

KANSAS GEOLOGICAL SURVEY

The University of Kansas
1930 Constant Ave
Lawrence KS 66047-3726
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www.kgs.ku.edu

September 26, 2006

Ms. Susan Galemore
Planning and Development Consultant
Southeast Kansas Regional Planning Commission
P.O. Box 664
Chanute, KS 66720-0664

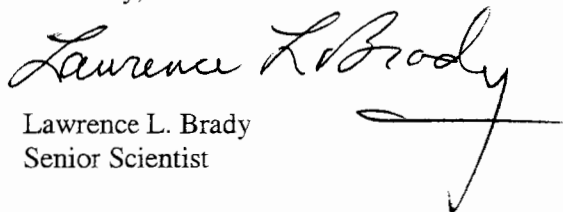
Dear Ms. Galemore:

I received your inquiry to the Kansas Geological Survey seeking input on "Environmental Assessment Comments" for improvements to an existing dam for the City of Pleasanton, located in Linn County. The dam is present on the west edge of town. The project involves adding a few feet of material to the top of the existing dam—raising the top elevation of the dam to 1869.85, the addition of a 100 foot wide earthen emergency spillway on the southwest side of the dam, and repair and replacement with rock rip-rap on the front face of the dam at locations where the dam has eroded.

It is my understanding that this review is necessary for this project to be considered for a Kansas Department of Commerce Small Cities Community Development Block Grant to assist with the cost of construction of described dam improvements. Based on the information provided to the Kansas Geological Survey, I do not recognize any potential geologic problems with this proposal. However, a significant amount of these improvements involve careful engineering work in designing these improvements, especially the spillway and the increased height of the dam with its increased loading on the existing materials under the dam, especially where soils exist under the dam. With these engineering alerts in mind, the Kansas Geological Survey provides the necessary clearance from our agency for your project and I have signed the form requesting environmental assessment comments.

The above discussion represents our best assessment based on the information that the Kansas Geological Survey has about this locality and/or proposed project at the time of this writing. Other geologic conditions, not discussed herein, or for which the Kansas Geological Survey has no knowledge, may affect the viability or safe operation of this facility or property. The information provided in this letter is from regional or countywide studies and should not be used as a substitute for detailed site characterization by a licensed geologist or engineer. It is the responsibility of the applicant to provide any required site characterizations.

Sincerely,


Lawrence L. Brady
Senior Scientist

Enc.

Request for Environmental Assessment Comments

REPLY REQUESTED BY: 10-07-06

TO: Larry Brady Kansas Geological Survey University of Kansas 1930 Constant Avenue, Campus West Lawrence, KS 66047 (Please indicate any change in address or personnel)	GRANT NUMBER AND PROGRAM: Kansas Department of Commerce Small Cities Community Development Block Grant Program
APPLICANT NAME AND ADDRESS: City of Pleasanton PO Box 399 Pleasanton, KS 66075	RETURN TO: Susan Galemore, Planning & Development Consultant Southeast Kansas Regional Planning Commission P.O. Box 664 Chanute, KS 66720-0664
PROGRAM ACTIVITY/PROJECT NAME: West Upper Lake Dam Improvements	LOCATION: Pleasanton, KS Linn County, SEE MAP

PROGRAM ACTIVITY/DESCRIPTION: This project will entail raising the elevation of the dam to 1869.85, add a 100 foot wide earthen emergency spillway on the southwest side of the dam, repair and replace rock rip-rap on the front face of the dam at selected areas where the dam has eroded.

REVIEW AGENCY COMMENTS:

No Comment _____

Project Approval _____

Other ☒ (Explain Below)

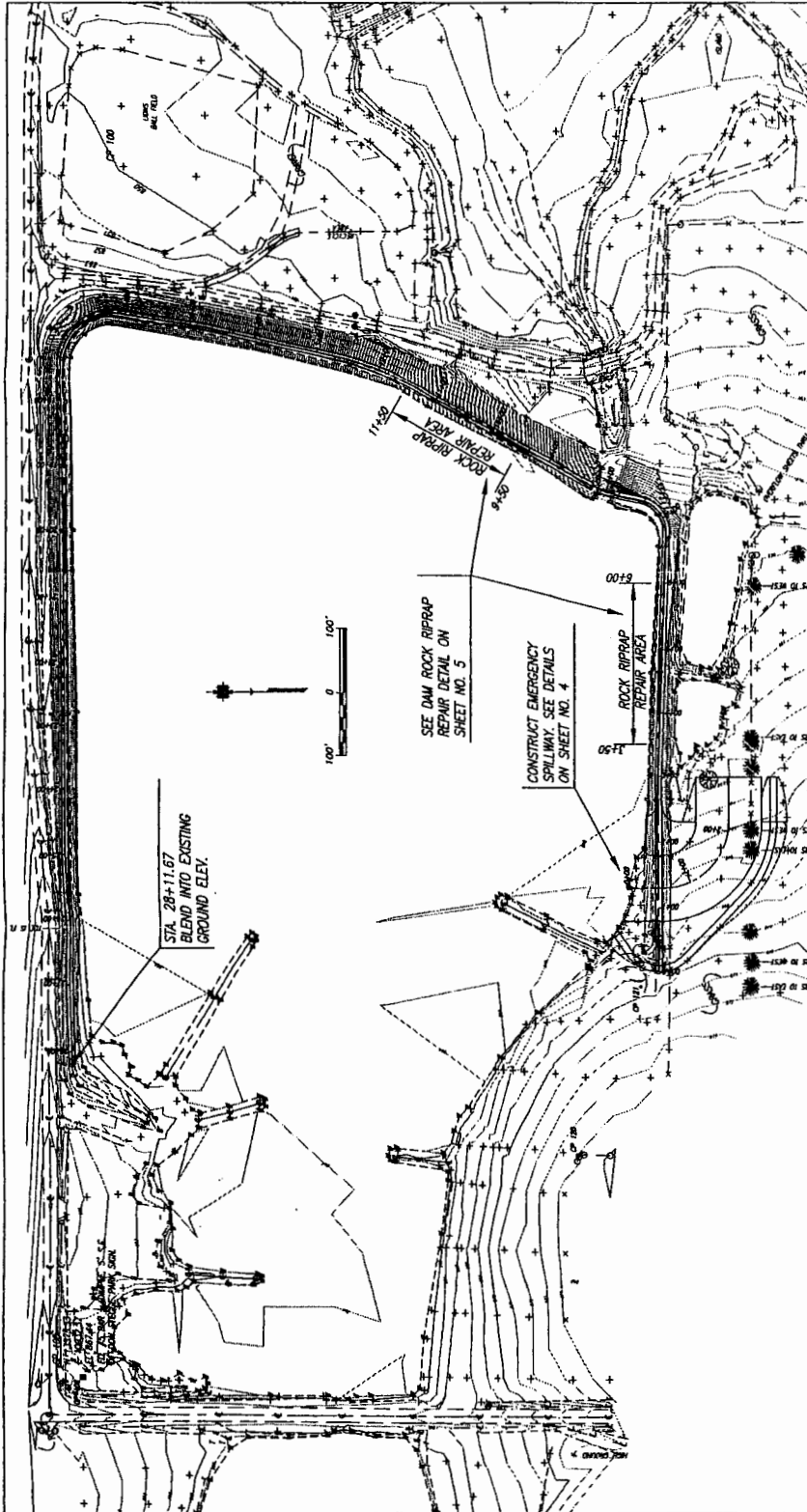
See comments in enclosed letter

SIGNATURE: <i>Laurence R Brady</i>	TITLE: <i>Senior Scientist</i> <i>Kansas Geological</i> <i>Survey</i>	DATE: <i>9/26/06</i>
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EXCAVATION NOTES
 1. EXCAVATION FOR EMBANKMENT MATERIAL SHALL BE:
 A. WITHIN THE LAKE AREA BELOW ELEV. 845.5
 B. MORE THAN 100' FROM THE CONCRETE SPILLWAY STRUCTURE
 C. MORE THAN 20' FROM THE TOE OF THE DAM.

DAM CENTERLINE COORDINATES

Sta.	North	East	Elev.	Desc.
0+00.00	12687.65	10947.13	869.50	BOF
1+00.00	12688.21	10747.84	869.50	
2+00.00	12688.78	10547.83	869.50	
3+00.00	12689.34	10347.68	869.50	PI
4+00.00	12689.07	10147.60	869.50	
5+00.00	12688.68	9947.53	869.50	
6+00.00	12679.36	9747.49	869.50	
6+73.41	12676.91	9547.47	869.50	PC 50R
7+00.00	12682.04	9347.42	869.50	
7+46.22	12717.85	9147.37	869.50	PT $\Delta = 63^{\circ}25'29"$
8+00.00	12750.75	8947.32	869.50	
8+79.87	12790.61	8747.27	869.50	EDGE SPILLWAY
9+00.00	12828.84	8547.22	869.50	
10+00.00	12868.13	8347.17	869.50	
11+07.46	13039.93	8147.12	869.50	PC
12+00.00	13121.75	7947.07	869.50	
12+54.51	13173.51	7747.02	869.50	PT $\Delta = 18^{\circ}43'23"$
13+00.00	13217.94	7547.00	869.50	
14+00.00	13315.60	7347.00	869.50	
14+92.07	13405.53	7147.00	869.50	PC 75' R
15+00.00	13504.20	6947.00	869.50	
16+12.50	13524.62	6747.00	869.50	PT $\Delta = 93^{\circ}26'46"$
17+00.00	13599.75	6547.00	869.50	
17+34.82	13610.46	6347.00	869.50	PT
18+00.00	13609.58	6147.00	869.50	
19+00.00	13608.24	5947.00	869.50	
20+00.00	13606.89	5747.00	869.50	
21+00.00	13605.55	5547.00	869.50	
22+00.00	13604.20	5347.00	869.50	
23+00.00	13602.86	5147.00	869.50	
24+00.00	13601.51	4947.00	869.50	PI
25+00.00	13599.75	4747.00	869.50	
26+00.00	13596.79	4547.00	869.50	
27+00.00	13593.41	4347.00	869.50	
28+00.00	13590.03	4147.00	869.50	
28+11.67	13589.63	3947.00	869.50	EOP



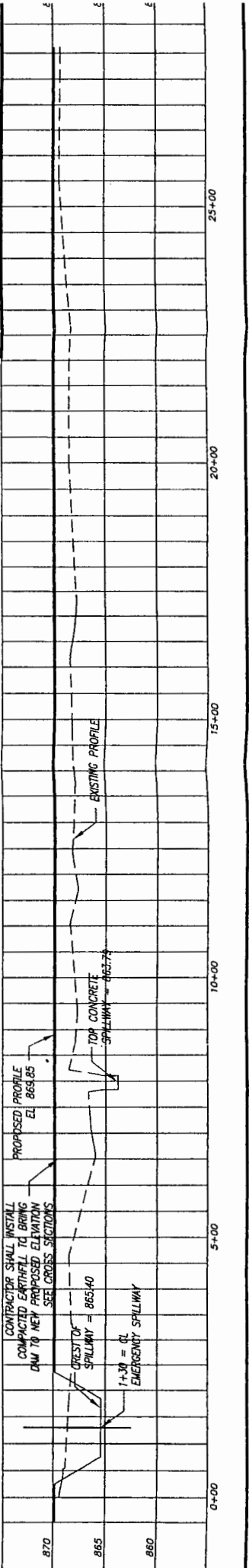
REVISION		CITY OF PLEASANTON WEST UPPER LAKE	
DAM IMPROVEMENTS		DAM IMPROVEMENTS	
DATE	JOB NO.	ENGINEER	SHEET
2004	7204030	E.B.H.	3
		DESIGNED BY	OF 7
		CHECKED BY	

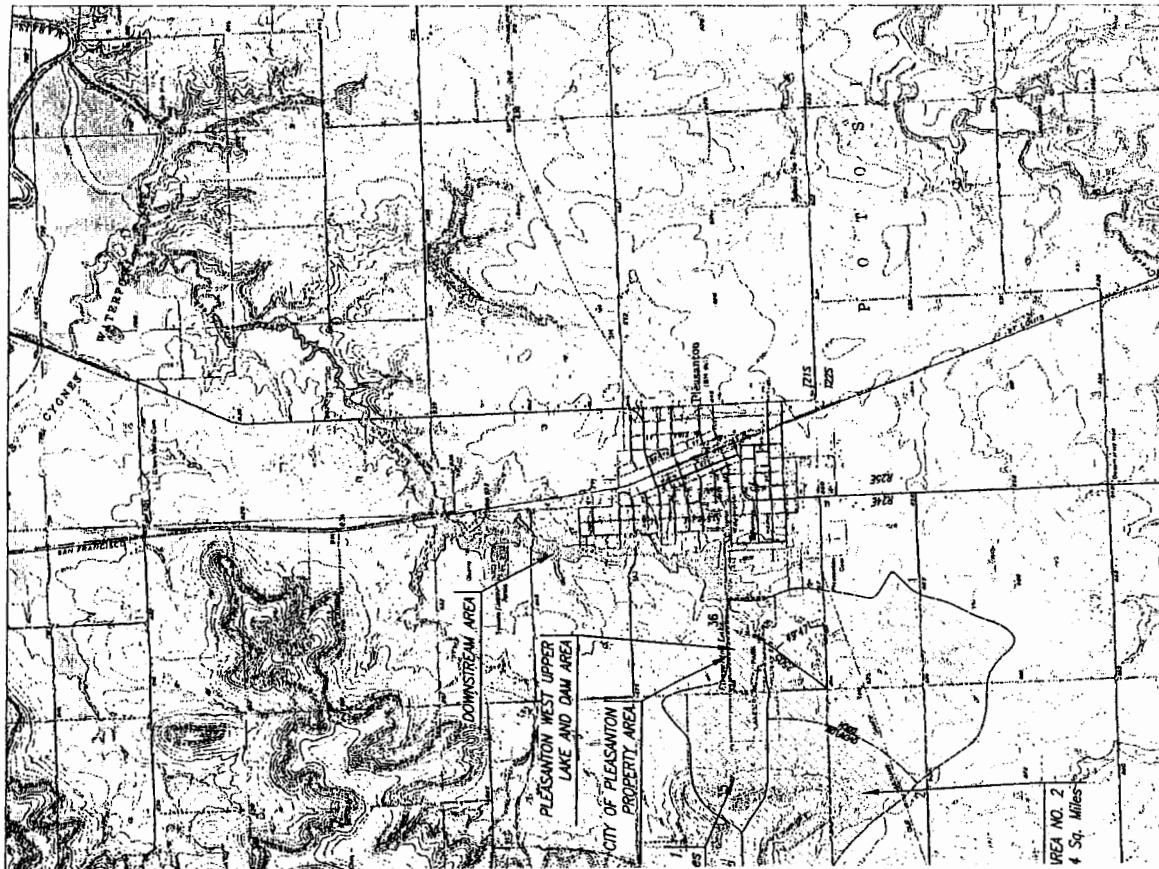
BENCH MARK:
 N 1353.27
 E 12559.15
 Elev. 848.82 NAVD 88
 Chiselled 2" Square in NW Corner
 Top North Wingwall of Spillway

CP 108
 N 13573.53
 E 10032.57
 Elev. 867.44
 Fd. #5 Rebar w/Druple,
 5' SE of Don Stegge
 Park Sign

CP 121
 N 12716.67
 E 10625.66
 Elev. 868.97
 #5 Rebar w/EBH cap

CP 120
 N 12812.54
 E 10371.65
 Elev. 873.70
 #5 Rebar w/EBH cap
 9.82' N. of SE Sign Post
 10.0' E. of NW Sign Post





AREA NO. 2
4 Sq. Miles

RESERVOIR DATA

Discharge (cfs)	Elevation
0	864.5
1000	865.5
2000	867.0
3000	868.5
4000	869.5
5000	870.5

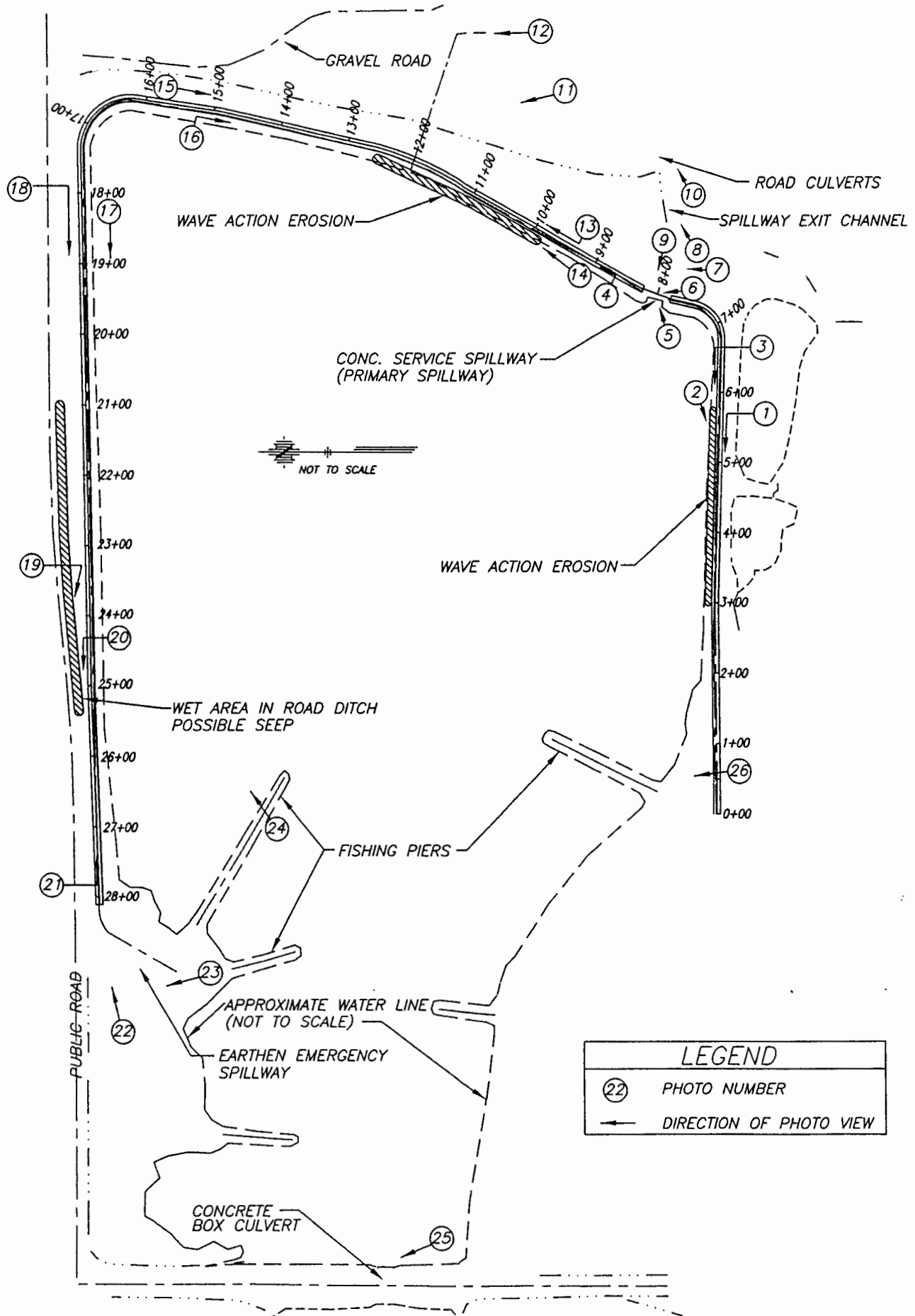
DIVERSION DITCH OVERFLOWS AT 310.7 CFS.
THEREFORE ONLY 310.7 CFS IS USED IN DETERMINING
RUNOFF FROM DRAINAGE AREA NO. 2.

R 245

NOTE:
THE ANGLE AND DISTANCE FROM THE SW CORNER OF SEC. 36 T21S R24W TO THE POINT WHERE THE AXIS OF THE DAM CROSSES THE STREAM WERE DETERMINED UTILIZING AN AERIAL PHOTOGRAPH AND ARE ONLY APPROXIMATE.

TOPOGRAPHIC MAP AND DATA TABLES

E.B.H. ENGINEERS
SURVEYORS
& Associates
Evans-Berry-Mulhison & Associates, P.A.



CITY OF PLEASANTON
WEST UPPER DAM (DLN-0001)
SCHEMATIC PLAN VIEW

E.B.H. ENGINEERS
& Associates SURVEYORS
Evans-Bierly-Hutchison & Associates, P.A.