

WATER PERMIT NO. 6279-3

Name of Applicant: US Fish & Wildlife Service

Address: PO Box 25486, Denver Federal Center, Denver CO 80225

Phone: Moody

Amount of Water Claimed: 110 acre-feet

Total Acres: NA

Source of Water Supply: runoff

Water to be used for: fish & wildlife propagation

County: Moody

Type of Waste Disposal System:

Location: 20 miles northeast of Madison

PRIORITY Date Received: 8-9-2001

Fee: \$150

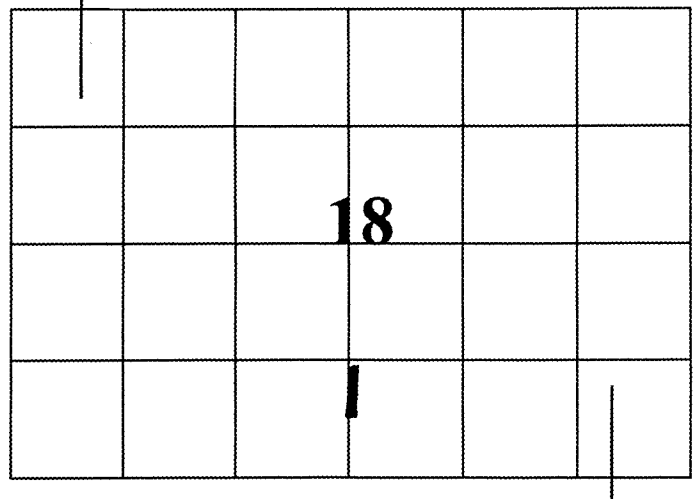
Corrected Application Received: 8-24-2001

Period of Annual Use: January 1 – December 31

Remarks: Reno Peterson Wetland

Diversion Point: SW ¼ SE ¼ Sec 18-T108N-R50W

Water Impounded: portions of SE ¼ Sec 18-
T108N-R50W



Depth of Well: NA

Well Driller: : NA

Remarks:

Type of Map: topographic

Prepared by: Roger C Smith, PE

Reviewed and the Number Assigned on: 8-27-2001

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____

**SOUTH DAKOTA
WATER PERMIT NO. 6279-3**

Date of first receipt of application August 9, 2001.

Date of return to applicant for corrections, amendments or changes August 21, 2001.

Date of receipt of corrected application August 24, 2001.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 6279-3 to U.S. Fish & Wildlife Service, PO Box 25486, Denver Federal Center, Denver CO 80225 authorizing the construction of the dike and ditch plug and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 6279-3 authorizes impoundment of 110 acre-feet of water from runoff by constructing a dike and ditch plug located in the SW ¼ SE ¼ Section 18 with water impounded in portions of the SE ¼ Section 18; all in T108N-R50W.
2. The water appropriated shall be used for the purpose of supplying water for fish and wildlife propagation 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. 6279-3 is November 5, 2001.
5. The date from which applicant may claim right is August 9, 2001.
6. One-fifth of the construction is to be completed on or before May 5, 2004.
7. All construction is to be completed on or before November 5, 2006.
8. Water is to be put to beneficial use on or before November 5, 2010.
9. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATION

Water Permit No. 6279-3 authorizes restoration of a wetland with a storage capacity of 110 acre feet of water and sufficient water annually to maintain the water level to the natural overflow elevation of the wetland.

WATER MANAGEMENT BOARD

By: Garland Erbele

Garland Erbele, Chief Engineer

Water Rights Program

Department of Environment and Natural Resources

DEC 07 2001

date



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. 6279-3 (office use only)
Hydrologic Unit 10170202
Basin Sioux River
Newspaper Moody Co. Enterprise, Flandreau



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: ☒ 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.) _____

1. Name of Applicant UNITED STATES OF AMERICA Phone (303) 236-5321
Fish and Wildlife Service
(check one) ☐ Owner ☐ Tenant/lessee
Mailing Address P.O. Box 25486, Denver Federal Center, Denver State CO 80225
(Street, RR, or Box and City) (Zip Code)
2. Amount of water claimed _____ *CFS or _____ **GPM 110 ***AF
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)
3. Source of water supply Surface Runoff
4. Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) _____
SW1/4 SE1/4 Section 18-T108N-R50E Water Impounded: portions of SE1/4
Sec 18-T108N-R50W County Moody
5. County or counties where water will be used Moody
6. Annual period during which water is to be used January 1-December 31
7. Give a description of the project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed)

See attached Design Report (Reno Peterson Wetland SD-329) by Ducks Unlimited, Inc.
Included with application is a final set of construction plans stamped by Roger C. Smith P.E. (PE-4325)

COLORADO
STATE OF ~~SOUTH DAKOTA~~ SS
County of Jefferson

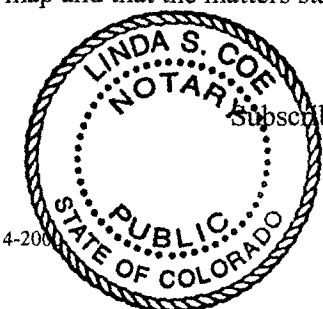
Attachments: Attach Form 2A if diversion is from a well or dugout, or if storage of water is proposed. Attach map and any other technical information. (see instructions)

I, Cheryl C. Williss, 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 Cheryl C. Williss
Cheryl C. Williss, Agent

Subscribed and sworn to before me this 6th day of August 20 01

Notary Public signature
My Commission Expires Nov. 10, 2001



(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

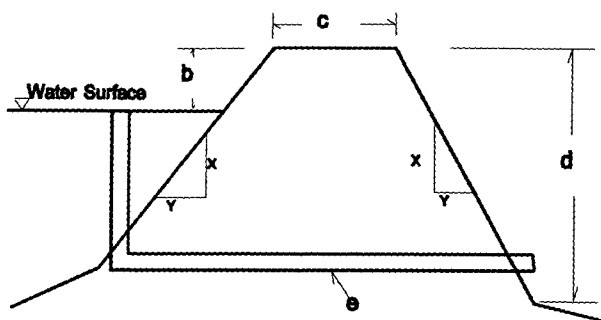
- a) Surface Dimensions _____ Depth _____
- b) Depth to water (ground surface to water level) _____

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:

Ducks Unlimited, Inc. (Roger Smith, P.E.)
2525 River Road, Bismarck, ND
701-355-3556



- b) Freeboard **2'**
- c) Crest Width **400' ***
Crest Length **38'***
- d) Height **8'**
- e) Primary Outlet Capacity **253 cfs**
If pipe, diameter **12' Wide channel**
- f) Secondary Spillway Capacity **1000+**
Spillway Width **130'**
- g) X & Y Slope _____
Upstream **4:1**
Downstream **N/A**
- h) Surface Area of Impoundment **36.2**
- i) Storage **110** Acre Feet
- j) Drainage Area Above Dam **122** Acres

*Section above not accurate. Project consists of plugging an existing ditch for the entire length (400') of the ditch. The length of the embankment is equal to the top width of the existing ditch.

Water Permit Application No. 6279-3
U.S. Fish & Wildlife Service

Cat. 3 - Low Hazard Dam

USFWS & Ducks Unlimited Wetland Restoration Project (Rand Peterson) by constructing Ditch Plug & Dike.

$$\left. \begin{array}{l} \text{Top of Dike Elev.} - 101 \\ \text{P. Spway (Ditch) Elev.} - 99 \\ \text{2nd Spway Elev.} - 100.4 \\ \text{D/S Toe Elev.} - 93 \end{array} \right\} \underline{H = 8 \text{ ft.}}$$

$$\begin{array}{l} \text{Normal Capacity} - 110 \text{ Ac-Ft} \\ \text{Int. Capacity} - 148 \text{ Ac-Ft} \\ \text{Max Capacity} - 186 \text{ Ac-Ft} \end{array}$$

$$\text{Int. Capacity} \times \text{Eff. Height} = 148 \times 7.4 = 1095 \pm 3000 \text{ in 25 year Minimum Spillway Design}$$

From USGS WRI 80-80 "Tech. for Est. Flood Peaks ... in 50"

$$DA = 122 \text{ Ac} = 0.19 \text{ mi}^2$$

$$\text{Slope} = 10 \text{ ft/mi}$$

$$SI = 3.33$$

$$\begin{aligned} Q_{25} &= 83.4 A^{.64} S^{.46} S_i^{-.72} \\ &= 83.4 (0.19)^{.64} (.20)^{.46} (3.33)^{-.72} \\ &= 83.4 (0.427) (3.73) (0.4206) \\ &= \underline{12.5 \text{ cfs}} \end{aligned}$$

$$\begin{aligned} Q_{100} &= 132 A^{.65} S^{.46} S_i^{-.67} \\ &= 132 (0.19)^{.65} (.20)^{.46} (3.33)^{-.67} \\ &= 132 (.3398) (3.9671) (.4466) \\ &= \underline{80 \text{ cfs}} \end{aligned}$$

Secondary Spillway Flow

$$\begin{aligned} Q &= C L H^{3/2} \quad C = 2.6 \\ &= 2.6 (130) (0.6)^{1.5} \quad L = 230 \quad H = 0.6 \\ &= \underline{157 \text{ cfs}} \end{aligned}$$

$$\begin{aligned} Q_{\text{Total}} &= \text{Primary} + \text{Secondary} \\ &= 253 + 157 \\ &= \underline{410 \text{ cfs}} \end{aligned}$$

Section 74.02:08:09

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

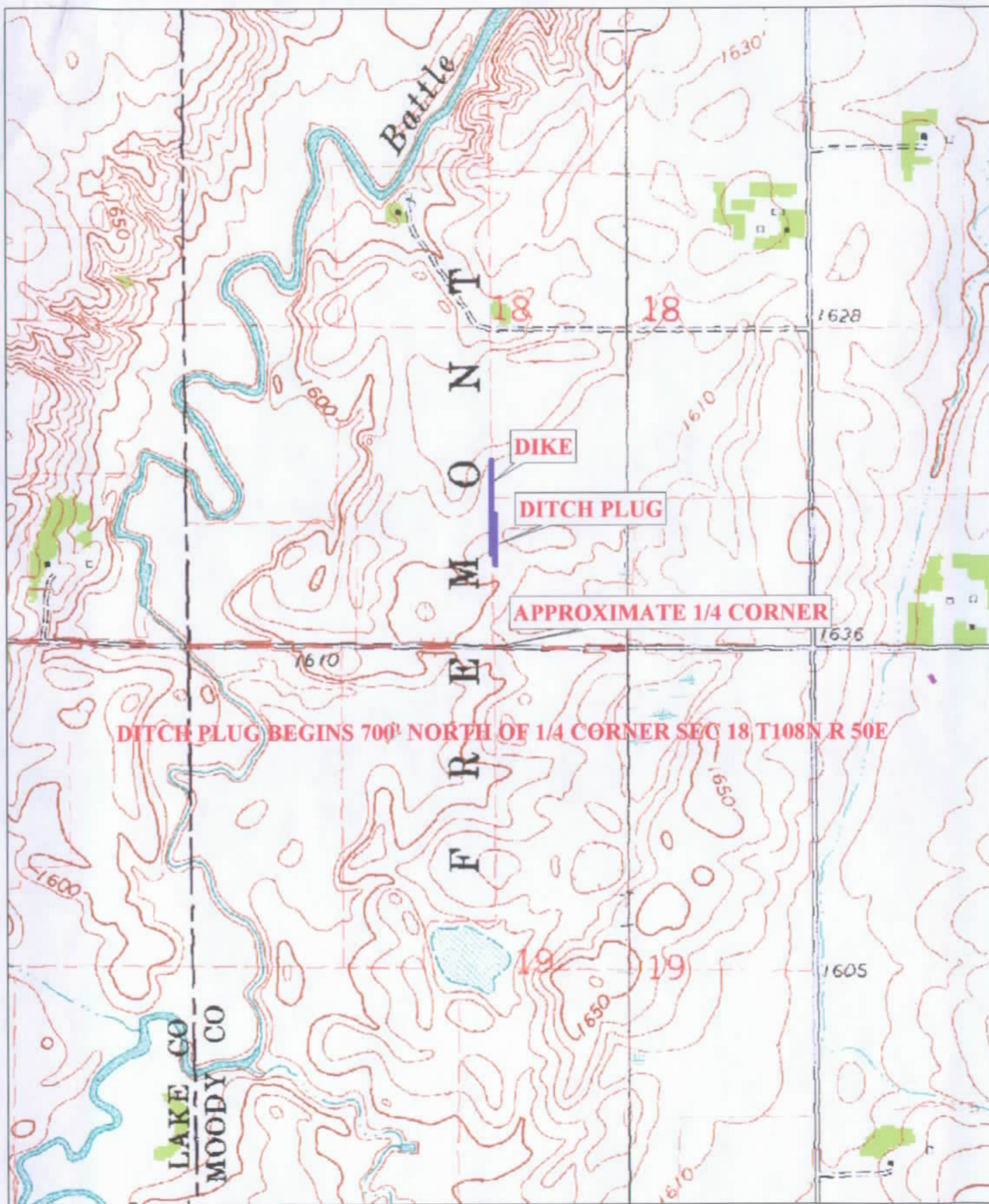
NRCS Annual Yield

$$DA = 122 \text{ Ac} \quad CN = 70 \quad ISO = 2 \frac{1}{2}$$

$$\begin{aligned} 80\% \text{ chance} &= 0.09 \quad 0.18 \\ 0.09 \times 122/12 &= \underline{1.0 \text{ Ac-Ft}} \quad 2 \text{ Ac-Ft} \end{aligned}$$

$$\begin{aligned} 50\% \text{ chance} &= 0.28 \quad 0.49 \\ 0.28 \times 122/12 &= \underline{3 \text{ Ac-Ft}} \quad 5 \text{ Ac-Ft} \end{aligned}$$

$$\begin{aligned} 10\% \text{ chance} &= 1.6 \quad 2.2 \\ 1.6 \times 122/12 &= \underline{16 \text{ Ac-Ft}} \quad 23 \text{ Ac-Ft} \end{aligned}$$



Copyright © 2000 DeLorme. TopoTools Advanced Print Kit. Scale: 1 : 12,800 Zoom Level: 14-0 Datum: WGS84

1000 ft

62793



DUCKS
UNLIMITED
INC.

GREAT PLAINS REGIONAL OFFICE

2525 River Road
Bismarck, North Dakota 58503-9011
(701) 355-3500
(701) 355-3575 Fax

August 16, 2001



Water Rights Program
Joe Foss Building
523 E. Capitol
Pierre, SD 57501-3181

Re: Application for Permit to Appropriate Water
Reno Peterson property, Moody County

Dear Sir or Madam:

Recently the Chief, Division of Water Resources, U.S. Fish & Wildlife Service, submitted an application to appropriate water on lands owned by Reno Peterson, in Moody County, SD.

At the time the application was submitted, a filing map was not included. The filing map is being submitted with this letter. I was responsible for developing the construction plans and filing map and therefore any questions should be directed to me.

Sincerely,

Roger C. Smith, P.E.
Regional Engineer

Cc: Linda Coe, FWS

DESIGN REPORT

For

**RENO PETERSON
WETLAND RESTORATION**

MOODY COUNTY, SD (SD-329-01)

July 19, 2001



Ducks Unlimited, Inc.
2525 River Road
Bismarck, ND 58501

DESIGN SUMMARY

PROJECT: Reno Peterson Wetland Restoration
SD -0329-01

LOCATIONS: SE¼ SECTION 18, TWP. 108 N RGE. 50 E
Moody County, South Dakota

MARSH DATA: Full Service Level (FSL) @ 99.0 (assumed elevation)
36 Surface Acres @ FSL)
110 Acre-Feet Capacity @ FSL
Maximum Depth -5' top of dam to pipe invert,

PROJECT DATA: Top of Dam - elevation 101.0
Primary Spillway - elevation 99.0
Emergency Spillway – Natural overflow at elevation 100.4

CLASSIFICATION: Based on the classification criteria outlined in Chapter 74:02:08 "Safety of Dams," it is recommended that the proposed dam be classified as a small, Category 3 dam. No loss of life and minimal economic loss is expected should failure occur. The product of the "maximum storage capacity" times the "effective height" is 960. (150 acre-feet x 6.4')

PRELIMINARY RISK ASSESSMENT PROJECT DESCRIPTION: The project will restore the marsh to its original overflow elevation prior to drainage. The work will consist of filling the entire length of a ditch excavated to drain the wetland. The ditch will be filled in a manner in which a 12' wide channel will be developed. Risk of failure due to erosion is minimal as velocities within the channel will not be erosive after grass is established.

A small portion of the original marsh flooded land within the SW ¼ of section 18 but does not show as being a wetland on NWI maps. The quarter line is a property boundary. The owner of the SW ¼ has agreed to the restoration as long as flooding does not occur on his property. To prevent flooding on the west quarter, a dike will be constructed along the fence line having a gradual enough slope to not affect farming operations.

HYDROLOGY / HYDRAULICS: A hydrologic and hydraulic investigation was limited to determining the watershed size and predicting the volume of runoff into the marsh. The watershed is 128 acres. SD regression equations predict that the watershed is capable of generating only 30 acre feet during a 100 year event. A spillway, implemented into the ditch embankment, is at an elevation corresponding to 110 acre-feet. A natural overflow exists an elevation corresponding to 150 acre-feet.

DROUGHT ANALYSIS: The basin will act as a temporary marsh most years. It is anticipated that 100% of the runoff generated from the watershed will remain in the marsh in all but the very rarest of years.

SOIL INVESTIGATION: A geotechnical investigation will be limited to finding acceptable material from visual means only.

IMPACTS TO SURROUNDING PROPERTY: The planned construction will impact the neighbor on the SW ¼ of Section 18. The impact is being mitigated by the construction of a dike and leaving the site graded to his satisfaction.

The channel, being constructed as part of the ditch embankment, is at an elevation near to the elevation of the south toe of a private roadway on the north side of the quarter. The lowest point of the south shoulder of the roadway is above the maximum elevation of the ditch embankment. Any impacts to the roadway will be more from the fact that the watershed above the road is generating runoff. At the time of the survey, there were not any culverts found in the roadway.

Dated: July 25, 2001

Submitted By:

Roger Smith, P.E (PE-4325)

Regional Engineer

Ducks Unlimited

Great Plains Regional Office



United States Department of the Interior

FISH AND WILDLIFE SERVICE Mountain-Prairie Region



IN REPLY REFER TO:

BA WTR

WR SD

Mail Stop 60189

MAILING ADDRESS:

Post Office Box 25486

Denver Federal Center

Denver, Colorado 80225-0486

STREET LOCATION:

134 Union Blvd.

Lakewood, Colorado 80228-1807

AUG 06 2001



Water Rights Program
Department of Environment
and Natural Resources
523 East Capitol
Pierre, South Dakota 57501-3181

Dear Sir or Madam:

The Fish and Wildlife Service, in cooperation with Ducks Unlimited, Inc., propose wetland restoration on the Reno Peterson property, Moody County, South Dakota. The property is owned by Mr. Reno Peterson, but is protected by a wetland conservation easement within the Madison Wetland Management District.

Enclosed are *Application for Permit to Appropriate Water Within the State of South Dakota, Forms 2 and 2A*; and design summary. The \$200 filing fee and inspection fee have been submitted via electronic fund transfer and the filing map is being prepared and will be submitted as soon as possible.

Please notify this office of the newspaper selected, prior to publication of Notice of Hearing, so that the Authorizations of Advertisement can be forwarded to them.

If you have any questions or require further information, please contact Linda Coe at (303) 236-5321, extension 227.

Sincerely,

Cheryl C. Williss
Chief, Division of Water Resources

Enclosures

cc: Ducks Unlimited, Inc.
Great Plains Regional Office
2525 River Road.
Bismarck, ND 58501



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

* INVOICE *

Invoice No. 20411-82101

US Fish and Wildlife Service
PO Box 25486
Denver Federal Center
Denver, CO 80225

New application/License fee	\$200.00
-----------------------------	----------

Purchase order #601811P665

PLEASE PAY THIS AMOUNT:	\$200.00
--------------------------------	-----------------

Glenda Marks
Secretary
Water Rights Program
(605) 773-3352

Verhelst, Sandy

From: Tillman, Sandy
Sent: Friday, August 24, 2001 9:19 AM
To: Verhelst, Sandy
Subject: RE: Wire

Is this the one you are looking for?

Reno Peterson

FWS TREAS 312 MISC PAY 082401 466000364141600 RMT*IV*20411-82101 **
\$200.00 08/24/2001

5220FWS TREAS 312 3121036500CCDMISC PAY
0824010108242362121036500000113
622091408598000000017012697630000020000466000364141600SOUTH DAKOTA DEPT OF
061121036504634914
705RMT*IV*20411-82101 *****INVOICE DATE: 08/21/01
\00014634914
822000000200091408590000000000000000000200003121036500 121036500000113

-----Original Message-----

From: Verhelst, Sandy
Sent: Friday, August 10, 2001 9:41 AM
To: Tillman, Sandy
Cc: Verhelst, Sandy
Subject: Wire

We are expecting 2 wires.
Both are from the United States Dept of Interior
\$275.00 and \$200.00
Thanks

RECEIPT

Water Rights Program

South Dakota Department of Environment and Natural Resources

416902

Pierre, August 24, 20 01

RECEIVED OF US Fish & Wildlife Service, PO Box 25486, Denver Federal Center, Denver CO 80225
the following amount in fees for services rendered as provided for by law: (Reno Peterson)

Fee for Application for Permit No. _____ 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. _____	50	00
Fee for Filing Transfer Form _____		
Fee for Filing Extension Request _____		
Fee for _____ payment was an electronic transfer		
(Any Other Work Provided by Law)	Total	200 00

By Darland Erbe
Chief Engineer *gm*

REPORT ON
WATER PERMIT APPLICATION NO. 6279-3
U. S. Fish & Wildlife Service
September 24, 2001

Water Permit Application No. 6279-3 has been filed by the US Fish & Wildlife Service to impound 110 acre-feet of water from runoff by constructing a dike and ditch plug at the Reno Peterson Wetland Restoration Project located in the SE 1/4 of Section 18-T108N-R50W, in Moody County. The application also requests impoundment of sufficient water to maintain water at the outlet elevation. The water will be used for fish and wildlife production in a wetland restoration project.

Discussion:

The dike and ditch plug will be classified as a small size, Category 3, Low Hazard dam. The Ducks Unlimited, Inc. (DU) has designed the Reno Peterson Wetland Restoration Project. The plans and specifications have been reviewed and will be approved; however, construction of the project can not begin until Water Permit Application No. 6279-3 is approved.

The Reno Peterson dike and ditch plug will be 8 feet high with a normal storage capacity of 110 acre-feet with a reservoir level at the primary spillway elevation, and a maximum storage capacity of 186 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 dike and ditch plug has a drainage area of 122 acres or 0.19 square miles. A 25-year frequency event for this drainage area produces a peak runoff of approximately 12.5 cfs. A 100-year frequency event produces a peak of approximately 80 cfs. The Reno Peterson Wetland Restoration Project involves restoring a wetland to its original elevation by filling in the entire length of ditch excavated to drain the wetland. The ditch will be filled leaving a 12 foot wide overflow channel with 2 feet of available freeboard as the primary spillway. A natural swale exists and functions as a secondary spillway with 0.60 feet of available freeboard and a width of 130 feet. The two spillways will have a combined capacity of approximately 410 cfs.

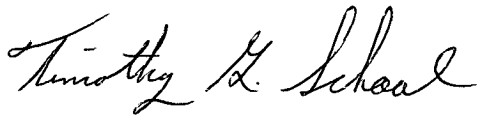
The annual yield for this drainage area with an 80 percent chance of occurrence, or 8 out of 10 years, is expected to be 2.0 acre-feet. The annual yield with a 50 percent chance of occurrence, or 1 out of 2 years, is expected to be 5.0 acre-feet and the annual yield with a 10 percent chance, or 1 out of 10 years, is expected to be 23 acre-feet.

The Reno Peterson Wetland Restoration Project will be located in the SW 1/4 SE 1/4 of Section 18-T108N-R50W adjacent to Battle Creek about 2.0 miles above the confluence of Battle Creek and Lake Campbell. There are no existing Water Permits/Rights located on Battle Creek between the proposed project and Lake Campbell. The Department of Game, Fish and Parks holds Vested Right Claim No. 648-3 for 210 acre-feet of water in Lake Campbell. Considering

the small drainage area for the project (122 acres), approval of Water Permit Application No. 6279-3 should not have any adverse effects on existing Water Permits/Rights.

Conclusions:

1. Water Permit Application No. 6279-3 should be approved since unappropriated water is available and approval should not have any adverse effect on existing Water Permits/Rights.



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

Approved by:



Gale N. Selken, P.E.
Natural Resources Engineer Director



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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. 6279-3, U. S. Fish & Wildlife Service**

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. 6279-3, U. S. Fish and Wildlife Service, c/o Cheryl Williss, PO Box 25486, Denver Federal Center, Denver CO 80225.

The Chief Engineer is recommending APPROVAL of Application No. 6279-3 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 qualification:

1. Water Permit No. 6279-3 authorizes restoration of a wetland with a storage capacity of 110 acre feet of water and sufficient water annually to maintain the water level to the natural overflow elevation of the wetland.

See report on application for additional information.

Garland Erbele, Chief Engineer
October 1, 2001

Water Rights Program - DENR
Conversation File Documentation

NAME OF PERSON OR FILE: Water Permit Application No. 6279-3, USFWS

ADDRESS: COUNTY: Moody

DATE: September 28, 2001 TELEPHONE: 701 355-3500

RE: Call to Roger Smith with Ducks Unlimited

COMMENTS:

I contacted Mr. Smith regarding the Range designation for application No. 6275-3 filed by US Fish and Wildlife on the Reno Peterson property in Moody County. This application, map and plan indicate the project is in the SE ¼ Section 18, T108N, **R50E**. I stated that I believe the range designation should be **R50W**. Mr. Smith agreed that the range designation of R50W is correct and asked that the application be amended accordingly.

File in Permit or other file as necessary. Use to document conversations and what the other party was told; why action or decision was made.

NAME: 



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

October 1, 2001

Cheryl C. Williss
U. S. Fish & Wildlife Service
P.O. Box 25486
Denver Federal Center
Denver, CO 80225

Dear Ms. Williss:

We have reviewed the plans and specifications for the USFWS Reno Peterson Wetland Restoration Project located in the SE 1/4 of Section 18-T108N-R50W, in Moody County. The plans and specifications as submitted are approved. Approval of the plans and specifications does not authorize construction of the project. The construction may not begin until Water Permit Application No. 6279-3 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 dike and ditch plug, from the responsibility for operating and maintaining the dike and ditch plug in good repair to ensure the safety of the project.

The Reno Peterson dike and ditch plug will be classified as a small size Category 3, Low Hazard dam with a height of 8 feet and a normal storage capacity of 110 acre-feet and a maximum storage capacity of 186 acre-feet.

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

Sincerely,

Gale N. Selken, P.E.
Natural Resources Engineer Director
for Garland Erbele, Chief Engineer
Water Rights Program
(605) 773-3352

c: Roger Smith, Ducks Unlimited, Inc.

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
) SSCounty of Moody)I, Angela Nibbelink

certify that the attached printed Notice was taken

from the Moody County
Enterpriseprinted and published in GlandreauCounty of Moody and

state of South Dakota. The notice was published

in the newspaper on the following two dates:

Oct. 17, 2001Oct. 24, 2001Cost of Printing \$ 40.84Angela Nibbelink
(Signature)Bookkeeper
(Title)10-23-01
(Date Signed)NOTICE OF APPLICATION NO. 6279-3
to Appropriate Water

Notice is given that US Fish & Wildlife Service, PO Box 25486, Denver Federal Center, Denver CO 80225 has filed an application for a water permit to impound 110 acre-feet of water from runoff by constructing a dike and ditch plug located in the SW 1/4 SE 1/4, Section 18 with water impounded in portions of SE 1/4 Section 18; all in T108N-R50W. This application request impoundment of sufficient water to maintain water to the outlet elevation and is to be used for fish and wildlife propagation purposes.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 6279-3 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 the 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 the 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 November 5, 2001.

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. Pimer, Secretary
Department of Environment and Natural Resources

(Oct. 17 & 24, 2001)



Instruction to Newspaper - Publish first Notice on October 17, 2001 with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 6279-3 to Appropriate Water

Notice is given that US Fish & Wildlife Service, PO Box 25486, Denver Federal Center, Denver CO 80225 has filed an application for a water permit to impound 110 acre-feet of water from runoff by constructing a dike and ditch plug located in the SW ¼ SE ¼ Section 18 with water impounded in portions of the SE ¼ Section 18; all in T108N-R50W. This application request impoundment of sufficient water to maintain water to the outlet elevation and is to be used for fish and wildlife propagation purposes.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 6279-3 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 the 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 the 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 November 5, 2001.

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**

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.

October 1, 2001

Cheryl C. Williss
US Fish & Wildlife Service
PO Box 25486
Denver, CO 80225

Dear Ms. Williss:

Water Permit Application No. 6279-3 for fish and wildlife use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice of hearing has been sent to the Publisher of the Moody County Enterprise printed at Flandreau, SD (Ph # 605-997-3725). 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 a 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 of Hearing 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 with the last publication to occur twenty days before the board meeting. The newspaper has also been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the application.

Sincerely,

Eric Gronlund
Natural Resources Engineer
(605) 773-3352

enclosures

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



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

October 1, 2001

Moody County Enterprise
Box 71
Flandreau, SD 57028-0071

ATTENTION: Legal Public Notice

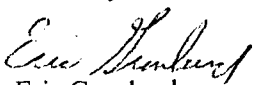
Enclosed is a Notice of Hearing on Application No. 6279-3 to Appropriate Water to be published twice. Please publish the first notice on October 17, 2001 with the second publication 7 days later.

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 US Fish & Wildlife Service, Attn: Cheryl C. Williss, PO Box 25486, Denver Federal Center, Denver, CO 80225 (Ph # 303-236-5321).

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. 6279-3

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

Date _____

We are in receipt of your letter of October 1, 2001 enclosing Notice of Hearing to Appropriate Water by Application No. 6279-3 which was first published in our issue of _____. ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.

Name

Newspaper



DEC 07 2001

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

Cheryl C. Williss
U.S. Fish and Wildlife Service
PO Box 25486
Denver Federal Center
Denver, CO 80225

Dear Ms. Williss:

Enclosed is Water Permit No. 6279-3 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



United States Department of the Interior

FISH AND WILDLIFE SERVICE Mountain-Prairie Region



IN REPLY REFER TO:

BA WTR
WR SD
Mail Stop 60189

MAILING ADDRESS:
Post Office Box 25486
Denver Federal Center
Denver, Colorado 80225-0486

STREET LOCATION:
134 Union Blvd.
Lakewood, Colorado 80228-1807

Water Rights Division
Department of Environment and
Natural Resources
523 East Capitol
Pierre, South Dakota 57501-3181

MAY 20 2003

RECEIVED
MAY 22 2003
WATER RIGHTS
PROGRAM

RE: Water Permit No. 6279-3
Water Permit No. 6369-3

Dear Sir or Madam:

The Fish and Wildlife Service completed construction and put water to beneficial use under the following water permits located on the Madison Wetland Management District:

6279-3, Reno Peterson Wetland Restoration Project
6369-3, Larson Wetland Restoration Project

Moody County
Hamlin County

Beneficial Use
May 13, 2003
May 12, 2003

Enclosed are completed *Notices of Completion of Works and Application of Water to Beneficial Use* forms. The \$50 water license fees were submitted previously by EFT. Please schedule an investigation so that water licenses may be issued.

If you have questions or require further information, please contact me at (303) 236-5321 extension 227.

Sincerely,

Linda Coe
Water Rights Specialist

Enclosures

**NOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USE**

Date May 20, 2003

TO: Water Rights Program, DENR
523 E. Capitol
Pierre, SD 57501-3181

RECEIVED

MAY 22 2003

**WATER RIGHTS
PROGRAM**

FROM: UNITED STATES OF AMERICA
Fish and Wildlife Service
(name)

P.O. Box 25486, Denver Federal Center
(address)

Denver, CO 80225
(city, state, zip)

303-236-5322
(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.

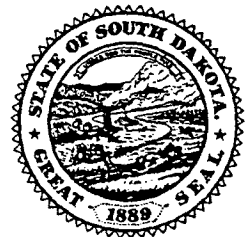
Water Permit No. 6279-3 states that the water use system is to be constructed by
November 5, 2006 , and water is to be put to beneficial use by November 5, 2010
(date) (date)

The water use system was completed on June 27, 2002
(date)

Applying the water to beneficial use was completed on May 13, 2003
(date)

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

Cheryl C. Williss
(signature)
Cheryl C. Williss, Agent



Permit No. 6279-3
Sioux River - Water District

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

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

I have this day, **November 27, 2006**, made a thorough examination of the water use system constructed by **US Fish & Wildlife Service** of **PO Box 25486, Denver Federal Center, Denver, CO 80225** holder of Permit No. **6279-3**, bearing the priority of **August 9, 2001** authorizing the storage of **110** acre-feet of the waters of **runoff** for **fish & wildlife propagation** purposes, in **Moody** County.

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

A. Works used to divert the water:

An 8 foot high dike and ditch plug with a normal storage capacity of 110 acre-feet.

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

N/A

C. Works used to apply water to beneficial use:

An 8 foot high dike and ditch plug with a normal storage capacity of 110 acre-feet.

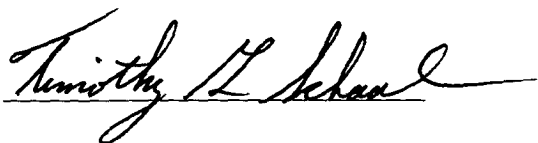
The system is in the following condition **good**. The point of diversion is located **900 feet north & 2620 feet west of the SE corner of Sec. 18-T108N-R50W (SW ¼ SE ¼); (Lat. 44.155229 Long. -96.879313)**. The works are capable of storing **110** acre-feet of water which is to be used for **fish & wildlife propagation**. Water has been put to beneficial use to the maximum extent as follows:

An 8 foot high dike and ditch plug with a normal storage capacity of 110 acre-feet.

and the license should be issued for **110** acre-feet of storage.

Applicable permit qualifications have been complied with: Yes **X**

Exceptions to compliance are: **none** Date Report Completed: **January 22, 2007**



Timothy G. Schaal, P.E.
Natural Resources Engineering Specialist
DENR, Water Rights Program

REPORT ON INSPECTION OF PERMIT NO. 6279-3

DATE OF INSPECTION: November 27, 2006

NAME & ADDRESS OF PERMIT HOLDER: US Fish & Wildlife Service, PO Box 25486, Denver Federal Center, Denver, CO 80225

DIVERSION POINT LEGAL LOCATION: 900 feet north & 2620 feet west of the SE corner of Sec. 18-T108N-R50W (SW ¼ SE ¼); (Lat. 44.155229 Long. -96.879313).

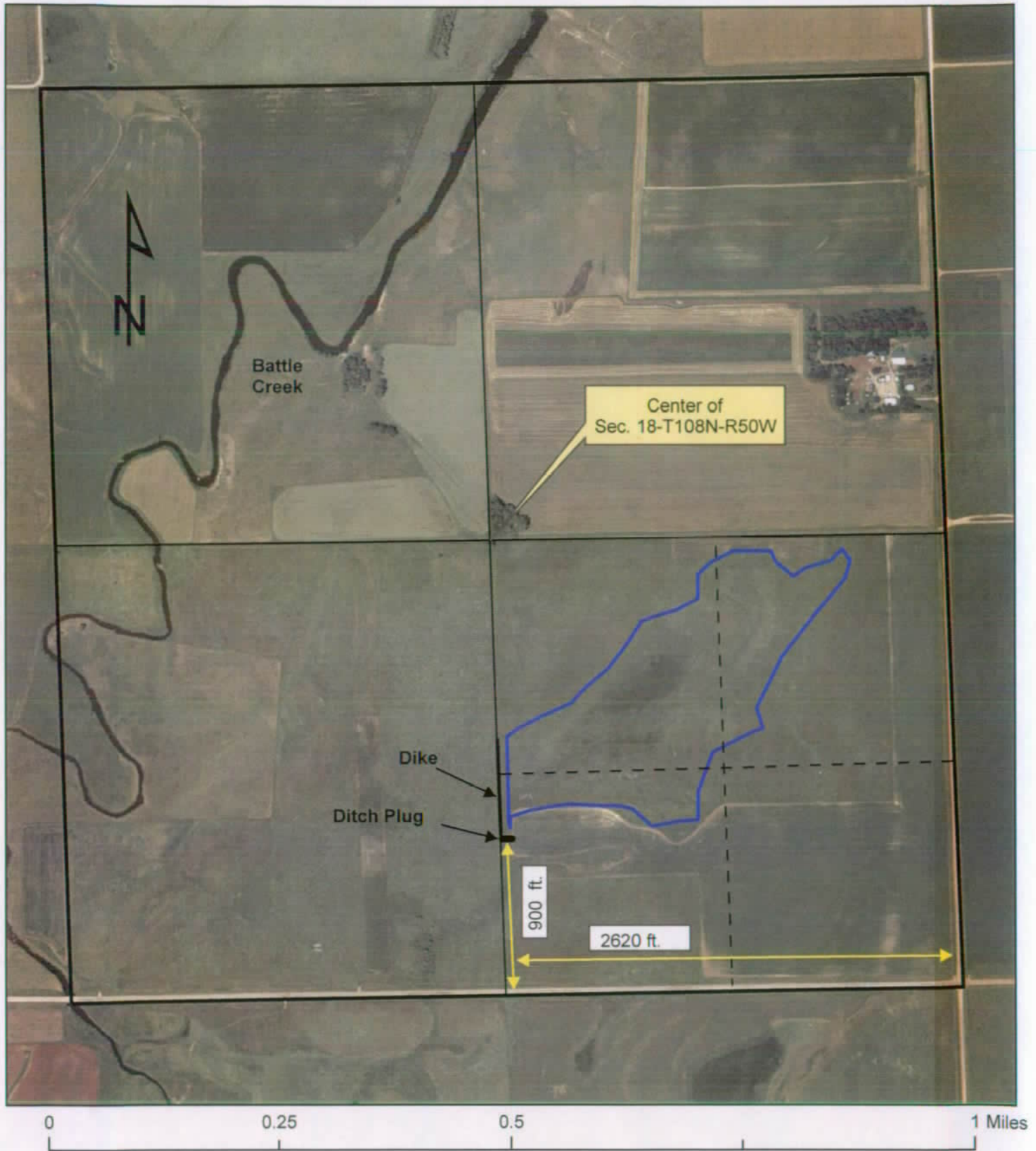
DAM INFORMATION: (Dike & Ditch Plug)

- 1) Height to crest 8 feet
- 2) Height to primary spillway 5.0 feet
- 3) Height to secondary spillway 7.4 feet
- 4) Crest width 400 feet
- 5) Crest length 38 feet
- 6) Spillway length XXX feet
- 7) Spillway width 130 feet
- 8) Approx. storage (Normal) 110 acre-feet
- 9) Approx. storage (Maximum) 186 acre-feet
- 10) Date constructed: June 2002

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. 6279-3



Timothy G. Schaal
Timothy G. Schaal, P.E.
Natural Resources Engineering Specialist
DENR, Water Rights Program

1/22/07

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 6279-3

(1) US Fish & Wildlife Service, PO Box 25486, Denver Federal Center, Denver CO 80225 made Application No. 6279-3, August 9, 2001 for a water permit to impound 110 acre-feet of water from runoff, Moody County, South Dakota for fish and wildlife propagation purposes. Permit No. 6279-3, with a priority date of August 9, 2001 was approved November 5, 2001 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before November 5, 2006 and for the application to beneficial use of said water on or before November 5, 2010.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to construction of the dike and ditch plug and is entitled to impound 110 acre-feet of water for beneficial use with sufficient water annually to maintain the natural overflow elevation of the wetland.

The location of the eight foot high dike and ditch plug is: 900 feet north and 2,620 feet west of the SE corner of Section 18, T108N, R50W (SW ¼ SE ¼).

(3) The permit holder has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use for fish and wildlife propagation (Reno Peterson wetland restoration).

(4) Pursuant to South Dakota Water Law 46-5-30.1 US Fish & Wildlife Service, PO Box 25486, Denver Federal Center, Denver CO 80225 the holder and/or owner of Water Right No. 6279-3 is issued a license to appropriate water, the right to impound 110 acre feet of runoff water with sufficient water annually to maintain the natural overflow elevation of the wetland from the location specified in (2) of this license. Water Right No. 6279-3 carries a priority date of August 9, 2001.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 6279-3 and subject to the following qualification:

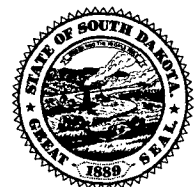
- Water Right No. 6279-3 authorizes restoration of a wetland with a storage capacity of 100 acre feet of water and sufficient water annually to maintain the water level to the natural overflow elevation of the wetland.



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

APR 30 2007

date





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

APR 30 2007

6279-3

Megan Estep
US Fish & Wildlife Service
PO Box 25486
Denver Federal Center
Denver CO 80225

RE: Water License No. 6279-3 – Reno Peterson Wetland Restoration

Dear Ms. Estep:

Enclosed is Water License No. 6279-3. The water license is the final document which completes the process of obtaining a water right. Also included 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.

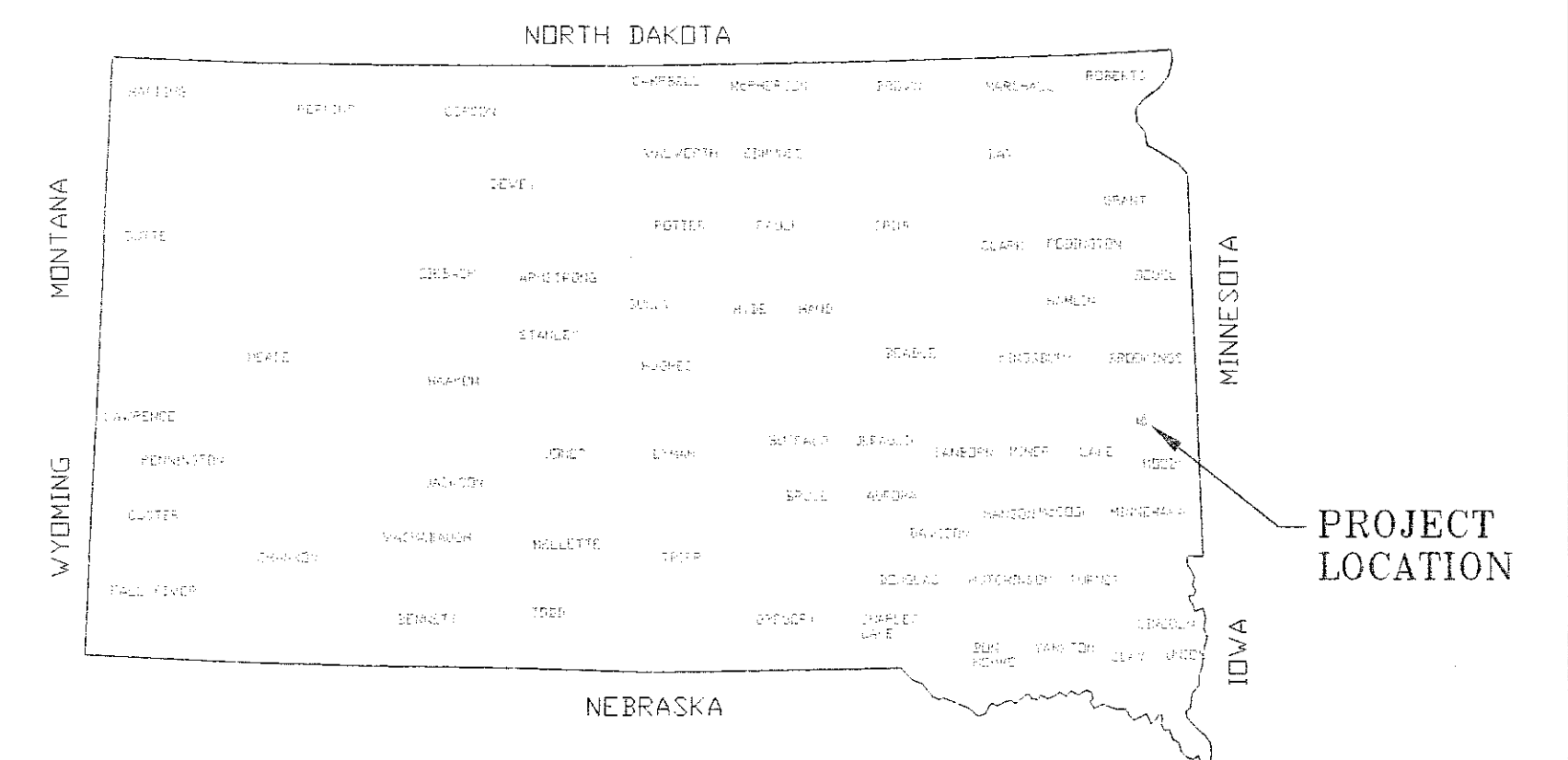
Sincerely,

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

enclosures



DUCKS UNLIMITED
RENO PETERSON WETLAND RESTORATION
SECTION 18, T-108-N, R-50-E
MOODY COUNTY, SOUTH DAKOTA
IN COOPERATION WITH
RENO PETERSON
(PRIVATE LANDOWNER)



SOUTH DAKOTA

SPECIFICATIONS

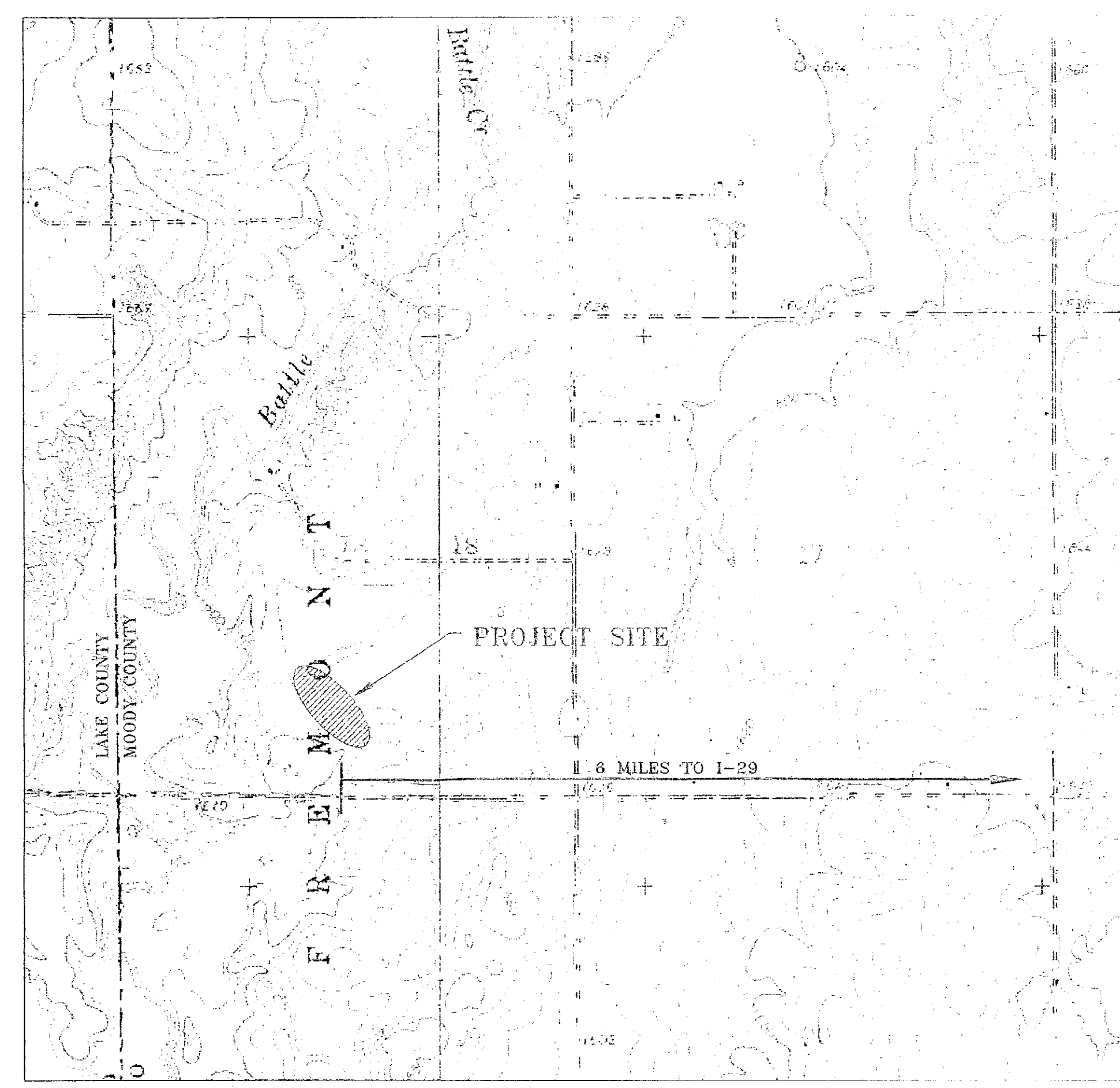
- 101 GENERAL CONDITIONS
- 102 SUPPLEMENTAL CONDITIONS
- 201 MOBILIZATION
- 202 SITE PREPARATION
- 204 EMBANKMENT CONSTRUCTION

PLAN INDEX

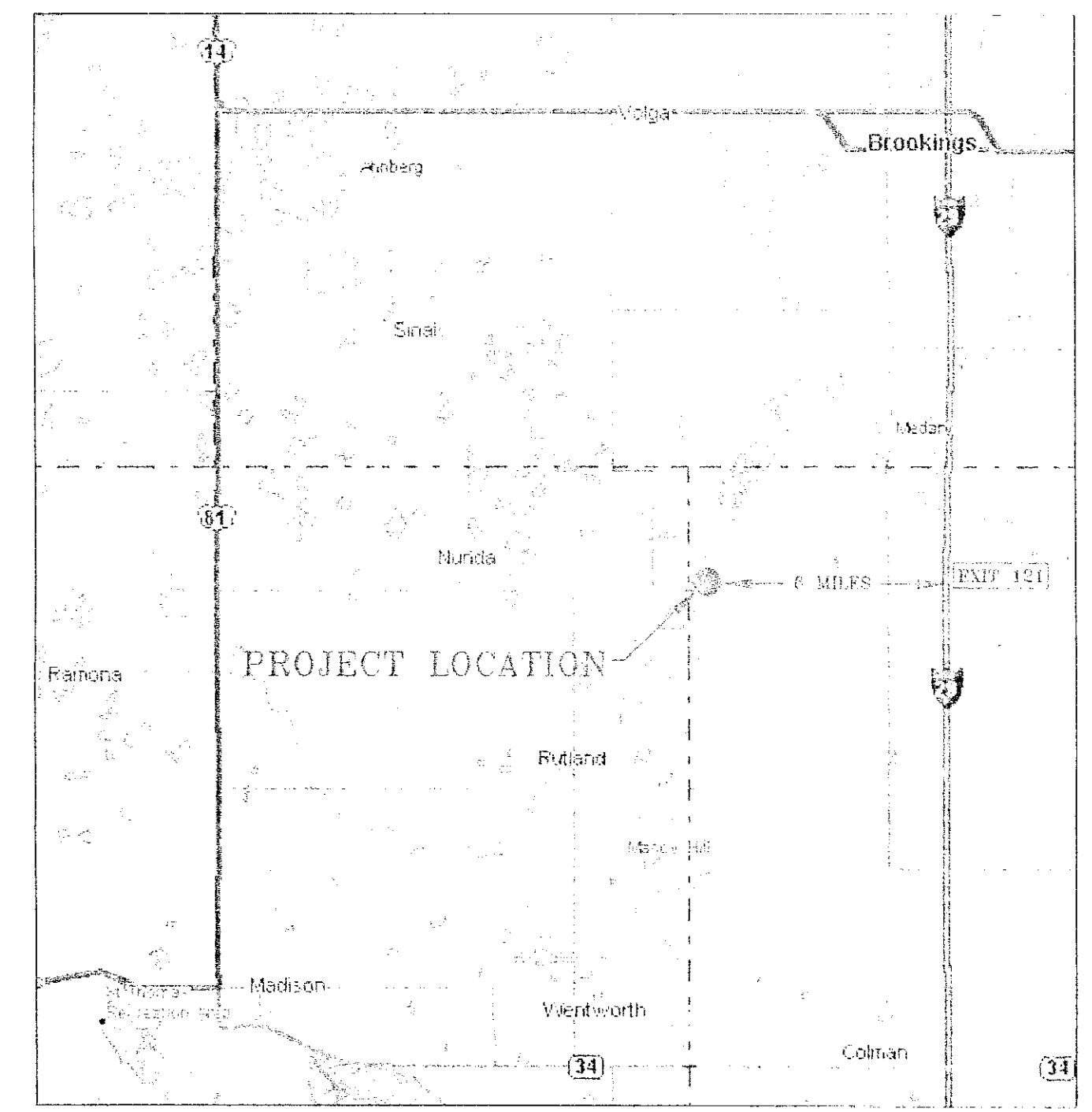
- 1 LOCATION MAPS
- 2 PROJECT TOPOGRAPHY
- 3 EMBANKMENT -- PLAN & SECTIONS

QUANTITIES

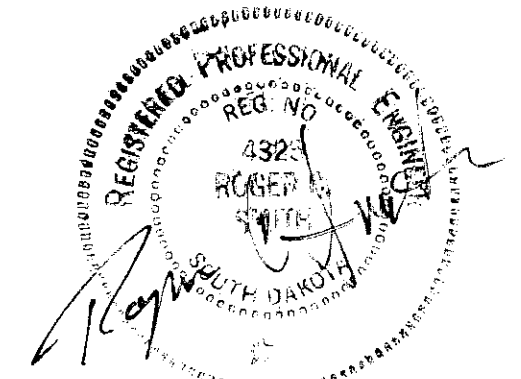
MOBILIZATION	1 L.S.
SITE PREPARATION (6")	450 CY-P
EMBANKMENT CONSTRUCTION	4800 CY-P



PROJECT LOCATION MAP
NOT TO SCALE



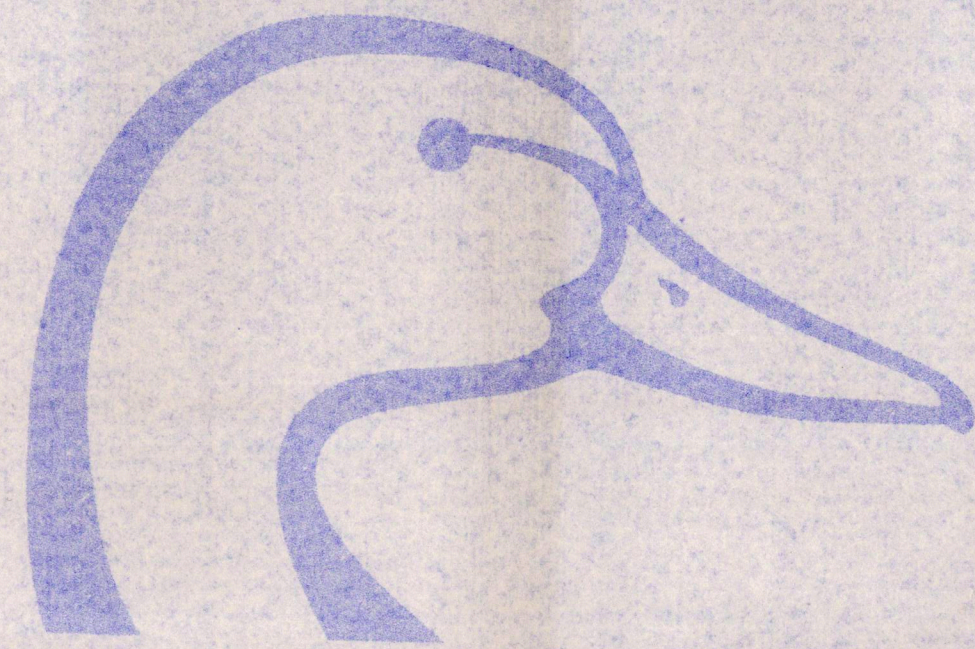
PROJECT LOCATION MAP
NOT TO SCALE



LANDOWNER:
RENO PETERSON
(605)-332-6562

DUCKS UNLIMITED INC.	PROJECT NO. SD-0329-001	DESIGNED BY: RCS
GREAT PLAINS REGIONAL OFFICE	RENO PETERSON WETLAND LOCATION MAPS	DRAWN BY: TSP
DATE: 7-24-2001	SHEET NO. 1 OF 3	SURVEYED BY: RCS
APPROVED BY: [Signature]		CHECKED BY: [Signature]

6279-3



DUCKS UNLIMITED

DUCKS UNLIMITED

PROJECT

RENO PETERSON WETLAND RESTORATION

SECTION 18, T-108-N, R-50-E
MOODY COUNTY, SOUTH DAKOTA

IN COOPERATION WITH
RENO PETERSON
(PRIVATE LANDOWNER)

SPECIFICATIONS

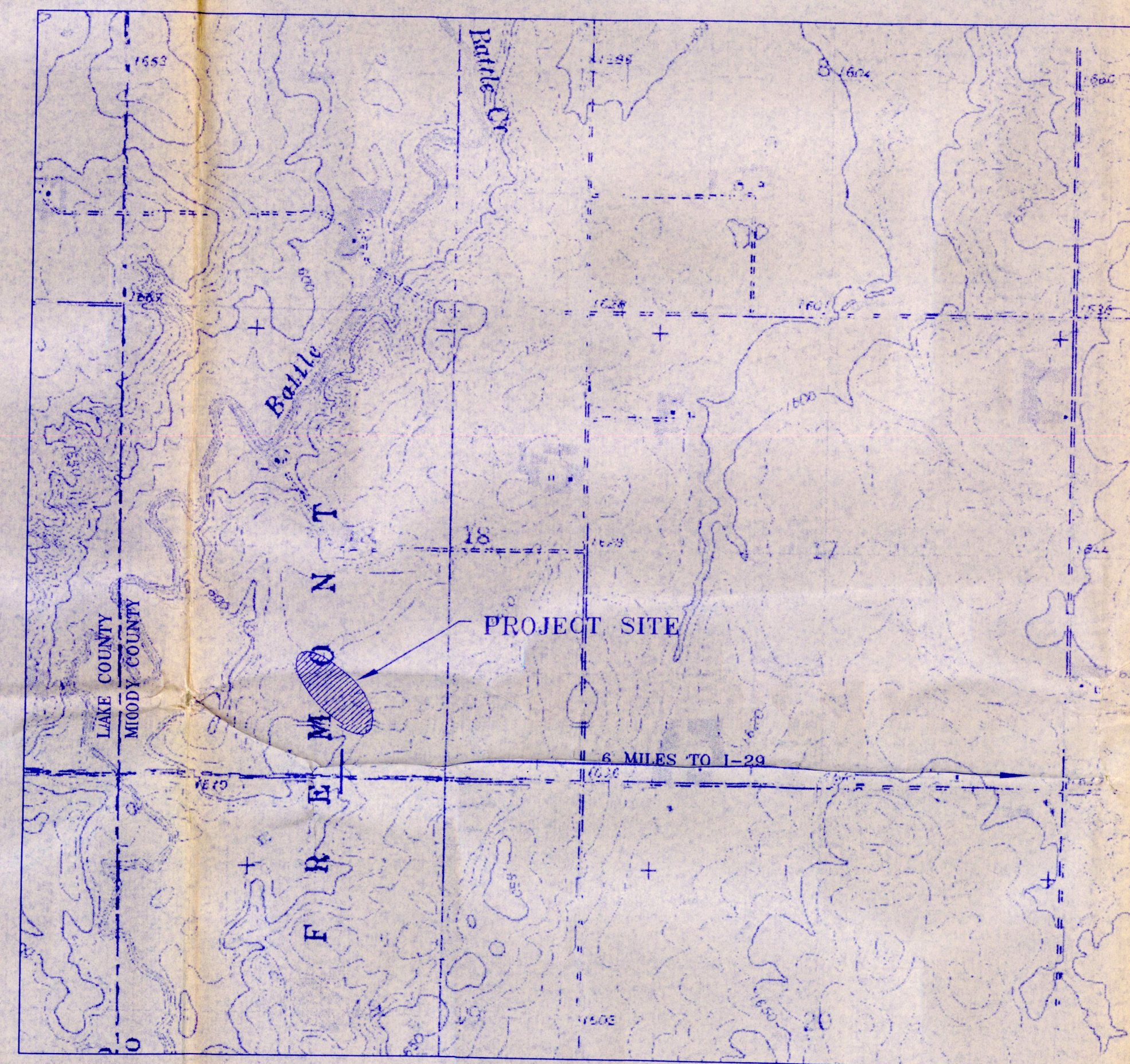
- 101 GENERAL CONDITIONS
- 102 SUPPLEMENTAL CONDITIONS
- 201 MOBILIZATION
- 202 SITE PREPARATION
- 204 EMBANKMENT CONSTRUCTION

PLAN INDEX

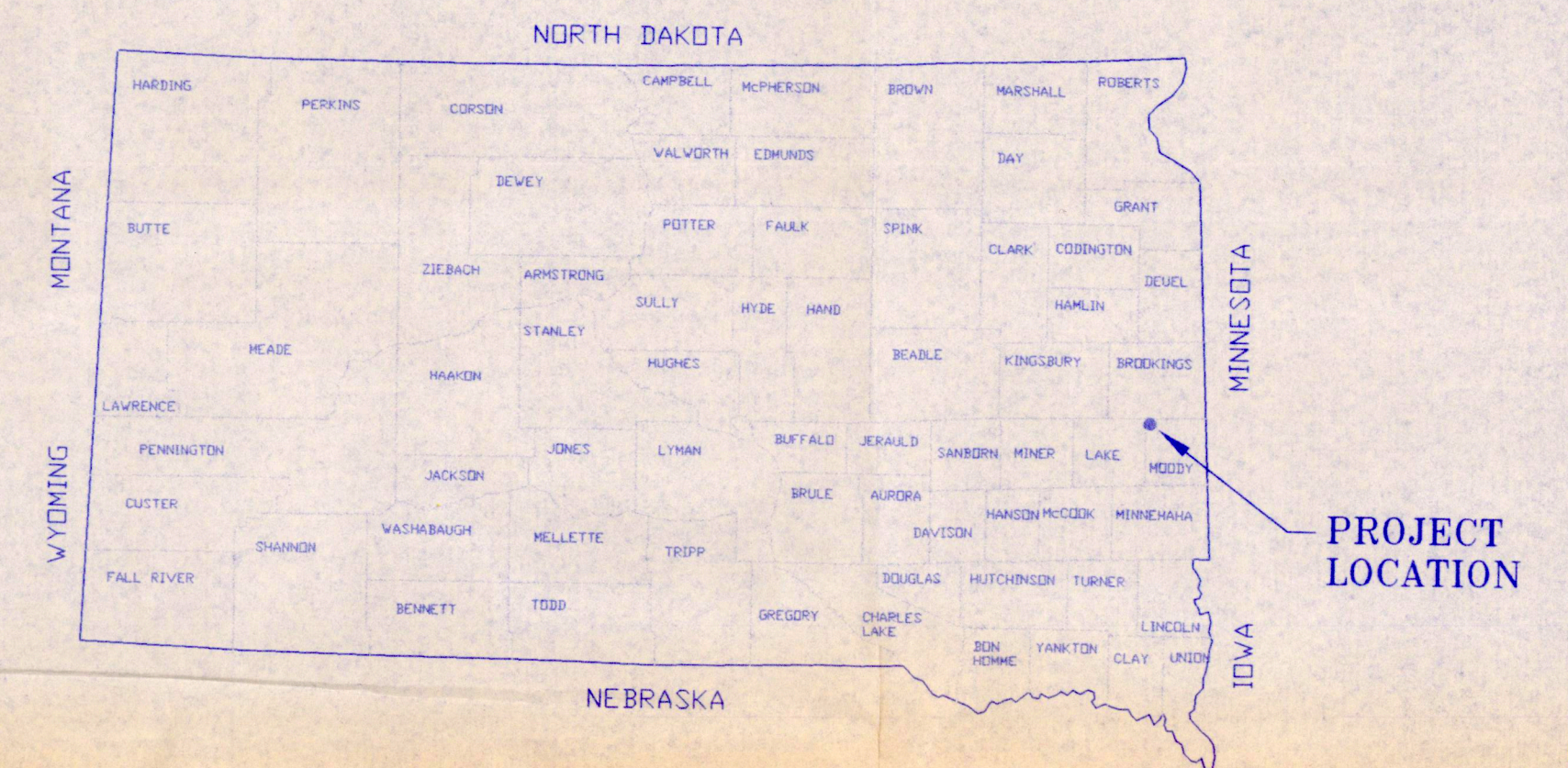
- 1 LOCATION MAPS
- 2 PROJECT TOPOGRAPHY
- 3 EMBANKMENT - PLAN & SECTIONS

QUANTITIES

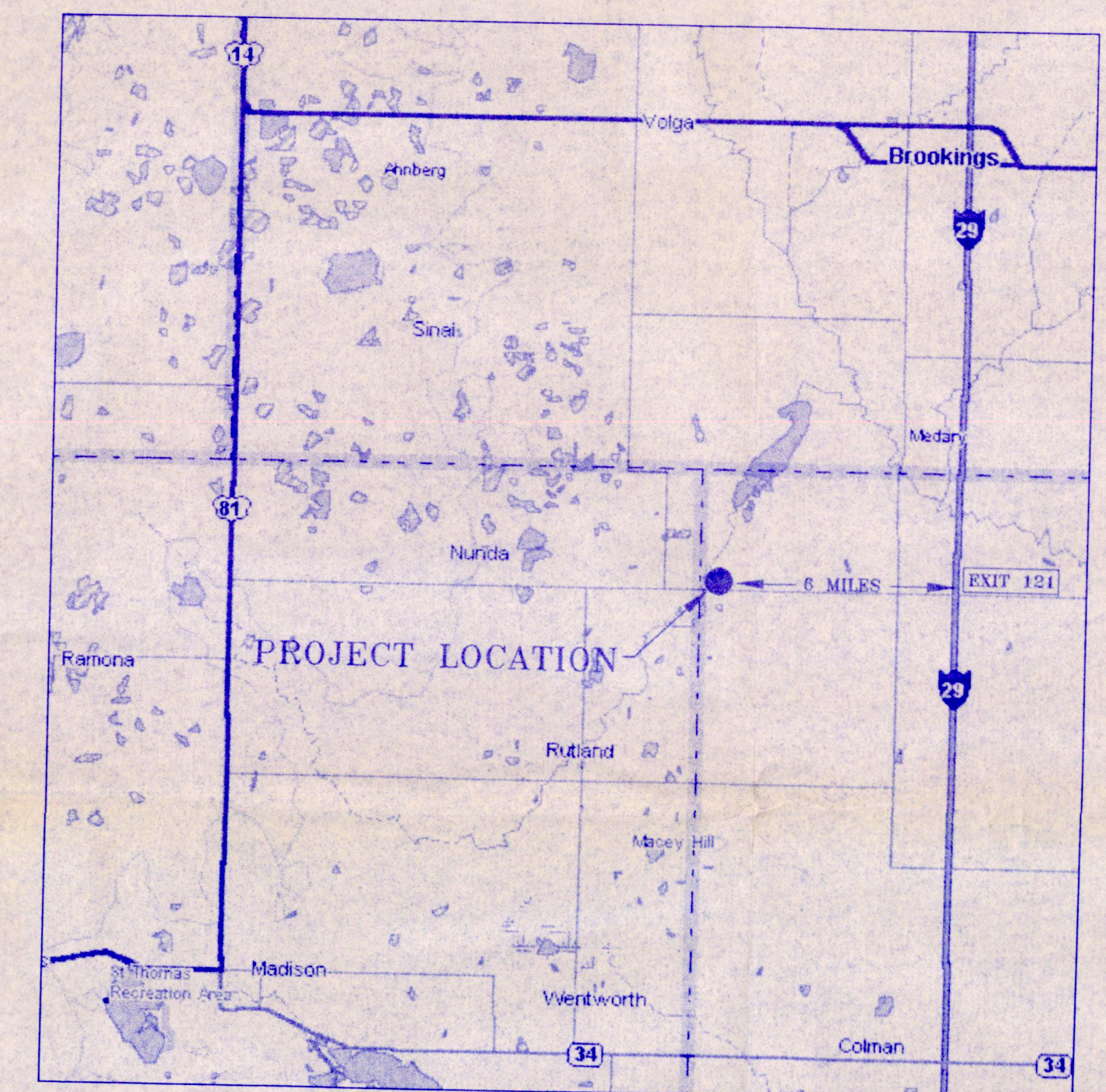
MOBILIZATION	1 L.S.
SITE PREPARATION (6")	450 CY-P
EMBANKMENT CONSTRUCTION	4800 CY-P



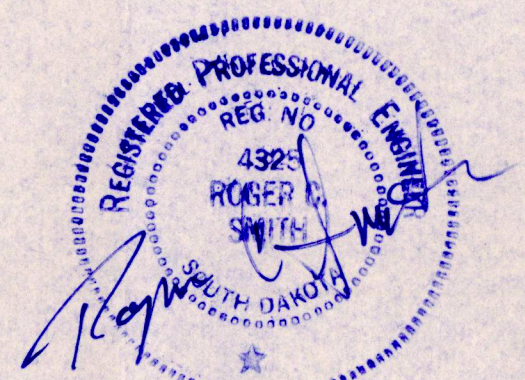
PROJECT LOCATION MAP
NOT TO SCALE



SOUTH DAKOTA



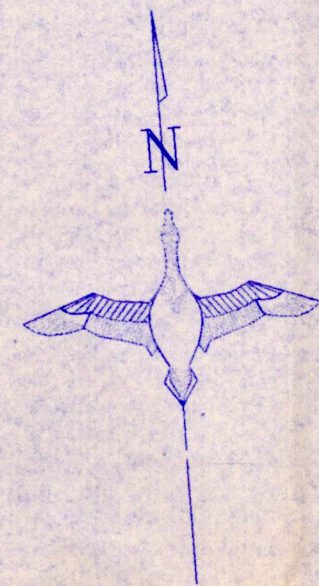
PROJECT LOCATION MAP
NOT TO SCALE



LANDOWNER:
RENO PETERSON
(605)-332-6562

DUCKS UNLIMITED INC.		PROJECT NO. SD-0329-001	DESIGNED BY: RCS
GREAT PLAINS REGIONAL OFFICE		RENO PETERSON WETLAND LOCATION MAPS	DRAWN BY: TSP
DATE: 7-24-2001	SHEET NO. 1 OF 3	APPROVED BY: <i>[Signature]</i>	SURVEYED BY: RCS
		CHECKED BY: <i>[Signature]</i>	

6279-3



LOW POINT ON SOUTH SHOULDER OF TRAIL
EL. 101.1

LOW POINT ON SOUTH TOE OF TRAIL
EL. 99.2

LOW POINT IN FIELD NORTH OF TRAIL
EL. 102.40

RESERVOIR ELEVATION	ACRES	VOLUME
94.0	3.08	0.0
95.0	13.3	8.2
96.0	17.5	23.6
PROPOSED FSL 97.0	27.3	48.0
98.0	32.4	75.9
99.0	36.2	110.2
100.0	40.1	148.3
101.0		186

THE NEIGHBOR TO THE WEST OF THE
PROPERTY BOUNDARY (ESTIMATED TO BE
THE FENCE LINE) HAS AGREED TO
CLOSING THE DRAIN PROVIDED THAT
LAND WEST OF THE BOUNDARY BE
PROTECTED FROM BEING FLOODED.

MATERIAL BORROWED FROM THE
DESIGNATED BORROW AREAS SHALL BE
USED TO CONSTRUCT THE DITCH PLUG
AND DIKE AS SHOWN ON THE
X-SECTIONS ON THE NEXT SHEET. THE
MATERIAL USED ON THE WEST SIDE OF
THE FENCE SHALL BE SLOPED TO
PROVIDE DRAINAGE AND BE COVERED
WITH ORGANIC MATERIAL CAPABLE OF
BEING CULTIVATED.

MATERIAL FOR FILL REQUIREMENTS SHALL
BE EXCAVATED FROM THIS AREA

24" CONCRETE PIPE
TO BE FILLED ACCORDING TO STATE REQUIREMENTS
STATE REQUIREMENTS CAN BE FOUND IN THE BID DOCUMENTS

DIKE / FILL

NATURAL OVERFLOW ELEVATION - 99.9
AREA MAY REQUIRE REGRADING TO
PROVIDE POSITIVE DRAINAGE.

CONTROL 2
N-4988.50 / E-4925.04
EL. TOP OF HUB 98.81

CONTROL 1
N-5000 / E-5000
EL. TOP OF HUB - 100.00

CONTROL ELEVATION OF
NATURAL OVERFLOW EL. 100.40

DITCH CENTERLINE
DITCH SHALL BE FILLED WITH MATERIAL
FROM THE DESIGNATED BORROW AREA.
MATERIAL SHALL BE PLACED AS TO
PROVIDE A CHANNEL AS SHOWN ON THE
X-SECTIONS ON THE NEXT SHEET.

DUCKS UNLIMITED INC.		PROJECT NO. SD-329-1	DESIGNED BY: RCS
		RENO PETERSON WETLAND RESTORATION PROJECT TOPOGRAPHY	
GREAT PLAINS REGIONAL OFFICE		SHEET NO. 2 OF 3	APPROVED BY:
DATE: 7-23-01		CHECKED BY:	

