

WATER PERMIT NO. 2687-2

Name of Applicant: Phillip Caslin

Address: 8508 W Grinn Place, Sioux Falls SD 57106

Phone: 605 274-6658

Amount of Water Claimed: 86 AF

Total Acres: NA

Source of Water Supply: runoff

Water to be used for: fwp, livestock

County: Lyman

Type of Waste Disposal System:

Location: 7 miles north of Kennebec

PRIORITY

Date Received: 7-31-12

Application/License Fee: \$ 700.00

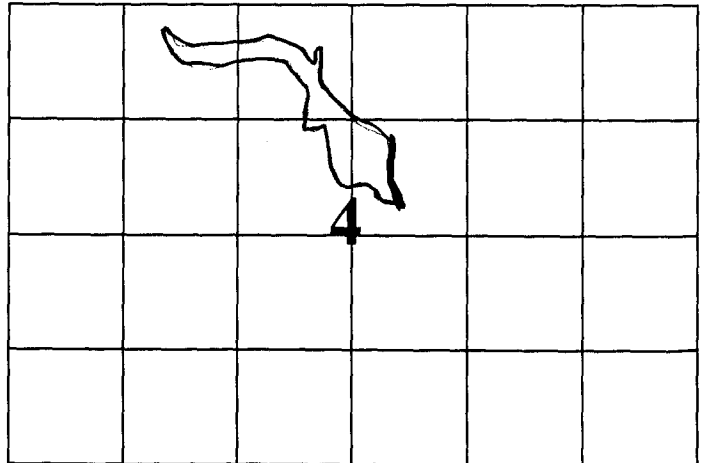
Corrected Application Received:

Period of Annual Use: January 1 – December 31

Remarks:

Diversion Point: SW ¼ NE ¼ Sec 4-T106N-R75W

Water Impounded: SW ¼ NE ¼, N ½ NW ¼, SE ¼ NW ¼ Sec 4-T106N-R75W



Depth of Well: NA

Well Driller:

Remarks:

Type of Map: aerial

Prepared by: Dave Konechne, PE

Reviewed and the Number Assigned on: 7-31-12

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

No. 2687-2 (office use only) Hydrologic Unit 10140104
Basin Missouri River 605-895-4397
Newspaper Lyman Co Herald PO Box 518, Pierre 57501
Capitol Journal PO Box 878 Pierre 57501 605-224-7301

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JUL 30 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 <u>Livestock</u>	

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.)

1. Name of Applicant Phillip Caslin - Kennebec Grazing Assn. Phone 605-274-6658
(check one) ☒ Owner ☐ Tenant/lessee

Mailing Address 8508 W Grinn Place Sioux Falls SD 57106-4797
(Address) (City) (State) (Zip Code)

2. Amount of water claimed _____ *CFS or _____ **GPM _____ 86 ***AF
(*Cubic Feet per Second) (**Gallons per Minute) (***) Acre Feet - storage capacity of dam/dugout or annual use if applicable

3. Source of water supply Dry Draw Runoff

4. Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) County Lyman
Dam is in the SW1/4NE1/4 section 4-T106N R75W. Water will be impounded in the SW1/4NE1/4, SE1/4NW1/4, NE1/4NW1/4, NW1/4NW1/4 section 4-T106N R75W.

5. County or counties where water will be used LYMAN

6. Annual period during which water is to be used Jan 1 - Dec. 31

7. 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 a dam with no original location notice. Damage to the emergency spillway has occurred causing failure. The repaired pond will be 17.2 surface acres storing 86 ac./ft. Engineering plans and specs are included with this application.

STATE OF SOUTH DAKOTA)

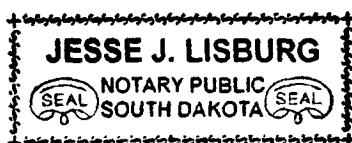
County of Lyman)

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, Phillip Caslin, 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 Phillip Caslin

Subscribed and sworn to before me this 27 day of July 20 12



Jesse J. Lisburg
Notary Public signature
Comm. exp. 08/23/16

SOUTH DAKOTA
WATER PERMIT NO. 2687-2

Date of first receipt of application July 30, 2012.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 2687-2 to Kennebec Grazing Association, c/o Phillip Caslin, 8508 W Grinn Place, Sioux Falls SD 57106 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. 2687-2 authorizes impoundment of 86 acre-feet of water from runoff by reconstructing a dam located in the SW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 4 with water impounded in the SW $\frac{1}{4}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 4; all in T106N-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. 2687-2 is September 10, 2012.
5. The date from which applicant may claim right is July 30, 2012.
6. One-fifth of the construction is to be completed on or before March 10, 2015.
7. All construction is to be completed on or before September 10, 2017.
8. Water is to be put to beneficial use on or before September 10, 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. 2687-2 authorizes an impoundment with a storage capacity of 86 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

OCT 29 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 6.0'

c) Crest Width 12.0'

Crest Length 797'

d) Height 21.0

e) Primary Outlet Capacity 169 cfs

If pipe, diameter 60" riser x 42" outlet

f) Secondary Spillway Capacity 1412 cfs

Spillway Width 100'

g) X & Y Slope (e.g. 3 to 1 is a typical slope)

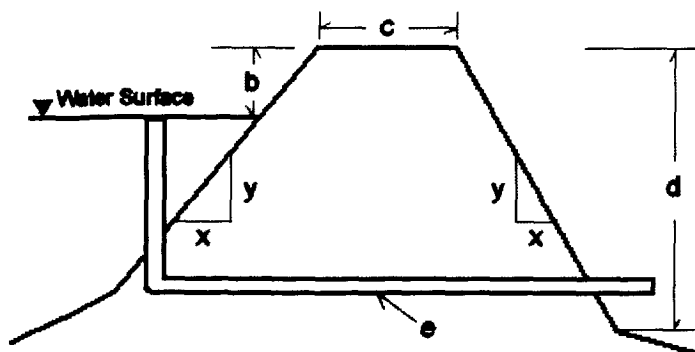
Upstream 3:1

Downstream 3:1

h) Surface Area of Impoundment 17.2

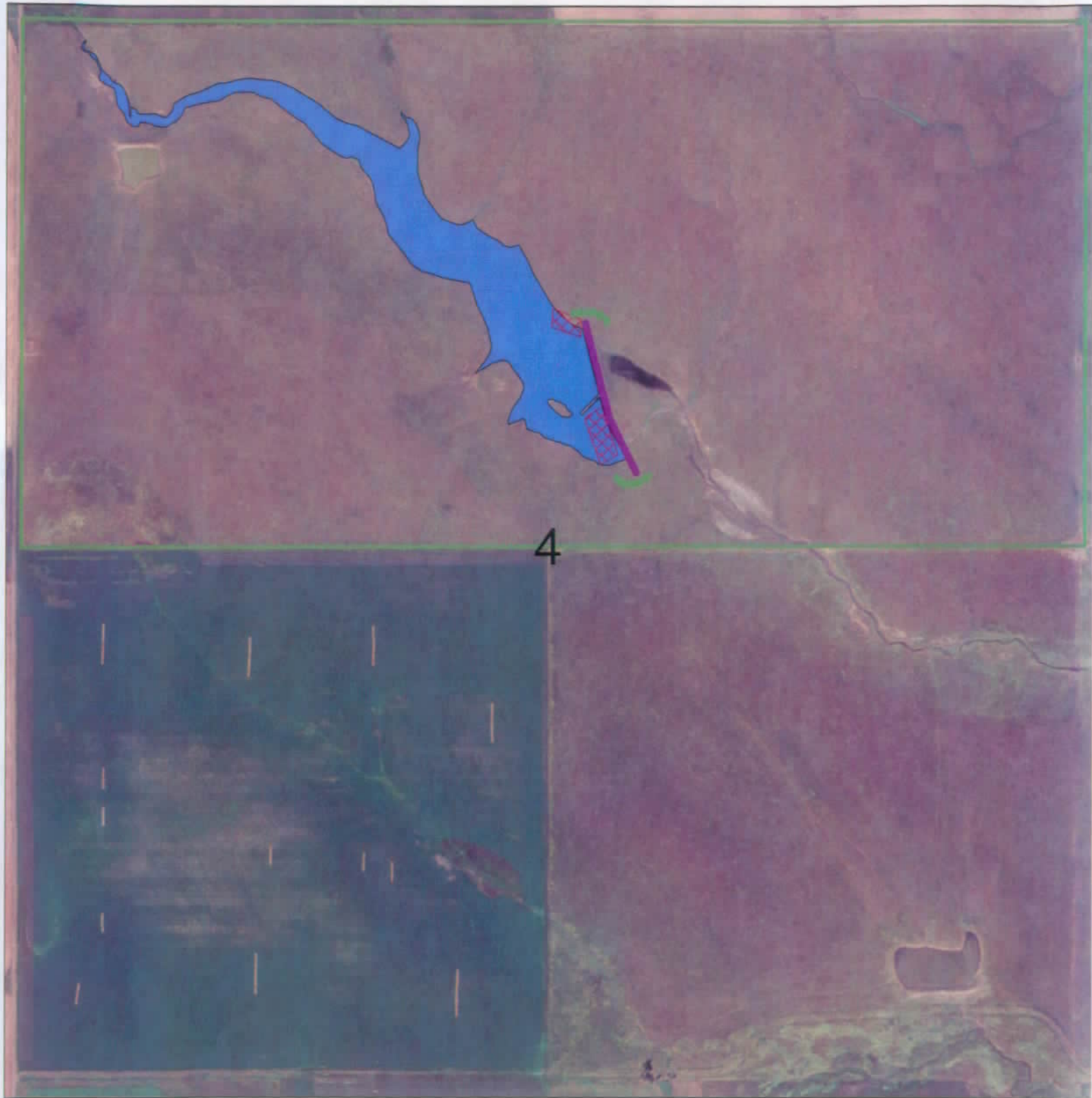
i) Storage 86.0 Acre Feet

j) Drainage Area Above Dam 1,856.0 Acres



WEA: SD-PI-12-014
County: Lyman

Name: Kennebec Grazing Association (Phillip Caslin, Rep.)
Legal: T106N R75W Sec. 4 NE1/2



Legend-Wetland Creation

-  Project Boundary
-  Wetland Created
-  Embankment
-  Spillway
-  Borrow Site

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8 inches = 1 mile



Phil Caslin Pond Repair

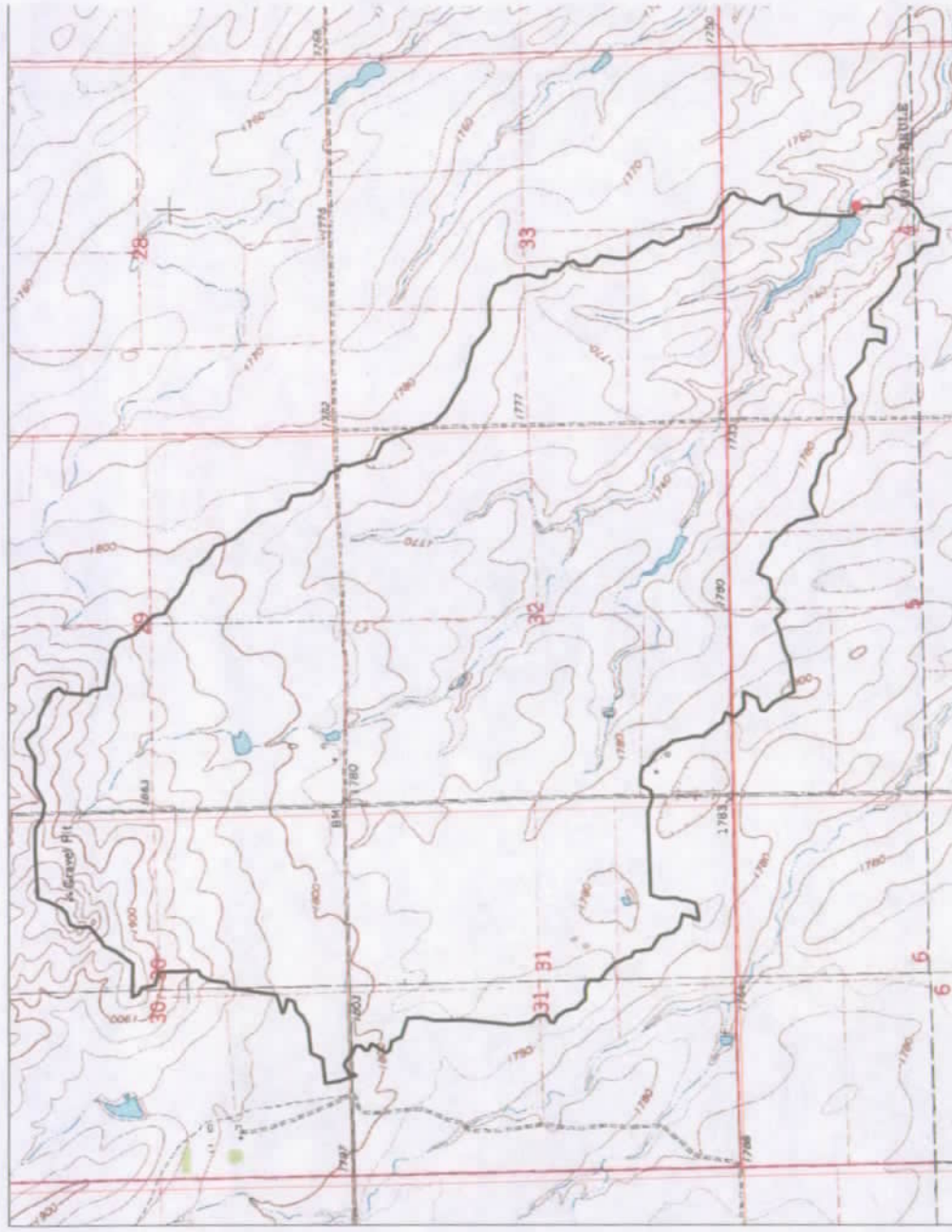
- 1,856 acre watershed
- 18,669 ft. w. length
- 2.98% watershed slope

CN 84

5yr - 3.1

10yr - 3.5

25yr - 4.2



106N-75W-4 SW1/4NE1/4

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*** INVOICE ***

SD DENR - Water Rights
523 E Capitol Ave
Pierre SD 57501

July 30, 2012
Invoice No. 730-12/2

USFWS
Norma Martin
Brookings SD 57006

Application fee for James Scull for a dam - Meade County \$700.00

Application fee for Phillip Caslin for a dam - Lyman County \$700.00

(\$1000.00 application fee)

(\$400.00 licensing fee)

PLEASE PAY THIS AMOUNT: \$1,400.00

DO NOT WRITE NORMA J MARTIN USFWS XXXX XX0X XXXX 0807 SIGN HERE X 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.	ABOVE THIS LINE EXPIRATION ☒ DATE CHECKED 06/14		PLEASE DO NOT WRITE ABOVE THIS LINE				SALES SLIP ORIGINAL	
	1	INV 730-12/2		1400.00				
		JAMES SCULL - MEADE CO						
		PHILLIP CASLIN - LYMAN CO						
	DATE	07/31/12		AUTHORIZATION	056724	SUB TOTAL		1400.00
	REFERENCE NO.	001		SERVER		TAX		
	ID-FOLIO/CHECK NO./LIC. NO. STATE	REG/DEPT.	CLERK	TIP	MISC.			
	 		5462816		TOTAL	1400.00		

File No. 2687-2

Water Rights Division -DENR
Conversation or File Documentation

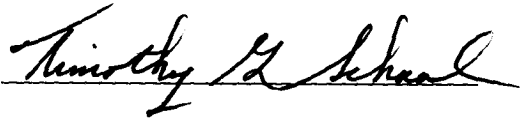
NAME OF PERSON OR FILE: Phillip Caslin

ADDRESS: 8508 W. Grinn Place, Sioux Falls, SD 57106 COUNTY: Lyman

DATE: August 7, 2012

TELEPHONE: (605) 274-6658

RE: I talked to Jesse Lisburg from the USFWS today. He had checked with Mr. Caslin and the Name of Applicant for Water Permit Application No. 2687-2 should be the Kennebec Grazing Association c/o Phillip Caslin.

A handwritten signature in black ink, reading "Timothy G. Schaal", written over a horizontal line.

Timothy G. Schaal, P.E.
Natural Resources Engineer IV
Water Rights Program

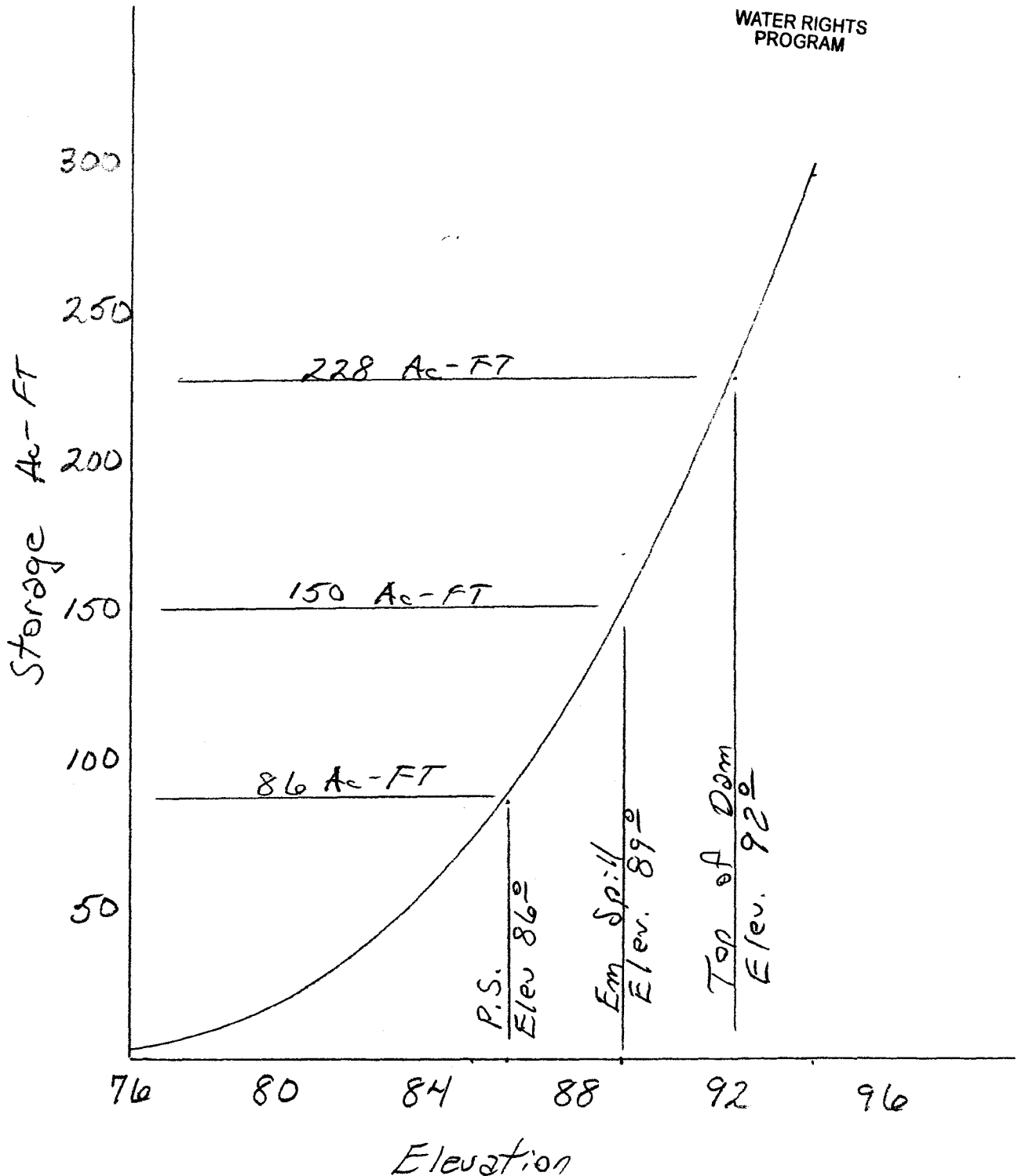
COMPUTATION SHEET

BY	DATE	PROJECT	SHEET ____ OF ____
CHKD BY	DATE	FEATURE <i>Phil Castlin</i>	
DETAILS <i>SW NE Sec 4, T106N, R75W</i>			

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1*****
 SITES XEQ 03/07/2012 WATER RESOURCE SITE ANALYSIS COMPUTER PROGRAM
 VER 2005.1.05 (USER MANUAL - DATED DECEMBER 2005)
 TIME 09:07:44

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

SITES 01/01/2005 Phil Caslin, sec4,T106N,R75W 2.9 H5
 SAVMOV 0 101
 SAVMOV 101 1 1
 STRUCTURE

76 0
 84 13.8
 86 17.2
 88 21.3
 90 25.9
 94 35.9

ENDTABLE

WSDATA 5A1 AC 84 1856 18669 2.98
 PDIRECT 2.3 4.20
 POOLDATA ELEV 86 86 71 71 SC
 PSINLET 1 15.7
 PSDATA 1 102 42 .025 72
 ASDATA 41 150 250 2 .06 2
 ASINSURF 41 .035
 ASINLET 41 0.0 0.0 150 0.0 3
 200 10

ENDTABLE

ASEXSURF 41 .035
 .65 0
 3
 2 0
 .02

ENDTABLE

ASEXIT 41 N 80
 BTMWIDTH FEET 100
 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 03/07/2012 Phil Caslin, sec4,T106N,R75W WSID=
 VER 2005.1.05 SUBW= A
 TIME 09:07:44 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
84.00	2.90	18669.00	2.98	0.00
SITEDATA- PERM POOL	CREST PS	FP SED	VALLEY FL	378?
86.00	86.00	0.00	71.00	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	102.00	42.00	0.00	
PS N	KE	WEIR L	TW EL	
0.025	1.00	15.70	72.00	
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	150.00	250	
AUX.DATA - INLET N	SIDE SLOPE	EXIT N	EXIT SLOPE	ACTUAL AUX?
0.035	2.00	0.035	0.060	NO
BTM WIDTH - BW1	BW2	BW3	BW4	BW5
ft 100.00	0.00	0.00	0.00	0.00

AUXILIARY SPILLWAY RATING DEVELOPED USING WSPVRT.

1SITES -----
 XEQ 03/07/2012 Phil Caslin, sec4,T106N,R75W WSID=
 VER 2005.1.05 SUBW= A
 TIME 09:07:44 SITE = S 1 PASS= 1 PART= 2

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

PERM POOL	86.00 FT	86.2 ACFT	17.20 AC	0.0 CFS
CREST PS	86.00 FT	86.2 ACFT	17.20 AC	0.0 CFS
SED ACCUM	86.00 FT	86.2 ACFT	17.20 AC	0.0 CFS
START ELEV	86.00 FT	86.2 ACFT	17.20 AC	0.0 CFS

NRCS-PSH D= 24.00 HR P= 2.30 IN Q= 0.96 IN DA= 2.90 SM
TC= 2.80 HR CN= 84.00 VOL= 149.1 ACFT

PEAK = 437.7 CFS, AT 13.7 HRS.

ROUTED RESULT - HYD TYPE EMAX VOL-MAX AMAX QMAX
NRCS-PSH 89.03 FT 147.8 ACFT 23.66 AC 155.0 CFS

PS STORAGE 61.6 ACFT, BETWEEN AUX. CREST AND SED. ACCUM ELEVATIONS.

DRAWDOWN (DDT) TEST 86.00 FT 86.2 ACFT 0.00 CFS
CONTROL IS 0.000 DETENTION STORAGE

DRAWDOWN TIME = 1.80 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	86.00	0.00	0.00	0.00	86.20	17.20
2	86.53	18.85	18.85	0.00	95.63	18.29
3	87.06	53.30	53.30	0.00	105.63	19.38
4	87.59	97.92	97.92	0.00	116.22	20.47
					FULL CONDUIT FLOW, ELEV = 88.12 FT	
5	88.12	150.76	150.76	0.00	127.38	21.59
6	88.86	154.25	154.25	0.00	143.85	23.28
7	89.59	157.57	157.57	0.00	161.57	24.97
8	90.33	160.83	160.83	0.00	180.53	26.72
9	91.06	164.02	164.02	0.00	200.83	28.56
10	91.80	167.14	167.14	0.00	222.48	30.39
11	92.53	170.22	170.22	0.00	245.47	32.23
12	93.27	173.23	173.23	0.00	269.81	34.06
13	94.00	176.20	176.20	0.00	295.50	35.90

1SITES

XEQ 03/07/2012 Phil Caslin, sec4,T106N,R75W WSID=
VER 2005.1.05 SUBW= A
TIME 09:07:44 SITE = S 1 PASS= 1 PART= 3

AUX. CREST 89.03 FT 147.8 ACFT 23.66 AC 155.0 CFS

PS STORAGE 61.6 ACFT, BETWEEN AUX. CREST AND SED. ACCUM ELEVATIONS.

START ELEV 86.00 FT 86.2 ACFT 17.20 AC 0.0 CFS

EFFECTIVE HEIGHT(H)= 18.0 FEET, PRODUCT= 2664. (H * STORAGE AT CREST AUX.).

INPUT DESIGN CLASS = A1 = LT 3000. PRODUCT.

NRCS-FBH D= 24.00 HR P= 4.20 IN Q= 2.55 IN DA= 2.90 SM
 TC= 2.80 HR CN= 84.00 VOL= 394.2 ACFT

PEAK = 1210.7 CFS, AT 13.7 HRS.

 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	86.00	0.00	0.00	0.00	86.20	17.20
2	86.53	18.85	18.85	0.00	95.63	18.29
3	87.06	53.30	53.30	0.00	105.63	19.38
4	87.59	97.92	97.92	0.00	116.22	20.47
FULL CONDUIT FLOW, ELEV = 88.12 FT						
5	88.12	150.76	150.76	0.00	127.38	21.59
6	88.24	151.38	151.38	0.00	129.83	21.85
7	88.35	151.90	151.90	0.00	132.30	22.11
8	88.46	152.42	152.42	0.00	134.81	22.36
9	88.58	152.94	152.94	0.00	137.34	22.62
10	88.69	153.46	153.46	0.00	139.90	22.88
11	88.80	153.98	153.98	0.00	142.50	23.14
12	88.91	154.49	154.49	0.00	145.12	23.40
13	89.03	155.01	155.01	0.00	147.77	23.66
14	89.27	169.00	156.14	12.87	153.72	24.23
15	89.52	191.35	157.26	34.10	159.82	24.80
16	89.97	287.38	159.25	128.13	171.15	25.83
17	90.52	473.36	161.66	311.70	185.66	27.20
18	91.51	1002.99	165.94	837.05	213.95	29.68
19	92.76	1892.76	171.15	1721.62	252.79	32.79
20	94.00	3025.59	176.20	2849.39	295.50	35.90

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	-100.	0.	-20.0	0.035	**	**	**	INLET
2	0.	150.	0.0	0.035	**	**	**	CREST
3	150.	230.	6.0	0.035	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 3 used in computing exit channel velocities.

DRAWDOWN USING FREEBOARD STORM FOLLOWS, STARTING AT ELEVATION 89.03 FT.

DRAWDOWN (DDT) TEST 86.00 FT 86.2 ACFT 0.00 CFS
CONTROL IS 0.000 DETENTION STORAGE

DRAWDOWN TIME = 1.77 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	100.0	91.32	208.3	29.2	2.30	60.6

PEAK - CFS	Q-PS	Q-AUX.	Q-TOT.
DISCHARGE =	165.1	732.6	897.7

	CRITICAL DEPTH FT	CRITICAL VELOCITY FT/SEC	CRITICAL SLOPE-Sc FT/FT	25% OF Q Sc FT/FT
AUXILIARY SPILLWAY ---	1.18	6.08	0.017	0.023

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

Aux. Spillway Discharge = 733. cfs; Bottom Width = 100. ft

REACH NO.	FROM STA	TO STA	SLOPE %	MANNING'S n	VELOCITY ft/s	TOTAL STRESS lb/ft^2	EFFECTIVE STRESS lb/ft^2
3	150.	230.	6.00	0.035	8.91	3.03	1.843

AUXILIARY SPILLWAY DURATION FLOW =	9.4 HOURS
ATTACK, OE/B =	1.7 ACFT/FT

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

EXIT CHANNEL FLOW SUPERCRITICAL: MAX VELOCITY= 8.9 FT/SEC
EXIT SLOPE = 0.060 FT/FT
FLOW DEPTH = 0.8 FT

>>>> NHCP378 RUN - MINIMUM DEPTH, DESIGN FLOW TO TOP OF DAM; 1.00 FT REQUIRED
FOR THIS PASS. NEW TOP OF DAM ELEVATION = 92.32.

ROUTED RESULTS	BTM WIDTH FT	MAX ELEV FT	VOL-MAX ACFT	AREA-MAX AC	AUX.HP FT	VOL-AUX. ACFT
MINIMUM AUX.	100.0	92.32	239.2	31.7	3.31	91.5

PEAK - CFS	Q-PS	Q-AUX.	Q-TOT.
DISCHARGES =	169.4	1412.5	1581.9

	CRITICAL DEPTH FT	CRITICAL VELOCITY FT/SEC	CRITICAL SLOPE-Sc FT/FT	25% OF Q Sc FT/FT
AUXILIARY SPILLWAY ---	1.81	7.51	0.015	0.020

Inflow Hyd 1 PSH-Peak = 154.98 CFS at 16.31 hrs., Location Point

Inflow Hyd 1 FBH-Peak = 897.72 CFS at 14.54 hrs., Location Point
HYDOUT 1

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

Phil Caslin, sec4,T106N,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 ID	SUBWS ID	SUBWS DA (SQ MI)	CURVE NO.	TC (HRS)	TOTAL DA (SQ MI)	TYPE DESIGN	STRUC CLASS	<<<
	S 1	A	2.90	84.	2.80	2.90	378CR	A1	

PASS NO.	DIA./ WIDTH (IN/FT)	AUX.CREST ELEV (FT)	BTM. WIDTH (FT)	MAX. HP (FT)	MAX. ELEV (FT)	EMB. VOL. (CY)	INTEGR.* DIST. (FT)	EXIT* VEL. (FT/SEC)	TYPE HYD
1	42.0	89.0	100.0	3.3	92.3	0.	0.	8.9	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.

NRCS SITES VERSION 2005.1.05 ,01/01/2005
FILES

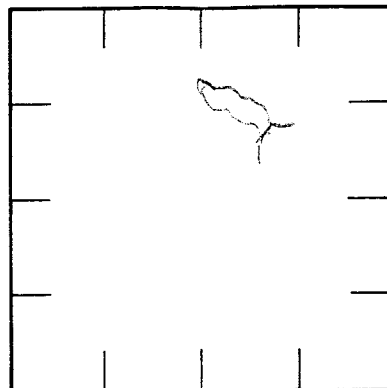
INPUT = C:\caslin\60-42.D2C
OUTPUT = C:\caslin\60-42.OUT
DATED 03/07/2012 09:07:44

GRAPHICS FILES GENERATED

DRAINAGE AREA	ANNUAL YIELD	PEAK RUNOFF	EMERG. SPLY. CAPACITY	WATER DEPTH	SURFACE AREA	SEDIMENT STORAGE	TOTAL STORAGE
ACRES	AC. FT.	25-YR.	C. F. S.	FEET	ACRES	AC. FT.	AC. FT.
1856	68	1211	1412	14	17	—	86

NOTE: Since minimum construction inspection is scheduled, it is necessary to hire a competent contractor.

The contractor can specify lifting lugs on the CMP to prevent damage to coating during installation.



SWNE sec. 4 T. 106N R. 75W
Lynn Co. County

Principal spillway
El. 92.0

Emergency spillway, El. 89.0

12

3:1

C of dam

Allowance for settlement 5%

3:1

Strip sod and brush from dam foundation to minimum depth

Cutoff trench, (approx. depths shown on Profile Along C of Dam)

El. 86.0

S.D. CONSTRUCTION AND MATERIAL SPECIFICATIONS:

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

OPERATOR: Phil Caslin

CONSERVATION DISTRICT: _____

Class "A" Hazardous

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

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

**WATER RIGHTS
PROGRAM**



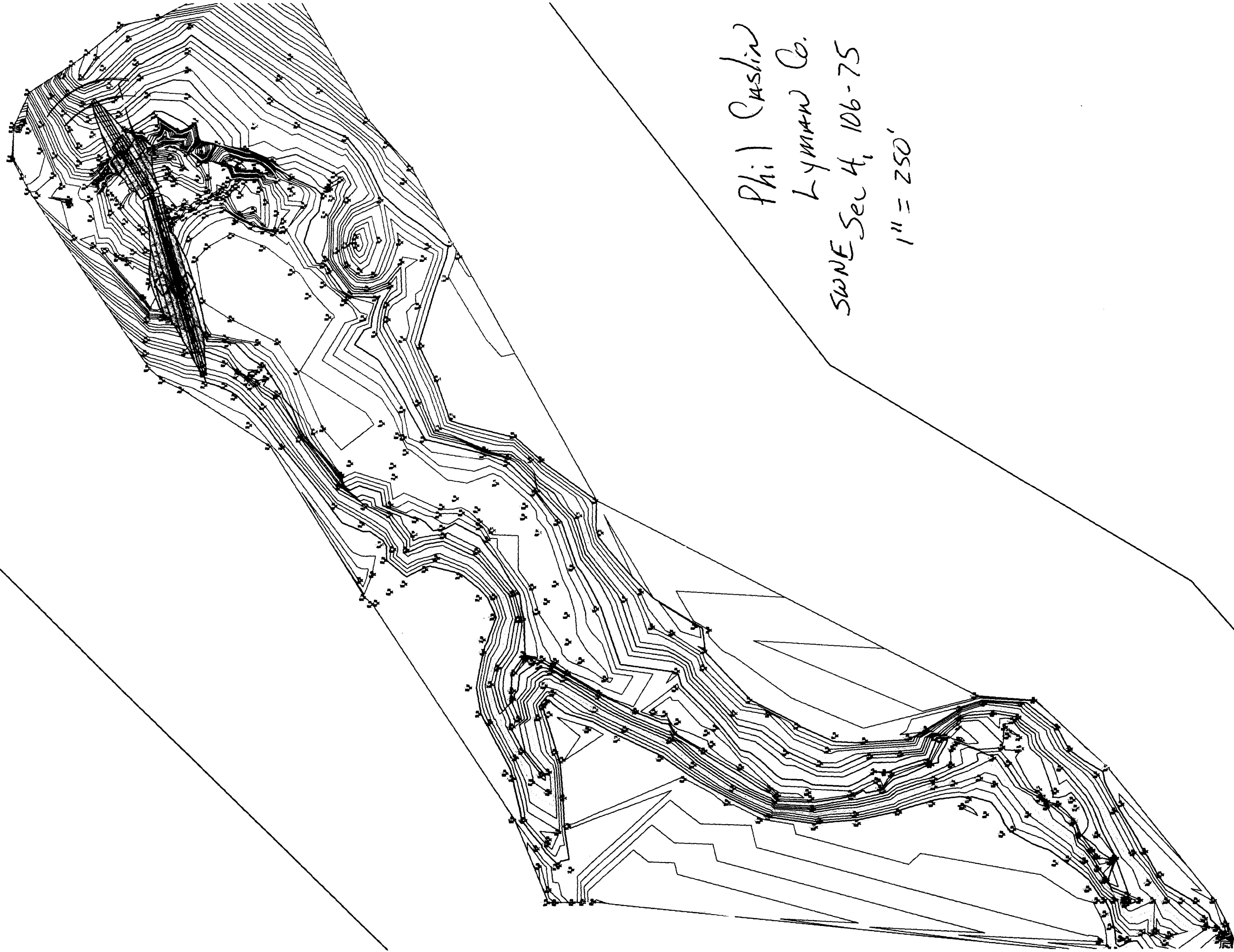
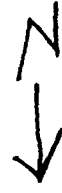
SKETCH PLAN OF DAM AND RESERVOIR AREA

Approximate scale 1" = _____

REFERENCE: GUIDE PLAN NO. 1.0

JOB PLAN NO. 1.0

100 ft Em. Spill
El. 89.2



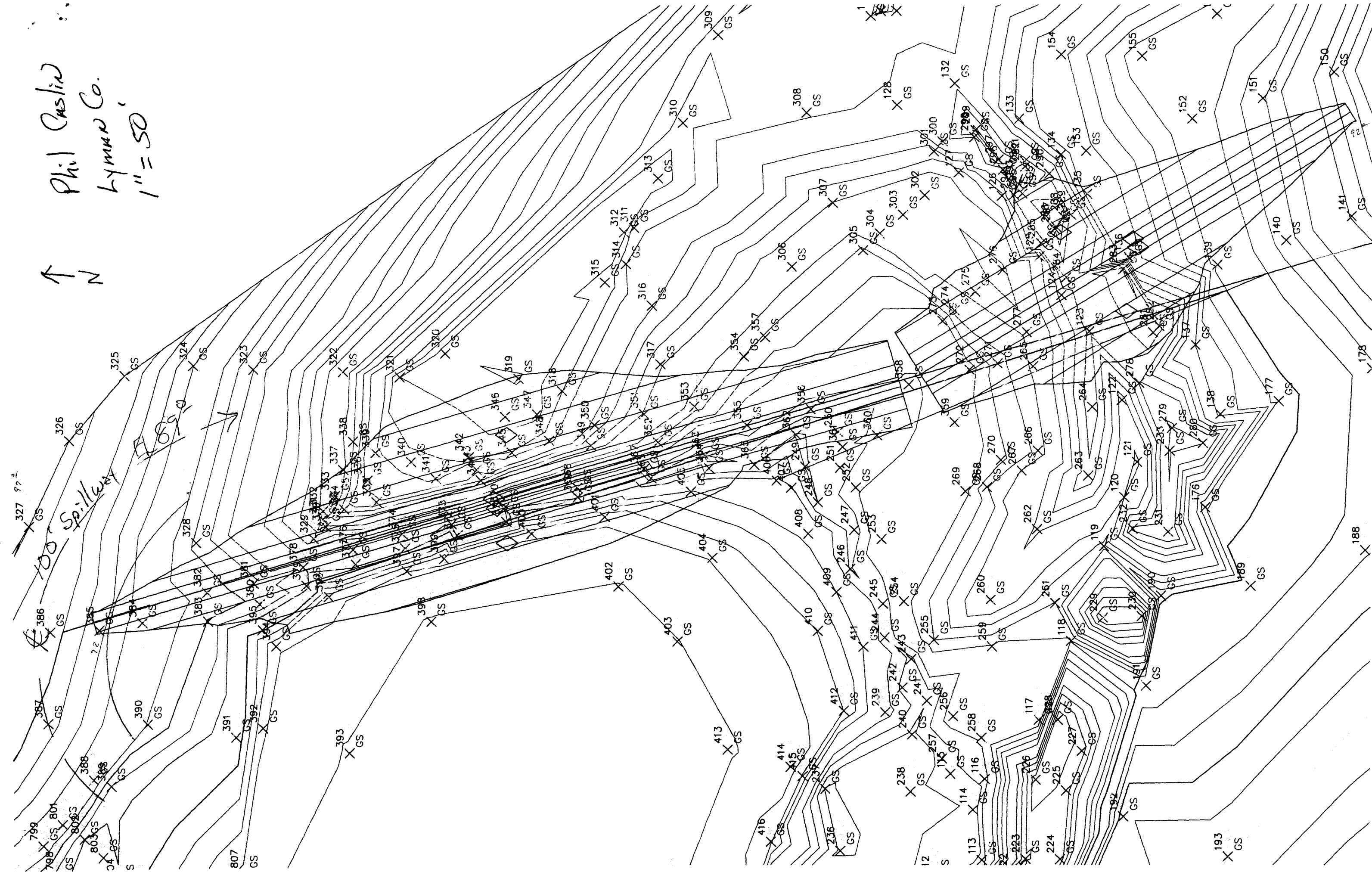
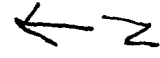
Phil Caslin

Lyman Co.

SWNE Sec 4, 106-75

1" = 250'

Phil Caslin
Lyman Co.
1" = 50'



The diagram illustrates a dam cross-section with the following features and annotations:

- Top of Dam:** A crest width of 12 units. The top elevation after settlement is noted as El. 92'. An allowance for settlement of 5% is specified.
- Slopes:** Both upstream and downstream slopes are indicated as 3:1 normal to the centerline (CL) of the dam.
- Centerline (CL):** A vertical dashed line representing the CL of the dam.
- Spillway Structure:** Located on the left side, it includes a principal spillway at El. 86' and an emergency spillway at El. 89'. A berm, if required, has a 3:1 slope normal to the CL.
- Riser and Baffle Plate:** A 60" diameter riser is shown with a 93° angle. A trash rack and baffle plate are located near the base of the riser, with a note referring to job plan no. 6.4.
- Foundation and Seepage Control:** The foundation consists of a concrete slab at El. 78'. Below it, there are antiseep collars and a sand seep collar. A 6% grade is shown for the material below the slabs.
- Pipe Installation:** A 100' length of 42" diameter pipe is shown passing through the dam body.
- Other Notes:** A note mentions "Locate principal spillway pipe as directed by Testation". Another note refers to "Job plan no. 5.3" regarding the 60" dia. riser.

Prefabricated elbow $^{\circ}$

% gr.

EI.

EI.

**OUTLET DETAIL WITHOUT
PIPE SUPPORT**

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 vinyl
clad 2nd spiral

TABLE OF QUANTITIES

[illegible]

APPLICABLE STANDARD S.C.S. SPECIFICATIONS

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

LOCATION

**CORRUGATED METAL PIPE
DROP INLET PRINCIPAL SPILLWAY**

OPERATOR Phil Castle

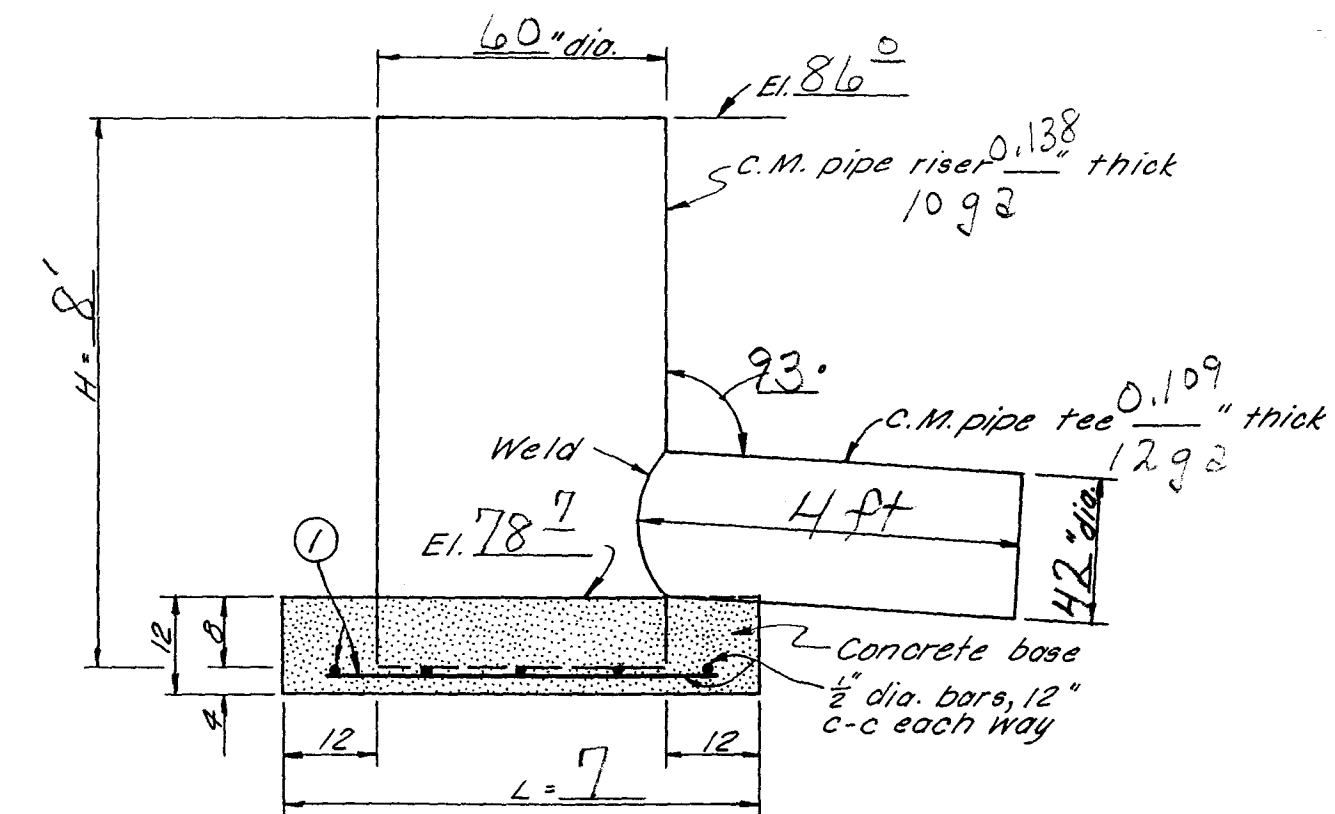
CONSERVATION DISTRICT

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

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

REFERENCE: GUIDE PLAN NO. 2.0

Rev. 8/80
JOB PLAN NO. 2.0



REFERENCE: GUIDE PLAN NO. 5.3

RISER DIA. IN.	BAR SIZE	MARK	TYPE	NO. REQ'D.	LENGTH FT.-IN.	TOTAL LENGTH FT.-IN.	TOTAL WT. LB.	C IN.	L FT.-IN.
60	4	1	STR.	14	6-6	91-0	61	6	7-0

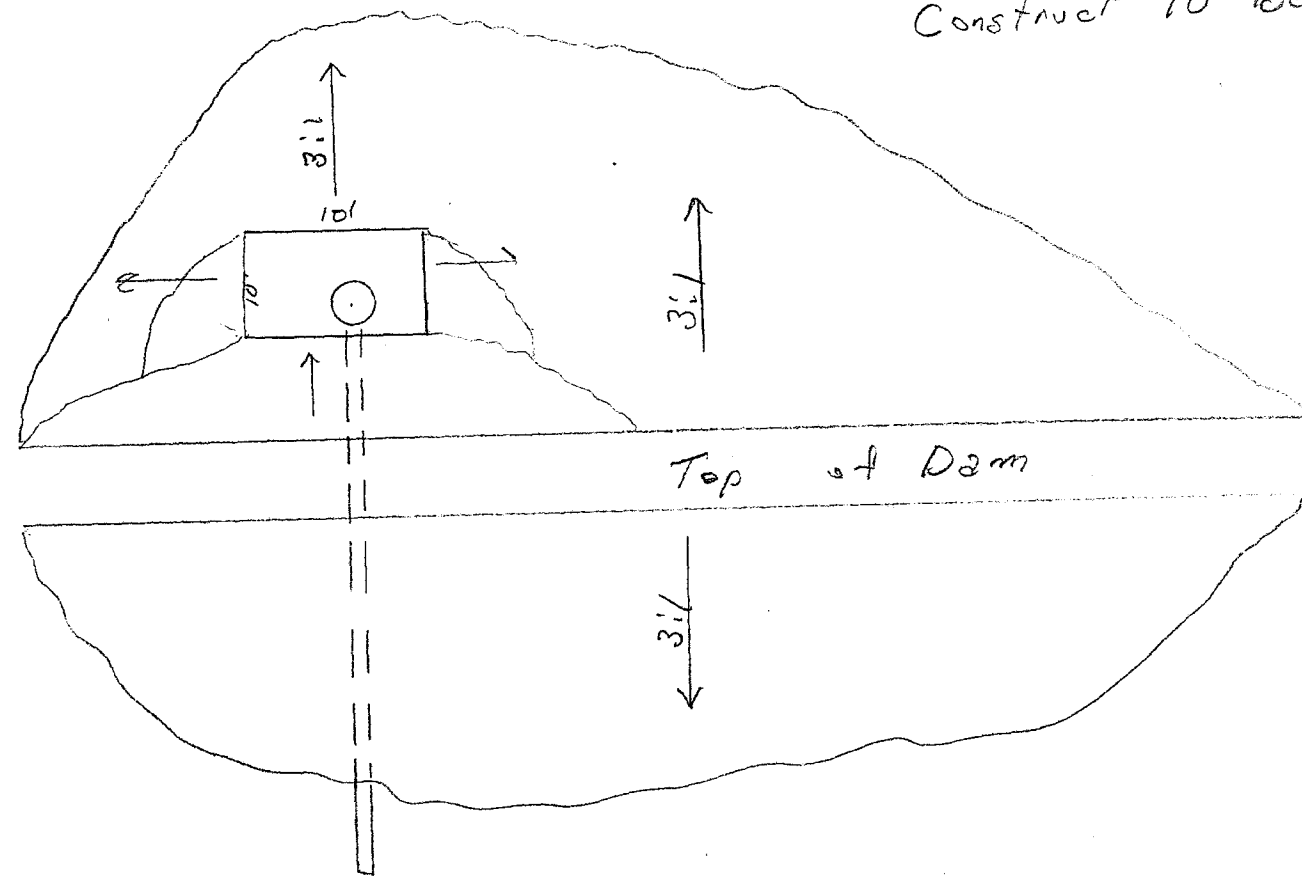
ITEM	UNIT	QUANTITY
CONCRETE	CU.YD.	1.9
REINFORCING STEEL	LB.	61

[illegible]

OPERATOR: <u>Phil Castlin</u>	
CONSERVATION DISTRICT: _____	
Date _____ Designed _____ Drawn _____ Traced _____ Checked _____	Approved by _____ Title _____ Title _____ Sheet No. _____ Drawing No. _____

JOB PLAN NO. 5.3

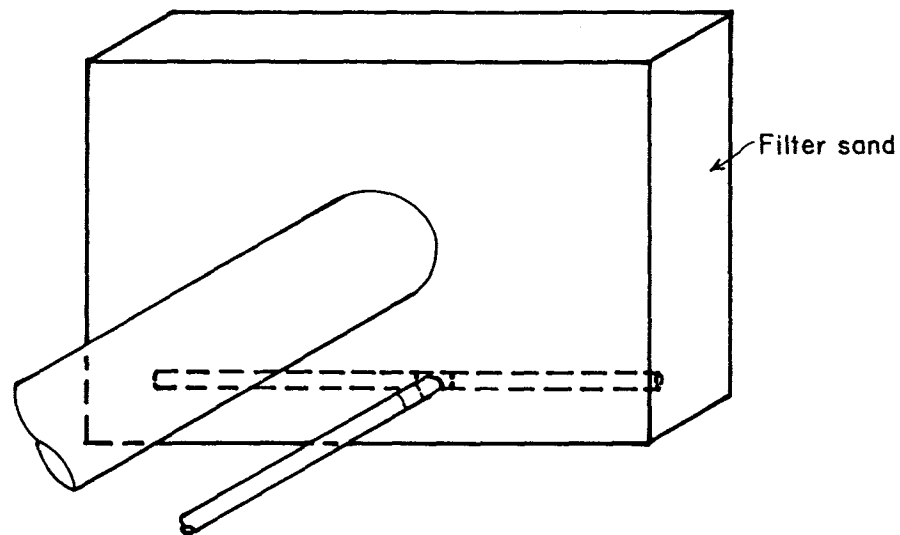
Construct 10' Berm at Riser



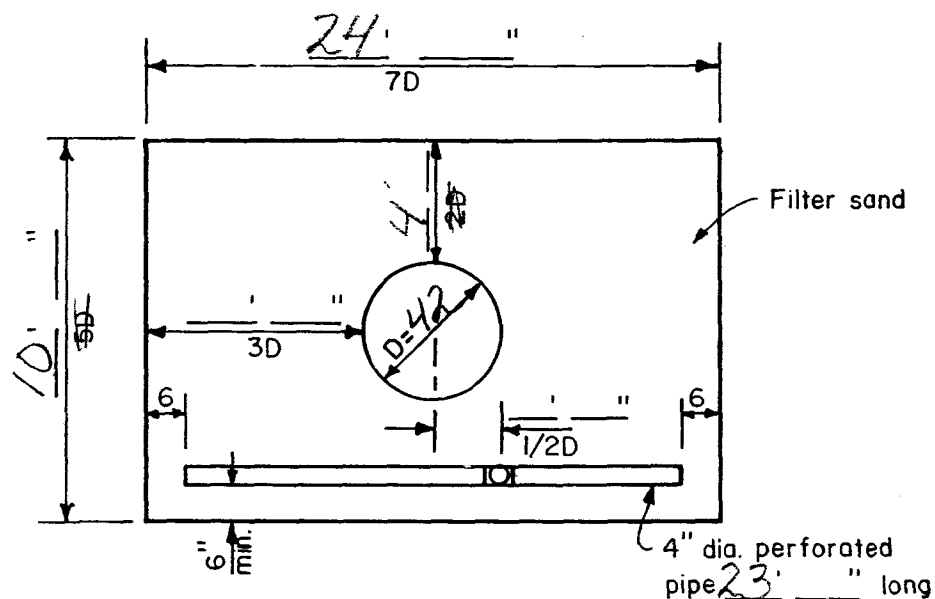
PLAN VIEW

Phil Caslin

DK-1



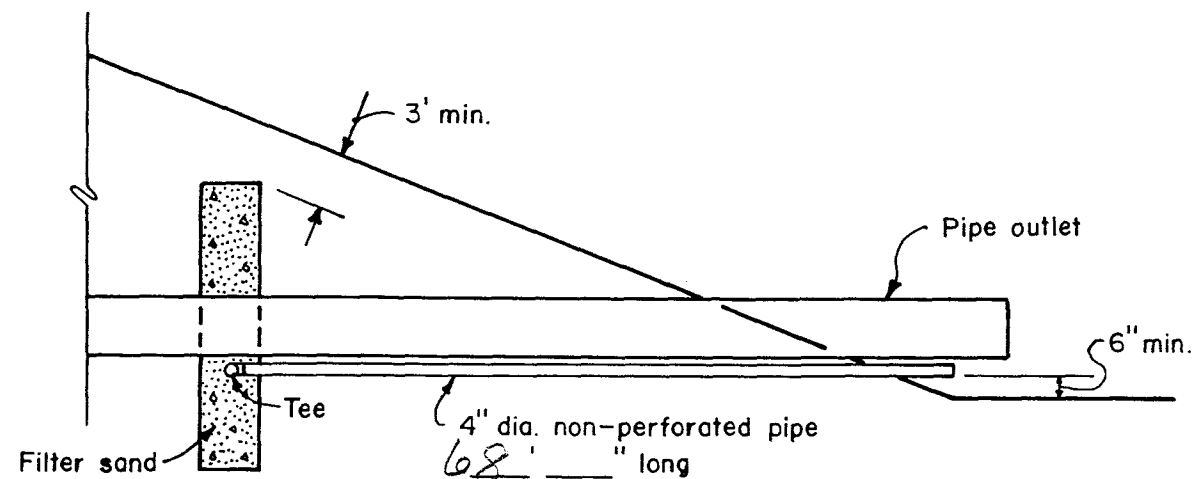
ISOMETRIC VIEW



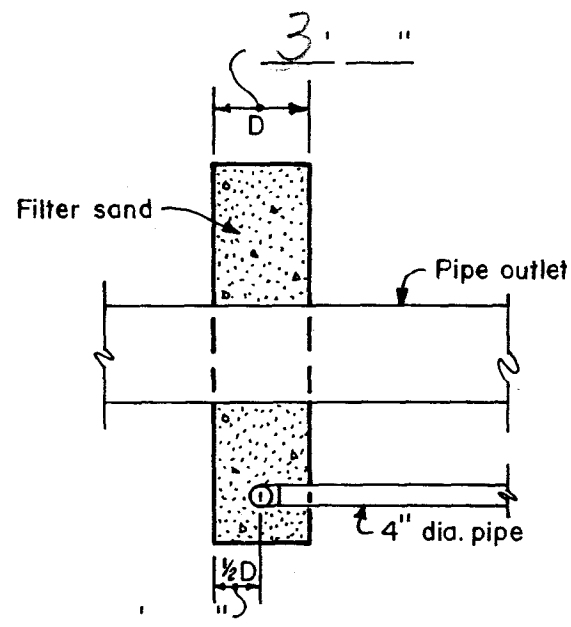
UPSTREAM VIEW

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 SD-9
27cy

Sec. _____, T. _____, R. _____

County _____

LOCATION

SAND ANTISEEP COLLAR

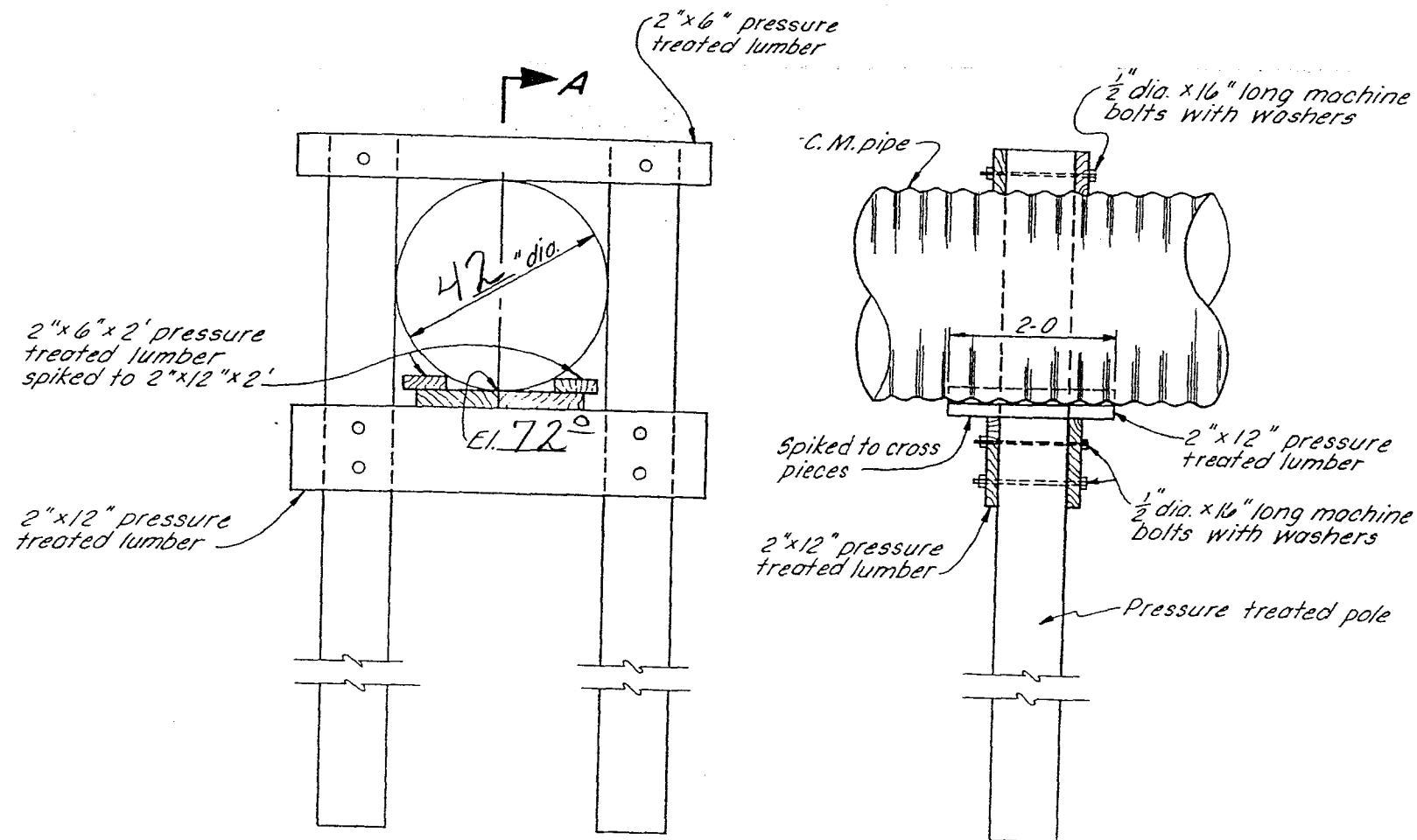
OPERATOR Phil Caslin

CONSERVATION DISTRICT _____

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

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

JOB PLAN NO. 3.8



ELEVATION
SECTIONAL ELEVATION A-A

TABLE OF QUANTITIES

ITEM	LENGTH FOR 42" DIA. C.M. PIPE	UNIT	QUANTITY
PRESSURE TREATED POLE 10" DIA.	12-0	EACH	2
2" X 12" PRESSURE TREATED LUMBER	16-0	EACH	2
2" X 6" PRESSURE TREATED LUMBER	6-0	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

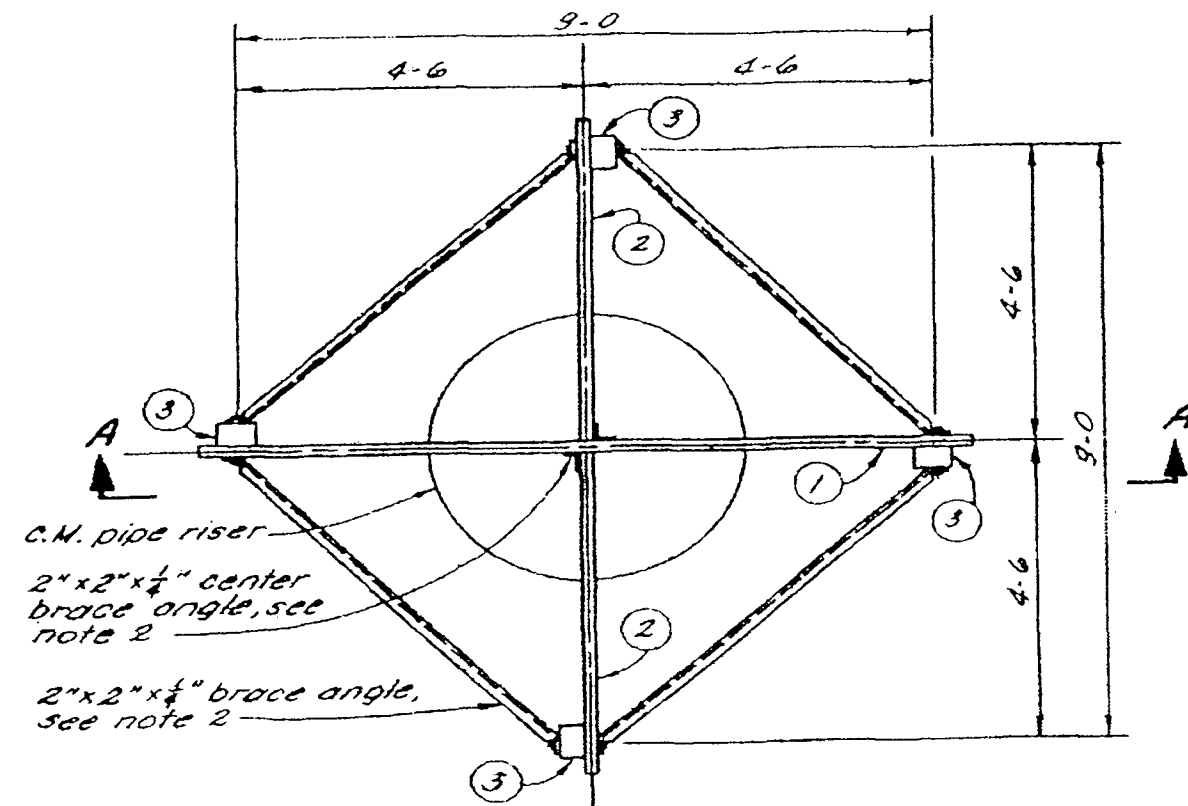
OPERATOR: Phil Caslin

CONSERVATION DISTRICT: _____

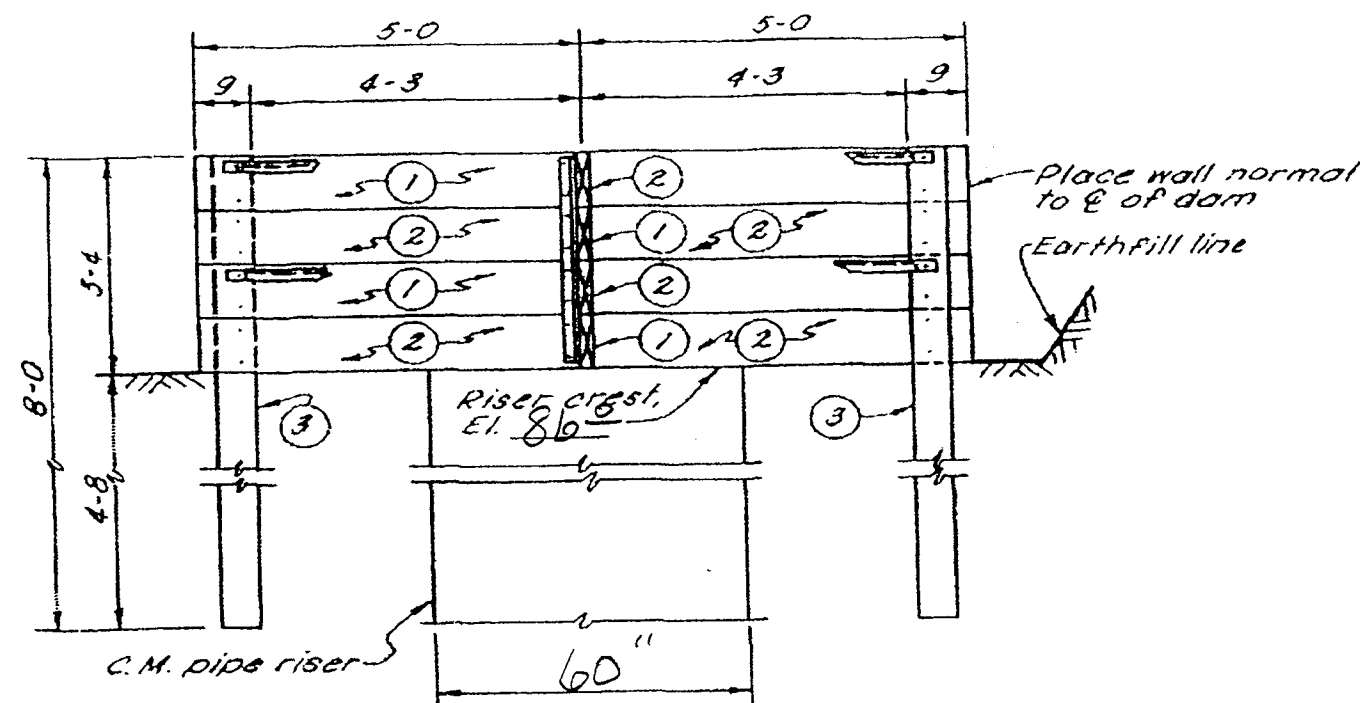
Designed _____ Drawn _____ Traced _____ Checked _____	Date _____ Approved by _____ Title _____ Title _____ Sheet No. _____ Drawing No. _____
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REFERENCE: GUIDE PLAN NO. 4.0

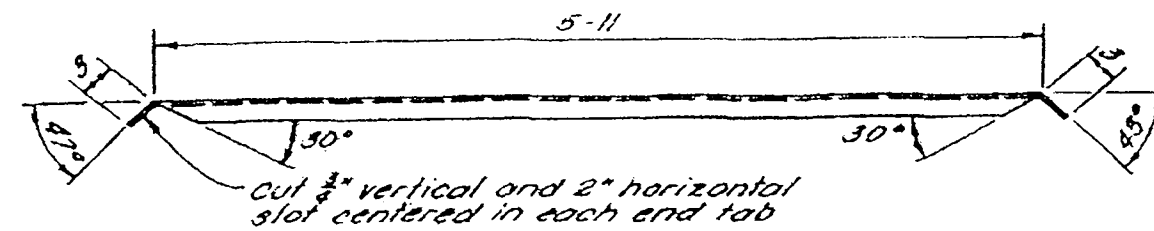
JOB PLAN NO. 4.0



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: <u>Phil Caslin</u>	
CONSERVATION DISTRICT: _____	
U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	
Designed: _____	Approved by: _____
Drawn: _____	Title: _____
Traced: _____	Sheet: _____
Checked: _____	Drawing No. _____

JOB PLAN NO. 6.4

5,N-29,073.6-40

Water Permit Application No 2687-2

Phillip Castin

Top of Dam Elev. - 92
 2nd Spillway Elev. - 89
 P. Spillway Elev. - 86
 D/S Emb. Toe Elev. - 71

Cat. 3 - Low Hazard Dam

Ht. = 21 ft.

Normal Storage Capacity - 86 Ac.-ft
 Int. Storage Capacity - 150
 Max Storage Capacity - 228

Int. Capacity x EFD Ht. = $150 \times 18 = 2700 < 3000 \therefore$ 25 year
Minimum Spillway Design

From USGS WRI 98-4055 "Tech. Ser. Est. Peak Flows ... in SO"
 Region D DA = 1856 Ac = 2.9 mi.²

$$\begin{aligned} Q_{25} &= 676 CA^{.585} \\ &= 676 (2.9)^{.585} \\ &= \underline{1260 \text{ cfs}} \end{aligned}$$

$$\begin{aligned} Q_{100} &= 1270 CA^{.663} \\ &= 1270 (2.9)^{.663} \\ &= \underline{2570 \text{ cfs}} \end{aligned}$$

Secondary Spillway Capacity

$$\begin{aligned} Q &= CLH^{3/2} \quad C = 2.6 \\ &= (2.6)(100)^{1.5} \quad L = 100 \\ &= \underline{1350 \text{ cfs}} \end{aligned}$$

P. Spillway = 170 cfs

NRCS Annual Yield

DA = 1856 Ac CN = 84 ISO 2

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

$$\begin{aligned} 80\% \text{ chance} &= 0.44 \\ 0.44 \times 1856/2 &= \underline{68 \text{ Ac.-ft}} \end{aligned}$$

$$\begin{aligned} 50\% \text{ chance} &= 1.0 \\ 1.0 \times 1856/2 &= \underline{154 \text{ Ac.-ft}} \end{aligned}$$

$$\begin{aligned} 10\% \text{ chance} &= 3.6 \\ 3.6 \times 1856/2 &= \underline{550 \text{ Ac.-ft}} \end{aligned}$$



**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. 2687-2, Kennebec Grazing Association**

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. 2687-2, Kennebec Grazing Association, c/o Phillip Caslin, 8508 W. Grinn Place, Sioux Falls SD 57106.

The Chief Engineer is recommending APPROVAL of Application No. 2687-2 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. 2687-2 authorizes an impoundment with a storage capacity of 86 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
August 23, 2012

REPORT ON
WATER PERMIT APPLICATION No. 2687-2
Kennebec Grazing Association
c/o Phillip Caslin
August 7, 2012

Water Permit Application No. 2687-2 has been filed by the Kennebec Grazing Association c/o Phillip Caslin to impound 86 acre-feet of water from runoff by reconstructing an existing dam located in the SW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 4-T106N-R75W, in Lyman 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. 2687-2 is approved.

The dam will be 21 feet high with a normal storage capacity of 86 acre-feet with a reservoir level at the primary spillway elevation, and a maximum storage capacity of 288 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 25-year frequency event.

The dam has a drainage area of 1856 acres or 2.90 square miles. The dam is designed to have a 60 inch diameter CMP riser with a 42 inch diameter CMP barrel and 6.0 feet of freeboard as the primary spillway, and a 100 foot wide earthcut secondary spillway with 3 feet of freeboard. A 25 year frequency event produces a peak runoff of approximately 1260 cfs and a 100 year frequency event produces a peak runoff of approximately 2570 cfs. The earthcut spillway will have a capacity of approximately 1350 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 68 acre-feet. The annual yield with a 50 percent chance of occurrence, or 1 out of 2 years, is expected to be 154 acre-feet and the annual yield with a 10 percent chance, or 1 out of 10 years, is expected to be 550 acre-feet.

The dam will be located in the SW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 4-T106N-R75W on an unnamed tributary to Medicine Creek, about 6 miles upstream of the confluence of the unnamed tributary and Medicine Creek. There are no existing Water Permits/Rights filed on the unnamed tributary between the proposed dam and Medicine Creek.

Conclusions:

1. Water Permit Application No. 2687-2 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. 2687-2.


Timothy G. Schaal, P.E.
Natural Resources Engineer IV



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

August 23, 2012

Kennebec Grazing Association
c/o Phillip Caslin
8508 W. Grinn Place
Sioux Falls, SD 57106

Dear Mr. Caslin:

We have reviewed the plans and specifications for your dam project located in the SW ¼ NE 1/4 of Sec. 4-T106N-R75W, in Lyman 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. 2687-2 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 dam will be classified as a small size Category 3, Low Hazard dam with a dam height of 21 ft. and a normal storage capacity of 86 acre-feet and a maximum storage capacity of 228 acre-feet.

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

Sincerely,

A handwritten signature in black ink, reading "Timothy G. Schaal".

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

c: Jesse Lisburg, USFWS
Dave Konechne

RECEIVED

SEP 12 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:

September 10, 2012

Cost of Printing \$30.75

Marylinn Baker
(Signature)

Bookkeeper
(Title)

9-11-12
(Date Signed)

Monday, September 10, 2012

800 Public Notice 800 Public Notice

NOTICE OF APPLICATION NO. 2687-2 to Appropriate Water

Notice is given that Kennebec Grazing Association, c/o Phillip Caslin, 8508 W Grinn Place, Sioux Falls SD 57106 has filed an application for a water permit to impound 86 acre-feet of water from runoff by reconstructing a dam located in the SW 1/4 NE 1/4 Section 4 with water impounded in the SW 1/4 NE 1/4, N 1/2 NW 1/4, SE 1/4 NW 1/4 Section 4; all in T108N-R75W. This application requests impoundment of sufficient water to maintain water to the outlet given above. A 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. 2687-2 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 the above Water act on this application, as recommended, unless a copy of information pertaining to this application. Steven M. Pinner, Secretary, Department of Environment and Natural Resources.

Published once at the total approximate cost of \$30.75.

Publisher's Affidavit of Publication
RECEIVED

SEP - 3 2012

WATER RIGHTS
PROGRAM

STATE OF SOUTH DAKOTA)
COUNTY OF LYMAN)SS

Connie Penny, of said county and state being duly sworn on her oath says: The Lyman County Herald is a weekly newspaper of general circulation and published in Presho, Lyman County, and State of South Dakota; and has been such newspaper during the times hereinafter mentioned; That said newspaper is a legal weekly, that it has a bonafide circulation of more than 200 copies weekly, that it has been published within said County of Lyman more than fifty-two successive weeks next prior to publication of the notice hereinafter mentioned and maintained at the place of publication; That I, the undersigned am editor of said newspaper, in charge of the advertising department thereof, and have personal knowledge of all the facts stated in this affidavit; that the advertisement headed:

Notice of Application No. 2687-2
86 Lines

a printed copy of which is hereto attached and published in the said newspaper for
1 consecutive week(s).

The first publication of said notice in said newspaper aforesaid was on
Wednesday, the 29 day of Aug, A.D., 2012

and that the succeeding publications were severally
Wednesday, the _____ day of _____ A.D., 2012
Wednesday, the _____ day of _____ A.D., 2012
Wednesday, the _____ day of _____ A.D., 2012
Wednesday, the _____ day of _____ A.D., 2012
Wednesday, the _____ day of _____ A.D., 2012
Wednesday, the _____ day of _____ A.D., 2012
Wednesday, the _____ day of _____ A.D., 2012
Wednesday, the _____ day of _____ A.D., 2012

and the last publication on Wednesday, the 29 day of Aug, 2012,
that the full sum of fees charged for publishing the same, to-wit; the sum of
\$ 26.14 insures solely to the editor of The Lyman County Herald.
That no agreement or understanding for any division thereof had been made with any
other person, and that no part thereof has been agreed to be paid to any person
whatsoever.

Connie Penny
me J Sm

MICHAEL J SPRENGER
NOTARY PUBLIC
SOUTH DAKOTA

Subscribed and sworn to before me this 30 day of Aug, 2012

My Commission expires _____
MICHAEL J. SPRENGER
NOTARY PUBLIC - SOUTH DAKOTA
My Commission Expires
March 27, 2015

NOTICE OF
APPLICATION NO.
2687-2
to Appropriate Water

Notice is given that Kennebec
Grazing Association, c/o Phillip
Caslin, 8508 W Grinn Place,
Sioux Falls SD 57106 has filed
an application for a water permit
to impound 86 acre-feet of water
from runoff by reconstructing a
dam located in the SW 1/4 NE 1/4
Section 4 with water impounded
in the SW 1/4 NE 1/4, N 1/2 NW
1/4, SE 1/4 NW 1/4 Section 4; all
in T106N-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.
2687-2 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 10, 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 \$26.14



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

August 23, 2012

Capital Journal
PO Box 878
Pierre SD 57501

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 2687-2 to Appropriate Water. Please publish the notice once on August 29, 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 Kennebec Grazing Association, c/o Phillip Caslin, 8508 W Grinn Place, Sioux Falls SD 57106-4797 (Ph # 605-274-6658).

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

August 23, 2012

Lyman County Herald
PO Box 518
Presho SD 57568

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**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.

August 23, 2012

Kennebec Grazing Association
Phillip Caslin
8508 W Grinn Place
Sioux Falls SD 57106-4797

Dear Mr. Caslin:

Water Permit Application No. 2687-2 for livestock watering use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Lyman County Herald printed at Presho SD (Ph # 605-895-6397) 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

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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 August 29, 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. 2687-2 to Appropriate Water

Notice is given that Kennebec Grazing Association, c/o Phillip Caslin, 8508 W Grinn Place, Sioux Falls SD 57106 has filed an application for a water permit to impound 86 acre-feet of water from runoff by reconstructing a dam located in the SW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 4 with water impounded in the SW $\frac{1}{4}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 4; all in T106N-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. 2687-2 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 10, 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
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denr.sd.gov

OCT 29 2012

Kennebec Grazing Association
Phillip Caslin
8508 W Grinn Place
Sioux Falls SD 57106

Dear Mr. Caslin:

Enclosed is Water Permit No. 2687-2 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

2687-2

RECEIVED
DEC - 3 2012
WATER RIGHTS
PROGRAMNOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USEDate Nov. 30 - 2012TO: Water Rights Program, DENR
523 E. Capitol
Pierre, SD 57501-3181

FROM:

Phillip E. Caslin
(name)8508 W. Grinn. pl.
(address)Sioux Falls SD. 57106 605-730-3016
(city, state, zip) (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.

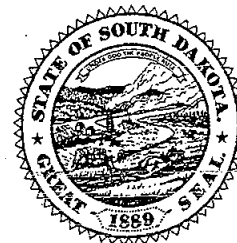
Water Permit No. 2687-2 states that the water use system is to be constructed by Sept-10-2017, and water is to be put to beneficial use by Sept-10-2021.
(date) (date)

The water use system was completed on Nov. 15, 2012.
(date)

Applying the water to beneficial use was completed on Nov 15, 2012.
(date)

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

Phillip E Caslin
Kenneth Heginess
(signature)





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

December 7, 2012

2687-2

Phillip E Caslin
8508 W Grinn Pl
Sioux Falls SD 57106

RE: Kennebec Grazing Association

Dear Mr. Caslin:

I am writing to acknowledge receipt of the "Notice of Completion of Works" form that you sent in to let us know that you are completed with the project authorized by Water Permit No. 2687-2.

The system is 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 your project and the staff inspection has no bearing on your water permit.

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. 2687-2
Missouri 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 Kennebec Grazing Association c/o Phillip Caslin of 8508 W. Grinn Place, Sioux Falls, SD 57106 holder of Permit No. 2687-2, bearing the priority of July 30, 2012 authorizing the storage of 86 acre-feet of the waters of runoff for fish & wildlife production and livestock water purposes, in Lyman County.

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

A. Works used to divert the water:

A 21 foot high earthen dam with a normal storage capacity of 86 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 21 foot high earthen dam with a normal storage capacity of 86 ac-ft. of water.

The system is in the following condition good. The point of diversion is located 1700 ft. south & 2300 ft. west of the NE corner of Section 4-T106N-R75W (SW ¼ NE ¼) (Lat. 44.01630, Long -99.83482). The works are capable of storing 86 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 21 foot high earthen dam with a normal storage capacity of 86 ac-ft. of water.

and the license should be issued for 86 acre-feet of storage.

Applicable permit qualifications have been complied with: Yes X

Exceptions to compliance are: none Date Report Completed: February 9, 2015



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

REPORT ON INSPECTION OF PERMIT NO. 2687-2

DATE OF INSPECTION: November 7, 2014

NAME & ADDRESS OF PERMIT HOLDER: Kennebec Grazing Association, c/o Phillip Caslin,
8508 W. Grinn Place, Sioux Falls 57106

DIVERSION POINT LEGAL LOCATION: 1700 ft. south & 2300 ft. west of the NE Corner of
Section 4-T106N-R75W (SW ¼ NE ¼) (Lat. 44.01630, Long. -99.83482).

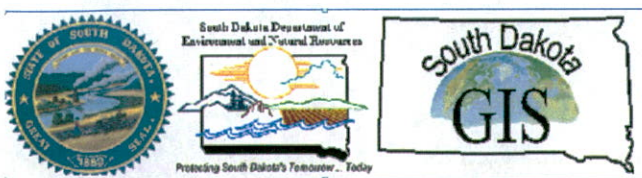
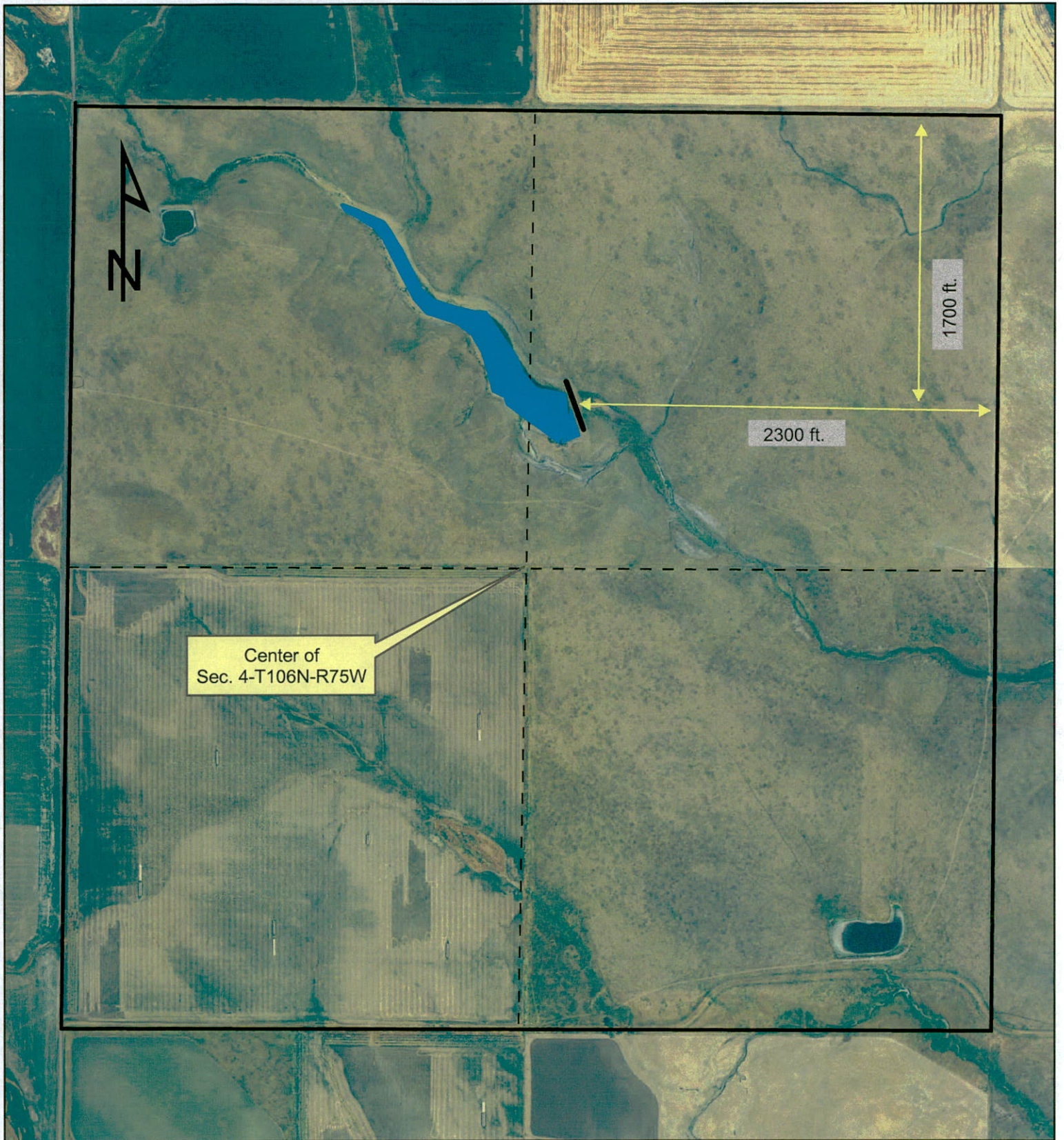
DAM INFORMATION:

- 1) Height to crest 21 feet
- 2) Height to primary spillway 15 feet
- 3) Height to secondary spillway 18 feet
- 4) Crest width 12 feet
- 5) Crest length XXX feet
- 6) Spillway length XXX feet
- 7) Spillway width 100 feet
- 8) Approx. storage (Normal) 86 acre-feet
- 9) Approx. storage (Maximum) 228 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 No. 2687-2



Timothy G. Schaal

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

2/9/15



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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FEB 17 2015

2687-2

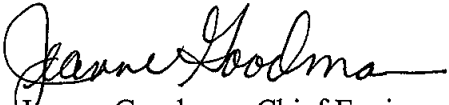
Phillip E Caslin
Kennebec Grazing Association
8508 W Grinn Place
Sioux Falls SD 57106

Dear Mr. Caslin:

Enclosed is Water License No. 2687-2. 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. 2687-2

(1) Kennebec Grazing Association, 8508 W Grinn Place, Sioux Falls SD 57106 made Application No. 2687-2, July 30, 2012 for a water permit to impound 86 acre feet of runoff water by reconstructing a dam located in Lyman County, South Dakota to be used for fish and wildlife propagation and livestock watering purposes. Permit No. 2687-2, with a priority date of July 30, 2012 was approved September 10, 2012 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before September 10, 2017 and for the application to beneficial use of said water on or before September 10, 2021.

Phillip Caslin on behalf of Kennebec Grazing Association submitted a "*Notice of Completion of Works and Application of Water to Beneficial Use*" on December 3, 2012. The "*Notice*" stated the water use system was completed and water placed to beneficial use on November 15, 2012.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to construction of the storage dam and is entitled to impound 86 acre feet of water for beneficial use.

The location of the storage dam (spillway) is:

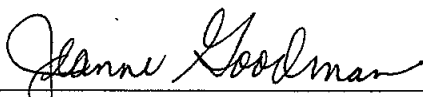
- 1,700 feet south and 2,300 feet west of the NE corner of Section 4, T106N, R75W (SW $\frac{1}{4}$ NE $\frac{1}{4}$). Water is impounded in the SW $\frac{1}{4}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ NW $\frac{1}{4}$ and SE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 4, T106N, R75W.

(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 Kennebec Grazing Association, 8508 W Grinn Place, Sioux Falls SD 57106 the holder and/or owner of Water Right No. 2687-2 is issued a license to appropriate water, the right to impound 86 acre feet of runoff water in a storage dam with the location specified in (2) of this license and used for fish and wildlife propagation and livestock watering purposes. Water Right No. 2687-2 carries a priority date of July 30, 2012.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 2687-2 and subject to the following qualifications:

- Water Right No. 2687-2 authorizes an impoundment with a storage capacity of 86 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, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

FEB 17 2015

date

