

## City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

August 23, 1999

Gregory J. Krenik, PE Mark Goodwin & Assoc, PA P.O. Box 90606 Albuquerque, NM 87199

RE: ENGINEER'S CERTIFICATION FOR PHILLIPS 66, EAGLE RANCH & PDN RECEIVED AUG 11, 1999 FOR CERTIFICATE OF OCCUPANCY ENGINEER'S STAMP DATED 8-11-99 (C-13/D22)

Dear Mr. Krenik:

Based on the information included in the submittal referenced above, City Hydrology accepts the Engineer's Certification of grading and drainage for Certificate of Occupancy. Contact Vicki Chavez (924-3306) at Plaza del Sol to obtain the Certificate of Occupancy for 9200 Eagle Ranch Road NW.

If I can be of further assistance, You may contact me at 768-2727.

Sincerely,

John P. Curtin, P.E.

Project Manager, PWD/Hyd

c: Inspector



### City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

March 19, 1999

Gregory Krenik, P.E. Mark Goodwin & Associates P.O. Box 90606 Albuquerque, NM 87199

RE: PHILLIPS 66 - EAGLE RANCH ROAD AND PASEO DEL NORTE (C13-D22).

Revised GRADING AND DRAINAGE PLAN FOR BUILDING PERMIT AND SO#19
PERMIT APPROVALS. ENGINEER'S STAMP DATED MARCH 1, 1999.

Dear Mr. Krenik:

Based on the information provided on your March 2, 1999 submittal, the above referenced project is approved for Building Permit and SO#19 Permit. The previuos submittal, Engineer's Stamp dated January 7, 1999, also had been approved for the same permits.

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

A separate permit is required for construction within the City right-of-way. A copy of this approval letter must be on hand when applying for the Excavation Permit.

Prior to Certificate of Occupancy approval, an Engineer's Certification per the DPM will be required.

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

Sincerely,

John P. Murray, P.E.

Hydrology

c: Arlene Portillo
D. Salas, St. Maint.
Andrew Garcia

#### PUBLIC WORKS DEPARTMENT

#### MARCH 19, 1999

#### INTEROFFICE CORRESPONDENCE

HYDROLOGY DIVISION

TO:

Desiderio Salas, Street Maintenance Division

FROM:

John P. Murray, P.E., Hydrology, PWD

SUBJECT: PRIVATE DRAINAGE FACILITIES WITHIN PUBLIC RIGHT-OF-WAY DRAINAGE FILE NUMBER (C13-D22).

Transmitted herewith is a copy of the approved drainage plan for the referenced project incorporating the SO #19 design.

This plan is being submitted to you for permitting and inspection. Please provide this section with a signed-off copy per the signature block upon construction and acceptance by your office.

As you are aware, the signed off SO #19 is required by this office for Certificate of Occupancy release; therefore your expeditious processing of this plan would be greatly appreciated and would avoid any unnecessary delay in the release of the Certificate of Occupancy.

Thank you for your cooperation and if you should have any questions and/or comments, please feel free to call me at 924-3984.

Attachment



## City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

February 5, 1999

Gregory Krenik, P.E. Mark Goodwin & Associates P.O. Box 90606 Albuquerque, NM 87199

RE: PHILLIPS 66 - EAGLE RANCH ROAD AND PASEO DEL NORTE (C13-D22).

GRADING AND DRAINAGE PLAN FOR BUILDING PERMIT AND SO#19

PERMIT APPROVALS. ENGINEER'S STAMP DATED JANUARY 7, 1999.

Dear Mr. Krenik:

Based on the information provided on your January 8, 1999 submittal along with the materials furnished on February 4, 1999, the above referenced project is approved for Building Permit and SO#19 permit.

Thank you again for furnishing a copy of the missing report which was indexed under C12-D3. Present and future submittals will be indexed under C13-D22.

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

A separate permit is required for construction within the City right-of-way. A copy of this approval letter must be on hand when applying for the Excavation Permit.

Prior to Certificate of Occupancy approval, an Engineer's Certification per the DPM will be required.

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

Sincerely,

John P. Murray, P.E.

Hydrology

c: Arlene Portillo

D. Salas, St. Maint.

Andrew Garcia

/File

#### PUBLIC WORKS DEPARTMENT

#### FEBRUARY 5, 1999

#### INTEROFFICE CORRESPONDENCE

HYDROLOGY DIVISION

TO:

Desiderio Salas, Street Maintenance Division

FROM:

John P. Murray, P.E., Hydrology, PWD

SUBJECT. PRIVATE DRAINAGE FACILITIES WITHIN PUBLIC RIGHT-OF-WAY

) DRAINAGE FILE NUMBER (C13-D22).

Transmitted herewith is a copy of the approved drainage plan for the referenced project incorporating the SO #19 design.

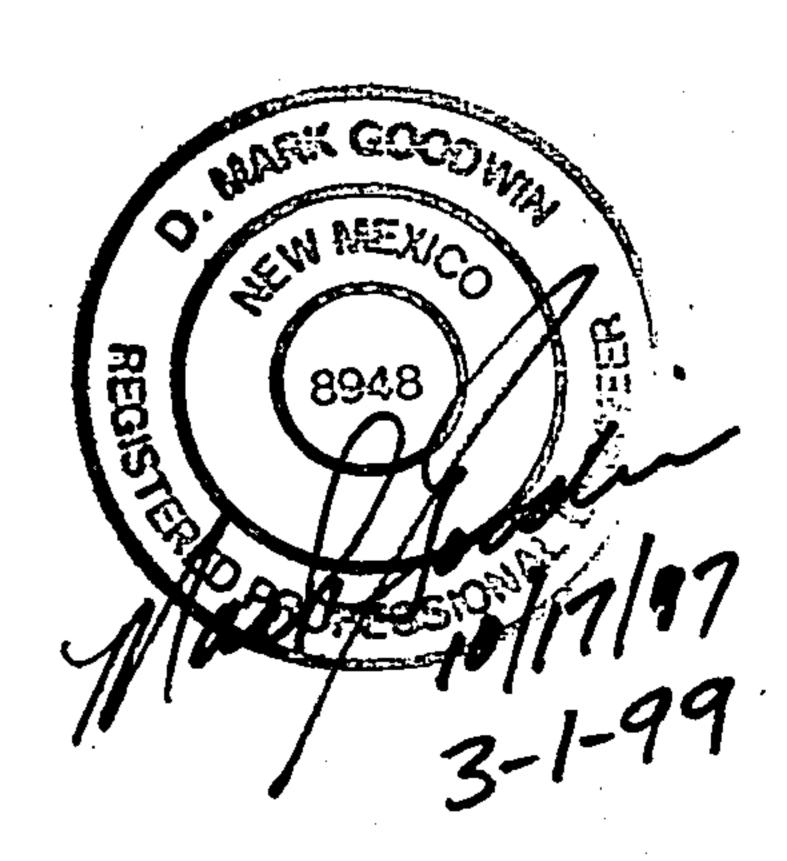
This plan is being submitted to you for permitting and inspection. Please provide this section with a signed-off copy per the signature block upon construction and acceptance by your office.

As you are aware, the signed off SO #19 is required by this office for Certificate of Occupancy release; therefore your expeditious processing of this plan would be greatly appreciated and would avoid any unnecessary delay in the release of the Certificate of Occupancy.

Thank you for your cooperation and if you should have any questions and/or comments, please feel free to call me at 924-3984.

Attachment

# PHILLIPS 66 EAGLE RANCH ROAD AND PASEO DEL NORTE



OCTOBER 1997

#### **PURPOSE**

The purpose of this drainage report is to determine the drainage parameters which will occur with the grading of this site and placement of a gas station. This report will analyze the current conditions, then analyze the proposed conditions which will remain consistent with the allowable discharge rate as specified in the Coors Road Interchange Report, Dated September 1985.

#### EXISTING SITE CONDITIONS

The site consists of 2.28 acres located on the northeast corner on Paseo del Norte and Eagle Ranch Road, within the limits of the City of Albuquerque (see attached zone map). It has no existing structures on it and is unimproved. The site is not located within any flood zone. There are no offsite flows associated with this site. Currently the site discharges the development storm runoff from the southwest towards the far eastern boundary where it discharges upon the adjacent lot.

#### PROPOSED CONDITIONS

The proposed site will consist of improvements which facilitate its use as a gas station and drive-thru restaurant. The improved portion of the site will drain from the southwest to the northeast corner, where the developed flow will enter into an asphalt swale and be conveyed to a detention pond located at the eastern corner of the site. The detention pond will discharge through a 6" pipe to an existing Storm Inlet in Paseo del Norte.

The proposed improvements will generate a developed storm discharge of 4.91 cfs. The unimproved portion of the site will generate a developed storm discharge of 1.31 cfs. The asphalt swale has been sized to accommodate these flows. The pond has a capacity of .2418 acre feet. The discharge rate to the storm drain inlet will be 1.267 cfs, which is below the allowed discharge rate of 2.166 cfs. The maximum water surface elevation will be 5066.81 which provides 1.19' free board.

The storm drainage management system of this site is sized to allow for additional improvement to the remaining site. The pond is designed to accept 9.19 cfs from the site, the pond then will discharge 1.596 cfs to the storm drain system in Paseo del Norte. The maximum water surface elevation level at that time will be 5067.70 which provides 0.30' free board.

Fraaboard

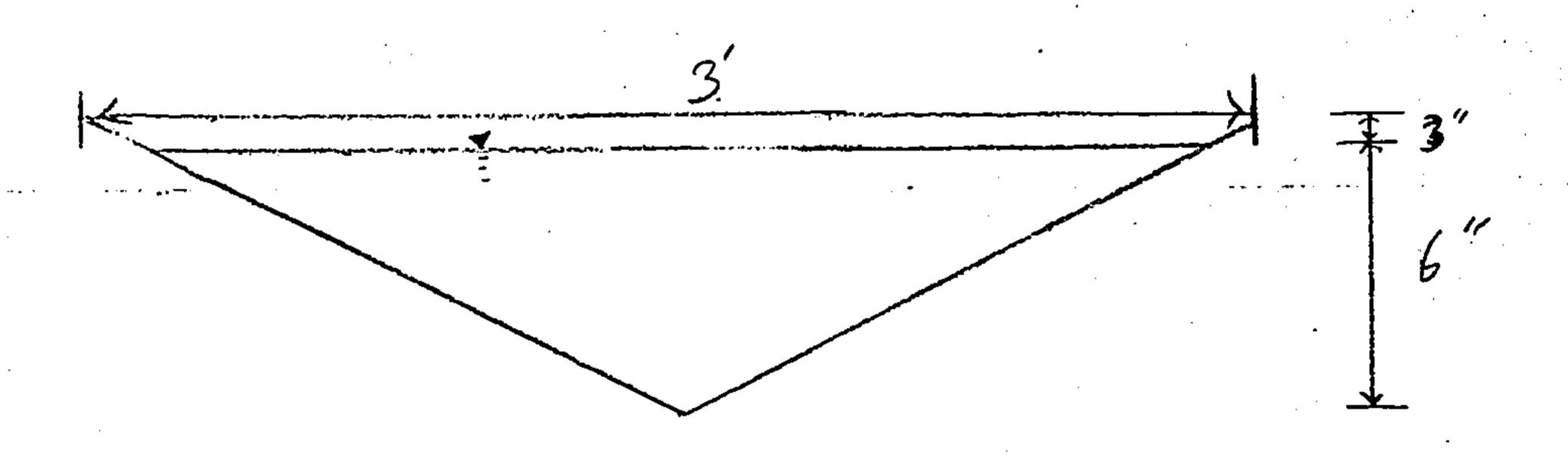
#### CONCLUSION

The proposed improvements are consistent with accepted engineering practices. The proposed peak discharge is below the allowable discharge rate of .95 cfs per acre as specified in the Coors Road Interchange Report dated September 1985. The latest AHYMO methodology and all current City of Albuquerque ordinances are being utilized in the development of this site.

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

PROJECT Phillip	os 66 - Eagle Reach & F.
SUBJECT_V 2:1,4	•
BY	DATE
CHECKED	DATE
•	SHEETOF

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. Ok

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

PROJECT HILLIPS O	66-ERRSPON
SUBJECT DEDING	E CACCS
BY	DATE 3-1-99
CHECKED	DATE
	SHEET OF

# Pond Volume Calculations

elevation	Arra	Volume (A²) A(f)		
65.00	2407		0	
66-00	.3096	2751.5	0.0632	
67.00	3869	6234	0./43/	
68.00	4725	10,531	0,2418	

START

TIME=0.0

\*\*\*\*\* HYDROGRAPH FOR PHILLIPS 66 IMPROVEMENTS
\*\*\*\*\* PASEO DEL NORTE AND EAGLE RANCH ROAD

RAINFALL TYPE=1 RAIN QUARTER=0.0 IN RAIN ONE=1.87 IN RAIN SIX=2.20 IN RAIN DAY=2.66 IN DT=0.03333 HR

\*HYDROGRAPH FOR EXISTING CONDITION OF PROPERTY \*INCLUDES RUNOFF FROM IMPROVED AREA ONLY

COMPUTE NM HYD ID=1 HYD NO=101.1 AREA=0.001905 SQ MI

PER A=.00 PER B=15.0 PER C=0.00 PER D=85.0

TP=0.1333 HR MASS RAINFALL=-1

PRINT HYD

ID=1 CODE=1

FINISH

AHYMO PROGRAM (AHYMO194) - AMAFCA Hydrologic Model - January, 1994 RUN DATE (MON/DAY/YR) = 10/07/1997 START TIME (HR:MIN:SEC) = 08:56:51 USER NO.= M\_GOODWN.I01 INPUT FILE = PH66PDN.DAT

START TIME=0.0

\*\*\*\*\* HYDROGRAPH FOR PHILLIPS 66 IMPROVEMENTS
\*\*\*\*\* PASEO DEL NORTE AND EAGLE RANCH ROAD

RAINFALL

TYPE=1 RAIN QUARTER=0.0 IN RAIN ONE=1.87 IN RAIN SIX=2.20 IN RAIN DAY=2.66 IN DT=0.03333 HR

COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK AT 1.40 HR.  $END\ TIME = 5.999400\ HOURS$ DT = .0333330 HOURS.0067 .0085 .0000 .0016 .0033 .0050 .0222 .0201 .0122 .0141 .0160 .0180 .0388 .0415 .0362 .0312 .0337 .0289 .0637 .0601 .0567 .0534 .0472 .0502 .1050 .0924 .0865 .0809 .0758 .0675 .0715 .1334 .1771 .2398 .3254 .4379 .5814 .7600 .9780 1.1804 1.2649 1.3363 1.3997 1.4575 1.5106 1.5600 1.6061 1.6493 1.6900 1.7284 1.7646 1.7989 1.8314 1.8623 1.8915 1.9193 1.9456 1.9518 1.9576 1.9630 1.9682 1.9732 1.9780 1.9825 1.9869 1.9912 1,9953 1,9993 2,0031 2,0068 2,0104 2,0140 2,0174 2.0207 2.0240 2.0272 2.0303 2.0333 2.0363 2.0392 2.0420 2.0448 2.0475 2.0502 2.0528 2.0554 2.0580 2.0605 2.0629 2.0653 2.0677 2.0700 2.0723 2.0746 2.0768 2.0790 2.0812 2.0833 2.0855 2.0875 2.0896 2.0916 2.0936 2.0956 2.0976 2.0995 2.1014 2.1033 2.1051 2.1070 2.1088 2.1106 2.1124 2.1141 2.1159 2.1176 2.1193 2.1210 2.1227 2.1244 2.1260 2.1276 2.1292 2.1308 2.1324 2.1340 2.1355 2.1371 2.1386 2.1401 2.1416 2.1431 2.1446 2.1460 2.1475 2.1489 2.1504 2.1518 2.1532 2.1546 2.1560 2.1573 2.1587 2.1600 2.1614 2.1627 2.1640 2.1654 2.1667 2.1680 2.1692 2.1705 2.1718 2.1731 2.1743 2.1756 2.1768 2.1780 2.1792 2.1804 2.1817 2.1829 2.1840 2.1852 2.1864 2.1876 2.1887 2.1899 2.1910 2.1922 2.1933 2.1944 2.1956 2.1967 2.1978 2.1989 2.2000

\*HYDROGRAPH FOR EXISTING CONDITION OF PROPERTY \*INCLUDES RUNOFF FROM IMPROVED AREA ONLY

COMPUTE NM HYD ID=1 HYD NO=101.1 AREA=0.001905 SQ MI PER A=.00 PER B=15.0 PER C=0.00 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 = 6.3929 CFS UNIT VOLUME = .9976 B = 526.28 P60 = 1.8700 AREA = .001619 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

K = .130992HR TP = .133300HR K/TP RATIO = .982685 SHAPE CONSTANT, N = 3.593448 UNIT PEAK = .70116 CFS UNIT VOLUME = .9805 B = 327.09 P60 = 1.8700 AREA = .000286 SQ MI IA = .50000 INCHES INF = 1.25000 INCHES PER HOUR RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .0333330

PRINT HYD ID=1 CODE=1

PARTIAL HYDROGRAPH . 101.10

RUNOFF VOLUME = 1.77077 INCHES = .1799 ACRE-FEET
PEAK DISCHARGE RATE = 4.91 CFS AT 1.500 HOURS BASIN AREA = .0019 SQ. MI.

FINISH -

NORMAL PROGRAM FINISH END TIME (HR:MIN:SEC) = 08:56:52

TIME=0.0START \*\*\*\* HYDROGRAPH FOR PHILLIPS 66 PROPOSED CONDITION OF ENTIRE PROPERTY INCLUDES DRAINAGE FROM PROPOSED CURRENT IMPROVEMENTS TYPE=1 RAIN QUARTER=0.0 IN RAINFALL RAIN ONE=1.87 IN RAIN SIX=2.20 IN RAIN DAY=2.66 IN DT=0.03333 HR ID=1 HYD NO=101.1 AREA=0.0035682 SQ MI COMPUTE NM HYD PER A=47 PER B=8 PER C=0 PER D=45 TP=0.1333 HR MASS RAINFALL=-1 ID=1 CODE=1PRINT HYD \*\*\*\*\*RESERVOIR ROUTE THE DEVELOPED STORM 6" ORIFICE ID=2 HYD NO=101.2 INFLOW ID=1 CODE=24 OUTE RESERVOIR STORAGE (AC-FT) ELEVATION (FT) OUTFLOW (CFS) 65.00 0.0 0.0 66.00 0.0632 0.887 67.00 0.1431 1.355 68.00 0.2418 1.698

EINISH

START

TIME=0.0

\*\*\*\*\* HYDROGRAPH FOR PHILLIPS 66 PROPOSED CONDITION OF ENTIRE PROPERTY
\*INCLUDES DRAINAGE FROM PROPOSED CURRENT IMPROVEMENTS
RAINFALL TYPE=1 RAIN QUARTER=0.0 IN

RAIN ONE=1.87 IN RAIN SIX=2.20 IN
RAIN DAY=2.66 IN DT=0.03333 HR

COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK AT 1.40 H 5.999400 HOURS END TIME =.033330 HOURS .0103 .0085 .0033 .0050 .0067 .0016 .0000 .0243 .0222 .0201 .0180 .0160 .0141 .0122 .0415 .0362 .0388 .0337 .0312 .0289 .0266 .0637 .0601 .0567 .0534 .0502 .0472 .0443 .1050 .0924 .0865 .0809 .0758 .0715 .0675 .7600 .5814 .4379 .3254 .2398 .1771 .1334 1.5106 1.4575 1.3997 1.3363 1.2649 1.1804 .9780 1.7646 1.7989 1.7284 1.6900 1.6493 1.6061 1.5600 1.9576 1.9518 1.9456 1.9193 1.8915 1.8623 1.8314 1.9912 1.9869 1.9780 1.9825 1.9732 1.9682 1.9630 2.0140 2.0174 2.0104 2.0068 2.0031 1.9993 1.9953 2.0392 2.0363 2.0333 2.0303 2.0272 2.0240 2.0207 2.0580 2.0554 2.0528 2.0502 2.0448 2.0475 2.0420 2.0746 2.0723 2.0700 2.0677 2.0653 2.0629 2.0605 2.0896 2.0875 2.0855 2.0833 2.0812 2.0790 2.0768 2.1033 2.1014 2.0995 2.0976 2.0956 2.0936 2.0916 2.1159 2.1124 2.1141 2.1106 2.1070 2.1088 2.1051 2.1260 2.1276 2.1244 2.1227 2.1210 2.1193 2.1176 2.1308 2.1324 2.1340 2.1355 2.1371 2.1386 2.1446 2.1460 2.1475 2.1489 2.1431 2.1416 2.1401 2.1587 2.1573 2.1546 2.1560 2.1532 2.1518 2.1504 2.1680 2.1640 2.1654 2.1667 2.1614 2.1627 2.1600 2.1705 2.1718 2.1731 2.1743 2.1756 2.1768 2.1692 2.1792 2.1804 2.1817 2.1829 2.1840 2.1852 2.1780 2.1864 2.1876 2.1887 2.1899 2.1910 2.1922 2.1933 2.1944 2.1956 2.1967 2.1978 2.1989 2.2000

COMPUTE NM HYD

ID=1 HYD NO=101.1 AREA=0.0035682 SQ MI PER A=47 PER B=8 PER C=0 PER D=45 TP=0.1333 HR MASS RAINFALL=-1

K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE CONSTANT, N = UNIT PEAK = 6.3393 CFS UNIT VOLUME = .9976 B = 526.28 P60 = 1.87 AREA = .001606 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .0333330

K=.158929HR TP=.133300HR K/TP RATIO=1.192263 SHAPE CONSTANT, N=UNIT PEAK=4.1237 CFS UNIT VOLUME=.9962 B=280.09 P60=1.87 AREA=.001963 SQ MI IA=.62818 INCHES INF=1.60891 INCHES PER HOUR RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD-DT=.0333330

PRINT HYD

RUNOFF VOLUME = 1.14186 INCHES = .2173 ACRE-FEET

PEAK DISCHARGE RATE = 6.22 CFS AT 1.500 HOURS BASIN AREA = .0036 SQ. MI.

\*\*\*\*\*RESERVOIR ROUTE THE DEVELOPED STORM 6" ORIFICE ID=2 HYD NO=101.2 INFLOW ID=1 CODE=24 ROUTE RESERVOIR ELEVATION (FT) STORAGE (AC-FT) OUTFLOW (CFS) 65.00 0.0 0.0 66.00 0.0632 0.887 67.00 0.1431 1.355 68.00 0.2418 1.698

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)		
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.80	.00	65.00	.000	.00		
1.60	4.51	66.36	.092	1.06	· ·	
2.40	.26	66.57	.109	1.15		- · · .
3.20	.05	65.83	.052	. 73		•
4.00	.03	65.35	.022	-31		- ·
4.80	.03	65.16	.010	.14		
5.60	.03	65.08	.005	.07		•
6.40	.00	65.05	.003	.04		
7.20	.00	65.02	.001	.02		
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EAK DISCHA AXIMUM WAT	RGE = ER SURFACE RAGE =	ELEVATION		OCCURS AT HOUR 6.812	2.00	.033330HRS

FINISH

NORMAL PROGRAM FINISH

END TIME (HR:MIN:SEC) = 09:05:51

TIME=0.0START \*\*\*\* HYDROGRAPH FOR PHILLIPS 66 PROPOSED CONDITION OF ENTIRE PROPERTY INCLUDES DRAINAGE FROM PROPOSED FUTURE IMPROVEMENTS TYPE=1 RAIN QUARTER=0.0 IN RAINFALL RAIN ONE=1.87 IN RAIN SIX=2.20 IN RAIN DAY=2.66 IN DT=0.03333 HR ID=1 HYD NO=101.1 AREA=0.0035682 SQ MI OMPUTE NM HYD PER A=0 PER B=15 PER C=0 PER D=85 TP=0.1333 HR MASS RAINFALL=-1 ID=1 CODE=1RINT HYD \*\*\*\*\*RESERVOIR ROUTE THE DEVELOPED STORM 6" ORIFICE ID=2 HYD NO=101.2 INFLOW ID=1 CODE=24 ROUTE RESERVOIR ELEVATION (FT) STORAGE (AC-FT) OUTFLOW (CFS) 65.00 0.0 0.0 66.00 0.0632 0.887 67.00 1.355

1.698

0.2418

68.00

FINISH

AHYMO PROGRAM (AHYM0194) - AMAFCA Hydrologic Model - January, 1994 RUN DATE (MON/DAY/YR) = 03/02/1999 $START\ TIME\ (HR:MIN:SEC) = 09:09:05$ USER NO.= M GOODWN.IO1 INPUT FILE = P66PND.DAT

START

TIME=0.0

\*\*\*\* HYDROGRAPH FOR PHILLIPS 66 PROPOSED CONDITION OF ENTIRE PROPERTY \*INCLUDES DRAINAGE FROM PROPOSED FUTURE IMPROVEMENTS

RAINFALL

TYPE=1 RAIN QUARTER=0.0 IN RAIN ONE=1.87 IN RAIN SIX=2.20 IN RAIN DAY=2.66 IN DT=0.03333 HR

COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK AT 1.40 H 5.999400 HOURS END TIME =.033330 HOURS .0103 .0033 .0050 .0067 .0085 .0016 .0000 .0222 .0243 .0201 .0180 .0160 .0141 .0122 .0415 .0388 .0362 .0337 .0312 .0289 .0266 .0637 .0567 .0601 .0534 .0502 .0472 .0443 .1050 .0924 .0865 .0809 .0758 .0715 .0675 .7600 .5814 .4379 .3254 .2398 .1771 .1334 1.3997 1.4575 1.5106 1.3363 1.2649 1.1804 .9780 1.7646 1.7989 1.7284 1.6900 1.6493 1.5600 1.6061 1.9576 1.9456 1.9518 1.9193 1.8915 1.8623 1.8314 1.9912 1.9825 1.9869 1.9780 1.9732 1.9682 1.9630 2.0174 2.0104 2.0140 2.0068 2.0031 1.9993 1.9953 2.0392 2.0363 2.0333 2.0303 2.0272 2.0240 2.0207 2.0580 2.0554 2.0528 2.0502 2.0475 2.0448 2.0420 2.0746 2.0700 2.0723 2.0677 2.0653 2.0629 2.0605 2.0875 2.0896 2.0855 2.0833 2.0812 2.0790 2.0768 2.1014 2.1033 2.0995 2.0976 2.0956 2.0936 2.0916 2.1159 2.1141 2.1106 2.1124 2.1088 2.1070 2.1051 2.1260 2.1276 2.1244 2.1227 2.1210 2.1193 2.1176 2.1292 2.1308 2.1324 2.1340 2.1355 2.1371 2.1386 2.1416 2.1431 2.1446 2.1460 2.1475 2.1489 2.1518 2.1532 2.1546 2.1560 2.1573 2.1587 2.1504 2.1614 2.1627 2.1640 2.1654 2.1680 2.1667 2.1600 2.1692 2.1705 2.1718 2.1731 2.1743 2.1756 2.1768 2.1780 2.1792 2.1804 2.1817 2.1829 2.1840 2.1852 2.1864 2.1876 2.1887 2.1899 2.1910 2.1922 2.1933 2.1944 2.1956 2.1967 2.1978 2.1989 2.2000

COMPUTE NM HYD

ID=1 HYD NO=101.1 AREA=0.0035682 SQ MI PER A=0 PER B=15 PER C=0 PER D=85 TP=0.1333 HR MASS RAINFALL=-1

.072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE CONSTANT, N = ...11.974 CFS UNIT VOLUME = .9984 B = 526.28 P60 = 1.87UNIT PEAK =.003033 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR AREA =RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .0333330

TP = .133300HR K/TP RATIO = .982685 SHAPE CONSTANT, N = ....130992HR B = 327.09.9903 UNIT VOLUME = 1.3133 CFSUNIT PEAK =INF = 1.25000 INCHES PER HOUR .50000 INCHES .000535 SQ MI IA =AREA =RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

ID=1 CODE=1

RUNOFF VOLUME = 1.77077 INCHES = .3370 ACRE-FEET

PEAK DISCHARGE RATE = 9.19 CFS AT 1.500 HOURS BASIN AREA = .0036 SQ. MI.

\*\*\*\*\*RESERVOIR ROUTE THE DEVELOPED STORM 6" ORIFICE ID=2 HYD NO=101.2 INFLOW ID=1 CODE=24 ROUTE RESERVOIR STORAGE (AC-FT) · ELEVATION (FT) OUTFLOW (CFS) 65.00 0.0 0.0 0.0632 66.00 0.887 0.1431 67.00 1.355 68.00 0.2418 1.698 OUTFLOW. VOLUME ELEVINFLOW TIME(CFS) (FEET) (AC-FT)(CFS) (HRS) .00 65.00 .000 .00 .00 .00 .000 65.00 .80 .00 1.36 .144 67.01 1.60 6.37 .192 1.52 67.50 .38 2.40 1.18 .113 66.62 .07 3.20 . 73 .052 65.82 4.00 .05 65.36 .023 .32 4.80 .05 .16 .011 65.18 5.60 .06 .09 .006 65.10 6.40 .01 .002 .03 65.04 7.20 .00 .001 .01 65.02 8.00 .00 .000 .01 8.80 65.01 .00 .000 .00 65.00 .00 9.60 [1.596] CFS - PEAK OCCURS AT HOUR PEAK DISCHARGE = MAXIMUM WATER SURFACE ELEVATION =

.2124 AC-FT

FINISH

NORMAL PROGRAM FINISH

MAXIMUM STORAGE =

END TIME (HR:MIN:SEC) = 09:09:05

INCREMENTAL TIME=