

WATER PERMIT NO. 7197-3

Name of Applicant: **Ree Valley Ranch, LLP**

Address: **4709 S Sundance Circle, Sioux Falls SD 57105**

Phone: **605 360-1952**

Amount of Water Claimed: **67 AF**

Total Acres: **NA**

Source of Water Supply: **runoff**

Water to be used for: **fish & wildlife propagation and livestock**

County: **Hyde**

Type of Waste Disposal System: **NA**

Location: **4 miles northeast of Highmore**

PRIORITY

Date Received: **4-30-10**

Application/License Fee: **\$700**

Corrected Application Received:

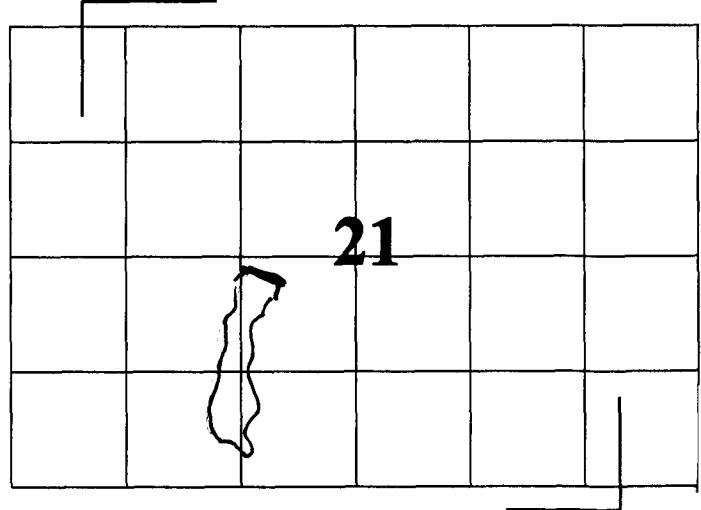
Period of Annual Use: **Jan 1 – Dec 31**

Remarks:

Diversion Point: **NE ¼ SW ¼ Sec 21-T113N-**

R71W

Water Impounded: **SW ¼ Sec 21-T113N-R71W**



Depth of Well: **NA**

Well Driller:

Remarks:

Type of Map: **plat**

Prepared by: **David E Konechne, PE**

Reviewed and the Number Assigned on: **5-10-10**

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. <u>7197-3</u> (office use only) Hydrologic Unit <u>10160009</u>
	Basin <u>James River</u>
	Newspaper <u>Higmore Herald P.O. Box 435</u> <u>605-852-2927</u> <u>57345</u>

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APR 30 2010

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	

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.)

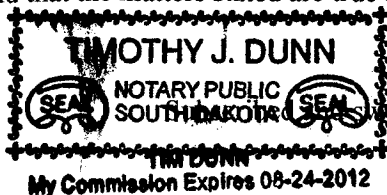
- Name of Applicant Ree Valley Ranch, LLP Phone 605-360-1952
(check one) ☒ Owner ☐ Tenant/lessee
Mailing Address 4709 S Sundance Circle Sioux Falls SD 57105
(Address) (City) (State) (Zip Code)
- Amount of water claimed _____ *CFS or _____ **GPM _____ ***AF
(*Cubic Feet per Second) (**Gallons per Minute) (**Acre Feet - storage capacity of dam/dugout or annual use if applicable)
- Source of water supply runoff
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) County Hyde
NE1/4SW1/4 Section 21 T113N R71W Water Impounded SW 1/4 Sec 21 T113N R 71W
- County or counties where water will be used Hyde
- 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)

See attached Sheets:

STATE OF SOUTH DAKOTA)

County of Hyde Lincoln) 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, Ree Valley Ranch, LLP, 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

Patrick J. Flynn Managing Partnerborn to before me this 28 day of April 20 10

Notary Public signature

**SOUTH DAKOTA
WATER PERMIT NO. 7197-3**

Date of first receipt of application April 30, 2010.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7197-3 to Ree Valley Ranch, LLP, c/o Patrick J Flynn, 4709 S Sundance Circle, Sioux Falls SD 57105 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. 7197-3 authorizes impoundment of 67 acre-feet of water from runoff by constructing a dam located in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 21 with water impounded in the SW $\frac{1}{4}$ Section 21; all in T113N-R71W.
2. The water appropriated shall be used for fish and wildlife propagation and livestock water purposes 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. 7197-3 is July 5, 2010.
5. The date from which applicant may claim right is April 30, 2010.
6. One-fifth of the construction is to be completed on or before January 5, 2013.
7. All construction is to be completed on or before July 5, 2015.
8. Water is to be put to beneficial use on or before July 5, 2019.
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. 7197-3 authorizes a dam with a storage capacity of 67 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

JUL 14 2010
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:
David Konechne
104 Capitol Hill Dr
Pierre, SD 57501-2304

- b) Freeboard 7'
- c) Crest Width 12'
Crest Length 1419
- d) Height 16'
- e) Primary Outlet Capacity 304 cfs

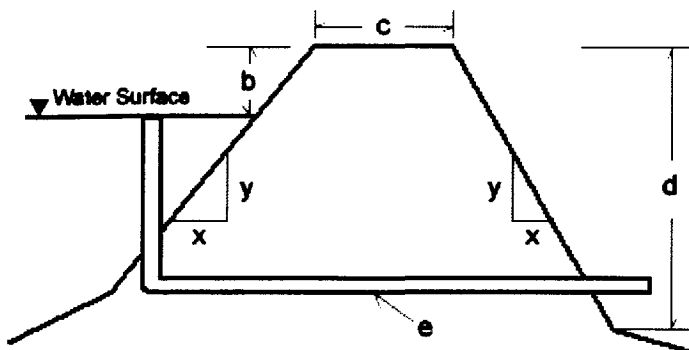
If pipe, diameter 72"/60" Dia. outlet cam

- f) Secondary Spillway Capacity 918 cfs
Spillway Width 135'
- g) X & Y Slope (e.g. 3 to 1 is a typical slope)
Upstream 3:1
Downstream 3:1

- h) Surface Area of Impoundment 19

- i) Storage 67.0 Acre Feet

- j) Drainage Area Above Dam 5,120.0 Acres



RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 4/30, 20 10

RECEIVED OF Ree Valley Ranch LLP P Flynn 4709 Sundance Cr Sioux Falls SD 57105

The following amount in fees for services rendered as provided for by law:

Fee for Application for Permit No. <u>7197-3</u> to Appropriate Water, to construct and to put water to beneficial use	500	00
Fee for Application for Permit No. _____ to Appropriate Water for Future use		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. <u>7197-3</u>	200	00
Fee for Filing Transfer Form _____		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law)	TOTAL	700 00

No. **04539**

By Harold White
Chief Engineer



United States Department of the Interior

Fish and Wildlife Service
Huron Wetland Management District
Room 309, Federal Bldg.
200 4th Street SW
Huron, SD 57350
605/352-5894 Fax: 605/352-6709
Internet: R6RW_HUR@FWS.GOV



April 15, 2010

Ree Valley Ranch, LLP
4709 S Sundance Circle,
Sioux Falls, SD 57105

RECEIVED
APR 30 2010
WATER RIGHTS
PROGRAM

Dear **Ree Valley Ranch, LLP**;

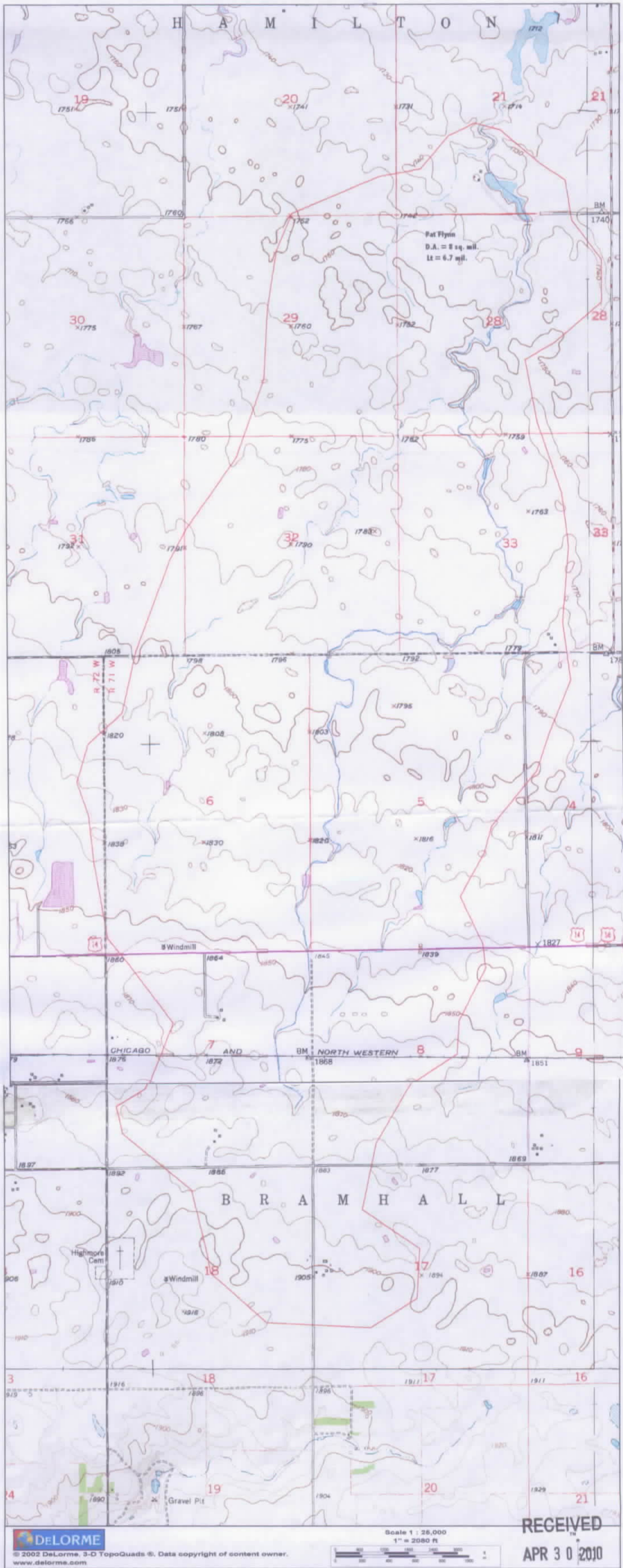
Enclosed you will find the SD Water Right and engineering papers to permit you to construct the dam on your property in SW1/4 Section 21 T113N R71W, Hyde, SD. Please sign and notarize the enclosed water right permit and forward onto the SD DENR. The cost of the permit will be taken off from your cash payment.

Thank you for participating in the Partners for Wildlife Program and call me with any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Chuck Pyle", with a long, sweeping horizontal line extending to the right.

Chuck Pyle
Wildlife Biologist
605-350-0415



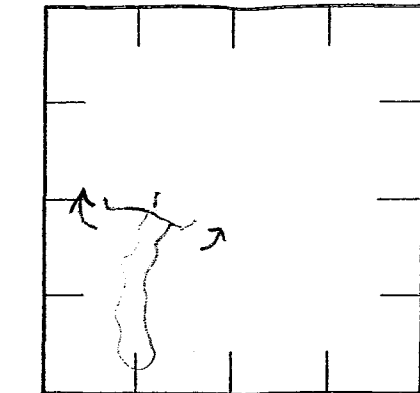
Pat Flynn

STRUCTURE DATA

DRAINAGE AREA	ANNUAL YIELD	PEAK RUNOFF <i>Ac-FT</i>	EMERG. SPLWY. CAPACITY	WATER DEPTH	SURFACE AREA	SEDIMENT STORAGE	TOTAL STORAGE
ACRES	AC. FT.	25-YR.	C.F.S.	FEET	ACRES	AC. FT.	AC. FT.
5120		743	918	9	19	-	67

Top Dam - 295

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



SW sec 21 T. 113 N R. 71 W
Hyde County

LOCATION

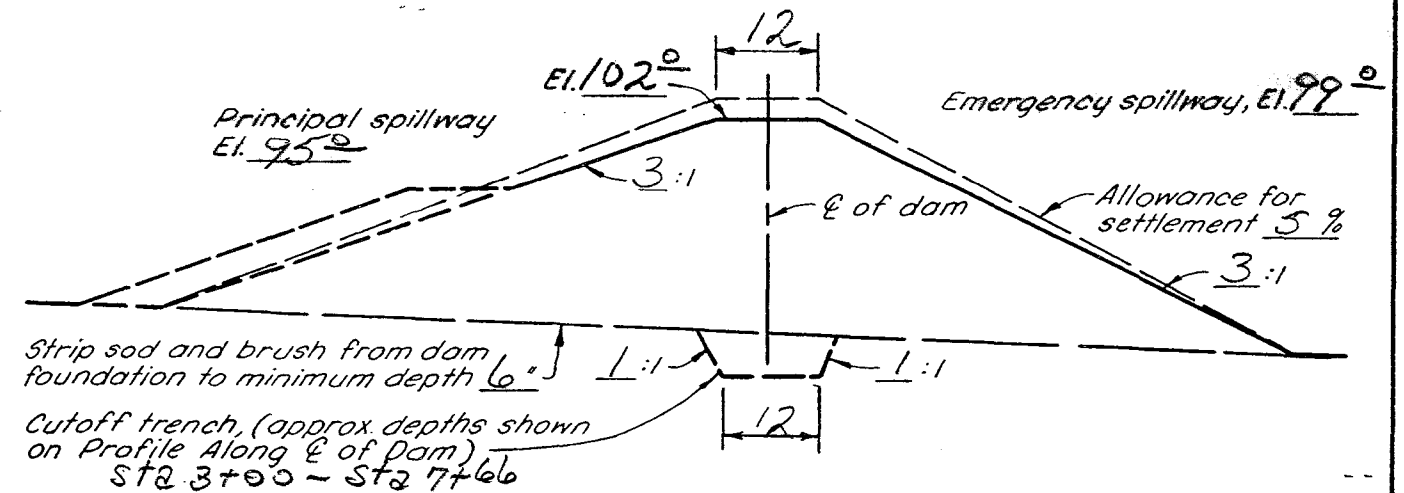
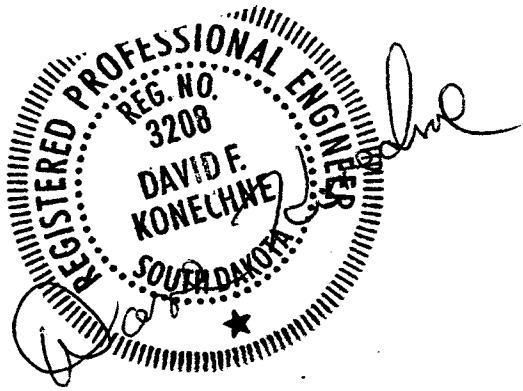
TABLE OF QUANTITIES

[illegible]

RECEIVED

APR 30 2010

**WATER RIGHTS
PROGRAM**



TYPICAL CROSS SECTION OF DAM

S.D. CONSTRUCTION AND MATERIAL SPECIFICATIONS:

SD-2 Clearing & Grubbing
SD-7s Earth Fill
SD-9 Drain Fill
SD-12B Concrete
SD-15 CMP
SD-16 Timber Fabrication

EARTH DAM

OPERATOR: Pat Flynn
CONSERVATION DISTRICT: Hyde

Class "A" Hazard

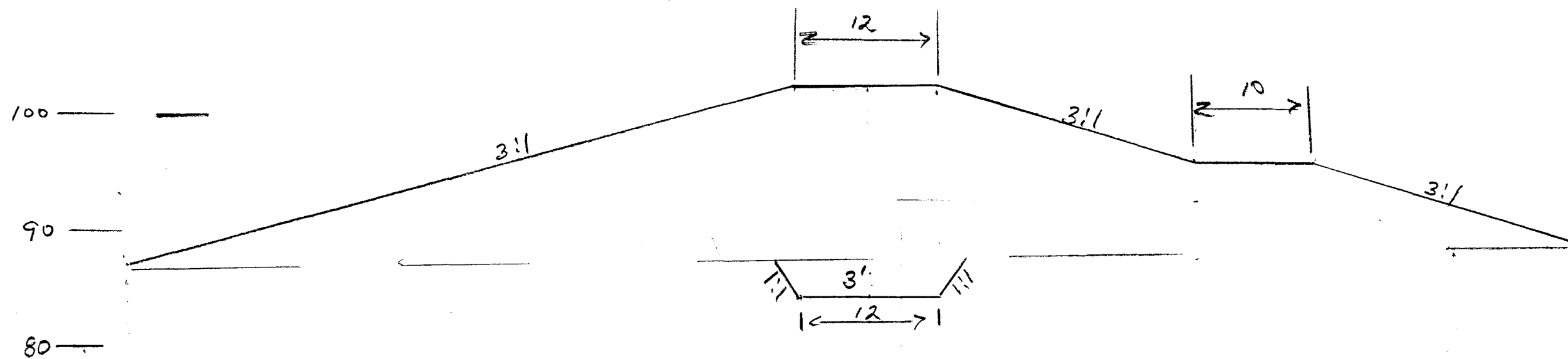
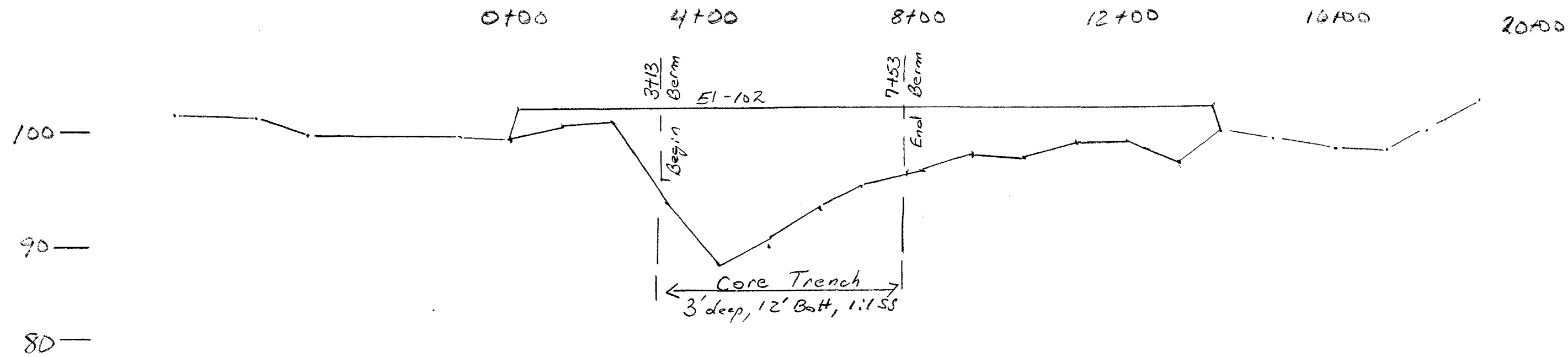
		Date	Approved by	
Designed			Title	
Drawn			Title	
Traced			Sheet	Drawing No.
Checked			No	
			of	

SKETCH PLAN OF DAM AND RESERVOIR AREA

Approximate scale 1" = _____

REFERENCE: GUIDE PLAN NO. 1.0

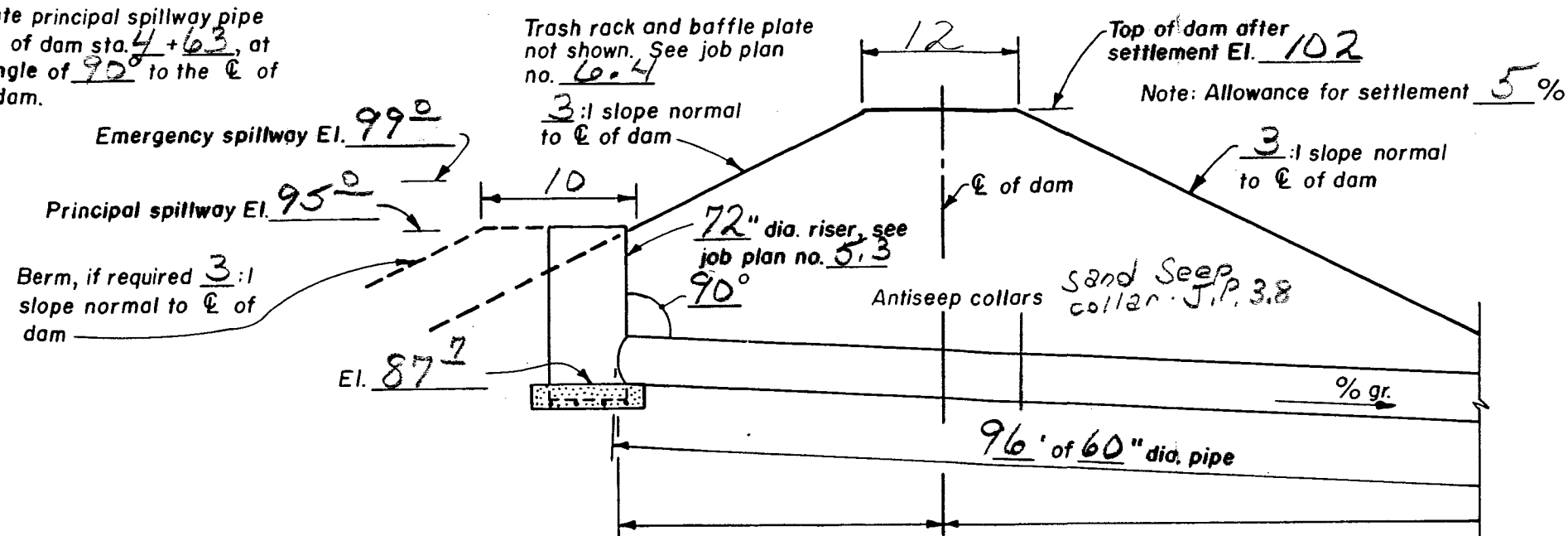
JOB PLAN NO. 1.0



Sta 4+63
P.S.

Pat Flynn

Locate principal spillway pipe at $\mathcal{C}$ of dam sta. 4+63, at an angle of 90° to the $\mathcal{C}$ of the dam.



CROSS SECTION OF DAM ALONG $\mathcal{C}$ OF PRINCIPAL SPILLWAY
(Not to scale)

SPECIFICATION NOTES

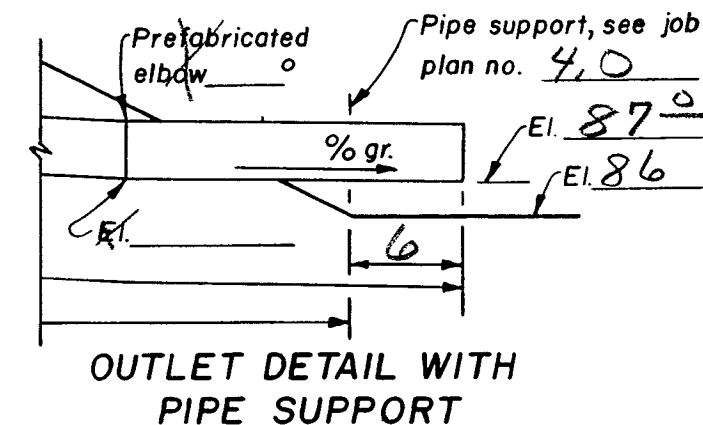
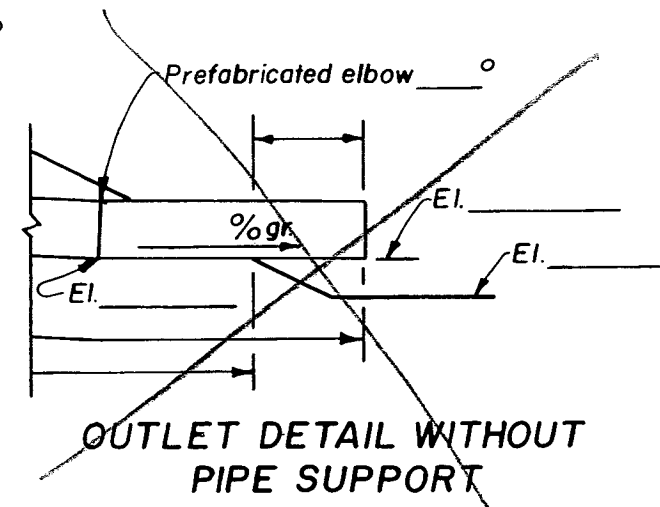
1. ELBOW, IF REQUIRED, MAY BE FABRICATED BY CONTINUOUS WELDING SEPERATE PIPE SECTIONS OR BY FABRICATING A CONTINUOUS WELDED JOINT ON THE UPSTREAM END OF LAST SECTION OF PIPE.
2. PIPE WALL THICKNESS SHALL BE 10 GAGE OR 0.138 INCHES.

All CMP to be spiral
vinyl clad

TABLE OF QUANTITIES

ITEM	UNIT	QUANTITY

APPLICABLE STANDARD S.C.S. SPECIFICATIONS

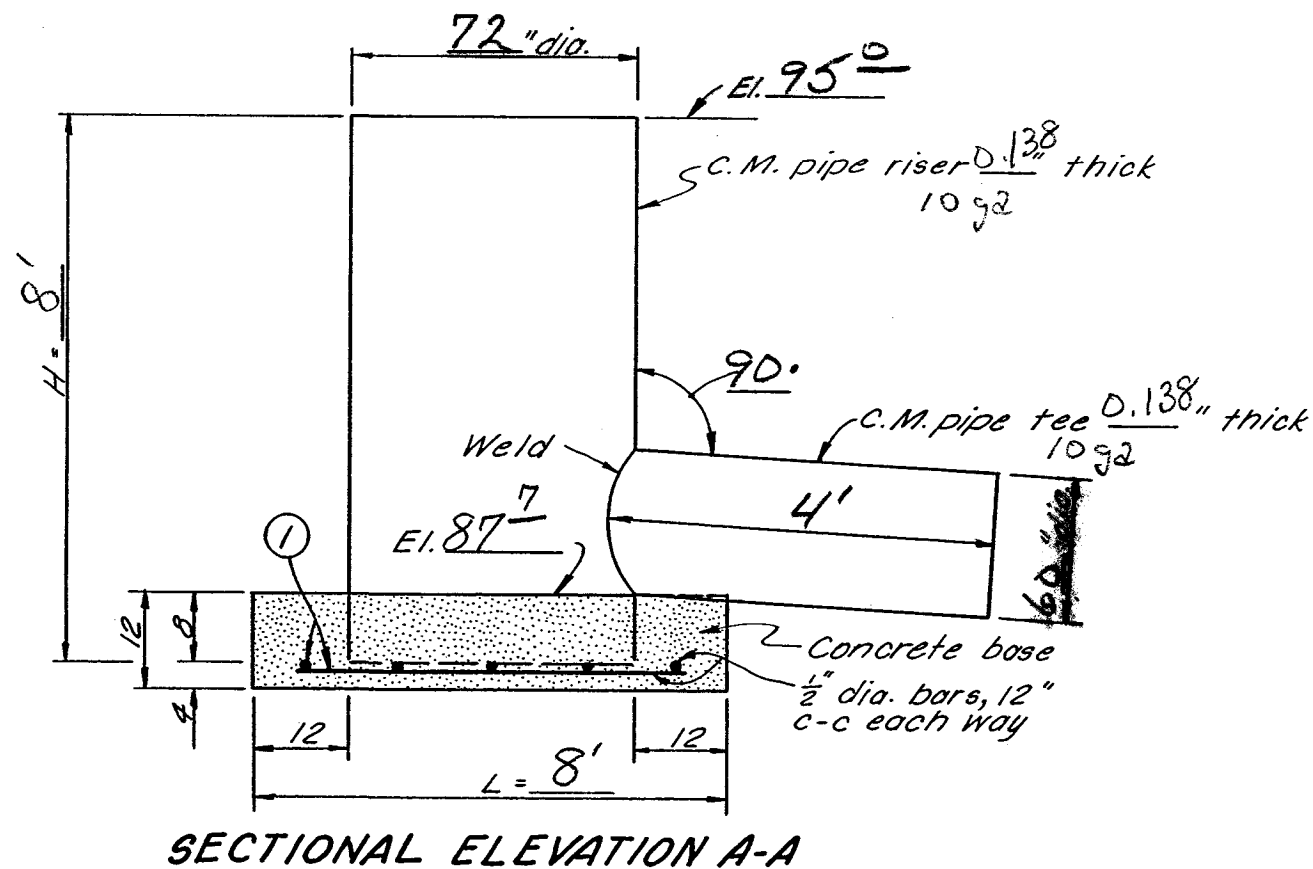
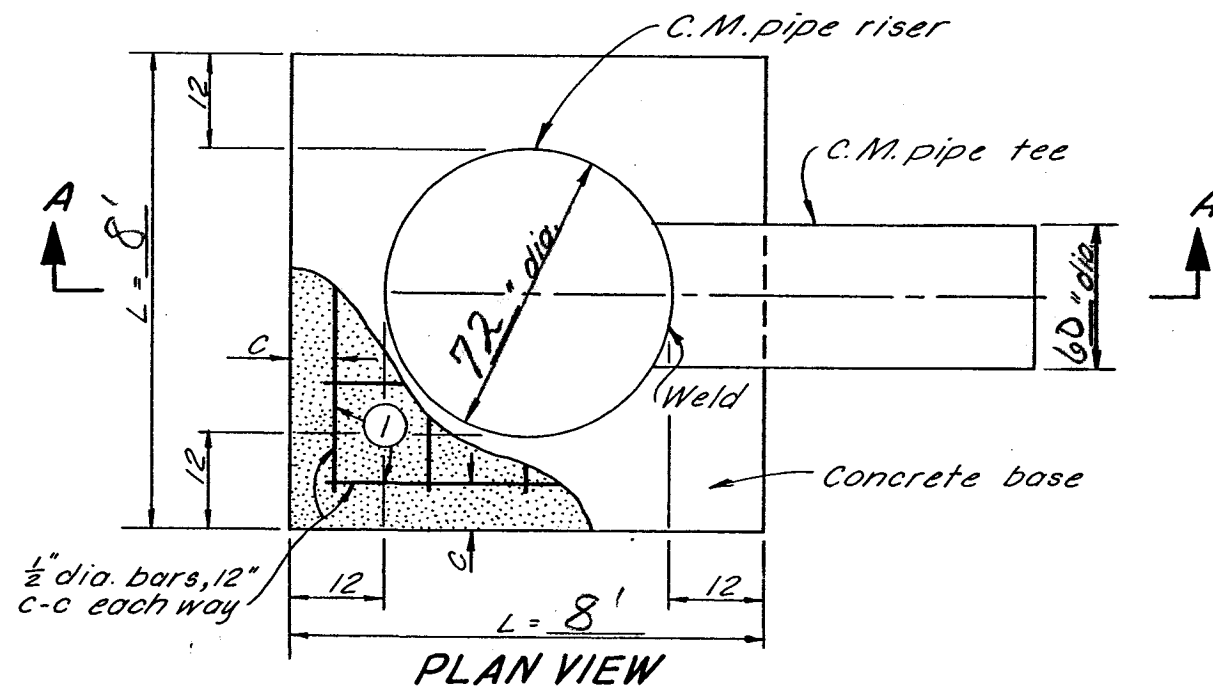


Sec. _____, T. _____, R. _____
County _____

LOCATION

CORRUGATED METAL PIPE DROP INLET PRINCIPAL SPILLWAY

OPERATOR <u>Pat Flynn</u>	
CONSERVATION DISTRICT _____	
U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	
Designed _____	Date _____
Drawn _____	Approved by _____
Traced _____	Title _____
Checked _____	Title _____
	Sheet No. _____
	Drawing No. _____



STEEL SCHEDULE

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.
72	4	I	STR.	16	7-0	112	75	6	8

TABLE OF QUANTITIES

ITEM	UNIT	QUANTITY
CONCRETE	CU. YD.	2.4
REINFORCING STEEL	LB.	75

NOTE: All CMP to be spiral vinyl clad

C.M. PIPE RISER WITH FABRICATED TEE

OPERATOR: Pat Flynn

CONSERVATION DISTRICT: _____

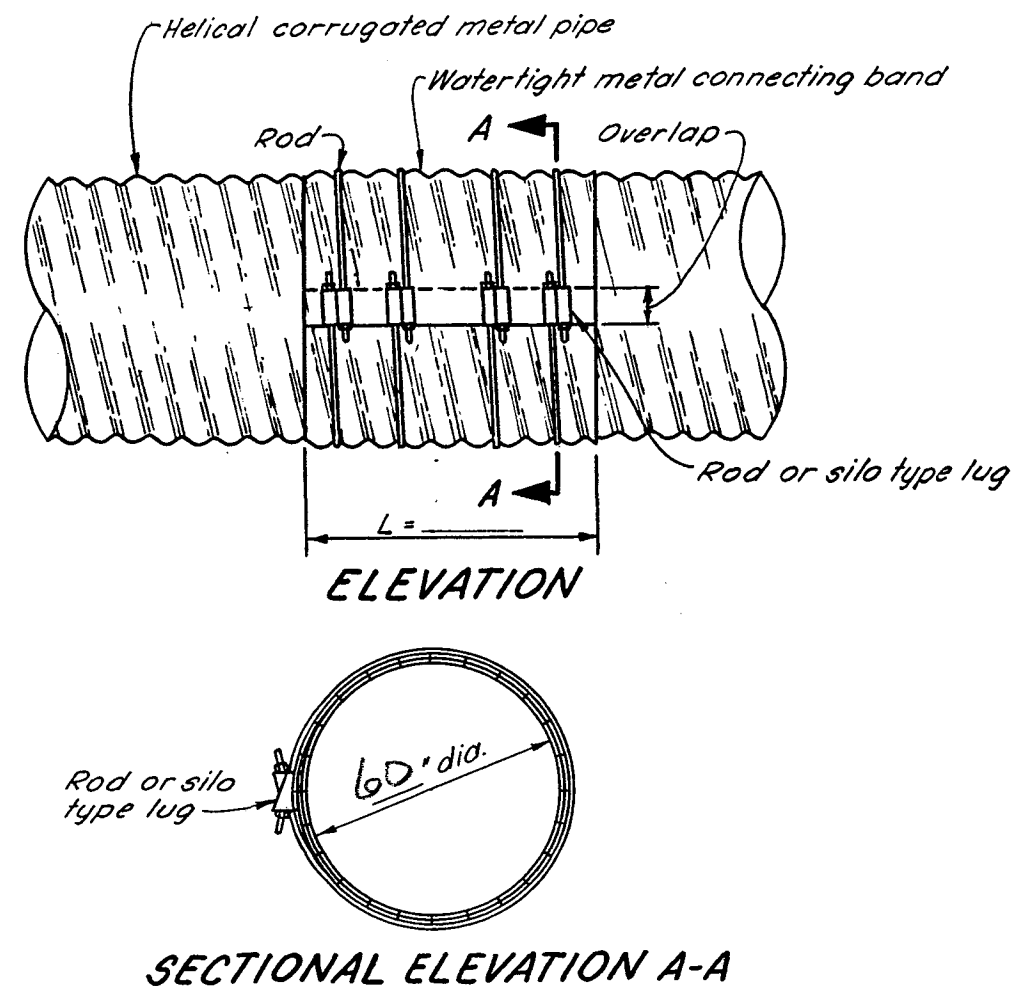
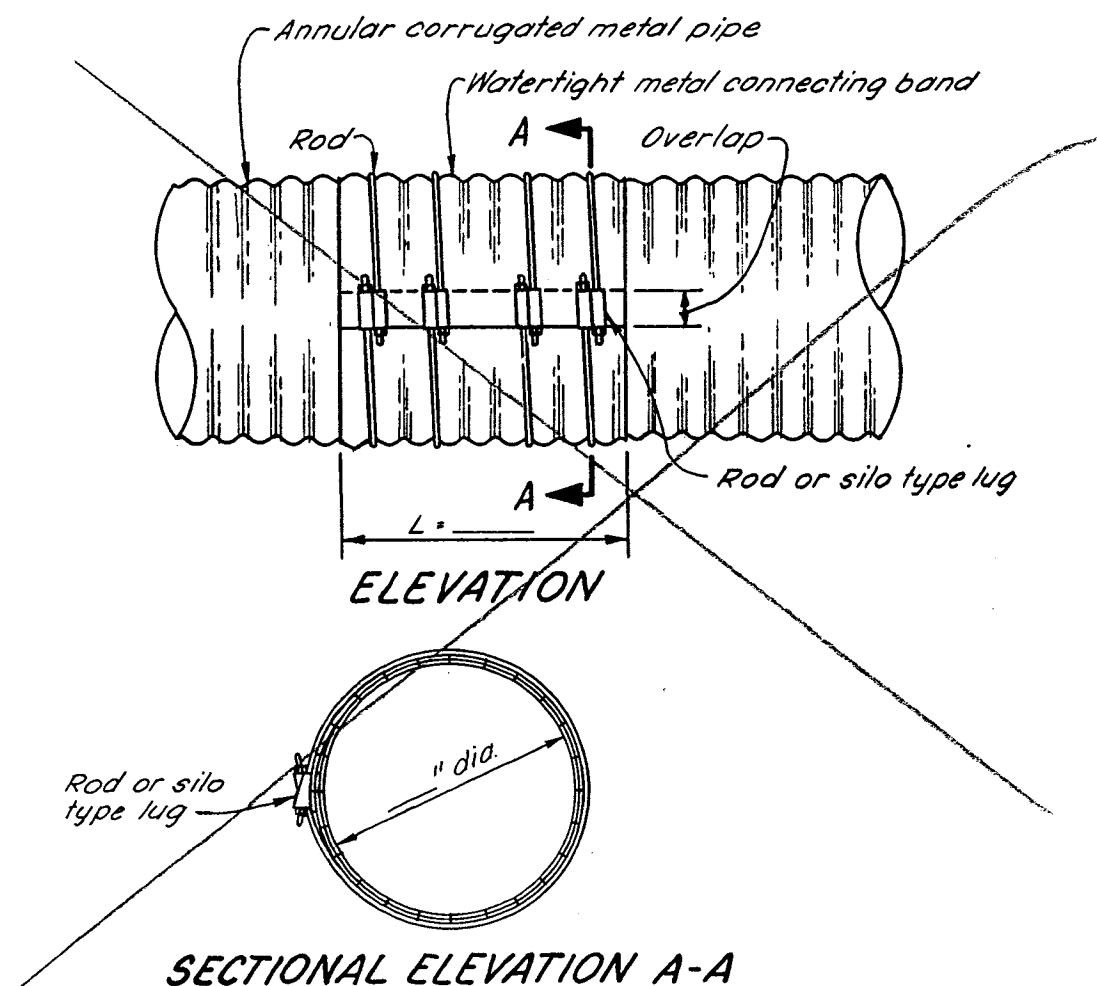
U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

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

REFERENCE: GUIDE PLAN NO. 5.3

JOB PLAN NO. 5.3

5, N-29,073.5-30



DIMENSIONS AND QUANTITIES

PIPE DIA. INCHES	MINIMUM "L" INCHES	APPROX. OVERLAP INCHES	NUMBER OF RODS & LUGS	MINIMUM ROD DIA. IN.	NEOPRENE GASKET WIDTH INCHES	ASPHALT MASTIC GAL.
6-18	12	2	2	1/2	12	1/2
21-30	24	3	4	1/2	12	1 1/2
36-48	24	6	4	1/2	12	2
60"	24	6	4	1/2	12	2

NOTES:

1. WATERTIGHTNESS WILL BE OBTAINED BY USE OF (1) 3/8" THICK NEOPRENE GASKET (WIDTH AS SHOWN) OR (2) ASPHALT MASTIC SEALING MATERIAL TO COVER FULL WIDTH OF BAND.
2. CROSS OUT BAND AND QUANTITIES NOT APPLICABLE.

WATERTIGHT CONNECTING BAND FOR ANNULAR AND HELICAL CORRUGATED METAL PIPE

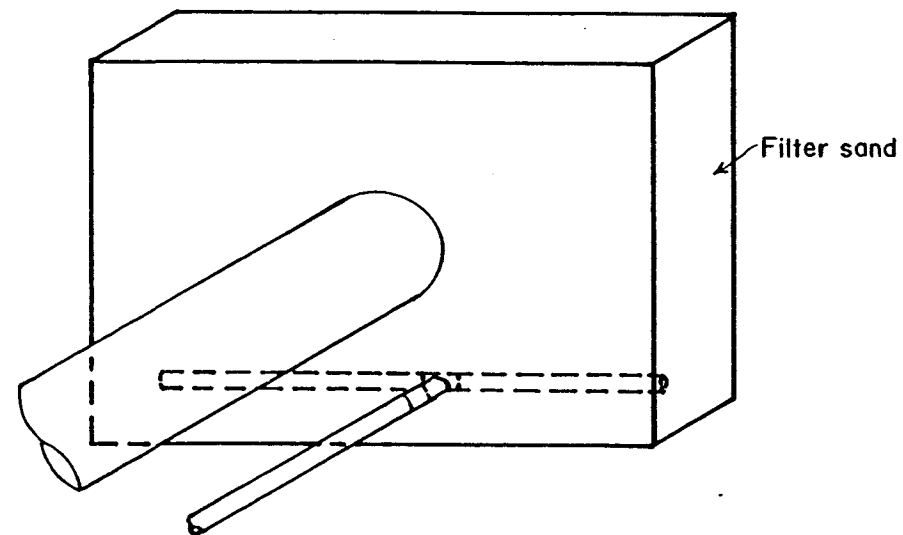
OPERATOR: Pat Flynn
 CONSERVATION DISTRICT: _____

U. S. DEPARTMENT OF AGRICULTURE
 SOIL CONSERVATION SERVICE

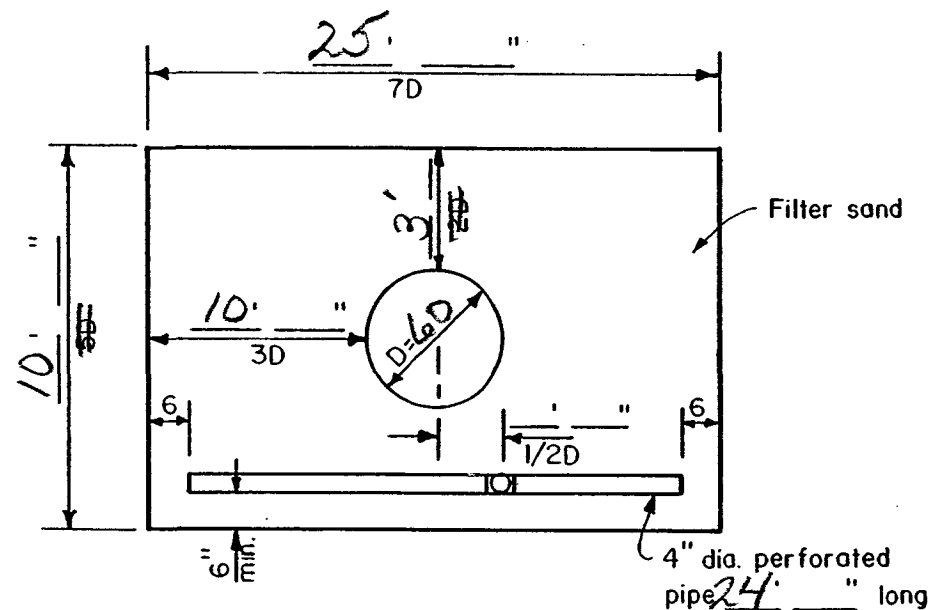
Date _____		Approved by _____	
Designed _____		Title _____	
Drawn _____		Title _____	
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Checked _____		Drawing No. _____	
		No _____	
		of _____	

JOB PLAN NO. 3.0

5 11-22 072 20



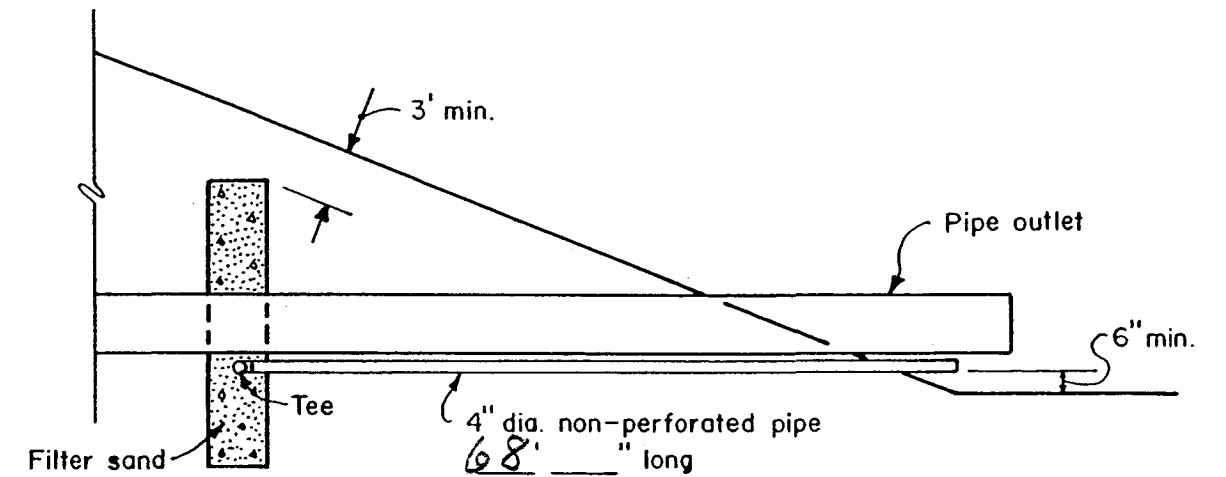
ISOMETRIC VIEW



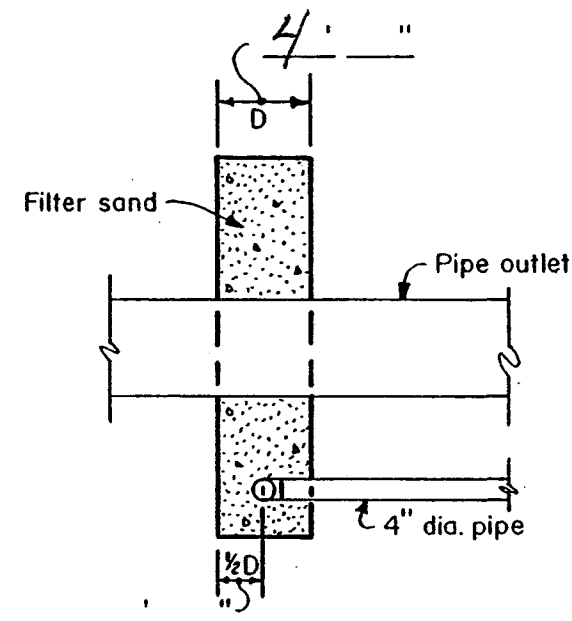
UPSTREAM VIEW

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 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
37cy

Sec. _____, T. _____, R. _____

County _____

LOCATION

SAND ANTISEEP COLLAR

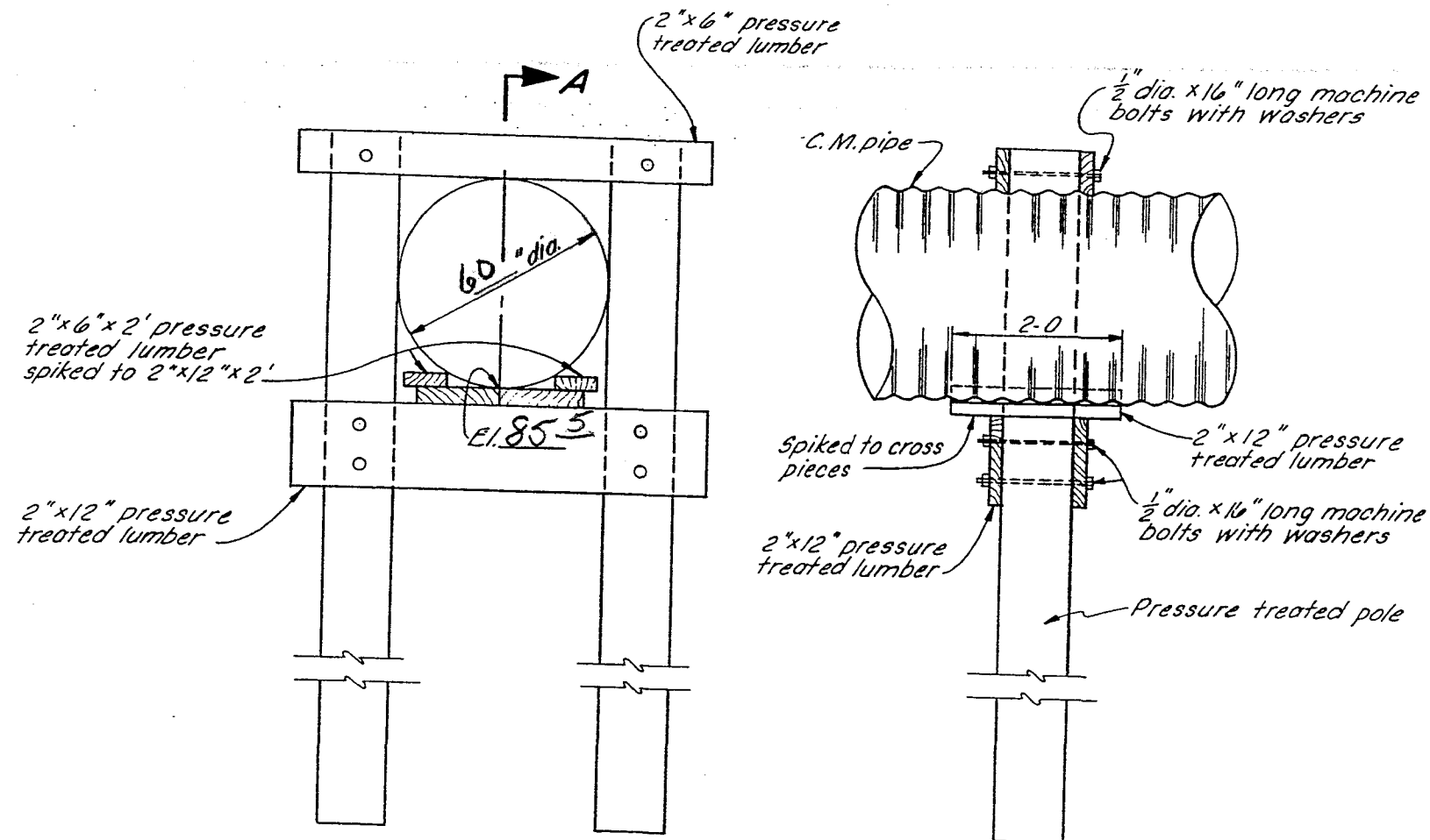
OPERATOR Pat Flynn

CONSERVATION DISTRICT _____

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

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

JOB PLAN NO. 3.8



ELEVATION

SECTIONAL ELEVATION A-A

TABLE OF QUANTITIES

ITEM	LENGTH FOR 60" DIA. C.M. PIPE	UNIT	QUANTITY
PRESSURE TREATED POLE 10" DIA.	12-0	EACH	2
2" X 12" PRESSURE TREATED LUMBER	7-0	EACH	2
2" X 6" PRESSURE TREATED LUMBER	7-0	EACH	2
2" X 12" PRESSURE TREATED LUMBER	2-0	EACH	4
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: Pat Flynn

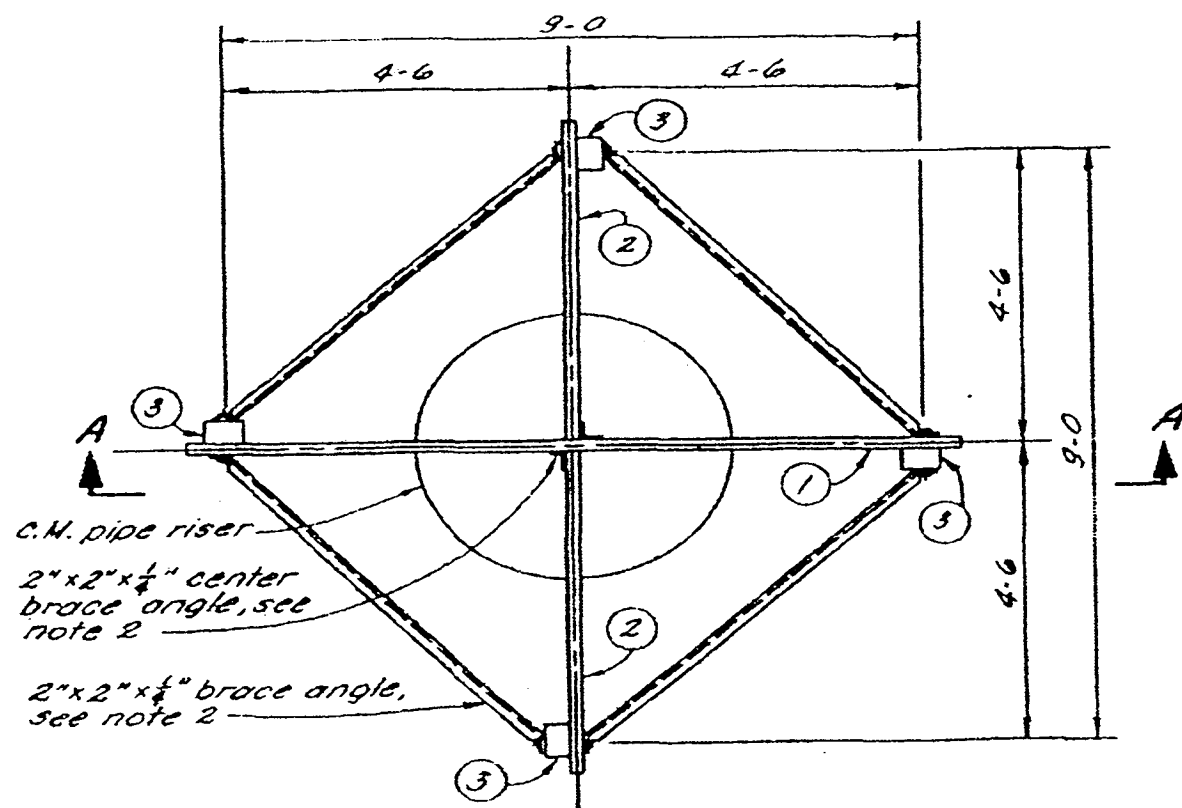
CONSERVATION DISTRICT:

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

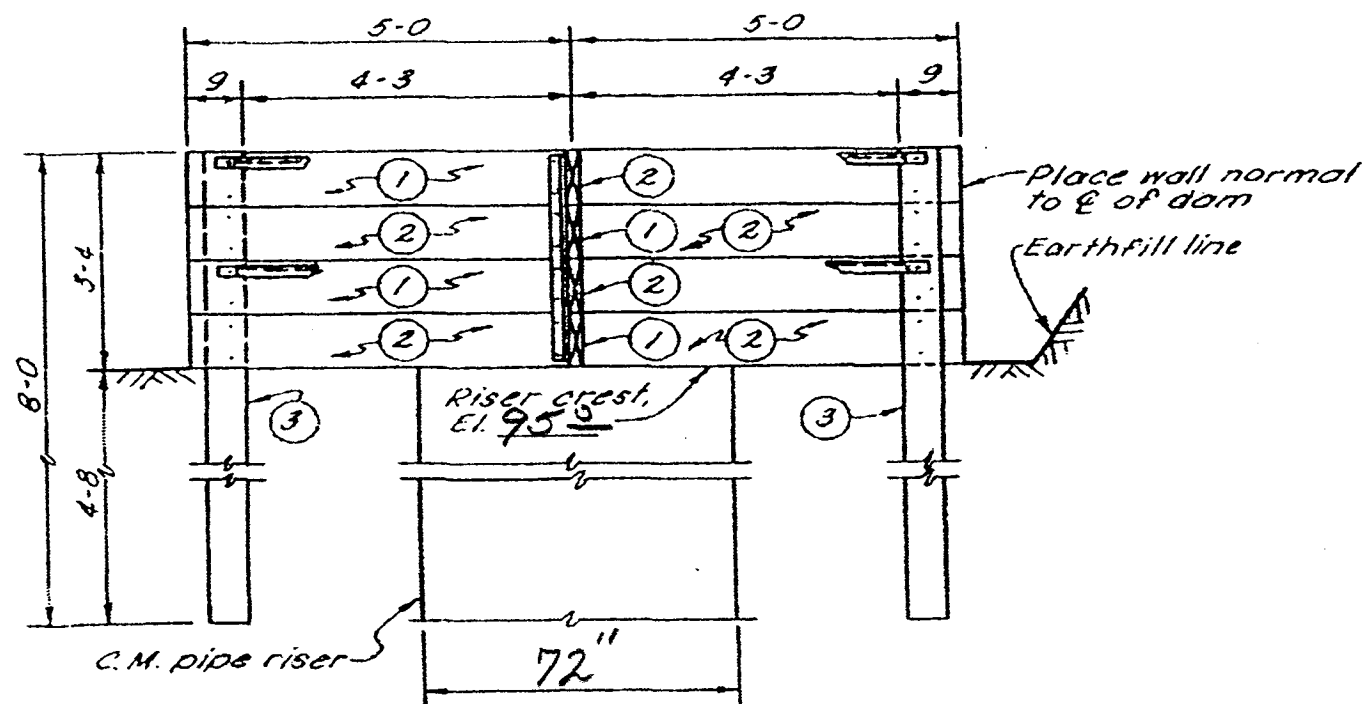
REFERENCE: GUIDE PLAN NO. 4.0

JOB PLAN NO. 4.0

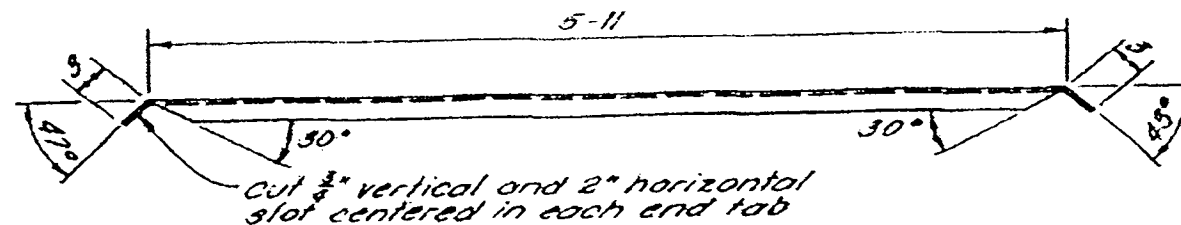
5,N-29,073.4a



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. ~~30"~~ THRU ~~30"~~

OPERATOR: <u>P2t Flynn</u>	
CONSERVATION DISTRICT: _____	
U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	
Designed: _____	Date: _____
Drawn: _____	Approved by: _____
Traced: _____	Title: _____
Checked: _____	Sheet No. _____
	Drawing No. _____

JOB PLAN NO. 6.4

5, N-29, 073.6-40

1*****

SITES XEQ 04/06/2008 WATER RESOURCE SITE ANALYSIS COMPUTER PROGRAM
VER 2000 (USER MANUAL - DATED MAY 2001)
TIME 12:46:34

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

SITES 05/01/2000 Pat Flynn 8 H5
SAVMOV 0 101
SAVMOV 101 1 1
STRUCTURE
84 0
86 .8
88 3
90 5.6
92 8.5
94 14.7
100 39
103 50

ENDTABLE
WSDATA 5A1 AC 75 5120 35376 1.2
PDIRECT 3.5 .00 4.10
POOLDATA ELEV 95 95 84 84 SC
PSINLET 1 22
PSDATA 1 104 60 .025 85
ASDATA 41 100 50 2 .05 2
ASINSURF 41 .035
ASINLET 41 0.0 0.0 100 0.0 3
150 5

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

ENDTABLE
ASEXIT 41 N 50
BTMWIDTH FEET 150
GRAPHICS 1
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.

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APR 30 2010

WATER RIGHTS
PROGRAM

72" x 60" PS

1SITES

XEQ 04/06/2008

Pat Flynn

WSID=

VER 2000

SUBW= A

TIME 12:46:34

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
3.50	0.00	0.00	4.10

WSDATA - CN	DA-SM	TC/L	-/H	QRF
75.00	8.00	35376.00	1.20	0.00

SITEDATA- PERM POOL	CREST PS	FP SED	VALLEY FL	378?
95.00	95.00	0.00	84.00	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	104.00	60.00	0.00

PS N	KE	WEIR L	TW EL
0.025	1.00	22.00	85.00

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	100.00	50

AUX.DATA - INLET N	SIDE SLOPE	EXIT N	EXIT SLOPE	ACTUAL AUX?
0.035	2.00	0.035	0.050	NO

BTM WIDTH - BW1	BW2	BW3	BW4	BW5
ft 150.00	0.00	0.00	0.00	0.00

AUXILIARY SPILLWAY RATING DEVELOPED USING WSPVRT.

1SITES

XEQ 04/06/2008

Pat Flynn

WSID=

VER 2000

SUBW= A

TIME 12:46:34

SITE = S 1

PASS= 1 PART= 2

PERM POOL 95.00 FT 67.2 ACFT 18.75 AC 0.0 CFS

CREST PS 95.00 FT 67.2 ACFT 18.75 AC 0.0 CFS

SED ACCUM 95.00 FT 67.2 ACFT 18.75 AC 0.0 CFS

START ELEV 95.00 FT 67.2 ACFT 18.75 AC 0.0 CFS

NRCS-PSH D= 24.00 HR P= 3.50 IN Q= 1.30 IN DA= 8.00 SM
TC= 9.73 HR CN= 75.00 VOL= 555.5 ACFT

PEAK = 630.2 CFS, AT 18.7 HRS.

ROUTED RESULT - HYD TYPE EMAX VOL-MAX AMAX QMAX
NRCS-PSH 100.84 FT 245.6 ACFT 42.07 AC 339.5 CFS

PS STORAGE 178.4 ACFT, BETWEEN AUX. CREST AND SED. ACCUM ELEVATIONS.

DRAWDOWN (DDT) TEST 95.00 FT 67.2 ACFT 0.00 CFS
CONTROL IS 0.000 DETENTION STORAGE

TIME = 1.93 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	95.00	0.00	0.00	0.00	67.22	18.75
2	95.68	38.01	38.01	0.00	80.85	21.49
3	96.35	107.51	107.51	0.00	96.34	24.24
4	97.03	197.51	197.51	0.00	113.68	26.98
FULL CONDUIT FLOW, ELEV = 97.71 FT						
5	97.71	304.08	304.08	0.00	132.88	29.72
6	98.37	311.99	311.99	0.00	153.42	32.40
7	99.03	319.61	319.61	0.00	175.74	35.08
8	99.69	327.06	327.06	0.00	199.82	37.76
9	100.35	334.34	334.34	0.00	225.66	40.30
10	101.02	341.46	341.46	0.00	253.11	42.72
11	101.68	348.44	348.44	0.00	282.17	45.15
12	102.34	355.28	355.28	0.00	312.83	47.57
13	103.00	362.00	362.00	0.00	345.10	50.00

1SITES

XEQ 04/06/2008

Pat Flynn

WSID=

VER 2000

SUBW= A

TIME 12:46:34

SITE = S 1

PASS= 1 PART= 3

AUX. CREST 100.84 FT 245.6 ACFT 42.07 AC 339.5 CFS

PS STORAGE 178.4 ACFT, BETWEEN AUX. CREST AND SED. ACCUM ELEVATIONS.

START ELEV 95.00 FT 67.2 ACFT 18.75 AC 0.0 CFS

EFFECTIVE HEIGHT(H)= 16.8 FEET, PRODUCT= 4135. (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= 4.10 IN Q= 1.74 IN DA= 8.00 SM
TC= 9.73 HR CN= 75.00 VOL= 743.3 ACFT

PEAK = 855.2 CFS, AT 18.7 HRS.

***** WARNING - UPSTREAM END OF CREST 0. 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	95.00	0.00	0.00	0.00	67.22	18.75
2	95.68	38.01	38.01	0.00	80.85	21.49
3	96.35	107.51	107.51	0.00	96.34	24.24
4	97.03	197.51	197.51	0.00	113.68	26.98
FULL CONDUIT FLOW, ELEV = 97.71 FT						
5	97.71	304.08	304.08	0.00	132.88	29.72
6	98.10	308.82	308.82	0.00	144.81	31.31
7	98.49	313.40	313.40	0.00	157.37	32.89
8	98.88	317.91	317.91	0.00	170.55	34.47
9	99.27	322.35	322.35	0.00	184.34	36.06
10	99.66	326.74	326.74	0.00	198.76	37.64
11	100.06	331.07	331.07	0.00	213.79	39.21
12	100.45	335.34	335.34	0.00	229.41	40.64
13	100.84	339.56	339.56	0.00	245.58	42.07
14	100.95	349.70	340.72	8.98	250.15	42.47
15	101.05	359.84	341.87	17.97	254.76	42.87
16	101.25	384.08	343.94	40.15	263.17	43.58
17	101.49	450.01	346.45	103.57	273.64	44.45
18	101.92	646.69	350.96	295.73	293.20	46.04
19	102.46	978.73	356.52	622.21	318.61	48.02
20	103.00	1406.00	362.00	1044.00	345.10	50.00

SUMMARY OF AUXILIARY SPILLWAY SURFACE CONDITIONS USED IN COMPUTATIONS BY REACH

REACH	FROM STA (ft)	TO STA (ft)	SLOPE CURVE INDEX@ (%)	RETARDANCE COVER FACTOR	VEGETAL CODE (ft)	MAINT. DEPTH *	ROOTING LOCATION	REACH
1	0.	100.	0.0	0.035	**	**	**	CREST
2	100.	150.	5.0	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 2 used in computing exit channel velocities.

DRAWDOWN USING FREEBOARD STORM FOLLOWS, STARTING AT ELEVATION 100.84 FT.

DRAWDOWN (DDT) TEST 95.00 FT 67.2 ACFT 0.00 CFS
CONTROL IS 0.000 DETENTION STORAGE

TIME = 2.22 DAYS, TO 0.0 CFS (LIMIT = 10.00 DAYS)

ROUTED RESULTS	BTM FT	WIDTH FT	MAX ELEV ACFT	VOL-MAX AC	AREA-MAX FT	AUX.-HP ACFT	VOL-AUX.
NRCS-FBH	150.0	101.92	293.2	46.0	1.08	47.6	

PEAK - CFS Q-PS Q-AUX. Q-TOT.
DISCHARGE = 351.0 295.6 646.5

	CRITICAL DEPTH FT	CRITICAL VELOCITY FT/SEC	CRITICAL SLOPE FT/FT	25% OF Q SLOPE FT/FT
AUXILIARY SPILLWAY —	0.49	3.97	0.023	0.031

EFFECTIVE STRESS FOR STABILITY ANALYSIS OF AUX. EXIT CHANNEL
(Refer to Ag. Handbook 667, Chapt. 3, for allowable stresses.)
Aux. Discharge = 296. cfs; Bottom Width = 150. ft

REACH NO.	FROM STA	TO STA	SLOPE %	MANNING'S n	VELOCITY ft/s	STRESS lb/ft^2
2	100.	150.	5.00	0.035	5.04	0.739

AUXILIARY SPILLWAY DURATION FLOW = 10.7 HOURS
ATTACK, OE/B = 0.8 ACFT/FT

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

EXIT CHANNEL FLOW SUPERCRITICAL: MAX VELOCITY= 5.0 FT/SEC
EXIT SLOPE = 0.050 FT/FT

FLOW DEPTH = 0.4 FT

>>>> NHCP378 RUN - MINIMUM FLOW IN AUX. SPILLWAY FROM TR60
USING FORMULA WITHOUT 200 CFS MINIMUM LIMIT (661. CFS).

ROUTED	BTM	WIDTH	MAX	ELEV	VOL-MAX	AREA-MAX	AUX.-HP	VOL-AUX.
RESULTS	FT	FT	ACFT	AC	FT	ACFT		
MIN. AUX.	150.0	102.51	321.0	48.2	1.67	75.4		

PEAK - CFS Q-PS Q-AUX. Q-TOT.
DISCHARGE = 357. 661. 1018.

	CRITICAL	CRITICAL	CRITICAL	25% OF Q
	DEPTH	VELOCITY	SLOPE-Sc	Sc
AUXILIARY	FT	FT/SEC	FT/FT	FT/FT
SPILLWAY —	0.84	5.18	0.019	0.026

>>>> NHCP378 RUN - MINIMUM DEPTH, CREST AUX. TO TOP OF DAM IS 2.00 FT.
NEW TOP OF DAM ELEVATION = 102.84.

ROUTED	BTM	WIDTH	MAX	ELEV	VOL-MAX	AREA-MAX	AUX.HP	VOL-AUX.
RESULTS	FT	FT	ACFT	AC	FT	ACFT		
MINIMUM AUX.	150.0	102.84	337.2	49.4	2.00	91.6		

PEAK - CFS Q-PS Q-AUX. Q-TOT.
DISCHARGES = 360.4 917.8 1278.2

E.S.

	CRITICAL	CRITICAL	CRITICAL	25% OF Q
	DEPTH	VELOCITY	SLOPE-Sc	Sc
AUXILIARY	FT	FT/SEC	FT/FT	FT/FT
SPILLWAY —	1.05	5.77	0.018	0.024

>>>> NHCP378 RUN - MINIMUM DEPTH, DESIGN FLOW TO TOP OF DAM; 1.00 FT REQUIRED
FOR THIS PASS. NEW TOP OF DAM ELEVATION = 102.92.

ROUTED	BTM	WIDTH	MAX	ELEV	VOL-MAX	AREA-MAX	AUX.HP	VOL-AUX.
RESULTS	FT	FT	ACFT	AC	FT	ACFT		
MINIMUM AUX.	150.0	102.92	341.1	49.7	2.08	95.5		

PEAK - CFS Q-PS Q-AUX. Q-TOT.
DISCHARGES = 361.2 980.6 1341.8

	CRITICAL	CRITICAL	CRITICAL	25% OF Q
	DEPTH	VELOCITY	SLOPE-Sc	Sc
AUXILIARY	FT	FT/SEC	FT/FT	FT/FT
SPILLWAY —	1.09	5.89	0.017	0.024

INFLOW HYD 1 PSH-PEAK = 339.51 CFS AT 23.99 HRS, LOCATION POINT

INFLOW HYD 1 FBH-PEAK = 646.54 CFS AT 21.33 HRS, LOCATION POINT
HYDOUT 1

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

Pat Flynn

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    8.00  75.  9.73   8.00  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  60.0  100.8  150.0  2.1  102.9   0.   0.   5.0 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 2000 ,05/01/2000
FILES

INPUT

C:\data\Engineering\sites\flynn\84-60-150ES-95elev.D2C

OUTPUT - DATED 04/06/2008 12:46:34

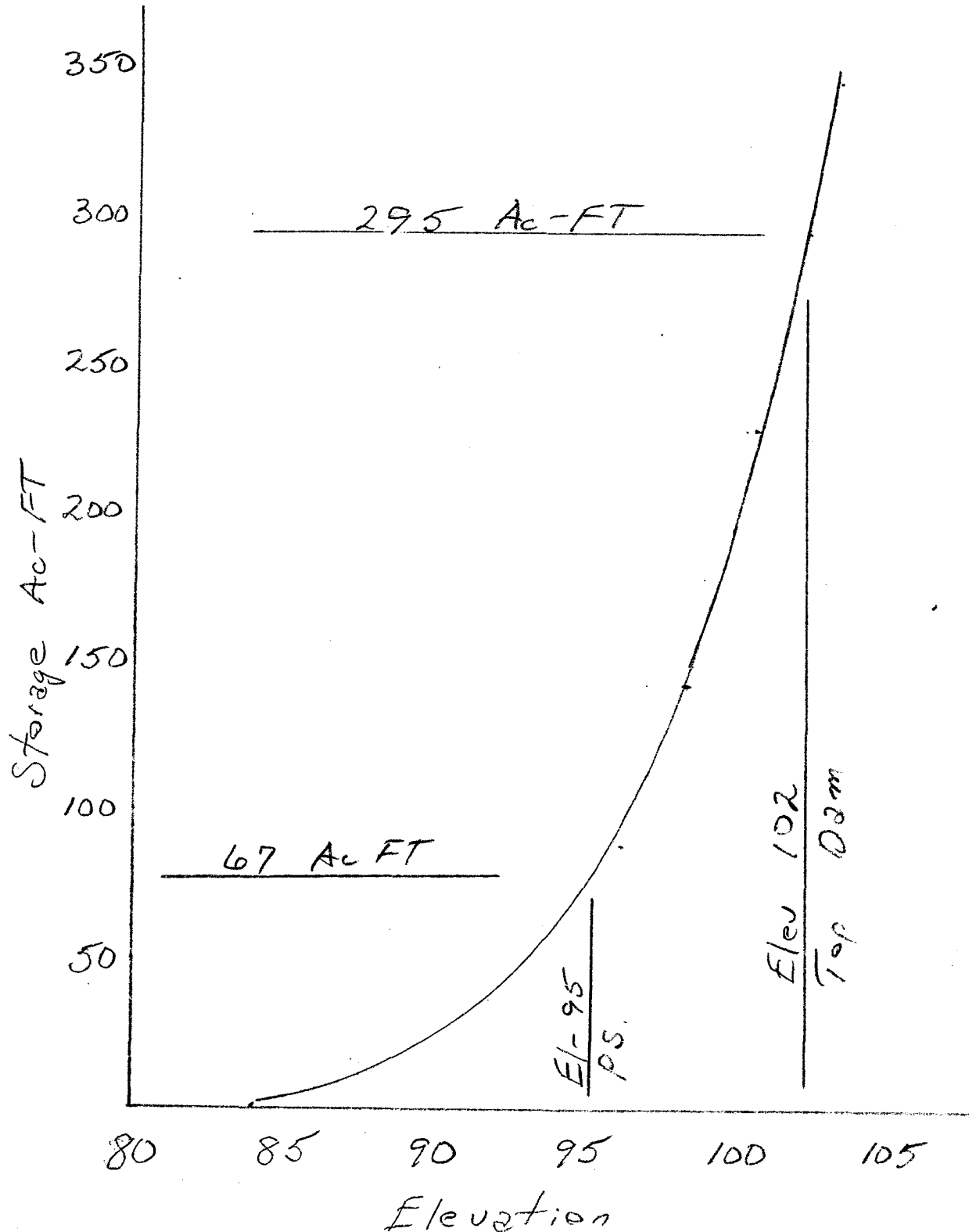
C:\data\Engineering\sites\flynn\84-60-150ES-95elev.OUT

*NOTE: A 60" dia road culvert
above structure will meter
the flow. Therefore Em Spill
elevation is not set at
routing elev.
DK*

COMPUTATION SHEET

BY	DATE	PROJECT <i>Pst Flynn</i>	SHEET ____ OF ____
CHKD BY	DATE	FEATURE	RECEIVED
DETAILS			APR 30 2010

WATER RIGHTS
PROGRAM



Water Permit Application # 7197-3 Ree Valley Ranch, LLP

Top of Dam Elev. - 102
2nd Spillway Elev. - 99
P. Spillway Elev. - 95
Dis Emb. Toe Elev. - 86

Cat. 3 - Low Hazard Dam

Ht. = 16 ft.

Normal Storage Capacity - 67 A.-Ft
Int. Storage Capacity - 246
Max. Storage Capacity - 295

Int. Cap. x Eff Ht. = $246 \times 13 = 3198 > 3000 \therefore$ 50 year
Minimum Spillway Design

From USGS WRI 98-4055 "Tech. Serv. Est. Peak Flows ... in SO"
Region B - $DA = 5120$ $Ac = 8.0 \text{ mi}^2$ $P_{II} = 0.8$

$$\begin{aligned} Q_{50} &= 206 CA^{.606} P_{II}^{.728} \\ &= 206 (8)^{.606} (0.8)^{.728} \\ &= 206 (3.52) (.8591) \\ &= \underline{620 \text{ cfs}} \end{aligned}$$

$$\begin{aligned} Q_{100} &= 275 CA^{.625} P_{II}^{.742} \\ &= 275 (8)^{.625} (0.8)^{.742} \\ &= 275 (3.6680) (.8474) \\ &= \underline{855 \text{ cfs}} \end{aligned}$$

Secondary Spillway Flow

$$\begin{aligned} Q &= CLH^{3/2} \quad C = 2.6 \\ &= 2.6 (150 \times 3)^{1.5} \quad L = 150 \\ &= \underline{2025 \text{ cfs}} \quad H = 3 \end{aligned}$$

NRCS Annual Yield

$$DA = 5120 \quad CN = 75 \quad ISO = 2$$

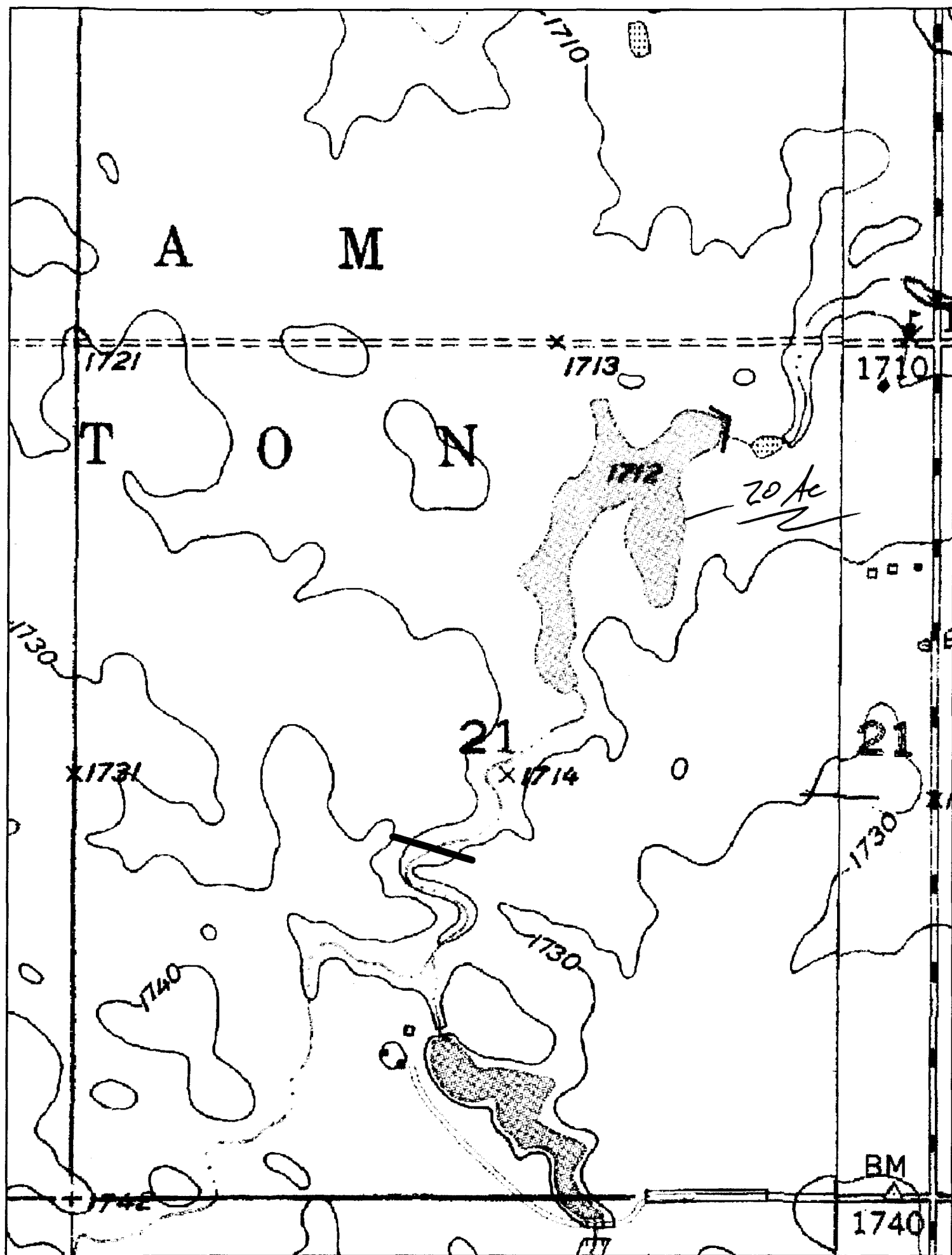
$$\begin{aligned} 80\% \text{ chance} &= 0.13 \\ 0.13 \times 5120^{1/2} &= \underline{55 \text{ A.-Ft}} \end{aligned}$$

$$\begin{aligned} 50\% \text{ chance} &= 0.35 \\ 0.35 \times 5120^{1/2} &= \underline{150 \text{ A.-Ft}} \end{aligned}$$

$$\begin{aligned} 10\% \text{ chance} &= 1.8 \\ 1.8 \times 5120^{1/2} &= \underline{768 \text{ A.-Ft}} \end{aligned}$$

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







**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

June 10, 2010

Ree Valley Ranch, LLP
4709 S. Sundance Circle
Sioux Falls, SD 57105

Dear Mr. Flynn:

We have reviewed the plans and specifications for your dam project located in the NE ¼ SW ¼ of Sec. 21-T113N-R71W, in Hyde County. The plans and specifications for the project are approved. Approval of the plans and specifications does not authorize construction of the dam. The construction of the dam may not begin until Water Permit No. 7197-3 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 Ree Valley Ranch Dam will be classified as a small size Category 3, Low Hazard dam with a dam height of 16 feet and a normal storage capacity of 67 acre-feet and a maximum storage capacity of 295 acre-feet.

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

Sincerely,

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

c: Dave Konechne, Konechne Engineering



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

June 10, 2010

Randy Hague
19325 340th Avenue
Highmore SD 57345

Dear Mr. Hague:

Enclosed is a copy of the report, recommendation and public notice for Water Permit Application No. 7197-3 filed by Ree Valley Ranches. The application proposes construction of a dam. The public notice is scheduled to be published June 17 and 24, 2010 in the Highmore Herald.

This information is being sent to you because there is a location notice on file for dam on property you own approximately one half mile downstream of the proposed dam. If you have any questions regarding DENR's review of the application please contact Tim Schaal at (605) 773-3352.

Sincerely,

Eric Gronlund
Water Rights Program, DENR
(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

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 7197-3, Ree Valley Ranch LLP**

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. 7197-3, Ree Valley Ranch LLP, c/o Patrick J Flynn, 4709 S Sundance Circle, Sioux Falls SD 57105.

The Chief Engineer is recommending APPROVAL of Application No. 7197-3 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. 7197-3 authorizes a dam with a storage capacity of 67 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
June 9, 2010

NOTE: There is a dam with a location notice on file with the Water Rights Program located approximately ½ mile downstream of the dam proposed in this application. This dam has a right to first fill. Tim Schaal's report states that there is sufficient drainage area to satisfy both dams in most years. However, you should construct the dam with a low flow bypass enabling you to bypass flow to satisfy this downstream dam's first fill each year when there is flow in the drainage.

REPORT ON
WATER PERMIT APPLICATION NO. 7197-3
Ree Valley Ranch, LLP
May 17, 2010

Water Permit Application No. 7197-3 has been filed by Ree Valley Ranch, LLP to impound 67 acre-feet of water from runoff by constructing a dam located in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 21-T113N-R71W, in Hyde 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, construction of the dam can not begin until Water Permit Application No. 7197-3 is approved.

The reconstructed dam will be 16 feet high with a normal storage capacity of 67 acre-feet with a reservoir level at the primary spillway elevation, and a maximum storage capacity of 295 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 5120 acres or 8.0 square miles. The dam is designed to have a 72 inch diameter CMP riser with a 60 inch diameter CMP barrel with 7.0 feet of freeboard as the primary spillway, and a 150 foot wide earthcut secondary spillway with 3.0 feet of freeboard. A 50 year frequency event produces a peak runoff of approximately 620 cfs and a 100 year frequency event produces a peak runoff of approximately 855 cfs. The earthcut spillway will have a capacity of approximately 2000 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 55 acre-feet. The annual yield with a 50 percent chance of occurrence, or 1 out of 2 years, is expected to be 150 acre-feet and the annual yield with a 10 percent chance, or 1 out of 10 years, is expected to be 768 acre-feet.

The Ree Valley Ranch Dam will be located in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 21-T113N-R71W on an unnamed tributary to Wolf Creek, about 4 miles upstream of the confluence of the unnamed tributary and Wolf Creek. There are no existing Water Permits/Rights filed on the unnamed tributary between the proposed dam and the Wolf Creek; however, Location Notice No. 935-2 was filed in 1950 to store 25 acre-feet of water in a dam located in the NW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 21-T113N-R71W, about one-half mile downstream of the proposed dam. The downstream dam appears to be larger than the 25 acre-feet authorized under the Location Notice, and will probably store approximately the same amount of water as the proposed dam. With the 8.0 square miles of drainage area and the expected 50 percent chance annual yield of 150 acre feet runoff, on most years there should be enough runoff to satisfy both dams.

Page 2

Application No. 7197-3

May 17, 2010

Conclusions:

1. Water Permit Application No. 7197-3 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. 7197-3.

A handwritten signature in black ink, reading "Timothy G. Schaal". The signature is fluid and cursive, with a long horizontal stroke at the end.

Timothy G. Schaal, P.E.
Natural Resources Engineering Specialist

RECEIVED

JUN 29 2010

WATER RIGHTS
PROGRAM

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
County of Hyde) SSI, Mary Ann Morfordcertify that the attached printed Notice was
takenfrom the Highmore Heraldprinted and published in HighmoreCounty of Hyde andstate of South Dakota. The notice was
published

in the newspaper on the following two dates:

June 17, 2010June 24, 2010Cost of Printing \$46.87Mary Ann Morford
(Signature)owner/publisher
(Title)6-24-10
(Date Signed)NOTICE OF
APPLICATION
NO. 7197-3 TO
APPROPRIATE WATER

Notice is given that Ree Valley Ranch, LLP, c/o Patrick J. Flynn, 4709 S. Sundance Circle, Sioux Falls, South Dakota 57105 has filed an application for a water permit to impound 67 acre-feet of water from runoff by constructing a dam located in the NE 1/4 SW 1/4 Section 21 with water impounded in the SW 1/4 Section 21; all in T113N-R71W. 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. 7197-3 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, South Dakota 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 July 5, 2010.

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
FPNO 43 I.PNO 44

Published to

approximate cost



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

June 10, 2010

Highmore Herald
PO Box 435
Highmore SD 57345

ATTENTION: Legal Public Notice

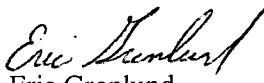
Enclosed is a Notice on Application No. 7197-3 to Appropriate Water to be published twice. Please publish the first notice on June 16, 2010 with the second publication 7 days later. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published, before you make the first publication. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Ree Valley Ranches LLP, c/o Patrick Flynn, 4709 S Sundance Circle, Sioux Falls SD 57105 (Ph # 605-360-1952).

Please send the Water Rights Program the first publication immediately. The publication is checked for accuracy so any corrections can be made in the second publication. You may use the form below or fax a copy of the first publication. Any fax should be sent to the attention of Karen Schlaak at (605) 773-4068. Publication errors can invalidate the public notice.

After the second publication, **please send us an affidavit or use the enclosed Proof of Publication form.** 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

-----CUT HERE-----

No. 7197-3

TO: Eric Gronlund
Water Rights Program
Joe Foss Building
Pierre SD 57501-3181

Date _____

We are in receipt of your letter of June 10, 2010 enclosing Notice to Appropriate Water by Application No. 7197-3 which was first published in our issue of _____. ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.

Name

Newspaper



**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 DATES, CONTACT
THE NEWSPAPER RIGHT AWAY.

June 10, 2010

Ree Valley Ranches LLP
Patrick J Flynn
4709 S Sundance Circle
Sioux Falls SD 57105

Dear Mr. Flynn:

Water Permit Application No. 7197-3 for fish, wildlife and livestock use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Publisher of the Highmore Herald printed at Highmore SD (Ph # 605-852-2927). You will need to contact the newspaper 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 to authorize publication of your Notice and to arrange for payment. Early contact with the paper can eliminate delays. Upon receiving authorization, the publisher has been instructed to publish your notice once each week for two consecutive weeks. 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
eric.gronlund@state.sd.us

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 first Notice on June 17, 2010 with the second publication 7 days later. 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. 7197-3 to Appropriate Water

Notice is given that Ree Valley Ranch, LLP, c/o Patrick J Flynn, 4709 S Sundance Circle, Sioux Falls SD 57105 has filed an application for a water permit to impound 67 acre-feet of water from runoff by constructing a dam located in the NE ¼ SW ¼ Section 21 with water impounded in the SW ¼ Section 21; all in T113N-R71W. 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. 7197-3 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 July 5, 2010.

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 twice 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

JUL 14 2010

Ree Valley Ranch LLP
Patrick J Flynn
4709 S Sundance Circle
Sioux Falls SD 57105

Dear Mr. Flynn:

Enclosed is Water Permit No. 7197-3 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

7197-3

RECEIVED

FEB 18 2014

WATER RIGHTS
PROGRAMNOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USEDate 02/12/2014TO: Water Rights Program, DENR
523 E. Capitol
Pierre, SD 57501-3181FROM: Ree Valley Ranch, LLP
Patrick J. Flynn

(name)

4709 S. Sundance Cir.

(address)

Sioux Falls SD 57105

(city, state, zip)

605-360-1592

(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.

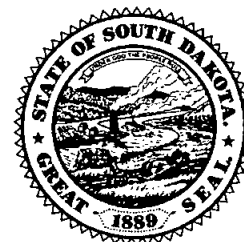
Water Permit No. 7197-3 states that the water use system is to be constructed by
07/05/2015, and water is to be put to beneficial use by 07/05/2019
(date) (date)

The water use system was completed on 08/01/2012
(date)

Applying the water to beneficial use was completed on 08/15/2013
(date)

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

Ree Valley Ranch, LLP
By Patrick J. Flynn
(signature)





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

February 18, 2014

7197-3

Patrick J Flynn
Ree Valley Ranch LLP
4709 S Sundance Circle
Sioux Falls SD 57105

Dear Mr. Flynn:

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 water use system.

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,

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

Permit No. 7197-3
James 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, July 17, 2014, made a thorough examination of the water use system constructed by Ree Valley Ranch, LLP of 4709 S. Sundance Circle, Sioux Falls, SD 57105 holder of Permit No. 7197-3, bearing the priority of April 30, 2010 authorizing the storage of 67 acre-feet of the waters of runoff for fish & wildlife propagation and livestock water purposes, in Hyde County.

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

A. Works used to divert the water:

A 16 ft. high earthen dam with a normal storage capacity of 67 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 16 ft. high earthen dam with a normal storage capacity of 67 ac.-ft. of water.

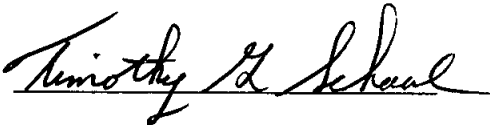
The system is in the following condition good. The point of diversion is located 2350 ft. north & 2250 ft. east of the SW corner of Sec. 21-T113N-R71W, (NE ¼ SW ¼) (Lat. 44.58290 Long. -99.38476). The works are capable of storing 67 acre-feet of water which is to be used for fish & wildlife propagation and livestock water. Water has been put to beneficial use to the maximum extent as follows:

A 16 ft. high earthen dam with a normal storage capacity of 67 ac.-ft. of water.

and the license should be issued for 67 acre-feet of storage.

Applicable permit qualifications have been complied with: Yes X

Exceptions to compliance are: none Date Report Completed: August 27, 2014



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

REPORT ON INSPECTION OF PERMIT NO. 7197-3

DATE OF INSPECTION: July 17, 2014

NAME & ADDRESS OF INSPECTION CONTACT/ Patrick Flynn

RELATIONSHIP TO PERMIT HOLDER, IF APPLICABLE: Managing Partner

NAME & ADDRESS OF PERMIT HOLDER: Ree Valley Ranch, LLP 4709 S. Sundance Circle,
Sioux Falls, SD 57105

DIVERSION POINT LEGAL LOCATION: 2350 ft. north & 2250 ft. east of the SW corner of
Sec. 21-T113N-R71W (NE ¼ SW ¼) (Lat. 44.58290 Long. -99.38476).

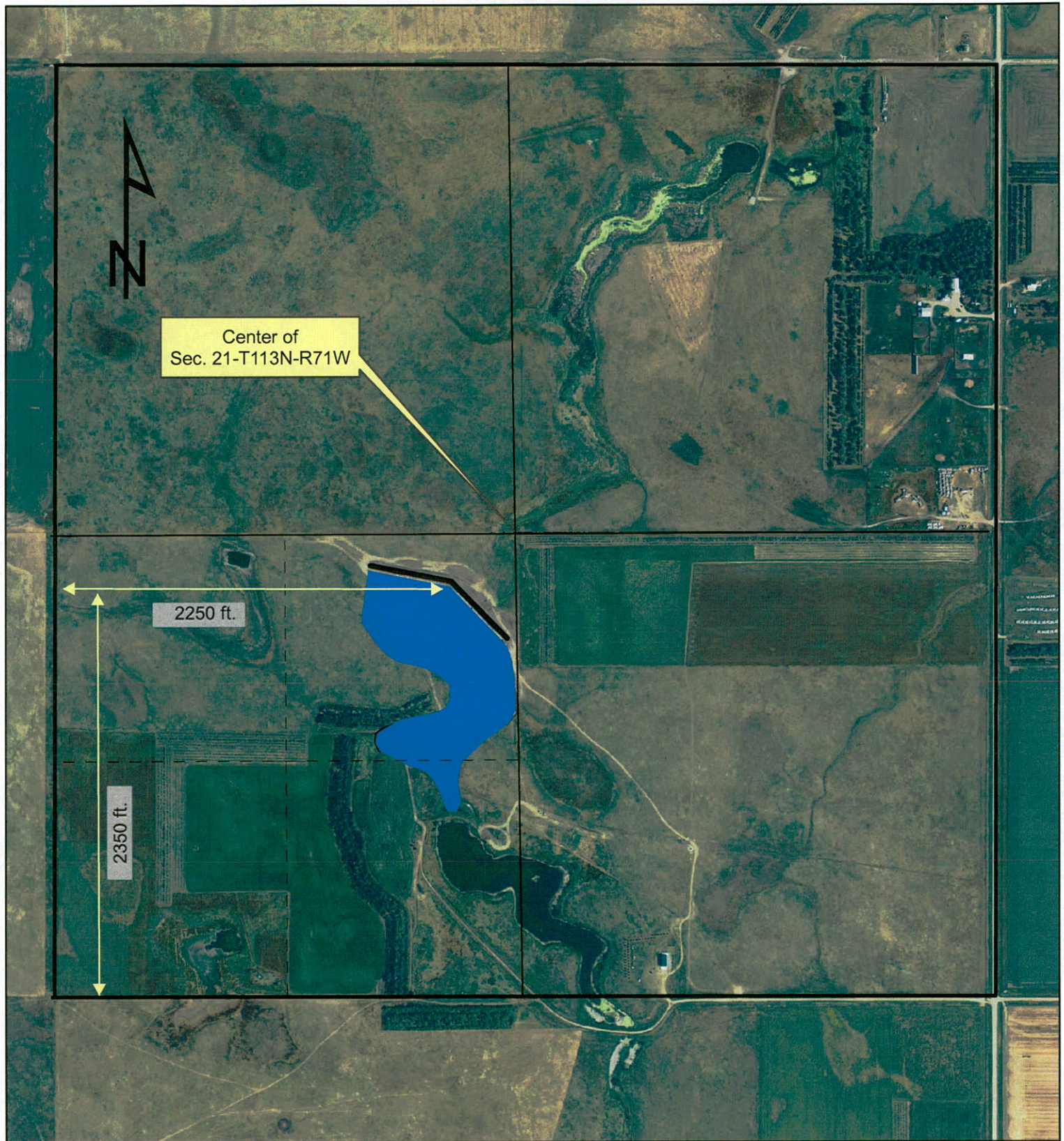
DAM INFORMATION:

- 1) Height to crest 16 feet
- 2) Height to primary spillway 9 feet
- 3) Height to secondary spillway 13 feet
- 4) Crest width 12 feet
- 5) Crest length 1419 feet
- 6) Spillway length XXX feet
- 7) Spillway width 150 feet
- 8) Approx. storage (Normal) 67 acre-feet
- 9) Approx. storage (Maximum) 295 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. 7197-3



0 0.25 0.5 1 Miles



Timothy G. Schaal

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

8/27/2014



**DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES**

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



7197-3

SEP 04 2014

Patrick Flynn
Ree Valley Ranch LLP
4709 S Sundance Circle
Sioux Falls SD 57105

Dear Mr. Flynn:

Enclosed is Water License No. 7197-3. 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. 7197-3

(1) Ree Valley Ranch LLP, 4709 S Sundance Circle, Sioux Falls SD 57105 made Application No. 7197-3, April 30, 2010 for a water permit to impound 67 acre feet of water from runoff in a dam located in Hyde County, South Dakota and used for fish & wildlife propagation, recreation and domestic livestock water purposes. Permit No. 7197-3, with a priority date of April 30, 2010 was approved July 5, 2010 and issued to the applicant for impoundment of water with construction of the storage dam to be completed on or before July 5, 2015 and the application to beneficial use of water on or before July 5, 2019.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the construction of the storage dam and is entitled to impound 67 acre feet of water for beneficial use with sufficient water annually to maintain the water level to the outlet elevation.

The location of the storage dam (spillway) is 2,350 feet north and 2,250 feet east of the SW corner of Section 21, T113N, R71W (NE ¼ SW ¼). Water is impounded in the SW ¼ Section 21.

(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 Ree Valley Ranch LLP, 4709 S Sundance Circle, Sioux Falls SD 57105 the holder and/or owner of Water Right No. 7197-3 is issued a license to impound 67 acre feet water from runoff in a storage dam with a priority date of April 30, 2010 from the location specified in (2) of this license. The water is used for fish and wildlife propagation, recreation and domestic livestock watering.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 7197-3 and subject to the following qualifications:

- Water Right No. 7197-3 authorizes a dam with storage capacity of 67 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

SEP 04 2014

date

