

WATER PERMIT NO. 6674-3

Name of Applicant: Ipswich Golf Club

Address: Box 613, Ipswich SD 57451

Phone: 605 426-6541

Amount of Water Claimed: 0.67 cfs

Total Acres: 43 acres

Source of Water Supply: groundwater

Water to be used for: irrigation

County: Edmunds

Type of Waste Disposal System:

Location: west edge of Ipswich

PRIORITY

Date Received: 11-30-2005

Application/License Fee: \$200

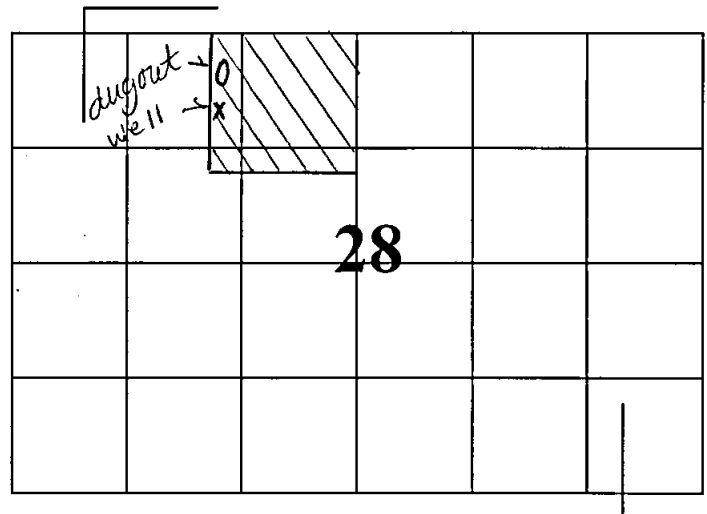
Corrected Application Received:

Period of Annual Use: April 1 – October 31

Remarks: Requesting diversion rate greater than statutory limit

Diversion Point: NW ¼ NW ¼ Sec 28-T123N-R68W

Land to be Irrigated: NW ¼ Sec 28-T123N-R68W



Depth of Well: 1600 feet

Well Driller:

Remarks:

Type of Map: aerial

Prepared by: Gary Bosato, FSA

Reviewed and the Number Assigned on: 11-30-05

By: Karen Schlaak

Notice of Hearing - date to intervene: _____

Mail to: Water Rights Program Joe Foss Building 523 E. Capitol Pierre, SD 57501-3181 (605) 773-3352	No. <u>6674-3</u>	(office use only) Hydrologic Unit <u>10160008</u>
	Basin <u>James River</u>	
	Newspaper <u>Ipswich Tribune,</u>	

RECEIVED
NOV 30 2005
WATER RIGHTS
PROGRAM

Application For Permit To Appropriate Water For Irrigation

Type of Application: ☒ New ☐ Vested Right ☐ Amendment/Correction to Permit No. _____
(Use predates Mar 2, 1955)

Description of amendment/correction: (i.e. change diversion point(s), add diversion point(s), change use, etc.)

- Name of Applicant Ipswich Golf Club Phone 605-426-6541
(check one) ☒ Owner ☐ Tenant/lessee
Mailing Address Box 613 Ipswich State SD 57451
(Street, RR, or Box and City) (Zip Code)
- Amount of water claimed 0.67 *CFS or 300 **GPM ***AF Total Acreage 43
(*Cubic Feet per Second) (**Gallons per Minute) (***) Acre Feet - storage capacity of dam/dugout or annual use if applicable
300 GPM for 9 Hrs./Day for approximately 210 days on 43 acres.
- Source of water supply New well will fill our dugout.
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) County Edmunds
1 well in NW1/4 NW 1/4 section 28-T123-R68
- County or counties where water will be used Edmunds
- Annual period during which water is to be used April 1 - October 31
- List below each forty acre division, or lot, or fraction thereof and show number of acres to be irrigated in each.
(Attach sheet if more space is needed)

Land Description	Acres	Land Description	Acres
NEL/4 NW1/4 section 28-T123-R68	32.25		
NW1/4 NW1/4 section 28-T123-R68	4.30		
SE1/4 NW1/4 section 28-T123-R68	4.30		
SW1/4 NW1/4 section 28-T123-R68	2.15		

8. Give a description of the project. (Attach sheet if more space is needed)
The irrigation is for a new grass green golf course in Ipswich, SD. We will irrigate 9 fairways, 9 tee boxes and 10 grass greens totalling 43 acres. Because of time constraints, we are requesting greater than the statutory limits.

STATE OF SOUTH DAKOTA) SS
County of Edmunds)

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, Mike Heinz, 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 Mike Heinz

Subscribed and sworn to before me this 28th day of November 2005



[Signature]
Notary Public signature

SOUTH DAKOTA
WATER PERMIT NO. 6674-3



Date of first receipt of application November 30, 3005.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 6674-3 to Ipswich Golf Club, Box 613, Ipswich SD 57451 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. 6674-3 appropriates 0.67 cubic feet of water per second (cfs) from one well to be completed into the Inyan Kara Aquifer (approximately 1600 feet deep) located in the NW ¼ NW ¼ Section 28 to irrigate 43 acres located in the NW ¼ Section 28; all in T123N-R68W. The water will be pumped from the well to a dugout (approximate 2.0 acre-feet storage capacity) located in the NW ¼ NW ¼ Section 28-T123N-R68W.
2. The amount of the appropriation may not exceed 3 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: April 1 – October 31.
3. The date from which applicant may claim right is November 30, 2005.
4. The date of approval of Permit No. 6674-3 is February 13, 2006.
5. One-fifth of the construction is to be completed on or before August 13, 2008.
6. All construction is to be completed on or before February 13, 2011.
7. Water is to be put to beneficial use on or before February 13, 2015.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

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.
2. The well authorized by Permit No. 6674-3 shall be constructed by a licensed well driller and construction of the well with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. The well approved under this Permit shall be valved and the flow reduced to the amount needed or to a minimum when not being used. If this well is abandoned or the Permit cancelled, the well must be plugged in accordance with Water Management Board Rules, Chapter 74:02:04.

(continued)

4. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, Permit No. 6674-3 authorizes a maximum diversion rate of 0.67 cfs for the irrigation of 43 acres with an annual volume not to exceed 3 acre feet of water per acre per year.
5. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

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

APR 07 2006
date



(type or print in ink)

- 1. Well Information - Proposed Construction** - We have a bid price of \$16.00/ft. for a completed well.
We are going to drill to the sundance level - approximately 1,600 ft.

- a) Drill Hole Diameter 6" to 2" Depth Approximately 1,600 ft.
- b) Casing Type Plastic & copper Diameter 6" to 2" 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 _____

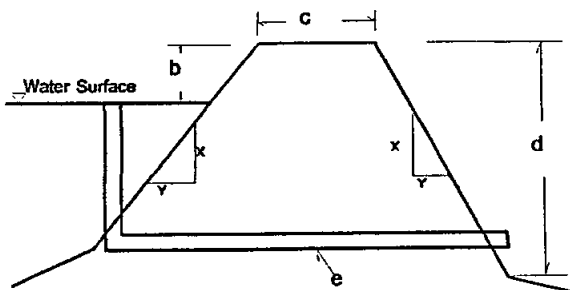
3. Dugout Information

- a) Surface Dimensions 215 feet x 85 feet Depth 12 feet
- b) Depth to water (ground surface to water level) 2 feet

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:



- 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

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date November 30, 20 05

RECEIVED OF Ipswich Golf Club, Ipswich SD 57451

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

Fee for Application for Permit No. <u>66674-3</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>66674-3</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.

002072

By

Darland White
Chief Engineer *gm*

1
X
Plow site
Layout

Mary Bosales
CED, Edmunds County
Farm Service Agency

WATER PERMIT APPLICATION NO. 6674-3
IPSWICH GOLF CLUB
DECEMBER 19, 2005

Water Permit Application No. 6674-3 proposes to appropriate 0.67 cubic feet of water per second from one well to be completed into the Inyan Kara aquifer (approximately 1,600 feet deep) located in the NW¼ NW¼ Section 28, T123N-R68W to irrigate 43 acres located in the NW¼ Sec. 28, T123N-R68W. The water will be pumped from the well to a dugout with a storage capacity of approximately two acre-feet located in the NW¼ NW¼ Sec. 28, T123N-R68W. The applicant is requesting a diversion rate greater than the statutory limit of one cfs per 70 acres.

AQUIFER: Inyan Kara (INKR)

AQUIFER CHARACTERISTICS:

Inyan Kara Aquifer:

The bedrock aquifer consisting of sandstone and siltstone found below the Dakota aquifer, and with higher artesian pressure can be considered the Inyan Kara aquifer (locally referred to as the "Sundance" aquifer). The Inyan Kara underlies 1,070 square miles of Edmunds County and contains an estimated 4.1 million acre feet of recoverable water in storage in the county (Hedges, 1982). The top of the Inyan Kara aquifer is expected to be approximately 1,350 feet below grade and the Inyan Kara is expected to be around 250 feet thick in this area (Gries, 1981). The Inyan Kara aquifer is confined (under artesian conditions) in this area and a well drilled at this site is expected to flow.

The nearest Water Rights Program observation well completed into the Inyan Kara Aquifer, (ED-85B), is approximately 15 miles east of the diversion point proposed by this application. Data from Water Right's Observation Well ED-85B is shown in figure 1.

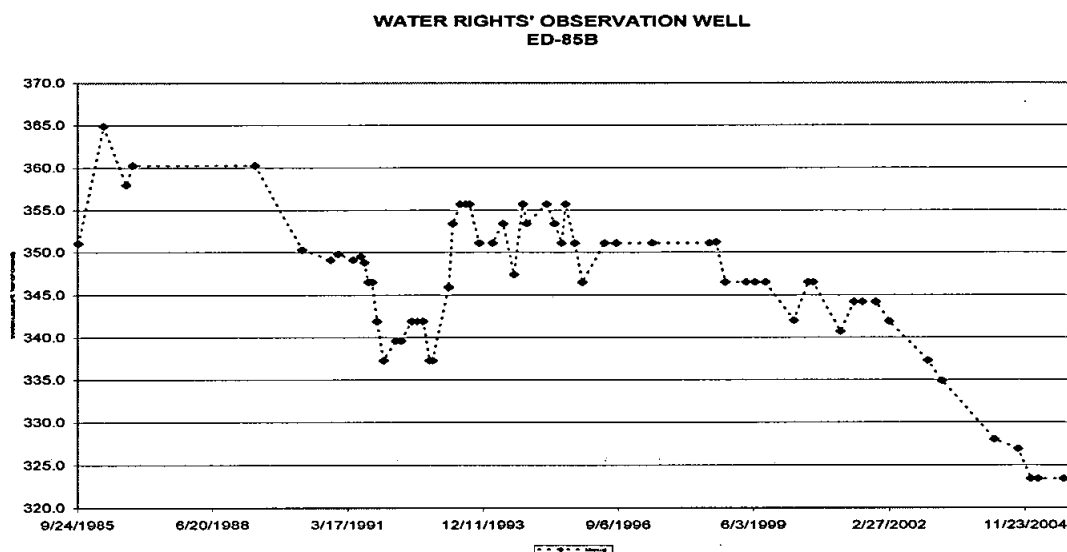


Figure 1. Hydrograph for Water Rights' Observation Well ED-85B

The hydrograph documents a decline of the potentiometric surface of 30-40 feet during the period of record. Hamilton, (1982) reports that the water levels in the Inyan Kara Aquifer have declined and “probably are declining because of increased discharge.” Since the Inyan Kara is under artesian conditions, the actual decrease of the amount of water in storage in the aquifer represented by the hydrograph is insignificant. In the case of ED-85B, it is possible that the recent water level declines may be linked to the 2003 completion of a domestic well approximately three-fourths of a mile from the observation well.

REVIEW OF EXISTING WATER RIGHTS:

There are a number of existing domestic wells completed into the Inyan Kara in Edmunds County. In addition there are three appropriations, (see table one), from the Inyan Kara aquifer within approximately six miles of the well site proposed by this application.

PERMIT NO	NAME	USE	CFS
1712-3	CITY OF IPSWICH	MUN	0.19
6376-3	LDL CATTLE COMPANY	COM	0.22
6377-3	LDL CATTLE COMPANY	COM	0.27

Table 1. Appropriations from the Inyan Kara aquifer within six miles of 6674-3

SDCL 46-6-3.1 requires that an application to appropriate groundwater may not be approved if, “according to the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of the water to the groundwater source”. Average annual recharge has not been quantified for the Inyan Kara aquifer. An estimate is not expected to be ascertained in the near future. The best information available to evaluate development as it relates to recharge, are historical records and data from observation wells. The difference between withdrawal from an aquifer and recharge is reflected by the water levels of the aquifer. If the water level of an aquifer continues to decline, it may suggest that withdrawals exceed recharge. However, withdrawals from confined aquifers such as the Inyan Kara affect water levels over a relatively large area. Water levels will continue to decline as the result of withdrawals until a dynamic equilibrium is established and water levels stabilize.

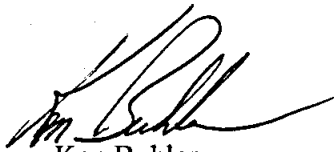
Although South Dakota Water Law (SDCL 46-6-3.1) does not allow “mining” of an aquifer, which could be evidenced by a decline of water levels; Water Law (SDCL 46-6-6.1) does not require the artesian head pressure to be protected. However, the Courts have determined that the Board must consider the effect of a limitation or a loss of artesian head pressure as one of the factors under the public interest determination.

Although there is the potential for well interference, particularly with the three City of Ipswich wells, it should not be an adverse impact.

CONCLUSIONS:

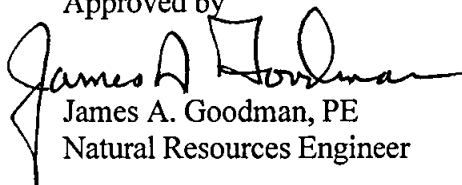
1. The Inyan Kara aquifer is a viable aquifer in this area.

2. Average annual recharge for the Inyan Kara aquifer has not been quantified and it is not expected to be ascertained in the near future. The best information available to determine the availability of unappropriated water is historical data and observation well records. Unappropriated water is available in the aquifer to sustain additional withdrawals.
3. Water Levels (head pressures) have declined in the Inyan Kara aquifer since the first wells were completed into the aquifers. However, whether withdrawals exceed the average estimated annual recharge can not be determined based solely upon a decline in head pressure.
4. In theory, the artesian head pressures of the Inyan Kara aquifer is stabilizing relative to withdrawals and recharge.
5. Each new diversion from the Inyan Kara aquifer will theoretically cause an additional effect of the head pressure of the aquifer. The withdrawals proposed by this application upon the Inyan Kara aquifer will not have a significant affect on the decline or stabilization of the head pressure in the aquifer.
6. The water management Board is not required to protect artesian head pressure as a means of diversion. However, the board must consider the effect of a limitation or a loss of artesian head pressure as one of the factors under the public interest determination.
7. If this application is approved, the well must be constructed in accordance with the SD Well Construction Standards. The alternative construction technique described in ARSD 74:02:04:36 is not appropriate, and the well casing must be pressure grouted from bottom to top pursuant to ARSD 74:02:04:28.



Ken Buhler
Natural Resources Engineer

Approved by



James A. Goodman, PE
Natural Resources Engineer

REFERENCES:

Gries, J.P., 1981, Unpublished Maps Prepared for the Office of Drinking Water, SD Dept. of Water and natural Resources for Underground Injection Control Program

Hamilton, L.J., 1982, Geology and Water Resources of McPherson, Edmunds, and Faulk Counties, South Dakota, Bulletin 26, SD DENR, Geological Survey, Vermillion, SD

Hedges, L.S., Burch, S.L, Iles, D.L., Barari, R.A., and Schoon, R.A., 1982, Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa: SD DENR-Geological Survey U.S. Army Corps of Engineers Contract DAWC 45-80-C-0185

Water Rights Program, 2005a, "Unpublished Observation Well Records", South Dakota DENR-Water Rights Program, Joe Foss Building, Pierre, SD

Water Rights Program, 2005b, "Water Permit/Right Files", South Dakota DENR-Water Rights Program, Joe Foss Building, Pierre, SD



**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. 6674-3, Ipswich Golf Club**

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. 6674-3, Ipswich Golf Club, c/o Mike Heinz, PO Box 613, Ipswich SD 57451.

The Chief Engineer is recommending APPROVAL of Application No. 6674-3 because: 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion has been 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. 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.
2. The well authorized by Permit No. 6674-3 shall be constructed by a licensed well driller and construction of the well with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. The well approved under this Permit shall be valved and the flow reduced to the amount needed or to a minimum when not being used. If this well is abandoned or the Permit cancelled, the well must be plugged in accordance with Water Management Board Rules, Chapter 74:02:04.
4. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, Permit No. 6674-3 authorizes a maximum diversion rate of 0.67 cfs for the irrigation of 43 acres with an annual volume not to exceed 3 acre feet of water per acre per year.
5. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Garland Erbele, Chief Engineer
January 18, 2006

AFFIDAVIT OF PUBLICATION

STATE OF SOUTH DAKOTA)
) ss
County of Edmunds)

D.E. Gibson of said County and State, being first duly sworn on his oath says: The Ipswich Tribune; a weekly newspaper in general circulation, printed and published in Ipswich, in said County and State by the Gibson Publishing and Printing Company; and has been such newspaper during the times hereinafter mentioned; that said newspaper now has, and has had during the publication of the attached advertisement, a bonafide circulation of at least 200 copies weekly, and has been published within the said County of Edmunds fifty-two successive weeks prior to the publication of said attached advertisement, and was during the publications of said advertisement, and now is, printed in whole or in part, in an office maintained at said place of publication. That said newspaper is and has been during the publication of attached advertisement, a legal newspaper, as defined by the laws of the state of South Dakota.

That I, D.E. Gibson, the undersigned, am

Publisher of said newspaper and am in charge of the advertising

thereof and have personal knowledge of all the facts stated in this affidavit and

that the advertisement headed

NOTICE OF APPLICATION NO. 6674-3

TO APPROPRIATE WATER

a printed copy of which hereto attached, was printed and published in the said

newspaper for two successive issues.

The First publication being made on the 25 day of Jan., 2006

The Second publication being made on the 1 day of Feb., 2006

The Third publication being made on the day of ,

The Fourth publication being made on the day of ,

The Fifth publication being made on the day of ,

The Sixth publication being made on the day of ,

The Seventh publication being made on the day of ,

The Eighth publication being made on the day of ,

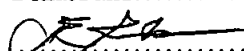
The Ninth publication being made on the day of ,

The Tenth publication being made on the day of ,

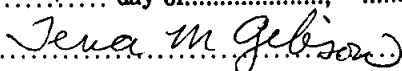
That the full amount of the fee charged for publication of said annexed notice inures to the benefit of the publisher of the The Ipswich Tribune; that no agreement or understanding for the division of the fee thereof has been made with any other person, and that no part thereof has been agreed to be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

The charges for said legal publications are Forty-one

Dollars and twenty-four cents (\$41.24)



Subscribed and sworn to before me this 1 day of Feb., 2006



Notary Public Edmunds County, South Dakota.

PUBLIC NOTICE

NOTICE OF APPLICATION NO. 6674-3 TO APPROPRIATE WATER

Notice is given that Ipswich Golf Club, c/o Mike Heinz, Box 613 Ipswich, SD 57451 has filed an application for a water permit to appropriate 0.67 cubic feet of water per second (cfs) from one well to be completed into the Inyan Kara Aquifer (approximately 1600 feet deep) located in the NW1/4 NW1/4 Section 28 to irrigate 43 acres located in the NW1/4 Section 28; all in T123N-R68W. The water will be pumped from the well to a dugout (approximate 2.0 acre-feet storage capacity) located in the NW1/4 NW1/4 Section 28-T123N-R68W. The applicant is requesting a diversion rate greater than the statutory limit of 1cfs per 70 acres.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 6674-3 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 February 13, 2006.

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
(Publish T 1-25; 2-1)

FEB 09 2006

WATER RIGHTS
PROGRAM

Instruction to Newspaper - Publish first Notice on January 25, 2006 with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 6674-3 to Appropriate Water

Notice is given that Ipswich Golf Club, c/o Mike Heinz, Box 613, Ipswich SD 57451 has filed an application for a water permit to appropriate 0.67 cubic feet of water per second (cfs) from one well to be completed into the Inyan Kara Aquifer (approximately 1600 feet deep) located in the NW ¼ NW ¼ Section 28 to irrigate 43 acres located in the NW ¼ Section 28; all in T123N-R68W. The water will be pumped from the well to a dugout (approximate 2.0 acre-feet storage capacity) located in the NW ¼ NW ¼ Section 28-T123N-R68W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 6674-3 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.

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DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

January 19, 2006

Ipswich Tribune
PO Box 7
Ipswich SD 57451-0007

ATTENTION: Legal Public Notice

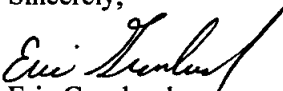
Enclosed is a Notice on Application No. 6674-3 to Appropriate Water to be published twice. Please publish the first notice on January 25, 2006 with the second publication 7 days later. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

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 Ipswich Golf Club, % Mike Heinz, Box 613, Ipswich, SD (Ph # 605-426-6541).

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. 6674-3

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

Date _____

We are in receipt of your letter of January 19, 2006 enclosing Notice to Appropriate Water by Application No. 6674-3 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.

January 19, 2006

Ipswich Golf Club
% Mike Heinz
Box 613
Ipswich SD 57451

Dear Mr. Heinz:

Water Permit Application No. 6674-3 for irrigation 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 Ipswich Tribune printed at Ipswich, SD (Ph # 605-426-6471). 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 and to arrange for payment. Early contact with the paper can eliminate delays. Upon receiving authorization, the publisher has been instructed to publish your notice once each week for two consecutive weeks. The newspaper has also been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the application.

Sincerely,


Eric Gronlund
Natural Resources Engineer
(605) 773-3352

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**

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

APR 07 2008

Ipswich Golf Club
% Mike Heinz
Box 613
Ipswich SD 57451

Dear Mr. Heinz:

Enclosed is Water Permit No. 6674-3 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. 6674-3
Inyan Kara Aquifer

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, **August 20, 2013**, made a thorough examination of the water use system constructed by **Ipswich Golf Club, PO Box 613, Ipswich, SD 57451** holder of Water Permit No. **6674-3**, bearing the priority date of **November 30, 2005** authorizing the diversion of **0.67 cubic feet per second (cfs)** from the **Inyan Kara aquifer** for the purpose of **irrigating** Ipswich Golf Course in the NW ¼ of Sec 28, T123N-R68W in **Edmunds County**.

I have the following conditions to report for the irrigation system in question:

- 1) Works used to divert water:
One well flowing freely into a dugout
- 2) Works used to transport water to a place of use:
A 40 hp Baldor pump and motor is used to pump water from the dugout and through the irrigation system.
- 3) Works used to apply water to beneficial use:
An underground sprinkler system is connected to the pump in order to apply water to the grounds.

The system is in the following condition: **well maintained**. The location of the well and the dugout (and corresponding pump house) can be described as follows:

- **The well is located approximately 1,440 feet south and 1,030 feet east of the northwest corner of Sec 28, T123N R68W at Lat 45.4439N Lon 99.0459W.**
- **The dugout and the adjacent pump used for distribution are located approximately 500 feet south and 1,070 feet to the east of the northwest corner of Sec 28, T123N-R68W at Lat 45.44647N Lon 99.04563W**

The well flows freely at approximately **150 gallons per minute (gpm)**, but can be restricted or shut off entirely using a control feature at the location of the well. The water from the well flows into a dugout with a capacity of approximately **2 acre-feet**. Pumping from the dugout into the irrigation system takes place at **400 gpm**. In addition, the dugout into which the well flows features an overflow channel into the nearby creek. Water has been put to beneficial use to the maximum extent as follows:

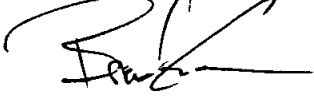
- **32.25 acres in the NE ¼ NW ¼ of Sec 28, T123N R68W.**
- **4.3 acres in the NW ¼ NW ¼ of Sec 28, T123N R68W.**
- **4.3 acres in the SE ¼ NW ¼ of Sec 28, T123N R68W.**
- **2.15 acres in the SW ¼ NW ¼ of Sec 28, T123N R68W.**

In total, 41 acres in the NW ¼ of Sec 28, T123N-R68W are being irrigated under Water Permit No. 6674-3.

This information is a best estimate based on information provided and viewing the 2012 FSA aerial using ArcMap.

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

Exceptions to compliance are: **None** Date Report Completed: **August 26, 2013**

A handwritten signature in black ink, appearing to read 'Bracken', with a long horizontal stroke extending to the right.

Bracken Capen
Natural Resources Engineer
DENR, Water Rights Program

FIELD INVESTIGATION REPORT FOR PERMIT NO. 6674-3

DATE OF INVESTIGATION:	August 20, 2013
NAME & ADDRESS OF PERMIT HOLDER	Ipswich Golf Club PO Box 613 Ipswich, SD 57451
NAME & ADDRESS OF INVESTIGATION CONTACT/ RELATIONSHIP TO PERMIT HOLDER, IF APPLICABLE	LeRoy Kilber Superintendent
DIVERSION POINT LEGAL LOCATIONS	1,440 feet south and 1,030 feet east of the northwest corner of Sec 28, T123N R68W at Lat 45.4439 Lon -99.0459

WELL INFORMATION:

- 1) Well Drilling Firm: **Pullman Well Drilling**
- 2) No. of Wells: **1**
- 3) Depth(s): **1560 feet**
- 4) Well logs is available: **Yes**
- 5) Comment:

Casing:

- 1) Diameter: **2.5 inches**
- 2) Length:
- 3) Type: **Steel and PVC**

Screen:

- 1) Type:
- 2) Length:
- 3) Static water level: **Flowing freely at surface**

Pump (from dugout):

- 1) Make: **Baldor**
- 2) Model:
- 3) Size:
- 4) Capacity: **400 GPM**

Motor:

- 1) Make: **Baldor**
- 2) Model No.:
- 3) Horsepower rating: **40 hp**

SYSTEM TYPE:

Underground irrigation

Center pivot: **N/A**

CHEMIGATION EQUIPMENT: No

PERMIT QUALIFICATIONS:

- 1) Special qualifications to permit being abided by: **No**
- 2) All structures, wells and lands on map: **Yes**
- 3) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period: **Yes**

COMMENTS:

- 1) Irrigation questionnaire reflect that irrigation began in 2006.
- 2) Well completion report was submitted with some missing information.
- 3) Operator indicated that flow from the well is maintained but restricted during the winter months to prevent a freeze of the pipes.

Rx Date/Time MAR-22-2007(THU) 13:40
03/16/2007 14:14 605-883-4534

605 883 4534
PULLMAN DRILLING
P. 001
PAGE 01
Ken Durbin 113-4068

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location NW 1/4 NW 1/4 Sec 28 Twp 123 Rg 68

County

Edmunds

North

Please mark well location with an "X"

W

E

Well Completion Date

8/5/2006

1 Mile

Distance to nearest potential pollution source (Septic tank, abandoned well, feed lot, etc.)
? ft. from (Identify source)

PROPOSED USE:

☐ Domestic/Stock Irrigation ☐ Municipal Industrial ☐ Business Institutional ☐ Test Holes Monitoring well

METHOD OF DRILLING:

Forward

CASING DATA:

☒ Steel ☐ Plastic ☐ Other
If other describe And 6" PVC cemented in
PIPEWEIGHT DIAMETER FROM TO HOLE DIAMETER
LB/FT 6.00 IN 0.0 FT 400.0 FT 8.75 IN
LB/FT 4.00 IN 0.0 FT 400.0 FT 7.88 IN
LB/FT 2.00 IN 400.0 FT 1,000.0 FT 4.50 IN

GROUTING DATA:

Grout Type No. of Sacks Grout Weight From To
Cement 180 Lb/gal 0.0 Ft 400.0 Ft
Lb/gal Ft Ft

Describe grouting procedure

Cement w/ 500 gal baroid mixed in Pumped in w/ Rig mud pump

SCREEN:

☐ Perforated pipe ☐ Manufactured
Diameter _____ Inches Length _____ Feet
Material _____
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

DISINFECTION: Was well disinfected upon completion?

☐ Yes, How?
☐ No, Why Not?

Lab sample sent to for water quality analysis

Well Owner: Ipswich Golf Course

Business Name:

Address: PO Box 8

City, State, Zip: Ipswich SD 57541

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Top Soil	0	3
Blue Clay	3	22
Shale	22	1420
Fair Sand	1420	1430
Shale	1430	1450
Fair to good sand	1450	1460
Shale	1460	1490
Sand	1490	1500

STATIC WATER LEVEL

If flowing: closed in pressure _____ FEET
GPM flow _____ through _____ PSI
Controlled by ☐ Valve ☐ Reducers ☐ Other _____ Inch pipe
Reduced flow rate _____ GPM
Can well be completely shut in?

WELL TEST DATA:

☐ Pumped Describe: Started flowing before cased- Stopped flow and cemented it up
☐ Bailed
☐ Other
Pumping Level Below Land Surface
_____ Ft. After _____ Hrs. pumped _____ GPM
_____ Ft. After _____ Hrs. pumped _____ GPM
If pump installed, pump rate: _____ GPM

REMARKS

Shale-----1500-----1505 Good Sand-----1505-----1515
Streaked-----1515-----1520 Sand-----1520-----1535
Hard Sand-----1535-----1560

This well was drilled under license #

440

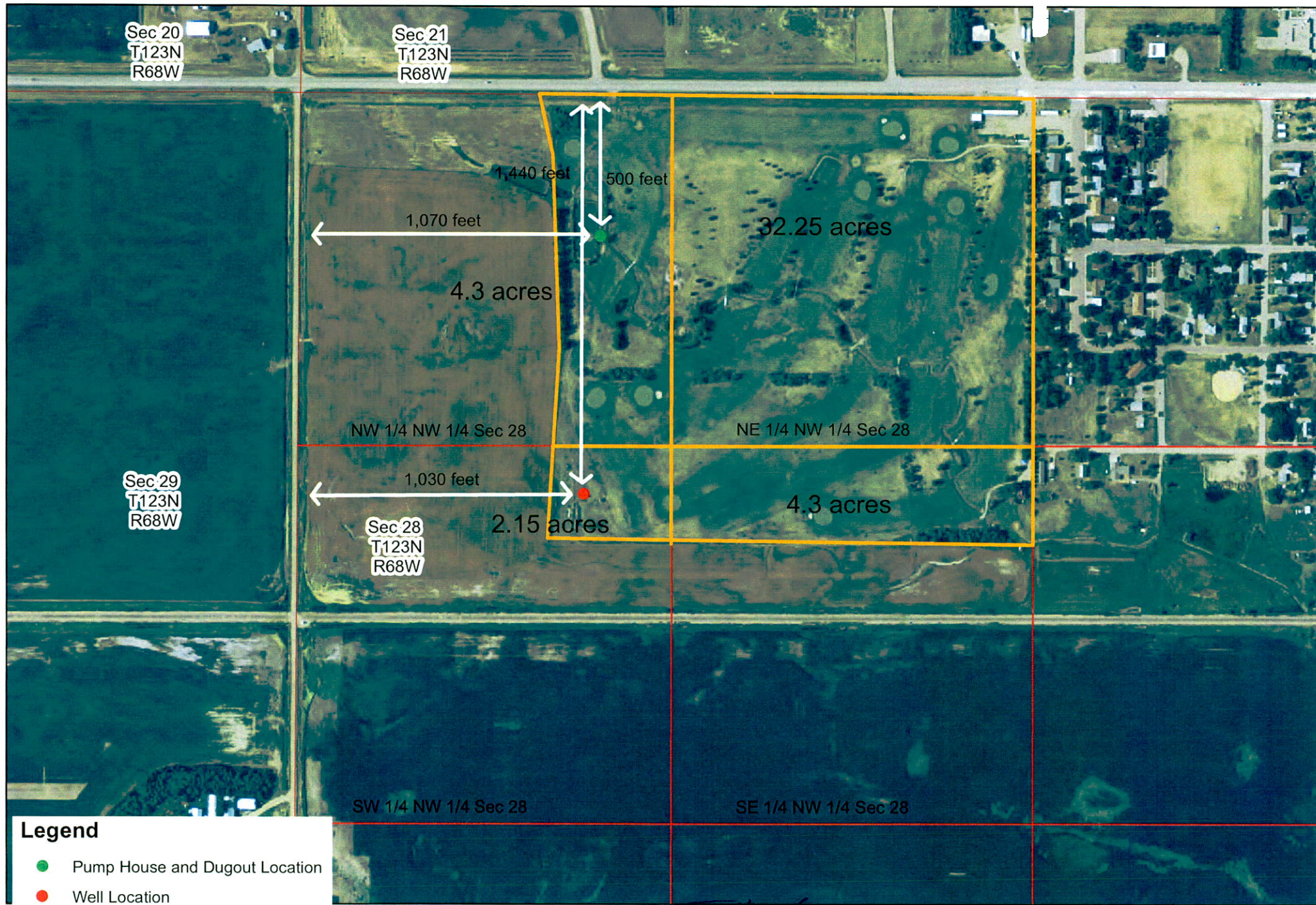
And this report is true and accurate.

Drilling firm: Pullman Well Drilling

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date:



Legend

- Pump House and Dugout Location
- Well Location
- Irrigated Area
- Section Boundaries - PLSS
- Township Boundaries



0 0.035 0.07 0.14 Miles

Bracken Capen
Prepared by Bracken Capen
Natural Resources Engineer
DENR, Water Rights Program





DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

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



MAR 13 2014

6674-3

Leroy Kilber, Supt
Ipswich Golf Club
PO Box 613
Ipswich SD 57451 0613

Dear Mr. Kilber:

Enclosed is Water License No. 6674-3. This is the final water right document completing the process of obtaining a Water Right. Included with the license is a map prepared by the staff engineer who conducted the field investigation.

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. 6674-3, 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,

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

enclosures

**STATE OF SOUTH DAKOTA
WATER LICENSE NO. 6674-3**

(1) The Ipswich Golf Club, PO Box 613, Ipswich SD 57451 made Application No. 6674-3, November 30, 2005 for a water permit to divert 0.67 cubic feet of water per second (300 gallons per minute) from ground water (one well, Inyan Kara Formation), in Edmunds County, South Dakota for irrigation purposes. Permit No. 6674-3, with a priority date of November 30, 2005 was approved February 13, 2006 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before February 13, 2011 and for the application to beneficial use of water on or before February 13, 2015.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the water supply system and is entitled to divert 0.33 cubic feet of water per second (150 gallons per minute) for beneficial use. The well free flows into dugout (2 acre feet capacity) with water being diverted from the dugout to the acreage.

The well is located: 1,440 feet south and 1,030 feet east of the NW corner of Section 28, T123N, R68W (NW ¼ NW ¼). The dugout is located: 500 feet south and 1,070 feet east of the NW corner of Section 28, T123N, R68W (NW ¼ NW ¼).

(3) The permit holder has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use to irrigate the following land:

Section 28, T123N, R68W

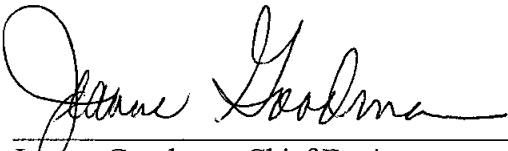
NE ¼ NW ¼	32.25 acres
NW ¼ NW ¼	4.30 acres
SE ¼ NW ¼	4.30 acres
SW ¼ NW ¼	2.15 acres
Total	41.00 acres

(4) Pursuant to South Dakota Water Law 46-5-30.1 the Ipswich Golf Club, PO Box 613, Ipswich SD 57451 the holder and/or owner of Water Right No. 6674-3 is issued a license to appropriate water, the right to use 0.33 cubic feet of water per second (150 gallons per minute) from ground water (one well – Inyan Kara Formation) and a dugout (2 acre feet capacity) with a priority date of November 30, 2005 from the locations specified in (2) of this license for irrigation purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 6674-3 and subject to the following qualifications:

- 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.
- The well authorized by Permit No. 6674-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28. *Well completed in 2006 by Pullman Well Drilling. Copy of log on file with the Water Rights Program.*

- The well approved under this Permit shall be valved and the flow reduced to the amount needed or to a minimum when not being used. If this well is abandoned or the Permit cancelled, the well must be plugged in accordance with Water Management Board Rules, Chapter 74:02:04.
- Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method or irrigation, time constraints, or type of soils so requires, Permit No. 6674-3 authorizes a maximum diversion rate of 0.67 cfs for the irrigation of 43 acres with an annual volume not to exceed 3 acre feet of water per acre per year. *The inspection found the well capable of flowing at a rate of 0.33 cfs or 150 gallons per minute with a total of 41 acres irrigated. License issued for system as developed.*
- This Permit is approved subject to the irrigation water use questionnaire being submitted each year.



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

MAR 13 2014

date

