

WATER PERMIT NO. 7140-3

Name of Applicant: **Denis Mikkelson**

Address: **12124 424th Ave, Langford SD 57454**

Phone:

Amount of Water Claimed: **47 AF**

Total Acres: **NA**

Source of Water Supply: **runoff**

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

County: **Marshall**

Type of Waste Disposal System: **NA**

Location: **4 miles northwest of Langford**

PRIORITY

Date Received: **5-29-09**

Application/License Fee: **\$200**

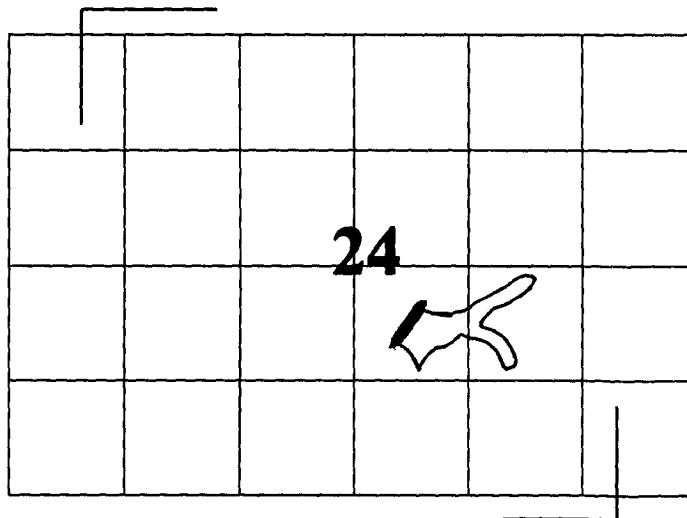
Corrected Application Received:

Period of Annual Use: **January 1 – December 31**

Remarks:

Diversion Point: **NW ¼ SE ¼ Sec 24-T125N-
R58W**

Land to be Irrigated: **N ½ SE ¼ Sec 24-T125N-
R58W**



Depth of Well: **NA**

Well Driller:

Remarks:

Type of Map: **aerial**

Prepared by: **Thomas L Wickstorm, USFWS**

Reviewed and the Number Assigned on: **5-29-09**

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____

SD Form - 1585 V2
FORM 2: Application for uses other than irrigation
(type or print)

Mail to: Water Rights Program Joe Foss Building 523 E. Capitol Pierre, SD 57501-3181 (605) 773-3352	No. <u>7140-3</u>	(office use only) Hydrologic Unit <u>10160005</u>
	Basin <u>James River</u>	
	Newspaper <u>The Britton Journal</u>	<u>PO Box 69 57430</u>
	<u>605 448-2281</u>	<u>(Wed)</u>

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MAY 29 2009
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: ☒ New ☐ Vested Right (Use predates Mar 2, 1955) ☐ Future Use Reservation
(check one) ☐ 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.)

Embankment in the NW1/4SE1/4 Section 24, T. 125 N., R. 58 W.

- Name of Applicant Dennis Mikkelsen Phone _____
(check one) ☐ Owner ☐ Tenant/lessee
Mailing Address 12124 424th Ave, Langford State SD 57454
(Street, RR, or Box and City) (Zip Code)
- Amount of water claimed _____ *CFS or _____ **GPM 47 ***AF
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)
- Source of water supply Watershed above embankment.
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) County Marshall
NW1/4SE1/4 Section 24, T. 125 N., R. 58 W. Water impounded: N 1/2 SE 1/4
Sec 24 T 125N R 58W
- County or counties where water will be used Marshall
- Annual period during which water is to be used annually 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 Engineers Job Plans.

STATE OF SOUTH DAKOTA)
County of MARSHALL SS

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

I, Dennis Mikkelsen, 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 Dennis F. Mikkelsen

Subscribed and sworn to before me this 28 day of May 20 09

[Signature]
Notary Public signature

**SOUTH DAKOTA
WATER PERMIT NO. 7140-3**

Date of first receipt of application May 29, 2009.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7140-3 to Denis Mikkelsen, 12124 424th Ave, Langford SD 57454 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. 7140-3 authorizes impoundment of 47 acre-feet of water from runoff by reconstructing an existing dam located in the NW ¼ SE ¼ Section 24 with water impounded in the N ½ SE ¼ Section 24; all in T125N-R58W.
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. 7140-3 is July 6, 2009.
5. The date from which applicant may claim right is May 29, 2009.
6. One-fifth of the construction is to be completed on or before January 6, 2012.
7. All construction is to be completed on or before July 6, 2014.
8. Water is to be put to beneficial use on or before July 6, 2018.
9. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

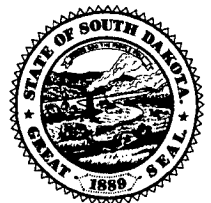
1. Water Permit No. 7140-3 authorizes a dam with a storage capacity of 47.0 acre feet of water and sufficient water annually to maintain the water level to the outlet elevation.
2. Low flows as needed for downstream domestic use, including livestock water and prior water rights must be by-passed.

WATER MANAGEMENT BOARD

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

AUG 04 2009

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 applicants 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

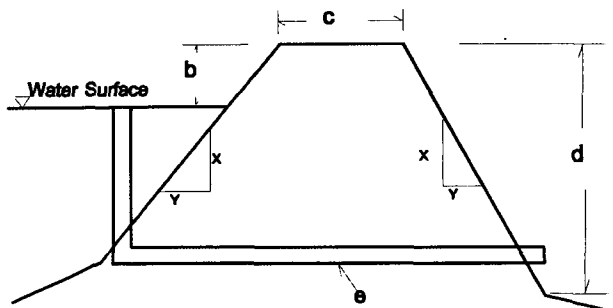
- a) Surface Dimensions _____ Depth _____
- b) Depth to water (ground surface to water level) _____

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 Dr
Pierre, SD 57501



- b) Freeboard _____ 3 ft.
- c) Crest Width _____ 12 ft.
- Crest Length _____ 385 ft.
- d) Height _____ 22.8 ft.
- e) Primary Outlet Capacity _____ 93.5 cfs
- If pipe, diameter _____ 60" drop w/48" out
- f) Secondary Spillway Capacity _____ 172.9 cfs
- Spillway Width _____ 40 ft.
- g) X & Y Slope _____
- Upstream _____ 3:1
- Downstream _____ 3:1
- h) Surface Area of Impoundment _____ 5.9
- i) Storage _____ 47.0 Acre Feet
- j) Drainage Area Above Dam _____ 1,485.6 Acres

Dennis Mikkelson
Pond Repair
Marshall County



Section 24, T. 125 N., R. 58 N., SE



0.5

0.25

0

Miles

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MAY 29 2009

WATER RIGHTS
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LTW
Thomas L. Wickstrom
Fish & Wildlife Bid.
vs Fish & Wildlife Service
Waubesa NWR



RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 5/29, 20 09

RECEIVED OF O & M Partnership 12124 424th Ave Langford SD 57454

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

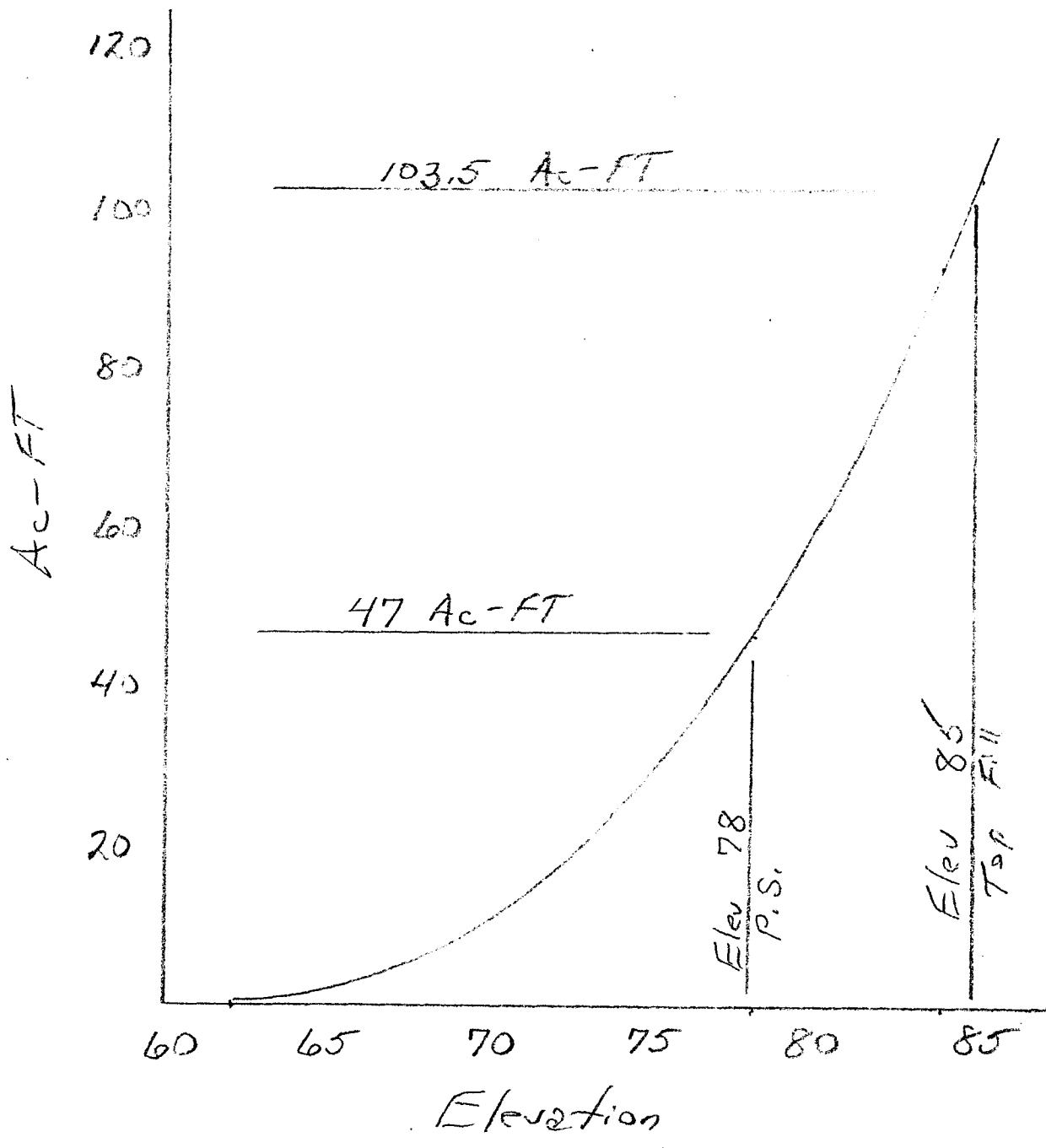
Fee for Application for Permit No. <u>7140-3</u> to Appropriate Water, to construct and to put water to beneficial use	150	00
Fee for Application for Permit No. _____ to Appropriate Water for Future use		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. <u>7140-3</u>	50	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	200 00

No. 04146

By Janet Erbe
Chief Engineer

Dennis Mikkelson

Sec 24, T125N, R58W



=====

POND DESIGN

=====

WinPond 1.5.2405.11111

Project ---- : Farm Pond

Description :

State ----- : South Dakota

County ----- : Marshall

Landowner -- : Dennis Mikkelsen

Township --- : 125N

Range ----- : 58W

Section ---- : 24

Tract ----- :

Field ----- :

Designed By : Dave Konechne

Date designed: 5/11/2009

Date printed : 5/16/2009

Approved By : _____

Date : _____

File Name : C:\Documents and Settings\Elaine\...\mikkelsen.prj

PLANNED IN COOPERATION WITH USDA-NRCS

Office Name
Address1
Address2
City

Project --- : Farm Pond
 Prepared for:Dennis Mikkelson
 Prepared by :Dave Konechne
 Checked by : _____

TWP : 125N RNG : 58W
 SEC : 24 FLD :
 Date: _____

***** JOB APPROVAL CLASS *****

Hazard Class	Low	A
Effective Height	Feet	20.0
Effective Storage	Ac-Ft	76.0
Overall Height	Feet	22.8
Total Storage	Ac-Ft	103.5
Storage X Effective Height	Ac-Ft Ft	1519
Contributing Drainage Area	Acres	1485
Contributing Drainage Area	Square Miles	2.32
Pipe Conduit Capacity	CFS	93.5
Open Channel Spillway Design Flow	CFS	172.9
Peak Inflow Aux Spillway Design Storm	CFS	529.5
Conduit - Inside Diameter	Inches	48
Conduit Material		HCMP
Inlet Type		Drop
Job Approval Class		
INVENTORY SIZE DAM		

***** ELEVATION-STORAGE INPUT DATA *****

ELEV (ft)	POOL AREA (acres)	INT.STORAGE (ac.ft.)	ACCUM.STORAGE (ac.ft.)
62.0	0.00		0.00
78.8	6.20	52.08	52.08
84.0	10.30	42.90	94.98

***** STORAGE VOLUMES *****

	ELEVATION (ft)	AREA (acres)	STORAGE (ac.ft.)
Inlet (Princ. spillway)	78.0	5.90	47.24
Aux. spillway	82.0	8.72	75.96
Max. water	83.8	10.10	92.45
Settled top of fill	84.8	10.93	103.47
Sediment - above inlet			0.00
- below inlet			0.00
Inlet to Aux.			28.72
Aux. to max. water			16.49

RUNOFF CURVE NUMBER DETERMINATION

Acres & (curve numbers) for
 Hydrologic soil Group

COVER DESCRIPTION

A B C D

ACCUMULATED: 1485.00 Acres

WEIGHTED CURVE NUMBER: 72.0

Project --- : Farm Pond
 Prepared for:Dennis Mikkelson
 Prepared by :Dave Konechne
 Checked by : _____

TWP : 125N RNG : 58W
 SEC : 24 FLD :
 Date: _____

***** HYDROLOGIC DATA *****

Rainfall distr. type ----- :	II		
Drainage area, acres ----- :	1485.0	Watershed slope, % :	4.3
Runoff curve number ----- :	72	Flow length, ft. - :	15576
Time of concentration, hrs :	2.90		
(min.: 174.15)			
----- Spillway -----			
	Principal	Auxiliary	
Design frequency, yrs.:	2	25	
24 hr. Rainfall, in. :	2.3	4.2	
Runoff, in. ----- :	0.4	1.6	
Peak inflow, cfs ---- :	116.60	529.55	
Peak outflow, cfs --- :	93.51	172.93 A.S.	
		233.35 P.S.	

***** PRINCIPAL SPILLWAY TRIALS *****

Inlet type: Drop Inlet Elevation: 78.0

	TRIAL 1	TRIAL 2	TRIAL 3
CONDUIT: Type -----	HCMP		
Diameter, in. --	48.00		
Height, in. ----			
Width, in. -----			
Manning's n ----	0.021		
Inlet ext., ft.-	0.0		
Length, ft. ----	111.0		
Entrance Coefficient, Ke	1.000		
RISER : Type -----	HCMP		
Diameter, in. --	60.00		
Length, in. ----			
Width, in. -----			
Weir length, in.	188.50		
Crest radius, in.			
Invert elevation -----	68.00		
Auxiliary elevation -----	82.0		
STORAGE (ac.ft.):			
Temporary (PS-AS) ----	28.72		
Total at Auxiliary ---	75.96		
Effective height, ft. ---	20.0		
Height x storage -----	1519		
Drawdown time, days-hrs.	0-3.4		
Trial used -----	1		

CONDUIT TYPES ----- : HCMP - Helical Corrugated Metal Pipe

Project --- : Farm Pond
 Prepared for: Dennis Mikkelsen
 Prepared by : Dave Konechne
 Checked by : _____

TWP : 125N RNG : 58W
 SEC : 24 FLD :
 Date: _____

***** AUXILIARY SPILLWAY DETAILS *****

Discharge determination: Qe values from ASFILE

Auxiliary elev. :	82.0	Retardance ----- :	B
Bottom width, ft. :	40	Level sect. length, ft.:	25
Flow depth, ft. - :	1.75	Side slope ratio, n:1 :	3.00
EXIT CHANNEL -			
Max. Vel., fps - :	5.0	Retardance ----- :	B

Flow, cfs ----- :	172.93	Exit slope, % --- Min.:	4
		Max.:	8
Settled fill elev.:	84.8	Drawdown time, days-hrs:	0-10.7
Channel elev. --- :	62.0	Overall height, ft. -- :	22.8
(downstream toe)			

***** CONDUIT DETAIL *****

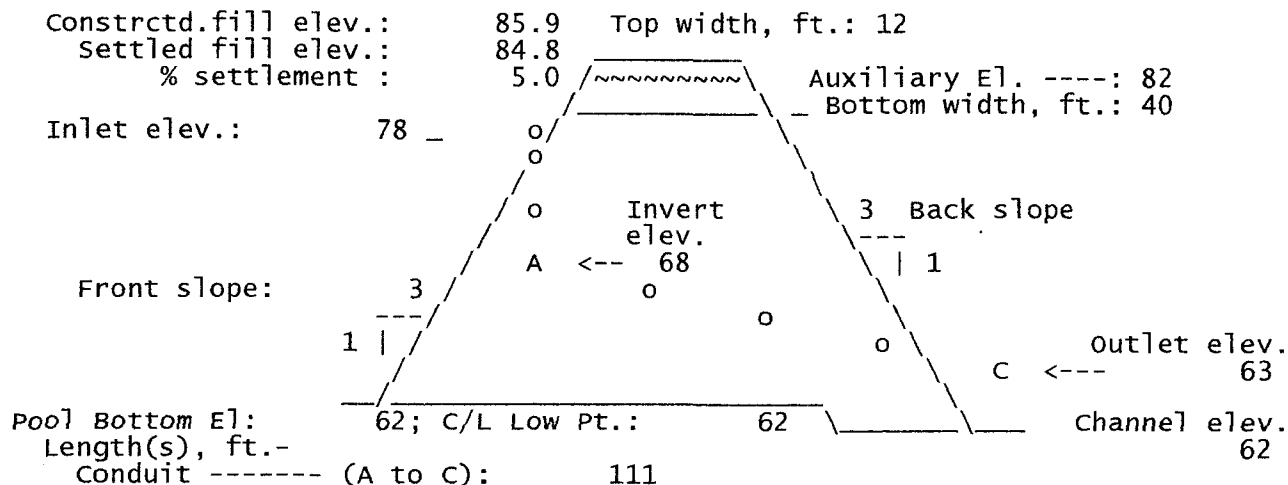
Inlet Type -----	DROP
Conduit Type -----	HCMP - Helical Corrugated Metal Pipe
Diameter, in. -----	48.00
Inlet extension, ft --	0.0
Length, lin. ft. -----	110.0 Extends 6.0 ft. beyond dnstr.toe
Length, lin. ft. -----	111.0 Pipe length used in routing
Slope, % -----	4.5
Max.fill over pipe, ft.	15.8

Horizontal Distances (ft.)	
Upstrm: edge of top width to inlet end of pipe :	22.7
Dnstrm: edge of top width to toe ----- :	68.4

***** DESIGN ELEVATIONS (at principal spillway) *****

Inlet type: DROP

NOT TO SCALE



Project --- : Farm Pond
 Prepared for:Dennis Mikkelson
 Prepared by :Dave Konechne
 Checked by : _____

TWP : 125N RNG : 58W
 SEC : 24 FLD :
 Date: _____

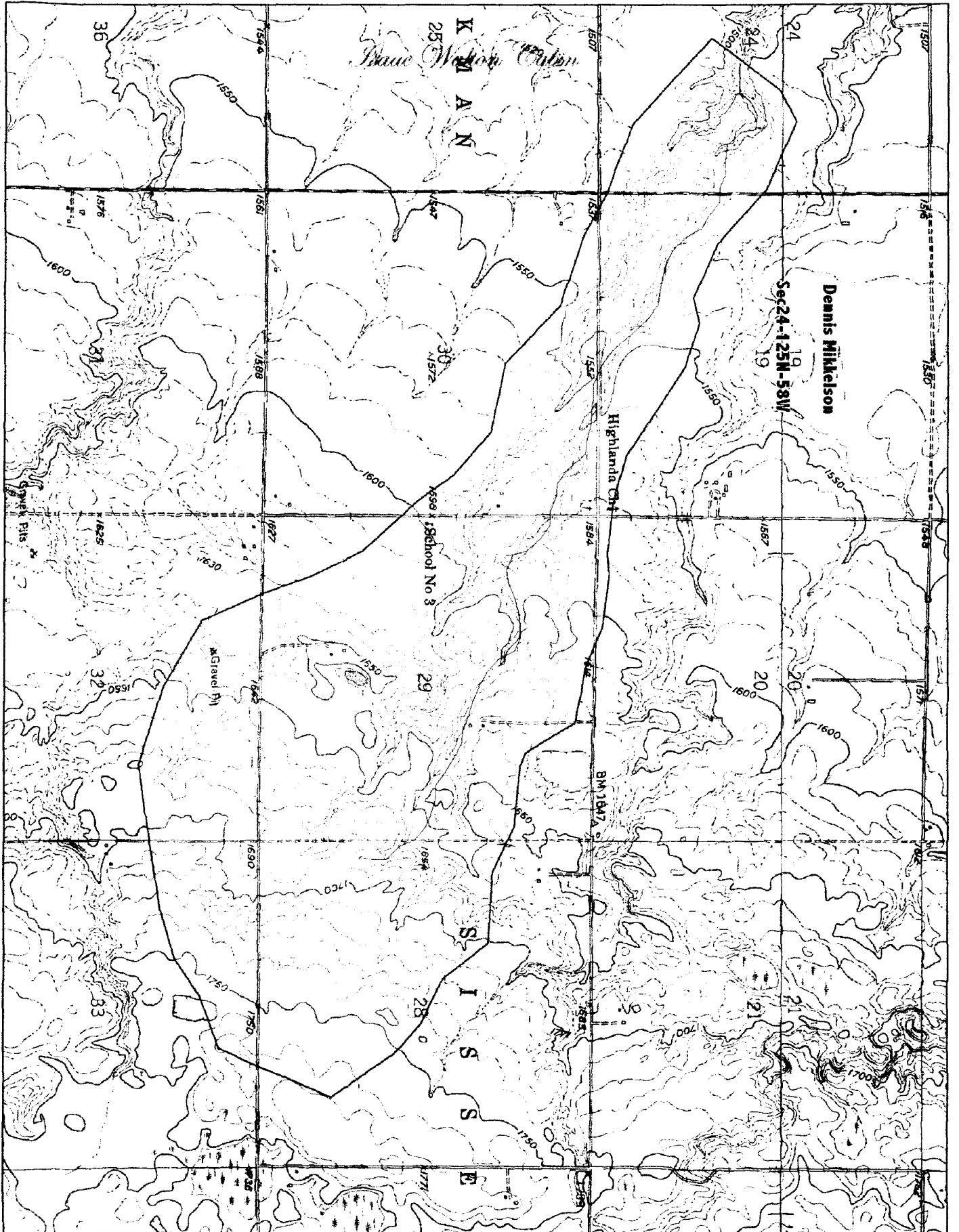
***** SUMMARY *****

Inlet type: DROP Inlet Elevation: 78

CONDUIT: Type -----	HCMP	- Helical Corrugated Metal Pipe
Diameter, in. ---	48	
Length, lin. ft.-	111	Extends 6 ft. beyond dnstr.toe
RISER : Type -----	HCMP	- Helical Corrugated Metal Pipe
Diameter, in. ---	60	
Height, ft. -----	10	= Inlet elev. - Invert elev.
AUX. : Elevation -----	82	
Bottom width, ft.	40	
Hp, flow depth,ft.	1.75	
Exit slope, % min.	4	
max.	8	
Effective height, ft. ----	20	= AS elev. - low pt. on C/L
Height x storage -----	1519	
Overall height, ft. -----	22.8	= std. fill elev - chan. elev
NOTE -----	*****	INVENTORY SIZE DAM

***** PROJECT DEFAULTS *****

Design based on -----:	Settled slopes
Berms settled -----:	False
Auxiliary spillway to Top of Dam: -----:	2.0 (ft)
Freeboard -----:	1.0 (ft)
Minimum bottom width -----:	10.0 (ft)
Maximum bottom width -----:	150 (ft)
Feet above inlet (Drawdown) -----:	1.0 (ft)
Percent or storage drained (Drawdown) -----:	85.0 (ft)
Minimum flow (Drawdown) -----:	0.1 (cfs)
Orifice Coefficient -----:	0.71 (ft)
Full Pipe Flow Required? -----:	Yes
stage required above Prin. Spwy. Crest: -----:	0.5 (ft)
Max. drainage area for required stage: -----:	20.0 (acres)



Dennis Mickelson

Sec 24, T125N, R52W Marshall Co

<u>Grid line</u>	<u>Length</u>
1	0.9
2	1.0
3	1.4
4	3.2
5	2.6
6	0.9
A	2.3
B	4.0
C	3.8

$$20.1 \times 2010 \frac{ft}{mi} = 40,200 ft$$

<u>Contour</u>	<u>Grid Crossing</u>
1500	5
1550	2
1600	2
1650	5
1700	3
1750	1
	<u>22</u>

$$S = \frac{1.571(50)(22)}{40,200} = 0.043 = 4.3\%$$

$$DA = 2.32 \times 640 = 1485 \text{ Ac}$$

$$L_T = 2.95 \times 5280 = 15,576 \text{ Ft}$$

$$CN = 75$$

$$DA = 1485 \text{ Ac} \quad L_T = 15,576 \text{ Ft} \quad CN = 72$$

Water Permit Application No. 7140-3
 Denis Mickelson

Top of Dam Elev. - 85
 2nd Spillway Elev. - 82
 P. Spillway Elev. - 78
 D/S Emb. Top Elev. - 62.2

Cat. 3 - Low Hazard Dam

Ht. = 22.8 ft.

Normal Storage Capacity = 47 Ac-Ft
 Int. Storage Capacity = 76
 Max. Storage Capacity = 103.5

Int. Capacity x Eff Ht. = 76 x 20 = 1520 < 3000 ∴ 25 yr
 Minimum Spillway Design

From USGS WRI 80-80 "Tech. for Est. Flood Peaks ... in SD"
 DA = 1485 Ac S = 704 mi S_i = 3.89
 = 2.32 mi²

$$Q_{25} = 83.4 A^{.60} S^{.44} S_i^{-.72}$$

$$= 83.4 (2.32)^{.60} (70)^{.44} (3.89)^{-.72}$$

$$= 83.4 (1.6569) (6.48) (0.3760)$$

$$= \underline{340 \text{ cfs}}$$

$$Q_{100} = 132 A^{.65} S^{.46} S_i^{-.67}$$

$$= 132 (2.32)^{.65} (70)^{.46} (3.89)^{-.67}$$

$$= 132 (1.7281) (7.0550) (.4025)$$

$$= \underline{650 \text{ cfs}}$$

Secondary Spillway Capacity

$$Q = CLH^{3/2}$$

C = 2.6
 L = 40
 H = 3

$$= (2.6)(40)(3)^{1.5}$$

$$= \underline{540 \text{ cfs}}$$

NRCS Annual Yield

DA = 1485 CH = 72 IS₂ = 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

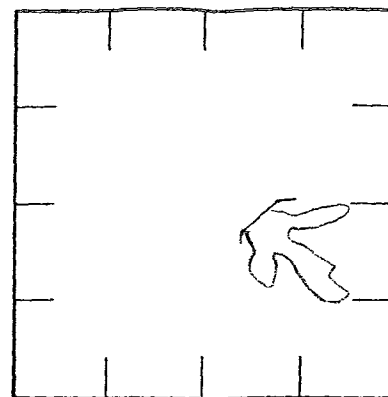
80% chance = 0.12
 0.12 x 1485/12 = 15 Ac-Ft

50% chance = 0.33
 0.33 x 1485/12 = 41 Ac-Ft

10% chance = 1.80
 1.80 x 1485/12 = 223 Ac-Ft

DRAINAGE AREA	ANNUAL YIELD	PEAK RUNOFF	EMERG. SPLWY. CAPACITY	WATER DEPTH	SURFACE AREA	SEDIMENT STORAGE	TOTAL STORAGE
ACRES	50% AC. FT.	25-YR.	C.F.S.	FEET	ACRES	AC. FT.	AC. FT.
1485	43	530	173	16	5.9	—	47

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

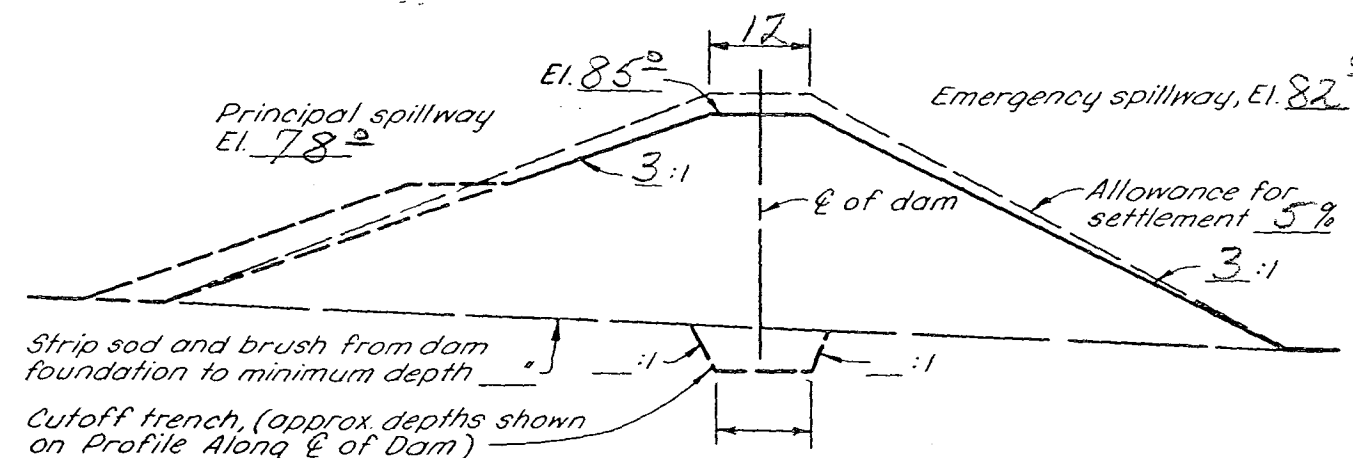


sec 24 T. 125N R. 58W
Marshall County

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**WATER RIGHTS
PROGRAM**

[illegible]

REGISTERED PROFESSIONAL ENGINEER
 REG. NO. 3208
 DAVID F. KONECHNE
 SOUTH DAKOTA

See attached topog by FF&WL

SKETCH PLAN OF DAM AND RESERVOIR AREA

Approximate scale 1" = _____

REFERENCE: GUIDE PLAN NO. 1.0

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
SP-19 PVC

JOB PLAN NO. 1.0

EARTH DAM

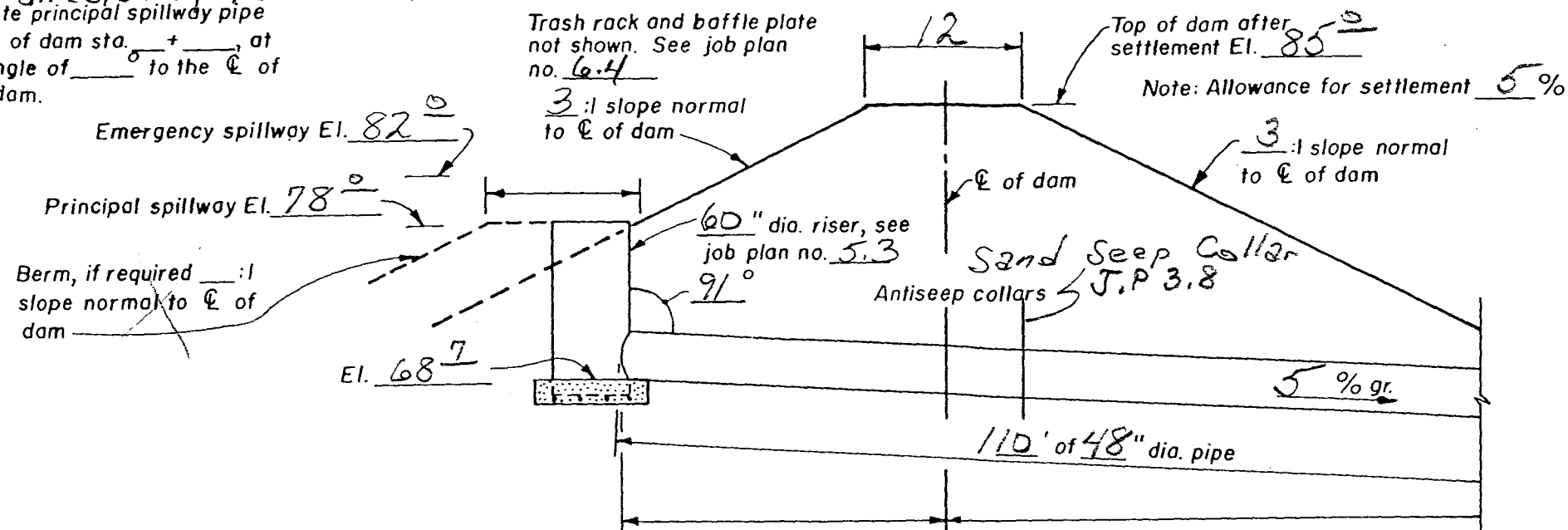
OPERATOR: Dennis Mikkelsen

CONSERVATION DISTRICT: _____

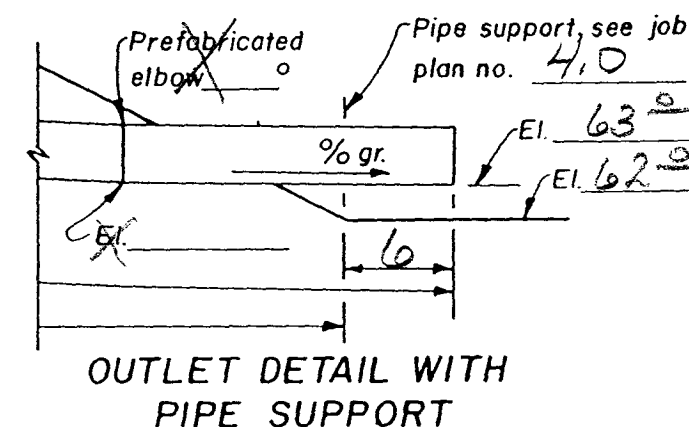
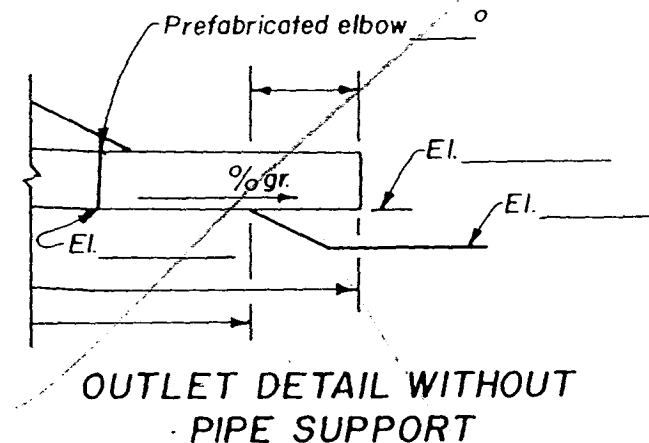
Class "A" Haz22nd

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

As directed by technician
Locate principal spillway pipe
at $\mathcal{C}$ of dam sta. + , at
an angle of ° to the $\mathcal{C}$ of
the dam.



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



SPECIFICATION NOTES

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

All CMP to be vinyl
clad and spiral or
caulked seam and
double riveted.

TABLE OF QUANTITIES

[illegible]

APPLICABLE STANDARD S.C.S. SPECIFICATIONS

REFERENCE: GUIDE PLAN NO. 2.0

Rev. 8/80
JOB PLAN NO. 2.0

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

LOCATION

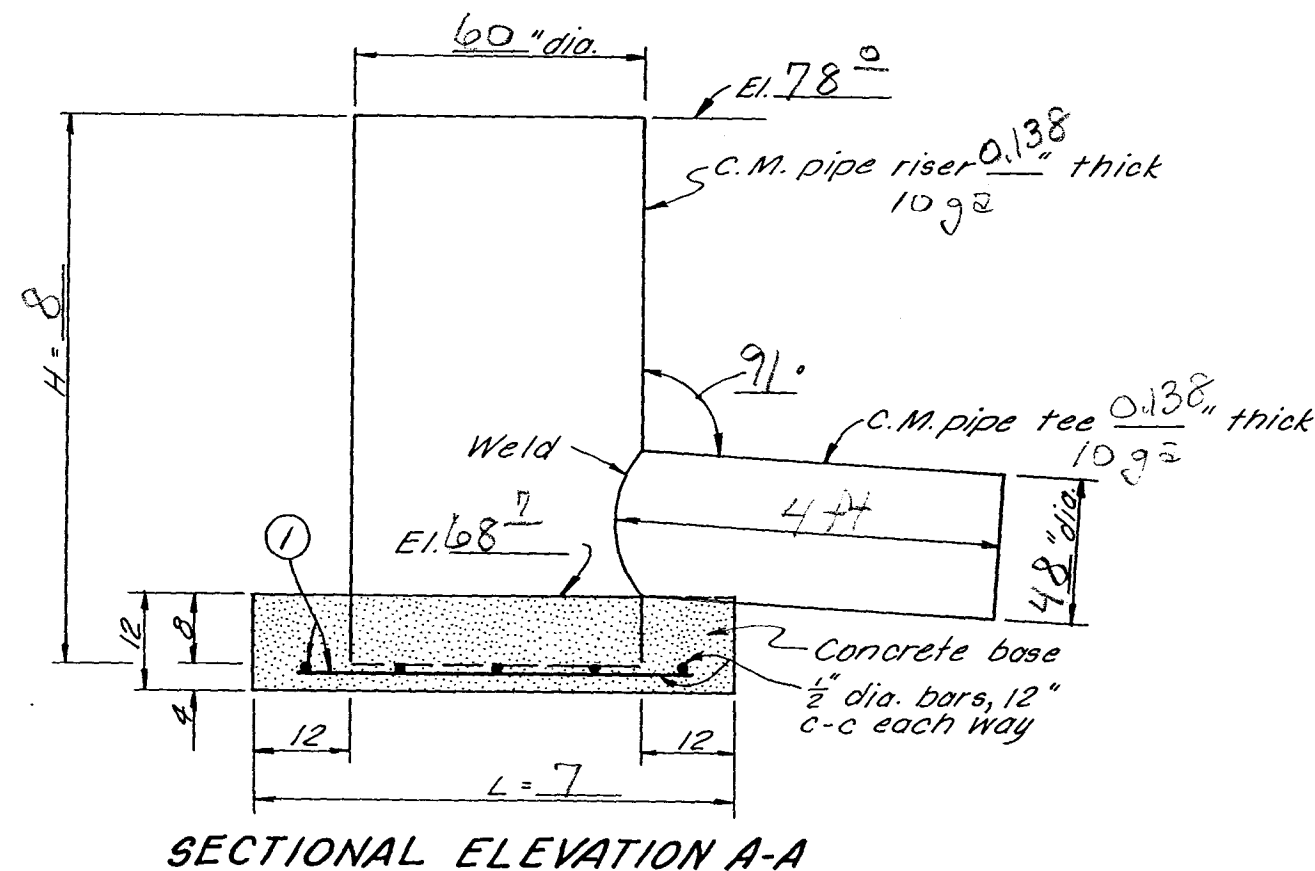
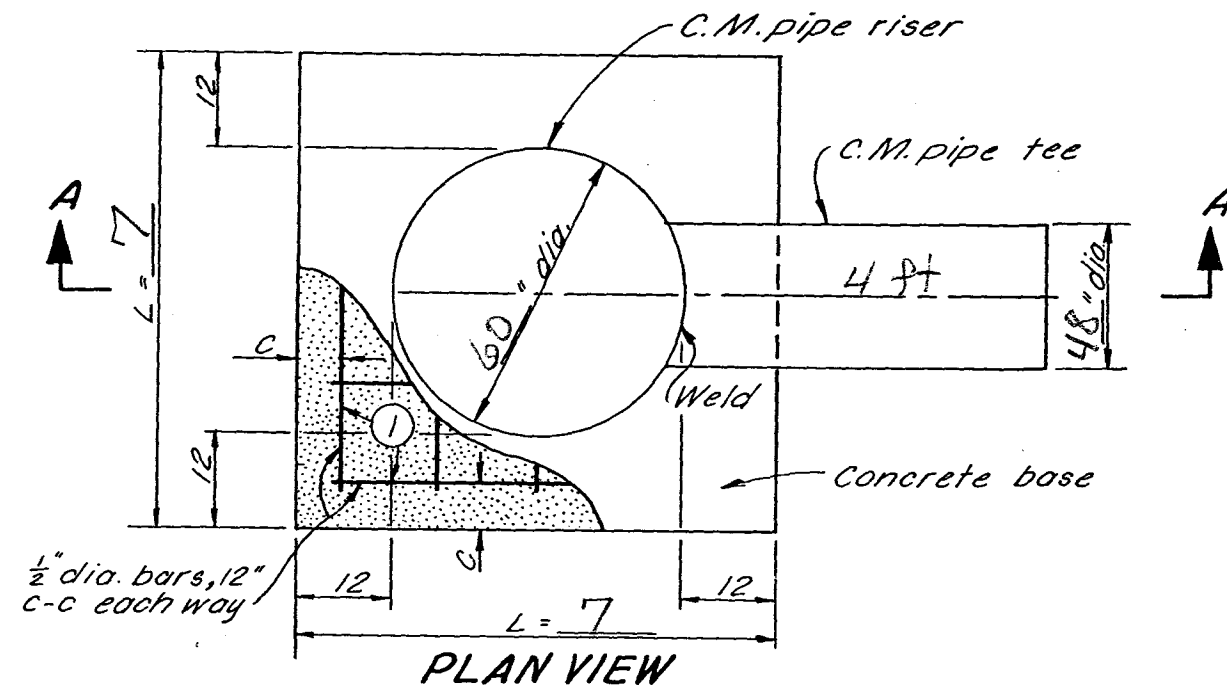
CORRUGATED METAL PIPE
DROP INLET PRINCIPAL SPILLWAY

OPERATOR Dennis Mikkelsen

CONSERVATION DISTRICT _____

**U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE**

Date _____		Approved by _____	
Designed _____		Title _____	
Drawn _____		Title _____	
Traced _____		Sheet _____	Drawing No _____
Checked _____		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.
60	4	1	STR.	14	6-6	91-0	61	6	7

TABLE OF QUANTITIES

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

NOTE: All CMP to be vinyl clad and spiral
or caulked seam and double riveted

C.M. PIPE RISER WITH FABRICATED TEE

OPERATOR: Denis M. Kelsner

CONSERVATION DISTRICT: _____

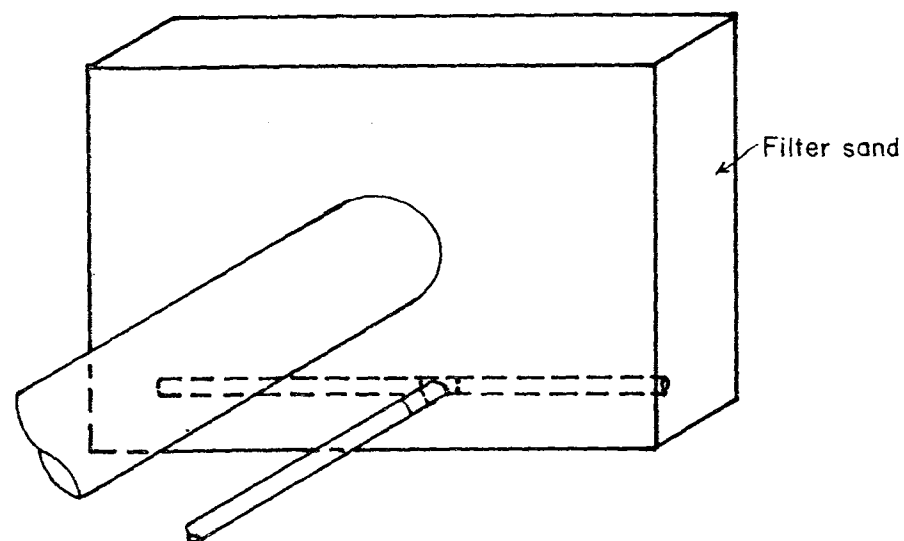
U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

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

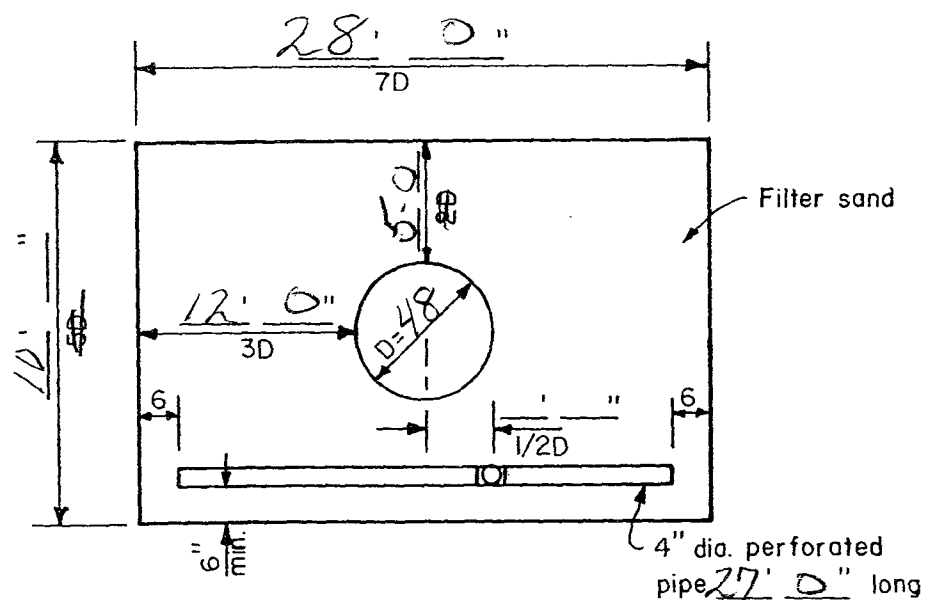
REFERENCE: GUIDE PLAN NO. 5.3

JOB PLAN NO. 5.3

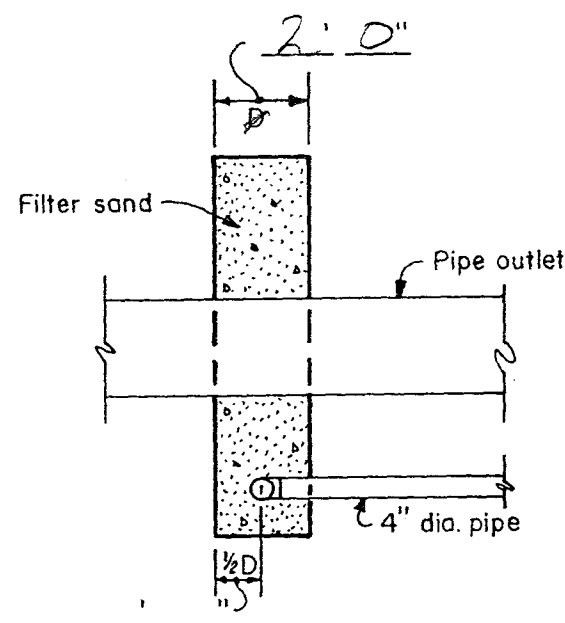
5, N-29,073.5-36



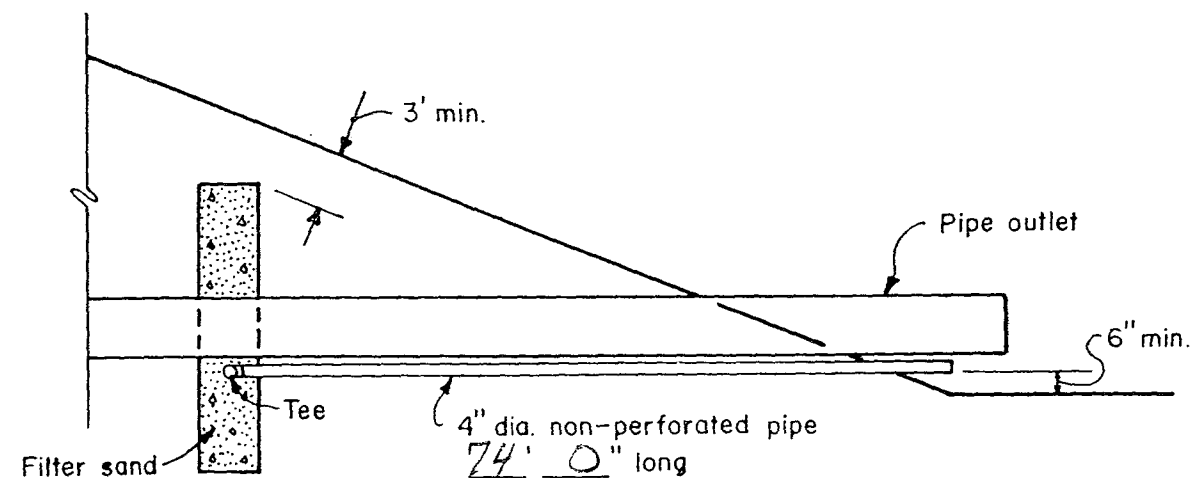
ISOMETRIC VIEW



UPSTREAM VIEW



SIDE VIEW



OUTLET DETAIL

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
21 cy

Sec. _____, T. _____, R. _____

_____ County

LOCATION

SAND ANTISEEP COLLAR

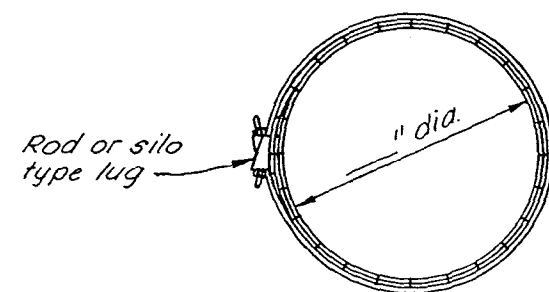
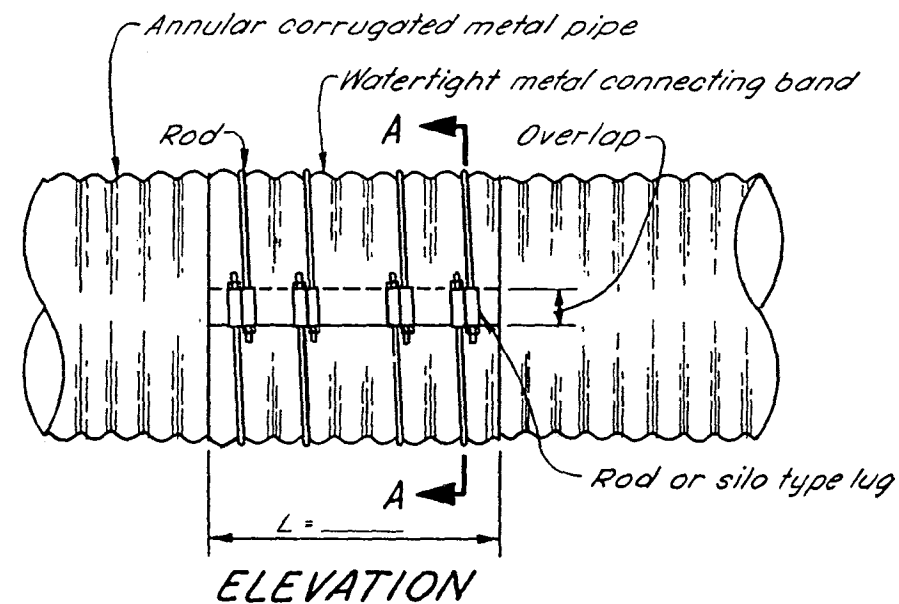
OPERATOR Dennis Mikkelsen

CONSERVATION DISTRICT _____

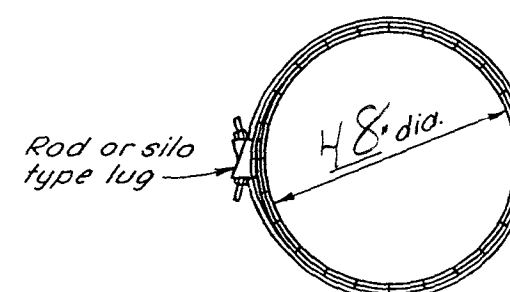
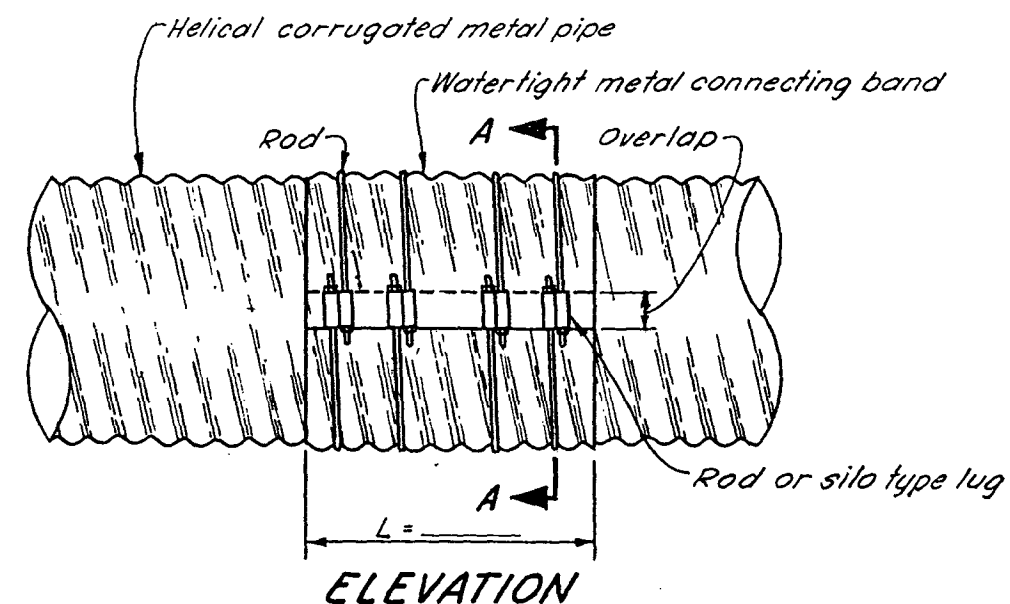
Designed _____	Date _____	Approved by _____
Drawn _____		Title _____
Traced _____		Title _____
Checked _____		Sheet _____
		Drawing No. _____

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 $\varnothing$ 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).



SECTIONAL ELEVATION A-A



SECTIONAL ELEVATION A-A

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

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.

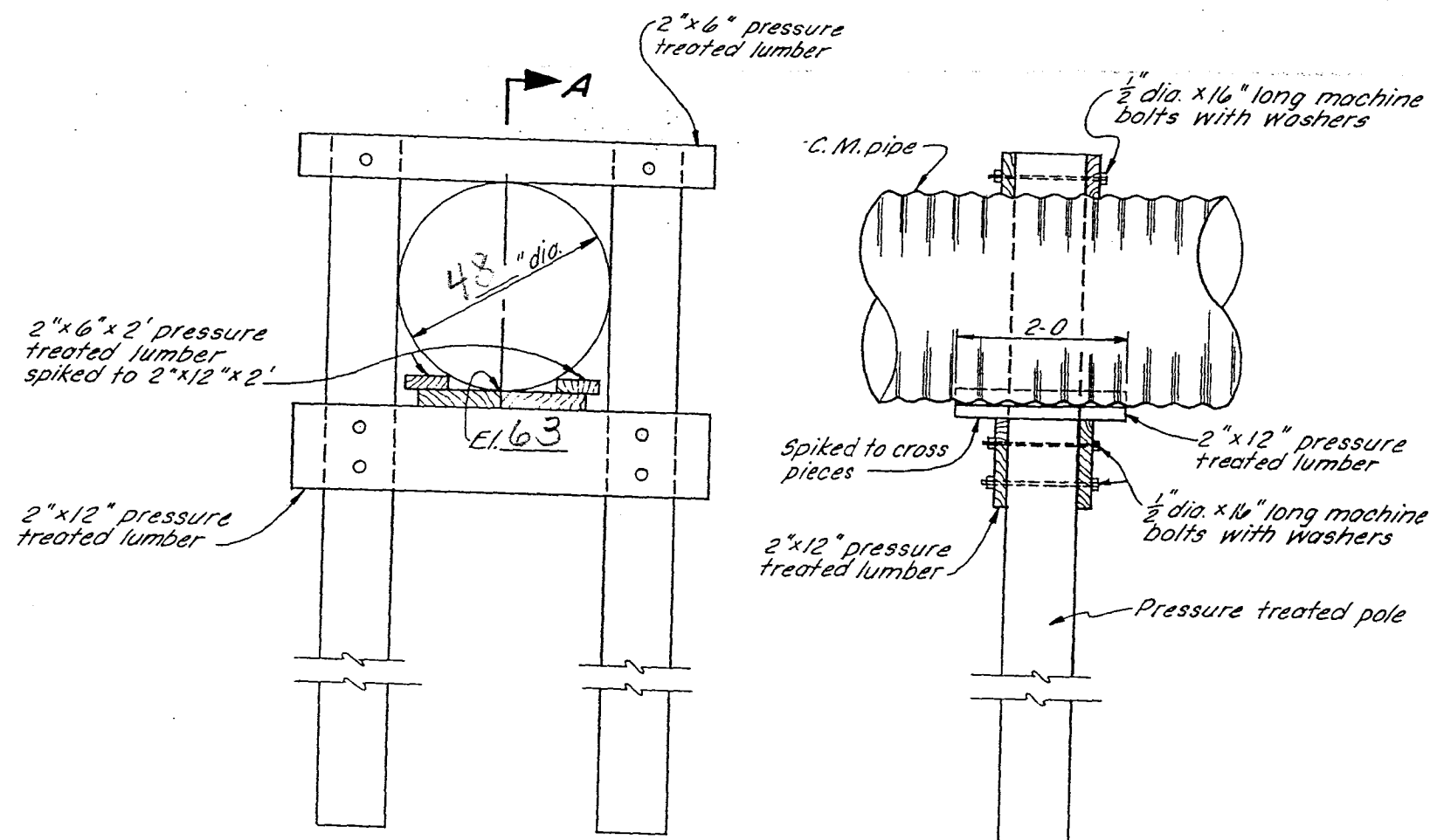
WATERTIGHT CONNECTING BAND FOR ANNULAR AND HELICAL CORRUGATED METAL PIPE

OPERATOR: Dennis Mikkelsen

CONSERVATION DISTRICT: _____

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Designed: _____ Date: _____ Approved by: _____
Drawn: _____ Title: _____



ELEVATION

SECTIONAL ELEVATION A-A

TABLE OF QUANTITIES

ITEM	LENGTH FOR 48" DIA. C.M. PIPE	UNIT	QUANTITY
PRESSURE TREATED POLE 10" DIA.	12-0	EACH	2
2" X 12" PRESSURE TREATED LUMBER	6-0	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

REFERENCE: GUIDE PLAN NO. 4.0

JOB PLAN NO. 4.0

NOTES:

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

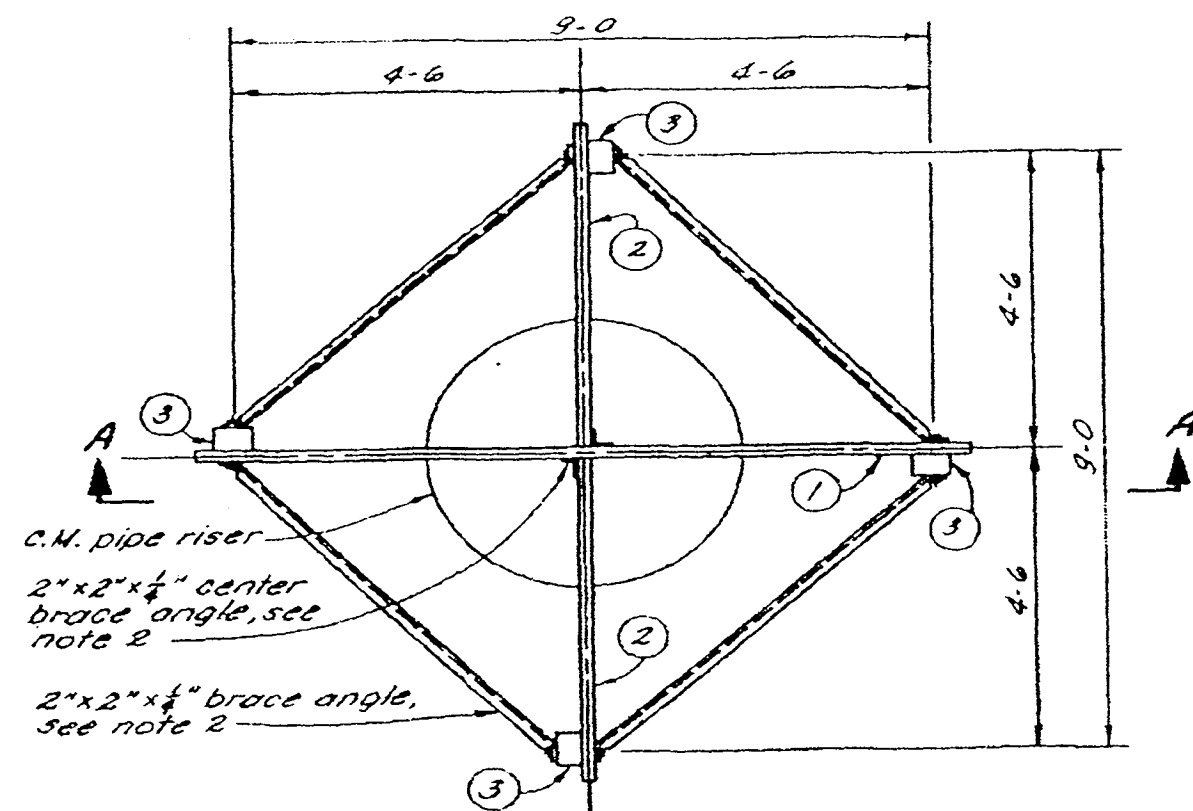
TIMBER PIPE SUPPORT

OPERATOR: *Dennis M. Kelson*

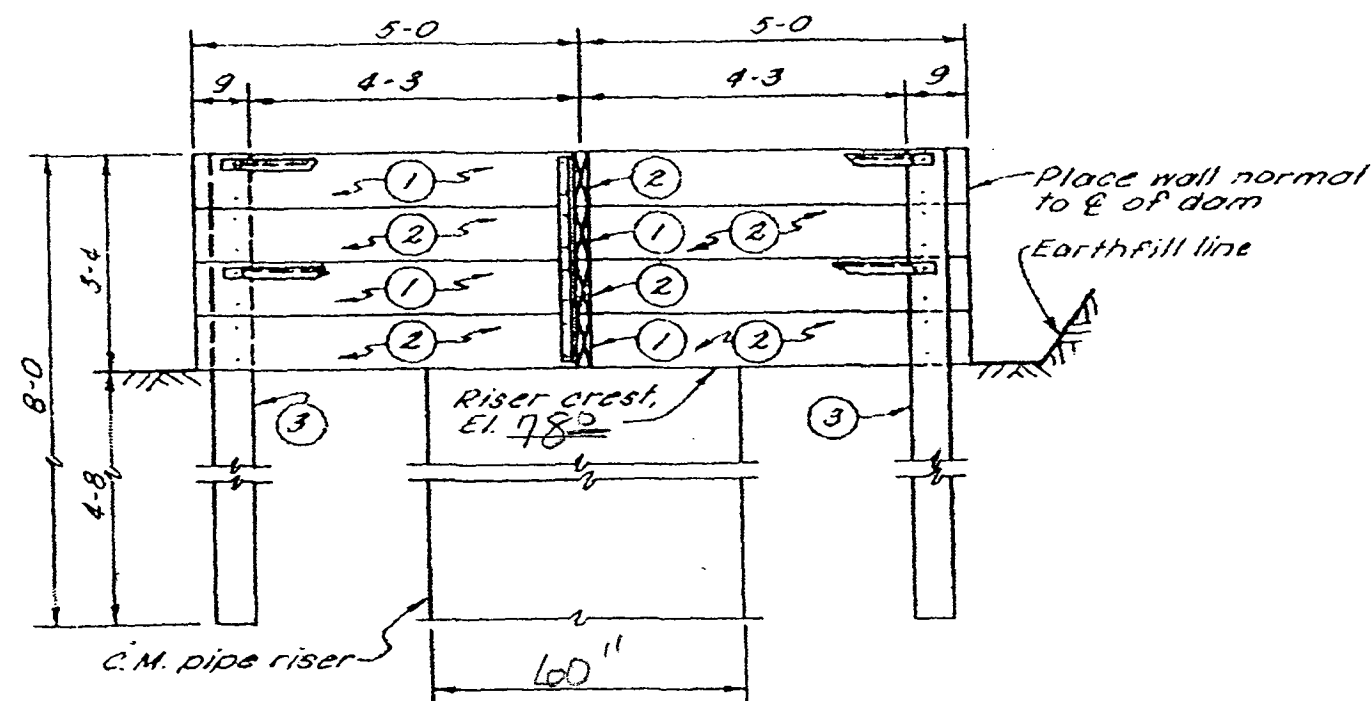
CONSERVATION DISTRICT: _____

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

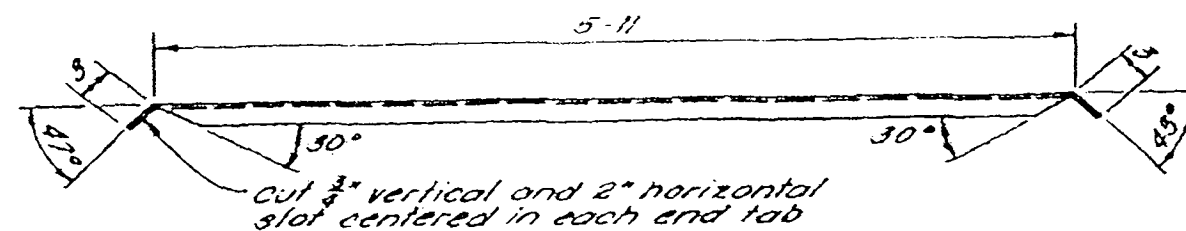
5,N-29,073.4a



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. 36" THRU 60"

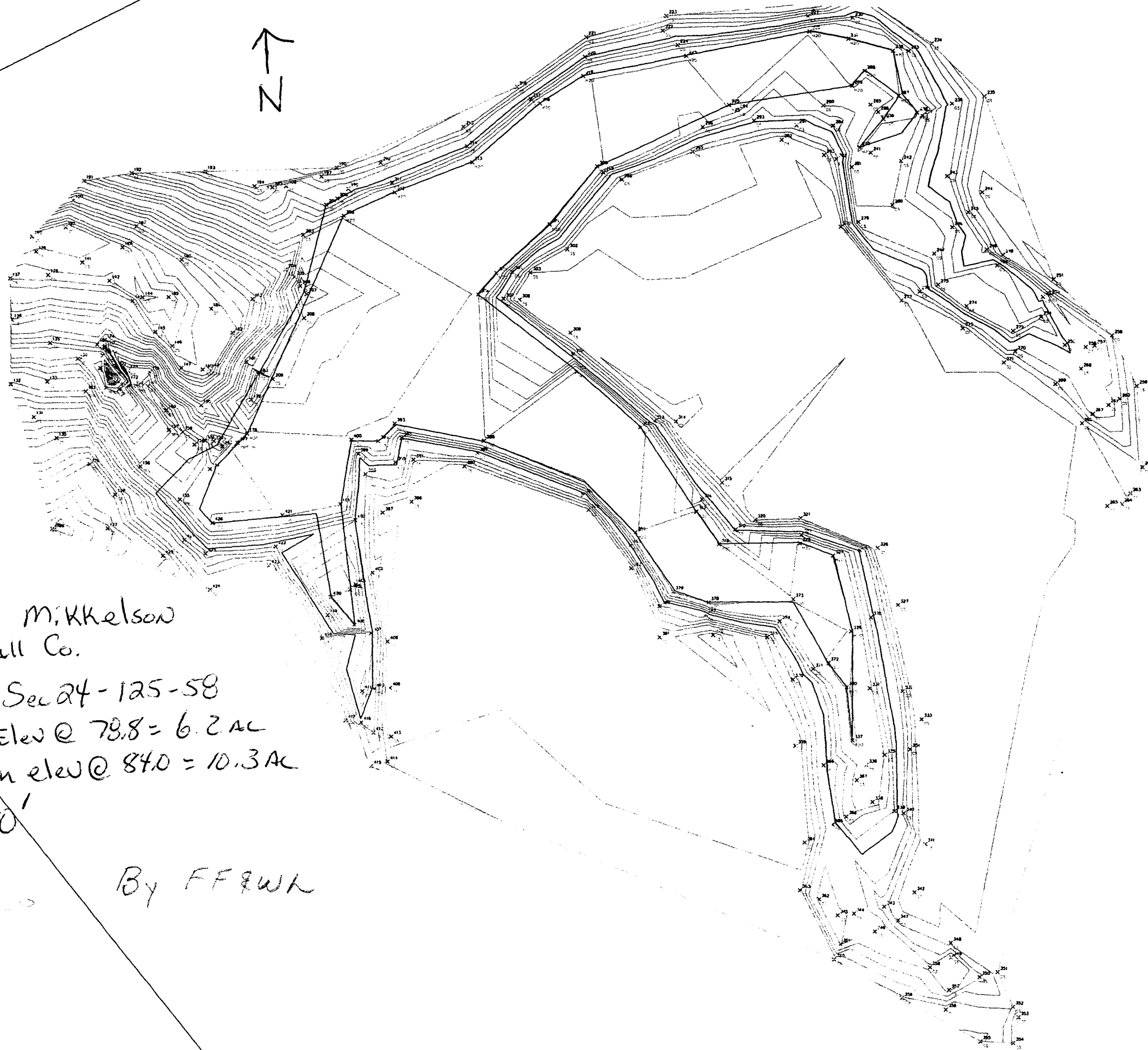
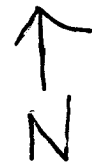
OPERATOR: Devis Mikkelsen
CONSERVATION DISTRICT: _____

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Designed: _____ Date: _____
Drawn: _____ Title: _____
Traced: _____ Date: _____
Checked: _____ Date: _____

JOB PLAN NO. 6.4

5, N-29, 073.6-40

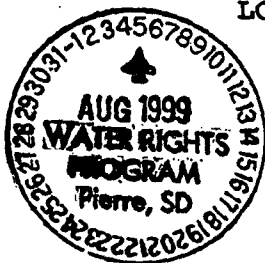


Dennis M. Kkelson
Marshall Co.

SE 1/4 Sec 24-125-58
Water Elev @ 78.8 = 6.2 AC
Top Dam elev @ 84.0 = 10.3 AC
1" = 150'

62-10

By FF&WK



LOCATION NOTICE DAM/DUGOUT

Mail to:
Water Rights Division
DENR, Foss Bldg.
Pierre, SD 57501
(605) 773-3352

Marshall
COUNTY

Location Notice No.

75050

I, O & M Partnership, of

12124 424th Ave, Langford, SD 57454 Marshall,
Address & Zip Code County

O & M Partnership, of the following described land, do hereby
(owner or operator)

notify the Water Management Board of the State of South Dakota and all others concerned that I am exercising my right under SDCL 46-4, for construction of a dam/dugout for the purpose of impounding runoff waters for wildlife purposes.

The following data is presented in compliance with SDCL 46-4-3 and 46-4-4.

(1) Date of:

(a) This notice July 29, 1999

(b) Proposed construction September 1, 1999

(2) Legal description of the land upon which the dam/dugout is located:

NW SE of Sec. 24, T.125, R.58

(describe to nearest 40 acre sub-division)

(3) Location of the dam/dugout from a section corner:

(see attached aerial photo)

(4) County Marshall

(5) The owner of the land O & M Partnership, United States of America

(6) Acre feet of water claimed annually 4.0

Notes: If the storage of the proposed structure at the spillway crest overflow elevation exceeds twenty five (25) acre feet, a water permit from the Water Management Board is required.

A location notice is only required on a dugout, if the dugout captures surface runoff waters.

(7) Complete the following information for the proposed dam/dugout:.

* Items to be completed for a dugout

*a) Dam/Dugout designed by NRCS
Britton, South Dakota 57430

b) Freeboard 5.0 feet

d) Height 21.3 feet

*Depth, if Dugout NA feet

c) Crest width 12 feet

e) Outlet Dimensions

Pipe dia. 12 inches

Crest Length 415 feet

Spillway width 60 feet

f) X & Y Slope:

Upstream 3:1

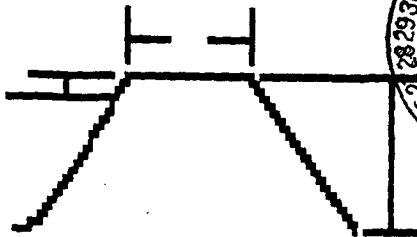
Downstream 3:1

g) Water Surface Area 4.0 acres

h) Storage at spillway crest or overflow
elevation (acre feet) 4.0

i) Maximum storage to top of dam.
(acre feet) 51.6

*j) Drainage area above dam/dugout
1280 acres



Enclosed herewith is ten dollars (\$10.00). The Water Management Board is requested to file this Location Notice in their official records. A copy of this Location Notice has been filed (do not record) with the Register of Deeds of Marshall County in accordance with SDCL 46-4-3.

O & M Partnership

STATE OF SOUTH DAKOTA)

Marshall County C.D.

COUNTY OF Marshall)

LOCATOR

I, O & M Partnership the applicant, certify that I have read this Location Notice and that the matters stated in this notice are true and that I intend, and am able to start construction within sixty days after the filing of this notice.

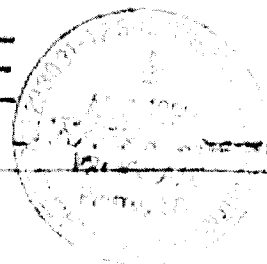
Signed O & M Partnership by [Signature]

Subscribed and sworn before me this 3 day of August, 1999.

(seal)

Notary Public

NOT TO SCALE



1410
T3898

NC

251R-D11

NHEL
237.7

NHEL
324.2

NHEL
1061.7

CRP
1990-99
NHEL
116.0

CRP
1987-97

NHEL
414.0

24

2339
T1220

511.7 HEL

CRP 1990-99

NHEL
089.0

17.7

85.0

NHEL
910.5

NHEL
31.8

NHEL
163.5

125-58

NHEL
28.0

NC

251R-D11

2058
T121

NHEL
27.1

NC



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 7140-3, Denis Mikkelson**

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. 7140-3, Denis Mikkelson, 12124 424th Avenue, Langford SD 57454.

The Chief Engineer is recommending APPROVAL of Application No. 7140-3 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. 7140-3 authorizes a dam with a storage capacity of 47.0 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 10, 2009

REPORT ON
WATER PERMIT APPLICATION NO. 7140-3
Denis Mikkelson
June 4, 2009

Water Permit Application No. 7140-3 has been filed by Denis Mikkelson to impound 47 acre-feet of water from runoff by reconstructing an existing dam located in the NW ¼ SE ¼ of Section 24-T125N-R58W, in Marshall 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. In 1999, Location Notice No. 75050 was filed for the dam with a storage capacity of 4.0 acre-feet.

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. 7140-3 is approved.

The reconstructed dam will be 22.8 feet high with a normal storage capacity of 47 acre-feet with a reservoir level at the primary spillway elevation, and a maximum storage capacity of 103.5 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.

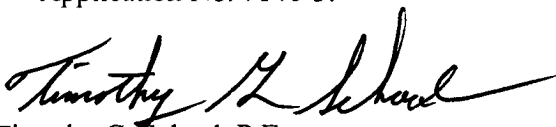
The dam has a drainage area of 1485 acres or 2.32 square miles. The dam is designed to have a 60 inch diameter CMP riser with a 48 inch diameter CMP barrel with 7.0 feet of freeboard as the primary spillway, and a 40 foot wide earthcut secondary spillway with 3.0 feet of freeboard. A 25 year frequency event produces a peak runoff of approximately 340 cfs and a 100 year frequency event produces a peak runoff of approximately 650 cfs. The earthcut spillway will have a capacity of approximately 540 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 15 acre-feet. The annual yield with a 50 percent chance of occurrence, or 1 out of 2 years, is expected to be 41 acre-feet and the annual yield with a 10 percent chance, or 1 out of 10 years, is expected to be 223 acre-feet.

The Mikkelson Dam will be located in the NW ¼ SE ¼ of Section 24-T125N-R58W on an unnamed tributary to the Crow Creek Ditch, about 10 miles upstream of the confluence of the unnamed tributary and the Crow Creek Ditch. There are no existing Water Permits/Rights filed on the unnamed tributary between the proposed dam and the Crow Creek Ditch.

Conclusions:

1. Water Permit Application No. 7140-3 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. 7140-3.



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



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

June 10, 2009

Denis Mikkelson
12124 424th Ave.
Langford, SD 57454

Dear Mr. Mikkelson:

We have reviewed the plans and specifications for your dam project located in the NW ¼ SE ¼ of Sec. 24-T125N-R58W, in Marshall County. The plans and specifications for your 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. 7140-3 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 Mikkelson Dam will be classified as a small size Category 3, Low Hazard dam with a dam height of 22.8 feet and a normal storage capacity of 47 acre-feet and a maximum storage capacity of 103.5 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
Tom Wickstrom, USFWS, Waubay National Wildlife Refuge, 44401 134A St., Waubay SD
57273-5301

AFFIDAVIT OF PUBLICATION

RECEIVED

JUN 25 2009

2T(June 17, 24)
NOTICE OF APPLICATION
NO. 7140-3 to Appropriate
Water

Notice is given that Denis Mikkelsen, 12124 424th Ave, Langford SD 57454 has filed an application for a water permit to impound 47 acre-feet of water from runoff by reconstructing an existing dam located in the NW 1/4 SE 1/4 Section 24 with water impounded in the N 1/2 SE 1/4 Section 24; all in T125N-R58W. 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. 7140-3 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 6, 2009.

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.

JTA, County of Marshall.

of said county, being first duly sworn on oath says that he is publisher of the BRITTON JOURNAL, a weekly newspaper printed and published in the City of Britton, in the County of Marshall, and has full and personal knowledge of all the facts herein stated; that said newspaper is a legal newspaper and has a bona-fide circulation of at least two hundred copies weekly and has been published within said County for fifty-two successive weeks, next prior to the publication of the notice herein mentioned and is printed wholly or in part in an office at said place of publication;

that the Notice of Application - Water
Dept of NR Denis Mikkelsen
a printed copy of which, taken from the paper in which the same was published, is attached to this sheet and is made a part of this affidavit, was published in said newspaper at least once each week for two successive weeks, on the day of each week on which said newspaper was regularly published, to wit:

June 17, 2009
June 24, 2009

that the full amount of the fee charged for the publication of said notice inures to the benefit of publisher of said newspaper, that no agreement or understanding for the division thereof has been made with any person, and that no part thereof has been agreed to be paid to any other person whomsoever, and that the fee for the publication thereof

Forty-three and 98/100

Douglas M. Cook
by Charles J. Cook

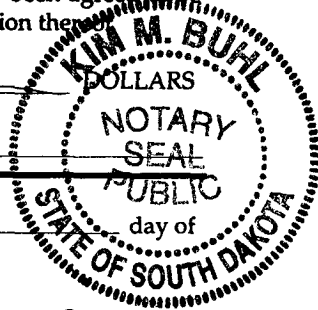
Subscribed and sworn to before me this 24th

June

A. D. 2009

Kim M Buhl

Notary Public, Marshall County, S. D.
My Commission Expires March 12, 2010





DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

June 10, 2009

Britton Journal
PO Box 69
Britton SD 57430

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7140-3 to Appropriate Water to be published twice. Please publish the first notice on June 17, 2009 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 Denis Mikkelsen, 12124 424th Ave., Langford SD 57454 (Ph # 605-493-6611).

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. 7140-3

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

Date _____

We are in receipt of your letter of June 10, 2009 enclosing Notice to Appropriate Water by Application No. 7140-3 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
www.state.sd.us/denr

NOTE: TO BE SURE OF PUBLICATION ON
THE CORRECT DATES, CONTACT
THE NEWSPAPER RIGHT AWAY.

June 10, 2009

Denis Mikkelson
12124 424th Ave
Langford SD 57454

Dear Mr. Mikkelson:

Water Permit Application No. 7140-3 for fish and wildlife use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Publisher of the Britton Journal printed at Britton SD (Ph # 605-448-2281). You will need to contact the newspaper and authorize publication of this notice. For your information, a copy of the notice, the recommendations of the Chief Engineer and reports on the applications 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 Notices 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 applications.

Sincerely,

Eric Gronlund
Natural Resources Engineer
(605) 773-3352

enclosures

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

Instruction to Newspaper - Publish first Notice on June 17, 2009 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. 7140-3 to Appropriate Water

Notice is given that Denis Mikkelson, 12124 424th Ave, Langford SD 57454 has filed an application for a water permit to impound 47 acre-feet of water from runoff by reconstructing an existing dam located in the NW ¼ SE ¼ Section 24 with water impounded in the N ½ SE ¼ Section 24; all in T125N-R58W. 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. 7140-3 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 6, 2009.

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.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

AUG 04 2003

Denis Mikkelson
12124 424th Ave
Langford SD 57454

Dear Mr. Mikkelson:

Enclosed is Water Permit No. 7140-3 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

Permit No. 7140-3
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, April 15, 2015, made a thorough examination of the water use system constructed by Denis Mikkelson of 12124 424th Ave., Langford, SD 57454 holder of Permit No. 7140-3, bearing the priority of May 29, 2009 authorizing the storage of 47 acre-feet of the waters of runoff for fish & wildlife propagation and livestock water purposes, in Marshall County.

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

A. Works used to divert the water:

A 22.8 ft. high earthen dam with a normal storage capacity of 47 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 22.8 ft. high earthen dam with a normal storage capacity of 47 ac.-ft. of water

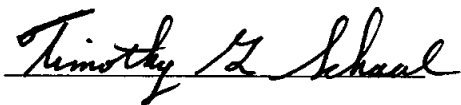
The system is in the following condition good. The point of diversion is located 2050 ft. north & 1900 ft. west of the SE corner of Sec. 24-T125N-R58W (NW ¼ SE ¼), (Lat. 45.62275 Long. -97.73904). The works are capable of storing 47 acre-feet of water which is to be used for fish & wildlife propagation and livestock water. Water has been put to beneficial use to the maximum extent as follows:

A 22.8 ft. high earthen dam with a normal storage capacity of 47 ac.-ft. of water

and the license should be issued for 47 acre-feet of storage.

Applicable permit qualifications have been complied with: Yes X

Exceptions to compliance are: none Date Report Completed: April 20, 2015



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

REPORT ON INSPECTION OF PERMIT NO. 7140-3

DATE OF INSPECTION: April 15, 2015

NAME & ADDRESS OF PERMIT HOLDER: Denis Mikkelson, 12124 424th Ave.,
Langford, SD 57454

DIVERSION POINT LEGAL LOCATION: 2050 ft. north & 1900 ft. west of the SE corner of
Sec. 24-T125N-R58W (NW ¼ SE ¼), (Lat. 45.62275 Long. -97.73904).

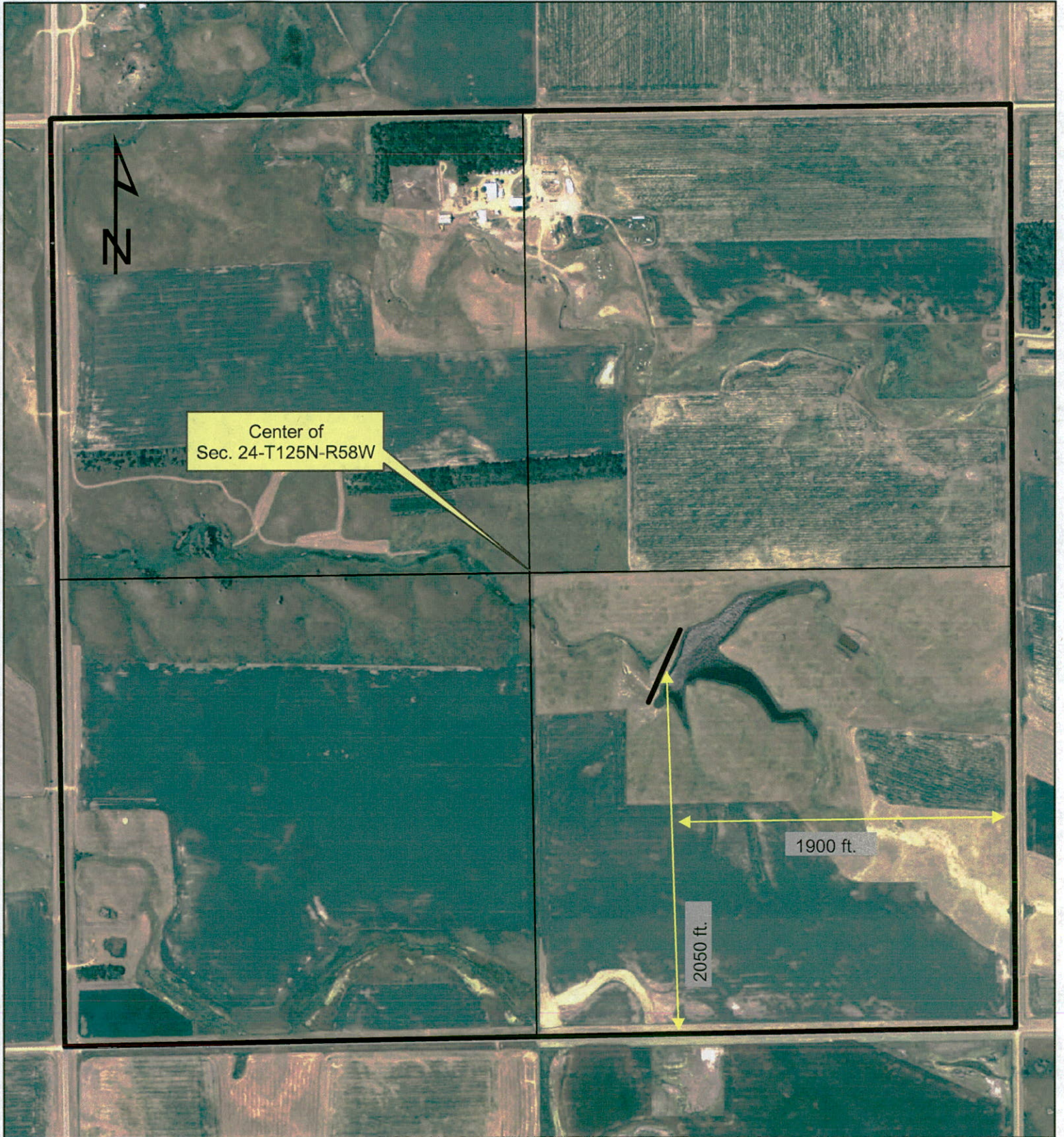
DAM INFORMATION:

- 1) Height to crest 22.8 feet
- 2) Height to primary spillway 15.8 feet
- 3) Height to secondary spillway 19.8 feet
- 4) Crest width 12 feet
- 5) Crest length 385 feet
- 6) Spillway length XXX feet
- 7) Spillway width 40 feet
- 8) Approx. storage (Normal) 47 acre-feet
- 9) Approx. storage (Maximum) 103.5 acre-feet
- 10) Date constructed: 2009

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. 7140-3



0 0.25 0.5 1 Miles



Timothy G. Schaal

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

4/20/15



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

MAY 19 2015

7140-3

Denis Mikkelson
12124 424th Ave
Langford SD 57454

Dear Mr. Mikkelson:

Enclosed is Water License No. 7140-3. This is the final water right document completing your process of obtaining a Water Right. Also, included with your license is a map prepared by the staff engineer who conducted the investigation.

As long as you use the water beneficially, as stated in the Water License, the State Water Laws provide that you have a continuing right to use the water. If you have any questions, please contact our office.

Sincerely,

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

enclosures

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 7140-3

(1) Denis Mikkelson, 12124 424th Ave, Langford SD 57454 made Application No. 7140-3, May 29, 2009 for a water permit to impound 47 acre-feet of water from runoff, Marshall County, South Dakota for fish and wildlife propagation and livestock watering purposes. Permit No. 7140-3, with a priority date of May 29, 2009 was approved July 6, 2009 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before July 6, 2014 and for the application to beneficial use of water on or before July 6, 2018.

(2) The water supply system has been completed and water applied to beneficial use in accordance with South Dakota State Law. Pursuant to South Dakota Codified Law 46-5-30.1, the holder and/or owner of Water Right No. 7140-3 is issued a license, bearing a priority date of May 29, 2009, to impound 47 acre-feet of water from runoff for fish and wildlife propagation and livestock watering purposes.

The location of the storage dam (spillway) is 2,050 feet north and 1,900 feet west of the SE corner of Section 24-T125N-R58W (NW 1/4 SE 1/4).

(3) This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Permit No. 7140-3, including the following now applicable qualifications:

- Water Permit No. 7140-3 authorizes a dam with a storage capacity of 47 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 by-passed.

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

MAY 19 2015

date

