

WATER PERMIT NO. 5793-3

Phone: 232-4276

Name of Applicant: City of North Sioux City

Post Office Address: PO Box 338, North Sioux City SD 57049

Amount of Water Claimed: 2.22 cfs Total Acres: NA

Source of Water Supply: groundwater - Dakota Formation

Water to be used for: municipal County: Union

About _____ miles _____ of _____

PRIORITY Date Received: 11-4-93 Fee: \$525.00 Remarks: New well in

Dakota Formation to replace existing well in Missouri:Elk Point Aquifer

Corrected Application Received: _____ Period of Annual Use: Jan 1- Dec 31

WATER QUALITY APPROVAL RECEIVED: NA APPROVED/CONDITIONAL (Circle one)

WI-1 Description same as Application YES _____ NO _____ REMARKS: _____

Diversion Point: SW 1/4 NW 1/4 Sec 14-T89N-R48W

Land to be Irrigated: _____

	⊗	14			

Well Log: Driller: Wetmore Drilling Licensed YES X NO _____

Depth of Well: 274 feet REMARKS: _____

Type of Map: topo PREPARED BY: Gregory C Meyer Reviewed and the Number

Assigned on: _____ By: Karen Schlaak

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

Mail to:
Water Rights Division
Joe Foss Building
523 E Capitol
Pierre SD 57501-3181
605 773-3352

No. 5793-3 Hydrologic Unit 10170203
Basin Big Sioux River
Newspaper Elk Point Leader Courier, Box 310
(office use only)



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

Check use of water:

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

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.)
New well in Dakota formation to replace existing well in Missouri:

Elk Point Aquifer - Permit No. 1069-3

1. Name of Applicant City of North Sioux City, South Dakota Phone 605/232-4276
(check one) ☒ Owner ☐ Tenant/lessee
Mailing Address P. O. Box 338 North Sioux City State SD 57049
(Street, RR, or Box) (City) (Zip Code)
2. Amount of water claimed 2.22 *CFS or 1000 **GPM ***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 Dakota formation
4. Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)
Well in SW 1/4 NW 1/4, Section 14, T89N, R48W
County Union
5. County or counties where water will be used Union
6. Annual period during which water is to be used All Jan 1 - Dec 31
7. Give a description of the project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed)

New municipal well in the Dakota formation designed to ultimately pump 1000 gpm to replace an existing well in the Missouri: Elk Point aquifer which pumps 250 gpm.

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)

STATE OF SOUTH DAKOTA)

County of Union)^{SS}

I, William C. Merrill, 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.

Signed William C. Merrill

Subscribed and sworn to before me this 22nd day of October 19 93

David Allen

Notary Public

**SOUTH DAKOTA
WATER PERMIT NO. 5793-3**

Date of first receipt of application November 4, 1993.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 5793-3 to the City of North Sioux City, PO Box 338, North Sioux City SD 57049 authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 5793-3 appropriates 2.22 cubic feet of water per second from one well (Dakota Formation) 274 feet deep located in the SW 1/4 NW 1/4 Section 14-T89N-R48W.
2. The water appropriated shall be used for the purpose of supplying water to the City and may not exceed the amount of water needed for beneficial use for municipal purposes.
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. 5793-3 is January 24, 1994.
5. The date from which applicant may claim right is November 4, 1993.
6. One-fifth of the construction is to be completed on or before July 24, 1996.
7. All construction is to be completed on or before January 24, 1999.
8. Water is to be put to beneficial use on or before January 24, 2003.
9. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATION

1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.

WATER MANAGEMENT BOARD

By: _____

John Hatch
John Hatch, Chief Engineer
Water Rights Division
Department of Environment and Natural Resources

MAR 14 1994

date

Supplemental Information

(type or print in ink)



1. Well Information - Proposed Construction

- a) Drill Hole Diameter 24" Depth 274'
- b) Casing Type steel Diameter 14" Thickness 0.375
- c) Screen Type 304 SS Diameter 14" Thickness 0.375
- d) Gravel Pack Thickness 5" Length of Gravel Pack 54'
- e) Depth to Top of Water Bearing Material 170'
- f) Depth to Water (ground surface to water level) 26'
- g) Distance to nearest existing domestic well:
On applicants property 60' to be abandoned On property owned by others 3500' - private well
6000' - Sodrac well

2. Dugout Information

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

3. 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:

b) Freeboard _____

c) Crest Width _____

Crest Length _____

d) Height _____

e) Primary Outlet Capacity _____

If pipe, diameter _____

f) Secondary Spillway Capacity _____

Spillway Width _____

g) X & Y Slope

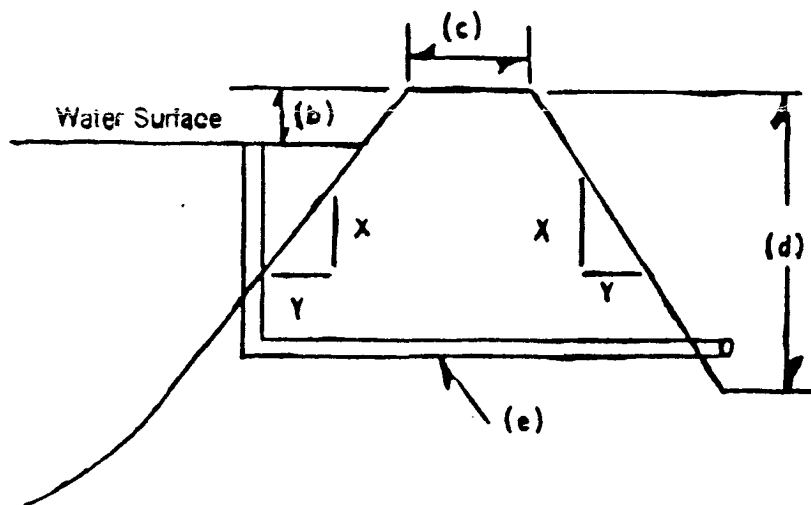
Upstream _____

Downstream _____

h) Surface Area of Impoundment _____

i) Storage _____ Acre Feet

j) Drainage Area Above Dam _____ Acres



RECEIPT

413935

Division of Water Rights

South Dakota Department of Environment and Natural Resources

Pierre, November 4, 19 93RECEIVED OF City of North Sioux City, Box 338, North Sioux City SD 57049

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

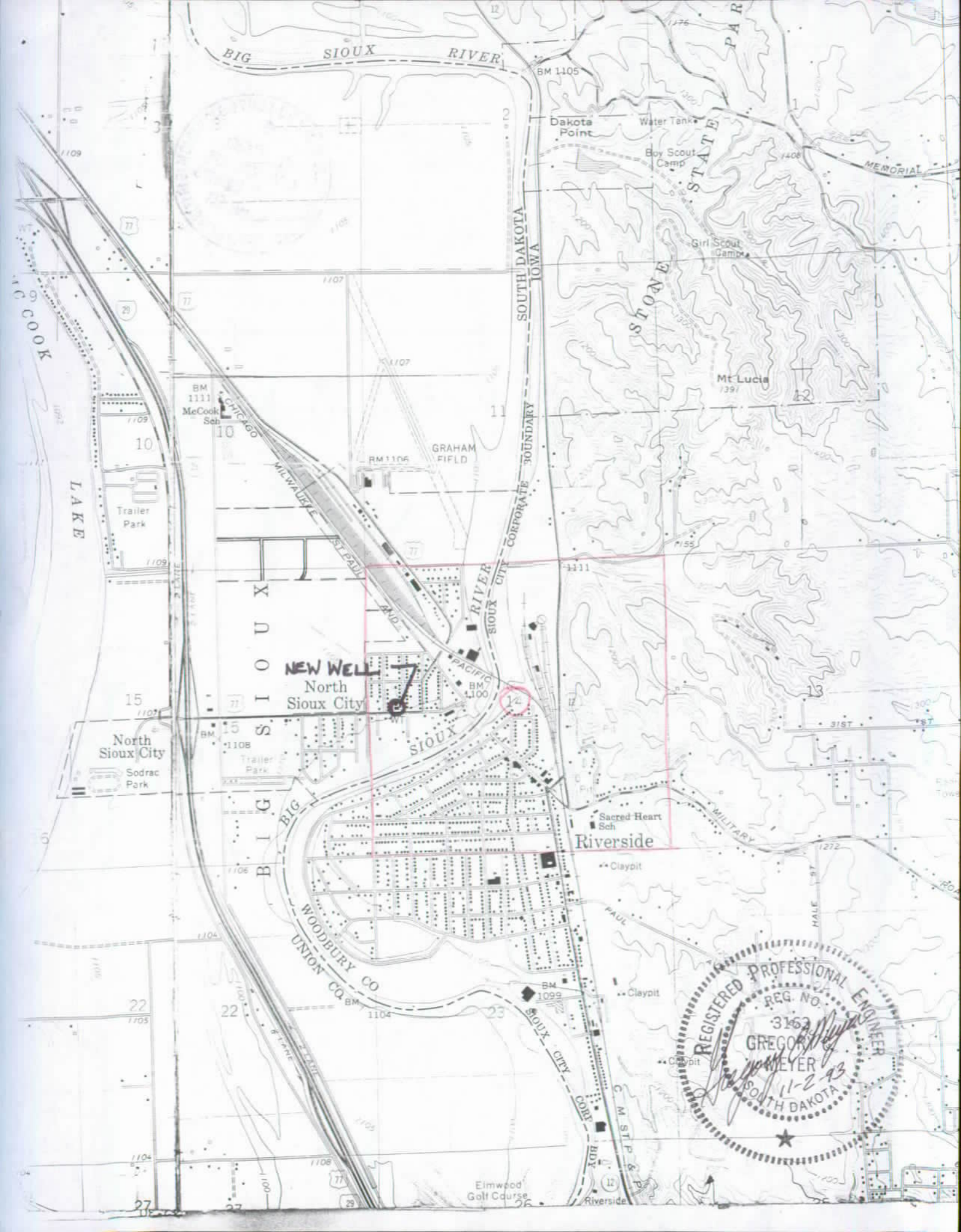
Fee for Application for Permit No. <u>5793-3</u> to Appropriate Water, to construct and to put water to beneficial use _____	525	00
Fee for Application for Permit No. _____ to Appropriate Water, for Future Use _____		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____		
Fee for Filing Transfer Form _____		
Fee for Filing Extension Request _____		
Fee for _____		

(Any Other Work Provided by Law)	Total	525 00

By John Hatch
Chief Engineer

JOHN HATCH

ks



11103 #1 (10603)
110.6

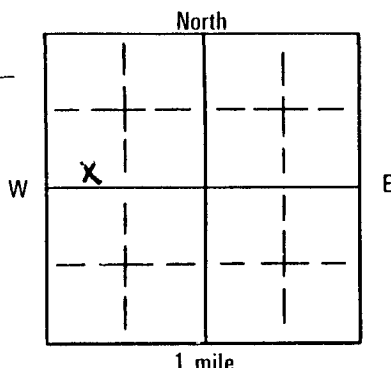
SOUTH DAKOTA WATER WELL COMPLETION REPORT

10-85

Location SW 1/4 NW 1/4 Sec 14 Twp 89N Rg 48W

County Union

Please mark well location with an "X"



Well Completion Date 12-8-92

PROPOSED USE:

☐ Domestic ☒ Municipal ☐ Test Holes
☐ Irrigation ☐ Industrial ☐ Stock

Method of Drilling:

Rotary

CASING DATA:

☒ Steel ☐ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>54.57</u> LB/FT	<u>14</u> IN	<u>0</u> FT	<u>221</u> FT	<u>18 1/2</u> IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN

GROUT:

Was the well grouted? ☒ YES ☐ NO

To what depth? 220 FEET

What is grouting material? neat cement

If cement, number of sacks? 216

Describe grouting procedure pumped w/ Tremie

What was grout weight? 15.5 LB/GAL

SCREEN: ☐ Perforated pipe ☒ Manufactured

Diameter 14 IN Length 50 FEET

Material stainless steel

Slot Size 50 Set From 221 Feet To 271 Feet

Slot Size _____ Set From _____ Feet To _____ Feet

Slot Size _____ Set From _____ Feet To _____ Feet

Other information _____

Was a packer or seal used? ☐ YES ☒ NO

If so, what material? _____

Describe packer(s) and location? _____

Was well disinfected upon completion? ☒ YES ☐ NO

Explain Chlorine solution

Bacteriological analysis ☒ YES ☐ NO

Laboratory sent to Sent by owner

Well Owner:

Name City of North Sioux City

Address Box 338, North Sioux City 57049

Well Log: _____ Depth _____

Formation	From	To
Top soil	0	2
clay	2	24
sand	24	75
Sand & gravel	75	141
boulder	141	142
Sand & gravel	142	148
Shale	148	170
Sandstone	170	272
shale	272	274

STATIC WATER LEVEL 26 Feet

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other

If other, specify _____

Can well be completely shut in? _____

WELL TEST DATA:

☒ Pumped

☐ Bailed

Describe: _____

☐ Other

Pumping Level Below Land Surface

88 ft. After 21 Hrs. pumped 500 GPM

112 ft. After 3 Hrs. pumped 800 GPM

_____ ft. After _____ Hrs. pumped _____ GPM

REMARKS:



This well was drilled under license # 341

And this report is true and accurate.

Drilling firm Wetmore Drilling

Signature of License Representative: _____

Signature of Well Owner: _____

Date 7-28-93



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

October 8, 1993

Gary Flett
City of North Sioux City
P.O. Box 189
North Sioux City, SD 57049

Dear Mr. Flett:

Enclosed are the application forms and an instruction sheet for applying for a water permit. This water permit is necessary for the new well that was drilled into the Dakota Formation to replace the well authorized by Permit No. 1069-3, which was constructed into the Missouri:Elk Point Aquifer. Since this is a different water source, a new water permit is required.

If you need further assistance, please feel free to contact Eric Gronlund at (605) 773-3352.

Sincerely,

Cheryl F. Frost
Secretary
Water Rights Division

enclosures

BW
MABUELL WINTER MOUSEL AND ASSOCIATES
CONSULTING ENGINEERSDate: Oct. 19, 93
Time: 1:55Project #: 15690 186
Project Name: No Sioux City

Please Deliver the Following Page(s) to:

Name: Eric Gronlund
Firm: So Dakota - DENR - Water Rights Division
City: Pierre
FAX: 605/773-4068
From: Connie Miller
Remarks: Please review the attached Permit for
information, as needed. (Did we do it correctly?)Who is to sign the form? - Mayor of City
Operator @ City plant or us as the Engineer?Thank you for your assistanceWE ARE TRANSMITTING 4 PAGES INCLUDING THIS COVER LETTER.

IF YOU DO NOT RECEIVE ALL THE PAGES OR HAVE ANY QUESTIONS, CONTACT THIS OFFICE.

REPORT ON APPLICATION NO. 5793-3
for North Sioux City
November 18, 1993

Application No. 5793-3 proposes to appropriate 2.22 cfs (1000 gpm) from one well approximately 274 feet deep located in the SW 1/4 NW 1/4 of section 14, T89N R48W in Union County. The water is for municipal use.

AQUIFER - DAKOTA FORMATION (DKOT)

The Dakota Formation consists of sand, sandstone, clay and shale which attains a thickness of 400 feet in this area (Schoon, 1971). The aquifer is buried beneath the Missouri Elk Point aquifer and is under artesian or confined conditions. The two aquifers are undoubtedly hydraulically connected over some of this area, however, layers of shale within the Dakota Formation do form confining beds which at least locally separate the two aquifers. The Dakota Formation underlies 452 square miles and contains an estimated 7.81 million acre feet of recoverable water in storage in Union County (Hedges, 1982).

The Division of Water Rights does not monitor any observation wells completed into the Dakota Formation in this immediate area. Water levels for the Dakota Formation and the Missouri Elk Point appear to be similar. The nearest Dakota Formation observation well being monitored is located over 20 miles northwest of this application. Data for that well show relatively the same characteristics as do wells completed into the Missouri Elk Point aquifer. In general, water levels for the Missouri Elk Point aquifer show good response to climatic conditions, that is, rising water levels during wet years and gradually declining water levels during dry years (Water Rights, 1993).

REVIEW OF EXISTING WATER PERMITS/RIGHTS

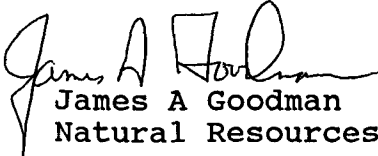
The nearest existing diversion from the Dakota Formation is also for North Sioux City. That well authorized by Water Permit Nos. 4465-3 and 5787-3 (will be licensed for 0.67 cfs) is located about 575 feet north of this application. Interference is not expected to be a concern. Drawdown can be expected due to pumping and that drawdown should extend to the other well. The city will be able to manage the wells to minimize any potential effects should it occur.

CONCLUSIONS

1. Water is available from the Dakota Formation.
2. The aquifer is buried and under confined conditions. Even though confined, the Missouri Elk Point aquifer directly overlies the Dakota Formation and is probably hydraulically connected to the Dakota Formation. Drawdown caused by

pumping is not expected to be significant and interference should not be a concern.

3. This well has already been drilled and has been completed in accordance with SD Well Construction Standards.
4. The well completion report filed with the application indicates that this well is capable of producing 800 gpm with 86 feet of drawdown. This results in a specific capacity of 9.3 gpm/ft of drawdown. The request for 1000 gpm is not unreasonable.



James A Goodman
Natural Resources Engineer

BIBLIOGRAPHY

Hedges, L.S., etal, 1982, Evaluation of Ground-Water Resources Eastern SD and Upper Big Sioux River, SD and Iowa, for US Army Corps of Engineers, SD DENR, SDGS, Vermillion, SD, 57069.

Schoon, R.A., 1971, Geology and Hydrology of the Dakota Formation in South Dakota, R.I. No. 104, SD DENR, SDGS, Vermillion, SD, 57069.

Water Rights, 1993, Unpublished Observation Well Records for Union County, SD DENR, Division of Water Rights, Pierre, SD, 57501.

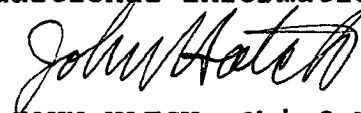
RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 5793-3, City of North Sioux City

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Division, Department of Environment and Natural Resources concerning Water Permit Application No. 5793-3, City of North Sioux City, c/o William Merrill, PO Box 338, North Sioux City, SD 57049.

The Chief Engineer is recommending APPROVAL of Application No. 5793-3 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) in the public interest with the following qualification:

The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.

See report on application for additional information.



JOHN HATCH, Chief Engineer
December 20, 1993



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

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

December 27, 1993

William C. Merrill
City of North Sioux City
Po Box 338
North Sioux City, SD 57049

Dear Mr. Merrill:

Water Permit Application No. 5793-3 for municipal 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 Elk Point Leader-Courier printed at Elk Point, SD (Ph # 356-2632). 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. 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 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
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 57501-3181

December 27, 1993

Elk Point Leader-Courier
Box 310
Elk Point, SD 57025

ATTENTION: Legal Department

Enclosed is a Notice of Hearing on Application No. 5793-3 to be published twice. Please publish the first notice on January 6, 1994, 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 the City of North Sioux City, PO Box 338, North Sioux City, SD 57049 (Ph # 232-4276).

A copy of BOTH publications must be SENT to the WATER RIGHTS DIVISION. IMMEDIATELY return the FIRST publication with the FIRST Transmittal form on the bottom of this page. The first copy is needed to check the publication for errors so any corrections can be made in the second publication. Publication errors can invalidate the public notice and cause the applicant costly delays.

Please be sure the SECOND publication is returned IMMEDIATELY with the enclosed Proof of Publication form. DO NOT WAIT until the end of the month or the billing cycle. No action may be taken on the permit application until proof of publication has been received.

Sincerely,

Eric Gronlund
Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

-----CUT HERE-----
FIRST TRANSMITTAL NOTICE

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

No. _____

Date _____

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

Name

Newspaper

Instruction to Newspaper - Publish first Notice on January 6, 1994, with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 5793-3 to Appropriate Water

Notice is given that the City of North Sioux City, c/o William C. Merrill, PO Box 338, North Sioux City, SD 57049 has filed an application for a water permit to appropriate 2.22 cubic feet of water per second from one well (Dakota Formation) 274 feet deep located in the SW 1/4 NW 1/4 Section 14-T89N-R48W. The water is for municipal use.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 5793-3 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 Division, 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 January 24, 1994.

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 Division address to request copies of information pertaining to this application. Russell L. Stone, Acting Secretary, Department of Environment and Natural Resources.

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
) ss
 County of Union)

I, Lester E. Emerson

certify that the attached printed Notice was

taken from the The Leader-Courier

printed and published in Elk Point

County of Union and State of

South Dakota. The notice was published in
 the newspaper on the following two dates:

January 6, 1994

January 13, 1994

Cost of Printing: \$32.10

Lester E. Emerson
 (Signature)

Publisher - Editor
 (Title)

Jan 13, 1994
 (Date Signed)

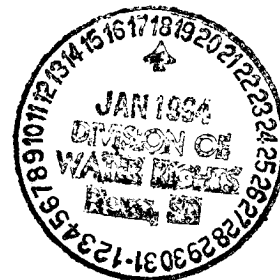
NOTICE OF APPLICATION NO. 5793-3 TO APPROPRIATE WATER

Notice is given that the City of North Sioux City, c/o William C. Merrill, P.O. Box 338, North Sioux City, SD 57049, has filed an application for a water permit to appropriate 2.22 cubic feet of water per second from one well (Dakota Formation) 274 feet deep located in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 14-T89N-R48W. The water is for municipal use.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 5793-3 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 Division, 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 January 24, 1994.

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 Division address to request copies of information pertaining to this application. Russell L. Stone, Acting Secretary, Department of Environment and Natural Resources.
 Pub. Jan. 6 and 13, 1994.





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

MAR 14 1994

William C Merrill
City of North Sioux City
PO Box 189
North Sioux City, SD 57049

Dear Mr. Merrill:

Enclosed is Water Permit No. 5793-3 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

Also enclosed is Form 10, Notice of Completion of Works and Application of Water to Beneficial Use, which you are to complete and submit to the Chief Engineer when you have completed the system and/or have put the water to beneficial use. An inspection can then be scheduled so that the Water License may be issued, thus completing your acquisition of a Water Right.

Very truly yours,

JOHN HATCH, Chief Engineer
Water Rights Division
605 773-3352

enclosures

PLEASE NOTE: Certain changes can be made in your permit within the five year construction period, usually without affecting the priority date provided an application to amend your permit is made within the five year period - i.e. changes in location or number of diversion points (wells) or location of land to be irrigated. Well locations for wells into the same aquifer can be moved up to 660 feet without application.

Applications to amend a permit after the five year construction period will be assigned a new priority date. Applications to change water sources, to add lands or increase original diversion rates, if approved will usually receive the date of the new application as a priority date regardless of the five year construction period.

5793-3

**Water Rights Division -DENR
Conversation or File Documentation**

NAME OF PERSON OR FILE: Gary Flett, City of North Sioux City

ADDRESS: PO Box 338, N Sioux City, SD 57049 **COUNTY:** Union

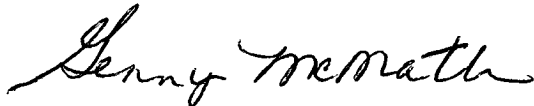
DATE: August 29, 1994 **TELEPHONE:** 232-9165 or 232-4276

RE: pump rate

COMMENTS:

Mr. Flett called regarding the pump rate on Water Permit No. 5793-3. He said the city is switching pumps from a 15 horse power to a 20 horse power pump. He indicated this would increase the diversion rate by 400 gpm.

I told him that under Water Permit No. 5793-3, the city was authorized to pump 2.22 cfs or 1000 gpm. If they pumped in excess of the 1000 gpm from this well, then a new permit would need to be obtained. He indicated they were still within the 1000 gpm.



Genny McMath
Environmental Scientist



WATER USE FOR 1995

PERMIT NO. _____

NAME FIRST _____

ADDRESS 1 _____

CITY OF NORTH SIOUX CITY

5793-3

ADDRESS 2 _____

PO BOX 338

CITY _____

N SIOUX CITY, SD 57049

SOURCE OF WATER (PLEASE CHECK):

GROUND WATER X NUMBER AND DEPTH OF WELLS 2

200-220 ft deep

SURFACE WATER _____ NAME OF STREAM OR LAKE _____

TYPE OF WATER USE (PLEASE CHECK):

INDUSTRIAL _____ COMMERICAL _____ INSTITUTIONAL _____

GEOHERMAL _____ POWER _____ MINING _____

MUNICIPAL WATER SUPPLY X

ESTIMATED TOTAL 1995 WATER USE ~~173~~ 173,186,120 GALLONS

NAME OF CONTACT PERSON Liesel Hallwas

TELEPHONE NO. 1-605-232-4276

ADDRESS CORRECTION _____



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

September 3, 2002

5793-3
6060-3

Liesel L Hallwas, Mayor
City of North Sioux City
PO Box 338
North Sioux City SD 57049

Dear Mayor Hallwas:

On June 18, 2002, the investigation of city's water use systems, including the extent of application of water to beneficial use, as developed under Water Permit Nos. 5793-3 and 6060-3, was completed by Ron Duvall, a staff engineer with our program. Nos. 5793-3 and 6060-3 refer to wells in Section 14, T89N, R48W.

The final water right document, the water license, can now be issued for each one. State law requires that we charge a \$50.00 fee (**each**) for the investigation and issuance of the water license. Upon receipt of the \$100.00 fee, we will complete processing the water licenses. The check or money order for the fee should be made payable to the "Water Rights Program".

Your licensed water right will be similar to a property right that can not be lost as long as the water use continues and you abide by the permit requirements.

If you have any questions regarding the water permit, investigation of your water use system or payment of the fee, please contact me at (605) 773-3352.

Sincerely,

Genny McMath
Environmental Scientist
Water Rights Program
email: genny.mcmath@state.sd.us

Note: Ron also conducted an investigation of the well and system for Water Permit No. 6285-3 (well is in Section 4). The fee for No. 6285-3 has already been paid and the license is being processed.

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date September 23, 2002

RECEIVED OF City of North Sioux City, PO Box 1845, North Sioux City, SD 57049-1845

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

Fee for Application for Permit No. _____ to Appropriate Water, to construct and to put water to beneficial use	50 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>5793-3</u>		
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	50.00

No.

000294

By

Darland Erbele

Chief Engineer

gm

Permit No. 5793-3
Big 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, June 18, 2002, made a thorough examination of the water use system constructed by the City of North Sioux City of PO Box 338, North Sioux City SD 57049 holder of Permit No. 5793-3, bearing the priority of November 4, 1993 authorizing the diversion of 2.22 cu. ft. per second of the waters of ground water (Dakota Formation) for municipal purposes, in Union County.

Inspection contact & relationship to permit holder, if applicable: **Randy Frederickson, PW Director**

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Wetmore Drilling
- 2) No. of Wells 1
- 3) Depth(s) 271 feet
- 4) Well log is available Y

Casing:

- 1) Diameter 14 inches
- 2) Length 221 feet
- 3) Type Steel

Screen:

- 1) Type Stainless steel
- 2) Length 50 feet
- 3) Static water level 26 feet

Pump/Motor:

- 1) Make Unknown
- 2) Size 15 hp
- 3) Capacity 550 GPM

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

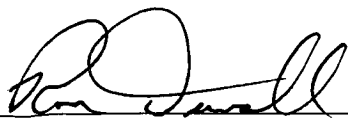
Water is diverted from the well into the city's water distribution system.

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by Y
- 2) Exceptions to compliance are: none

The system is in good condition with the point of diversion located as follows: Well (SW $\frac{1}{4}$ NW $\frac{1}{4}$): 450 feet E and 2,500 feet S from the NW corner section 14-T89N-R48W (Lat 42.52520, Long -96.48584). The works are capable of diverting and conveying to the place of use 1.22 cu. ft. per second of water which is to be used for municipal purposes. Water has been put to beneficial use to the maximum extent and the license should be issued for 1.22 cfs.

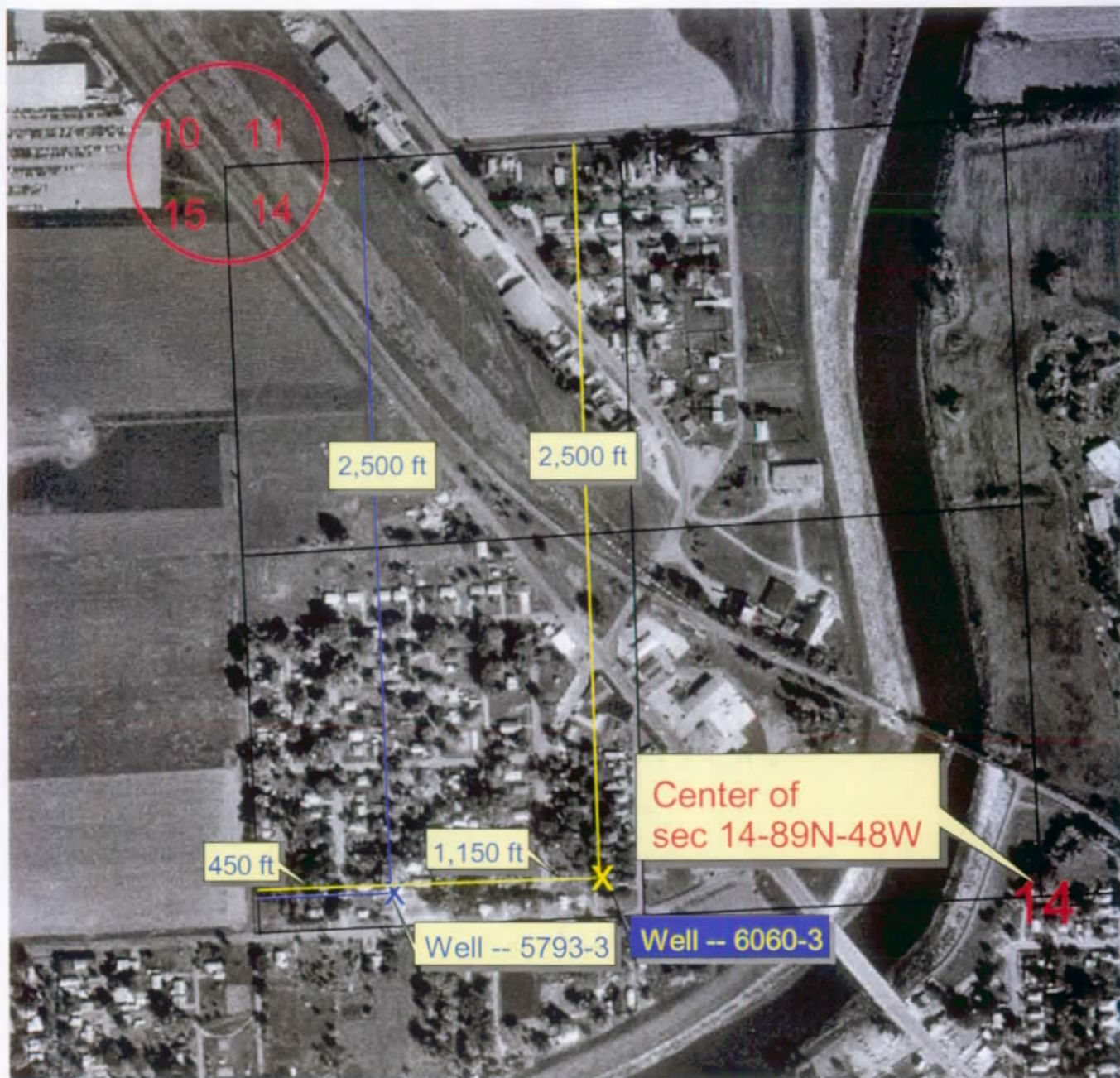
Comments or other permit(s) associated with the project: none | All structures, wells and lands on map Y



Ron Duvall
Natural Resources Engineer
DENR, Water Rights Program

Date report completed: August 29, 2002

900 0 900 Feet



South Dakota
Department of Environment
& Natural Resources
Water Rights

Ron Duvall, Nat. Res. Engineer
August 29, 2002

Nos. 5793-3 & 6060-3

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 5793-3

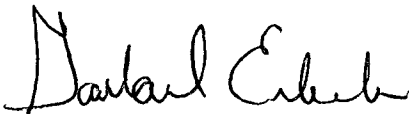
(1) The City of North Sioux City, PO Box 338, North Sioux City SD 57049 made Application No. 5793-3, November 4, 1993 for a water permit to divert 2.22 cubic feet of water per second from groundwater (one well- Dakota Formation), Union County, South Dakota for municipal purposes. Permit No. 5793-3, with a priority date of November 4, 1993 was approved January 24, 1994 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before January 24, 1999 and for the application to beneficial use of water on or before January 24, 2003.

(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. 5793-3 is issued a license, bearing a priority date of November 4, 1993, to appropriate 1.22 cubic feet of water per second from groundwater (one well – Dakota Formation). The water is diverted for municipal purposes from the following location:

450 feet East and 2,500 feet south from the northwest corner Section 14-T89N-R48W (SW ¼ NW ¼)

(3) This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Permit No. 5793-3 including the following qualification:

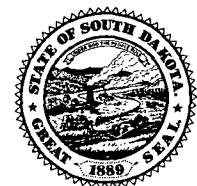
- The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.



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

OCT 25 2002

date





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

OCT 25 2002

5793-3

City of North Sioux City
Liesel L Hallwas Mayor
PO Box 338
North Sioux City SD 57049

Dear Mayor Hallwas:

Enclosed is Water License No. 5793-3. This is the final water right document completing your process of obtaining a Water Right. Enclosed is Receipt No. 000294 in the amount of \$50.00 which you paid for the investigation and issuance of the Water License.

For your information SDCL 46-6-27 requires that if the owner of an existing well, such as the well authorized by Water Right No. 5793-3, constructs a replacement well and does not plan to use the old well, the old well is considered abandoned and must be plugged. Also, any well that is being used or is not considered abandoned must be valved and controlled, if flowing, or sealed and capped so that no leaking occurs either underground or at the surface.

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,

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

enclosures