

WATER PERMIT NO. 2690-2

Name of Applicant: Chris B Snavely

Address: 725 W 5th St, Winner SD 57580

Phone: 605 842-3353

Amount of Water Claimed: 99 acre-feet

Total Acres: NA

Source of Water Supply: runoff

Water to be used for: fwp, livestock water

County: Tripp

Type of Waste Disposal System:

Location: 16 miles north of Winner

PRIORITY

Date Received: 8-6-12

Application/License Fee: \$ 700

Corrected Application Received:

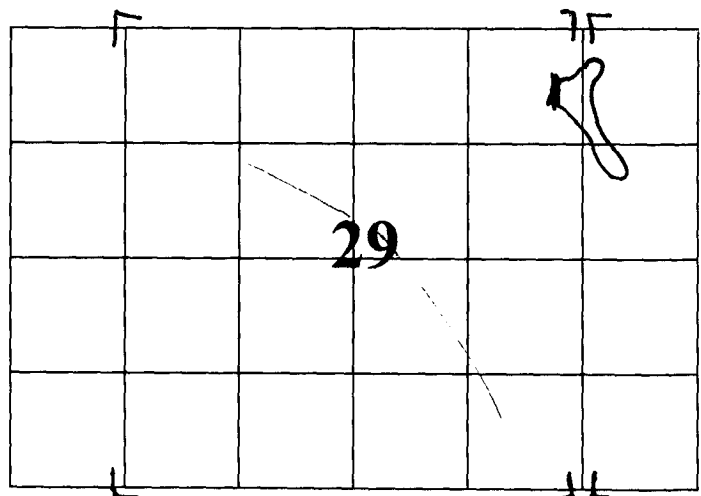
Period of Annual Use: Jan 1 – Dec 31

Remarks:

Diversion Point: NE ¼ NE ¼ Sec 29-T102N-R75W

Water Impounded: NE ¼ NE ¼ Sec 2 and W ½

NW ¼ Sec 28; all in T102N-R75W



Depth of Well: NA

Well Driller: NA

Remarks:

Type of Map: topo

Prepared by: Steven d Spawn, USFWS

Reviewed and the Number Assigned on: 8-7-12

By: Karen Schlaak

Notice of Hearing - date to intervene: _____

FORM 2: Application for uses other than irrigation
(type or print)

Mail to:
PMB 2020
DENR - Water Rights
523 E Capitol Ave
Pierre, SD 57501-3182
ph. (605) 773-3352

(office use only)
No. 2690-2 Hydrologic Unit 10140204
Basin White River 605-842-1481
Newspaper Winner Advocate 1250 3rd St. 57580
Capital Journal PO Box 878 Pierre 57501 605-224-7301

RECEIVED
AUG 06 2012
WATER RIGHTS
PROGRAM

Application For Permit To Appropriate Water Within The State Of South Dakota

Check use(s) of water:

☐ Municipal	☐ Suburban Housing	☐ Recreational	☐ Institutional
☐ Rural Water System	☐ Commercial	☒ Fish & Wildlife	☐ Geothermal Heat
☒ Domestic (over 18 gpm)	☐ Industrial	☒ Other Livestock	

Type of Application:

(check one)

☒ New ☐ Vested Right (Use predates Mar 2, 1955) ☐ Future Use Reservation
☐ Place to Beneficial Use Water Reserved by Future Use Permit No. _____
☐ Amendment/Correction to Permit No. _____

Description of amendment/correction: (i.e. change diversion point(s), add diversion point(s), change use, etc.)

- Name of Applicant Chris B. Snively Phone 605-842-3353
(check one) ☒ Owner ☐ Tenant/lessee
Mailing Address 725 W. 5th St. Winner SD 57580
(Address) (City) (State) (Zip Code)
- Amount of water claimed _____ *CFS or _____ **GPM _____ 99 ***AF
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable
- Source of water supply Dry Draw Runoff
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) County Tripp
The embankment is located 225 feet west and 550 feet south of NE corner of Sec. 29 T102N R75W
(NE 1/4 NE 1/4) water impounded: NE 1/4 NE 1/4 S29 and W 1/2 NW 1/4 Sec 28
all in T102N R75W
- County or counties where water will be used Tripp
- Annual period during which water is to be used Jan. 1 - Dec. 31
- Give a description of the project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed)
The project will repair and rebuild a dam where an original location notice dated 8/30/1960 was filed for a 3.0 surface acre pond capable of storing 22 acre feet of water. The existing pipe has failed and will be replaced and the front of the dam grade will be rebuilt. When repaired, the pond will be 11.7 surface acres in size with 99 acre feet of storage. Engineering plans and specs are included with this application.

STATE OF SOUTH DAKOTA)

County of Tripp)

SS

Attachments: Attach Form 2A if diversion is from a well or dugout, or if storage of water is proposed. Also, attach map and any other technical information. (see instructions)

I, Chris B. Snively, the applicant, certify that I have read this application, have examined the attached map and that the matters stated are true and that I intend, and am able to complete the necessary construction.

Applicant's signature Chris B. SnivelySubscribed and sworn to before me this 28th day of July 20 12Betty Tideman

Notary Public signature

My Commission
Expires 1-4-17

**SOUTH DAKOTA
WATER PERMIT NO. 2690-2**

Date of first receipt of application August 6, 2012.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 2690-2 to Chris B Snavely, 725 W 5th St, Winner SD 57580 authorizing the construction of the dam and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 2690-2 authorizes impoundment of 99 acre-feet of water from runoff by reconstructing a dam located in the NE 1/4 NE 1/4 Section 29 with water impounded in the NE 1/4 NE 1/4 Section 29 and and W 1/2 NW 1/4 Section 28; all in T102N-R75W.
2. The water appropriated shall be used for the purpose of fish and wildlife propagation and livestock water and may not exceed the amount of water needed for beneficial use.
3. The water is to be used during the following described annual period: January 1 – December 31.
4. The date of approval of Permit No. 2690-2 is September 24, 2012.
5. The date from which applicant may claim right is August 6, 2012.
6. One-fifth of the construction is to be completed on or before March 24, 2015.
7. All construction is to be completed on or before September 24, 2017.
8. Water is to be put to beneficial use on or before September 24, 2021.
9. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

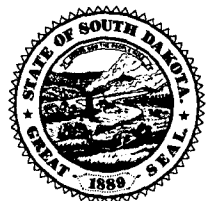
QUALIFICATIONS

1. Water Permit No. 2690-2 authorizes an impoundment with a storage capacity of 99 acre feet of water and sufficient water annually to maintain the water level to the outlet elevation.
2. Low flows as needed for downstream domestic use, including livestock water and prior water rights must be by-passed.

WATER MANAGEMENT BOARD

By: Garland Erbele
Garland Erbele, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

SEP 28 2012
date



Supplemental Information

(type or print in ink)

1. Well Information - Proposed Construction

- a) Drill Hole Diameter _____ Depth _____
- b) Casing Type _____ Diameter _____ Thickness _____
- c) Screen Type _____ Diameter _____ Thickness _____
- d) Gravel Pack _____ Length of Gravel Pack _____
- e) Depth to Top of Water Bearing Material _____
- f) Depth to Water (ground surface to water level) _____
- g) Distance to nearest existing domestic well:
- On applicant's property _____ On property owned by others _____

2. Wastewater Disposal System Information

- a) Type of System (i.e. septic tank, drain field)
- b) System Capacity (gallons) _____ Year Constructed _____
- c) Connected to the City of _____ Sanitary System

3. Dugout Information

- a) Surface Dimensions _____ Depth _____
- b) Depth to water (ground surface to water level) _____

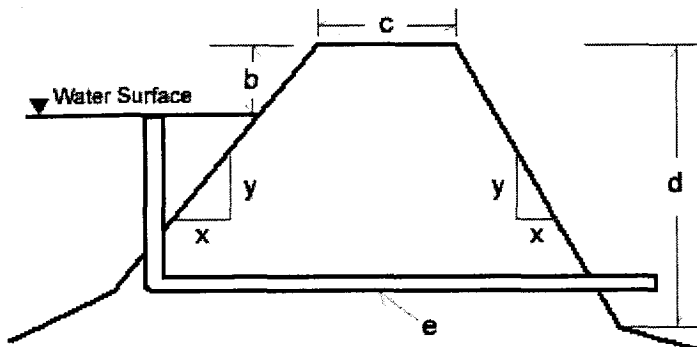
4. Water Storage Dams

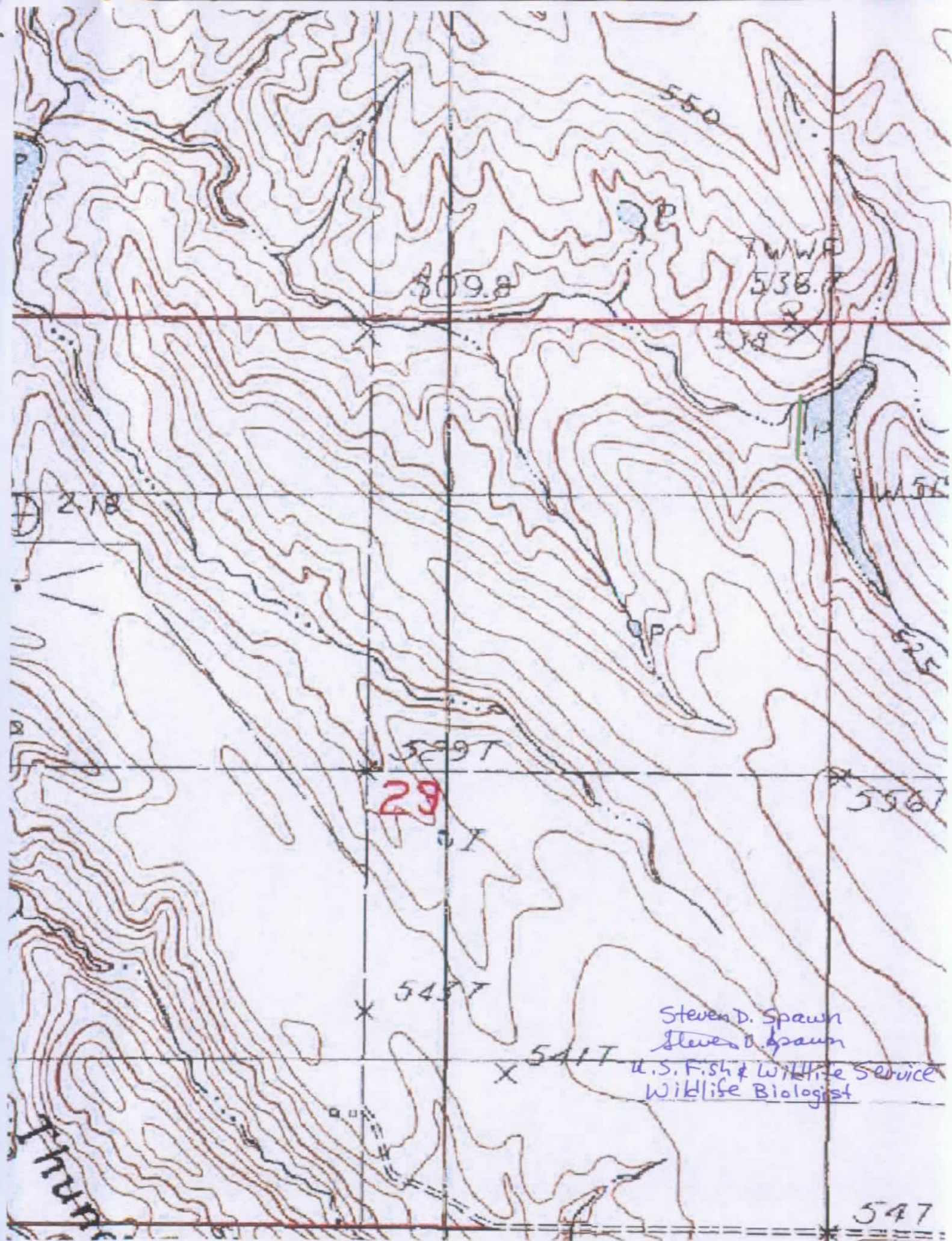
If the proposed water use system contains one or more storage dams, please furnish the information requested below for each dam. The locations of the dams need to be shown on the map submitted with the application.

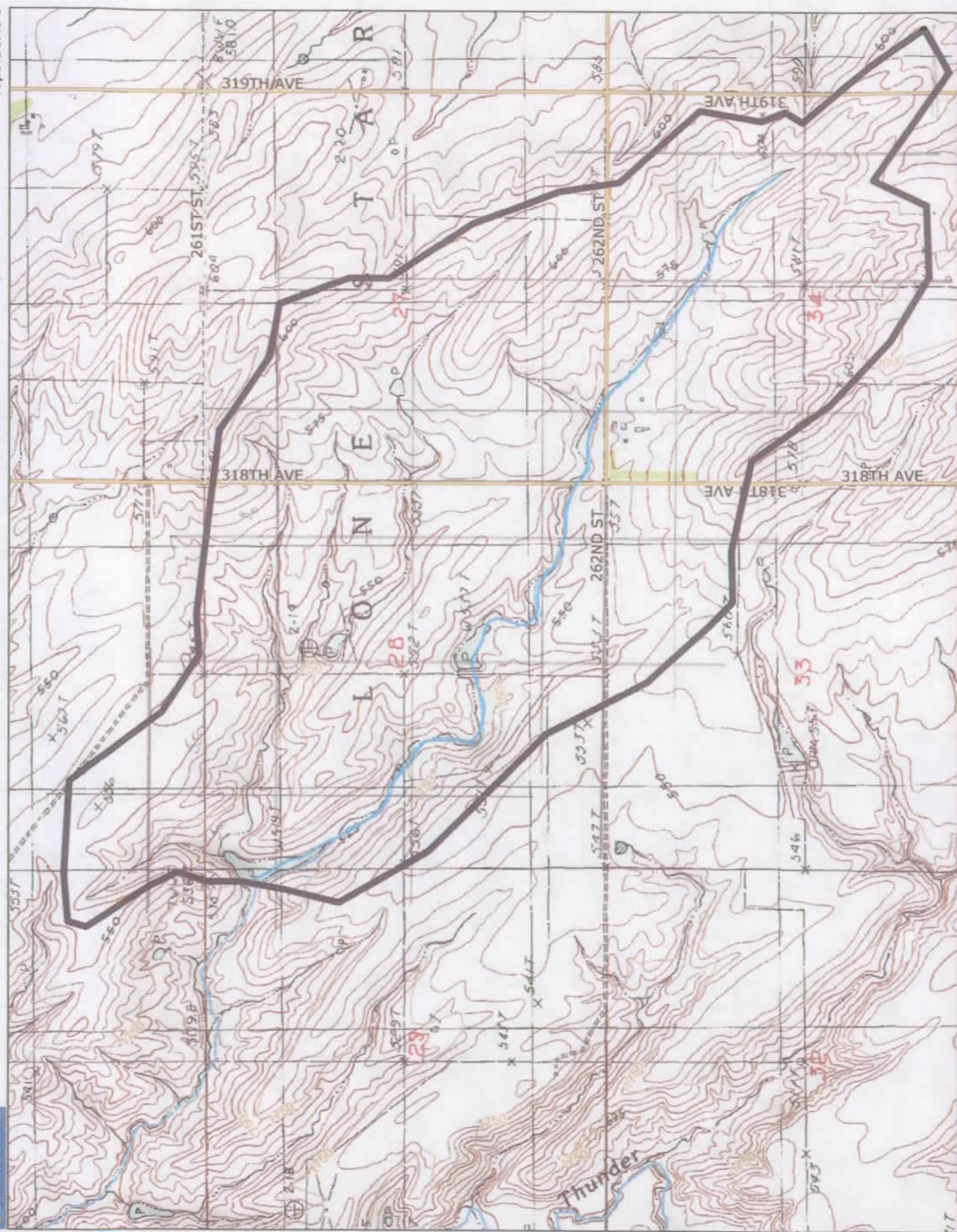
- a) If a private engineering firm or government agency was involved in the design of this dam, please give their name and address:

Konechne Engineering
104 Capitol Hill Drive
Pierre, SD 57501
(605) 224-7092

- b) Freeboard 3.0'
- c) Crest Width 12.0'
Crest Length _____
- d) Height 24.0'
- e) Primary Outlet Capacity 122 cfs
If pipe, diameter 36"
- f) Secondary Spillway Capacity 892 cfs
Spillway Width 80' 120'
- g) X & Y Slope (e.g. 3 to 1 is a typical slope)
Upstream 3:1
Downstream 3:1
- h) Surface Area of Impoundment 11.7
- i) Storage 99.0 Acre Feet
- j) Drainage Area Above Dam 1,621.0 Acres







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www.delorme.com

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Scale 1 : 20,800

1" = 1,733.3 ft Data Zoom 12-7

Dept of Environment & Natural Resources
Water Rights Program
523 E Capitol Ave
Pierre SD 57501

* INVOICE *

August 6, 2012
Invoice No. 8-6LN

Norma Martin
USFWS
Brookings SD 57006

Application fee for Chris Snavely	\$700.00
Application fee for Julie Snavely	\$700.00
(\$1,000.00 application fees)	
(\$400.00 license fees)	

PLEASE PAY THIS AMOUNT: \$1,400.00

59082

DO NOT WRITE		ABOVE THIS LINE	
NORMA J MARTIN USFWS		EXPIRATION ☒ DATE CHECKED	
XXXX XXXX XXXX 0807		06/14	
SIGN HERE X		DATE 08/15/12 AUTHORIZATION 021058	
		REFERENCE NO. 001	
		ID-FOLIO/CHECK NO./LIC. NO. STATE REG/DEPT. CLERK	
		TAX	
		MISC.	
		TOTAL 1400.00	

PLEASE DO NOT WRITE ABOVE THIS LINE

SALES SLIP ORIGINAL

VISA MasterCard 5462821

TOTAL 1400.00

The issuer of the card identified on this item is authorized to pay the amount shown as TOTAL upon proper presentation. I promise to pay such TOTAL (together with any other charges due thereon) subject to and in accordance with the agreement governing the use of such card.

1*****
 SITES XEQ 03/03/2012 WATER RESOURCE SITE ANALYSIS COMPUTER PROGRAM
 VER 2005.1.05 (USER MANUAL - DATED DECEMBER 2005)
 TIME 10:58:34

***** 80-80 LIST OF INPUT DATA *****

SITES 01/01/2005 Snavelly #2 - NE29,T102N,R75W 2.53125 H5
 SAVMOV 0 101
 SAVMOV 101 1 1
 STRUCTURE
 69 0
 86 10.3
 91 17.3
 92 19
 ENDTABLE
 WSDATA 5A1 AC 82 1620 17769 8
 PDIRECT 2.3 4.20
 POOLDATA ELEV 87 87 69 69 SC
 PSINLET 1 12.57
 PSDATA 1 110 36 .025 70
 ASDATA 41 50 2 .04 2
 ASINSURF 41 .035
 ASINLET 41 0.0 0.0 80 0.0 3
 120 8
 ENDTABLE
 ASINLET 41 91
 ASEXSURF 41 .03
 .65 0
 3
 2 0
 .02
 ENDTABLE
 ASEXIT 41 N 180
 BTMWIDTH FEET 120
 GRAPHICS I
 GO,DESIGN HL TYPE2 24 TYPE2378 24
 SAVMOV 2 101 1
 ENDJOB

***** MESSAGE - ALTERNATE STRUCTURE ID (S 1) BEING USED
 SINCE USER DID NOT INPUT AN ID.

***** MESSAGE - ALTERNATE SUBWATERSHED ID (A) BEING USED SINCE
 USER DID NOT INPUT AN ID.

***** MESSAGE - DRAINAGE AREA FROM WSDATA CONTROL BEING CONVERTED FROM
 ACRES TO SQUARE MILES FOR COMPUTATION PURPOSES.

1SITES -----
 XEQ 03/03/2012 Snavelly #2 - NE29,T102N,R75W WSID=
 VER 2005.1.05 SUBW= A
 TIME 10:58:34 SITE = S 1 PASS= 1 PART= 1

***** BASIC DATA *****
 CLIMATE AREA - NOT DEFINED DESIGN CLASS A1 = LT 3000.

STORM DISTRIBUTION-PSH 24 HOUR TYPE II RAINFALL DISTRIBUTION

STORM DISTRIBUTION AUX. -24 HOUR TYPE II RAINFALL DISTRIBUTION

PRECIP. - P-PS,1-DAY	P-PS,10-DAY	P-SD	P-FB	
2.30	0.00	0.00	4.20	
WSDATA - CN	DA-SM	TC/L	-/H	ORF
82.00	2.53	17769.00	8.00	0.00
SITEDATA- PERM POOL	CREST PS	FP SED	VALLEY FL	378?
87.00	87.00	0.00	69.00	YES
BASEFLOW	INITIAL EL	EXTRA VOL	SITE TYPE	
0.00	0.00	0.00	DESIGN	
PSDATA - NO. COND	COND L	DIA/W	-/H	
1.00	110.00	36.00	0.00	
PS N	KE	WEIR L	TW EL	
0.025	1.00	12.57	70.00	
2ND STG	ORF H	ORF L	START AUX.	
0.00	0.00	0.00	0.00	
ASCRESTS - AUX.1	AUX.2	AUX.3	AUX.4	AUX.5
0.00	0.00	0.00	0.00	0.00
AUX.DATA - REF.NO.	RETARD. Ci	TIE STATION	INLET LENGTH	
41	0.00	0.00	50	
AUX.DATA - INLET N	SIDE SLOPE	EXIT N	EXIT SLOPE	ACTUAL AUX?
0.035	2.00	0.030	0.040	NO
BTM WIDTH - BW1	BW2	BW3	BW4	BW5
ft 120.00	0.00	0.00	0.00	0.00

AUXILIARY SPILLWAY RATING DEVELOPED USING WSPVRT.

1SITES -----
 XEQ 03/03/2012 Snavely #2 - NE29,T102N,R75W WSID=
 VER 2005.1.05 SUBW= A
 TIME 10:58:34 SITE = S 1 PASS= 1 PART= 2

MESSAGE ---- Climatic Index changed from 0.0 to 1.0 for this run.

PERM POOL	87.00 FT	98.6 ACFT	11.70 AC	0.0 CFS
CREST PS	87.00 FT	98.6 ACFT	11.70 AC	0.0 CFS
SED ACCUM	87.00 FT	98.6 ACFT	11.70 AC	0.0 CFS
START ELEV	87.00 FT	98.6 ACFT	11.70 AC	0.0 CFS

NRCS-PSH D= 24.00 HR P= 2.30 IN Q= 0.85 IN DA= 2.53 SM
TC= 1.76 HR CN= 82.00 VOL= 115.3 ACFT

PEAK = 475.8 CFS, AT 13.0 HRS.

ROUTED RESULT - HYD TYPE EMAX VOL-MAX AMAX QMAX
NRCS-PSH 90.60 FT 149.7 ACFT 16.74 AC 115.8 CFS

PS STORAGE 51.1 ACFT, BETWEEN AUX. CREST AND SED. ACCUM ELEVATIONS.

DRAWDOWN (DDT) TEST 87.00 FT 98.6 ACFT 0.00 CFS
CONTROL IS 0.000 DETENTION STORAGE

DRAWDOWN TIME = 1.57 DAYS, TO 0.0 CFS (LIMIT = 10.00 DAYS)

RATING TABLE DEVELOPED, SITE = S 1:
BY PROGRAM FOR PS AND AUX. SPILLWAYS
AUX. RATING USED WSPVRT METHOD.

RATING TABLE NUMBER 1

	ELEV. FEET	Q-TOTAL CFS	Q-PS CFS	Q-AUX. CFS	VOLUME AC-FT	AREA ACRE
1	87.00	0.00	0.00	0.00	98.55	11.70
2	87.50	13.90	13.90	0.00	104.61	12.40
3	88.01	39.32	39.32	0.00	111.03	13.11
4	88.51	72.23	72.23	0.00	117.80	13.81
					FULL CONDUIT FLOW, ELEV = 89.01 FT	
5	89.01	111.21	111.21	0.00	124.92	14.52
6	89.39	112.31	112.31	0.00	130.44	15.04
7	89.76	113.39	113.39	0.00	136.16	15.56
8	90.13	114.45	114.45	0.00	142.07	16.09
9	90.51	115.51	115.51	0.00	148.17	16.61
10	90.88	116.56	116.56	0.00	154.48	17.13
11	91.25	117.60	117.60	0.00	160.98	17.73
12	91.63	118.62	118.62	0.00	167.72	18.37
13	92.00	119.64	119.64	0.00	174.70	19.00

1SITES

XEQ 03/03/2012 Snavelly #2 - NE29,T102N,R75W WSID=
VER 2005.1.05 SUBW= A
TIME 10:58:34 SITE = S 1 PASS= 1 PART= 3

AUX. CREST 90.60 FT 149.7 ACFT 16.74 AC 115.8 CFS

PS STORAGE 51.1 ACFT, BETWEEN AUX. CREST AND SED. ACCUM ELEVATIONS.

START ELEV 87.00 FT 98.6 ACFT 11.70 AC 0.0 CFS

EFFECTIVE HEIGHT(H)= 21.6 FEET, PRODUCT= 3233. (H * STORAGE AT CREST AUX.).

INPUT DESIGN CLASS = A1 = LT 3000. PRODUCT.

***** WARNING - NHCP-378 CRITERIA DOES NOT APPLY WHEN THE EFFECTIVE HEIGHT
IS OVER 35 FEET OR THE PRODUCT IS 3000 OR GREATER.

NRCS-FBH D= 24.00 HR P= 4.20 IN Q= 2.37 IN DA= 2.53 SM
 TC= 1.76 HR CN= 82.00 VOL= 320.7 ACFT

PEAK = 1400.7 CFS, AT 12.9 HRS.

***** WARNING - FIXED INLET X,Y POINT (0., 91.0) IS ABOVE OR DOWNSTREAM
OF THE U/S EDGE OF THE CREST (-80., 90.6).

***** WARNING - UPSTREAM END OF CREST -80. IS UPSTREAM OF THE
FIRST GROUND POINT -50. STATION.

RATING TABLE DEVELOPED, SITE = S 1:
BY PROGRAM FOR PS AND AUX. SPILLWAYS
AUX. RATING USED WSPVRT METHOD.

RATING TABLE NUMBER 2

	ELEV. FEET	Q-TOTAL CFS	Q-PS CFS	Q-AUX. CFS	VOLUME AC-FT	AREA ACRE
1	87.00	0.00	0.00	0.00	98.55	11.70
2	87.50	13.90	13.90	0.00	104.61	12.40
3	88.01	39.32	39.32	0.00	111.03	13.11
4	88.51	72.23	72.23	0.00	117.80	13.81
FULL CONDUIT FLOW, ELEV = 89.01 FT						
5	89.01	111.21	111.21	0.00	124.92	14.52
6	89.21	111.80	111.80	0.00	127.83	14.79
7	89.41	112.38	112.38	0.00	130.79	15.07
8	89.61	112.95	112.95	0.00	133.80	15.35
9	89.80	113.52	113.52	0.00	136.87	15.63
10	90.00	114.08	114.08	0.00	139.99	15.90
11	90.20	114.65	114.65	0.00	143.17	16.18
12	90.40	115.21	115.21	0.00	146.40	16.46
13	90.60	115.77	115.77	0.00	149.69	16.74
14	90.67	120.96	115.96	4.99	150.86	16.83
15	90.74	126.14	116.16	9.98	152.05	16.93
16	90.86	135.48	116.51	18.97	154.20	17.11
17	91.02	154.44	116.94	37.50	156.86	17.33
18	91.30	227.79	117.72	110.07	161.79	17.81
19	91.65	354.59	118.69	235.90	168.14	18.40
20	92.00	519.38	119.65	399.74	174.70	19.00

SUMMARY OF AUXILIARY SPILLWAY SURFACE CONDITIONS USED IN COMPUTATIONS BY REACH

REACH	FROM STA (ft)	TO STA (ft)	SLOPE (%)	RETARDANCE CURVE INDEX@	VEGETAL COVER FACTOR	MAINT. CODE	ROOTING DEPTH (ft)	REACH LOCATION *
1	-80.	0.	0.0	0.035	**	**	**	CREST
2	0.	180.	4.0	0.030	0.65	3	2.0	EXIT !

@ The program interprets retardance curve index entries of less than 1 as
Manning's n values.

* Upper case indicates a reach of constructed spillway channel.
 ** The program does not use vegetal cover factor, maintenance code, and
 rooting depth for inlet and crest reaches in computations.
 ! Reach 2 used in computing exit channel velocities.

DRAWDOWN USING FREEBOARD STORM FOLLOWS, STARTING AT ELEVATION 90.60 FT.

DRAWDOWN (DDT) TEST 87.00 FT 98.6 ACFT 0.00 CFS
 CONTROL IS 0.000 DETENTION STORAGE

DRAWDOWN TIME = 1.52 DAYS, TO 0.0 CFS (LIMIT = 10.00 DAYS)

ROUTED RESULTS	BTM WIDTH FT	MAX ELEV FT	VOL-MAX ACFT	AREA-MAX AC	AUX.-HP FT	VOL-AUX. ACFT
NRCS-FBH	120.0	92.99	194.4	20.7	2.40	44.7

PEAK - CFS Q-PS Q-AUX. Q-TOT.
 DISCHARGE = 122. 892. 1014.

	CRITICAL DEPTH FT	CRITICAL VELOCITY FT/SEC	CRITICAL SLOPE-Sc FT/FT	25% OF Q Sc FT/FT
AUXILIARY	1.19	6.13	0.013	0.017
SPILLWAY ---				

EROSIONALLY EFFECTIVE STRESS FOR STABILITY ANALYSIS OF AUX. EXIT CHANNEL
 (Refer to Ag. Handbook 667, Chapt. 3, for allowable stresses.)

Aux. Spillway Discharge = 892. cfs; Bottom Width = 120. ft

REACH NO.	FROM STA	TO STA	SLOPE %	MANNING'S n	VELOCITY ft/s	TOTAL STRESS lb/ft^2	EFFECTIVE STRESS lb/ft^2
2	0.	180.	4.00	0.030	8.72	2.10	1.276

AUXILIARY SPILLWAY DURATION FLOW = 8.4 HOURS
 ATTACK, OE/B = 1.3 ACFT/FT

***** MESSAGE - NHCP378 CRITERIA USED BUT AUXILIARY SPILLWAY RATING NOT
 BASED ON ASFILE RATINGS.

EXIT CHANNEL FLOW SUPERCRITICAL: MAX VELOCITY= 8.7 FT/SEC
 EXIT SLOPE = 0.040 FT/FT
 FLOW DEPTH = 0.8 FT

***** WARNING - SOLUTION EXCEEDED MAX. INPUT ELEVATION (92.00) BY 0.99 FT.

>>>> NHCP378 RUN - MINIMUM DEPTH, DESIGN FLOW TO TOP OF DAM; 1.00 FT REQUIRED
 FOR THIS PASS. NEW TOP OF DAM ELEVATION = 93.99.

ROUTED RESULTS	BTM WIDTH FT	MAX ELEV FT	VOL-MAX ACFT	AREA-MAX AC	AUX.HP FT	VOL-AUX. ACFT
MINIMUM AUX.	120.0	93.99	212.0	22.1	3.22	62.3

PEAK - CFS Q-PS Q-AUX. Q-TOT.

DISCHARGES =	124.5	1331.0	1455.5	
	CRITICAL	CRITICAL	CRITICAL	25% OF Q
	DEPTH	VELOCITY	SLOPE-Sc	Sc
AUXILIARY	FT	FT/SEC	FT/FT	FT/FT
SPILLWAY ---	1.55	6.98	0.012	0.016

***** WARNING - SOLUTION EXCEEDED MAX. INPUT ELEVATION (92.00) BY 1.81 FT.

Inflow Hyd 1 PSH-Peak = 115.76 CFS at 15.34 hrs., Location Point
 Inflow Hyd 1 FBH-Peak = 1014.24 CFS at 13.60 hrs., Location Point
 HYDOUT 1

1SITES.....JOB NO. 1 COMPLETE.

Snavelly #2 - NE29,T102N,R75W

0 SUBWATERSHED(S) ANALYZED.

1 STRUCTURE(S) ANALYZED.

2 HYDROGRAPHS ROUTED AT LOWEST SITE.

0 TRIALS TO OBTAIN BOTTOM WIDTH FOR SPECIFIED STRESS OR VELOCITY.

SITES.....COMPUTATIONS COMPLETE

>>>	SITE	SUBWS	SUBWS DA	CURVE	TC	TOTAL DA	TYPE	STRUC	<<<
	ID	ID	(SQ MI)	NO.	(HRS)	(SQ MI)	DESIGN	CLASS	
	S 1	A	2.53	82.	1.76	2.53	378CR	A1	

PASS	DIA./	AUX.CREST	BTM.	MAX.	MAX.	EMB.	INTEGR.*	EXIT*	TYPE
NO.	WIDTH	ELEV	WIDTH	HP	ELEV	VOL.	DIST.	VEL.	HYD
	(IN/FT)	(FT)	(FT)	(FT)	(FT)	(CY)	(FT)	(FT/SEC)	
1	36.0	90.6	120.0	3.4	94.0	0.	0.	8.7	MIN. AUX.

* INTEGRITY DIST. AND EXIT VEL. ARE BASED ON THE ROUTED HYDROGRAPH AND WILL NOT RELATE TO THE MAX. ELEV. (TOP OF DAM), WHICH IS SET BY MINIMUM DESIGN CRITERIA.

SITES.....SUMMARY TABLE 1 COMPLETED.

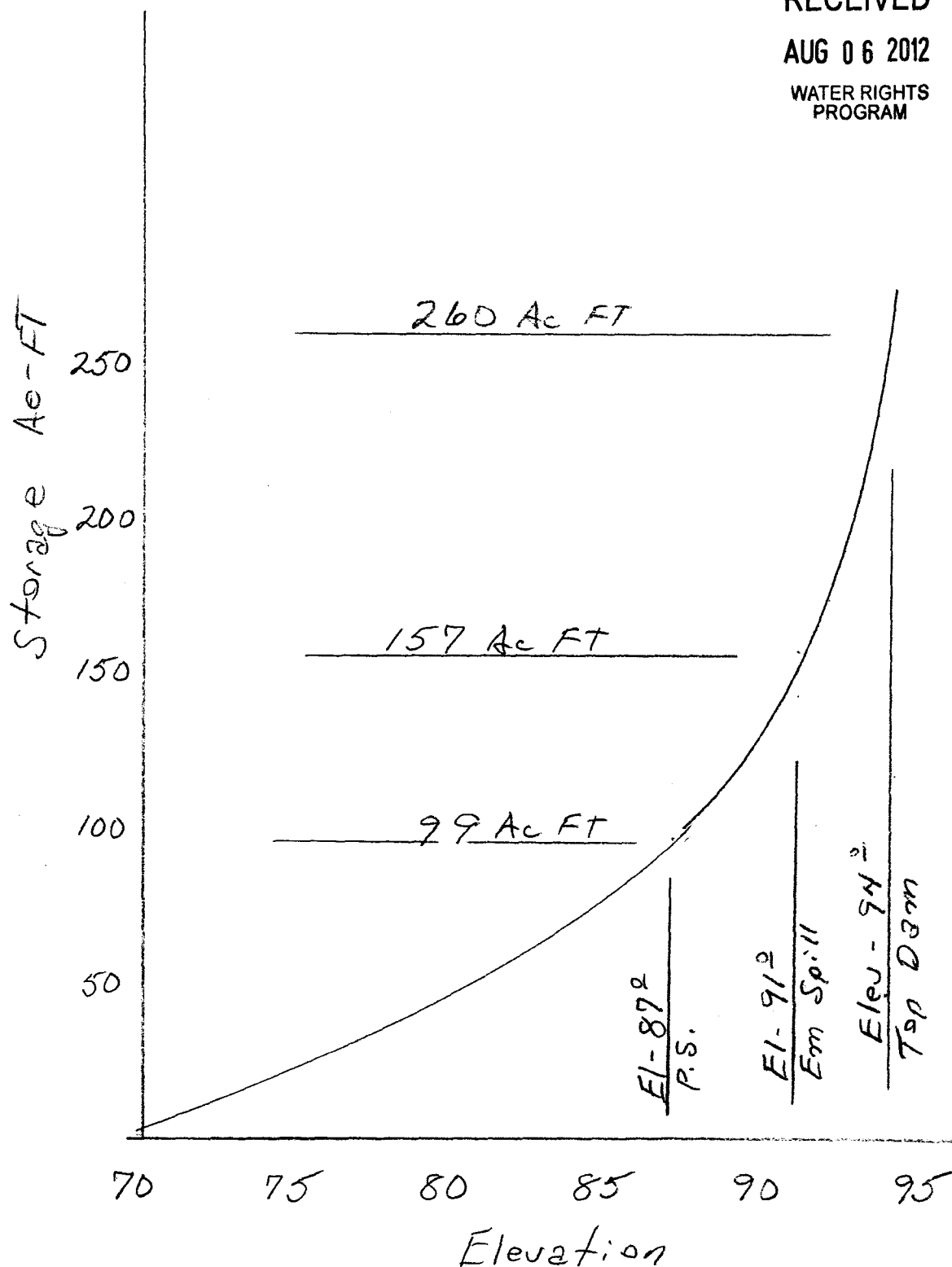
COMPUTATION SHEET

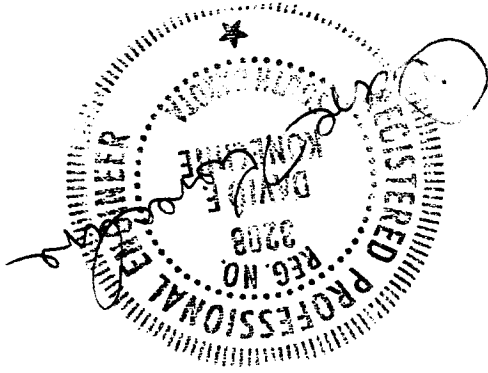
BY	DATE	PROJECT	SHEET ____ OF ____
CHKD BY	DATE	FEATURE <i>Snively #2</i>	
DETAILS <i>NENE Sec 29, T102N, R75W - Lyman Co.</i>			

RECEIVED

AUG 06 2012

WATER RIGHTS
PROGRAM





SKETCH PLAN OF DAM AND RESERVOIR AREA

REFERENCE: GUIDE PLAN NO. 1.0

Approximate scale 1" = _____

JOB PLAN NO. 1.0

(Rev. 4-73) 5, N-29, 073.1a(1)

- SD-2 Clearing
- SD-7s Earthfill
- SD-9 Drain Fill
- SD-12B Concrete
- SD-15 CMP
- SD-16 Timber Fabrication
- SD-19 PVC

S.D. CONSTRUCTION AND MATERIAL SPECIFICATIONS:

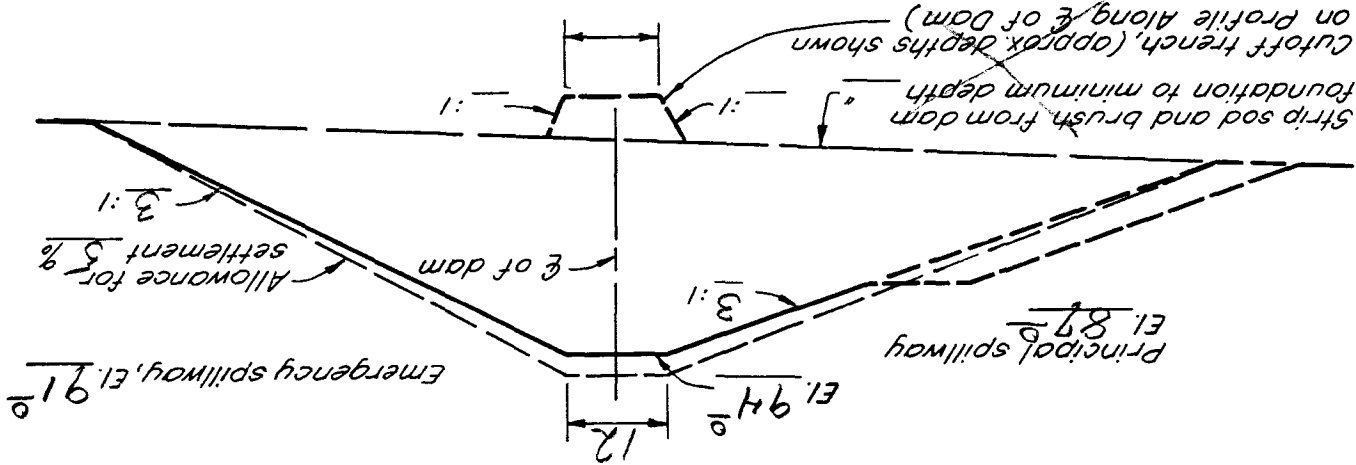
Class "A" Hazard

Operator: Snavely #2

CONSERVATION DISTRICT:

Designed	Title	_____
Drawn	Title	_____
Traced	Sheet	_____
Checked	No. of	_____

TYPICAL CROSS SECTION OF DAM



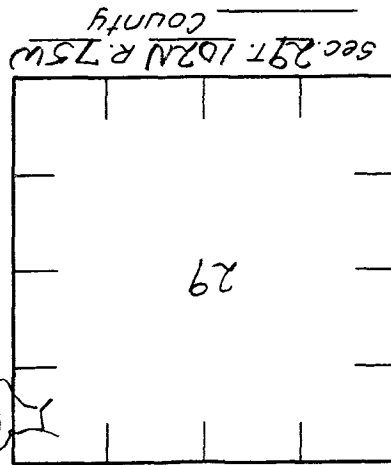
by Technician

- Since minimal construction inspection is scheduled, it is necessary to have a competent contractor.
- All CMP to be vinyl clad & spiral
- Construct berm in Emergency Spillway as directed

NOTE:

STRUCTURE DATA

Drainage	Annual	Peak	Runoff	Emerg.	Water	Surface	Sediment	Total
Area	Yield	Peak	Runoff	Capacity	Depth	Area	Storage	Storage
Acres	Ac.Ft.	Ac.Ft.	Ac.Ft.	C.F.S.	Feet	Acres	Ac.Ft.	Ac.Ft.
1621	127	1400	1190	18	11.7	-	99	260



LOCATION

TABLE OF QUANTITIES

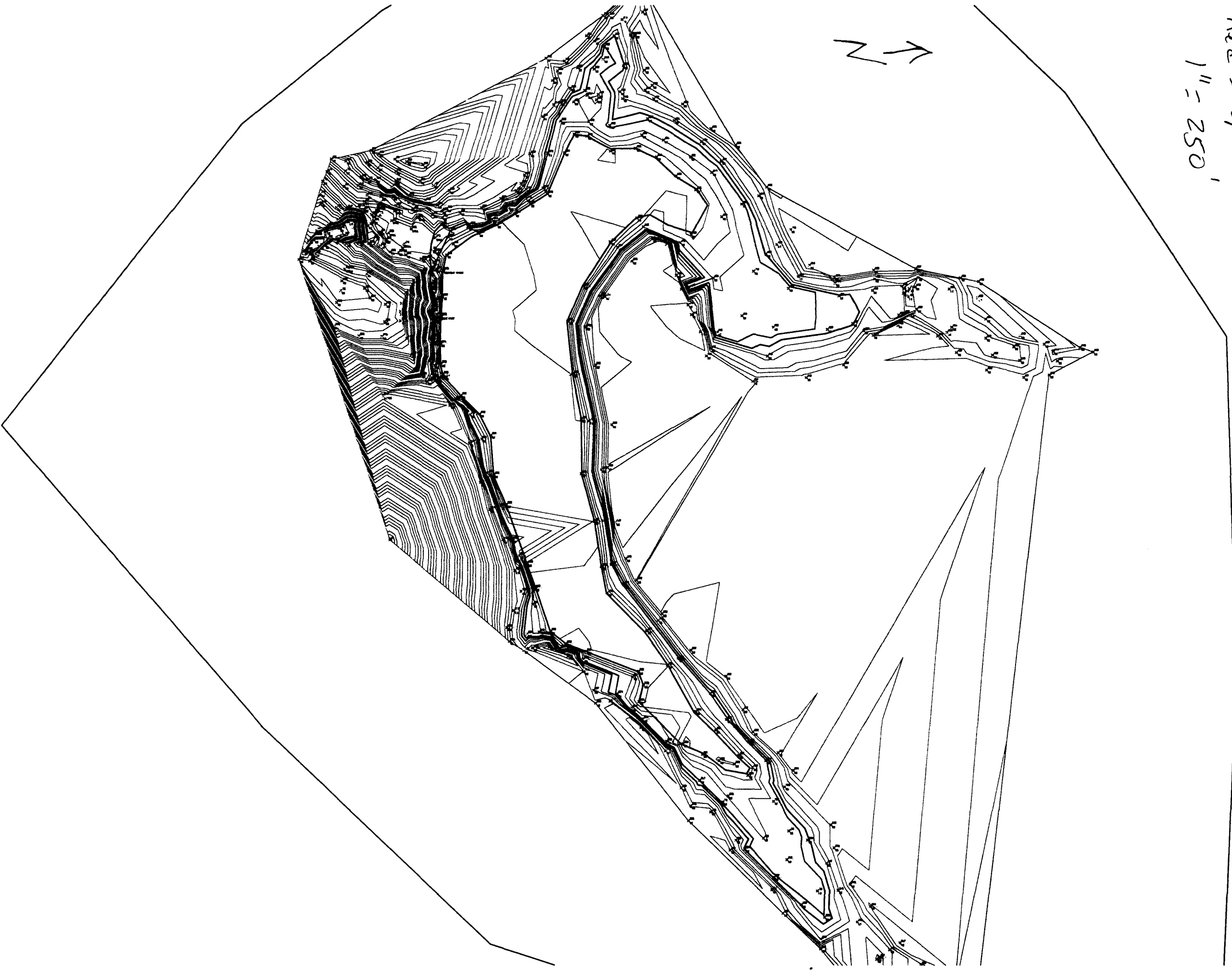
ITEM	UNIT	QUANTITY
Earthwork - Princ Spill (estimate)	CY	1000
Earthwork - Em Spill berm (estimate)	CY	100
8ft-48" dia Riser w/ 4ft-36" dia stub	ea	1
36" dia CMP	lin ft	108
Concrete	CY	1.3
Sand Seep Collar	CY	23
4" dia PVC	lin ft	94
Timber Pipe Support	ea	1
Timber Trash Rack	ea	1

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AUG 06 2012
WATER RIGHTS
PROGRAM

Tipp Co. #2 (Steve Spauln)
Snavely

#2 NEX NEX Sec 29, T102-R-75
& W/2 NW 1/4 Sec 28-102-75

Green = Spillway $\approx 91.0 = 17.3ac$
Blue = $H_2O \approx 86.0 = 10.3ac$
Red = Top Dam $\approx 92.0 = 19.0ac$
1" = 250'





Snarely #2 (Steve Spawn)
1" = 50'

120.4

106 BENCH

Locate principal spillway pipe @ existing pipe
at $\frac{1}{2}$ of dam sta. + _____, at
an angle of _____ to the $\frac{1}{2}$ of
the dam.

Trash rack and baffle plate
not shown. See job plan
no. 614

3: 1 slope normal
to $\odot$ of dam —

Top of dam after
settlement El. 74.0

Note: Allowance for settlement 5 %

Emergency spillway El. 91²

Principal spillway El. 87⁰

Berm, if required 3:1
slope normal to C of
dam _____

El. 79⁶

- 48" dia. riser, see
job plan no. 5.3

Antiseep collars sand seep collar
J.P. # 3.8

8.5 % gr.

112' of 36" dia. pipe

CROSS SECTION OF DAM ALONG C OF PRINCIPAL SPILLWAY
(Not to scale)

SPECIFICATION NOTES

1. ELBOW, IF REQUIRED, MAY BE FABRICATED BY CONTINUOUS WELDING SEPERATE PIPE SECTIONS OR BY FABRICATING A CONTINUOUS WELDED JOINT ON THE UPSTREAM END OF LAST SECTION OF PIPE.
2. PIPE WALL THICKNESS SHALL BE _____ GAGE OR _____ INCHES.

All CMP to be spiraled &

vinyl c/cd

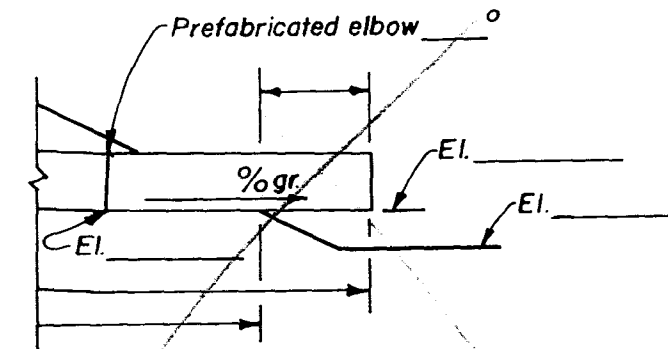
TABLE OF QUANTITIES

[illegible]

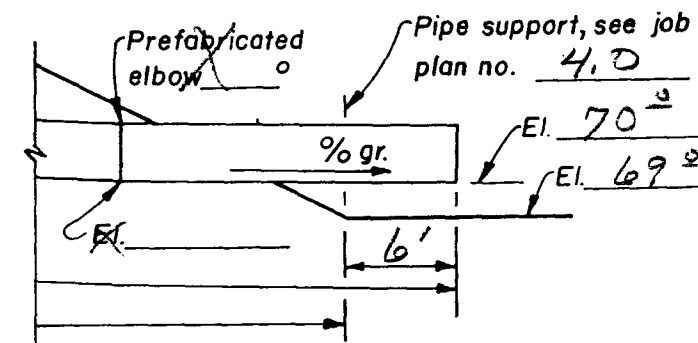
APPLICABLE STANDARD S.C.S. SPECIFICATIONS

Rev. 8/80
JOB PLAN NO. 2.0

REFERENCE: GUIDE PLAN NO. 2.0



~~OUTLET DETAIL WITHOUT
PIPE SUPPORT~~



OUTLET DETAIL WITH PIPE SUPPORT

Sec. _____, T. _____, R. _____
_____ County

LOCATION

CORRUGATED METAL PIPE
DROP INLET PRINCIPAL SPILLWAY

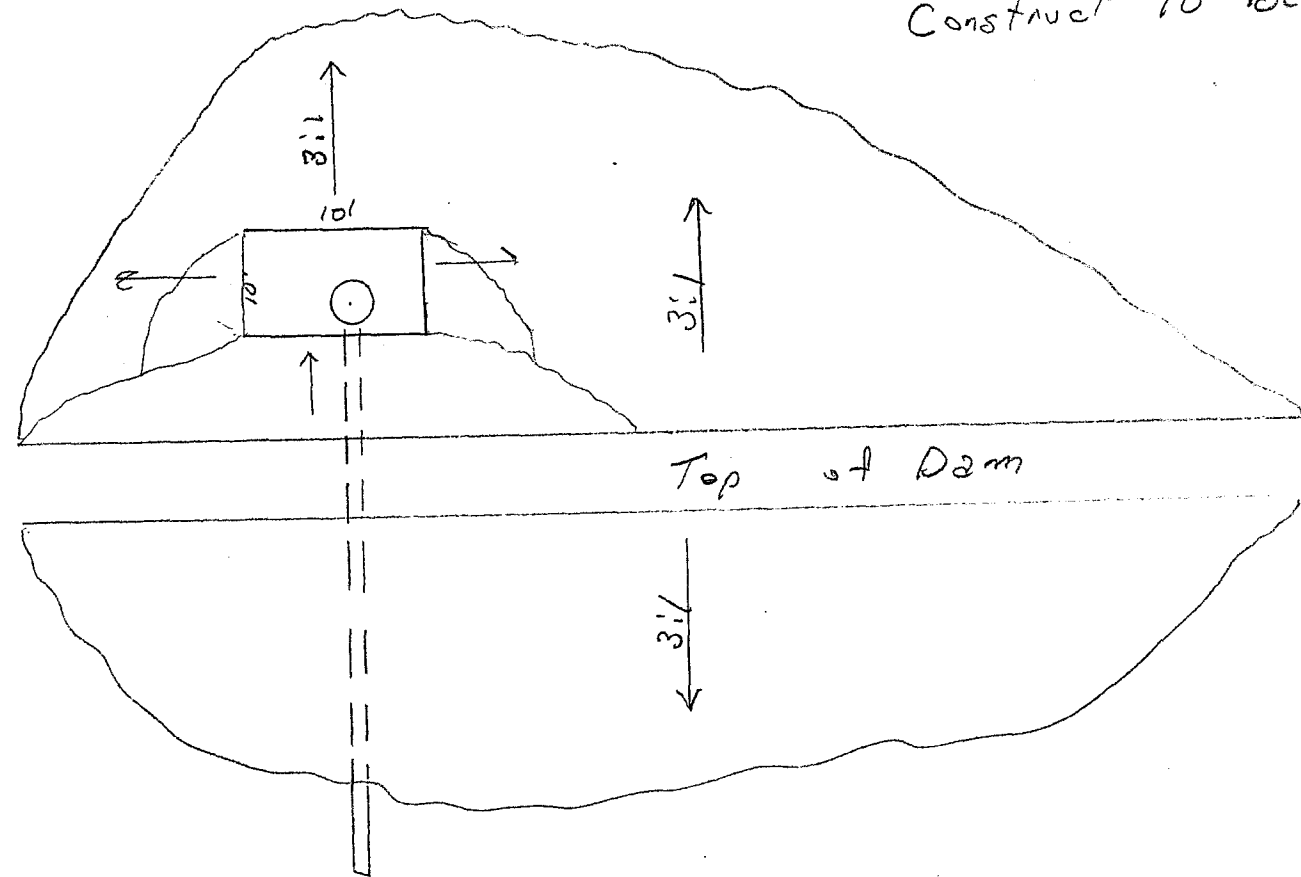
OPERATOR Snively #2

CONSERVATION DISTRICT _____

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

		Date	Approved by	
Designed			Title	
Drawn			Title	
Traced			Sheet	Drawing No.
Checked			No	
			of	

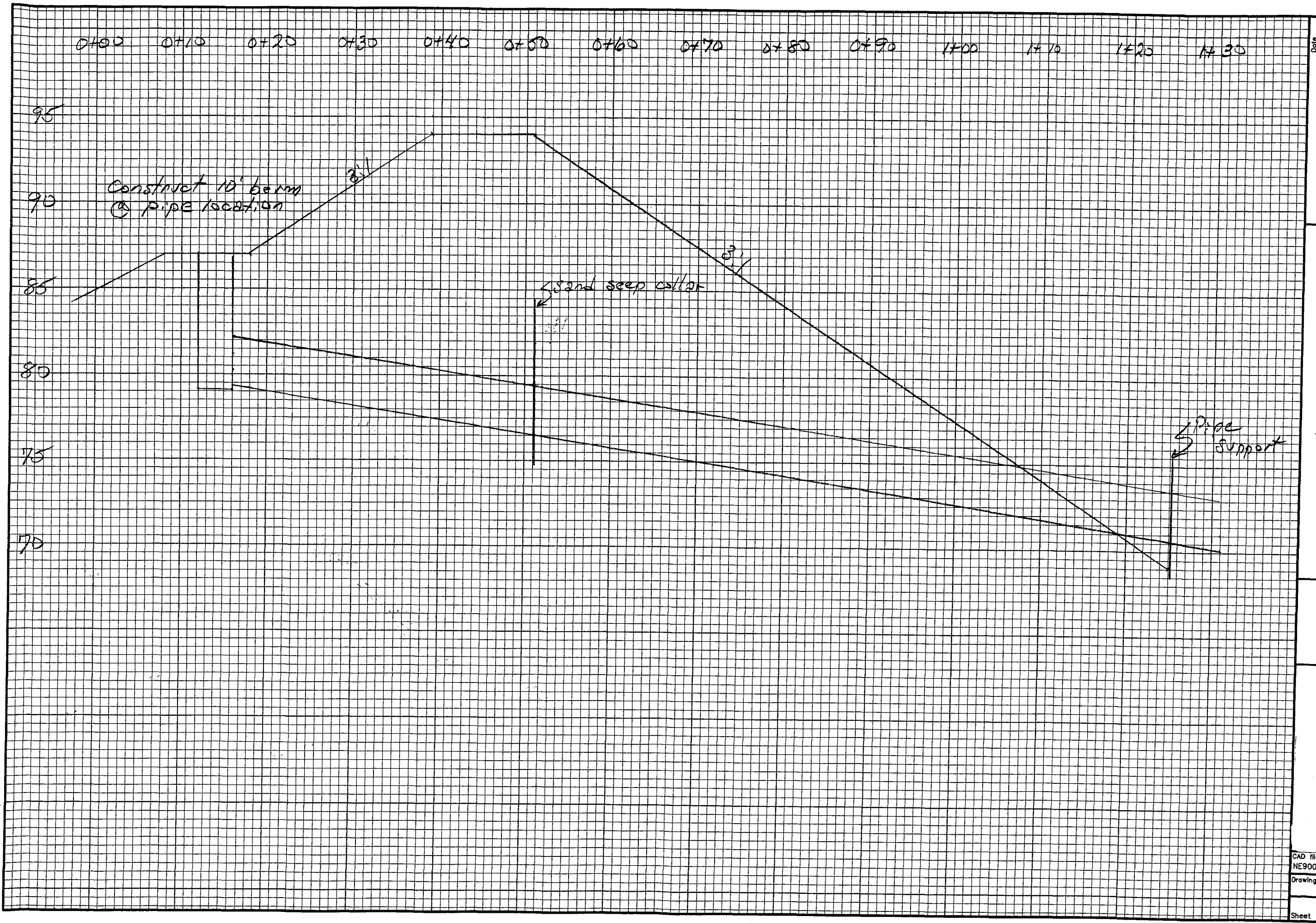
Construct 10' Berm at Riser



PLAN VIEW

Snagely #2

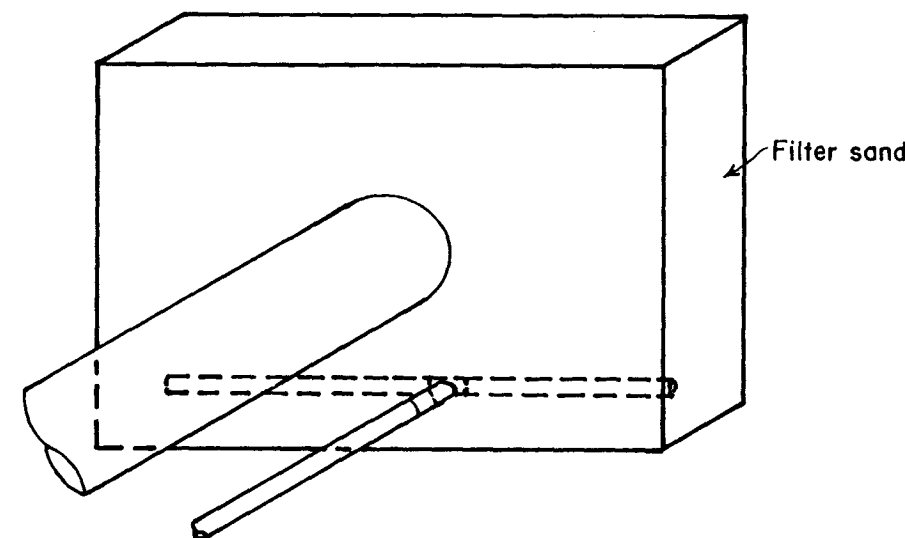
OK-1



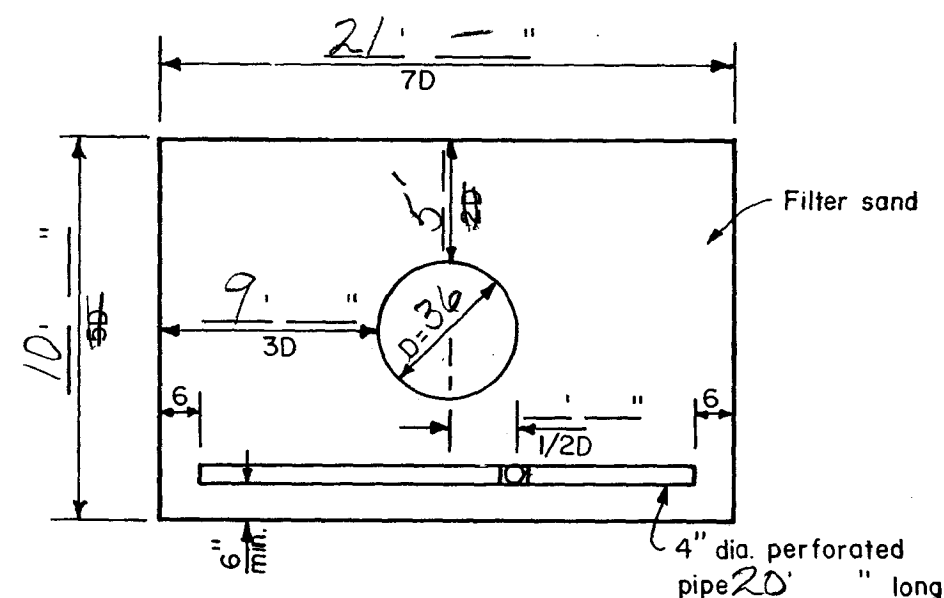
Date	
Designed	
Drawn	
Checked	
Approved	

Snively #2

CAD file:	NE900-10-002a.dwg
Drawing No.	
Sheet	of



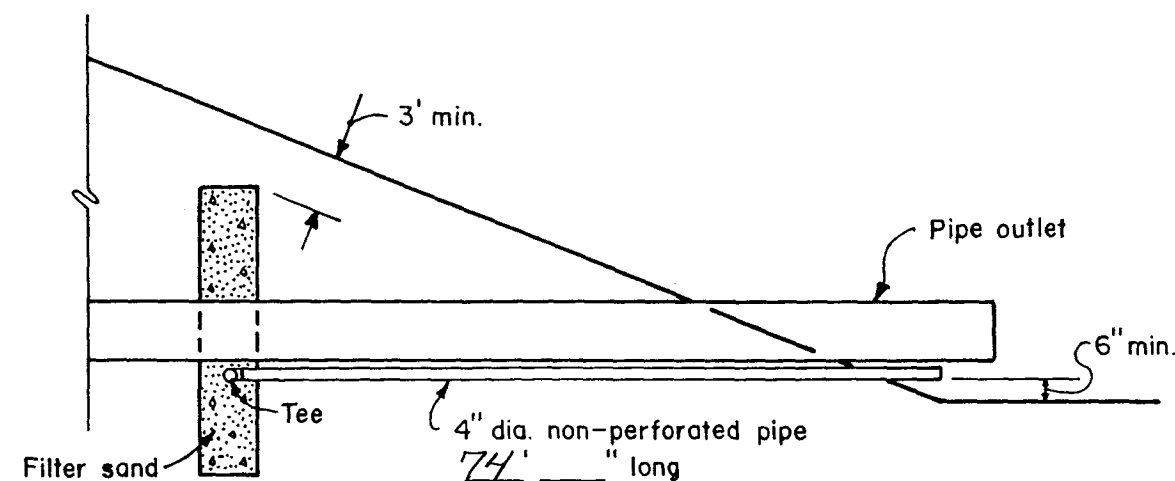
ISOMETRIC VIEW



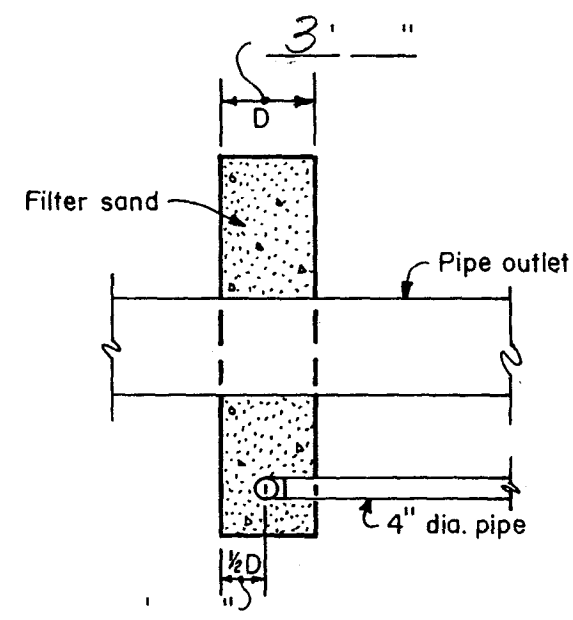
UPSTREAM VIEW

NOTE:

1. THE 4" DIA. PIPE SHALL BE ASTM D1785, SCHEDULE 40, PVC.
2. PROVIDE AN ANIMAL GUARD ON DRAIN OUTLET PIPE. DRILL 2, 1/2" DIA. HOLES, ON $\frac{1}{2}$ 6" FROM END OF PIPE AND PLACE A 3/8" DIA., 5 1/2" LONG GALVANIZED STEEL BOLT THRU THEM AND SECURE WITH A NUT (PLACE BOLT HORIZONTAL).



OUTLET DETAIL



SIDE VIEW

FILTER GRADATION

SIEVE SIZE	PERCENT PASSING
3/8"	100
4	95-100
8	80-100
16	50-85
30	25-60
50	10-30
100	2-10

see spec SO-9
23 cy

Sec. _____, T. _____, R. _____

_____ County

LOCATION

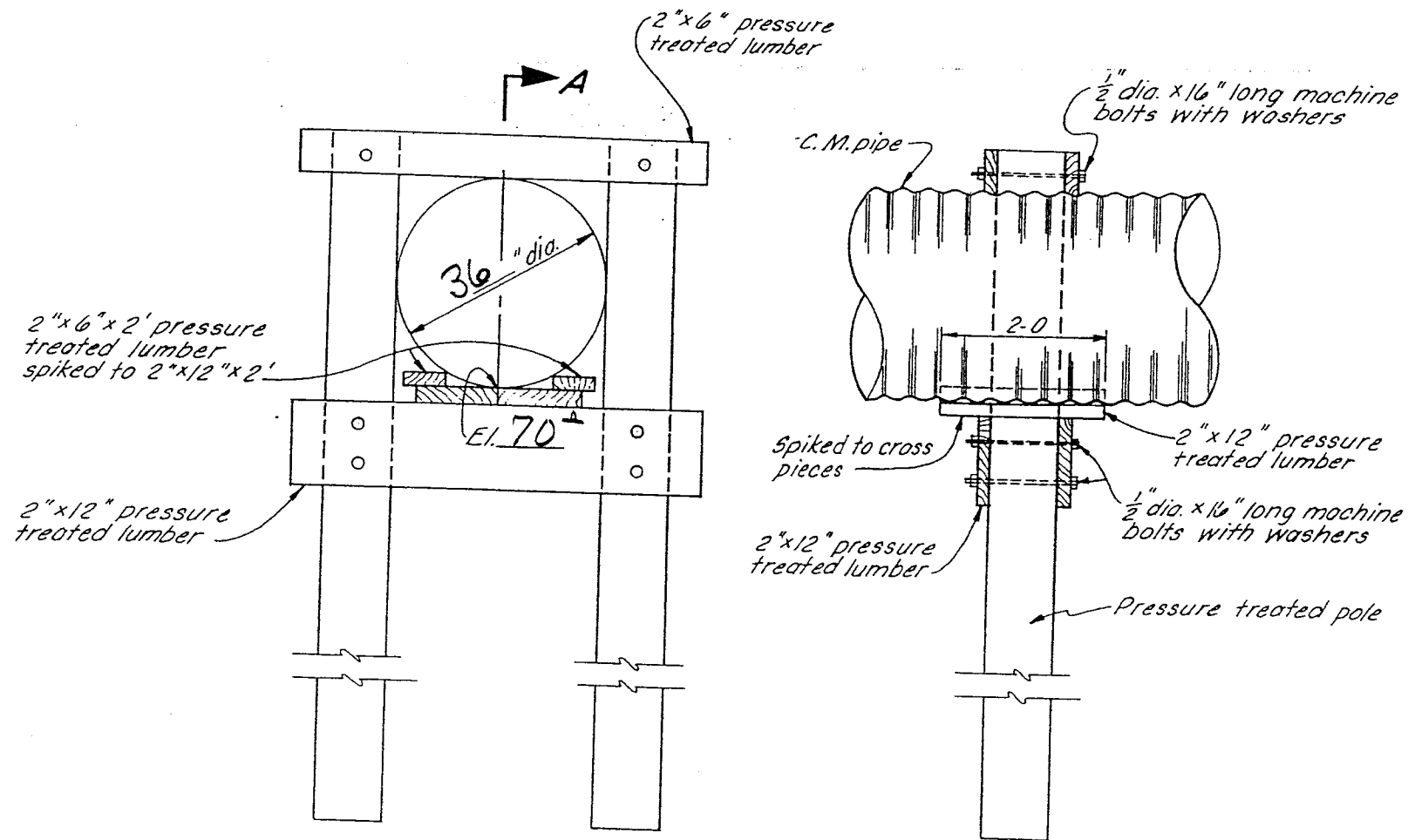
SAND ANTISEEP COLLAR

OPERATOR Snively #2

CONSERVATION DISTRICT _____

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Designed _____	Date _____	Approved by _____
Drawn _____		Title _____
Traced _____		Title _____
Checked _____	Sheet _____ of _____	Drawing No. _____



ELEVATION

SECTIONAL ELEVATION A-A

TABLE OF QUANTITIES

ITEM	LENGTH FOR 36" DIA. C.M. PIPE	UNIT	QUANTITY
PRESSURE TREATED POLE 10" DIA.	10-0	EACH	2
2" X 12" PRESSURE TREATED LUMBER	5-0	EACH	2
2" X 6" PRESSURE TREATED LUMBER	5-0	EACH	2
2" X 12" PRESSURE TREATED LUMBER	2-0	EACH	3
2" X 6" PRESSURE TREATED LUMBER	2-0	EACH	2
1/2" DIA. MACHINE BOLTS WITH NUTS	1-4	EACH	10
1/2" DIA. WASHERS		EACH	20

NOTES:

- HAND OR MACHINE TAMP BACKFILL THOROUGHLY AROUND FOOTINGS AND COLUMNS.

TIMBER PIPE SUPPORT

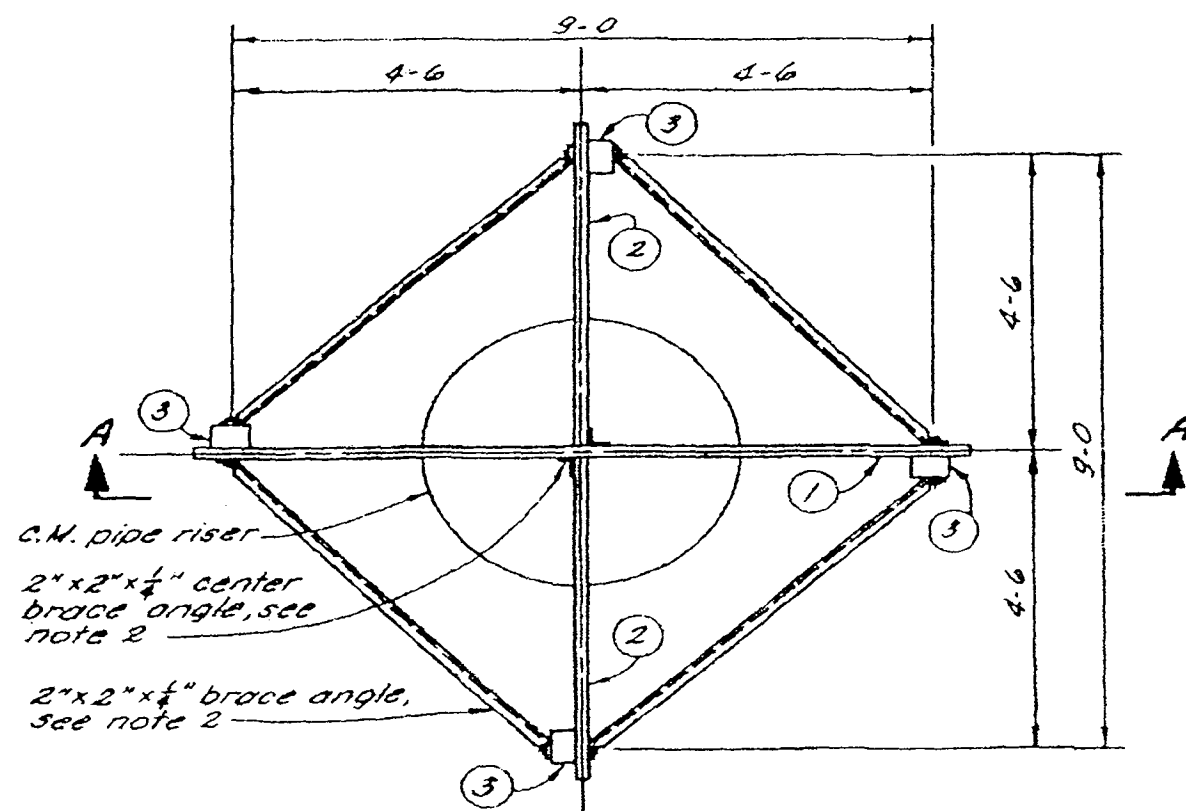
OPERATOR: Snaveley #2

CONSERVATION DISTRICT: _____

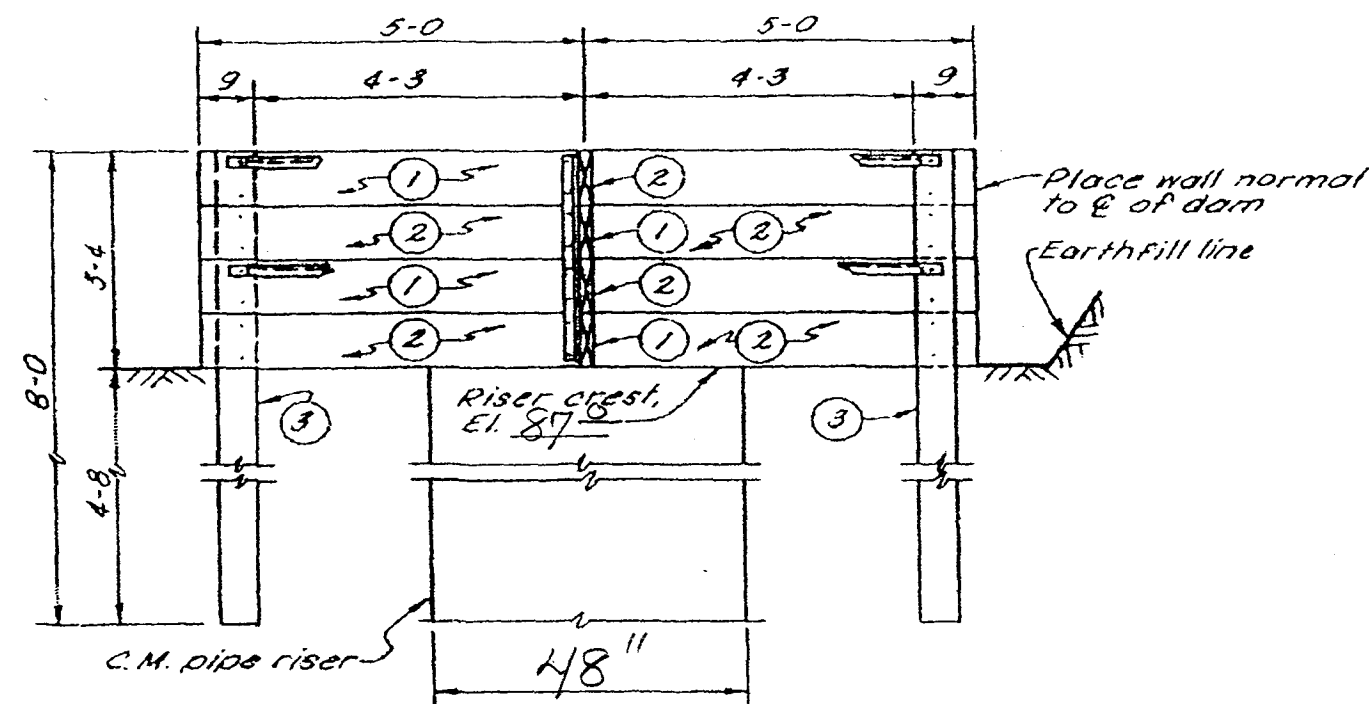
Designed.....	Date.....	Approved by.....
Drawn.....		Title.....
Traced.....		Title.....
Checked.....		Sheet No.....
		Drawing No.....

REFERENCE: GUIDE PLAN NO. 4.0

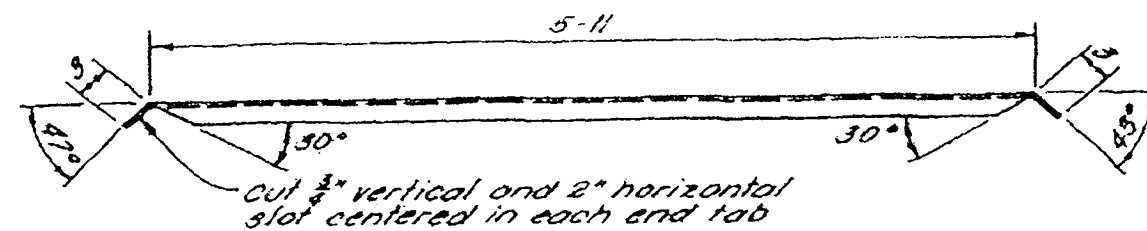
JOB PLAN NO. 4.0



PLAN VIEW



SECTIONAL ELEVATION A-A



PLAN VIEW OF BRACE ANGLE

TABLE OF QUANTITIES

ITEM	MARK	NO. REQ'D.	QUANTITY
2" X 10" X 10' PRESSURE TREATED LUMBER	1	4	67 BD.FT.
2" X 10" X 4'-11" PRESSURE TREATED LUMBER	2	8	66 BD.FT.
4" X 6" X 8' PRESSURE TREATED POST	3	4	64 BD.FT.
2" X 2" X 1/4" X 6'-5" STEEL ANGLE		8	164 LB.
2" X 2" X 1/4" X 3'-2" STEEL ANGLE		2	20 LB.
5/8" X 8" STEEL BOLTS, NUTS, 2 WASHERS		32	32 SETS
1/2" X 3" STEEL BOLTS, NUTS, 2 WASHERS		32	32 SETS

NOTES:

1. TO 4" X 6" POSTS (4 REQUIRED) BOLT 2" X 10" BOARDS USING TWO 5/8" X 8" BOLTS PER 2" X 10" BOARD. DO NOT PLACE BOLTS CLOSER THAN 1 1/2" FROM EDGE OF BOARD.
2. FOR CENTER BRACE ANGLES DRILL 8 - 9/16" HOLES 5/8" FROM OUTER EDGE OF EACH LEG OF EACH ANGLE AND CENTERED 5 1/4" APART ALONG THE LEG.
3. ATTACH BRACE ANGLES TO TOP BOLT ON TOP 2" X 10" BOARD AND TO TOP BOLT ON NEXT TO BOTTOM BOARD.

TRASH RACK AND BAFFLE
FOR RISER DIA. 36" THRU 60"

OPERATOR: Snavely #2
CONSERVATION DISTRICT: _____

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Designed _____	Date _____	Approved by _____
Drawn _____		Title _____
Traced _____		Sheet _____
Checked _____		Drawing No. _____

JOB PLAN NO. 6.4

5, N-29, 073.6-40

Water Permit Application No. 2690-2
Chris B. Snavely

Top of Dam Elev. - 94
2nd Spillway Elev. - 91
P. Spillway Elev. - 87
Dis Emb. Toe Elev. - 70

Cat. 3 - Low Hazard Dam

Ht. = 24 ft.

Normal Storage Capacity - 99 Ac.-Ft.
Int. Storage Capacity - 157
Max. Storage Capacity - 260

Int. Capacity x Eff. Ht. = $157 \times 21.6 = 3391 > 3000 \therefore 50 \text{ yr}$
Minimum Spillway Design

From USGS WRI 98-4055 "Tech. for Est Peak Flows ... in SD"
Region C $OA = 1620 \text{ Ac} = 2.53 \text{ mi}^2$

$$Q_{50} = 286 CA^{.570}$$

$$= 286 (2.53)^{.570}$$

$$= \underline{485 \text{ cfs}}$$

$$Q_{100} = 379 CH^{.566}$$

$$= 379 (2.53)^{.566}$$

$$= \underline{640 \text{ cfs}}$$

Secondary Spillway Capacity

$$Q = CLH^{3/2} \quad C = 2.6$$

$$= 2.6 (120)^{1.5} \quad L = 120$$

$$= \underline{1620 \text{ cfs}} \quad H = 3$$

NRCS Annual Yield

$$CN = 82 \quad OA = 1620 \quad ISO = 242$$

Section 74:02:08:09

1. Topo Map - OK
2. Dam Axis Profile - OK
3. Dam Max X-Sec - OK
4. Area - Capacity - OK
5. Outlet Details - OK
6. Spillway Rating - OK
7. Spillway Details - OK
8. Specs - std. NRCS - OK
9. EPP - N/A Cat. 3 - OK

80% chance = 0.44

$$0.44 \times 1620 = \underline{59 \text{ Ac.-Ft.}}$$

50% chance = 1.0

$$1.0 \times 1620 = \underline{135 \text{ Ac.-Ft.}}$$

10% chance = 3.5

$$3.5 \times 1620 = \underline{472 \text{ Ac.-Ft.}}$$



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

September 6, 2012

Chris B. Snavelly
725 W. 5th St.
Winner, SD 57580

Dear Mr. Snavelly:

We have reviewed the plans and specifications for your dam project located in the NE ¼ NE ¼ of Sec. 29-T102N-R75W, in Tripp County. The plans and specifications for the reconstruction of the existing dam are approved. Approval of the plans and specifications does not authorize reconstruction of the dam. The reconstruction of the dam may not begin until Water Permit No. 2690-2 is approved.

Our review was to determine compliance with the requirements of the Water Management Board Safety of Dams Rules, Chapter 74:02:08. Approval of these plans and specifications does not release you, as owner of the dam, from the responsibility for operating and maintaining the dam in good repair to ensure the safety of the dam.

The Snavelly No.2 dam will be classified as a small size Category 3, Low Hazard dam with a dam height of 24 ft. and a normal storage capacity of 99 acre-feet and a maximum storage capacity of 260 acre-feet.

If you have any questions, please feel free to contact us.

Sincerely,

Timothy G. Schaal, P.E.
Natural Resources Engineer IV
for Garland Erbele, Chief Engineer
Water Rights Program
(605) 773-3352

c: Steve Spawn, USFWS
Dave Konechne



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 2690-2, Chris B Snavely**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Environment and Natural Resources concerning Water Permit Application No. 2690-2, Chris B Snavely, 725 W 5th Street, Winner SD 57580.

The Chief Engineer is recommending APPROVAL of Application No. 2690-2 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) it is in the public interest with the following qualifications:

1. Water Permit No. 2690-2 authorizes an impoundment with a storage capacity of 99 acre feet of water and sufficient water annually to maintain the water level to the outlet elevation.
2. Low flows as needed for downstream domestic use, including livestock water and prior water rights must be by-passed.

See report on application for additional information.

Garland Erbele, Chief Engineer
September 6, 2012

REPORT ON
WATER PERMIT APPLICATION No. 2690-2
Chris B. Snively
August 29, 2012

Water Permit Application No. 2690-2 has been filed by Chris B. Snively to impound 99 acre-feet of water from runoff by reconstructing an existing dam located in the NE ¼ NE ¼ of Section 29-T102N-R75W, in Tripp County. The application also requests impoundment of sufficient water to maintain water to the outlet elevation. The water will be used for fish and wildlife production and livestock water purposes.

Discussion:

The dam will be classified as a small size, Category 3, Low Hazard dam. The dam has been designed by Konechne Engineering. The plans and specifications have been reviewed and will be approved; however, reconstruction of the dam can not begin until Water Permit Application No. 2690-2 is approved.

The dam will be 24 feet high with a normal storage capacity of 99 acre-feet with a reservoir level at the primary spillway elevation, and a maximum storage capacity of 260 acre-feet with a reservoir level at the top of dam elevation. A dam of this size and hazard classification is required to have a minimum spillway design capable of passing a 50-year frequency event.

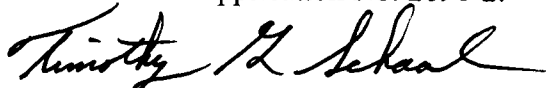
The dam has a drainage area of 1620 acres or 2.53 square miles. The dam is designed to have a 48 inch CMP riser with a 36 inch diameter CMP barrel with 7.0 feet of freeboard as the primary spillway, and a 120 foot wide earthcut secondary spillway with 3 feet of freeboard. A 50 year frequency event produces a peak runoff of approximately 485 cfs and a 100 year frequency event produces a peak runoff of approximately 640 cfs. The earthcut spillway will have a capacity of approximately 1620 cfs.

The annual yield for this drainage area with an 80 percent chance of occurrence, or 8 out of 10 years, is expected to be 59 acre-feet. The annual yield with a 50 percent chance of occurrence, or 1 out of 2 years, is expected to be 135 acre-feet and the annual yield with a 10 percent chance, or 1 out of 10 years, is expected to be 472 acre-feet.

The Snively No. 2 Dam will be located in the NE ¼ NE 1/4 of Section 29-T102N-R75W on an unnamed tributary to Old Lodge Creek; about 1.5 miles upstream of the confluence of the unnamed tributary and Old Lodge Creek and about 6.5 miles upstream of the confluence of Old Lodge Creek and the White River. There are no other existing Water Permits/Rights filed on the unnamed tributary or Old Lodge Creek between the proposed dam and the White River.

Conclusions:

1. Water Permit Application No. 2690-2 should be approved since unappropriated water is available and approval should not have any adverse effect on existing Water Permits/Rights.
2. If approved, the low flow bypass requirement for domestic use should be a qualification on Water Permit Application No. 2690-2.



Timothy G. Schaal, P.E.

Natural Resources Engineer IV

RECEIVED

SEP 19 2012

Form 8

WATER RIGHTS
PROGRAM

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)

County of Hughes) SS

I, Marylinn Baker

certify that the attached printed Notice was taken

from the Capital Journal

printed and published in Pierre

County of Hughes and

state of South Dakota. The notice was published

in the newspaper on the following date:

9-12-12

Cost of Printing \$ 30.34

Marylinn Baker
(Signature)

Bookkeeper
(Title)

9-17-12

(Date Signed)

SD Public Notice	SD Public Notice	SD Public Notice
SNAXLP 12352 tdly 9/12 NOTICE OF APPLICATION NO. 2690-2 to Appropriate Water	Chief Engineer will person or the ap- act on this appli- cant must be cation, as recom- filed by Septem- mended, unless a ber 24, 2012. The petition may petition is filed op- The petition is posing the appli- be informal, but cation or the appli- must include a cant files a petition statement descri- ing the petitioner's contesting the ing the petitioner's way, 725 W 5th Chief Engineer's interest in the ap- St. Winner SD recommendation. plication, the peti- 57580 has filed an if a petition oppos- tioner's reasons application for ing the application for opposing or water permit to im- or contesting the supporting the ap- pound 99 recommendation plication, and the acres-feet of water is filed, then a signature and from runoff by re- hearing will be mailing address of constructing a scheduled and the the petitioner or dam located in the Water Manage- the petitioner's le- NE 1/4 NE 1/4 ment Board will gal counsel. If le- Section 29 with consider this ap- gal counsel is ob- water impounded plication. Notice of lained. Contact in the NE 1/4 NE the hearing will be Eric Gronlund at 1/4 Section 29 given to the appli- the above Water and W 1/2 NW 1/4 cant and any per- Rights Program Section 28; all in son filing a peti- address to request T102N-R75W. lion. copies of informa- This application Any person inter- tion pertaining to requests impound- ested in opposing this application. ment of sufficient or supporting this Steven M. Pimer, water to maintain application or rec- Secretary, Depart- water to the outlet ommendation ment of Environ- elevation. The wa- must file a written ment and Natural tor is for fish and petition with Resources. wildlife propaga- BOTH the appli- Published once at tion and livestock cant and Chief En- water purposes. gineer. The appli- the total approx- Pursuant to cant must file a mate cost of SDCL 45-2A-2, petition If contest- \$30.34. the Chief Engineer ing the Chief Engi- recommends AP- neer's recommen- PROVAL of Application. The Chief Engineer No. 2690-2 Engineer's ad- because 1) unap- dress is "Water appropriated water is Rights Program, available, 2) exist- Foss Building, 523 ing rights will not E Capitol, Pierre be unlawfully im- SD 57501 (605 paired, 3) It is a 773-3352)* and beneficial use of the applicant's water, and 4) it is mailing address is in the public inter- given above. A est. In accordance petition filed by a- with SDCL ther an interested 46-2A-23, the	

AFFIDAVIT OF PUBLICATION

State of South Dakota, county of Tripp-ss.

Dan Bechtold

of said county being first duly sworn, on oath says that he is the Editor of

RECEIVED

SEP 13 2012

WATER RIGHTS
PROGRAM

WINNER ADVOCATE

a weekly newspaper printed and published at Winner, said county of Tripp, and has full and personal knowledge of all the facts herein stated that said newspaper is a legal newspaper and has a bona fide circulation of a least two hundred copies weekly and has been published within said County for fifty-two successive weeks prior to the publication of the notice herein mentioned, and was printed wholly or in part in a office maintained at said place of publication; that the

59 lines @ 1 column rate

Notice of Application

Chris Snavelly

a printed copy of which, taken from the paper in which the same was published, is attached to this sheet, and is made a part of this affidavit, was published in said newspaper at least one in each week for 1 weeks, on the day of each week on which said newspaper was regularly published to wit:

09/12/12

That the full amount of the fees for the publication of the *annexed notice is \$ 22.13

Dan Bechtold

Subscribed and sworn to before me this 12th day of September, 2012

Patricia Arvin

Notary Public

County of Tripp, South Dakota

My Commission Expires November 4, 2015

NOTICE OF APPLICATION NO.

2690-2

TO APPROPRIATE WATER

Notice is given that Chris B Snavelly, 725 W 5th St, Winner SD 57580 has filed an application for a water permit to impound 99 acre-feet of water from runoff by reconstructing a dam located in the NE 1/4 NE 1/4 Section 29 with water impounded in the NE 1/4 NE 1/4 Section 29 and W 1/2 NW 1/4 Section 28; all in T102N-R75W. This application requests impoundment of sufficient water to maintain water to the outlet elevation. The water is for fish and wildlife propagation and livestock water purposes.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2690-2 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by September 24, 2012.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.

Published once at the total approximate cost of \$22.13 (37)

SEAL
Patricia Arvin
Notary Public
SOUTH DAKOTA



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

September 6, 2012

Capital Journal
PO Box 787
Pierre SD 57501

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 2690-2 to Appropriate Water. Please publish the notice once on September 12, 2012. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published and arrange for payment. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Chris B Snavely, 725 W 5th St., Winner SD 57580 (Ph # 605-842-3353).

Please send the Water Rights Program an affidavit or the enclosed Proof of Publication form immediately.

The applicant pays the cost of publication, but the Water Rights Program records require an affidavit or Proof of Publication. Delays in receiving the affidavit can be costly to the applicant.

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

September 6, 2012

Winner Advocate
125 W 3rd St
Winner SD 57580

ATTENTION: Legal Public Notice

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Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

NOTE: TO BE SURE OF PUBLICATION ON
THE CORRECT DATE, CONTACT
THE NEWSPAPER(S) RIGHT AWAY.

September 6, 2012

Chris B Snavely
725 W 5th St
Winner SD 57580

Dear Mr. Snavely:

Water Permit Application No. 2690-2 for fish and wildlife use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Winner Advocate printed at Winner SD (Ph # 605-842-1481) and the Capital Journal printed at Pierre SD (Ph # 605-224-7301). You will need to contact the newspaper(s) and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspaper(s) to authorize publication of your Notice and to arrange for payment. Early contact with the paper(s) can eliminate delays. Upon receiving authorization from you, the publisher has been instructed to publish your notice. The newspaper has also been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the application.

Sincerely,

Eric Gronlund
Natural Resources Engineer
(605) 773-3352

enclosures

NOTE: If you plan to contest any part of the Chief Engineer's recommendation, you must file a petition pursuant to the procedures outlined in the attached notice of hearing. The Water Management Board will then consider your concerns during a hearing on the application.

Instruction to Newspaper - Publish the Notice on September 12, 2012. The applicant is responsible for payment. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352 or email: Karen.schlaak@state.sd.us.

NOTICE OF APPLICATION NO. 2690-2 to Appropriate Water

Notice is given that Chris B Snavely, 725 W 5th St, Winner SD 57580 has filed an application for a water permit to impound 99 acre-feet of water from runoff by reconstructing a dam located in the NE ¼ NE ¼ Section 29 with water impounded in the NE ¼ NE ¼ Section 29 and W ½ NW ¼ Section 28; all in T102N-R75W. This application requests impoundment of sufficient water to maintain water to the outlet elevation. The water is for fish and wildlife propagation and livestock water purposes.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2690-2 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by September 24, 2012.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.
Published once at the total approximate cost of _____.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

SEP 28 2012

Chris B Snavelly
725 W 5th St
Winner SD 57580

Dear Mr. Snavelly:

Enclosed is Water Permit No. 2690-2 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

Form 10, *Notice of Completion of Works and Application of Water to Beneficial Use*, is enclosed. Please return this completed form after you have finished the system and have put the water to beneficial use. An investigation can then be scheduled so the water license may be issued, thus completing the acquisition of a water right.

An informational sheet *Common Water Right Questions* is also enclosed. This sheet is intended to answer some of the questions associated with obtaining and keeping a water right.

Sincerely,

Garland Erbele, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

2690-2
RECEIVED

JUL 19 2013

WATER RIGHTS
PROGRAMNOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USEDate 7-18-13TO: Water Rights Program, DENR
523 E. Capitol
Pierre, SD 57501-3181

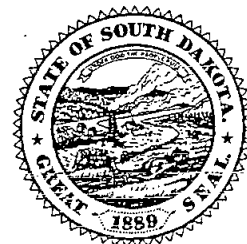
FROM:

Chris B. Snively
(name)725 W. 5th Street
(address)Winner, S.D. 57580
(city, state, zip)605-842-3353
(phone)

I have completed the construction of the water use system and I have put the water to beneficial use to the maximum extent it is going to be used.

Water Permit No. 2690-2 states that the water use system is to be constructed by9-24-2017, and water is to be put to beneficial use by 9-24-2021
(date) (date)The water use system was completed on 11-30-2012
(date)Applying the water to beneficial use was completed on 6-1-2013
(date)

You may schedule an investigation so that the water license may be issued.

Chris B. Snively
(signature)



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
PMB 2020
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
<http://denr.sd.gov>

July 22, 2013

2689-2

2690-2

Chris & Julie Snavelly
725 W 5th St
Winner SD 57580

Dear Mr. & Mrs. Snavelly:

I am writing to acknowledge receipt of the "Notice of Completion of Works" forms you sent in to let us know that you are completed with the projects authorized under Water Permit Nos. 2689-2 and 2690-2.

The systems are now ready for inspection. Inspections are done on a county-by-county basis as staff time permits. You have done everything you need to do and the intervening time between the completion of the projects and the staff inspection has no bearing on your water permits.

Someone from our office will contact you prior to the inspection to set up a time that is convenient for you. If you have any questions, please contact me.

Sincerely,

A handwritten signature in cursive script that reads "Genny McMath".

Genny McMath
Water Rights Program
(605) 773-3352
email: genny.mcmath@state.sd.us

Permit No. 2690-2
White River - Water District

Report Of Examination Of Works And/Or Application of Water To Beneficial Use

TO: Chief Engineer, Water Rights Program, DENR, Foss Bldg., Pierre, SD 57501

I have this day, November 7, 2014, made a thorough examination of the water use system constructed by Chris B. Snavely of 725 W. 5th St., Winner, SD 57580 holder of Permit No. 2690-2, bearing the priority of August 6, 2012 authorizing the storage of 99 acre-feet of the waters of runoff for fish & wildlife production and livestock water purposes, in Tripp County.

I have to report on the conditions of the same as follows:

A. Works used to divert the water:

A 24 foot high earthen dam with a normal storage capacity of 99 ac-ft. of water.

B. Works used to transport water to place of use:

N/A

C. Works used to apply water to beneficial use:

A 24 foot high earthen dam with a normal storage capacity of 99 ac-ft. of water.

The system is in the following condition good. The point of diversion is located 650 ft. south & 260 ft. west of the NE corner of Section 29-T102N-R75W (NE ¼ NE ¼) (Lat. 43.61403, Long. -99.82333). The works are capable of storing 99 acre-feet of water which is to be used for fish & wildlife production and livestock water. Water has been put to beneficial use to the maximum extent as follows:

A 24 foot high earthen dam with a normal storage capacity of 99 ac-ft. of water.

and the license should be issued for 99 acre-feet of storage.

Applicable permit qualifications have been complied with: Yes X

Exceptions to compliance are: none Date Report Completed: February 5, 2015



Timothy G. Schaal, P.E.
Engineer IV
SD DENR, Water Rights Program

REPORT ON INSPECTION OF PERMIT NO. 2690-2

DATE OF INSPECTION: November 7, 2014

NAME & ADDRESS OF PERMIT HOLDER: Chris B. Snavely, 725 W. 5th St., Winner, SD 57580

DIVERSION POINT LEGAL LOCATION: 650 ft. south & 260 ft. west of the NE corner of Section 29-T102N-R75W (NE ¼ NE ¼) (Lat. 43.61403, Long. -99.82333).

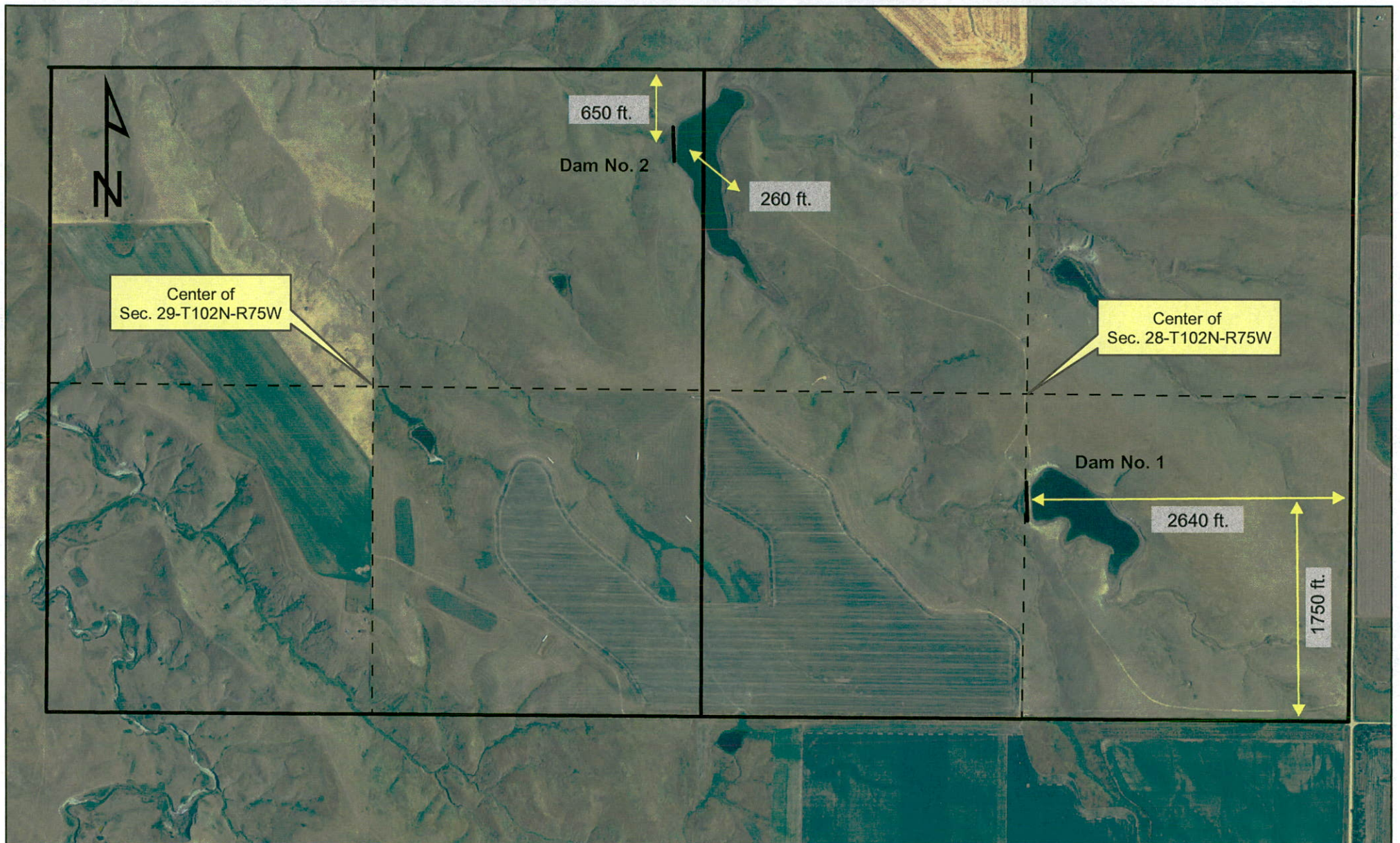
DAM INFORMATION:

- 1) Height to crest 24 feet
- 2) Height to primary spillway 17 feet
- 3) Height to secondary spillway 21 feet
- 4) Crest width 12 feet
- 5) Crest length XXX feet
- 6) Spillway length XXX feet
- 7) Spillway width 120 feet
- 8) Approx. storage (Normal) 99 acre-feet
- 9) Approx. storage (Maximum) 260 acre-feet
- 10) Date constructed: 2012

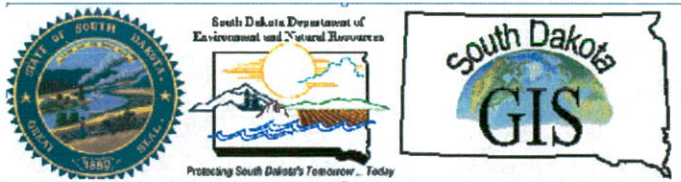
PERMIT QUALIFICATIONS AND REGULATIONS:

- 1) Soil and water permit lands agree with lands being irrigated and lands listed on permit N/A
- 2) Special qualifications to permit being abided by yes
- 3) All structures, wells and lands on map yes
- 4) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period N/A

Water Permit Application Nos. 2689-2 & 2690-2



0 0.25 0.5 1 Miles



Timothy G. Schaal
Timothy G. Schaal, P.E.
Engineer IV
SD DENR, Water Rights Program

2/5/15



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

MAR 19 2015

2690-2

Chris B Snavelly
725 W 5th St
Winner SD 57580

Dear Mr. Snavelly:

Enclosed is Water License No. 2690-2. This is the final water right document completing your process of obtaining a Water Right. Included with your license is a map prepared by the staff engineer who conducted the field investigation.

As long as you use the water beneficially, as stated in the Water License, State Water Laws provide that you have a continuing right to use the water.

Sincerely,

Jeanne Goodman, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 2690-2

(1) Chris B Snavely, 725 W 5th St, Winner SD 57580 made Application No. 2690-2, August 6, 2012 for a water permit to impound 99 acre feet of runoff water by reconstructing a dam located in Tripp County, South Dakota for fish & wildlife propagation and livestock watering purposes. Permit No. 2690-2, with a priority date of August 6, 2012 was approved September 24, 2012 and issued to the applicant for impoundment of water with construction of the described storage dam to be completed on or before September 24, 2017 and the application to beneficial use of water on or before September 24, 2021.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the project and is entitled to impound 99 acre feet of water for beneficial use.

The location of the storage dam (spillway) is located 650 feet south & 260 feet west of the NE corner of Section 29, T102N, R75W (NE ¼ NE ¼). Water is impounded in the NE ¼ NE ¼ Section 29 and the W ½ NW ¼ Section 28, T102N, R75W.

(3) The permit holder has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use.

(4) Pursuant to South Dakota Water Law 46-5-30.1 Chris B Snavely, 725 W 5th St, Winner SD 57580 the holder and/or owner of Water Right No. 2690-2 is issued a license to appropriate water, the right to impound 99 acre feet of water from runoff with a priority date of August 6, 2012 from the location specified in (2) of this license for fish & wildlife propagation and livestock watering purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 2690-2 and subject to the following qualifications:

- Water Right No. 2689-2 authorizes an impoundment with a storage capacity of 99 acre feet of water and sufficient water annually to maintain the water level to the outlet elevation.
- Low flows as needed for downstream domestic use, including livestock water and prior water rights must be bypassed.

Jeanne Goodman

Jeanne Goodman, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

MAR 19 2015

date

