

CITY OF WICHITA

Division of Engineering

Manor Care of Kansas, Inc.
 10750 Columbia Pike
 Silver Spring, Maryland

Attn. Mr. Ron Vernon

Invoice **No 91197**
 Date July 1, 19 87
Mo. Day Year

Fund	Amount
TOTAL	\$7,037.66

IMPORTANT!
 RETURN DUPLICATE COPY WITH YOUR
 REMITTANCE TO —

CITY TREASURER,
 455 NORTH MAIN
 WICHITA, KANSAS 67202

TERMS — NET, 10 DAYS

19-026

QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
	Special assessments (21st Street - Lot 1, Block 1, Northborough 2nd Addition) Agreement dated June 18, 1986 Amount due:		\$7,037.66

STATE OF COLORADO)
) ss.
COUNTY OF DENVER)

BE IT REMEMBERED, That on this 9th day of ~~December~~ ^{January}, 1986, before me, the undersigned, a Notary Public in and for the County and State aforesaid, came TEENA J. SLATKIN, personally known to me to be the President of T. J. Land & Cattle Company, a Colorado corporation, and known to me to be the same person who executed the within instrument of writing, and such person duly acknowledged the execution of the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last above written.

Valerie R. Lip
Notary Public
3775 Cherry Creek N.W. Dr. W445 Denver, CO 80209

My Appointment expires: My Commission Expires
December 18, 1988

STATE OF KANSAS)
) ss.
COUNTY OF SEDGWICK)

BE IT REMEMBERED, That on this 2nd day of ~~December~~ ^{January}, 1987, before me, the undersigned, a Notary Public in and for the County and State aforesaid, came ROBERT M. BEREN and JOAN S. BEREN, husband and wife, personally known to me to be the same persons who executed the within instrument of writing, and such persons duly acknowledged the execution of the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last above written.

Linda Sevier
Notary Public

My Appointment expires:
April 13, 1990



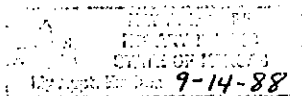
STATE OF KANSAS)
) ss.
COUNTY OF SEDGWICK)

BE IT REMEMBERED, That on this 31st day of December, 1986, before me, the undersigned, a Notary Public in and for the County and State aforesaid, came ROSALYN W. GORE, a single woman, personally known to me to be the same person who executed the within instrument of writing, and such person duly acknowledged the execution of the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last above written.

Kay P. LaGree
Notary Public

My Appointment expires:
September 14, 1988



POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that the COMMERCIAL UNION INSURANCE COMPANY, a corporation duly organized and existing under the laws of the Commonwealth of Massachusetts, and having its principal office in the City of Boston, Massachusetts, hath made, constituted and appointed, and does by these presents make and constitute and appoint **W. C. COHEN, W. C. COHEN, JR., R. B. MATASSARIN, JOE E. MODDRELL, JR., WALLACE C. RAABE, PAUL G. STARR, JOSEPH C. LUKENS, II, ROBERTA I. HOERMAN, SCOTT T. POST, KAY J. WHITE, SANDRA BROADSTREET, JAMES E. SLOAN, STEVEN E. HOLZWART, RICHARD A. BUMGARDNER and MELISSA EVANS** all of Wichita, Kansas and each of them its true and lawful Attorney-in-Fact, to make, execute, seal and deliver for and on its behalf as surety any and all bonds or undertakings

and the execution of such bonds or undertakings in pursuance of these presents, shall be binding upon said Company as fully and amply, to all intents and purposes, as if such bonds were signed by the President, sealed with the corporate seal of the Company, and duly attested by its Secretary, hereby ratifying and confirming all the acts of said Attorney-in-Fact pursuant to the power herein given. This Power of Attorney is made and executed pursuant to and by authority of the following resolutions adopted by the Board of Directors of the COMMERCIAL UNION INSURANCE COMPANY at a meeting duly called and held on the twenty-seventh day of July, 1972:

Resolved: That the President, or any Vice-President, or any Assistant Vice-President, may execute for and in behalf of the company any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof, the same to be attested when necessary and the seal of the company affixed thereto by the Secretary, or any Assistant Secretary; and that the President, or any Vice-President, or Assistant Vice-President, may appoint and authorize an Attorney-in-Fact to execute on behalf of the company any and all such instruments and to affix the seal of the company thereto; and that the President, or any Vice-President, or any Assistant Vice-President, may at any time remove, any such Attorney-in-Fact and revoke all power and authority given to any such Attorney-in-Fact.

Resolved: That Attorneys-in-Fact may be given full power and authority to execute for and in the name and on behalf of the company any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof, and any such instrument executed by any such Attorney-in-Fact shall be as binding upon the company as if signed by the President and sealed and attested by the Secretary, and, further, Attorneys-in-Fact are hereby authorized to verify any affidavit required to be attached to bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof, and are also authorized and empowered to certify to a copy of any of the by-laws of the company as well as any resolution of the Directors having to do with the execution of bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof, and to certify copies of the Power of Attorney or with regard to the powers of any of the officers of the company or of Attorneys-in-Fact.

This power of attorney is signed and sealed by facsimile under the authority of the following Resolution adopted by the Directors of the COMMERCIAL UNION INSURANCE COMPANY at a meeting duly called and held on the twenty-seventh day of July, 1972:

"Resolved: That the signature of the President, or any Vice-President, or any Assistant Vice-President, and the signature of the Secretary or any Assistant Secretary and the Company Seal may be affixed by facsimile to any power of attorney or to any certificate relating thereto appointing Attorneys-in-Fact for purposes only of executing and attesting any bond, undertaking, recognizance or other written obligation in the nature thereof, and any such signature and seal where so used, being hereby adopted by the company as the original signature of such officer and the original seal of the company, to be valid and binding upon the company with the same force and effect as though manually affixed."

IN WITNESS WHEREOF, the COMMERCIAL UNION INSURANCE COMPANY, has caused these presents to be signed by its Assistant Vice-President and its corporate seal to be hereto affixed, duly attested by its Secretary on this 22nd day of July 19 86



COMMERCIAL UNION INSURANCE COMPANY

Attest: Raymond M. Defossez
Raymond M. Defossez - Secretary

By John M. Garrett
John M. Garrett - Assistant Vice-President

COMMONWEALTH OF MASSACHUSETTS
COUNTY OF SUFFOLK SS.

On this 22nd day of July 19 86, before me personally came John M. Garrett, Assistant Vice-President, and Raymond M. Defossez, Secretary of the COMMERCIAL UNION INSURANCE COMPANY, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and they acknowledged the execution of the same, and being by me duly sworn, severally and each for himself deposed and sayeth, that they are the said officers of the Company aforesaid, and that the seal affixed to the preceding instrument is the corporate seal of said Company and that the said corporate seal and their signatures as such officers were duly affixed and subscribed to the said instrument by the authority and direction of the said Company.



Edward W. Shay
Edward W. Shay - Notary Public
(My Commission expires August 10, 1990)

CERTIFICATE

I, the undersigned, Assistant Secretary of the COMMERCIAL UNION INSURANCE COMPANY, a Massachusetts Corporation, do hereby certify that the foregoing power of attorney is in full force and has not been revoked; and furthermore, that the Resolutions of the Board of Directors set forth in the power of attorney are now in force.

Signed and sealed at the City of Boston, Dated this 30th day of January 19 87



Daniel J. Boyle
Daniel J. Boyle - Assistant Secretary

**CITY OF WICHITA
DEPARTMENT OF PUBLIC WORKS**

DATE: August 30, 1999

TO: Chris Cherches, City Manager
FROM: Steve Lackey, Director of Public Works

SUBJECT: Rockhill & Woodlawn Traffic Signal

In March 1987, the Board of City Commissioners approved a 100% Petition requesting the installation of a traffic signal at this location in conjunction with the platting of Northborough 3rd Addition. With the Petition, the developer guaranteed to signalize Rockhill and Woodlawn when development necessitated it.

In 1988, the developer contacted the City Engineer's office requesting the installation of the traffic signal due to the expectant completion of two additional office buildings that were being designed. The traffic volumes generated by the additional office buildings would meet warrants. Therefore, as a proactive measure, the signal was initiated to be installed. In February 1989, the installation of the traffic signal was completed.

As this was being developed, the developer had ties with the Woodland's Track as well as another track in southeast Kansas. Shortly after the signal was installed, the developer found them in financial hardship; therefore, they did not proceed with the construction of the two additional office buildings as they had planned. The property was sold or repossessed due to the financial problems.

Had this area developed as anticipated by the developer, namely east of Bramblewood and Stratford, a signal would likely have been warranted. To date, the only commercial sites developed east of Bramblewood and Stratford in the Petitioned area are Aldi and Jumbo Sports. In fact, Stratford has not been built south of the ManorCare Health Services at 7101 E. 21st St. N. Stratford Ln. is platted to continue south and west to the existing Rockhill and Bramblewood intersection.

Since this area did not develop as the developer's agent had anticipated, traffic volumes are not large enough to meet signal warrants.

Attached are the traffic counts taken on May 23, 1999. These counts were used for the Traffic Signal Warrant Study that was completed on June 1, 1999. Following the guidelines set forth by the Manual on Uniform Traffic Control Devices (MUTCD), adopted for use by City Code, the signal at this location is not warranted.

Cc: Mike Lindebak, City Engineer



City of Wichita, Kansas

ACCOUNTS RECEIVABLE INVOICE

DOCUMENT
AR-09853

DATE
12/03/90

FISCAL PERIOD
12/90

CUSTOMER NUMBER: 003444

DUE DATE: 12/03/90

KAPLAN, McMILLAN & HARRIS

430 N. MARKET
ATTN: ROBERT KAPLAN
WICHITA, KS 67202

REMIT TO:
PUBLIC WORKS
CHERYL DUNBAR

CITY OF WICHITA
455 N. MAIN
WICHITA, KS 67202

BILLING DEPARTMENT: 060017 PUBLIC WORKS

LN	DESCRIPTION	QTY	U/M	UNIT PRICE	AMOUNT
A	SPECIAL ASSESSMENT 21ST LOT 1 B 12 B	1	EA	12813.08	12,813.08

TOTAL DUE 12,813.08

RETURN ONE COPY OF THIS INVOICE WITH YOUR PAYMENT.

LAW OFFICES
KAPLAN, McMILLAN AND HARRIS
ROBERT W. KAPLAN
CALVIN McMILLAN
CHARLES F. HARRIS

LAW BUILDING
430 NORTH MARKET
WICHITA, KANSAS 67202
316-262-5175
FAX 316-262-7226

January 9, 1991

Ms. Cheryl Dunbar
Public Works
City of Wichita
455 North Main
Wichita, KS 67202

RE: Northborough 3rd Addition
Document AR-09853
Customer No. 003444

Dear Ms. Dunbar:

Enclosed is our firm trust account check in the amount of \$8,969.16 in partial payment of the referenced account. We will forward the balance of \$3,943.92 as soon as we receive it from our client.

Sincerely,



(Mrs.) Judy A. Summitt
Secretary to Robert W. Kaplan

Enclosures

cc: Insurance Management Associates, Inc.

*
* FLOOD HYDROGRAPH PACKAGE (HEC-1) *
* FEBRUARY 1981 *
CENTER *
* REVISED 01 JUN 88 *
*
* RUN DATE 11/10/2000 TIME 12:16:48 *
*

*
* U.S. ARMY CORPS OF ENGINEERS *
* THE HYDROLOGIC ENGINEERING *
*
* 609 SECOND STREET *
* DAVIS, CALIFORNIA 95616 *
* (916) 551-1748 *
*

HEC-1

DETENTION POND ROUTING FOR 5 YEAR 24 HOUR STORM EVENT

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.

THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION

NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,

DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

L'INE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

1 ID BEREXCO CORPORATE BUILDING
2 ID DETENTION POND ANALYSIS
3 ID CERTIFIED ENGINEERING DESIGN
4 ID BY HARLAN D. FORAKER, P.E. 11-10-2000
*DIAGRAM
5 IT 4 10NOV00 0 0 10NOV00 1800
6 IN 30 10NOV00 600

7 KK PREDEV EXISTING CONDITIONS FOR PROPOSED DEVELOPMENT AREA USING
8 KM SCS DISTRIBUTION FOR 10 YEAR-24 HOUR STORM
9 BA .0208
10 PB 4.5
11 PC 0 0.0055 0.011 0.017 0.022 0.029 0.035 0.042 0.048 0.056
12 PC 0.064 0.072 0.080 0.090 0.100 0.110 0.120 0.133 0.147 0.163
13 PC 0.181 0.204 0.235 0.283 0.663 0.735 0.772 0.799 0.820 0.835
14 PC 0.850 0.865 0.880 0.890 0.910 0.916 0.925 0.934 0.943 0.952
15 PC 0.958 0.964 0.970 0.976 0.982 0.988 0.994 1.000
16 LS 0 68 0
17 UD .46

18 KK NEW DEVELOPED RUNOFF FROM PROPOSED BEREXCO BUILDING SITE
19 BA .0164
20 PB 4.5
21 PC 0 0.0055 0.011 0.017 0.022 0.029 0.035 0.042 0.048 0.056
22 PC 0.064 0.072 0.080 0.090 0.100 0.110 0.120 0.133 0.147 0.163
23 PC 0.181 0.204 0.235 0.283 0.663 0.735 0.772 0.799 0.820 0.835
24 PC 0.850 0.865 0.880 0.890 0.910 0.916 0.925 0.934 0.943 0.952
25 PC 0.958 0.964 0.970 0.976 0.982 0.988 0.994 1.000
26 LS 0 72 0
27 UD .23

28 KK POND PROPOSED DETENTION POND w/24" CMP OUTLET
29 RS 1 ELEV 202
30 SV 0 0.24 0.515 0.825 1.175
31 SQ 0 4 12.5 18.5 23
32 SE 201 202 203 204 205
33 IO 5 2
34 ZZ

1 SCHEMATIC DIAGRAM OF STREAM NETWORK

INPUT
LINE (V) ROUTING (--->) DIVERSION OR PUMP FLOW
NO. (.) CONNECTOR (<---) RETURN OF DIVERTED OR PUMPED FLOW

7 PREDEV
.
.
18 NEW
V
V
28 POND

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

↑*****

* * *
* FLOOD HYDROGRAPH PACKAGE (HEC-1) *
* FEBRUARY 1981 *
* REVISED 01 JUN 88 *

* * *
* U.S. ARMY CORPS OF
* THE HYDROLOGIC ENGINEERING CENTER *
* 609 SECOND STREET *

*
* RUN DATE 11/10/2000 TIME 12:16:48 *
*

* DAVIS, CALIFORNIA 95616 *
* (916) 551-1748 *
*

BEREXCO CORPORATE BUILDING
DETENTION POND ANALYSIS
CERTIFIED ENGINEERING DESIGN
BY HARLAN D. FORAKER, P.E. 11-10-2000

IT HYDROGRAPH TIME DATA
NMIN 4 MINUTES IN COMPUTATION INTERVAL
IDATE 10NOV 0 STARTING DATE
ITIME 0000 STARTING TIME
NQ 271 NUMBER OF HYDROGRAPH ORDINATES
NDDATE 10NOV 0 ENDING DATE
NDTIME 1800 ENDING TIME
ICENT 19 CENTURY MARK

COMPUTATION INTERVAL .07 HOURS
TOTAL TIME BASE 18.00 HOURS

ENGLISH UNITS
DRAINAGE AREA SQUARE MILES
PRECIPITATION DEPTH INCHES
LENGTH, ELEVATION FEET
FLOW CUBIC FEET PER SECOND
STORAGE VOLUME ACRE-FEET
SURFACE AREA ACRES
TEMPERATURE DEGREES FAHRENHEIT

*** **

* *
7 KK * PREDEV * EXISTING CONDITIONS FOR PROPOSED DEVELOPMENT AREA USING
* *

SCS DISTRIBUTION FOR 10 YEAR-24 HOUR STORM

6 IN TIME DATA FOR INPUT TIME SERIES
JXMIN 30 TIME INTERVAL IN MINUTES
JXDATE 10NOV 0 STARTING DATE
JXTIME 600 STARTING TIME

SUBBASIN RUNOFF DATA

9 BA SUBBASIN CHARACTERISTICS
TAREA .02 SUBBASIN AREA

PRECIPITATION DATA

10 PB STORM 4.50 BASIN TOTAL PRECIPITATION

11 PI INCREMENTAL PRECIPITATION PATTERN

10 NOV 0032	9	.00	.00	.00	0.	*	10 NOV 0936	145	.01	.01	.00	0.
10 NOV 0036	10	.00	.00	.00	0.	*	10 NOV 0940	146	.01	.01	.00	0.
10 NOV 0040	11	.00	.00	.00	0.	*	10 NOV 0944	147	.01	.01	.00	0.
10 NOV 0044	12	.00	.00	.00	0.	*	10 NOV 0948	148	.01	.01	.00	0.
10 NOV 0048	13	.00	.00	.00	0.	*	10 NOV 0952	149	.01	.01	.00	0.
10 NOV 0052	14	.00	.00	.00	0.	*	10 NOV 0956	150	.01	.01	.00	0.
10 NOV 0056	15	.00	.00	.00	0.	*	10 NOV 1000	151	.01	.01	.00	0.
10 NOV 0100	16	.00	.00	.00	0.	*	10 NOV 1004	152	.01	.01	.00	0.
10 NOV 0104	17	.00	.00	.00	0.	*	10 NOV 1008	153	.01	.01	.00	0.
10 NOV 0108	18	.00	.00	.00	0.	*	10 NOV 1012	154	.01	.01	.00	0.
10 NOV 0112	19	.00	.00	.00	0.	*	10 NOV 1016	155	.01	.01	.00	0.
10 NOV 0116	20	.00	.00	.00	0.	*	10 NOV 1020	156	.01	.01	.00	0.
10 NOV 0120	21	.00	.00	.00	0.	*	10 NOV 1024	157	.01	.01	.00	0.
10 NOV 0124	22	.00	.00	.00	0.	*	10 NOV 1028	158	.01	.01	.00	0.
10 NOV 0128	23	.00	.00	.00	0.	*	10 NOV 1032	159	.02	.02	.00	0.
10 NOV 0132	24	.00	.00	.00	0.	*	10 NOV 1036	160	.02	.02	.00	0.
10 NOV 0136	25	.00	.00	.00	0.	*	10 NOV 1040	161	.02	.02	.00	0.
10 NOV 0140	26	.00	.00	.00	0.	*	10 NOV 1044	162	.02	.02	.00	0.
10 NOV 0144	27	.00	.00	.00	0.	*	10 NOV 1048	163	.02	.02	.00	0.
10 NOV 0148	28	.00	.00	.00	0.	*	10 NOV 1052	164	.02	.02	.00	0.
10 NOV 0152	29	.00	.00	.00	0.	*	10 NOV 1056	165	.02	.02	.00	0.
10 NOV 0156	30	.00	.00	.00	0.	*	10 NOV 1100	166	.02	.02	.00	0.
10 NOV 0200	31	.00	.00	.00	0.	*	10 NOV 1104	167	.03	.03	.00	0.
10 NOV 0204	32	.00	.00	.00	0.	*	10 NOV 1108	168	.03	.03	.00	0.
10 NOV 0208	33	.00	.00	.00	0.	*	10 NOV 1112	169	.03	.03	.00	0.
10 NOV 0212	34	.00	.00	.00	0.	*	10 NOV 1116	170	.03	.03	.00	0.
10 NOV 0216	35	.00	.00	.00	0.	*	10 NOV 1120	171	.03	.03	.00	0.
10 NOV 0220	36	.00	.00	.00	0.	*	10 NOV 1124	172	.03	.03	.00	0.
10 NOV 0224	37	.00	.00	.00	0.	*	10 NOV 1128	173	.03	.03	.00	0.
10 NOV 0228	38	.00	.00	.00	0.	*	10 NOV 1132	174	.14	.11	.02	0.
10 NOV 0232	39	.00	.00	.00	0.	*	10 NOV 1136	175	.25	.19	.06	1.
10 NOV 0236	40	.00	.00	.00	0.	*	10 NOV 1140	176	.25	.17	.07	1.
10 NOV 0240	41	.00	.00	.00	0.	*	10 NOV 1144	177	.25	.16	.09	2.
10 NOV 0244	42	.00	.00	.00	0.	*	10 NOV 1148	178	.25	.15	.10	2.
10 NOV 0248	43	.00	.00	.00	0.	*	10 NOV 1152	179	.25	.13	.11	4.
10 NOV 0252	44	.00	.00	.00	0.	*	10 NOV 1156	180	.25	.12	.12	5.
10 NOV 0256	45	.00	.00	.00	0.	*	10 NOV 1200	181	.25	.12	.13	7.
10 NOV 0300	46	.00	.00	.00	0.	*	10 NOV 1204	182	.05	.02	.03	9.
10 NOV 0304	47	.00	.00	.00	0.	*	10 NOV 1208	183	.05	.02	.03	11.
10 NOV 0308	48	.00	.00	.00	0.	*	10 NOV 1212	184	.05	.02	.03	13.
10 NOV 0312	49	.00	.00	.00	0.	*	10 NOV 1216	185	.05	.02	.03	13.
10 NOV 0316	50	.00	.00	.00	0.	*	10 NOV 1220	186	.05	.02	.03	14.
10 NOV 0320	51	.00	.00	.00	0.	*	10 NOV 1224	187	.05	.02	.03	13.
10 NOV 0324	52	.00	.00	.00	0.	*	10 NOV 1228	188	.05	.02	.03	12.
10 NOV 0328	53	.00	.00	.00	0.	*	10 NOV 1232	189	.04	.01	.02	11.
10 NOV 0332	54	.00	.00	.00	0.	*	10 NOV 1236	190	.02	.01	.01	10.
10 NOV 0336	55	.00	.00	.00	0.	*	10 NOV 1240	191	.02	.01	.01	9.
10 NOV 0340	56	.00	.00	.00	0.	*	10 NOV 1244	192	.02	.01	.01	8.
10 NOV 0344	57	.00	.00	.00	0.	*	10 NOV 1248	193	.02	.01	.01	8.
10 NOV 0348	58	.00	.00	.00	0.	*	10 NOV 1252	194	.02	.01	.01	7.
10 NOV 0352	59	.00	.00	.00	0.	*	10 NOV 1256	195	.02	.01	.01	6.
10 NOV 0356	60	.00	.00	.00	0.	*	10 NOV 1300	196	.02	.01	.01	6.
10 NOV 0400	61	.00	.00	.00	0.	*	10 NOV 1304	197	.02	.01	.01	5.
10 NOV 0404	62	.01	.01	.00	0.	*	10 NOV 1308	198	.02	.01	.01	5.
10 NOV 0408	63	.01	.01	.00	0.	*	10 NOV 1312	199	.02	.01	.01	4.
10 NOV 0412	64	.01	.01	.00	0.	*	10 NOV 1316	200	.02	.01	.01	4.
10 NOV 0416	65	.01	.01	.00	0.	*	10 NOV 1320	201	.02	.01	.01	4.
10 NOV 0420	66	.01	.01	.00	0.	*	10 NOV 1324	202	.02	.01	.01	3.
10 NOV 0424	67	.01	.01	.00	0.	*	10 NOV 1328	203	.02	.01	.01	3.
10 NOV 0428	68	.01	.01	.00	0.	*	10 NOV 1332	204	.02	.01	.01	3.
10 NOV 0432	69	.01	.01	.00	0.	*	10 NOV 1336	205	.01	.01	.01	3.
10 NOV 0436	70	.01	.01	.00	0.	*	10 NOV 1340	206	.01	.01	.01	3.

10 NOV 0440	71	.01	.01	.00	0.	*	10 NOV 1344	207	.01	.01	.01	3.
10 NOV 0444	72	.01	.01	.00	0.	*	10 NOV 1348	208	.01	.01	.01	2.
10 NOV 0448	73	.01	.01	.00	0.	*	10 NOV 1352	209	.01	.01	.01	2.
10 NOV 0452	74	.01	.01	.00	0.	*	10 NOV 1356	210	.01	.01	.01	2.
10 NOV 0456	75	.01	.01	.00	0.	*	10 NOV 1400	211	.01	.01	.01	2.
10 NOV 0500	76	.01	.01	.00	0.	*	10 NOV 1404	212	.01	.00	.01	2.
10 NOV 0504	77	.01	.01	.00	0.	*	10 NOV 1408	213	.01	.00	.01	2.
10 NOV 0508	78	.01	.01	.00	0.	*	10 NOV 1412	214	.01	.00	.01	2.
10 NOV 0512	79	.01	.01	.00	0.	*	10 NOV 1416	215	.01	.00	.01	2.
10 NOV 0516	80	.01	.01	.00	0.	*	10 NOV 1420	216	.01	.00	.01	2.
10 NOV 0520	81	.01	.01	.00	0.	*	10 NOV 1424	217	.01	.00	.01	2.
10 NOV 0524	82	.01	.01	.00	0.	*	10 NOV 1428	218	.01	.00	.01	2.
10 NOV 0528	83	.01	.01	.00	0.	*	10 NOV 1432	219	.01	.00	.01	2.
10 NOV 0532	84	.01	.01	.00	0.	*	10 NOV 1436	220	.01	.00	.01	1.
10 NOV 0536	85	.01	.01	.00	0.	*	10 NOV 1440	221	.01	.00	.01	1.
10 NOV 0540	86	.01	.01	.00	0.	*	10 NOV 1444	222	.01	.00	.01	1.
10 NOV 0544	87	.01	.01	.00	0.	*	10 NOV 1448	223	.01	.00	.01	1.
10 NOV 0548	88	.01	.01	.00	0.	*	10 NOV 1452	224	.01	.00	.01	1.
10 NOV 0552	89	.01	.01	.00	0.	*	10 NOV 1456	225	.01	.00	.01	1.
10 NOV 0556	90	.01	.01	.00	0.	*	10 NOV 1500	226	.01	.00	.01	1.
10 NOV 0600	91	.01	.01	.00	0.	*	10 NOV 1504	227	.01	.00	.01	1.
10 NOV 0604	92	.01	.01	.00	0.	*	10 NOV 1508	228	.01	.00	.01	1.
10 NOV 0608	93	.01	.01	.00	0.	*	10 NOV 1512	229	.01	.00	.01	1.
10 NOV 0612	94	.01	.01	.00	0.	*	10 NOV 1516	230	.01	.00	.01	1.
10 NOV 0616	95	.01	.01	.00	0.	*	10 NOV 1520	231	.01	.00	.01	1.
10 NOV 0620	96	.01	.01	.00	0.	*	10 NOV 1524	232	.01	.00	.01	1.
10 NOV 0624	97	.01	.01	.00	0.	*	10 NOV 1528	233	.01	.00	.01	1.
10 NOV 0628	98	.01	.01	.00	0.	*	10 NOV 1532	234	.01	.00	.01	1.
10 NOV 0632	99	.01	.01	.00	0.	*	10 NOV 1536	235	.01	.00	.01	1.
10 NOV 0636	100	.01	.01	.00	0.	*	10 NOV 1540	236	.01	.00	.01	1.
10 NOV 0640	101	.01	.01	.00	0.	*	10 NOV 1544	237	.01	.00	.01	1.
10 NOV 0644	102	.01	.01	.00	0.	*	10 NOV 1548	238	.01	.00	.01	1.
10 NOV 0648	103	.01	.01	.00	0.	*	10 NOV 1552	239	.01	.00	.01	1.
10 NOV 0652	104	.01	.01	.00	0.	*	10 NOV 1556	240	.01	.00	.01	1.
10 NOV 0656	105	.01	.01	.00	0.	*	10 NOV 1600	241	.01	.00	.01	1.
10 NOV 0700	106	.01	.01	.00	0.	*	10 NOV 1604	242	.01	.00	.00	1.
10 NOV 0704	107	.01	.01	.00	0.	*	10 NOV 1608	243	.01	.00	.00	1.
10 NOV 0708	108	.01	.01	.00	0.	*	10 NOV 1612	244	.01	.00	.00	1.
10 NOV 0712	109	.01	.01	.00	0.	*	10 NOV 1616	245	.01	.00	.00	1.
10 NOV 0716	110	.01	.01	.00	0.	*	10 NOV 1620	246	.01	.00	.00	1.
10 NOV 0720	111	.01	.01	.00	0.	*	10 NOV 1624	247	.01	.00	.00	1.
10 NOV 0724	112	.01	.01	.00	0.	*	10 NOV 1628	248	.01	.00	.00	1.
10 NOV 0728	113	.01	.01	.00	0.	*	10 NOV 1632	249	.01	.00	.01	1.
10 NOV 0732	114	.01	.01	.00	0.	*	10 NOV 1636	250	.01	.00	.01	1.
10 NOV 0736	115	.01	.01	.00	0.	*	10 NOV 1640	251	.01	.00	.01	1.
10 NOV 0740	116	.01	.01	.00	0.	*	10 NOV 1644	252	.01	.00	.01	1.
10 NOV 0744	117	.01	.01	.00	0.	*	10 NOV 1648	253	.01	.00	.01	1.
10 NOV 0748	118	.01	.01	.00	0.	*	10 NOV 1652	254	.01	.00	.01	1.
10 NOV 0752	119	.01	.01	.00	0.	*	10 NOV 1656	255	.01	.00	.01	1.
10 NOV 0756	120	.01	.01	.00	0.	*	10 NOV 1700	256	.01	.00	.01	1.
10 NOV 0800	121	.01	.01	.00	0.	*	10 NOV 1704	257	.00	.00	.00	1.
10 NOV 0804	122	.01	.01	.00	0.	*	10 NOV 1708	258	.00	.00	.00	1.
10 NOV 0808	123	.01	.01	.00	0.	*	10 NOV 1712	259	.00	.00	.00	1.
10 NOV 0812	124	.01	.01	.00	0.	*	10 NOV 1716	260	.00	.00	.00	1.
10 NOV 0816	125	.01	.01	.00	0.	*	10 NOV 1720	261	.00	.00	.00	1.
10 NOV 0820	126	.01	.01	.00	0.	*	10 NOV 1724	262	.00	.00	.00	1.
10 NOV 0824	127	.01	.01	.00	0.	*	10 NOV 1728	263	.00	.00	.00	1.
10 NOV 0828	128	.01	.01	.00	0.	*	10 NOV 1732	264	.00	.00	.00	1.
10 NOV 0832	129	.01	.01	.00	0.	*	10 NOV 1736	265	.01	.00	.00	1.
10 NOV 0836	130	.01	.01	.00	0.	*	10 NOV 1740	266	.01	.00	.00	1.
10 NOV 0840	131	.01	.01	.00	0.	*	10 NOV 1744	267	.01	.00	.00	1.
10 NOV 0844	132	.01	.01	.00	0.	*	10 NOV 1748	268	.01	.00	.00	1.

10 NOV 0144	27	.00	.00	.00	0.	*	10 NOV 1048	163	.02	.02	.00	0.
10 NOV 0148	28	.00	.00	.00	0.	*	10 NOV 1052	164	.02	.02	.00	0.
10 NOV 0152	29	.00	.00	.00	0.	*	10 NOV 1056	165	.02	.02	.00	0.
10 NOV 0156	30	.00	.00	.00	0.	*	10 NOV 1100	166	.02	.02	.00	0.
10 NOV 0200	31	.00	.00	.00	0.	*	10 NOV 1104	167	.03	.03	.01	0.
10 NOV 0204	32	.00	.00	.00	0.	*	10 NOV 1108	168	.03	.03	.01	0.
10 NOV 0208	33	.00	.00	.00	0.	*	10 NOV 1112	169	.03	.03	.01	1.
10 NOV 0212	34	.00	.00	.00	0.	*	10 NOV 1116	170	.03	.02	.01	1.
10 NOV 0216	35	.00	.00	.00	0.	*	10 NOV 1120	171	.03	.02	.01	1.
10 NOV 0220	36	.00	.00	.00	0.	*	10 NOV 1124	172	.03	.02	.01	1.
10 NOV 0224	37	.00	.00	.00	0.	*	10 NOV 1128	173	.03	.02	.01	1.
10 NOV 0228	38	.00	.00	.00	0.	*	10 NOV 1132	174	.14	.10	.04	1.
10 NOV 0232	39	.00	.00	.00	0.	*	10 NOV 1136	175	.25	.17	.08	2.
10 NOV 0236	40	.00	.00	.00	0.	*	10 NOV 1140	176	.25	.15	.10	3.
10 NOV 0240	41	.00	.00	.00	0.	*	10 NOV 1144	177	.25	.14	.11	6.
10 NOV 0244	42	.00	.00	.00	0.	*	10 NOV 1148	178	.25	.12	.12	8.
10 NOV 0248	43	.00	.00	.00	0.	*	10 NOV 1152	179	.25	.11	.13	11.
10 NOV 0252	44	.00	.00	.00	0.	*	10 NOV 1156	180	.25	.10	.14	14.
10 NOV 0256	45	.00	.00	.00	0.	*	10 NOV 1200	181	.25	.10	.15	16.
10 NOV 0300	46	.00	.00	.00	0.	*	10 NOV 1204	182	.05	.02	.03	18.
10 NOV 0304	47	.00	.00	.00	0.	*	10 NOV 1208	183	.05	.02	.03	18.
10 NOV 0308	48	.00	.00	.00	0.	*	10 NOV 1212	184	.05	.02	.03	16.
10 NOV 0312	49	.00	.00	.00	0.	*	10 NOV 1216	185	.05	.02	.03	13.
10 NOV 0316	50	.00	.00	.00	0.	*	10 NOV 1220	186	.05	.02	.03	10.
10 NOV 0320	51	.00	.00	.00	0.	*	10 NOV 1224	187	.05	.02	.03	8.
10 NOV 0324	52	.00	.00	.00	0.	*	10 NOV 1228	188	.05	.02	.03	7.
10 NOV 0328	53	.00	.00	.00	0.	*	10 NOV 1232	189	.04	.01	.02	6.
10 NOV 0332	54	.00	.00	.00	0.	*	10 NOV 1236	190	.02	.01	.02	6.
10 NOV 0336	55	.00	.00	.00	0.	*	10 NOV 1240	191	.02	.01	.02	5.
10 NOV 0340	56	.00	.00	.00	0.	*	10 NOV 1244	192	.02	.01	.02	4.
10 NOV 0344	57	.00	.00	.00	0.	*	10 NOV 1248	193	.02	.01	.02	4.
10 NOV 0348	58	.00	.00	.00	0.	*	10 NOV 1252	194	.02	.01	.02	3.
10 NOV 0352	59	.00	.00	.00	0.	*	10 NOV 1256	195	.02	.01	.02	3.
10 NOV 0356	60	.00	.00	.00	0.	*	10 NOV 1300	196	.02	.01	.02	3.
10 NOV 0400	61	.00	.00	.00	0.	*	10 NOV 1304	197	.02	.01	.01	3.
10 NOV 0404	62	.01	.01	.00	0.	*	10 NOV 1308	198	.02	.01	.01	3.
10 NOV 0408	63	.01	.01	.00	0.	*	10 NOV 1312	199	.02	.01	.01	2.
10 NOV 0412	64	.01	.01	.00	0.	*	10 NOV 1316	200	.02	.01	.01	2.
10 NOV 0416	65	.01	.01	.00	0.	*	10 NOV 1320	201	.02	.01	.01	2.
10 NOV 0420	66	.01	.01	.00	0.	*	10 NOV 1324	202	.02	.01	.01	2.
10 NOV 0424	67	.01	.01	.00	0.	*	10 NOV 1328	203	.02	.01	.01	2.
10 NOV 0428	68	.01	.01	.00	0.	*	10 NOV 1332	204	.02	.00	.01	2.
10 NOV 0432	69	.01	.01	.00	0.	*	10 NOV 1336	205	.01	.00	.01	2.
10 NOV 0436	70	.01	.01	.00	0.	*	10 NOV 1340	206	.01	.00	.01	2.
10 NOV 0440	71	.01	.01	.00	0.	*	10 NOV 1344	207	.01	.00	.01	2.
10 NOV 0444	72	.01	.01	.00	0.	*	10 NOV 1348	208	.01	.00	.01	2.
10 NOV 0448	73	.01	.01	.00	0.	*	10 NOV 1352	209	.01	.00	.01	2.
10 NOV 0452	74	.01	.01	.00	0.	*	10 NOV 1356	210	.01	.00	.01	2.
10 NOV 0456	75	.01	.01	.00	0.	*	10 NOV 1400	211	.01	.00	.01	2.
10 NOV 0500	76	.01	.01	.00	0.	*	10 NOV 1404	212	.01	.00	.01	2.
10 NOV 0504	77	.01	.01	.00	0.	*	10 NOV 1408	213	.01	.00	.01	1.
10 NOV 0508	78	.01	.01	.00	0.	*	10 NOV 1412	214	.01	.00	.01	1.
10 NOV 0512	79	.01	.01	.00	0.	*	10 NOV 1416	215	.01	.00	.01	1.
10 NOV 0516	80	.01	.01	.00	0.	*	10 NOV 1420	216	.01	.00	.01	1.
10 NOV 0520	81	.01	.01	.00	0.	*	10 NOV 1424	217	.01	.00	.01	1.
10 NOV 0524	82	.01	.01	.00	0.	*	10 NOV 1428	218	.01	.00	.01	1.
10 NOV 0528	83	.01	.01	.00	0.	*	10 NOV 1432	219	.01	.00	.01	1.
10 NOV 0532	84	.01	.01	.00	0.	*	10 NOV 1436	220	.01	.00	.01	1.
10 NOV 0536	85	.01	.01	.00	0.	*	10 NOV 1440	221	.01	.00	.01	1.
10 NOV 0540	86	.01	.01	.00	0.	*	10 NOV 1444	222	.01	.00	.01	1.
10 NOV 0544	87	.01	.01	.00	0.	*	10 NOV 1448	223	.01	.00	.01	1.
10 NOV 0548	88	.01	.01	.00	0.	*	10 NOV 1452	224	.01	.00	.01	1.

10 NOV 0552	89	.01	.01	.00	0.	*	10 NOV 1456	225	.01	.00	.01	1.
10 NOV 0556	90	.01	.01	.00	0.	*	10 NOV 1500	226	.01	.00	.01	1.
10 NOV 0600	91	.01	.01	.00	0.	*	10 NOV 1504	227	.01	.00	.01	1.
10 NOV 0604	92	.01	.01	.00	0.	*	10 NOV 1508	228	.01	.00	.01	1.
10 NOV 0608	93	.01	.01	.00	0.	*	10 NOV 1512	229	.01	.00	.01	1.
10 NOV 0612	94	.01	.01	.00	0.	*	10 NOV 1516	230	.01	.00	.01	1.
10 NOV 0616	95	.01	.01	.00	0.	*	10 NOV 1520	231	.01	.00	.01	1.
10 NOV 0620	96	.01	.01	.00	0.	*	10 NOV 1524	232	.01	.00	.01	1.
10 NOV 0624	97	.01	.01	.00	0.	*	10 NOV 1528	233	.01	.00	.01	1.
10 NOV 0628	98	.01	.01	.00	0.	*	10 NOV 1532	234	.01	.00	.01	1.
10 NOV 0632	99	.01	.01	.00	0.	*	10 NOV 1536	235	.01	.00	.01	1.
10 NOV 0636	100	.01	.01	.00	0.	*	10 NOV 1540	236	.01	.00	.01	1.
10 NOV 0640	101	.01	.01	.00	0.	*	10 NOV 1544	237	.01	.00	.01	1.
10 NOV 0644	102	.01	.01	.00	0.	*	10 NOV 1548	238	.01	.00	.01	1.
10 NOV 0648	103	.01	.01	.00	0.	*	10 NOV 1552	239	.01	.00	.01	1.
10 NOV 0652	104	.01	.01	.00	0.	*	10 NOV 1556	240	.01	.00	.01	1.
10 NOV 0656	105	.01	.01	.00	0.	*	10 NOV 1600	241	.01	.00	.01	1.
10 NOV 0700	106	.01	.01	.00	0.	*	10 NOV 1604	242	.01	.00	.00	1.
10 NOV 0704	107	.01	.01	.00	0.	*	10 NOV 1608	243	.01	.00	.00	1.
10 NOV 0708	108	.01	.01	.00	0.	*	10 NOV 1612	244	.01	.00	.00	1.
10 NOV 0712	109	.01	.01	.00	0.	*	10 NOV 1616	245	.01	.00	.00	1.
10 NOV 0716	110	.01	.01	.00	0.	*	10 NOV 1620	246	.01	.00	.00	1.
10 NOV 0720	111	.01	.01	.00	0.	*	10 NOV 1624	247	.01	.00	.00	1.
10 NOV 0724	112	.01	.01	.00	0.	*	10 NOV 1628	248	.01	.00	.00	1.
10 NOV 0728	113	.01	.01	.00	0.	*	10 NOV 1632	249	.01	.00	.01	1.
10 NOV 0732	114	.01	.01	.00	0.	*	10 NOV 1636	250	.01	.00	.01	1.
10 NOV 0736	115	.01	.01	.00	0.	*	10 NOV 1640	251	.01	.00	.01	1.
10 NOV 0740	116	.01	.01	.00	0.	*	10 NOV 1644	252	.01	.00	.01	1.
10 NOV 0744	117	.01	.01	.00	0.	*	10 NOV 1648	253	.01	.00	.01	1.
10 NOV 0748	118	.01	.01	.00	0.	*	10 NOV 1652	254	.01	.00	.01	1.
10 NOV 0752	119	.01	.01	.00	0.	*	10 NOV 1656	255	.01	.00	.01	1.
10 NOV 0756	120	.01	.01	.00	0.	*	10 NOV 1700	256	.01	.00	.01	1.
10 NOV 0800	121	.01	.01	.00	0.	*	10 NOV 1704	257	.00	.00	.00	1.
10 NOV 0804	122	.01	.01	.00	0.	*	10 NOV 1708	258	.00	.00	.00	1.
10 NOV 0808	123	.01	.01	.00	0.	*	10 NOV 1712	259	.00	.00	.00	1.
10 NOV 0812	124	.01	.01	.00	0.	*	10 NOV 1716	260	.00	.00	.00	1.
10 NOV 0816	125	.01	.01	.00	0.	*	10 NOV 1720	261	.00	.00	.00	1.
10 NOV 0820	126	.01	.01	.00	0.	*	10 NOV 1724	262	.00	.00	.00	1.
10 NOV 0824	127	.01	.01	.00	0.	*	10 NOV 1728	263	.00	.00	.00	1.
10 NOV 0828	128	.01	.01	.00	0.	*	10 NOV 1732	264	.00	.00	.00	1.
10 NOV 0832	129	.01	.01	.00	0.	*	10 NOV 1736	265	.01	.00	.00	1.
10 NOV 0836	130	.01	.01	.00	0.	*	10 NOV 1740	266	.01	.00	.00	1.
10 NOV 0840	131	.01	.01	.00	0.	*	10 NOV 1744	267	.01	.00	.00	1.
10 NOV 0844	132	.01	.01	.00	0.	*	10 NOV 1748	268	.01	.00	.00	1.
10 NOV 0848	133	.01	.01	.00	0.	*	10 NOV 1752	269	.01	.00	.00	1.
10 NOV 0852	134	.01	.01	.00	0.	*	10 NOV 1756	270	.01	.00	.00	1.
10 NOV 0856	135	.01	.01	.00	0.	*	10 NOV 1800	271	.01	.00	.00	1.
10 NOV 0900	136	.01	.01	.00	0.	*						

*

TOTAL RAINFALL = 4.50, TOTAL LOSS = 2.68, TOTAL EXCESS = 1.82

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	18.00-HR
+ 18.	12.07	3.	1.	1.	1.
	(INCHES)	1.726	1.801	1.801	1.801
	(AC-FT)	2.	2.	2.	2.

CUMULATIVE AREA = .02 SQ MI

HYDROGRAPH AT									
+ NEW	18.	12.07	3.	1.	1.	.02			
ROUTED TO									
+ POND	10.	12.33	3.	1.	1.	.02	202.76	12.33	

*** NORMAL END OF HEC-1 ***

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*                               *                               *
* FLOOD HYDROGRAPH PACKAGE (HEC-1) * U.S. ARMY CORPS
OF ENGINEERS *
* FEBRUARY 1981 *
CENTER *
* REVISED 01 JUN 88 *
* RUN DATE 11/10/2000 TIME 16:34:14 *
*                               *
*****
*                               *                               *
* THE HYDROLOGIC ENGINEERING
* 609 SECOND STREET *
DAVIS, CALIFORNIA 95616 *
* (916) 551-1748 *
*                               *
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HEC-1

DETENTION POND ROUTING FOR 100 YEAR 24 HOUR RAINFALL EVENT

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.

THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION

NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,

DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION

KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

1 HEC-1 INPUT PAGE 1

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LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10
1 ID BEREXCO CORPORATE BUILDING
2 ID DETENTION POND ANALYSIS
3 ID CERTIFIED ENGINEERING DESIGN
4 ID BY HARLAN D. FORAKER, P.E. 11-10-2000
*DIAGRAM
5 IT 4 10NOV00 0 0 10NOV00 1800
6 IN 30 10NOV00 600
7 KK PREDEV EXISTING CONDITIONS FOR PROPOSED DEVELOPMENT AREA
USING 8 KM SCS DISTRIBUTION FOR 100 YEAR-24 HOUR STORM
9 BA .0208
10 PB 7.5
11 PC 0 0.0055 0.011 0.017 0.022 0.029 0.035 0.042 0.048 0.056
12 PC 0.064 0.072 0.080 0.090 0.100 0.110 0.120 0.133 0.147 0.163
13 PC 0.181 0.204 0.235 0.283 0.663 0.735 0.772 0.799 0.820 0.835
14 PC 0.850 0.865 0.880 0.890 0.910 0.916 0.925 0.934 0.943 0.952
15 PC 0.958 0.964 0.970 0.976 0.982 0.988 0.994 1.000
16 LS 0 68 0

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LINE  ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10
1     ID BEREXCO CORPORATE BUILDING
2     ID DETENTION POND ANALYSIS
3     ID CERTIFIED ENGINEERING DESIGN
4     ID BY HARLAN D. FORAKER, P.E. 11-10-2000
*DIAGRAM
5     IT  4 10NOV00  0  0 10NOV00 1800
6     IN  30 10NOV00  600

7     KK PREDEV  EXISTING CONDITIONS FOR PROPOSED DEVELOPMENT AREA USING
8     KM          SCS DISTRIBUTION FOR 100 YEAR-24 HOUR STORM
9     BA .0208
10    PB 7.5
11    PC  0 0.0055 0.011 0.017 0.022 0.029 0.035 0.042 0.048 0.056
12    PC 0.064 0.072 0.080 0.090 0.100 0.110 0.120 0.133 0.147 0.163
13    PC 0.181 0.204 0.235 0.283 0.663 0.735 0.772 0.799 0.820 0.835
14    PC 0.850 0.865 0.880 0.890 0.910 0.916 0.925 0.934 0.943 0.952
15    PC 0.958 0.964 0.970 0.976 0.982 0.988 0.994 1.000
16    LS  0 68  0
17    UD .46

18    KK NEW  DEVELOPED 100 YR. RUNOFF FROM PROPOSED BEREXCO BUILDING SITE
19    BA .0164
20    PB 7.5
21    PC  0 0.0055 0.011 0.017 0.022 0.029 0.035 0.042 0.048 0.056
22    PC 0.064 0.072 0.080 0.090 0.100 0.110 0.120 0.133 0.147 0.163
23    PC 0.181 0.204 0.235 0.283 0.663 0.735 0.772 0.799 0.820 0.835
24    PC 0.850 0.865 0.880 0.890 0.910 0.916 0.925 0.934 0.943 0.952
25    PC 0.958 0.964 0.970 0.976 0.982 0.988 0.994 1.000
26    LS  0 72  0
27    UD .23

28    KK POND  PROPOSED DETENTION POND w/24" CMP OUTLET
29    RS  1  ELEV 202
30    SV  0  0.24 0.515 0.825 1.175
31    SQ  0  4 12.5 18.5 23
32    SE 201 202 203 204 205
33    IO  5  2
34    ZZ

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1

SCHEMATIC DIAGRAM OF STREAM NETWORK

INPUT

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LINE (V) ROUTING  (--->) DIVERSION OR PUMP FLOW
NO.  (.) CONNECTOR  (<---) RETURN OF DIVERTED OR PUMPED FLOW

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7  PREDEV
.
.
18 . NEW
.  V
.  V
28 . POND

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(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

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*****
* FLOOD HYDROGRAPH PACKAGE (HEC-1) *
* FEBRUARY 1981
* REVISED 01 JUN 88
* RUN DATE 11/10/2000 TIME 16:34:14 *
*****

* U.S. ARMY CORPS OF ENGINEERS *
* THE HYDROLOGIC ENGINEERING CENTER *
* 609 SECOND STREET
* DAVIS, CALIFORNIA 95616
* (916) 551-1748
*****

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STRTL .94 INITIAL ABSTRACTION
 CRVNBR 68.00 CURVE NUMBER
 RTIMP .00 PERCENT IMPERVIOUS AREA

17 UD SCS DIMENSIONLESS UNITGRAPH
 TLAG .46 LAG

UNIT HYDROGRAPH
 36 END-OF-PERIOD ORDINATES

1.	3.	6.	11.	16.	19.	20.	20.	19.	17.
14.	11.	9.	7.	6.	4.	4.	3.	2.	2.
1.	1.	1.	1.	1.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.				

HYDROGRAPH AT STATION PREDEV

DA MON HRMN ORD RAIN LOSS EXCESS COMP Q * DA MON HRMN ORD RAIN LOSS EXCESS
 COMP Q

10 NOV 0000	1	.00	.00	.00	0.	*	10 NOV 0904	137	.02	.02	.00	0.
10 NOV 0004	2	.01	.01	.00	0.	*	10 NOV 0908	138	.02	.02	.00	0.
10 NOV 0008	3	.01	.01	.00	0.	*	10 NOV 0912	139	.02	.02	.00	0.
10 NOV 0012	4	.01	.01	.00	0.	*	10 NOV 0916	140	.02	.02	.00	0.
10 NOV 0016	5	.01	.01	.00	0.	*	10 NOV 0920	141	.02	.02	.00	0.
10 NOV 0020	6	.01	.01	.00	0.	*	10 NOV 0924	142	.02	.02	.00	0.
10 NOV 0024	7	.01	.01	.00	0.	*	10 NOV 0928	143	.02	.01	.00	0.
10 NOV 0028	8	.01	.01	.00	0.	*	10 NOV 0932	144	.02	.02	.00	0.
10 NOV 0032	9	.01	.01	.00	0.	*	10 NOV 0936	145	.02	.02	.00	0.
10 NOV 0036	10	.01	.01	.00	0.	*	10 NOV 0940	146	.02	.02	.00	0.
10 NOV 0040	11	.01	.01	.00	0.	*	10 NOV 0944	147	.02	.02	.00	0.
10 NOV 0044	12	.01	.01	.00	0.	*	10 NOV 0948	148	.02	.02	.00	0.
10 NOV 0048	13	.01	.01	.00	0.	*	10 NOV 0952	149	.02	.02	.00	0.
10 NOV 0052	14	.01	.01	.00	0.	*	10 NOV 0956	150	.02	.02	.00	0.
10 NOV 0056	15	.01	.01	.00	0.	*	10 NOV 1000	151	.02	.02	.00	0.
10 NOV 0100	16	.01	.01	.00	0.	*	10 NOV 1004	152	.02	.02	.00	1.
10 NOV 0104	17	.01	.01	.00	0.	*	10 NOV 1008	153	.02	.02	.01	1.
10 NOV 0108	18	.01	.01	.00	0.	*	10 NOV 1012	154	.02	.02	.01	1.
10 NOV 0112	19	.01	.01	.00	0.	*	10 NOV 1016	155	.02	.02	.01	1.
10 NOV 0116	20	.01	.01	.00	0.	*	10 NOV 1020	156	.02	.02	.01	1.
10 NOV 0120	21	.01	.01	.00	0.	*	10 NOV 1024	157	.02	.02	.01	1.
10 NOV 0124	22	.01	.01	.00	0.	*	10 NOV 1028	158	.02	.02	.01	1.
10 NOV 0128	23	.01	.01	.00	0.	*	10 NOV 1032	159	.03	.02	.01	1.
10 NOV 0132	24	.01	.01	.00	0.	*	10 NOV 1036	160	.03	.02	.01	1.
10 NOV 0136	25	.01	.01	.00	0.	*	10 NOV 1040	161	.03	.02	.01	1.
10 NOV 0140	26	.01	.01	.00	0.	*	10 NOV 1044	162	.03	.02	.01	1.
10 NOV 0144	27	.01	.01	.00	0.	*	10 NOV 1048	163	.03	.02	.01	1.
10 NOV 0148	28	.01	.01	.00	0.	*	10 NOV 1052	164	.03	.02	.01	1.
10 NOV 0152	29	.01	.01	.00	0.	*	10 NOV 1056	165	.03	.02	.01	1.
10 NOV 0156	30	.01	.01	.00	0.	*	10 NOV 1100	166	.03	.02	.01	1.
10 NOV 0200	31	.01	.01	.00	0.	*	10 NOV 1104	167	.05	.04	.02	1.
10 NOV 0204	32	.01	.01	.00	0.	*	10 NOV 1108	168	.05	.03	.02	2.
10 NOV 0208	33	.01	.01	.00	0.	*	10 NOV 1112	169	.05	.03	.02	2.
10 NOV 0212	34	.01	.01	.00	0.	*	10 NOV 1116	170	.05	.03	.02	2.
10 NOV 0216	35	.01	.01	.00	0.	*	10 NOV 1120	171	.05	.03	.02	2.
10 NOV 0220	36	.01	.01	.00	0.	*	10 NOV 1124	172	.05	.03	.02	2.
10 NOV 0224	37	.01	.01	.00	0.	*	10 NOV 1128	173	.05	.03	.02	2.
10 NOV 0228	38	.01	.01	.00	0.	*	10 NOV 1132	174	.23	.14	.10	3.
10 NOV 0232	39	.01	.01	.00	0.	*	10 NOV 1136	175	.41	.22	.19	3.
10 NOV 0236	40	.01	.01	.00	0.	*	10 NOV 1140	176	.41	.19	.22	4.
10 NOV 0240	41	.01	.01	.00	0.	*	10 NOV 1144	177	.41	.17	.24	6.
10 NOV 0244	42	.01	.01	.00	0.	*	10 NOV 1148	178	.41	.15	.26	9.
10 NOV 0248	43	.01	.01	.00	0.	*	10 NOV 1152	179	.41	.14	.27	12.
10 NOV 0252	44	.01	.01	.00	0.	*	10 NOV 1156	180	.41	.13	.29	17.
10 NOV 0256	45	.01	.01	.00	0.	*	10 NOV 1200	181	.41	.11	.30	21.
10 NOV 0300	46	.01	.01	.00	0.	*	10 NOV 1204	182	.08	.02	.06	26.
10 NOV 0304	47	.01	.01	.00	0.	*	10 NOV 1208	183	.08	.02	.06	30.
10 NOV 0308	48	.01	.01	.00	0.	*	10 NOV 1212	184	.08	.02	.06	33.
10 NOV 0312	49	.01	.01	.00	0.	*	10 NOV 1216	185	.08	.02	.06	35.
10 NOV 0316	50	.01	.01	.00	0.	*	10 NOV 1220	186	.08	.02	.06	35.
10 NOV 0320	51	.01	.01	.00	0.	*	10 NOV 1224	187	.08	.02	.06	33.
10 NOV 0324	52	.01	.01	.00	0.	*	10 NOV 1228	188	.08	.02	.06	31.
10 NOV 0328	53	.01	.01	.00	0.	*	10 NOV 1232	189	.06	.01	.05	28.

10 NOV 0332	54	.01	.01	.00	0.	*	10 NOV 1236	190	.04	.01	.03	25.
10 NOV 0336	55	.01	.01	.00	0.	*	10 NOV 1240	191	.04	.01	.03	22.
10 NOV 0340	56	.01	.01	.00	0.	*	10 NOV 1244	192	.04	.01	.03	20.
10 NOV 0344	57	.01	.01	.00	0.	*	10 NOV 1248	193	.04	.01	.03	18.
10 NOV 0348	58	.01	.01	.00	0.	*	10 NOV 1252	194	.04	.01	.03	16.
10 NOV 0352	59	.01	.01	.00	0.	*	10 NOV 1256	195	.04	.01	.03	14.
10 NOV 0356	60	.01	.01	.00	0.	*	10 NOV 1300	196	.04	.01	.03	13.
10 NOV 0400	61	.01	.01	.00	0.	*	10 NOV 1304	197	.03	.01	.02	12.
10 NOV 0404	62	.01	.01	.00	0.	*	10 NOV 1308	198	.03	.01	.02	11.
10 NOV 0408	63	.01	.01	.00	0.	*	10 NOV 1312	199	.03	.01	.02	10.
10 NOV 0412	64	.01	.01	.00	0.	*	10 NOV 1316	200	.03	.01	.02	9.
10 NOV 0416	65	.01	.01	.00	0.	*	10 NOV 1320	201	.03	.01	.02	8.
10 NOV 0420	66	.01	.01	.00	0.	*	10 NOV 1324	202	.03	.01	.02	8.
10 NOV 0424	67	.01	.01	.00	0.	*	10 NOV 1328	203	.03	.01	.02	7.
10 NOV 0428	68	.01	.01	.00	0.	*	10 NOV 1332	204	.03	.01	.02	7.
10 NOV 0432	69	.01	.01	.00	0.	*	10 NOV 1336	205	.02	.00	.02	6.
10 NOV 0436	70	.01	.01	.00	0.	*	10 NOV 1340	206	.02	.00	.02	6.
10 NOV 0440	71	.01	.01	.00	0.	*	10 NOV 1344	207	.02	.00	.02	6.
10 NOV 0444	72	.01	.01	.00	0.	*	10 NOV 1348	208	.02	.00	.02	5.
10 NOV 0448	73	.01	.01	.00	0.	*	10 NOV 1352	209	.02	.00	.02	5.
10 NOV 0452	74	.01	.01	.00	0.	*	10 NOV 1356	210	.02	.00	.02	5.
10 NOV 0456	75	.01	.01	.00	0.	*	10 NOV 1400	211	.02	.00	.02	5.
10 NOV 0500	76	.01	.01	.00	0.	*	10 NOV 1404	212	.02	.00	.01	4.
10 NOV 0504	77	.01	.01	.00	0.	*	10 NOV 1408	213	.02	.00	.01	4.
10 NOV 0508	78	.01	.01	.00	0.	*	10 NOV 1412	214	.02	.00	.01	4.
10 NOV 0512	79	.01	.01	.00	0.	*	10 NOV 1416	215	.02	.00	.01	4.
10 NOV 0516	80	.01	.01	.00	0.	*	10 NOV 1420	216	.02	.00	.01	4.
10 NOV 0520	81	.01	.01	.00	0.	*	10 NOV 1424	217	.02	.00	.01	4.
10 NOV 0524	82	.01	.01	.00	0.	*	10 NOV 1428	218	.02	.00	.01	3.
10 NOV 0528	83	.01	.01	.00	0.	*	10 NOV 1432	219	.02	.00	.01	3.
10 NOV 0532	84	.01	.01	.00	0.	*	10 NOV 1436	220	.02	.00	.01	3.
10 NOV 0536	85	.01	.01	.00	0.	*	10 NOV 1440	221	.02	.00	.01	3.
10 NOV 0540	86	.01	.01	.00	0.	*	10 NOV 1444	222	.02	.00	.01	3.
10 NOV 0544	87	.01	.01	.00	0.	*	10 NOV 1448	223	.02	.00	.01	3.
10 NOV 0548	88	.01	.01	.00	0.	*	10 NOV 1452	224	.02	.00	.01	3.
10 NOV 0552	89	.01	.01	.00	0.	*	10 NOV 1456	225	.02	.00	.01	3.
10 NOV 0556	90	.01	.01	.00	0.	*	10 NOV 1500	226	.02	.00	.01	3.
10 NOV 0600	91	.01	.01	.00	0.	*	10 NOV 1504	227	.02	.00	.01	3.
10 NOV 0604	92	.01	.01	.00	0.	*	10 NOV 1508	228	.02	.00	.01	3.
10 NOV 0608	93	.01	.01	.00	0.	*	10 NOV 1512	229	.02	.00	.01	3.
10 NOV 0612	94	.01	.01	.00	0.	*	10 NOV 1516	230	.02	.00	.01	3.
10 NOV 0616	95	.01	.01	.00	0.	*	10 NOV 1520	231	.02	.00	.01	3.
10 NOV 0620	96	.01	.01	.00	0.	*	10 NOV 1524	232	.02	.00	.01	3.
10 NOV 0624	97	.01	.01	.00	0.	*	10 NOV 1528	233	.02	.00	.01	3.
10 NOV 0628	98	.01	.01	.00	0.	*	10 NOV 1532	234	.02	.00	.01	3.
10 NOV 0632	99	.01	.01	.00	0.	*	10 NOV 1536	235	.02	.00	.01	3.
10 NOV 0636	100	.01	.01	.00	0.	*	10 NOV 1540	236	.02	.00	.01	3.
10 NOV 0640	101	.01	.01	.00	0.	*	10 NOV 1544	237	.02	.00	.01	3.
10 NOV 0644	102	.01	.01	.00	0.	*	10 NOV 1548	238	.02	.00	.01	3.
10 NOV 0648	103	.01	.01	.00	0.	*	10 NOV 1552	239	.02	.00	.01	3.
10 NOV 0652	104	.01	.01	.00	0.	*	10 NOV 1556	240	.02	.00	.01	3.
10 NOV 0656	105	.01	.01	.00	0.	*	10 NOV 1600	241	.02	.00	.01	3.
10 NOV 0700	106	.01	.01	.00	0.	*	10 NOV 1604	242	.01	.00	.01	3.
10 NOV 0704	107	.01	.01	.00	0.	*	10 NOV 1608	243	.01	.00	.01	3.
10 NOV 0708	108	.01	.01	.00	0.	*	10 NOV 1612	244	.01	.00	.01	3.
10 NOV 0712	109	.01	.01	.00	0.	*	10 NOV 1616	245	.01	.00	.01	3.
10 NOV 0716	110	.01	.01	.00	0.	*	10 NOV 1620	246	.01	.00	.01	2.
10 NOV 0720	111	.01	.01	.00	0.	*	10 NOV 1624	247	.01	.00	.01	2.
10 NOV 0724	112	.01	.01	.00	0.	*	10 NOV 1628	248	.01	.00	.01	2.
10 NOV 0728	113	.01	.01	.00	0.	*	10 NOV 1632	249	.02	.00	.01	2.
10 NOV 0732	114	.01	.01	.00	0.	*	10 NOV 1636	250	.02	.00	.02	2.
10 NOV 0736	115	.01	.01	.00	0.	*	10 NOV 1640	251	.02	.00	.02	2.
10 NOV 0740	116	.01	.01	.00	0.	*	10 NOV 1644	252	.02	.00	.02	2.
10 NOV 0744	117	.01	.01	.00	0.	*	10 NOV 1648	253	.02	.00	.02	2.
10 NOV 0748	118	.01	.01	.00	0.	*	10 NOV 1652	254	.02	.00	.02	2.
10 NOV 0752	119	.01	.01	.00	0.	*	10 NOV 1656	255	.02	.00	.02	2.
10 NOV 0756	120	.01	.01	.00	0.	*	10 NOV 1700	256	.02	.00	.02	3.
10 NOV 0800	121	.01	.01	.00	0.	*	10 NOV 1704	257	.01	.00	.01	3.
10 NOV 0804	122	.01	.01	.00	0.	*	10 NOV 1708	258	.01	.00	.01	3.
10 NOV 0808	123	.01	.01	.00	0.	*	10 NOV 1712	259	.01	.00	.01	3.
10 NOV 0812	124	.01	.01	.00	0.	*	10 NOV 1716	260	.01	.00	.01	3.
10 NOV 0816	125	.01	.01	.00	0.	*	10 NOV 1720	261	.01	.00	.01	3.
10 NOV 0820	126	.01	.01	.00	0.	*	10 NOV 1724	262	.01	.00	.01	3.
10 NOV 0824	127	.01	.01	.00	0.	*	10 NOV 1728	263	.01	.00	.01	2.
10 NOV 0828	128	.01	.01	.00	0.	*	10 NOV 1732	264	.01	.00	.01	2.
10 NOV 0832	129	.01	.01	.00	0.	*	10 NOV 1736	265	.01	.00	.01	2.
10 NOV 0836	130	.02	.01	.00	0.	*	10 NOV 1740	266	.01	.00	.01	2.
10 NOV 0840	131	.02	.01	.00	0.	*	10 NOV 1744	267	.01	.00	.01	2.

RTIMP .00 PERCENT IMPERVIOUS AREA

27 UD SCS DIMENSIONLESS UNITGRAPH
TLAG .23 LAG

UNIT HYDROGRAPH
19 END-OF-PERIOD ORDINATES

4. 15. 27. 30. 27. 20. 12. 8. 6. 4.
2. 2. 1. 1. 0. 0. 0. 0. 0.

HYDROGRAPH AT STATION NEW

DA MON HRMN ORD RAIN LOSS EXCESS COMP Q * DA MON HRMN ORD RAIN LOSS EXCESS
COMP Q

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	
10	NOV	0000	1	.00	.00	0.	*		10	NOV	0904	137	.02	.01	.00	0.
10	NOV	0004	2	.01	.01	0.	*		10	NOV	0908	138	.02	.01	.00	0.
10	NOV	0008	3	.01	.01	0.	*		10	NOV	0912	139	.02	.01	.00	0.
10	NOV	0012	4	.01	.01	0.	*		10	NOV	0916	140	.02	.01	.00	0.
10	NOV	0016	5	.01	.01	0.	*		10	NOV	0920	141	.02	.01	.00	0.
10	NOV	0020	6	.01	.01	0.	*		10	NOV	0924	142	.02	.01	.00	1.
10	NOV	0024	7	.01	.01	0.	*		10	NOV	0928	143	.02	.01	.00	1.
10	NOV	0028	8	.01	.01	0.	*		10	NOV	0932	144	.02	.01	.00	1.
10	NOV	0032	9	.01	.01	0.	*		10	NOV	0936	145	.02	.01	.00	1.
10	NOV	0036	10	.01	.01	0.	*		10	NOV	0940	146	.02	.01	.00	1.
10	NOV	0040	11	.01	.01	0.	*		10	NOV	0944	147	.02	.01	.00	1.
10	NOV	0044	12	.01	.01	0.	*		10	NOV	0948	148	.02	.01	.00	1.
10	NOV	0048	13	.01	.01	0.	*		10	NOV	0952	149	.02	.01	.01	1.
10	NOV	0052	14	.01	.01	0.	*		10	NOV	0956	150	.02	.01	.01	1.
10	NOV	0056	15	.01	.01	0.	*		10	NOV	1000	151	.02	.01	.01	1.
10	NOV	0100	16	.01	.01	0.	*		10	NOV	1004	152	.02	.02	.01	1.
10	NOV	0104	17	.01	.01	0.	*		10	NOV	1008	153	.02	.02	.01	1.
10	NOV	0108	18	.01	.01	0.	*		10	NOV	1012	154	.02	.02	.01	1.
10	NOV	0112	19	.01	.01	0.	*		10	NOV	1016	155	.02	.02	.01	1.
10	NOV	0116	20	.01	.01	0.	*		10	NOV	1020	156	.02	.02	.01	1.
10	NOV	0120	21	.01	.01	0.	*		10	NOV	1024	157	.02	.02	.01	1.
10	NOV	0124	22	.01	.01	0.	*		10	NOV	1028	158	.02	.02	.01	1.
10	NOV	0128	23	.01	.01	0.	*		10	NOV	1032	159	.03	.02	.01	1.
10	NOV	0132	24	.01	.01	0.	*		10	NOV	1036	160	.03	.02	.01	1.
10	NOV	0136	25	.01	.01	0.	*		10	NOV	1040	161	.03	.02	.01	1.
10	NOV	0140	26	.01	.01	0.	*		10	NOV	1044	162	.03	.02	.01	1.
10	NOV	0144	27	.01	.01	0.	*		10	NOV	1048	163	.03	.02	.01	2.
10	NOV	0148	28	.01	.01	0.	*		10	NOV	1052	164	.03	.02	.01	2.
10	NOV	0152	29	.01	.01	0.	*		10	NOV	1056	165	.03	.02	.01	2.
10	NOV	0156	30	.01	.01	0.	*		10	NOV	1100	166	.03	.02	.01	2.
10	NOV	0200	31	.01	.01	0.	*		10	NOV	1104	167	.05	.03	.02	2.
10	NOV	0204	32	.01	.01	0.	*		10	NOV	1108	168	.05	.03	.02	2.
10	NOV	0208	33	.01	.01	0.	*		10	NOV	1112	169	.05	.03	.02	2.
10	NOV	0212	34	.01	.01	0.	*		10	NOV	1116	170	.05	.03	.02	3.
10	NOV	0216	35	.01	.01	0.	*		10	NOV	1120	171	.05	.03	.02	3.
10	NOV	0220	36	.01	.01	0.	*		10	NOV	1124	172	.05	.03	.02	3.
10	NOV	0224	37	.01	.01	0.	*		10	NOV	1128	173	.05	.03	.02	3.
10	NOV	0228	38	.01	.01	0.	*		10	NOV	1132	174	.23	.12	.12	4.
10	NOV	0232	39	.01	.01	0.	*		10	NOV	1136	175	.41	.18	.23	6.
10	NOV	0236	40	.01	.01	0.	*		10	NOV	1140	176	.41	.16	.25	10.
10	NOV	0240	41	.01	.01	0.	*		10	NOV	1144	177	.41	.14	.27	16.
10	NOV	0244	42	.01	.01	0.	*		10	NOV	1148	178	.41	.13	.29	23.
10	NOV	0248	43	.01	.01	0.	*		10	NOV	1152	179	.41	.11	.30	29.
10	NOV	0252	44	.01	.01	0.	*		10	NOV	1156	180	.41	.10	.31	35.
10	NOV	0256	45	.01	.01	0.	*		10	NOV	1200	181	.41	.09	.32	39.
10	NOV	0300	46	.01	.01	0.	*		10	NOV	1204	182	.08	.02	.06	41.
10	NOV	0304	47	.01	.01	0.	*		10	NOV	1208	183	.08	.02	.06	40.
10	NOV	0308	48	.01	.01	0.	*		10	NOV	1212	184	.08	.02	.06	35.
10	NOV	0312	49	.01	.01	0.	*		10	NOV	1216	185	.08	.02	.06	29.
10	NOV	0316	50	.01	.01	0.	*		10	NOV	1220	186	.08	.02	.06	23.
10	NOV	0320	51	.01	.01	0.	*		10	NOV	1224	187	.08	.01	.06	18.
10	NOV	0324	52	.01	.01	0.	*		10	NOV	1228	188	.08	.01	.06	15.
10	NOV	0328	53	.01	.01	0.	*		10	NOV	1232	189	.06	.01	.05	14.
10	NOV	0332	54	.01	.01	0.	*		10	NOV	1236	190	.04	.01	.03	12.
10	NOV	0336	55	.01	.01	0.	*		10	NOV	1240	191	.04	.01	.03	11.
10	NOV	0340	56	.01	.01	0.	*		10	NOV	1244	192	.04	.01	.03	9.
10	NOV	0344	57	.01	.01	0.	*		10	NOV	1248	193	.04	.01	.03	8.

10 NOV 0348	58	.01	.01	.00	0.	*	10 NOV 1252	194	.04	.01	.03	7.
10 NOV 0352	59	.01	.01	.00	0.	*	10 NOV 1256	195	.04	.01	.03	6.
10 NOV 0356	60	.01	.01	.00	0.	*	10 NOV 1300	196	.04	.01	.03	6.
10 NOV 0400	61	.01	.01	.00	0.	*	10 NOV 1304	197	.03	.01	.02	6.
10 NOV 0404	62	.01	.01	.00	0.	*	10 NOV 1308	198	.03	.00	.02	5.
10 NOV 0408	63	.01	.01	.00	0.	*	10 NOV 1312	199	.03	.00	.02	5.
10 NOV 0412	64	.01	.01	.00	0.	*	10 NOV 1316	200	.03	.00	.02	5.
10 NOV 0416	65	.01	.01	.00	0.	*	10 NOV 1320	201	.03	.00	.02	4.
10 NOV 0420	66	.01	.01	.00	0.	*	10 NOV 1324	202	.03	.00	.02	4.
10 NOV 0424	67	.01	.01	.00	0.	*	10 NOV 1328	203	.03	.00	.02	4.
10 NOV 0428	68	.01	.01	.00	0.	*	10 NOV 1332	204	.03	.00	.02	4.
10 NOV 0432	69	.01	.01	.00	0.	*	10 NOV 1336	205	.02	.00	.02	4.
10 NOV 0436	70	.01	.01	.00	0.	*	10 NOV 1340	206	.02	.00	.02	4.
10 NOV 0440	71	.01	.01	.00	0.	*	10 NOV 1344	207	.02	.00	.02	4.
10 NOV 0444	72	.01	.01	.00	0.	*	10 NOV 1348	208	.02	.00	.02	3.
10 NOV 0448	73	.01	.01	.00	0.	*	10 NOV 1352	209	.02	.00	.02	3.
10 NOV 0452	74	.01	.01	.00	0.	*	10 NOV 1356	210	.02	.00	.02	3.
10 NOV 0456	75	.01	.01	.00	0.	*	10 NOV 1400	211	.02	.00	.02	3.
10 NOV 0500	76	.01	.01	.00	0.	*	10 NOV 1404	212	.02	.00	.01	3.
10 NOV 0504	77	.01	.01	.00	0.	*	10 NOV 1408	213	.02	.00	.01	3.
10 NOV 0508	78	.01	.01	.00	0.	*	10 NOV 1412	214	.02	.00	.01	3.
10 NOV 0512	79	.01	.01	.00	0.	*	10 NOV 1416	215	.02	.00	.01	3.
10 NOV 0516	80	.01	.01	.00	0.	*	10 NOV 1420	216	.02	.00	.01	2.
10 NOV 0520	81	.01	.01	.00	0.	*	10 NOV 1424	217	.02	.00	.01	2.
10 NOV 0524	82	.01	.01	.00	0.	*	10 NOV 1428	218	.02	.00	.01	2.
10 NOV 0528	83	.01	.01	.00	0.	*	10 NOV 1432	219	.02	.00	.01	2.
10 NOV 0532	84	.01	.01	.00	0.	*	10 NOV 1436	220	.02	.00	.01	2.
10 NOV 0536	85	.01	.01	.00	0.	*	10 NOV 1440	221	.02	.00	.01	2.
10 NOV 0540	86	.01	.01	.00	0.	*	10 NOV 1444	222	.02	.00	.01	2.
10 NOV 0544	87	.01	.01	.00	0.	*	10 NOV 1448	223	.02	.00	.01	2.
10 NOV 0548	88	.01	.01	.00	0.	*	10 NOV 1452	224	.02	.00	.01	2.
10 NOV 0552	89	.01	.01	.00	0.	*	10 NOV 1456	225	.02	.00	.01	2.
10 NOV 0556	90	.01	.01	.00	0.	*	10 NOV 1500	226	.02	.00	.01	2.
10 NOV 0600	91	.01	.01	.00	0.	*	10 NOV 1504	227	.02	.00	.01	2.
10 NOV 0604	92	.01	.01	.00	0.	*	10 NOV 1508	228	.02	.00	.01	2.
10 NOV 0608	93	.01	.01	.00	0.	*	10 NOV 1512	229	.02	.00	.01	2.
10 NOV 0612	94	.01	.01	.00	0.	*	10 NOV 1516	230	.02	.00	.01	2.
10 NOV 0616	95	.01	.01	.00	0.	*	10 NOV 1520	231	.02	.00	.01	2.
10 NOV 0620	96	.01	.01	.00	0.	*	10 NOV 1524	232	.02	.00	.01	2.
10 NOV 0624	97	.01	.01	.00	0.	*	10 NOV 1528	233	.02	.00	.01	2.
10 NOV 0628	98	.01	.01	.00	0.	*	10 NOV 1532	234	.02	.00	.01	2.
10 NOV 0632	99	.01	.01	.00	0.	*	10 NOV 1536	235	.02	.00	.01	2.
10 NOV 0636	100	.01	.01	.00	0.	*	10 NOV 1540	236	.02	.00	.01	2.
10 NOV 0640	101	.01	.01	.00	0.	*	10 NOV 1544	237	.02	.00	.01	2.
10 NOV 0644	102	.01	.01	.00	0.	*	10 NOV 1548	238	.02	.00	.01	2.
10 NOV 0648	103	.01	.01	.00	0.	*	10 NOV 1552	239	.02	.00	.01	2.
10 NOV 0652	104	.01	.01	.00	0.	*	10 NOV 1556	240	.02	.00	.01	2.
10 NOV 0656	105	.01	.01	.00	0.	*	10 NOV 1600	241	.02	.00	.01	2.
10 NOV 0700	106	.01	.01	.00	0.	*	10 NOV 1604	242	.01	.00	.01	2.
10 NOV 0704	107	.01	.01	.00	0.	*	10 NOV 1608	243	.01	.00	.01	2.
10 NOV 0708	108	.01	.01	.00	0.	*	10 NOV 1612	244	.01	.00	.01	2.
10 NOV 0712	109	.01	.01	.00	0.	*	10 NOV 1616	245	.01	.00	.01	2.
10 NOV 0716	110	.01	.01	.00	0.	*	10 NOV 1620	246	.01	.00	.01	2.
10 NOV 0720	111	.01	.01	.00	0.	*	10 NOV 1624	247	.01	.00	.01	2.
10 NOV 0724	112	.01	.01	.00	0.	*	10 NOV 1628	248	.01	.00	.01	2.
10 NOV 0728	113	.01	.01	.00	0.	*	10 NOV 1632	249	.02	.00	.01	2.
10 NOV 0732	114	.01	.01	.00	0.	*	10 NOV 1636	250	.02	.00	.02	2.
10 NOV 0736	115	.01	.01	.00	0.	*	10 NOV 1640	251	.02	.00	.02	2.
10 NOV 0740	116	.01	.01	.00	0.	*	10 NOV 1644	252	.02	.00	.02	2.
10 NOV 0744	117	.01	.01	.00	0.	*	10 NOV 1648	253	.02	.00	.02	2.
10 NOV 0748	118	.01	.01	.00	0.	*	10 NOV 1652	254	.02	.00	.02	3.
10 NOV 0752	119	.01	.01	.00	0.	*	10 NOV 1656	255	.02	.00	.02	3.
10 NOV 0756	120	.01	.01	.00	0.	*	10 NOV 1700	256	.02	.00	.02	3.
10 NOV 0800	121	.01	.01	.00	0.	*	10 NOV 1704	257	.01	.00	.01	3.
10 NOV 0804	122	.01	.01	.00	0.	*	10 NOV 1708	258	.01	.00	.01	3.
10 NOV 0808	123	.01	.01	.00	0.	*	10 NOV 1712	259	.01	.00	.01	2.
10 NOV 0812	124	.01	.01	.00	0.	*	10 NOV 1716	260	.01	.00	.01	2.
10 NOV 0816	125	.01	.01	.00	0.	*	10 NOV 1720	261	.01	.00	.01	2.
10 NOV 0820	126	.01	.01	.00	0.	*	10 NOV 1724	262	.01	.00	.01	1.
10 NOV 0824	127	.01	.01	.00	0.	*	10 NOV 1728	263	.01	.00	.01	1.
10 NOV 0828	128	.01	.01	.00	0.	*	10 NOV 1732	264	.01	.00	.01	1.
10 NOV 0832	129	.01	.01	.00	0.	*	10 NOV 1736	265	.01	.00	.01	1.
10 NOV 0836	130	.02	.01	.00	0.	*	10 NOV 1740	266	.01	.00	.01	1.
10 NOV 0840	131	.02	.01	.00	0.	*	10 NOV 1744	267	.01	.00	.01	1.
10 NOV 0844	132	.02	.01	.00	0.	*	10 NOV 1748	268	.01	.00	.01	1.
10 NOV 0848	133	.02	.01	.00	0.	*	10 NOV 1752	269	.01	.00	.01	1.
10 NOV 0852	134	.02	.01	.00	0.	*	10 NOV 1756	270	.01	.00	.01	1.
10 NOV 0856	135	.02	.01	.00	0.	*	10 NOV 1800	271	.01	.00	.01	1.

TOTAL RAINFALL = 7.50, TOTAL LOSS = 3.24, TOTAL EXCESS = 4.26

+ (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	18.00-HR
+ 41.	12.07	7.	2.	2.	2.
	(INCHES)	3.885	4.221	4.221	4.221
	(AC-FT)	3.	4.	4.	4.

CUMULATIVE AREA = .02 SQ MI

28 KK * POND * PROPOSED DETENTION POND w/24" CMP OUTLET

33 IO OUTPUT CONTROL VARIABLES
 IPRNT 5 PRINT CONTROL
 IPLOT 2 PLOT CONTROL
 QSCAL 0. HYDROGRAPH PLOT SCALE
 1 STATION POND

(I) INFLOW, (O) OUTFLOW
 0. 5. 10. 15. 20. 25. 30. 35. 40. 45. 0. 0. 0.
 (S) STORAGE
 .0 .0 .0 .0 .0 .0 .0 .4 .8 1.2 .0 .0 .0

DAHRMN PER	STATION	INFLOW	OUTFLOW	STORAGE
100000	1I	O		S
100004	2I	O		S
100008	3I	O		S
100012	4I	O		S
100016	5I	O		S
100020	6I	O		S
100024	7I	O		S
100028	8I	O		S
100032	9I	O		S
100036	10I	O		S
100040	11I	O		S
100044	12I	O		S
100048	13I	O		S
100052	14I	O		S
100056	15I	O		S
100100	16I	O		S
100104	17I	O		S
100108	18I	O		S
100112	19I	O		S
100116	20I	O		S
100120	21I	O		S
100124	22I	O		S
100128	23I	O		S
100132	24I	O		S
100136	25I	O		S
100140	26I	O		S
100144	27I	O		S
100148	28I	O		S
100152	29I	O		S
100156	30I	O		S
100200	31I	O		S
100204	32I			S
100208	33I			S
100212	34I			S
100216	35I			S
100220	36I			S
100224	37I			S
100228	38I			S
100232	39I			S

RUNOFF SUMMARY
 FLOW IN CUBIC FEET PER SECOND
 TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	PEAK TIME OF STATION FLOW	TIME OF FLOW	AVERAGE FLOW FOR MAXIMUM PERIOD			BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
			6-HOUR	24-HOUR	72-HOUR			
+ HYDROGRAPH AT PREDEV	35.	12.27	8.	3.	3.	.02		
+ HYDROGRAPH AT NEW	41.	12.07	7.	2.	2.	.02		
+ ROUTED TO POND	22.	12.33	7.	3.	3.	.02	204.72	12.33

*** NORMAL END OF HEC-1 ***

CERTIFIED ENGINEERING DESIGN

810 West Douglas, Suite C
Wichita, KS 67203
(316)262-8808 Office
(316)262-1669 Fax

November 11, 2000

Ms. Vicki Huang, P.E.
Engineering Division
City of Wichita
7th Floor, City Hall
455 North Main
Wichita, KS 67202

Re: Berexco Corporate Building
Lot 3, Block 1, Northborough Addition

Dear Ms. Huang:

Attached please find a detailed drainage plan for the proposed building at the above referenced location. I visited last Wednesday with Mr. Mike Lindebak, P.E., and he indicated that a temporary detention pond would be acceptable if properly engineered. He requested that the pond be sized for this building and a possible future building located to the south of the proposed building. Please review this drainage plan at your earliest possible time and notify Mr. Paul Hayes, OCI that you are in receipt of and reviewing the drainage plan. The contractor for this project would like to obtain a grading permit for this project from OCI and proceed with earthwork as soon as possible. If you have any revisions please call me at 262-8808 so that we may discuss the issues.

Sincerely,



Harlan D. Foraker, P.E.
Kansas P.E. No. 10891

CERTIFIED ENGINEERING DESIGN

cc: Stan Sheldon, SP Architects

PROJECT: BEREXCO

DATE 11-10-2000

LOCATION: NORTHBOROUGH ADDITION

BY HOF CKD

CLIENT: _____

JOB NO. _____ SHEET NO. _____ OF _____

T_a (UNDEVELOPED)

$$T(\text{lowland}) = \frac{.007 (.29 \cdot 300)^{-8}}{(3.5)^5 \left(\frac{4'}{200}\right)^{-4}} = \frac{0.2143}{0.3637} = 0.5892 \text{ hr} \\ 35 \text{ minutes}$$

$$T(\text{shallow}) = \frac{480' + 220'}{2100} = \frac{6 \text{ min.}}{41 \text{ min.}}$$

SOIL TYPE D, ROSETTILL SILTY CLAY

T_c (DEVELOPED)

$$T_c(\text{lowland}) = 15 \text{ minutes}$$

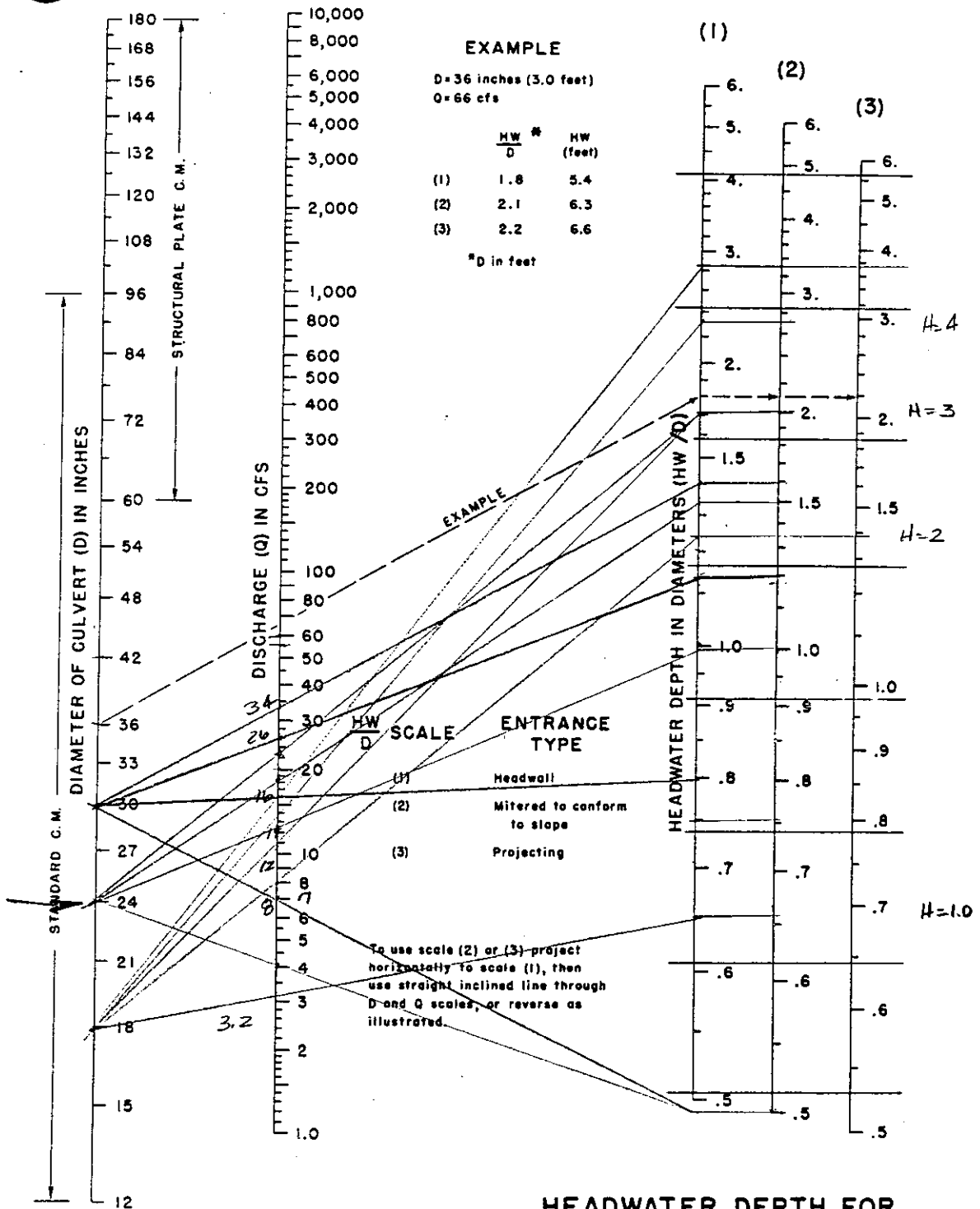
$$T_{\text{shallow}} / \frac{700}{2100} = \frac{6 \text{ minutes}}{21 \text{ minutes}}$$

C (DEVELOPED)

$$C_{\text{LTD}} = \frac{1.5 \text{ ac.} (.87) + (10.49 - 1.5)(.35)}{10.99} = 0.42$$



CHART 2

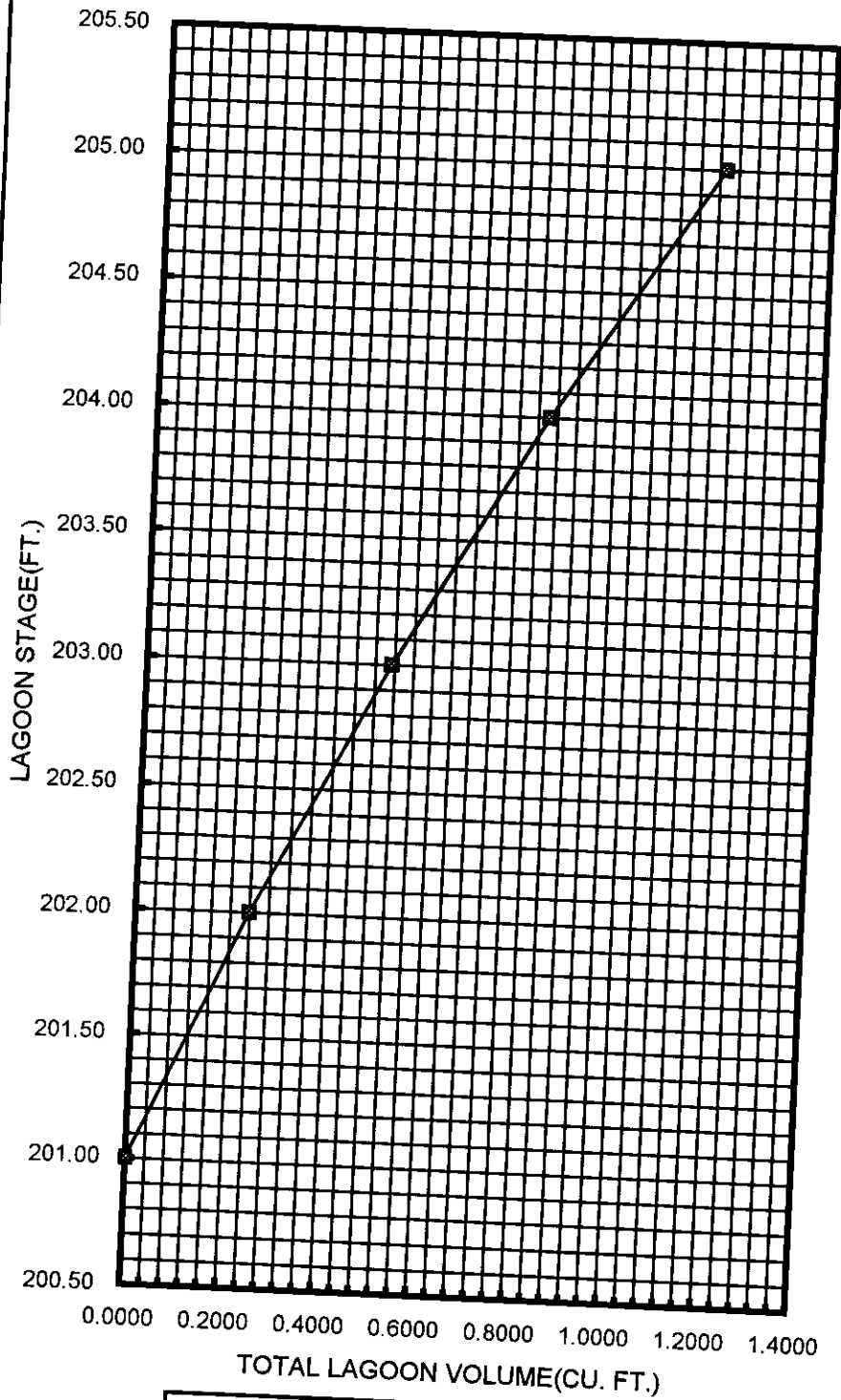


HEADWATER DEPTH FOR C. M. PIPE CULVERTS WITH INLET CONTROL

BEREXCO CORPORATE BUILDING
LOT 3, BLOCK 1, NORTHBOROUGH ADDITION
WICHITA, KANSAS

LAGOON STAGE(FT.)	LAGOON SURFACE AREA(ACRES)	INCREMENTAL LAGOON VOLUME(AC.FT.)	TOTAL LAGOON VOLUME(AC.FT.)
201.00	0.22	0.0000	0.0000
202.00	0.26	0.2400	0.2400
203.00	0.29	0.2750	0.5150
204.00	0.33	0.3100	0.8250
205.00	0.37	0.3500	1.1750

DETENTION POND VOLUME ANALYSIS
BEREXCO CORPORATE BUILDING, WICHITA, KS



—■— Lagoon Storage @ Lagoon Stage