

MEMORANDUM

TO: Programs, Projects and Operations Subcommittee

SUBJECT: Watershed Structure Bank Stabilization Project

DATE: March 2, 2009

FROM: Martin P. Cleveland, P.E.

The Papio-Missouri River Natural Resources District received and opened bids for the Watershed Structure Bank Stabilization Project on February 26, 2009 at 10:00 a.m. There were six bids received ranging from \$158,597.50 to \$221,450.00. Attached is a bid summary. The apparent low bid of \$158,597.50 is from Penro Construction Company, Inc. of Pender, Nebraska. The engineer's opinion of cost was \$177,155.00

The project consists of installing rock riprap along the eroding front berm of seven watershed structures (dams) located in Silver Creek Watershed (four sites), Tekamah-Mud Watershed (one site) in Burt County, NE and Pigeon-Jones Watershed (two sites) in Dakota County, NE. The work includes the furnishing of the labor, materials, equipment, tools and incidentals necessary to install approximately 4,140 tons of rock riprap bank protection along approximately 2,855 linear feet of front berm length and possible removal and replacement of 2,855 ft. of fence and 1,065 cubic yards of riprap soil infill. District staff will handle the reseeding of grass, as needed. Attached are location maps, typical repair cross-section and dam/berm photograph.

The work will be funded via FY09 Budget Project Maintenance Contract work Account No. 0103-12 (4479) and as of February 6, 2009, there is \$793,538 available in this account.

- **It is Management's recommendation that the Subcommittee recommend to the Board of Directors that the bid of Penro Construction Company, Inc., in the amount of \$158,597.50, for construction of the Watershed Structure Bank Stabilization Project should be accepted; and, that the General Manager, on behalf of the District, should execute the advertised contract with such bidder providing for such price.**

**WATERSHED STRUCTURE BANK STABILIZATION PROJECT
BID SUMMARY**

BID OPENING – FEBRUARY 26, 2009 – 10:00A.M.

ENGINEER'S OPINION OF COST					Camden Excavating		Penro Construction	
ITEM NO.	SITE	DESCRIPTION	LENGTH (FT)	TONS	UNIT COST (\$)	TOTAL COST (\$)	UNIT COST (\$)	TOTAL COST (\$)
1	SC 6	Rock Riprap (Type B)	550	800	\$35.00	\$28,000.00	41.00	\$32,800.00
2	SC 30	Rock Riprap (Type B)	450	650	\$35.00	\$22,750.00	41.00	\$26,650.00
3	SC 31	Rock Riprap (Type B)	400	580	\$35.00	\$20,300.00	40.00	\$23,200.00
4	SC 36	Rock Riprap (Type B)	530	770	\$35.00	\$26,950.00	42.75	\$32,917.50
5	TM 6-4	Rock Riprap (Type B)	200	290	\$35.00	\$10,150.00	40.00	\$11,600.00
6	PJ 4	Rock Riprap (Type B)	400	580	\$40.00	\$23,200.00	41.50	\$24,070.00
7	PJ 5	Rock Riprap (Type B)	325	470	\$40.00	\$18,800.00	41.50	\$19,505.00
		SUB-TOTAL (Item 1 thru 7)	2,855	4,140		\$150,150.00		\$170,742.50
ITEM NO.	SITE	BID ITEM DESCRIPTION	LENGTH (FT.)		UNIT COST (\$)	TOTAL COST (\$)	UNIT COST (\$)	TOTAL COST (\$)
8	SC 6	Fence Removal/Reinstall	550		\$4.00	\$2,200.00	\$2.25	\$1,237.50
9	SC 30	Fence Removal/Reinstall	450		\$4.00	\$1,800.00	\$1.75	\$787.50
10	SC 31	Fence Removal/Reinstall	400		\$4.00	\$1,600.00	\$3.00	\$1,200.00
11	SC 36	Fence Removal/Reinstall	530		\$4.00	\$2,120.00	\$1.50	\$795.00
12	TM 6-4	Fence Removal/Reinstall	200		\$4.00	\$800.00	\$1.75	\$350.00
13	PJ 4	Fence Removal/Reinstall	400		\$4.00	\$1,600.00	\$3.00	\$1,200.00
14	PJ 5	Fence Removal/Reinstall	325		\$4.00	\$1,300.00	\$2.00	\$650.00
		SUB-TOTAL (Item 8 thru 14)	2855			\$11,420.00		\$6,220.00
ITEM NO.	SITE	BID ITEM DESCRIPTION	CUBIC YARDS		UNIT COST (\$)	TOTAL COST (\$)	UNIT COST (\$)	TOTAL COST (\$)
15	SC 6	Riprap Soil Infill	200		\$9.00	\$1,800.00	\$10.00	\$2,000.00
16	SC 30	Riprap Soil Infill	170		\$9.00	\$1,530.00	\$8.00	\$1,360.00
17	SC 31	Riprap Soil Infill	150		\$9.00	\$1,350.00	\$7.00	\$1,050.00
18	SC 36	Riprap Soil Infill	200		\$9.00	\$1,800.00	\$8.00	\$1,600.00
19	TM 6-4	Riprap Soil Infill	75		\$9.00	\$675.00	\$12.00	\$900.00
20	PJ 4	Riprap Soil Infill	150		\$9.00	\$1,350.00	\$13.00	\$1,950.00
21	PJ 5	Riprap Soil Infill	120		\$9.00	\$1,080.00	\$14.00	\$1,680.00
		SUB-TOTAL (Item 15 thru 22)	1065			\$9,585.00		\$10,540.00
22	MOBILIZATION					\$6,000.00		0
		TOTAL BID (1 TO 22)				\$177,155.00		\$187,502.50
					Bid Bond (yes or No)		Yes	
					Riprap Source		LG or Ft. Calhoun	
							LG and Ft. Calhoun	
							* Yes	

* Apparent low bidder

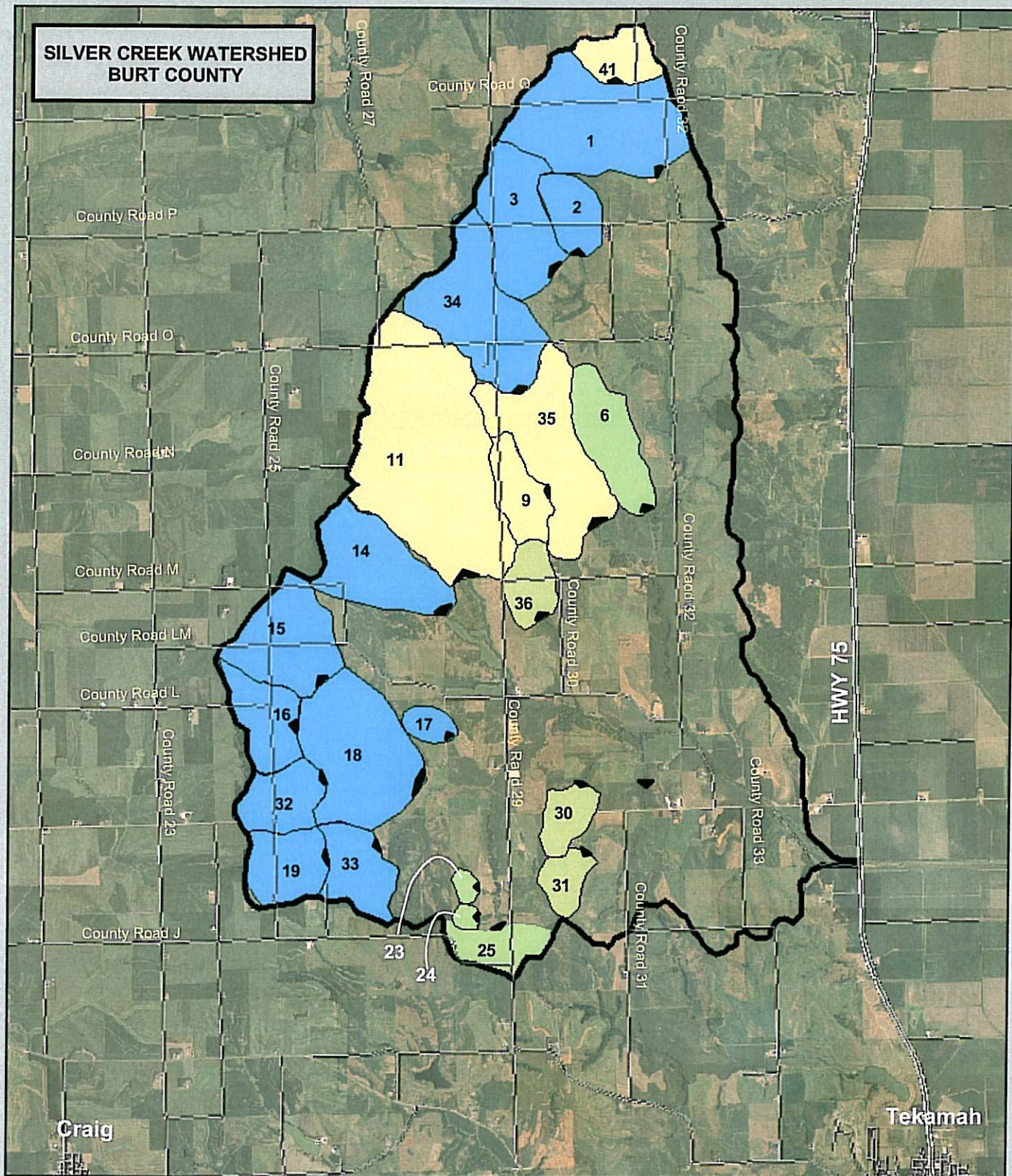
Note: SC=SILVER CREEK WATERSHED SITE; TM=TEKAMAH-MUD WATERSHED SITE; PJ=PIGEON-JONES WATERSHED SITE

**WATERSHED STRUCTURE BANK STABILIZATION PROJECT
BID SUMMARY (Continued)**

ITEM NO.	SITE	DESCRIPTION	Thompson Construction		Nelson and Rock Contracting		L.A. Carlson Contracting		Valley Corp	
			UNIT COST (\$)	TOTAL COST (\$)	UNIT COST (\$)	TOTAL COST (\$)	UNIT COST (\$)	TOTAL COST (\$)	UNIT COST (\$)	TOTAL COST (\$)
1	SC 6	Rock Riprap (Type B)	\$34.00	\$27,200.00	\$40.00	\$32,000.00	\$38.95	\$31,160.00	\$34.75	\$27,800.00
2	SC 30	Rock Riprap (Type B)	\$34.00	\$22,100.00	\$40.00	\$26,000.00	\$38.95	\$25,317.50	\$34.75	\$22,587.50
3	SC 31	Rock Riprap (Type B)	\$34.00	\$19,720.00	\$40.00	\$23,200.00	\$38.95	\$22,591.00	\$34.75	\$20,155.00
4	SC 36	Rock Riprap (Type B)	\$34.00	\$26,180.00	\$40.00	\$30,800.00	\$38.95	\$29,991.50	\$34.75	\$26,757.50
5	TM 6-4	Rock Riprap (Type B)	\$34.00	\$ 9,860.00	\$40.00	\$11,600.00	\$38.95	\$11,295.50	\$34.75	\$10,077.50
6	PJ 4	Rock Riprap (Type B)	\$37.00	\$21,460.00	\$40.00	\$23,200.00	\$41.45	\$24,041.00	\$39.40	\$22,852.00
7	PJ 5	Rock Riprap (Type B)	\$37.00	\$17,390.00	\$40.00	\$18,800.00	\$41.45	\$19,481.50	\$39.40	\$18,518.00
		SUB-TOTAL (Item 1 thru 7)		\$143,910.00		\$165,600.00		\$163,878.00		\$148,747.50
ITEM NO.	SITE	BID ITEM DESCRIPTION	UNIT COST (\$)	TOTAL COST (\$)	UNIT COST (\$)	TOTAL COST (\$)	UNIT COST (\$)	TOTAL COST (\$)	UNIT COST (\$)	TOTAL COST (\$)
8	SC 6	Fence Removal/Reinstall	\$2.00	\$1,100.00	\$10.00	\$5,500.00	\$3.00	\$1,650.00	\$4.00	\$2,200.00
9	SC 30	Fence Removal/Reinstall	\$2.00	\$ 900.00	\$10.00	\$4,500.00	\$3.00	\$1,350.00	\$4.00	\$1,800.00
10	SC 31	Fence Removal/Reinstall	\$2.00	\$ 800.00	\$10.00	\$4,000.00	\$3.00	\$1,200.00	\$4.00	\$1,600.00
11	SC 36	Fence Removal/Reinstall	\$2.00	\$1,060.00	\$10.00	\$5,300.00	\$3.00	\$1,590.00	\$4.00	\$2,120.00
12	TM 6-4	Fence Removal/Reinstall	\$2.00	\$ 400.00	\$10.00	\$2,000.00	\$3.00	\$ 600.00	\$4.00	\$ 800.00
13	PJ 4	Fence Removal/Reinstall	\$2.00	\$ 800.00	\$10.00	\$4,000.00	\$3.00	\$1,200.00	\$4.00	\$1,600.00
14	PJ 5	Fence Removal/Reinstall	\$2.00	\$ 650.00	\$10.00	\$3,250.00	\$3.00	\$ 975.00	\$4.00	\$1,300.00
		SUB-TOTAL (Item 8 thru 14)		\$5,710.00		\$28,550.00		\$8,565.00		\$11,420.00
ITEM NO.	SITE	BID ITEM DESCRIPTION	UNIT COST (\$)	TOTAL COST (\$)	UNIT COST (\$)	TOTAL COST (\$)	UNIT COST (\$)	TOTAL COST (\$)	UNIT COST (\$)	TOTAL COST (\$)
15	SC 6	Riprap Soil Infill	\$8.00	\$1,600.00	\$20.00	\$4,000.00	\$15.00	\$3,000.00	\$8.60	\$1,720.00
16	SC 30	Riprap Soil Infill	\$8.00	\$1,360.00	\$20.00	\$3,400.00	\$15.00	\$2,550.00	\$8.60	\$1,462.00
17	SC 31	Riprap Soil Infill	\$8.00	\$1,200.00	\$20.00	\$3,000.00	\$15.00	\$2,250.00	\$8.60	\$1,290.00
18	SC 36	Riprap Soil Infill	\$8.00	\$1,600.00	\$20.00	\$4,000.00	\$15.00	\$3,000.00	\$8.60	\$1,720.00
19	TM 6-4	Riprap Soil Infill	\$8.00	\$ 600.00	\$20.00	\$1,500.00	\$15.00	\$1,125.00	\$8.60	\$ 645.00
20	PJ 4	Riprap Soil Infill	\$8.00	\$1,200.00	\$20.00	\$3,000.00	\$15.00	\$2,250.00	\$10.70	\$1,605.00
21	PJ 5	Riprap Soil Infill	\$8.00	\$ 960.00	\$20.00	\$2,400.00	\$15.00	\$1,800.00	\$10.70	\$1,284.00
		SUB-TOTAL (Item 15 thru 22)		\$8,520.00		\$21,300.00		\$15,975.50		\$9,726.00
22	MOBILIZATION			\$3,000.00		\$6,000.00		\$5,800.00		\$4,000.00
		TOTAL BID (1 TO 22)		\$161,140.00		\$221,450.00		\$194,218.00		\$173,893.50
		Bid Bond (yes or No)	Yes		Yes		Yes		Yes	
		Riprap Source	L G and Ft. Calhoun		L G and Ft. Calhoun		L G and Ft. Calhoun		L G and Ft. Calhoun	

* Apparent low bidder Note: Penro Construction, Inc. SC=SILVER CREEK WATERSHED SITE; TM=TEKAMAH-MUD WATERSHED SITE; PJ=PIGEON-JONES WATERSHED SITE

SILVER CREEK WATERSHED BURT COUNTY



LEGEND

Structure Schedule

- COMPLETED
- SUMMER 2006 (Constructed)
- SPRING 2007

3,700 0 3,700 7,400 11,100 14,800 Feet

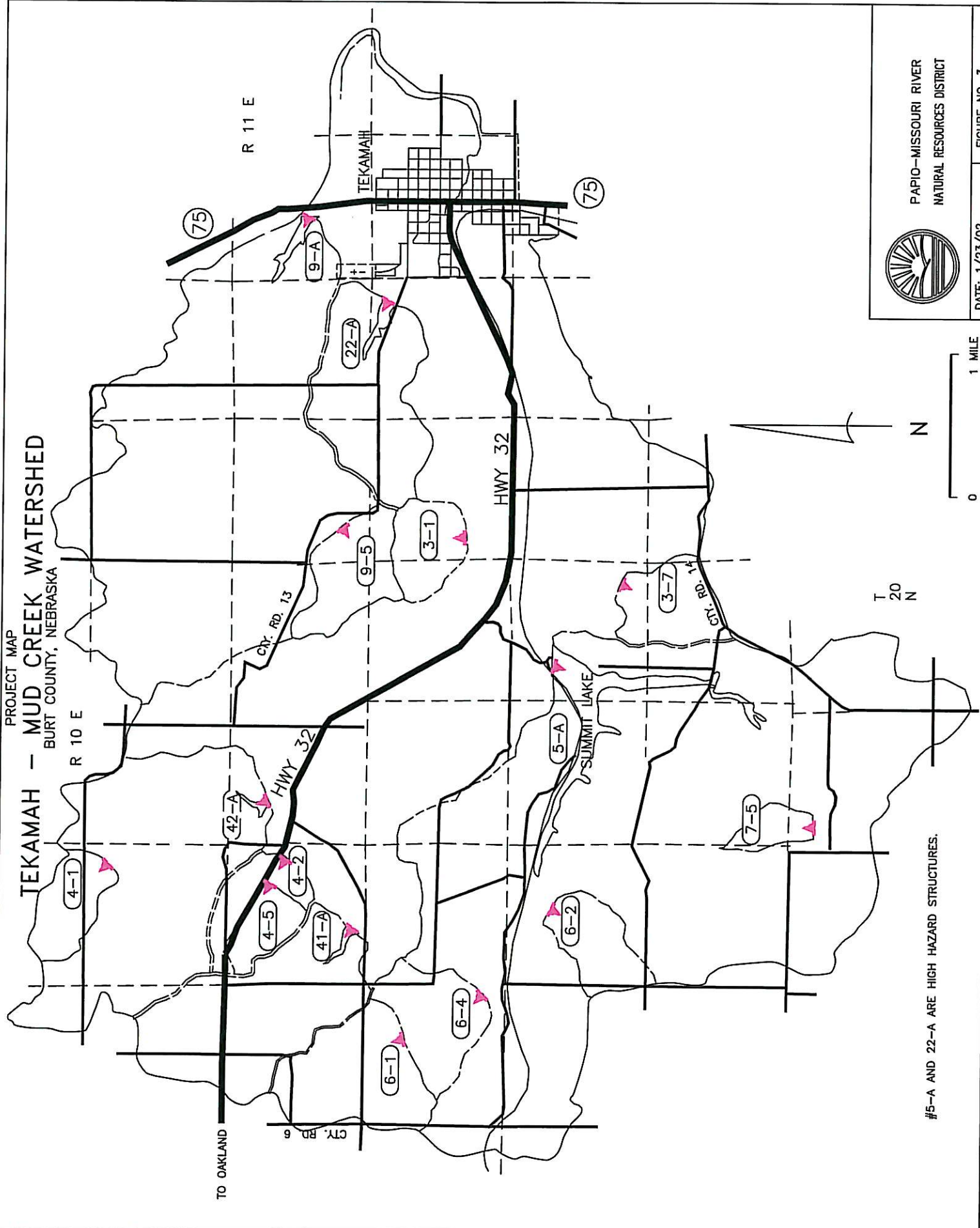
2005 Ortho Imagery Not To Scale



USDA NRCS
Date: 9/08/2006



PROJECT MAP TEKAMAH - MUD CREEK WATERSHED BURT COUNTY, NEBRASKA



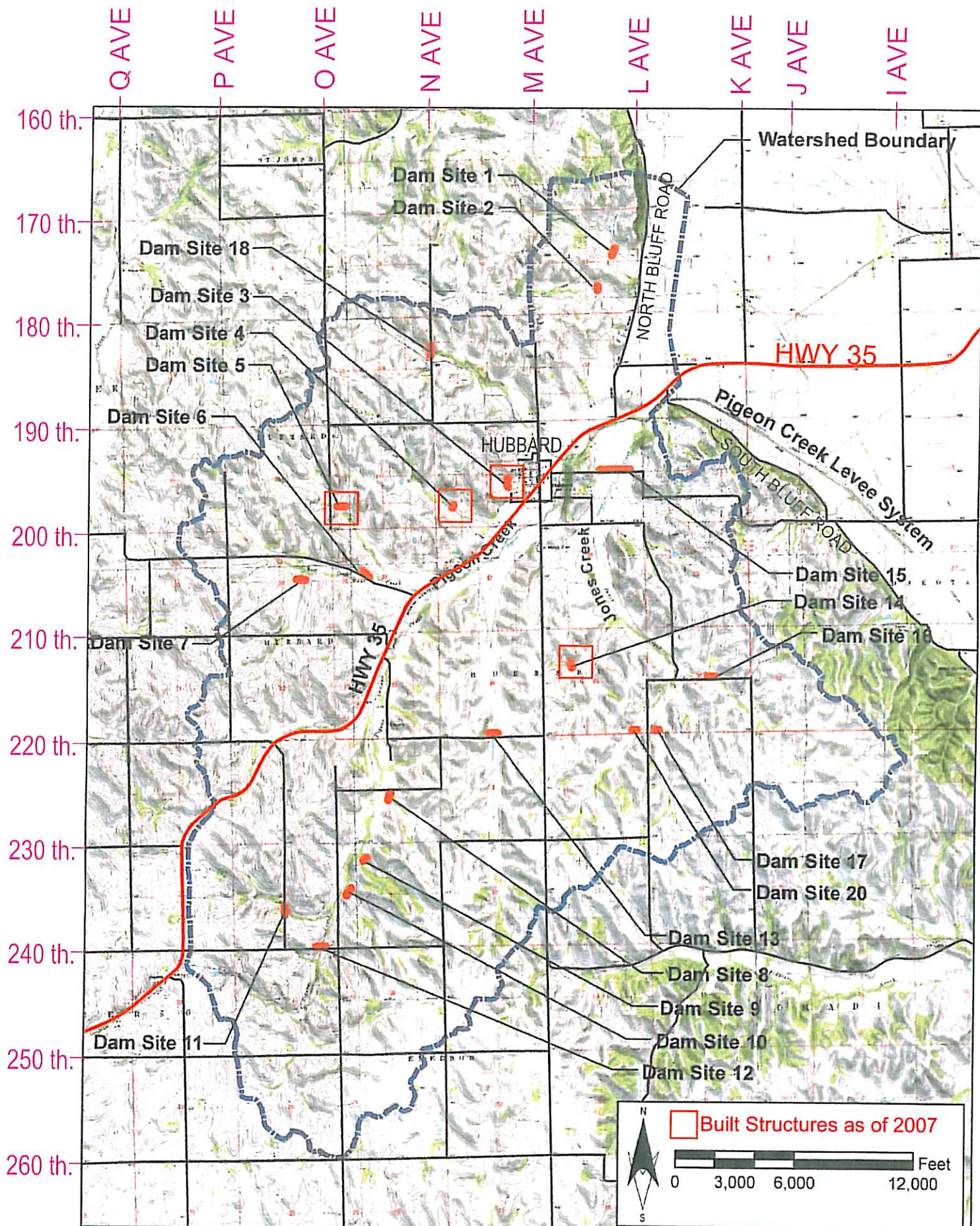
#5-A AND 22-A ARE HIGH HAZARD STRUCTURES.



PAPIO-MISSOURI RIVER
 NATURAL RESOURCES DISTRICT

DATE: 1/23/02

FIGURE NO. 3



PROJECT: 2004-0219

DRAWN BY: JMF

DATE: DECEMBER 2004

PROPOSED NRCS STRUCTURE LOCATION MAP

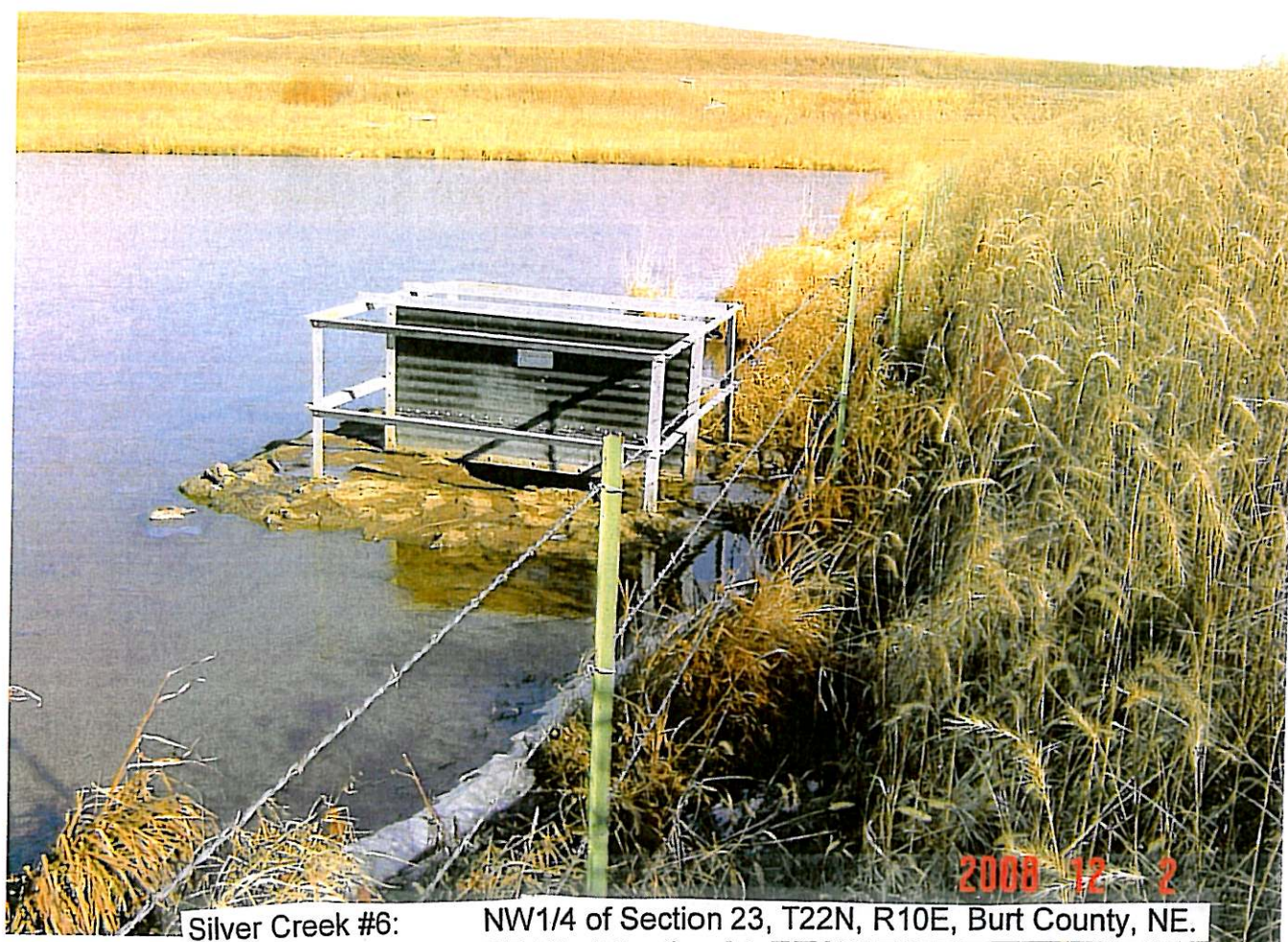


FIGURE

2



2008 12 2



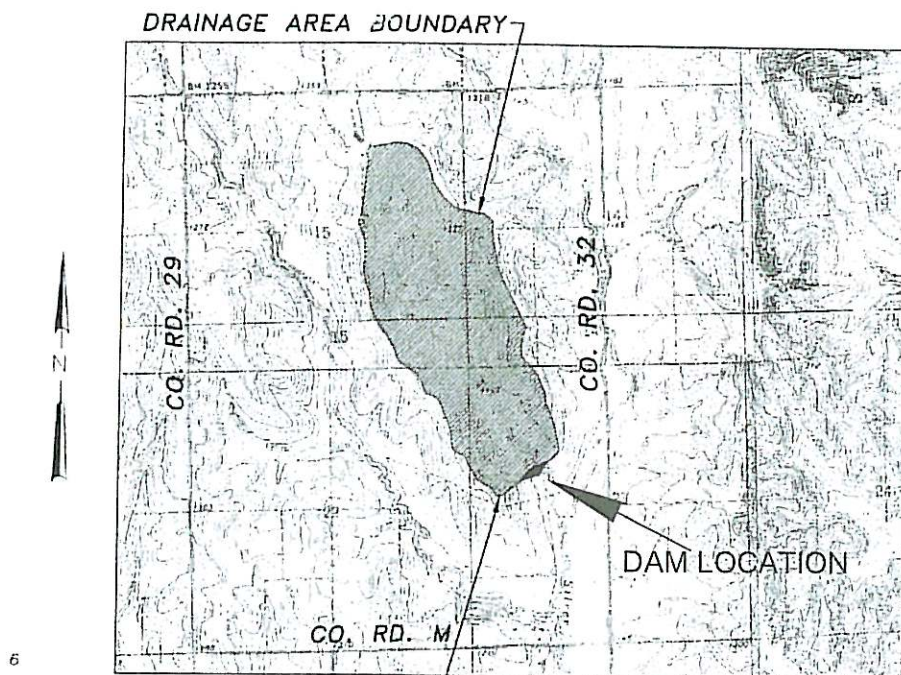
2008 12 2

Silver Creek #6:

NW1/4 of Section 23, T22N, R10E, Burt County, NE.



DRAINAGE AREA MAP



PROPOSED DAM SITE 6 -
 NW 1/4 OF SECTION 23-T22N-R10E
 LOCATION: INTERSECTION OF DAM @ WITH PRINCIPAL SPILLWAY
 SW CORNER OF SECTION 23-T22N-R10E, 3,550 FT @ N 20° 43' E

LOCATION MAP
 NOT TO SCALE

Location Map



PAPIO-MISSOURI RIVER
 NATURAL
 RESOURCES
 DISTRICT

8901 S. 154th St.
 Omaha, NE 68138-3621
www.papionrd.org

TITLE

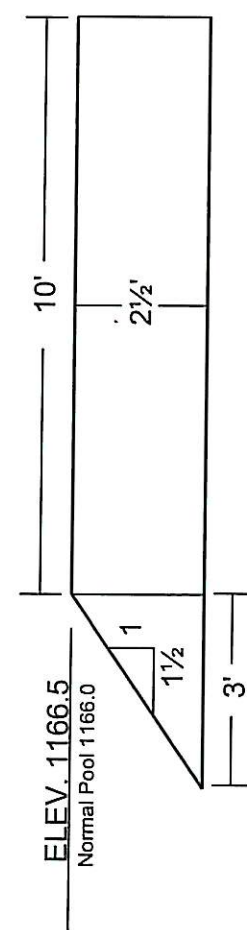
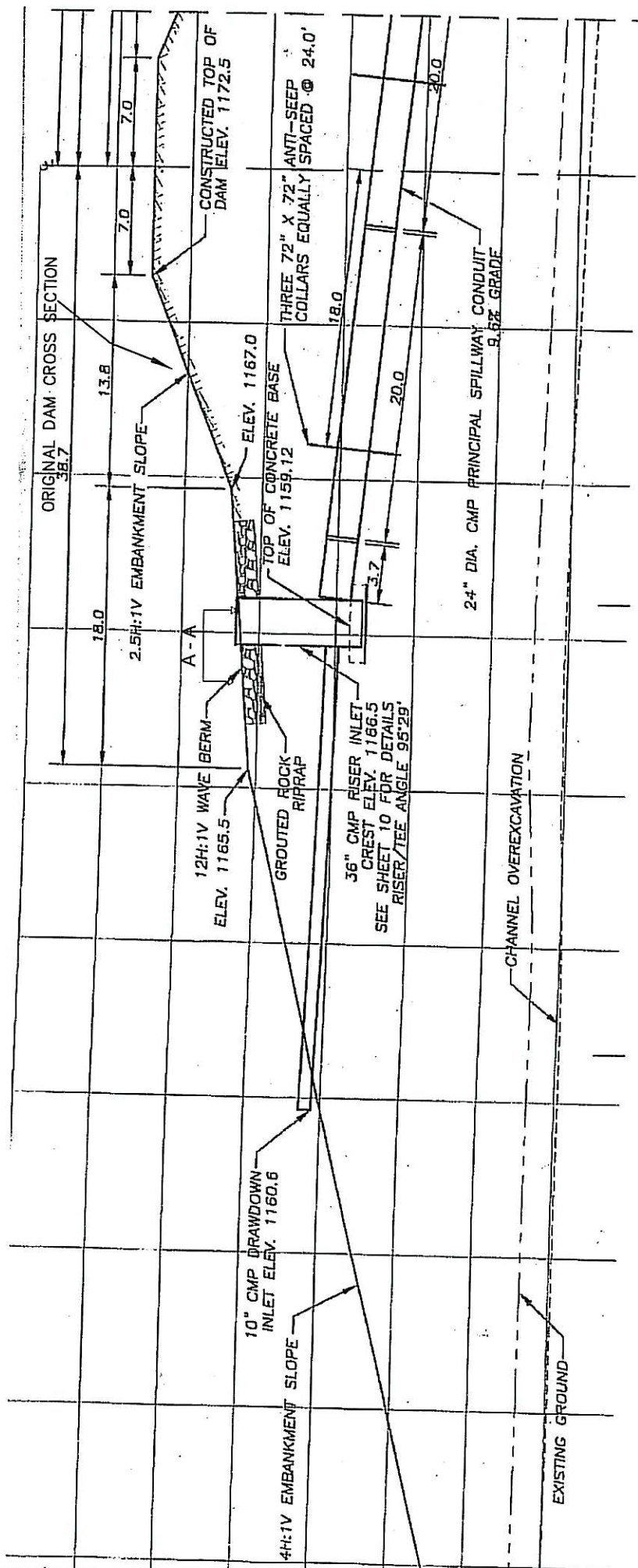
SILVER CREEK WATERSHED
 STRUCTURE # 6
 BERM PROTECTION PROJECT

Not to scale

DATE: 12/29/2008 Sheet 1 of 3



DATE: 12/29/2008 Sheet 2 of 3



PROPOSED ROCK RIPRAP CROSS SECTION A-A

Cross Sections

PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT 	TITLE
SILVER CREEK WATERSHED STRUCTURE # 6 BERM PROTECTION PROJECT	Not to scale
8901 S. 154th St. Omaha, NE 68138-3621 www.papionrd.org	DATE: 12/30/2008 Sheet 3 of 3