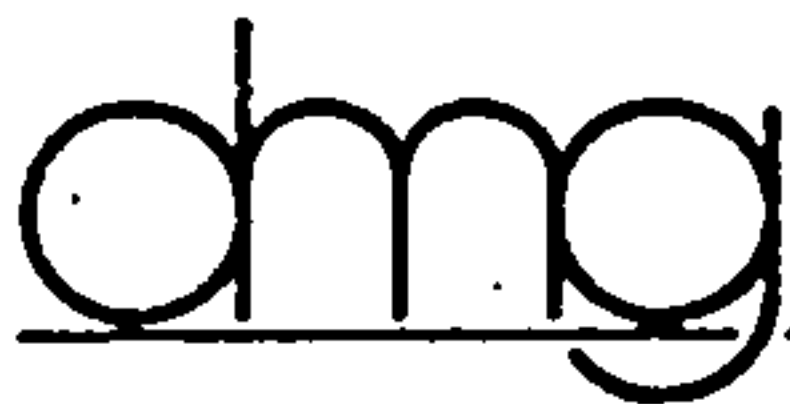
$$A = 6.0W$$

18"



BUREAU OF PUBLIC ROADS  
DIVISION TWO WASH, D.C.

CAPACITY OF GRATE INLET IN SUMP  
WATER PONDED ON GRATE



D. Mark Goodwin & Associates, P.A.  
Consulting Engineers and Surveyors

PROJECT Frederick  
SUBJECT Pipe Capacity  
BY \_\_\_\_\_ DATE \_\_\_\_\_  
CHECKED \_\_\_\_\_ DATE \_\_\_\_\_  
SHEET \_\_\_\_\_ OF \_\_\_\_\_

Capacity of  $d=2'$   
 $r=1'$  24" CMP located at I-25  
Frontage road with  $S = -2.9\%$

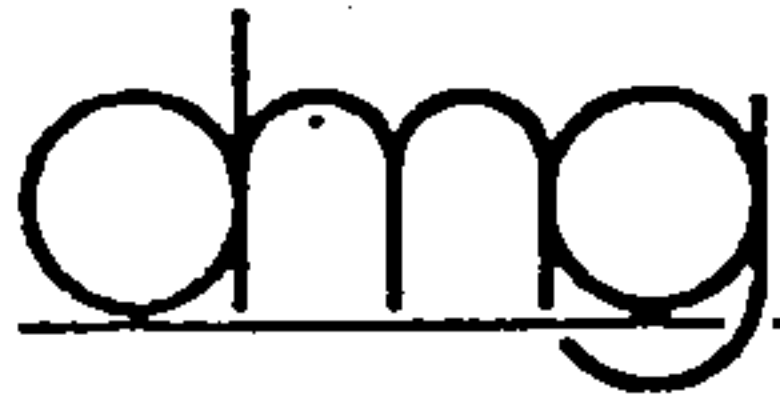
$$Q = \frac{K}{N} (A) (R_h)^{2/3} S^{1/2}$$
$$= \frac{1.49}{.024} (3.14) (.63)^{2/3} (.029)^{1/2}$$
$$= 20.93 \text{ CFS}$$

$$Q = \frac{1.49}{n} A R^{2/3} S^{1/2}$$

$$Q = \frac{1.49}{.024} \pi (1)^2 \left(\frac{2}{4}\right)^{2/3} (.029)^{1/2}$$

$$Q = 20.92 \text{ cfs}$$

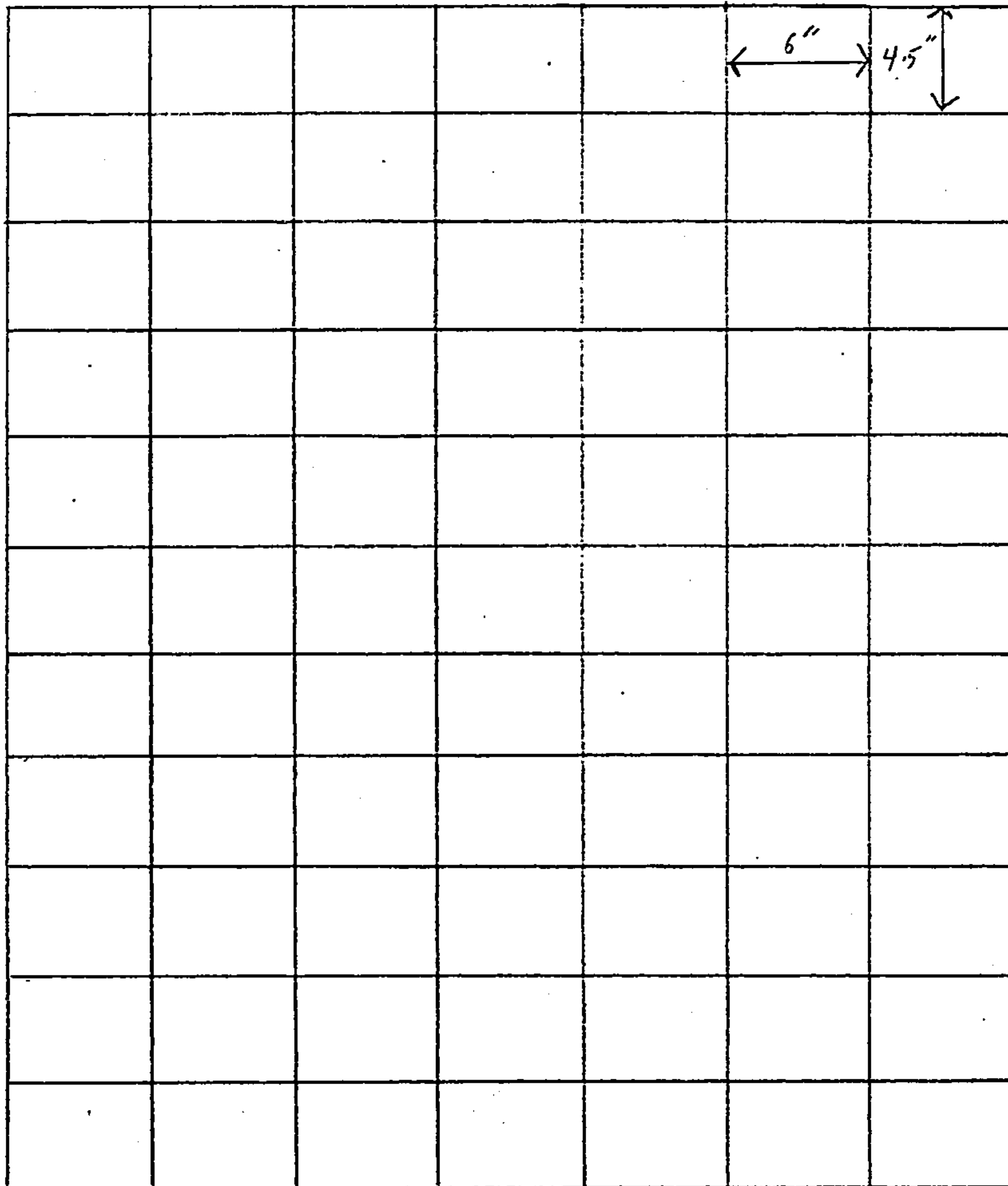




D. Mark Goodwin & Associates, P.A.  
Consulting Engineers and Surveyors

PROJECT Fudruckers  
SUBJECT Inlet Capacity  
BY \_\_\_\_\_ DATE \_\_\_\_\_  
CHECKED \_\_\_\_\_ DATE \_\_\_\_\_  
SHEET \_\_\_\_\_ OF \_\_\_\_\_

Existing Inlet Grate located in I-25 Frontage road ROW



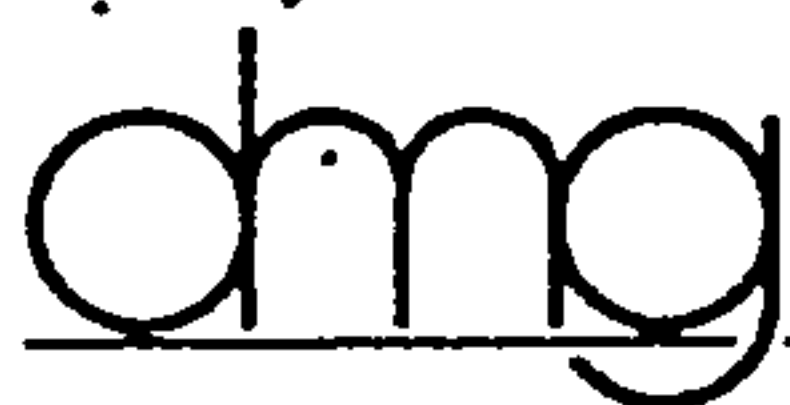
$$\text{area} = (11)(7)\left(\frac{6}{12}\right)\left(\frac{4.5}{12}\right) = 14.44 \text{ ft}^2$$

Grate in sump condition per attached chart

Capacity per Square foot = 6.4

$$\therefore \text{Capacity} = 92.4 \text{ CFS}$$





D. Mark Goodwin & Associates, P.A.  
Consulting Engineers and Surveyors

PROJECT Fog Creek  
SUBJECT Pipe Capacity  
BY \_\_\_\_\_ DATE \_\_\_\_\_  
CHECKED \_\_\_\_\_ DATE \_\_\_\_\_  
SHEET \_\_\_\_\_ OF \_\_\_\_\_

Capacity of 24" CMP located at I-25  
Frontage road with  $S = -2.9\%$

$$\begin{aligned} Q &= \frac{K}{N} (A) (R_h)^{2/3} S^{1/2} \\ &= \frac{1.49}{.024} (3.14) (.63)^{2/3} (.029)^{1/2} \\ &= 20.93 \text{ CFS} \end{aligned}$$



AHYMO PROGRAM (AHYMO194) - AMAFCA Hydrologic Model - January, 1994

RUN DATE (MON/DAY/YR) = 01/08/1998

START TIME (HR:MIN:SEC) = 15:07:26 USER NO.= M\_GOODWN.I01

INPUT FILE = fudruck.dat

START TIME=0.0

\*\*\*\*\* HYDROGRAPH FOR FUDDRUCKERS

\*\*\*\*\* PAN AMERICAN FREEWAY WEST OF OFFICE DRIVE, N.E.

RAINFALL TYPE=1 RAIN QUARTER=0.0 IN

RAIN ONE=2.01 IN RAIN SIX=2.35 IN

RAIN DAY=2.75 IN DT=0.03333 HR

COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK AT 1.40  
HR.

DT = .033330 HOURS END TIME = 5.999400 HOURS

.0000	.0016	.0033	.0049	.0066	.0084	.0102
.0120	.0139	.0158	.0178	.0199	.0219	.0241
.0263	.0286	.0309	.0333	.0358	.0384	.0411
.0439	.0467	.0497	.0529	.0561	.0596	.0631
.0669	.0709	.0751	.0807	.0866	.0930	.1066
.1371	.1840	.2514	.3434	.4644	.6186	.8106
1.0449	1.2624	1.3533	1.4300	1.4982	1.5602	1.6174
1.6704	1.7200	1.7664	1.8102	1.8514	1.8904	1.9273
1.9622	1.9953	2.0268	2.0566	2.0850	2.0915	2.0976
2.1033	2.1088	2.1140	2.1191	2.1239	2.1285	2.1329
2.1373	2.1414	2.1454	2.1494	2.1531	2.1568	2.1604
2.1639	2.1673	2.1706	2.1739	2.1771	2.1802	2.1832
2.1862	2.1891	2.1919	2.1947	2.1975	2.2002	2.2028
2.2054	2.2080	2.2105	2.2130	2.2154	2.2178	2.2202
2.2225	2.2248	2.2270	2.2293	2.2315	2.2336	2.2358
2.2379	2.2399	2.2420	2.2440	2.2460	2.2480	2.2500
2.2519	2.2538	2.2557	2.2576	2.2594	2.2612	2.2631
2.2648	2.2666	2.2684	2.2701	2.2718	2.2735	2.2752
2.2769	2.2785	2.2802	2.2818	2.2834	2.2850	2.2866
2.2881	2.2897	2.2912	2.2928	2.2943	2.2958	2.2973



2.2987 2.3002 2.3017 2.3031 2.3045 2.3060 2.3074  
 2.3088 2.3102 2.3115 2.3129 2.3143 2.3156 2.3169  
 2.3183 2.3196 2.3209 2.3222 2.3235 2.3248 2.3261  
 2.3273 2.3286 2.3298 2.3311 2.3323 2.3335 2.3348  
 2.3360 2.3372 2.3384 2.3396 2.3408 2.3419 2.3431  
 2.3443 2.3454 2.3466 2.3477 2.3488 2.3500

\*HYDROGRAPH FOR EXISTING CONDITIONS

COMPUTE NM HYD ID=1 HYD NO=101.1 AREA=0.002294 SQ MI

PER A=100.00 PER B=0.0 PER C=0.0 PER D=0.0

TP=0.1333 HR MASS RAINFALL=-1

K = .160154HR TP = .133300HR K/TP RATIO =1.201459 SHAPE CONSTANT, N  
 =2.957910

UNIT PEAK = 4.7906 CFS UNIT VOLUME = .9967 B = 278.37 P60 = 2.0100

AREA = .002294 SQ MI IA = .65000 INCHES INF = 1.67000 INCHES PER HOUR

RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -

DT=.033330

PRINT HYD ID=1 CODE=1

PARTIAL HYDROGRAPH 101.10

RUNOFF VOLUME = .53121 INCHES = .0650 ACRE-FEET

PEAK DISCHARGE RATE = 2.29 CFS AT 1.533 HOURS BASIN AREA = .0023 SQ.  
 MI.

\*HYDROGRAPH FOR IMPROVED PROPERTY

\*BASIN A

COMPUTE NM HYD ID=2 HYD NO=101.2 AREA=0.000575 SQ MI

PER A=0.00 PER B=7.5 PER C=7.5 PER D=85.0

TP=0.1333 HR MASS RAINFALL=-1

K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE CONSTANT, N =  
 7.106420

UNIT PEAK = 1.9296 CFS UNIT VOLUME = .9933 B = 526.28 P60 = 2.0100



AREA = .000489 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  
.033330

K = .119767HR TP = .133300HR K/TP RATIO = .898476 SHAPE CONSTANT, N = 3.944947  
UNIT PEAK = .22742 CFS UNIT VOLUME = .9405 B = 351.48 P60 = 2.0100  
AREA = .000086 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -  
DT=.033330

PRINT HYD ID=2 CODE=1

PARTIAL HYDROGRAPH 101.20

RUNOFF VOLUME = 1.93856 INCHES = .0594 ACRE-FEET  
PEAK DISCHARGE RATE = 1.64 CFS AT 1.500 HOURS BASIN AREA = .0006 SQ.  
MI.

\*BASIN B

COMPUTE NM HYD ID=3 HYD NO=101.3 AREA=0.001719 SQ MI  
PER A=0.00 PER B=7.5 PER C=7.5 PER D=85.0  
TP=0.1333 HR MASS RAINFALL=-1

K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE CONSTANT, N =  
7.106420  
UNIT PEAK = 5.7687 CFS UNIT VOLUME = .9973 B = 526.28 P60 = 2.0100  
AREA = .001461 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -  
DT=.033330

K = .119767HR TP = .133300HR K/TP RATIO = .898476 SHAPE CONSTANT, N =  
3.944947  
UNIT PEAK = .67989 CFS UNIT VOLUME = .9808 B = 351.48 P60 = 2.0100  
AREA = .000258 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -  
DT=.033330

PRINT HYD ID=3 CODE=1

PARTIAL HYDROGRAPH 101.30

RUNOFF VOLUME = 1.93856 INCHES = .1777 ACRE-FEET

PEAK DISCHARGE RATE = 4.86 CFS AT 1.500 HOURS BASIN AREA = .0017 SQ.  
MI.

\*ADD BASIN A TO BASIN B

ADD HYD ID=4 HYD NO=102.1 ID=2 ID=3

PRINT HYD ID=4 CODE=1

PARTIAL HYDROGRAPH 102.10

RUNOFF VOLUME = 1.93831 INCHES = .2371 ACRE-FEET

PEAK DISCHARGE RATE = 6.49 CFS AT 1.500 HOURS BASIN AREA = .0023 SQ.  
MI.

\*OFFSITE BASIN C- NORTH 1/2 OF I-25 FRONTAGE; CARRIED BY BARDITCH

COMPUTE NM HYD ID=5 HYD NO=101.4 AREA=0.0041250 SQ MI

PER A=40.00 PER B=0.0 PER C=0.0 PER D=60.0

TP=0.1333 HR MASS RAINFALL=-1

K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE CONSTANT, N =  
7.106420

UNIT PEAK = 9.7714 CFS UNIT VOLUME = .9982 B = 526.28 P60 = 2.0100

AREA = .002475 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR

RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -

DT=.033330

K = .160154HR TP = .133300HR K/TP RATIO = 1.201459 SHAPE CONSTANT, N = 2.957910

UNIT PEAK = 3.4457 CFS UNIT VOLUME = .9954 B = 278.37 P60 = 2.0100

AREA = .001650 SQ MI IA = .65000 INCHES INF = 1.67000 INCHES PER HOUR

RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -

DT=.033330

PRINT HYD ID=5 CODE=1



PARTIAL HYDROGRAPH 101.40

RUNOFF VOLUME = 1.48170 INCHES = .3260 ACRE-FEET

PEAK DISCHARGE RATE = 9.07 CFS AT 1.500 HOURS BASIN AREA = .0041 SQ. MI.

FINISH

NORMAL PROGRAM FINISH END TIME (HR:MIN:SEC) = 15:07:26

# DRAINAGE INFORMATION SHEET

F-17/D80 ~~112~~

PROJECT TITLE: FUDDRUCKER'S ZONE ATLAS/DRNG, FILE#: ~~112~~  
DRB #: \_\_\_\_\_ EPC #: \_\_\_\_\_ WORK ORDER #: \_\_\_\_\_  
LEGAL DESCRIPTION: Tract A-1-C-2, within Section 35, Township 11 North, Range 3 East, NMPM, City of Albuquerque, Bernalillo County, New Mexico, October 1997  
CITY ADDRESS: \_\_\_\_\_

ENGINEERING FIRM: Mark Goodwin & Associates CONTACT: David Soule  
ADDRESS: PO Box 90606 PHONE: 828-2200  
OWNER: Fuddruckers CONTACT: Jim Lewis  
ADDRESS: \_\_\_\_\_ PHONE: 247-1529  
ARCHITECT: SLNB Architects CONTACT: Ken Duck  
ADDRESS: 1620 CENTRAL PHONE: 247-1529  
SURVEYOR: Aldrich Land Surveyors CONTACT: Tim Aldrich  
ADDRESS: \_\_\_\_\_ PHONE: 884-1990  
CONTRACTOR: \_\_\_\_\_ CONTACT: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

## TYPE OF SUBMITTAL:

☐ DRAINAGE REPORT  
☒ DRAINAGE PLAN  
☐ CONCEPTUAL GRADING & DRAINAGE PLAN  
☒ GRADING PLAN  
☐ EROSION CONTROL PLAN  
☐ ENGINEER'S CERTIFICATION  
☐ OTHER

## PRE-DESIGN MEETING:

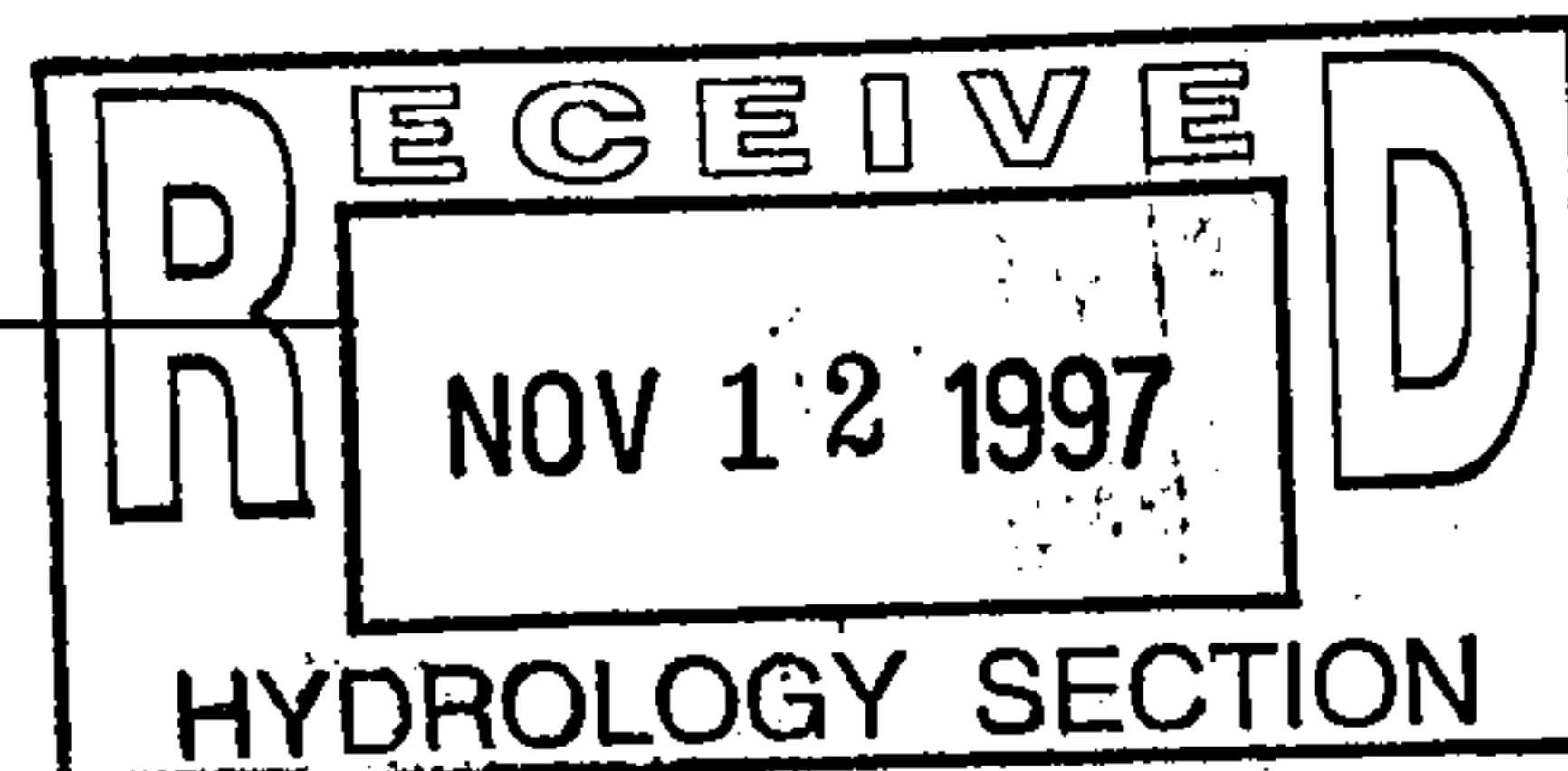
☐ YES  
☒ NO  
☐ COPY PROVIDED

## CHECK TYPE OF APPROVAL SOUGHT:

☐ SKETCH PLAT APPROVAL  
☐ PRELIMINARY PLAT APPROVAL  
☐ S. DEV. PLAN FOR SUB'D APPROVAL  
☐ S. DEV. PLAN FOR BLDG PERMIT APPROVAL  
☐ SECTOR PLAN APPROVAL  
☐ FINAL PLAT APPROVAL  
☐ FOUNDATION PERMIT APPROVAL  
☒ BUILDING PERMIT APPROVAL  
☐ CERTIFICATION OF OCCUPANCY APPROVAL  
☐ GRADING PERMIT APPROVAL  
☐ PAVING PERMIT APPROVAL  
☐ S.A.D. DRAINAGE REPORT  
☐ DRAINAGE REQUIREMENTS  
☐ OTHER \_\_\_\_\_ (Specify)

DATE SUBMITTED: November 12, 1997

BY: David Soule  
David Soule



u





May 22, 1998

Mark Goodwin  
D. Mark Goodwin & Associates  
P.O. Box 90606  
Albuquerque, New Mexico 87199

RE: REVISED DRAINAGE PLAN FOR FUDDRUCKERS (F17-~~D71~~) REVISION DATED  
4/20/98 *D80*

Dear Mr. Goodwin:

Based on the information provided on your April 27, 1998 resubmittal, the above referenced site is approved for Building Permit.

Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

Also, prior to Certificate of Occupancy release, the following must be submitted:

1. Engineer Certification per the DPM checklist.
2. Concurrence from the State Highway Department for work done within their R/W.

If I can be of further assistance, please feel free to contact me at 924-3986.

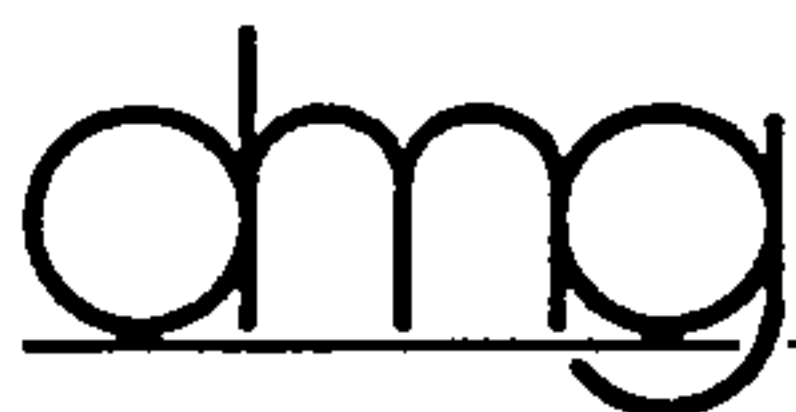
C: Andrew Garcia

*File*

Sincerely

Bernie J. Montoya CE  
Associate Engineer





D. Mark Goodwin & Associates, P.A.  
Consulting Engineers

P.O. BOX 90606, ALBUQUERQUE, NM 87199  
(505) 828-2200 FAX 797-9539  
e-mail: dmgs@swcp.com

April 28, 1998

Mr. Fred Aguirre  
Hydrology Division  
City of Albuquerque  
200 Lomas NW  
Albuquerque, New Mexico 87102

Re: **Fuddrucker's (F17-~~D74~~) Grading and Drainage Plan Third Resubmittal for Building Permit Approval** **D80**

Dear Mr. Aguirre:

Attached is the revised Grading and Drainage plan for Fuddrucker's Restaurant site located north of the I-25 frontage road between Montgomery and Jefferson. This revised plan was modified to address comments from NMSHTD. The only modifications from the most recently submitted plan is the inclusion in the notes portion regarding the improvements to the bar ditch and inlet within NMSHTD right of way. My last meeting with Lisa Ann Manwill resulted in the final comment of the City requiring concurrence from NMSHTD for the drainage plan. I have attached this concurrence.

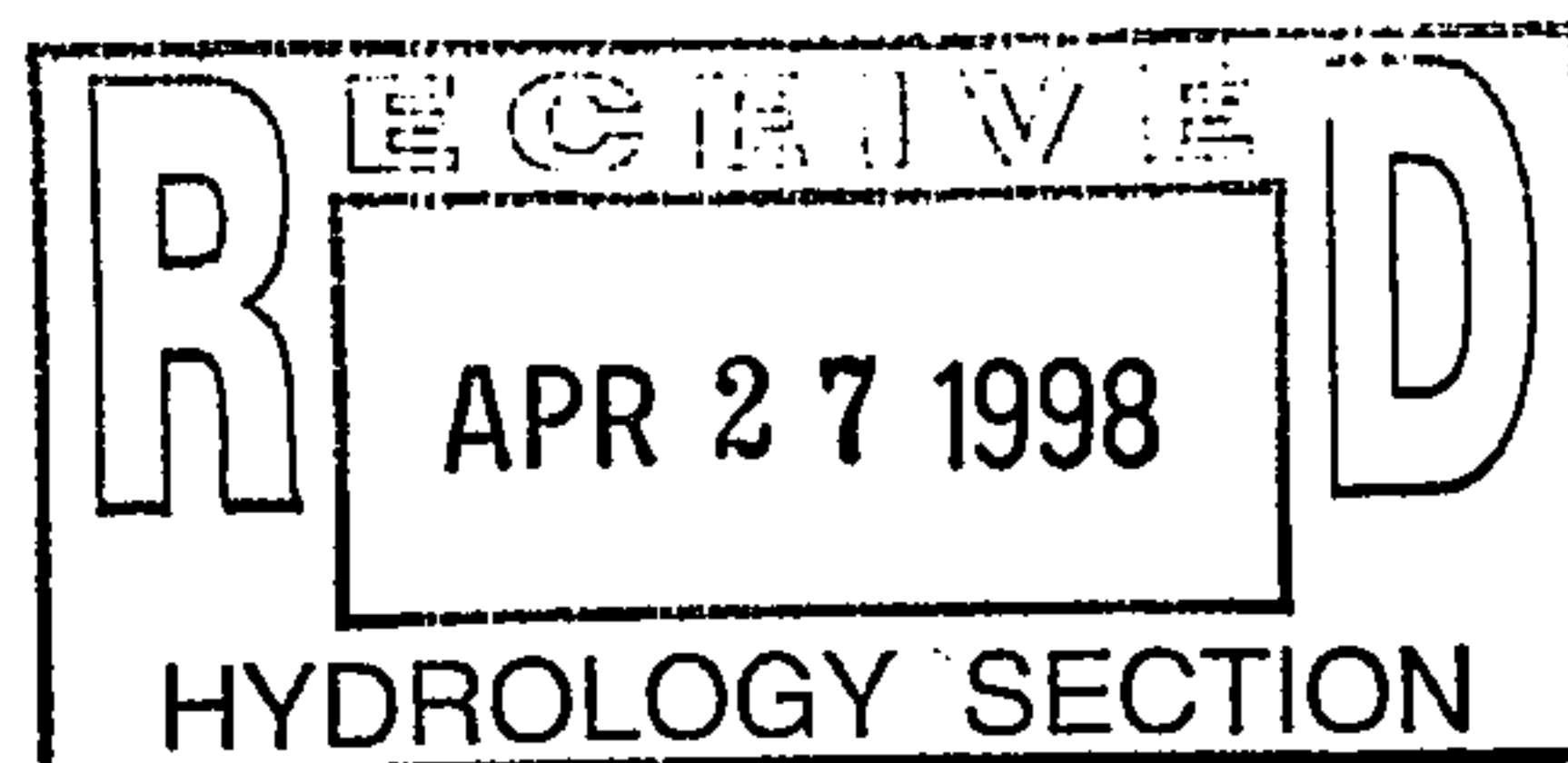
Feel free to contact me if there are any questions.

Sincerely,

MARK GOODWIN & ASSOCIATES, P.A.

  
David Soule  
Staff Engineer

f:\Wudruck\Adrainage.rv3





# DRAINAGE INFORMATION SHEET

PROJECT TITLE: FUDDRUCKER'S ZONE ATLAS/DRNG, FILE#: F-17-Z/D80

DRB #: \_\_\_\_\_ EPC #: \_\_\_\_\_ WORK ORDER #: \_\_\_\_\_

LEGAL DESCRIPTION: Tract A-1-C-2, within Section 35, Township 11 North, Range 3 East, NMPM, City of Albuquerque, Bernalillo County, New Mexico, October 1997

CITY ADDRESS: \_\_\_\_\_

ENGINEERING FIRM: Mark Goodwin & Associates CONTACT: David Soule

ADDRESS: PO Box 90606 PHONE: 828-2200

OWNER: Fuddruckers CONTACT: Jim Lewis

ADDRESS: \_\_\_\_\_ PHONE: 247-1529

ARCHITECT: SLNB Architects CONTACT: Ken Duck

ADDRESS: 1620 CENTRAL PHONE: 247-1529

SURVEYOR: Aldrich Land Surveyors CONTACT: Tim Aldrich

ADDRESS: \_\_\_\_\_ PHONE: 884-1990

CONTRACTOR: \_\_\_\_\_ CONTACT: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

## TYPE OF SUBMITTAL:

## CHECK TYPE OF APPROVAL SOUGHT:

☐ DRAINAGE REPORT  
☒ DRAINAGE PLAN  
☐ CONCEPTUAL GRADING & DRAINAGE PLAN  
☒ GRADING PLAN  
☐ EROSION CONTROL PLAN  
☐ ENGINEER'S CERTIFICATION  
☐ OTHER

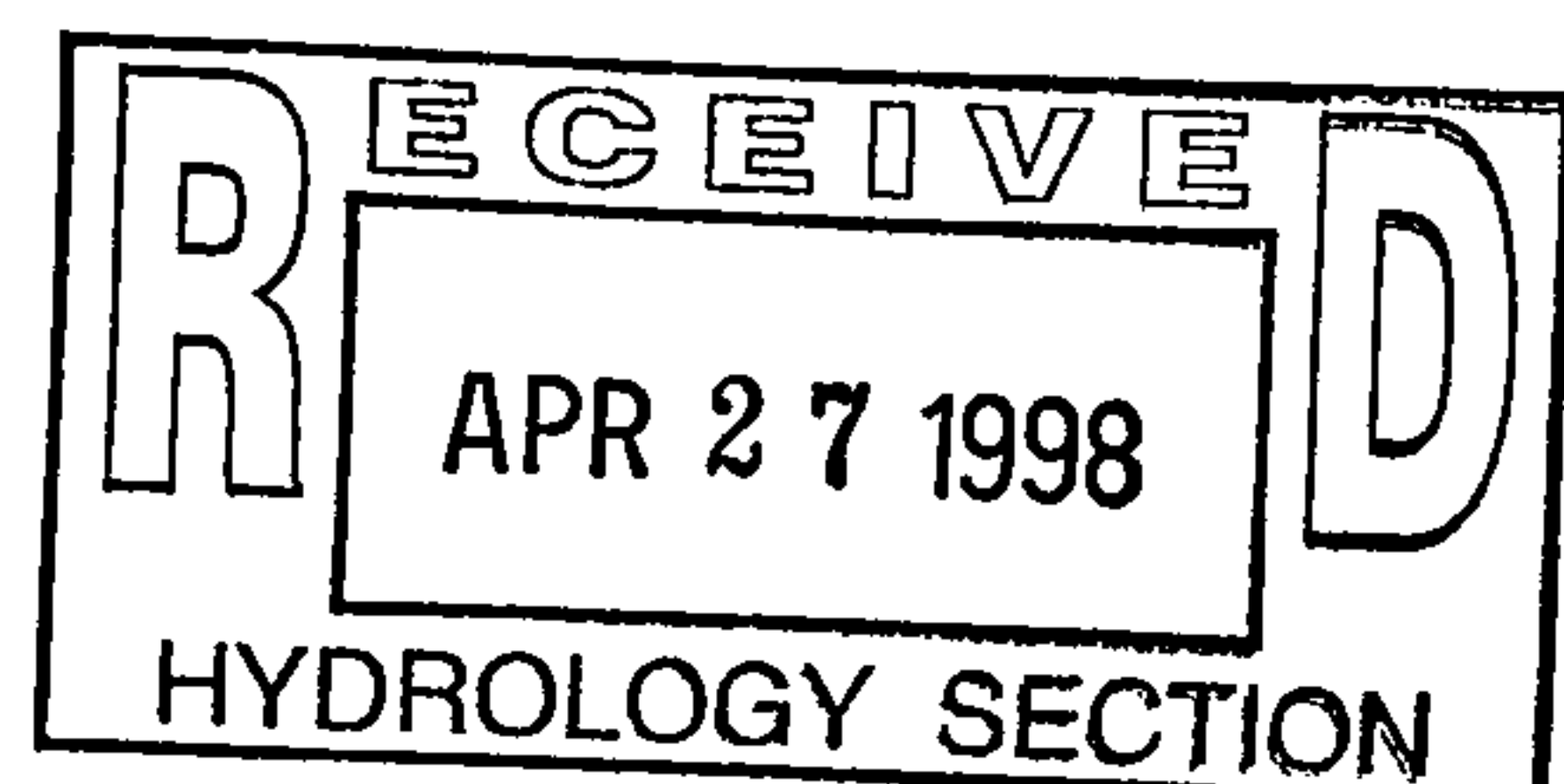
☐ SKETCH PLAT APPROVAL  
☐ PRELIMINARY PLAT APPROVAL  
☐ S. DEV. PLAN FOR SUB'D APPROVAL  
☐ S. DEV. PLAN FOR BLDG PERMIT APPROVAL  
☐ SECTOR PLAN APPROVAL  
☐ FINAL PLAT APPROVAL  
☐ FOUNDATION PERMIT APPROVAL  
☒ BUILDING PERMIT APPROVAL  
☐ CERTIFICATION OF OCCUPANCY APPROVAL  
☐ GRADING PERMIT APPROVAL  
☐ PAVING PERMIT APPROVAL  
☐ S.A.D. DRAINAGE REPORT  
☐ DRAINAGE REQUIREMENTS  
☐ OTHER \_\_\_\_\_ (Specify)

## PRE-DESIGN MEETING:

☐ YES  
☒ NO  
☐ COPY PROVIDED

DATE SUBMITTED: April 28 1998

BY: David Soule  
David Soule



# DRAINAGE INFORMATION SHEET

PROJECT TITLE: FUDDRUCKER'S ZONE ATLAS/DRNG, FILE#: F-17-7D80

DRB #: \_\_\_\_\_ EPC #: \_\_\_\_\_ WORK ORDER #: \_\_\_\_\_

LEGAL DESCRIPTION: Tract A-1-C-2, within Section 35, Township 11 North, Range 3 East, NMPM, City of Albuquerque, Bernalillo County, New Mexico, October 1997

CITY ADDRESS: \_\_\_\_\_

ENGINEERING FIRM: Mark Goodwin & Associates CONTACT: David Soule

ADDRESS: PO Box 90606 PHONE: 828-2200

OWNER: Fuddruckers CONTACT: Jim Lewis

ADDRESS: \_\_\_\_\_ PHONE: 247-1529

ARCHITECT: SLNB Architects CONTACT: Ken Duck

ADDRESS: 1620 CENTRAL PHONE: 247-1529

SURVEYOR: Aldrich Land Surveyors CONTACT: Tim Aldrich

ADDRESS: \_\_\_\_\_ PHONE: 884-1990

CONTRACTOR: \_\_\_\_\_ CONTACT: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

## TYPE OF SUBMITTAL:

## CHECK TYPE OF APPROVAL SOUGHT:

- ☐ DRAINAGE REPORT
- ☒ DRAINAGE PLAN
- ☐ CONCEPTUAL GRADING & DRAINAGE PLAN
- ☒ GRADING PLAN
- ☐ EROSION CONTROL PLAN
- ☐ ENGINEER'S CERTIFICATION
- ☐ OTHER

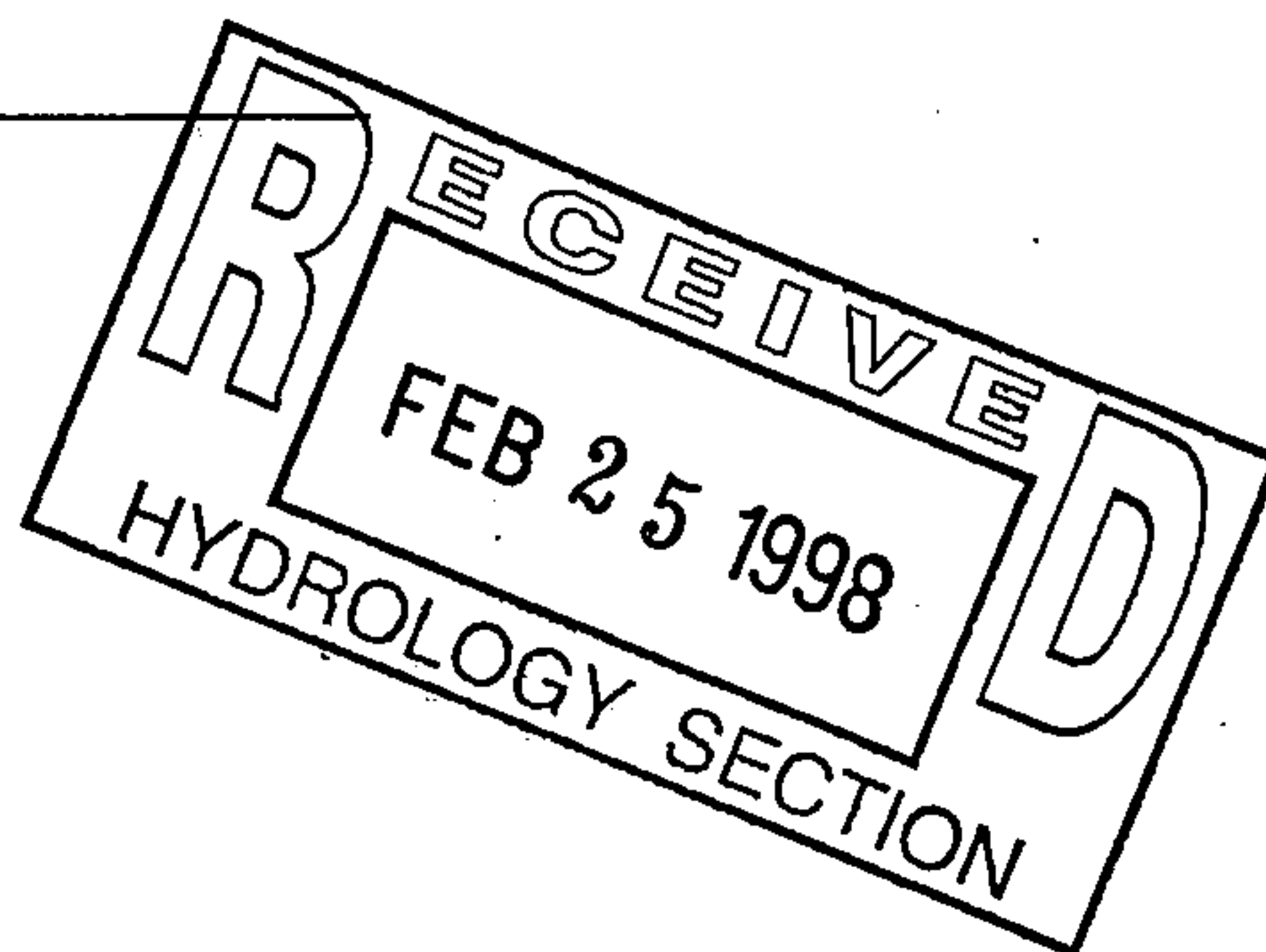
- ☐ SKETCH PLAT APPROVAL
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ S. DEV. PLAN FOR SUB'D APPROVAL
- ☐ S. DEV. PLAN FOR BLDG PERMIT APPROVAL
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- ☐ FINAL PLAT APPROVAL
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- ☒ BUILDING PERMIT APPROVAL
- ☐ CERTIFICATION OF OCCUPANCY APPROVAL
- ☐ GRADING PERMIT APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☐ S.A.D. DRAINAGE REPORT
- ☐ DRAINAGE REQUIREMENTS
- ☐ OTHER \_\_\_\_\_ (Specify)

## PRE-DESIGN MEETING:

- ☐ YES
- ☒ NO
- ☐ COPY PROVIDED

DATE SUBMITTED: February 25, 1998

BY: David Soule  
David Soule







D. Mark Goodwin & Associates, P.A.  
Consulting Engineers

P.O. BOX 90606, ALBUQUERQUE, NM 87199  
(505) 828-2200 FAX 797-9539  
e-mail: dmgs@swcp.com

February 11, 1998

Ms. Lisa Ann Manwill, P.E.  
Hydrology Division  
City of Albuquerque  
200 Lomas NW  
Albuquerque, New Mexico 87102

Re: **Fuddrucker's (F17-~~D74~~) Grading and Drainage Plan Second Resubmittal for Building Permit Approval** **D80**

Dear Ms. Manwill:

Attached is the revised Grading and Drainage plan for Fuddrucker's Restaurant site located north of the I-25 frontage road between Montgomery and Jefferson. The grading plan has been altered to accommodate a new site plan. The modifications do not change the drainage parameters previously submitted. The following are my responses to your comments dated January 30, 1998

- Comment #1-Attached is a more defined orthotopographic map showing the drainage basin which drains to the bar-ditch in front of this site. The properties which front bar-ditch drain mainly east to west. Only a small portion of each lot drains to the bar-ditch. After re-analyzing the basin, I find the developed flow to be 9.27 CFS. With the contribution of the flow from our site, the capacity of the channel is sufficient to carry all the predicted developed storm discharge to the existing inlet located within the I-25 frontage right of way.
- Comment #2- The formula for the channel capacity does not include the variable H, the variable is R<sub>h</sub> for hydraulic radius. The confusion was in the letter sizing, the revised plan corrects this issue.
- Comment #3- We are in the process of obtaining acceptance of this drainage plan from the New Mexico State Highway and Transportation Department.

Feel free to contact me if there are any questions.

Sincerely,

MARK GOODWIN & ASSOCIATES, P.A.

*David Soule*  
David Soule  
Staff Engineer

f:\Wudruck\Adrainage.rv2



January 30, 1998

David Soule  
Mark Goodwin & Associates  
P.O. Box 90606  
Albuquerque, NM 87199

*D80*  
**RE: FUDRUCKER'S (F17-~~D71~~). GRADING AND DRAINAGE PLAN FOR BUILDING  
PERMIT APPROVAL. ENGINEER'S STAMP DATED JANUARY 9, 1998.**

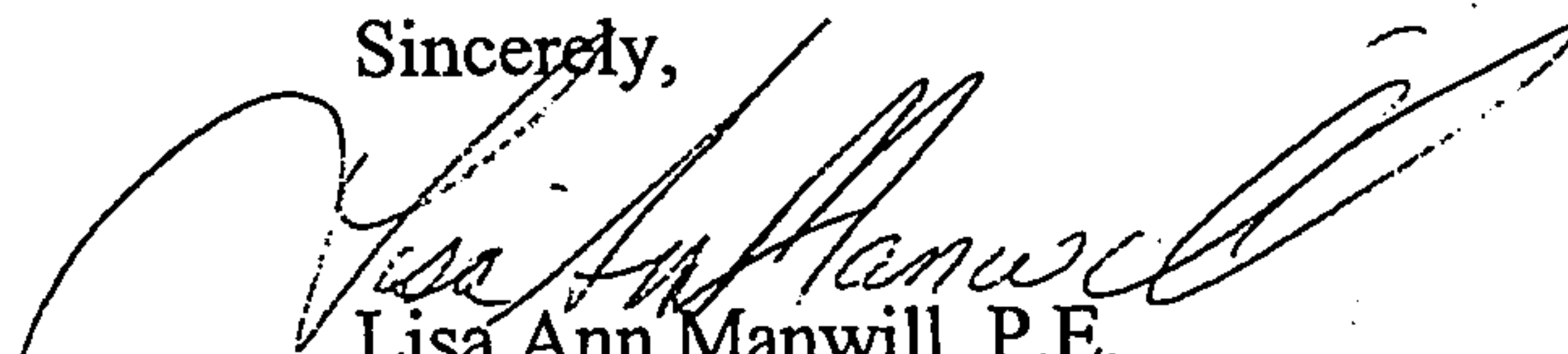
Dear Mr. Soule:

Based on the information provided on your January 9, 1998 submittal, City Hydrology has the following comments:

1. Your orthophoto topographic map seems to indicate that properties north of the Frontage Road drain to the bar ditch. You must consider these flows when determining the allowable discharge from your site. In other words, it appears that your allowable discharge will be somewhat less than the capacity of the channel.
2. Please re-evaluate the equation used to determine the channel capacity. I do not think the "H" variable belongs in the equation.
3. Concurrence from the New Mexico State Highway Department will be required.

If I can be of further assistance, please feel free to contact me at 924-3984.

Sincerely,

  
Lisa Ann Manwill, P.E.  
Hydrology

c: Andrew Garcia  
File

Good for You, Albuquerque!







SCALE 1 = 600





January 30, 1998

David Soule  
Mark Goodwin & Associates  
P.O. Box 90606  
Albuquerque, NM 87199

*D80*  
**RE: FUDRUCKER'S (F17-~~DTT~~). GRADING AND DRAINAGE PLAN FOR BUILDING  
PERMIT APPROVAL. ENGINEER'S STAMP DATED JANUARY 9, 1998.**

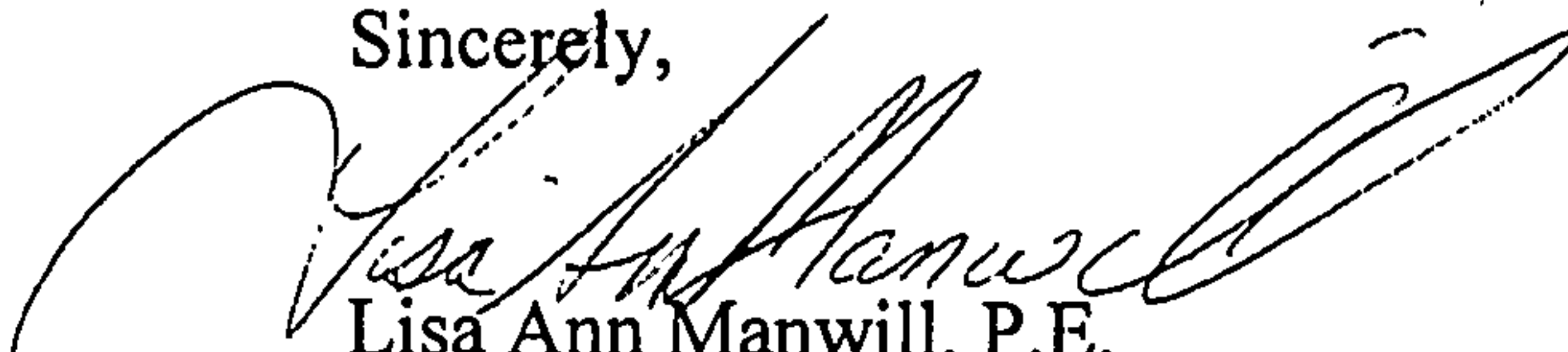
Dear Mr. Soule:

Based on the information provided on your January 9, 1998 submittal, City Hydrology has the following comments:

1. Your orthophoto topographic map seems to indicate that properties north of the Frontage Road drain to the bar ditch. You must consider these flows when determining the allowable discharge from your site. In other words, it appears that your allowable discharge will be somewhat less than the capacity of the channel.
2. Please re-evaluate the equation used to determine the channel capacity. I do not think the "H" variable belongs in the equation.
3. Concurrence from the New Mexico State Highway Department will be required.

If I can be of further assistance, please feel free to contact me at 924-3984.

Sincerely,

  
Lisa Ann Manwill, P.E.  
Hydrology

c: Andrew Garcia  
File

Good for You, Albuquerque!







# ***City of Albuquerque***

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

December 4, 1997

David Soule  
Mark Goodwin & Associates  
P.O. Box 90606  
Albuquerque, NM 87199

*D80*

***RE: FUDRUCKER'S (F17-~~DEF~~). GRADING AND DRAINAGE PLAN FOR BUILDING  
PERMIT APPROVAL. ENGINEER'S STAMP DATED NOVEMBER 12, 1997.***

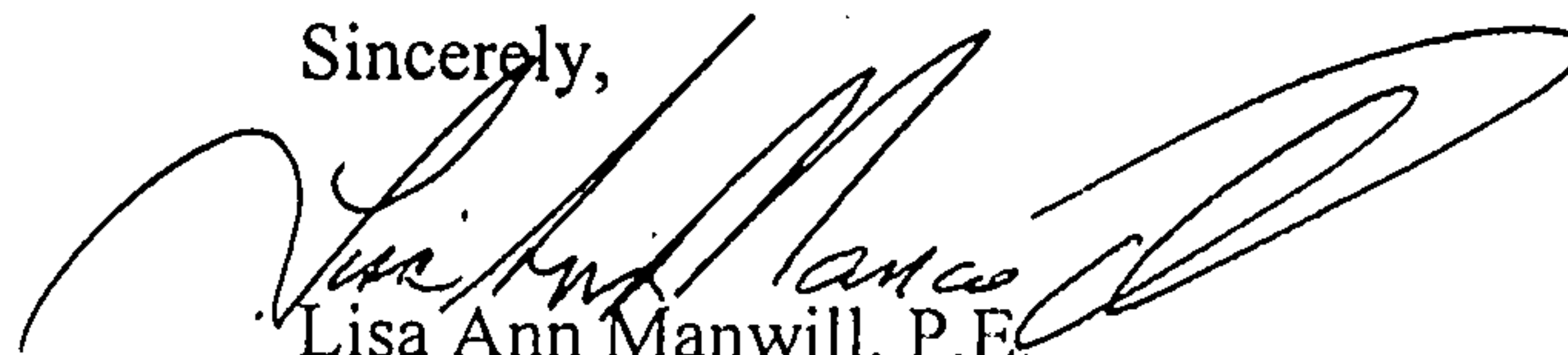
Dear Mr. Soule:

Based on the information provided on your November 12, 1997 submittal, City Hydrology has the following comments:

1. What numbers are you using in your weir equations (Basins A and B) for length and height?
2. What is downstream capacity and allowable discharge?
3. What is historical discharge?
4. Please provide a general explanation of the project and define what happens to flow once it leaves the site.

If I can be of further assistance, please feel free to contact me at 924-3984.

Sincerely,

  
Lisa Ann Manwill, P.E.  
Hydrology

c: Andrew Garcia  
File

**NEW MEXICOSTATE HIGHWAY AND TRANSPORTATION  
DEPARTMENT**

**INTRA-DEPARTMENTAL CORRESPONDENCE**

---

**DATE:** April 23, 1998

**SUBJECT:** Fuddruckers in South Bound Frontage Road  
South of Jefferson Interchange

F-17/D080

**REFERENCE:  
ATTENTION:**

**TO:** Julian Vigil  
District Three Permit Section

**FROM:** Raymunda A. Van Hoven  
Drainage Engineer

*R. Van Hoven*

I have reviewed the revised drainage plan submitted by Mr. David Soule of Mark Goodwin & Assoc. and found the recommendations to be reasonable. The consultant addressed the Drainage Section's previous comments.

The Drainage Section approves the drainage plan for further permit processing. The project will involve construction inside the State right-of-way.

xc: George Herrera  
Kathy Trujillo, DO#3  
David Soule, DMG & Assoc.





March 4, 1998

David Soule  
Mark Goodwin & Associates  
P.O. Box 90606  
Albuquerque, NM 87199

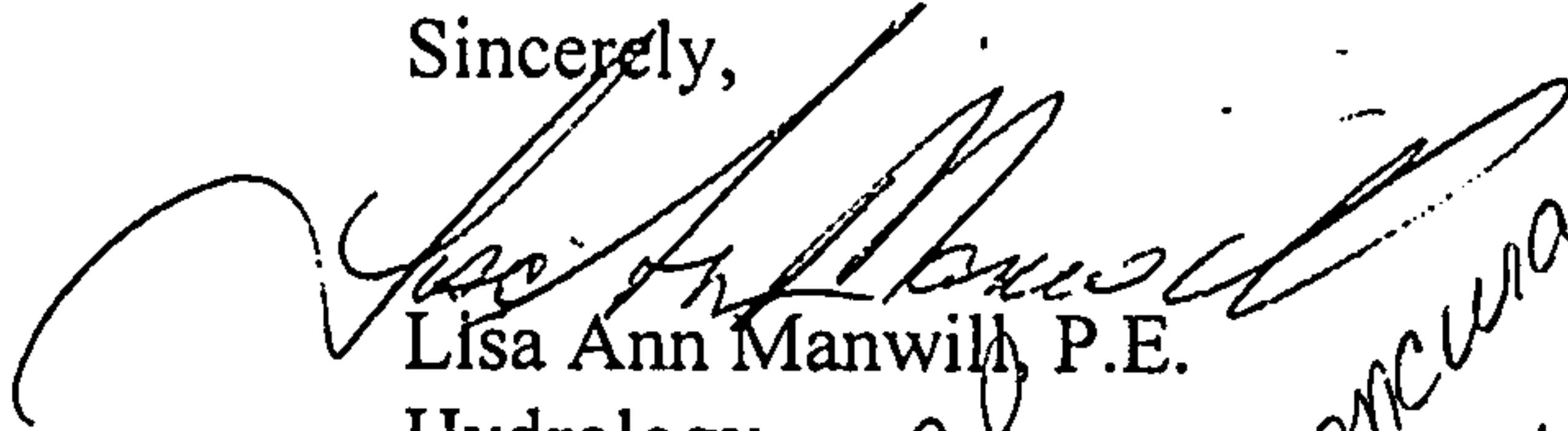
680

**RE: FUDRUCKER'S (F17-B71). GRADING AND DRAINAGE PLAN FOR BUILDING PERMIT APPROVAL. ENGINEER'S STAMP DATED FEBRUARY 20, 1998.**

Dear Mr. Soule:

Based on the information provided on your February 25, 1998 submittal, City Hydrology has concerns about cross lot drainage and downstream capacity. I would like for you and I to meet regarding this project. Since this project has been turned in and reviewed a number of times, I will expedite your next submittal. Please call me, at your earliest convenience, to set up a meeting time. I can be reached at 924-3984.

Sincerely,

  
Lisa Ann Manwill, P.E.  
Hydrology

c: Andrew Garcia  
File 

*Prior to approval  
27 ① State Hwy concurrence  
plans dated  
are okay.*

*2-20-98*

Good for You, Albuquerque!



# DRAINAGE INFORMATION SHEET

F17/D80

PROJECT TITLE: FUDDRUCKER'S ZONE ATLAS/DRNG, FILE#: ETZ  
DRB #: \_\_\_\_\_ EPC #: \_\_\_\_\_ WORK ORDER #: \_\_\_\_\_  
LEGAL DESCRIPTION: Tract A-1-C-2, within Section 35, Township 11 North, Range 3 East, NMPM, City of Albuquerque, Bernalillo County, New Mexico, October 1997  
CITY ADDRESS: \_\_\_\_\_

ENGINEERING FIRM: Mark Goodwin & Associates CONTACT: David Soule  
ADDRESS: PO Box 90606 PHONE: 828-2200  
OWNER: Fuddruckers CONTACT: Jim Lewis  
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ARCHITECT: SLNB Architects CONTACT: Ken Duck  
ADDRESS: 1620 CENTRAL PHONE: 247-1529  
SURVEYOR: Aldrich Land Surveyors CONTACT: Tim Aldrich  
ADDRESS: \_\_\_\_\_ PHONE: 884-1990  
CONTRACTOR: \_\_\_\_\_ CONTACT: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

## TYPE OF SUBMITTAL:

## CHECK TYPE OF APPROVAL SOUGHT:

☐ DRAINAGE REPORT  
☐ DRAINAGE PLAN  
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☐ SKETCH PLAT APPROVAL  
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☐ PAVING PERMIT APPROVAL  
☐ S.A.D. DRAINAGE REPORT  
☐ DRAINAGE REQUIREMENTS  
☐ OTHER \_\_\_\_\_ (Specify)

## PRE-DESIGN MEETING:

☐ YES  
☒ NO  
☐ COPY PROVIDED

RECEIVED  
OCT 21 1998  
HYDROLOGY SECTION

DATE SUBMITTED: October 20, 1998

BY: David Soule  
David Soule

4855 Pan American Freeway NE  
30 day Temp. 10/24/98