



CITY OF  
Albuquerque

Public Works Department  
January 16, 1997

Martin J. Chávez, Mayor

Robert E. Gurulé, Director

Mark Goodwin  
Mark Goodwin & Assoc.  
P.O. Box 90606  
Albuquerque, NM 87199

**RE: POMPEO WAREHOUSE (C18-D31). GRADING AND DRAINAGE PLAN FOR  
BUILDING AND GRADING PERMIT APPROVALS. ENGINEER'S STAMP DATED  
JANUARY 8, 1997.**

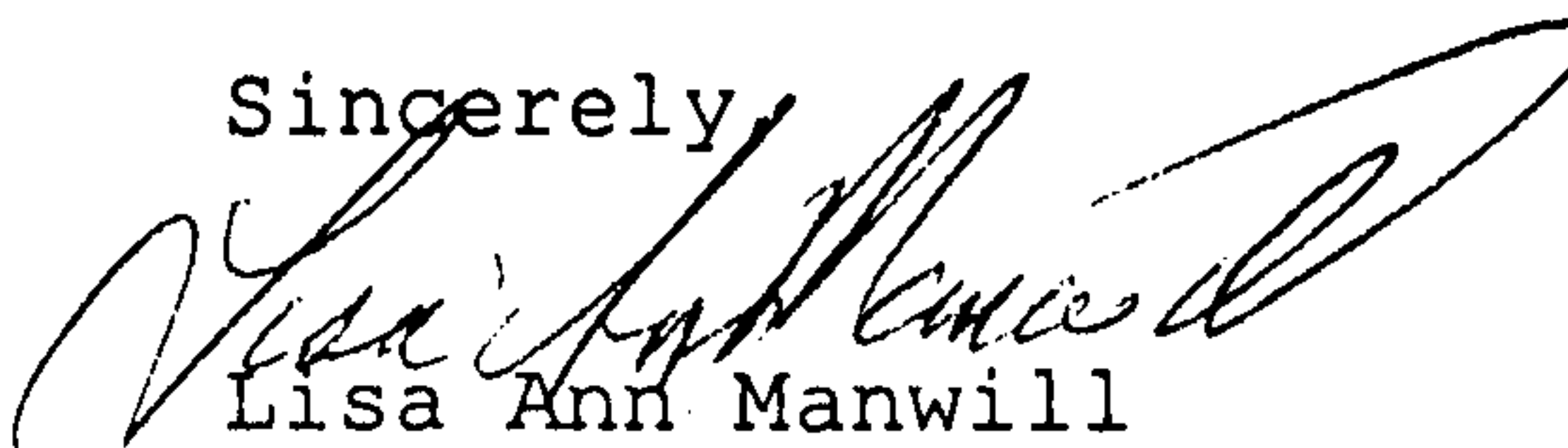
Dear Mr. Goodwin:

Based on the information provided on your January 8, 1997 submittal, the above referenced project is approved for Building Permit. This project will require DRB and Work Order approval. Be certain to include the 10-feet of RCP and 4-foot diameter manhole on the infrastructure list.

An Engineer's Certification will be required prior to Certificate of Occupancy.

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

Sincerely,



Lisa Ann Manwill  
Engineering Assoc./Hyd.

c: Andrew Garcia  
File

Good for You, Albuquerque!

P.O. Box 1293, Albuquerque, New Mexico 87103



# DRAINAGE INFORMATION SHEET

PROJECT TITLE: Pompeo Warehouse ZONE ATLAS/DRNG, FILE#: C-18/1031  
 DRB #: \_\_\_\_\_ EPC #: \_\_\_\_\_ WORK ORDER #: \_\_\_\_\_  
 LEGAL DESCRIPTION: Lot 5, Block 30, Tract A of Unit B, NAA  
 CITY ADDRESS: \_\_\_\_\_

ENGINEERING FIRM: Mark Goodwin & Associates PA CONTACT: Roger Martinez, Jr.  
 ADDRESS: PO Box 90606 PHONE: 345-2010  
 OWNER: Pompeo CONTACT: Steve Schaefer  
 ADDRESS: 319 Central NE PHONE: 247-9955  
 ARCHITECT: Van H. Gilbert Architects CONTACT: Steve Schaefer  
 ADDRESS: 319 Central NE PHONE: 247-9955  
 SURVEYOR: \_\_\_\_\_ CONTACT: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_  
 CONTRACTOR: \_\_\_\_\_ CONTACT: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

## TYPE OF SUBMITTAL:

\_\_\_\_ DRAINAGE REPORT  
X DRAINAGE PLAN  
 \_\_\_\_ CONCEPTUAL GRADING & DRAINAGE PLAN  
X GRADING PLAN  
 \_\_\_\_ EROSION CONTROL PLAN  
 \_\_\_\_ ENGINEER'S CERTIFICATION  
 \_\_\_\_ OTHER

## PRE-DESIGN MEETING:

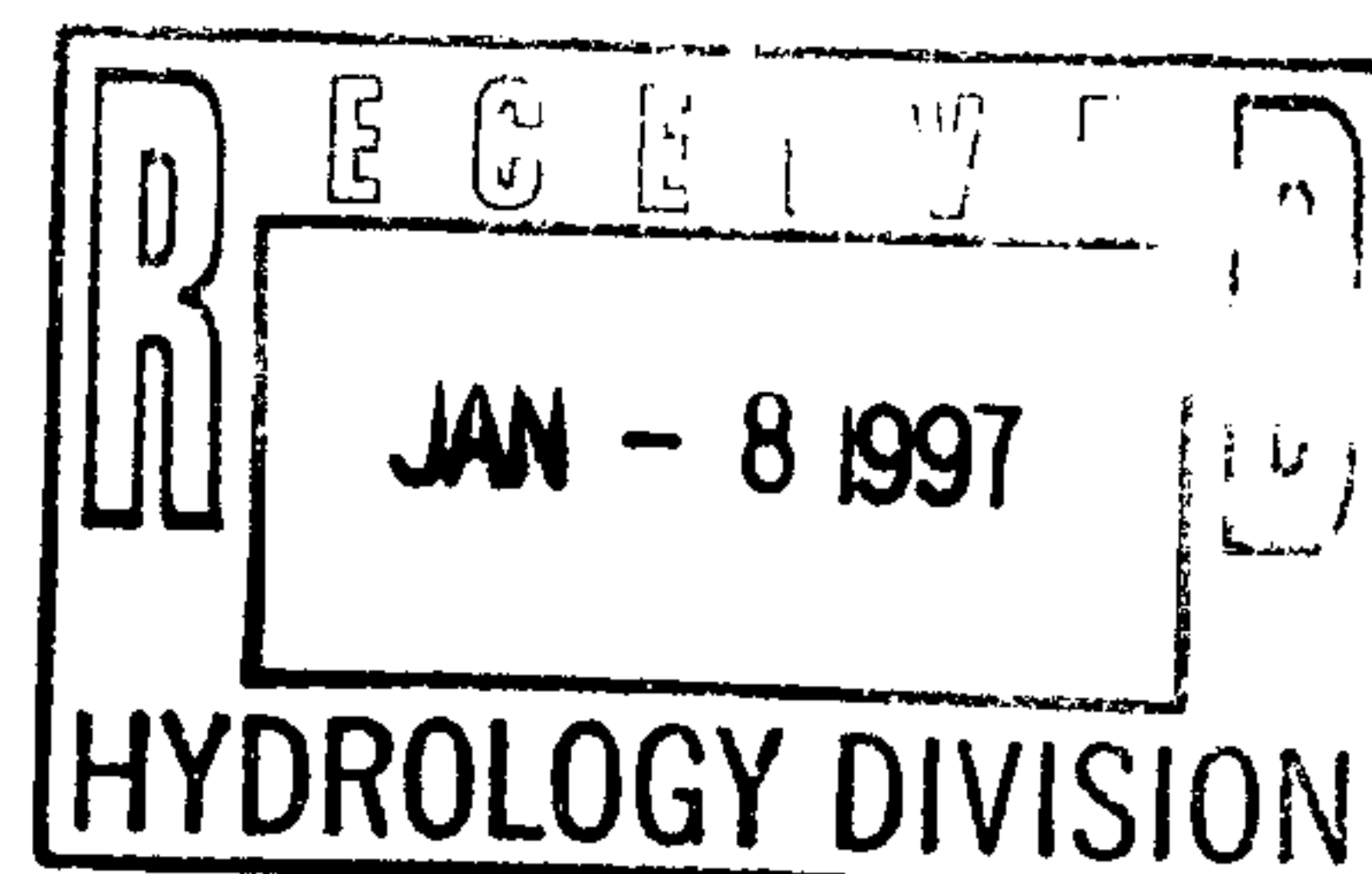
\_\_\_\_ YES  
 \_\_\_\_ NO  
 \_\_\_\_ COPY PROVIDED

## 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  
X BUILDING PERMIT APPROVAL  
 \_\_\_\_ CERTIFICATION OF OCCUPANCY APPROVAL  
X GRADING PERMIT APPROVAL  
 \_\_\_\_ PAVING PERMIT APPROVAL  
 \_\_\_\_ S.A.D. DRAINAGE REPORT  
 \_\_\_\_ DRAINAGE REQUIREMENTS  
 \_\_\_\_ OTHER \_\_\_\_\_ (Specify)

DATE SUBMITTED: 1/8/97

BY: R. Martinez, Jr.  
 Roger Martinez, Jr.





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

P.O. BOX 90606, ALBUQUERQUE, NM 87199  
(505) 345-2010

January 3, 1997

Ms Lisa Manwill  
Hydrology  
City Of Albuquerque  
P.O. Box 1293  
Albuquerque, NM 87103

RE: POMPEO WAREHOUSE C-18/D31

Dear Ms Manwill,

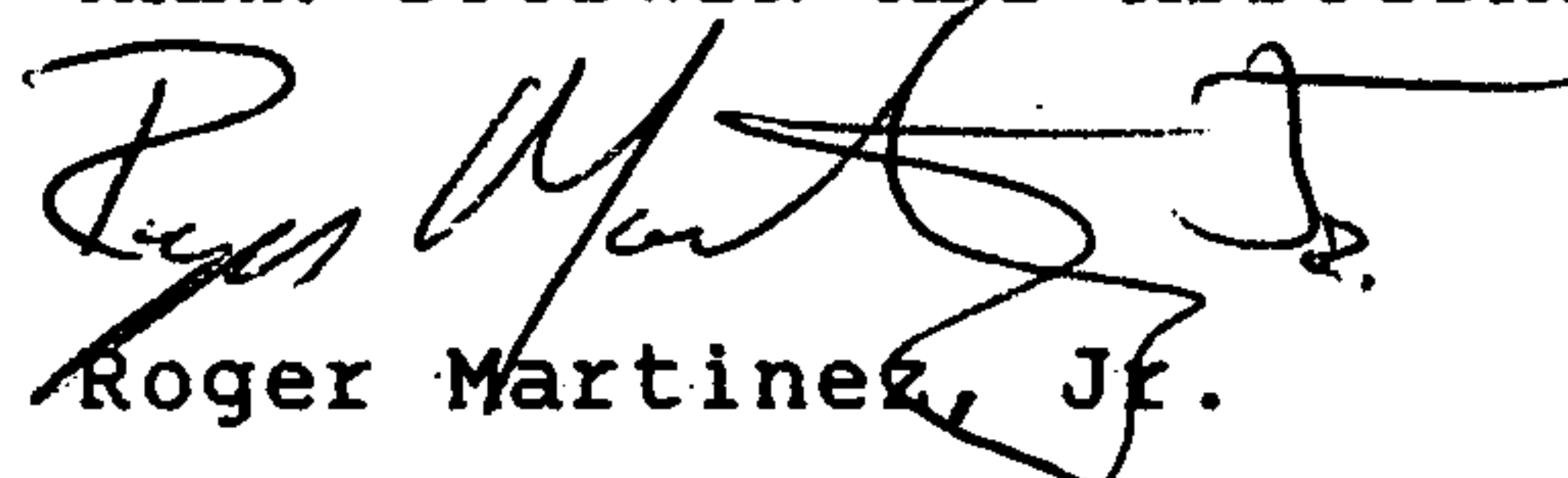
The intent of this letter is to respond to your comments outlined in your letter dated December 30, 1996. Attached, please find the revised grading and drainage plan for the above referenced project.

1. Contours have been drawn on plans that show ponding areas.
2. This item is being coordinated and an infrastructure list has been attached.
3. Invert elevation has been provided.
4. The storm inlet/reducer reference has been added to keyed notes 1 & 2.
5. The drainage management plan for this site has been divided down the center into two basins. Basin A is the eastern half and Basin B is the western half with the developed flows draining northward towards Signal Avenue. The storm water is collected into type single "D" inlets with a 4" x 6" reducer on the attached pipe. The flows are combined and then discharged to the existing 30" storm drain pipe in Signal Avenue. The discharged storm water from this site is in compliance with the Signal Hill Master Drainage Plan for interim conditions.

If you have any questions concerning this project or the letter, please contact me at 345-2010.

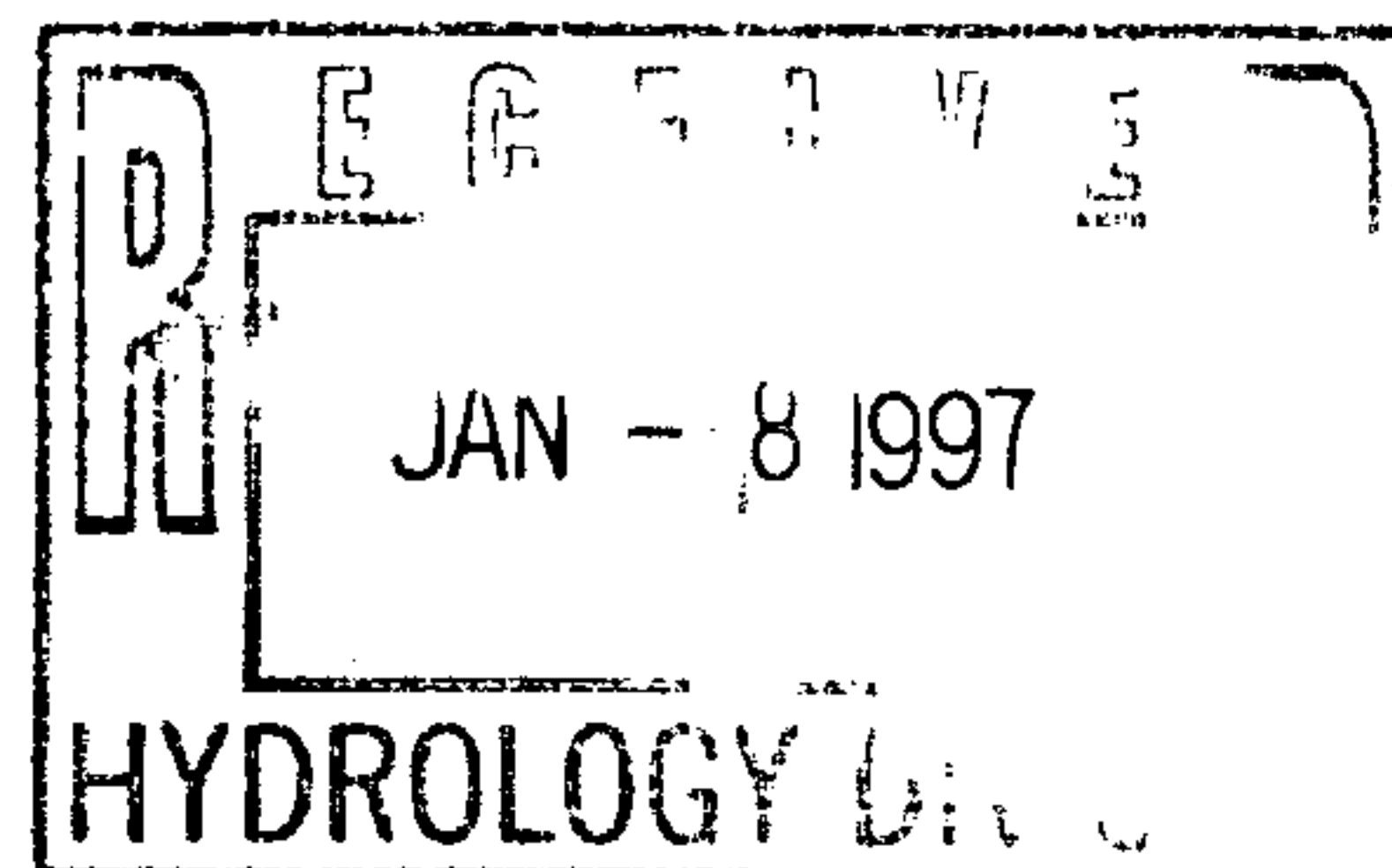
Sincerely,

MARK GOODWIN AND ASSOCIATES, P.A.



Roger Martinez, Jr.

Attachments





CITY OF  
Albuquerque  
December 30, 1996

Martin J. Chávez, Mayor

Roger Martinez, Jr.  
Mark Goodwin & Assoc.  
P.O. Box 90606  
Albuquerque, NM 87199

**RE: POMPEO WAREHOUSE (C18-D31). GRADING AND DRAINAGE PLAN FOR  
BUILDING AND GRADING PERMIT APPROVALS. ENGINEER'S STAMP DATED  
DECEMBER 19, 1996.**

Dear Mr. Martinez:

Based on the information provided on your December 19, 1996 submittal, City Hydrology has the following comments:

1. Indicate ponds by showing proposed contours.
2. This project will require Work Order approval. Why are you seeking a SO #19 Permit? Provide a copy of the infrastructure list.
3. Provide the invert elevation for the manhole in Signal.
4. Reference storm inlet/reducer detail in keyed notes 1 and 2.
5. A brief drainage management plan narrative would be helpful.

If I can be of further assistance, please feel free to contact me at 768-3622.

Sincerely,

Lisa Ann Manwill  
Engineering Assoc./Hyd.

c: Andrew Garcia

File

Good for You, Albuquerque!





## DRAINAGE INFORMATION SHEET

PROJECT TITLE: Pompeo Warehouse ZONE ATLAS/DRNG, FILE#: C-18/031  
DRB #: \_\_\_\_\_ EPC #: \_\_\_\_\_ WORK ORDER #: \_\_\_\_\_  
LEGAL DESCRIPTION: Lot 5, Block 30, Tract A of Unit B, NAA  
CITY ADDRESS: \_\_\_\_\_

ENGINEERING FIRM: Mark Goodwin & Associates PA CONTACT: Roger Martinez, Jr.  
ADDRESS: PO Box 90606 PHONE: 345-2010  
OWNER: Pompeo CONTACT: Steve Schaefer  
ADDRESS: 319 Central NE PHONE: 247-9955  
ARCHITECT: Van H. Gilbert Architects CONTACT: Steve Schaefer  
ADDRESS: 319 Central NE PHONE: 247-9955  
SURVEYOR: \_\_\_\_\_ CONTACT: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_  
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: 17 DEC 96

BY: Roger Martinez, Jr.  
Roger Martinez, Jr.

DEC 19  
PROLOGUE



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

P.O. BOX 90606, ALBUQUERQUE, NM 87199  
(505) 345-2010

December 17, 1996

Ms Lisa Manwill  
Hydrology  
City Of Albuquerque  
P.O. Box 1293  
Albuquerque, NM 87103

*Read  
BB # and  
infrastructure list*

RE: POMPEO WAREHOUSE C-18/D31

Dear Ms Manwill,

The intent of this letter is to respond to your comments outlined in your letter dated November 19, 1996. Attached, please find the revised grading and drainage plan for the above referenced project.

- ✓ 1. The drainage basins have been outlined along the property boundaries for clarification.
2. The ponds are located on the northern most portion of the parking lot adjacent to the entrances. The storm inlets are centrally located within the ponds.
3. The construction of Signal Avenue has not been determined and may be constructed prior to the commencement of this project. Therefore requiring a SO #19 permit. *NO* *Street needs to be bonded.*
4. Please see attached sheets and notes in legend.
5. See revised plan.
6. Please see attached sheets and notes in legend.

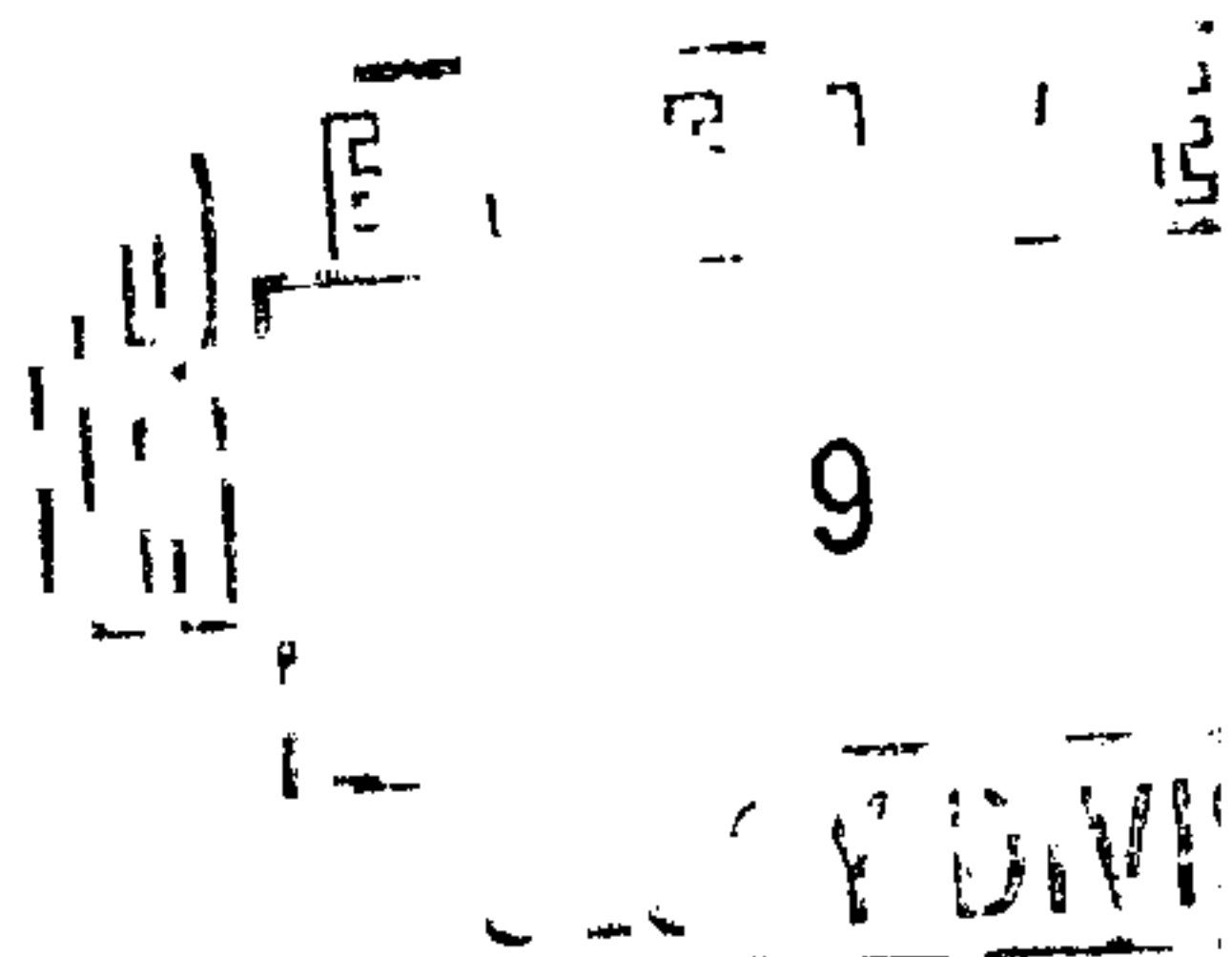
If you have any questions concerning this project or the letter, please contact me at 345-2010.

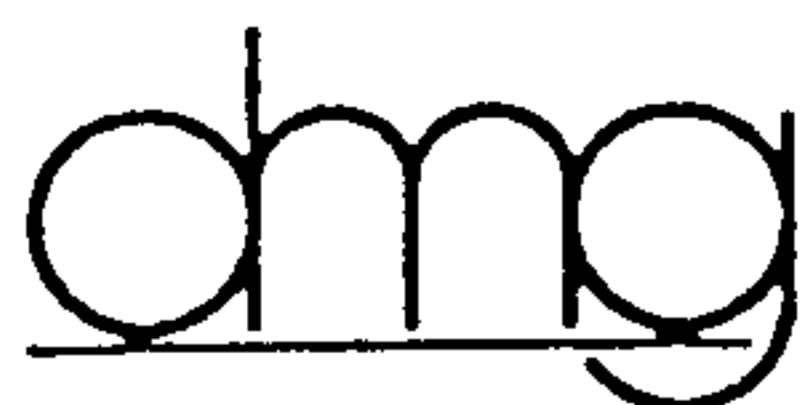
Sincerely,

MARK GOODWIN AND ASSOCIATES, P.A.

*Roger Martinez, Jr.*  
Roger Martinez, Jr.

Attachments





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

PROJECT POMPED WAREHOUSE  
SUBJECT DRAINAGE  
BY RM DATE 12/16/96  
CHECKED \_\_\_\_\_ DATE \_\_\_\_\_  
SHEET 1 OF 2

$$AREA = 0.8864 \text{ ACRES} = 0.001385 \text{ SQ. MILES}$$

ALLOWABLE DISCHARGE PER SIGNAL HILL SUBDIVISION DRAINAGE REPORT.  
REPORT SETS DISCHARGE RATE FOR AREA

$$Q = 1.41 \text{ cfs / ACRE}$$

POMPED SITE ALLOWABLE DISCHARGE

$$Q = 1.25 \text{ cfs}$$

FROM AHXMO RESULTS

BASIN A

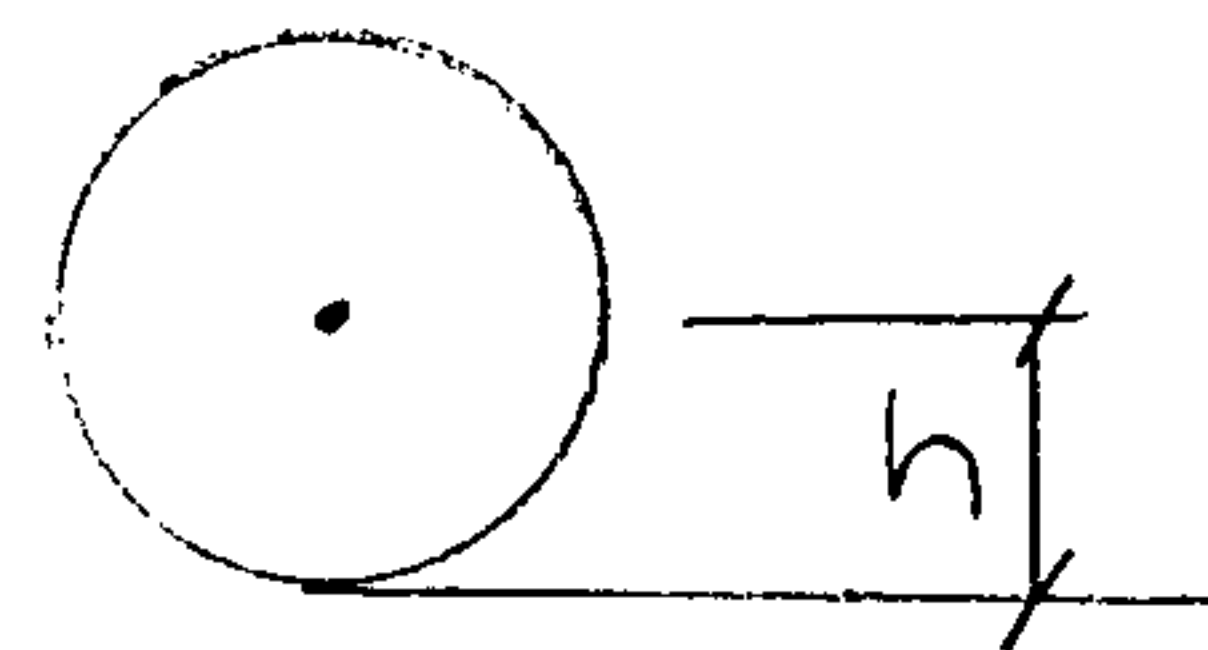
$$A = 0.4432 \text{ ACRES} = 0.0006925 \text{ SQ. MILES}$$

$$Q = 0.68 \text{ cfs} \quad \text{MAXIMUM WATER SURFACE ELEVATION} = 47.85$$

| POND IN BASIN A |         | VOL (ft <sup>3</sup> ) | STORAGE  | OUTFLOW | ORIFICE |
|-----------------|---------|------------------------|----------|---------|---------|
| ELEVATION       | AREA    |                        |          |         |         |
| 45.30           | 16.00   |                        |          | 0.00    | 4"      |
|                 |         | 40                     | 0.000918 |         |         |
| 47.80           | 16.00   |                        |          | 0.67    |         |
|                 |         | 159.1                  | 0.003652 |         |         |
| 48.00           | 1575.00 |                        |          | 0.70    |         |
|                 |         | 4747.5                 | 0.108987 |         |         |
| 49.00           | 7920.00 |                        |          | 0.83    |         |
|                 |         | 4906.6                 | 0.112640 |         |         |

ORIFICE EQUATION

$$Q = 0.654 (\pi r^2) \sqrt{2gh}$$



BASIN B

$$A = 0.4432 \text{ ACRES} = 0.0006925 \text{ SQ. MILES}$$

$$Q = 0.72 \text{ cfs} \quad \text{MAXIMUM WATER SURFACE ELEV} = 47.34$$

| POND IN BASIN B |         | VOL (ft <sup>3</sup> ) | STORAGE  | OUTFLOW | ORIFICE |
|-----------------|---------|------------------------|----------|---------|---------|
| ELEVATION       | AREA    |                        |          |         |         |
| 44.50           | 16.00   |                        |          | 0.00    | 4"      |
|                 |         | 40                     | 0.000918 |         |         |
| 47.00           | 16.00   |                        |          | 0.67    |         |
|                 |         | 3248                   | 0.074563 |         |         |
| 48.00           | 6480.00 |                        |          | 0.81    |         |

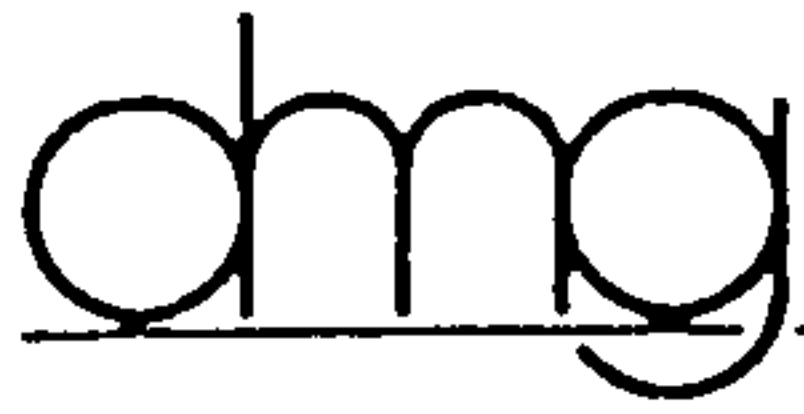
Show  
proposed  
contour

CUMULATIVE DISCHARGE FROM SITE

$$Q = 1.39 \text{ cfs}$$

DEC 19

ECOLOGICAL



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

PROJECT PUMPED WAREHOUSE  
SUBJECT DRAINAGE  
BY FW DATE \_\_\_\_\_  
CHECKED \_\_\_\_\_ DATE \_\_\_\_\_  
SHEET 2 OF 2

PIPE SIZING

UTILIZING FLOW EQUATION  $Q = K/N \cdot A \cdot R^{2/3} \cdot S^{1/2}$

| PIPE SIZE | "N"   | SLOPE | AREA | HYD. RAD. | Q(cfs) |
|-----------|-------|-------|------|-----------|--------|
| 6.00"     | 0.011 | 0.02  | 0.20 | 0.25      | 0.94   |
| 18.00"    | 0.013 | 0.01  | 1.77 | 0.52      | 10.53  |

$$K = 1.49$$

BASIN A & B

PIPE FROM STORM INLET TO M.H.

$$6" \quad Q = 0.94 \text{ cfs} > Q_F = 0.68 \text{ cfs}$$

$$Q = 0.94 \text{ cfs} > Q_3 = 0.72 \text{ cfs}$$

PIPE CONTAINS CAPACITY TO CONVEY DEVELOPED FLOW

for 6"  $\phi$  pipe @ 2.6%

$$Q = \frac{1.49}{0.011} (0.2) (0.25)^{2/3} (0.026)^{1/2}$$

$$Q = 1.09 \text{ cfs.}$$

Unless inlets  
control, you are  
releasing 2.03 cfs  
into system. Allowable  
is 1.25 cfs.



POMPEO.DAT

*This should  
be summarized*

START TIME=0.0

\*\*\*\*\* HYDROGRAPH FOR POMPEO WAREHOUSE ON SIGNAL AVENUE BETWEEN  
\*\*\*\*\* LOUISIANA AND SAN PEDRO.

RAINFALL TYPE=1 RAIN QUARTER=0.0 IN  
RAIN ONE=2.14 IN RAIN SIX=2.60 IN  
RAIN DAY=3.10 IN DT=0.03333 HR

\*HYDROGRAPH FOR ON-SITE BASIN

\*EXISTING CONDITIONS

COMPUTE NM HYD ID=1 HYD NO=101.1 AREA=0.001385 SQ MI  
PER A=100.00 PER B=0.00 PER C=0.00 PER D=0.00  
TP=0.1333 HR MASS RAINFALL=-1  
PRINT HYD ID=1 CODE=1

\*PROPOSED CONDITONS

\*BASIN A

COMPUTE NM HYD ID=2 HYD NO=101.2 AREA=0.0006925 SQ MI  
PER A=0.00 PER B=0.00 PER C=15.00 PER D=85.00  
TP=0.1333 HR MASS RAINFALL=-1  
PRINT HYD ID=2 CODE=1

\*RESERVOIR ROUTE OUT OF BASIN A

\*DISCHARGE VIA A 6" PIPE TO A 6" PIPE IN BASIN A

| ROUTE RESERVOIR | ID=3          | HYD NO=101.3   | INFLOW ID=2   | CODE=24 |
|-----------------|---------------|----------------|---------------|---------|
|                 | OUTFLOW (CFS) | STORAGE(AC-FT) | ELEVATION(FT) |         |
|                 | 0.00          | 0.000000       | 45.30         |         |
|                 | 0.67          | 0.004570       | 47.80         |         |
|                 | 0.70          | 0.108987       | 48.00         |         |
|                 | 0.83          | 0.112640       | 49.00         |         |

PRINT HYD ID=3 CODE=1

\*BASIN B

COMPUTE NM HYD ID=4 HYD NO=101.4 AREA=0.0006925 SQ MI  
PER A=0.00 PER B=0.00 PER C=15.00 PER D=85.00  
TP=0.1333 HR MASS RAINFALL=-1

POMPEO.DAT

PRINT HYD ID=4 CODE=1

\*RESERVOIR ROUTE OUT OF POND IN PARKING LOT

\*DISCHARGE VIA A 6" PVC PIPE TO STORM DRAIN IN SIGNAL

|                 |               |              |                |               |
|-----------------|---------------|--------------|----------------|---------------|
| ROUTE RESERVOIR | ID=5          | HYD NO=101.5 | INFLOW ID=4    | CODE=24       |
|                 | OUTFLOW (CFS) |              | STORAGE(AC-FT) | ELEVATION(FT) |
|                 | 0.00          |              | 0.000000       | 44.50         |
|                 | 0.67          |              | 0.000918       | 47.00         |
|                 | 0.81          |              | 0.074563       | 48.00         |

PRINT HYD ID=5 CODE=1

\*ADD HYDROGRAPHS FROM POND IN BASIN A AND BASIN B

ADD HYD ID=6 HYD NO=101.6 ID=3 ID=5

PRINT HYD ID=6 CODE=1

FINISH

POMPEO.OUT

AHYMO PROGRAM (AHYMO194) - AMAFCA Hydrologic Model - January, 1994  
RUN DATE (MON/DAY/YR) = 11/12/1996  
START TIME (HR:MIN:SEC) = 10:10:47      USER NO.= M\_GOODWN.I01  
INPUT FILE = POMPEO.DAT

START                      TIME=0.0

\*\*\*\*\*      HYDROGRAPH FOR POMPEO WAREHOUSE ON SIGNAL AVENUE BETWEEN  
  
\*\*\*\*\*      LOUISIANA AND SAN PEDRO.

RAINFALL                      TYPE=1 RAIN QUARTER=0.0 IN  
  
RAIN ONE=2.14 IN RAIN SIX=2.60 IN  
  
RAIN DAY=3.10 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  | .0027         | .0055      | .0084          | .0113  | .0143  | .0173  |
| .0204  | .0236         | .0269      | .0302          | .0337  | .0372  | .0408  |
| .0445  | .0484         | .0523      | .0564          | .0606  | .0649  | .0694  |
| .0741  | .0789         | .0839      | .0892          | .0946  | .1003  | .1063  |
| .1126  | .1192         | .1262      | .1322          | .1385  | .1452  | .1597  |
| .1922  | .2422         | .3139      | .4119          | .5407  | .7049  | .9093  |
| 1.1588 | 1.3904        | 1.4871     | 1.5687         | 1.6414 | 1.7074 | 1.7683 |
| 1.8247 | 1.8775        | 1.9270     | 1.9735         | 2.0174 | 2.0589 | 2.0982 |
| 2.1354 | 2.1707        | 2.2041     | 2.2359         | 2.2661 | 2.2737 | 2.2807 |

POMPEO.OUT

|        |        |        |        |        |        |        |
|--------|--------|--------|--------|--------|--------|--------|
| 2.2875 | 2.2939 | 2.3001 | 2.3060 | 2.3117 | 2.3172 | 2.3226 |
| 2.3277 | 2.3328 | 2.3376 | 2.3423 | 2.3470 | 2.3514 | 2.3558 |
| 2.3601 | 2.3643 | 2.3683 | 2.3723 | 2.3762 | 2.3801 | 2.3838 |
| 2.3875 | 2.3911 | 2.3947 | 2.3982 | 2.4016 | 2.4050 | 2.4083 |
| 2.4115 | 2.4147 | 2.4179 | 2.4210 | 2.4241 | 2.4271 | 2.4301 |
| 2.4330 | 2.4359 | 2.4388 | 2.4416 | 2.4444 | 2.4472 | 2.4499 |
| 2.4526 | 2.4553 | 2.4579 | 2.4605 | 2.4631 | 2.4656 | 2.4681 |
| 2.4706 | 2.4731 | 2.4755 | 2.4779 | 2.4803 | 2.4827 | 2.4850 |
| 2.4873 | 2.4896 | 2.4919 | 2.4942 | 2.4964 | 2.4986 | 2.5008 |
| 2.5030 | 2.5052 | 2.5073 | 2.5094 | 2.5115 | 2.5136 | 2.5157 |
| 2.5177 | 2.5198 | 2.5218 | 2.5238 | 2.5258 | 2.5277 | 2.5297 |
| 2.5317 | 2.5336 | 2.5355 | 2.5374 | 2.5393 | 2.5412 | 2.5430 |
| 2.5449 | 2.5467 | 2.5486 | 2.5504 | 2.5522 | 2.5540 | 2.5557 |
| 2.5575 | 2.5593 | 2.5610 | 2.5627 | 2.5645 | 2.5662 | 2.5679 |
| 2.5696 | 2.5713 | 2.5729 | 2.5746 | 2.5762 | 2.5779 | 2.5795 |
| 2.5811 | 2.5828 | 2.5844 | 2.5860 | 2.5876 | 2.5891 | 2.5907 |
| 2.5923 | 2.5938 | 2.5954 | 2.5969 | 2.5984 | 2.6000 |        |

\*HYDROGRAPH FOR ON-SITE BASIN

\*EXISTING CONDITIONS

$A_T = 39010 \text{ FT}^2$

COMPUTE NM HYD ID=1 HYD NO=101.1 AREA=0.001385 SQ MI

PER A=100.00 PER B=0.00 PER C=0.00 PER D=0.00

TP=0.1333 HR MASS RAINFALL=-1

K = .158399HR TP = .133300HR K/TP RATIO = 1.188293 SHA  
PE CONSTANT, N = 2.988024

UNIT PEAK = 2.9180 CFS UNIT VOLUME = .9947 B = 280.  
84 P60 = 2.1400

AREA = .001385 SQ MI IA = .65000 INCHES INF = 1.67000  
INCHES PER HOUR

RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - D  
T = .033330



POMPEO.OUT

PRINT HYD

ID=1 CODE=1

PARTIAL HYDROGRAPH 101.10

RUNOFF VOLUME = .65514 INCHES = .0484 ACRE-FEET  
PEAK DISCHARGE RATE = ~~1.67~~ CFS AT 1.533 HOURS BASIN AREA =  
.0014 SQ. MI.

*Entire site*

\*PROPOSED CONDITONS

\*BASIN A

COMPUTE NM HYD ID=2 HYD NO=101.2 AREA=0.0006925 SQ MI

PER A=0.00 PER B=0.00 PER C=15.00 PER D=85.00

TP=0.1333 HR MASS RAINFALL=-1

*No Landscaping?  
I think there  
are Landscaping  
requirements*

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

UNIT PEAK = 2.3239 CFS UNIT VOLUME = .9941 B = 526.

28 P60 = 2.1400

AREA = .000589 SQ MI IA = .10000 INCHES INF = .04000  
INCHES PER HOUR

RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - D  
T = .033330

K = .108912HR TP = .133300HR K/TP RATIO = .817047 SHA

POMPEO.OUT

PE CONSTANT, N = 4.373949

UNIT PEAK = .29563 CFS UNIT VOLUME = .9556 B = 379.  
38 P60 = 2.1400

AREA = .000104 SQ MI IA = .35000 INCHES INF = .83000  
INCHES PER HOUR

RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - D  
T = .033330

PRINT HYD ID=2 CODE=1

PARTIAL HYDROGRAPH 101.20

RUNOFF VOLUME = 2.19549 INCHES = .0811 ACRE-FEET  
PEAK DISCHARGE RATE = 2.14 CFS AT 1.500 HOURS BASIN AREA =  
.0007 SQ. MI.

\*RESERVOIR ROUTE OUT OF BASIN A

\*DISCHARGE VIA A 6" PIPE TO A 6" PIPE IN BASIN A

ROUTE RESERVOIR ID=3 HYD NO=101.3 INFLOW ID=2 CODE=24

| OUTFLOW (CFS) | STORAGE(AC-FT) | ELEVATION(FT) |
|---------------|----------------|---------------|
| 0.00          | 0.000000       | 45.30         |
| 0.67          | 0.004570       | 47.80         |
| 0.70          | 0.108987       | 48.00         |
| 0.83          | 0.112640       | 49.00         |

# POMPEO.OUT

\* \* \* \* \*

| TIME<br>(HRS) | INFLOW<br>(CFS) | ELEV<br>(FEET) | VOLUME<br>(AC-FT) | OUTFLOW<br>(CFS) |
|---------------|-----------------|----------------|-------------------|------------------|
| .00           | .00             | 45.30          | .000              | .00              |
| .80           | .00             | 45.30          | .000              | .00              |
| 1.60          | 1.48            | 47.84          | .023              | .68              |
| 2.40          | .08             | 47.82          | .014              | .67              |
| 3.20          | .02             | 45.39          | .000              | .02              |
| 4.00          | .02             | 45.36          | .000              | .02              |
| 4.80          | .02             | 45.36          | .000              | .02              |
| 5.60          | .02             | 45.36          | .000              | .02              |
| 6.40          | .00             | 45.31          | .000              | .00              |

PEAK DISCHARGE = .677 CFS - PEAK OCCURS AT HOUR

MAXIMUM WATER SURFACE ELEVATION = 47.847

MAXIMUM STORAGE = .0292 AC-FT INCREMENTAL TIME=

HRS

PRINT HYD

ID=3 CODE=1

PARTIAL HYDROGRAPH 101.30

RUNOFF VOLUME = 2.19509 INCHES = .0811 ACRE-FEET  
 PEAK DISCHARGE RATE = .68 CFS AT 1.866 HOURS BASIN AREA =  
 .0007 SQ. MI.

\*BASIN B

COMPUTE NM HYD

ID=4 HYD NO=101.4 AREA=0.0006925 SQ MI

*you need to clearly  
 show ponds on  
 plan sheet.  
 Also, this  
 design is useless!  
 w/ the inlets  
 + pipe you  
 have  
 chosen.*

POMPEO.OUT

PER A=0.00 PER B=0.00 PER C=15.00 PER D=85.00

TP=0.1333 HR MASS RAINFALL=-1

K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHA  
PE CONSTANT, N = 7.106420  
UNIT PEAK = 2.3239 CFS UNIT VOLUME = .9941 B = 526.  
28 P60 = 2.1400  
AREA = .000589 SQ MI IA = .10000 INCHES INF = .04000  
INCHES PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - D  
T = .033330

K = .108912HR TP = .133300HR K/TP RATIO = .817047 SHA  
PE CONSTANT, N = 4.373949  
UNIT PEAK = .29563 CFS UNIT VOLUME = .9556 B = 379.  
38 P60 = 2.1400  
AREA = .000104 SQ MI IA = .35000 INCHES INF = .83000  
INCHES PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - D  
T = .033330

PRINT HYD

ID=4 CODE=1

PARTIAL HYDROGRAPH 101.40

RUNOFF VOLUME = 2.19549 INCHES = .0811 ACRE-FEET  
PEAK DISCHARGE RATE = ~~2.14~~ CFS AT 1.500 HOURS BASIN AREA =  
.0007 SQ. MI.



POMPEO.OUT

\*RESERVOIR ROUTE OUT OF POND, IN PARKING LOT

\*DISCHARGE VIA A 6" PVC PIPE TO STORM DRAIN IN SIGNAL

ROUTE RESERVOIR ID=5 HYD NO=101.5 INFLOW ID=4 CODE=24

| OUTFLOW (CFS) | STORAGE(AC-FT) | ELEVATION(FT) |
|---------------|----------------|---------------|
| 0.00          | 0.000000       | 44.50         |
| 0.67          | 0.000918       | 47.00         |
| 0.81          | 0.074563       | 48.00         |

\* \* \* \* \*

| TIME<br>(HRS) | INFLOW<br>(CFS) | ELEV<br>(FEET) | VOLUME<br>(AC-FT) | OUTFLOW<br>(CFS) |
|---------------|-----------------|----------------|-------------------|------------------|
| .00           | .00             | 44.50          | .000              | .00              |
| .80           | .00             | 44.50          | .000              | .00              |
| 1.60          | 1.48            | 47.27          | .021              | .71              |
| 2.40          | .08             | 47.11          | .009              | .69              |
| 3.20          | .02             | 44.59          | .000              | .02              |
| 4.00          | .02             | 44.56          | .000              | .02              |
| 4.80          | .02             | 44.56          | .000              | .02              |
| 5.60          | .02             | 44.56          | .000              | .02              |
| 6.40          | .00             | 44.51          | .000              | .00              |

PEAK DISCHARGE = .718 CFS - PEAK OCCURS AT HOUR 1.83

MAXIMUM WATER SURFACE ELEVATION = 47.339

MAXIMUM STORAGE = .0259 AC-FT INCREMENTAL TIME= .033330

HRS

PRINT HYD ID=5 CODE=1

PARTIAL HYDROGRAPH 101.50

POMPEO.OUT

RUNOFF VOLUME = 2.19509 INCHES = .0811 ACRE-FEET  
PEAK DISCHARGE RATE = .72 CFS AT 1.833 HOURS BASIN AREA =  
.0007 SQ. MI.

\*ADD HYDROGRAPHS FROM POND IN BASIN A AND BASIN B

ADD HYD ID=6 HYD NO=101.6 ID=3 ID=5

PRINT HYD ID=6 CODE=1

PARTIAL HYDROGRAPH 101.60

RUNOFF VOLUME = 2.19499 INCHES = .1621 ACRE-FEET  
PEAK DISCHARGE RATE = 1.39 CFS AT 1.833 HOURS BASIN AREA =  
.0014 SQ. MI.

FINISH

NORMAL PROGRAM FINISH

END TIME (HR:MIN:SEC) = 10:10:49

PRO-RATA

|  |   |                         |                 |           |  |
|--|---|-------------------------|-----------------|-----------|--|
| SIGNAL HILL SUBDIVISION  |   |                         |                 | 9/16/1996 |  |
| ALLOWABLE INTERIM DISCHARGE RATE   |   |                         |                 |           |  |
| FILE: E:\SONORAWHYDIHYDRO.XLS  |   |                         | AVID JN 6022.48 |           |  |
| DETERMINE ALLOWABLE DISCHARGE RATE FOR INTERIM CONDITIONS  |   |                         |                 |           |  |
| Allowable discharge rate determined by a) determining San Pedro storm drain hydraulic capacity and |   |                         |                 |           |  |
| b) applying capacity to contributing basins on an equal basis.                                     |   |                         |                 |           |  |
| a)   | HYDRAULIC CAPACITY  |                         |                 |           |  |
|  | Hydraulic capacity was determined by the Sonora Subdivision Drainage Report.          |                         |                 |           |  |
|  | The capacity was determined to be 160cfs at Eagle Rock ave.                           |                         |                 |           |  |
| b)   | HYDROLOGIC RATING   |                         |                 |           |  |
|  | Applying the hydraulic capacity is accomplished by utilizing the AHYMO program        |                         |                 |           |  |
|  | to develop basin hydrology, these basins are added and routed, approximately          |                         |                 |           |  |
|  | modeling the existing, or 'Historic' conditions prior to development. A portion of    |                         |                 |           |  |
|  | the runoff generated by each basin was diverted to the storm drain. The percent       |                         |                 |           |  |
|  | diverted was the same for each basin. The percentage was adjusted until the           |                         |                 |           |  |
|  | capacity of 160cfs was reached at Analysis Point 10 at Eagle Rock and San Pedro Blvd. |                         |                 |           |  |
| BASINS   | BASIN   | Q100                    | Q100 SD         |           |  |
|  | AREA  | DIVERTED TO STORM DRAIN |                 |           |  |
|  | (acres)   | (cfs)                   | (cfs)           |           |  |
| O7A  | 6.976   | 12.6                    | 9.8             |           |  |
| O7B  | 8.256   | 15                      | 11.7            |           |  |
| O7C  | 14.4  | 26.1                    | 20.4            |           |  |
| O7D  | 10.304  | 18.7                    | 14.6            |           |  |
| O8A  | 6.336   | 11.5                    | 9.0             |           |  |
| O8B  | 1.79  | 3.3                     | 2.6             |           |  |
| O8C  | 3.52  | 6.4                     | 5.0             |           |  |
| O8D  | 8.96  | 16.2                    | 12.6            |           |  |
| O9A  | 9.024   | 16.4                    | 12.8            |           |  |
| O9B  | 8.192   | 14.8                    | 11.5            |           |  |
| O9C  | 10.752  | 19.5                    | 15.2            |           |  |
| O9D  | 15.04   | 27.2                    | 21.2            |           |  |
| O10A   | 27.58   | 50                      | 39.0            |           |  |
| O10B   | 18.432  | 33.4                    | 26.1            |           |  |
| O10C   | 25.792  | 46.7                    | 36.4            |           |  |
| O10D   | 20.224  | 36.6                    | 28.5            |           |  |
| TOTALS   | 195.578   | 354.4                   | 276.4           |           |  |

276.4 cfs

195.578 acre = 1.41 CFS/ACRE

- Signal Hill Drainage Report



CITY OF  
Albuquerque

November 19, 1996

Martin J. Chávez, Mayor

Roger Martinez, Jr.  
Mark Goodwin & Assoc.  
P.O. Box 90606  
Albuquerque, NM 87199

**RE: POMPEO WAREHOUSE (C18-D31). GRADING AND DRAINAGE PLAN FOR BUILDING AND GRADING PERMIT APPROVALS. ENGINEER'S STAMP DATED NOVEMBER 14, 1996.**

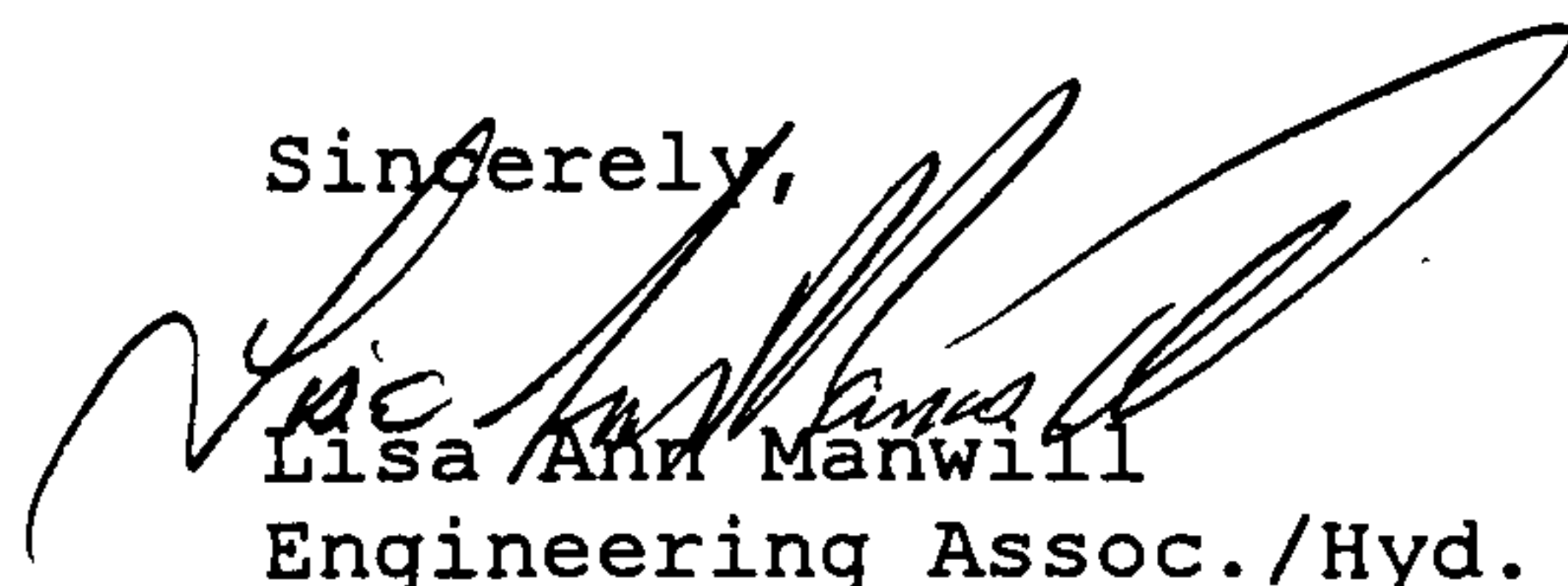
Dear Mr. Martinez:

Based on the information provided on your November 18, 1996 submittal, City Hydrology has the following comments:

1. I see a drainage basin boundary line running through the middle of the project. Show north, south, etc. drainage basin boundaries.
2. Where are the ponds? I see calculations, but no proposed contours to indicate ponds.
3. This project will require DRC and Work Order approval. Why are you seeking a SO #19 Permit?
4. Summarize existing and developed flow conditions. Provide copies of applicable documentation from the Signal Hill Subdivision Drainage Report to confirm your proposed discharge rate.
5. Label the size and type of existing storm sewer in Signal Ave.
6. Provide pipe capacity calculations for the entire on-site storm drainage system.

If I can be of further assistance, please feel free to contact me at 768-3622.

Sincerely,

  
Lisa Ann Marwill  
Engineering Assoc./Hyd.

c: Andrew Garcia  
(File)

Good for You, Albuquerque!





## DRAINAGE INFORMATION SHEET

PROJECT TITLE: Pompeo Warehouse ZONE ATLAS/DRNG, FILE#: C-18/431  
DRB #: \_\_\_\_\_ EPC #: \_\_\_\_\_ WORK ORDER #: \_\_\_\_\_  
LEGAL DESCRIPTION: Lot 5, Block 30, Tract A of Unit B, NAA  
CITY ADDRESS: \_\_\_\_\_

ENGINEERING FIRM: Mark Goodwin & Associates PA CONTACT: Roger Martinez, Jr.  
ADDRESS: PO Box 90606 PHONE: 345-2010  
OWNER: Pompeo CONTACT: Steve Schaefer  
ADDRESS: 319 Central NE PHONE: 247-9955  
ARCHITECT: Van H. Gilbert Architects CONTACT: Steve Schaefer  
ADDRESS: 319 Central NE PHONE: 247-9955  
SURVEYOR: \_\_\_\_\_ CONTACT: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_  
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:

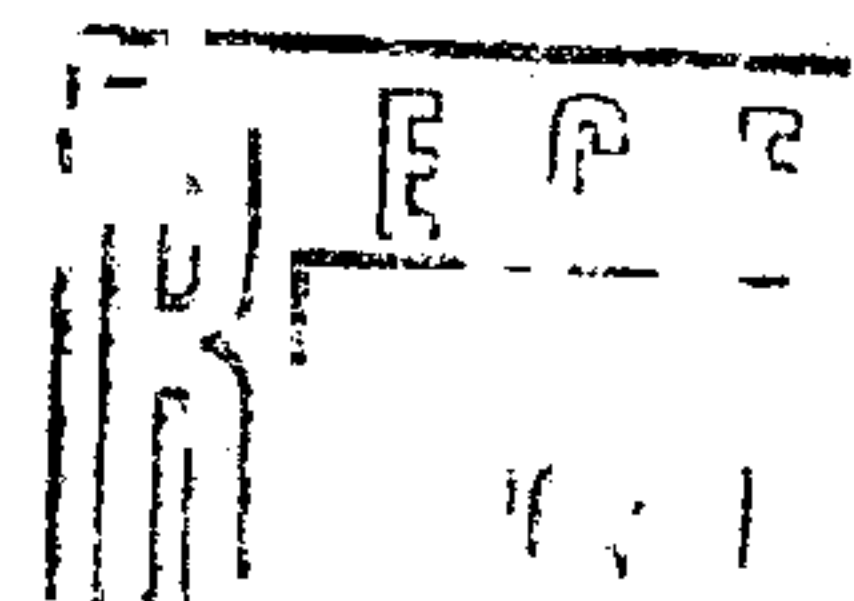
☐ YES  
☐ NO  
☐ COPY PROVIDED

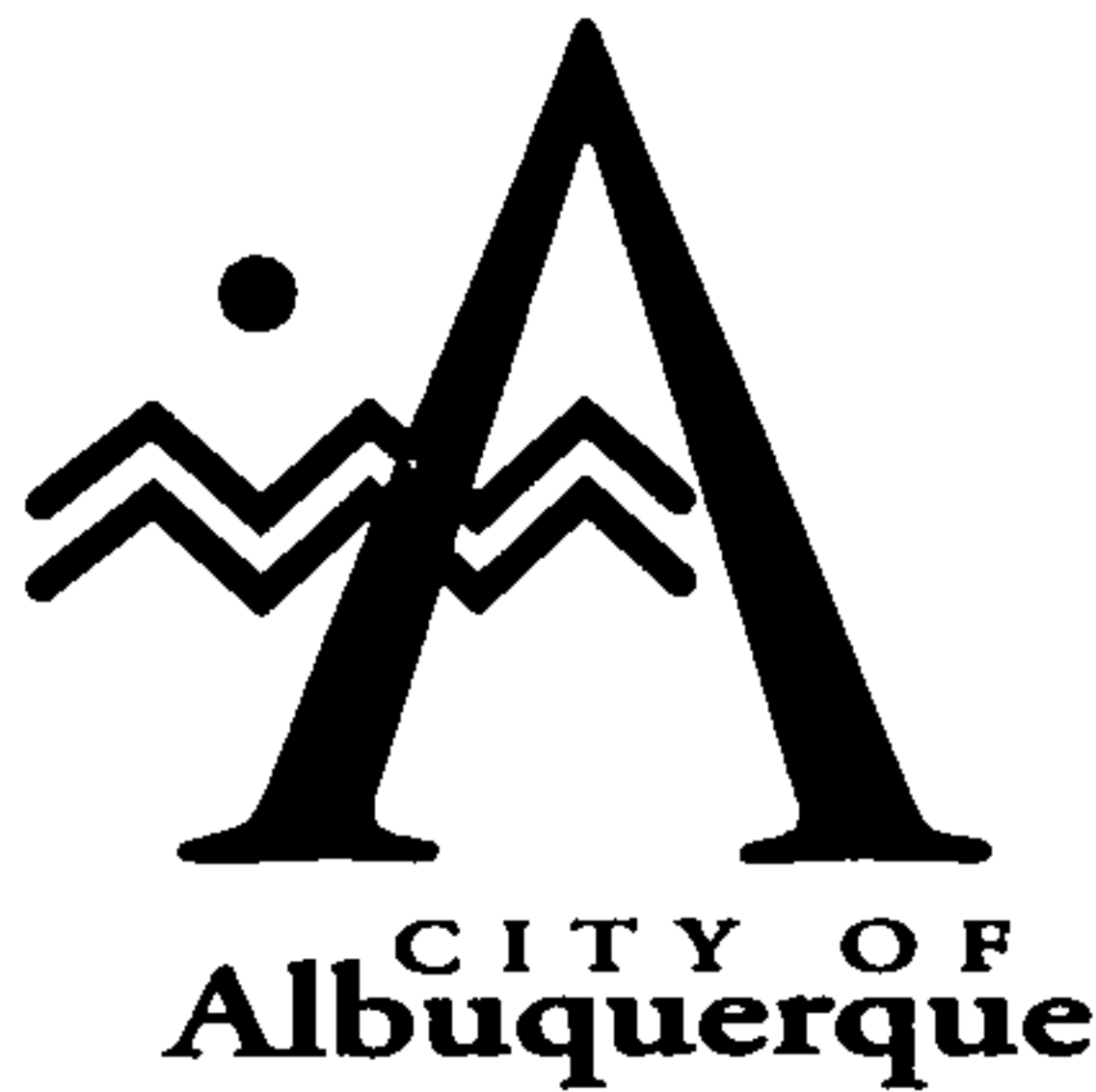
### CHECK TYPE OF APPROVAL SOUGHT:

☐ 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: 18 Nov 96

BY: Roger Martinez, Jr.  
Roger Martinez, Jr.





P.O. Box 1293 Albuquerque, NM 87103

August 20, 1996

Martin J. Chávez, Mayor

Mark Goodwin, PE  
Mark Goodwin & Assoc.  
P.O. Box 90606  
Albuquerque, NM 87109

RE: GRADING & DRAINAGE PLAN FOR POMPEO WAREHOUSE (C-18/D31)  
RECEIVED AUGUST 2, 1996 FOR GRADING & BUILDING PERMIT  
ENGINEER'S STAMP DATED 7/31/96

Dear Mr. Goodwin:

Based on the information included in the submittal referenced above, City Hydrology has the following comments that must be addressed:

A Site Plan is required for this property. Include a copy of the proposed infrastructure list with the next submittal. What width street is Transportation requiring for Signal? Indicate whether the site is in a 100 year floodplain or not. Why don't off-site flows impact the site?

This site must discharge to the storm drain in Signal instead of to the street. Discharge to the storm drain must be pro-rated to the capacity of the storm drain. Rick Beltramo is preparing a drainage report for Sonora West (C-18/D10) which includes a master plan of this area.

If you have any questions about this project, You may contact me at 768-2727.

Sincerely,

John P. Curtin, P.E.  
Civil Engineer, Hydrology

c: Andrew Garcia  
Fred Aguirre, DRB ???  
Steve Schaefer, 319 Central NE, 87102

Good for You, Albuquerque!



# DRAINAGE INFORMATION SHEET

PROJECT TITLE: Pompeo Warehouse ZONE ATLAS/DRNG, FILE#: C-18/131  
DRB #: \_\_\_\_\_ EPC #: \_\_\_\_\_ WORK ORDER #: \_\_\_\_\_  
LEGAL DESCRIPTION: Lot 5, Block 30, Tract A of Unit B, NAA  
CITY ADDRESS: \_\_\_\_\_

ENGINEERING FIRM: Mark Goodwin & Associates PA CONTACT: Roger Martinez, Jr.  
ADDRESS: PO Box 90606 PHONE: 345-2010  
OWNER: Pompeo CONTACT: Steve Schaefer  
ADDRESS: 319 Central NE PHONE: 247-9955  
ARCHITECT: Van H. Gilbert Architects CONTACT: Steve Schaefer  
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SURVEYOR: \_\_\_\_\_ CONTACT: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_  
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: 31 July 96

BY: Roger Martinez, Jr.  
Roger Martinez, Jr.

113-11