

WATER PERMIT NO. 8510-3

Name of Applicant: TR Golf LLC

Address: 150 S Oak Tree Lane, Dakota Dunes SD 57049

Phone: 712 253-9124

Amount of Water Claimed: no add'l

Total Acres: no add'l

Source of Water Supply: groundwater (one well)

Water to be used for: irrigation

County: Union

Type of Waste Disposal System:

Location: near Dakota Dunes

PRIORITY

Date Received: 3-26-21

Application/License Fee: \$ 700

Corrected Application Received: 4-26-21

Period of Annual Use: March 15 – November 15

Remarks: Add'l well to Water Permit No. 8354-3 from a different water source

Diversion Point: NE 1/4 NW 1/4 Sec 26-T89N-
R48W

Land to be Irrigated: portions of the NW 1/4,
Gov't Lot 1 & 2 Sec 26 and Gov't Lot 3, Section
23; all in T89N-R48W

Depth of Well:

Well Driller:

Remarks:

Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 3-26
4-26-21

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____

SOUTH DAKOTA
WATER PERMIT NO. 8510-3

Date of first receipt of application March 26, 2021.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8510-3 to TR Golf LLC, c/o Bart Connelly, Manager, 150 S Oak Tree Lane, Dakota Dunes 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. 8510-3 supplements Water Permit No. 8354-3. Water Permit No. 8354-3 appropriates 1.11 cubic feet of water per second (cfs) from one well completed into the Missouri:Elk Point Aquifer located in the NW1/4 NW 1/4 Section 26 for irrigation of 30 acres located in the portions of the NW 1/4, Gov't Lot 1 & 2 Section 26 and Gov't Lot 3 Section 23; all in T89N-R48W. This permit authorizes an additional well to be completed into the Dakota Aquifer (approximately 320 feet deep) located in the NE 1/4 NW 1/4 (Gov't Lot 1) Section 26-T89N-R48W appropriating 1.11 cfs to supplement irrigation of the golf course with no increase in irrigated acres. The additional well, which is a better quality of water, will be used to irrigate the greens, two fairways and supply ornamental ponds. This site is located on the east side of Dakota Dunes SD.
2. The amount of the appropriation may not exceed 2 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: March 15 – November 15.
3. The date from which applicant may claim right is March 26, 2021.
4. The date of approval of Permit No. 8510-3 is July 12, 2021.
5. One-fifth of the construction is to be completed on or before January 12, 2024.
6. All construction is to be completed on or before July 12, 2026.
7. Water is to be put to beneficial use on or before July 12, 2030.
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 Water Permit No. 8510-3 will be located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals under this Permit shall be controlled 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. 8510-3 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.

(continued)

3. 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. 8510-3 authorizes a maximum diversion rate of 1.11 cfs for the irrigation of 30 acres. Combinations of diversions under this Permit and Water Permit No. 8354-3 may not exceed an annual volume of 2 acre feet of water per acre per year.
4. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

By: Eric Gronlund
Eric Gronlund, Chief Engineer
Water Rights Program
Department of Agriculture and Natural Resources

7/21/2021
date



MAR 26 2021

PAID

MAR 26 2021

Ck# 50776

Mail to: DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>8510-3</u>	(office use only) Hydrologic Unit <u>10170101</u>	WATER RIGHTS PROGRAM
	Basin <u>Missouri R.</u>		
	Newspaper <u>Dakota Dunes & Sioux City Times</u> <u>Press & Dakotan</u>		

Application For Permit To Appropriate Water For Irrigation

Type of Application: ☐ New ☐ Vested Right ☒ Amendment/Correction to Permit No. 8354-3
(Use predates Mar 2, 1955)

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

See Below, Revision to location & Aquifer1. Name to Appear on Irrigation Permit TR Golf, LLC,

Note: The "Name to Appear on Irrigation Permit" must be the name in which the property to be irrigated is held in.

Mailing Address 150 So. Oak Tree Lane Dakota Dunes ☒ SD ☒ 57049
(Address) (City) (State) (Zip Code)

Phone 605-232-3241 Mobile 712-253-9124 Email roddtworivers@outlook.com
(no add'l)

2. Amount of water claimed 1.11 *CFS or 500 **GPM ***AF Total Acreage 30
(*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 Sandstone Aquifer4. Location of point of diversion 1 well in ne 1/4 of nw 1/4 Section 26 T089nR48w

(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)

County Union ☒5. County or counties where water will be used Union6. Annual period during which water is to be used March 15-November 15

7. 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
<u>ne 1/4 nw 1/4 Sec 26 T089nR48w</u>	<u>8</u>		
<u>nw 1/4 nw 1/4 Sec 26 T089nR48w</u>	<u>4</u>		
<u>Govt lot 3 Sec 26 T089nR48w</u> <u>23</u>	<u>10</u>		
<u>Govt lot 1&2 Sec 26 T089nR48w</u>	<u>8</u>		

8. Give a description of the project. (Attach sheet if more space is needed)

This application requests adding a water source for Water Right #8354-3 from the Dakota Sandstone Aquifer to supplement one existing well, 108 feet deep completed in the Missouri:Elk Point Aquifer. The new well with better quality water would be used to irrigate greens, two fairways and ornamental ponds while the existing well would continue to irrigate fairways and other incidental acreage. Total irrigated acres, rate of diversion, and total annual use to remain unchanged.

I, Bart Connolly (BART CONNOLLY) Project Manager, the applicant, certify under
Name of Person Title (if applicable)

penalty of perjury that I have read this application, examined the attached map, and that the matters stated are true. I further certify, if acting on behalf of an entity or individual other than myself, that I am authorized to submit this application.

Supplemental Information

(type or print)

1. Well Information (check one or both as applicable) ☒ Drilling new well(s) ☐ Using existing well(s)a) If new wells, how many 1 Have test holes been drilled ☐ Yes ☒ No Drilled by _____
(if yes, please provide copies of logs)

b) If existing wells, how many _____ Provide copy of log(s), if available. Drilled by _____

For either Existing or Proposed Wells:

c) Well Depth (required) 320 Depth to Top of Water Bearing Material 230 Depth to Water from Surface 25d) Distance to nearest domestic well on applicant's property 175 Property owned by others .3000'**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:

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 (e.g. 3 to 1 is a typical slope)

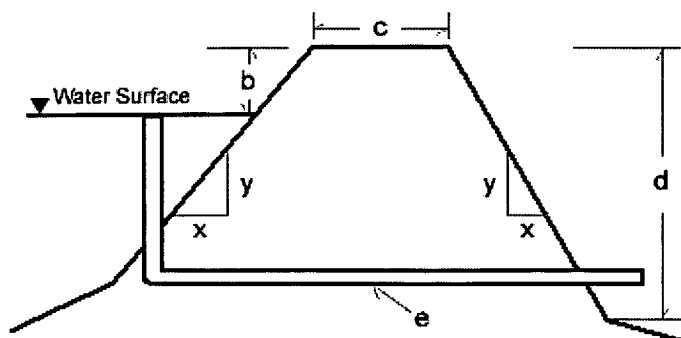
Upstream _____

Downstream _____

h) Surface Area of Impoundment _____

i) Storage _____ Acre Feet

j) Drainage Area Above Dam _____ Acres

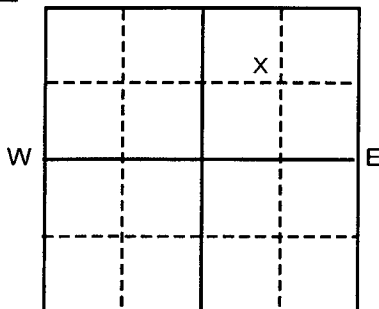


SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location NW 1/4 NE 1/4 Sec 26 Twp 89N Rg 48WCounty UNION

North

Please mark well
location with an "X"

Well Completion Date

11-11-2020

1 Mile

Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?
160.0 ft. from SEPTIC TANK (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

MUD ROTARY

CASING DATA:

☐ Steel ☒ Plastic ☐ Other
 If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	5.00 IN	0.0 FT	85.0 FT	8.75 IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
GROUT WEL	7	9.5 Lb/gal	6.0 Ft	85.0 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure

TREMIE METHOD

SCREEN:

☐ Perforated pipe ☒ Manufactured
 Diameter 5.00 Inches Length 20.0 Feet
 Material PVC
 Slot Size .040 Set From 85.0 Feet to 105.0 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? HTH TABLETS
☐ No, Why Not?
 Lab to which water
 quality sample sent for analysis _____
Well Owner: TWO RIVERS GOLF CLUB

Business Name: _____

Address: 150 OAK TREE LANECity, State, Zip: DAKOTA DUNES SD 57049

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
TOP SOIL	0	3
GRAY CLAY	3	17
FINE GRAY SAND	17	47
FINE BROWN SAND	47	62
SMALL-MEDIUM GRAVEL SAND	62	105

STATIC WATER LEVEL 24.0 FEET

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced flow rate _____ GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped Describe:☐ Bailed☐ Other

Pumping Level Below Land Surface

3.0 Ft. After 0.5 Hrs. pumped 52.0 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

LATITUDE: 42.500711

LONGITUDE: -96.476214

ELEVATION: 1190

This well was drilled under license # 810 and this report is true and accurate.Drilling firm: HEINE ELECTRIC & IRRIGATION, INC.

Signature of License Representative:

RECEIVED

Signature of Well Owner or Equitable Property Owner: DEC 18 2020WATER RIGHTS
PROGRAMDate: 12-15-2020

Two Rivers Golf

Write a description for your map.

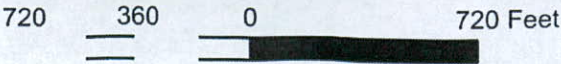
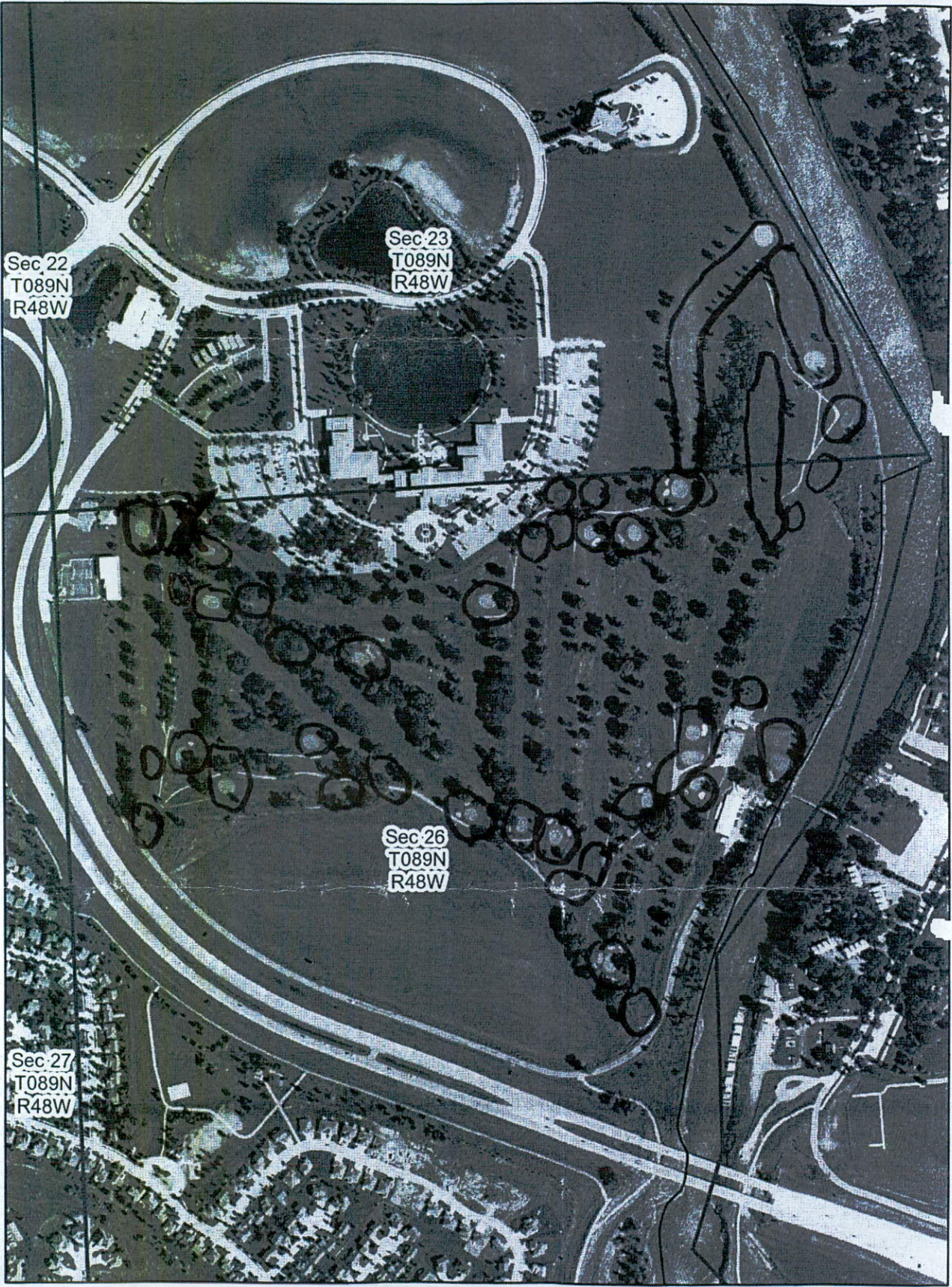


2 RIVERS GOLF WATER PERMIT APPLICATION



1,200 600 0 1,200 Feet

2 RIVERS GOLF WATER PERMIT APPLICATION



89N 48W
Section: 22

89N 48W
Section: 23

89N 48W
Section: 27

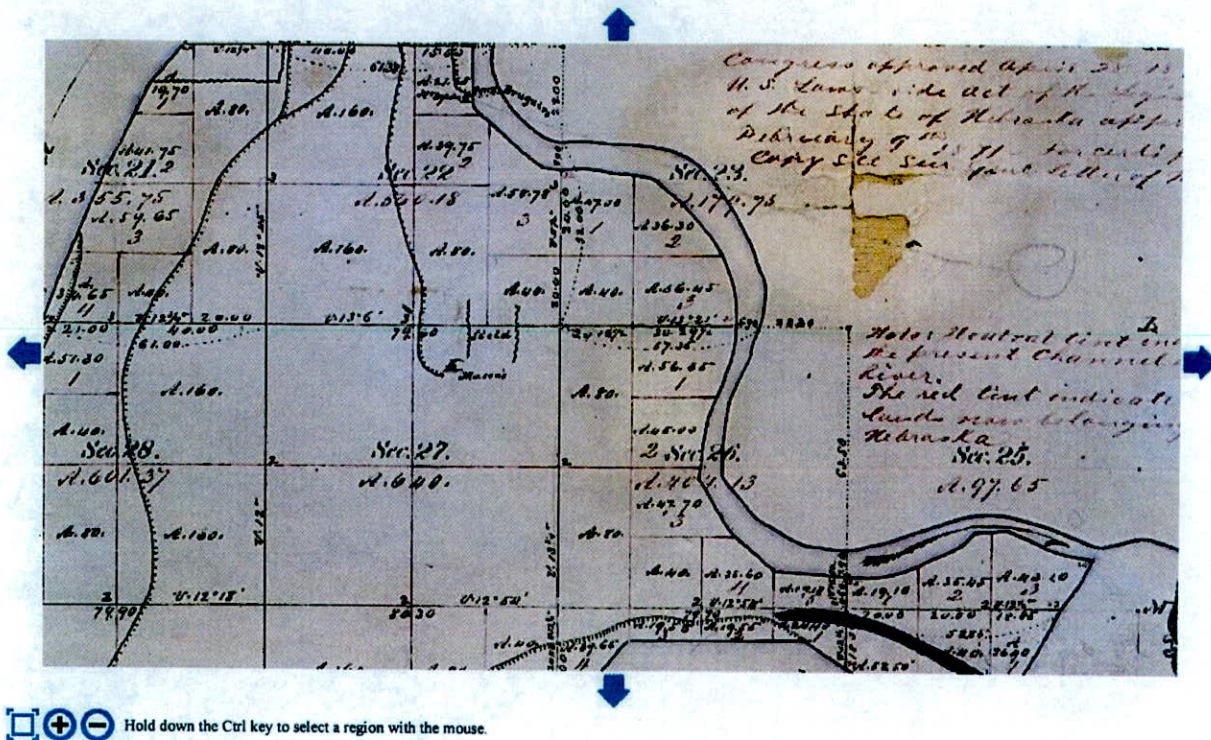
89N 48W
Section: 26

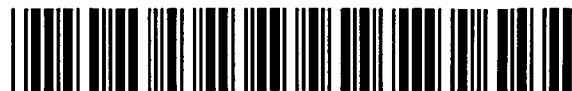
89N 48W
Section: 35

89N 48W
Section: 34

89N
Section

89N
Section





531114784

ANNUAL REPORT

Secretary of State
500 E. Capitol Ave
Pierre, SD 57501-5070
(605) 773-4845

Domestic Limited Liability Company
SDCL 47-34A-211; 59-11-24, 24.1

Filing Fee: \$50

2021
FILING YEAR

Please Type or Print Clearly in Ink
Please submit one Original
Make payable to the SECRETARY OF STATE

Total Fee: \$50

1. Business ID and Name:

DL175321
BUSINESS ID

TR GOLF, LLC
BUSINESS NAME

2. The jurisdiction under whose law it is formed **South Dakota**

3. The address of the principal executive office (business address):

Actual Street Address

300 CENTENNIAL DRIVE, SUITE 200
NORTH SIOUX CITY, SD 57049

Mailing Address

300 CENTENNIAL DRIVE, SUITE 200
NORTH SIOUX CITY, SD 57049

4. The South Dakota Registered Agent's Name:

South Dakota law permits the registered agent to be either (a) a noncommercial registered agent, or (b) a commercial registered agent.

(a) The South Dakota Noncommercial Registered Agent's name

Name **Nikki K Nobbe**

Actual Street Address in this State

639 STREETER DRIVE
APT 201
NORTH SIOUX CITY, SD 57049

Mailing Address in this State

639 STREETER DRIVE
APT 201
NORTH SIOUX CITY, SD 57049

5. If the LLC is manager-managed, list the names and addresses of its Managers. SDCL 59-11-24. If the LLC is member-managed, this section may be left blank.

Name	Address
Bart J Connelly	300 Centennial Drive, Suite 200, North Sioux City, SD 57049
Jay D Layman	300 Centennial Drive, Suite 200, North Sioux City, SD 57049
Jan Vontobel	300 Centennial Drive, Suite 200, North Sioux City, SD 57049

6. Beneficial Owners (optional): A beneficial owner is a person who has or in some manner controls an equity security. Please consult an attorney for legal advice if you have any questions concerning this entry. Any question under this heading is considered a request for legal advice and the secretary of state's office is, by statute, not permitted, to provide legal advice.

No person may execute this report knowing it is false in any material respect. Any violation may be subject to a criminal penalty (SDCL 22-39-36).

B0157-9347 11/09/2020 10:06AM Rec'd by SD SOS



11/09/2020

Dated

Email (Optional)

Dan A. Moore

Signature of an Authorized Person

Dan A. Moore

Printed Name

B0157-9348 11/09/2020 10:06AM Rec'd by SD SOS

RECEIPT

WATER RIGHTS PROGRAM South Dakota Department of Environment and Natural Resources

Date March 26, 2021

RECEIVED OF Connelly Tiehen & Sons PO Box 1268 Dakota Dunes SD 57049

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

Fee for Application for Permit No. <u>8510-3</u> to Appropriate Water, to construct and to put water to beneficial use	\$500.00
Fee for Application for Permit No. _____ to Appropriate Water for Future use	\$
Fee to retain Future Use Permit No. _____ after period of seven years.	\$
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. <u>8510-3</u>	\$200.00
Fee for Filing Transfer Form _____	\$
Fee for _____	\$
Fee for Issuing New Well Driller's License No. _____	\$
Fee for Renewal of Well Driller's License No. _____	\$
Fee for Issuing Well Pump Installer's License No. _____	\$
Fee for Renewal of Well Pump Installer's License No. _____	\$
(Any Other Work Provided by Law)	
TOTAL	\$700.00

By Eric Gronlund
Chief Engineer vm

Schlaak, Karen

From: Schlaak, Karen
Sent: Monday, June 28, 2021 9:12 AM
To: roddtworivers@outlook.com
Subject: Water Permit Application No. 8510-3
Attachments: 1426.pdf

Attached is a copy of the report, chief engineer recommendation and information regarding the public notice for your water permit application. The notice to be published has been sent to the papers. As stated in the letter, please contact the papers by noon today to authorize publication and arrange for payment. This information is being mailed to you today.

Karen Schlaak

DANR - Water Rights Program

(605) 773-3352

Website: <https://danr.sd.gov>





**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 8510-3, TR Golf LLC**

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. 8510-3, TR Golf LLC, 150 S Oak Tree Lane, Dakota Dunes SD 57049.

The Chief Engineer is recommending APPROVAL of Application No. 8510-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) it is in the public interest with the following qualifications:

1. The well approved under Water Permit No. 8510-3 will be located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals under this Permit shall be controlled 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. 8510-3 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.
3. 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. 8510-3 authorizes a maximum diversion rate of 1.11 cfs for the irrigation of 30 acres. Combinations of diversions under this Permit and Water Permit No. 8354-3 may not exceed an annual volume of 2 acre feet of water per acre per year.
4. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Eric Gronlund, Chief Engineer
June 24, 2021

**REPORT TO THE CHIEF ENGINEER
WATER PERMIT APPLICATION NO. 8510-3
TR GOLF LLC
JUNE 20, 2021**

Water Permit Application No. 8510-3 proposes to add an additional well to supplement Water Permit No. 8354-3. Water Permit No. 8354-3 appropriates water at 1.11 cubic feet per second (cfs) from one well into the Missouri: Elk Point aquifer, located in the NW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 26, for the irrigation of 30 acres located in portions of the NW $\frac{1}{4}$, Gov't Lot 1 and 2, Section 26 and Gov't Lot 3 Section 23; all in T89N-R48W. This application requests an additional well to be completed into the Dakota aquifer (approximately 320 feet deep) located in Gov't Lot 1, the NE $\frac{1}{4}$ NW $\frac{1}{4}$, Section 26-T89N-R48W, to appropriate 1.11 cfs to supplement the golf course irrigation with no increase in irrigated acres. The site is located on the east side of Dakota Dunes, SD. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

AQUIFER: Dakota (DKOT)

Aquifer Characteristics

The Dakota Formation is the first relatively continuous sandstone between the Greenhorn Limestone and the Skull Creek Shale in western and central South Dakota (Schoon, 1971). In eastern South Dakota, where the Skull Creek Shale is absent, the Dakota Formation directly overlies Precambrian bedrock or the Inyan Kara Group (Schoon, 1971). It is present under the entirety of Union County (Niehus, 1993). In eastern South Dakota, the Dakota Formation has been subdivided into three units (Schoon, 1971). The upper unit consists of light brown to reddish-brown, fine- to medium-grained, friable sandstone, interbedded with gray to dark gray shale. Thin, discontinuous beds of lignite are also present in the lower portion of the upper unit. The middle unit consists of a gray silty clay and the lower unit consists of medium- to coarse-grained sandstone. The Dakota aquifer is comprised of the porous and permeable portions of the Dakota Formation and is primarily a confined aquifer (Schoon, 1971). Schoon (1971) estimated the Dakota Formation averages 150 feet thick and underlies 66,500 square miles (42.56 million acres) of South Dakota. By applying the 15% porosity assumed by Hedges, et al. (1982), there is approximately 957.6 million acre-feet (ac-ft) of stored water in the Dakota Formation within South Dakota, with 7.81 million ac-ft in Union County.

Well completion reports in the vicinity of the application location indicate there is an average thickness of 222 feet of material overlying the Dakota aquifer. This overlying interval contains glacial till overlying the sand and gravel deposit of the Missouri: Elk Point aquifer (Water Rights, 2021a and 2021b). The average static water level was at 22 feet below ground surface. This indicates an average of 200 feet of artesian head pressure and that the proposed site is under confined conditions (Water Rights, 2021a).

SOUTH DAKOTA CODIFIED LAW (SDCL) 46-2A-9

Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued only if there is reasonable probability that there is unappropriated water available for the applicant's proposed use, that the proposed diversion can be developed without unlawful impairment of existing rights, and that the proposed use is a beneficial use and in the public interest. This report will address

water availability and potential for unlawful impairment of existing water rights within the Dakota aquifer.

WATER AVAILABILITY

Water Permit Application No. 8510-3 proposes to appropriate water from the Dakota aquifer. The probability of unappropriated water being available from an aquifer can be evaluated by considering SDCL 46-6-3.1 which requires "No application to appropriate groundwater may 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 water to the groundwater source..." If the source of the water is older or lower than the Greenhorn Formation and a water distribution system as defined by SDCL 46-1-6(17) has applied for a permit, the Board need not consider the balance of recharge to and withdrawal from the aquifer. For this application, the Dakota aquifer is older and lower than the Greenhorn Formation, however, is not for a water distribution system. Therefore, recharge and withdrawal rates must be considered.

Hydrologic Budget

Recharge:

The Dakota aquifer is recharged from the underlying formations in western South Dakota, especially the Madison and other formations that outcrop in the Black Hills, and possibly by the Missouri aquifer (Niehus, 1993). Recharge from confining layers was studied by Bredehoeft, et al. (1983) and a recharge estimate of approximately 79.4 cfs, or 57,500 acre-feet/year (ac-ft/yr), was determined before well development began with the Dakota aquifer. However, several assumptions used in the models are not representative of actual conditions, so the analysis is considered incorrect or outdated. It is also not known if the value found by the model is above or below the actual rate of recharge occurring in the aquifer. As yet, a reliable recharge rate has not been established for water management purposes.

Discharge:

Discharge from the Dakota aquifer occurs by well withdrawals, groundwater outflow to adjacent aquifers, and possibly into the fractures of the underlying Sioux Quartzite (Niehus, 1993). Currently, there are 256 water rights/permits authorized to appropriate water from the Dakota aquifer (Water Rights, 2021a). Table 1 summarizes the non-irrigation water rights/permits uses with the estimated annual volume and includes six commercial water rights/permits authorized to appropriate from the Dakota aquifer as a secondary water source. The total estimated volume of water to be withdrawn can be determined by assuming that water rights/permits limited by an annual volume will pump the entire volume appropriated annually or that water rights/permits limited by diversion rate will pump at the maximum permitted diversion rate 60 percent of the time. Municipal water rights/permits that are connected to a rural water system typically maintain their permit as a backup or emergency use (Drinking water, 2021). Therefore, they use a negligible amount of water and zero ac-ft/yr will be included for the total estimated use for those specific municipalities. There are 6 non-irrigation water rights/permits that are required to report annual usage. These are shown in Table 2 with the average total reported use placed in the total estimated use column in Table 1. There are no pending applications for the Dakota aquifer. Table 3 is historic irrigation water use from the Dakota aquifer (Water Rights, 1979-2020).

Table 1. Non-irrigation water rights/permits from the Dakota aquifer with appropriation and estimated volume water use (Water Rights, 2021a).

Use Type ^a	Number of Water Rights/Permits	Appropriation limited by Volume (ac-ft/yr)	Appropriation limited by Diversion Rate (cfs)	Total Estimated Use (ac-ft/yr)
COM	102	978	11.74	6,078
DOM	11		1.75	760
FWP	4		2.73	1,186
GEO	2		2.33	1,012
IND	6	160	0.84	525
INS	2		1.34	582
MUN	89	3,274	10.41	7,796
REC	2		0.45	196
RWS	6	2,005	2.20	885 ^b
SHD	7		3.33	1,447
Total:				20,467
a - COM: Commercial; DOM: Domestic; FWP: Fish & Wildlife Propagation; GEO: Geothermal; IND: Industrial; INS: Institutional; MUN: Municipal; REC: Recreational; RWS: Rural Water System; SHD: Suburban Housing Development				
b - see Table 2 for usage				

Table 2: Non-irrigation water rights/permits required to report usage from the Dakota aquifer (Water Rights, 2003-2020)

Year	South Lincoln RWS 5647-3, 6300-3, 6490-3, 6778A-3	Clay RWS 5997B-3	Lincoln County RWS 5156-3
2003	725		
2004	904		
2005	769		
2006	863	72	
2007	860	126	
2008	863	124	0
2009	773	119	0
2010	775	122	0
2011	785	116	0
2012	865	186	0
2013	765	155	0
2014	739	148	0
2015	711.5	141	0
2016	640	163	0
2017	643	201	0
2018	503	170	0
2019	562	162	0
2020	530	197	0
Minimum (ac-ft/yr)	503	72	0
Maximum (ac-ft/yr)	904	201	0
Average (ac-ft/yr)	738	147	0
Total (ac-ft/yr)	885		

Table 3- Historic irrigation pumpage from the Dakota aquifer (Water Rights, 1979-2020).

Year	No. of Permits	Annual Appropriation (acre-feet)	Reported Pumpage (acre-feet)
1979	2	729.00	38.00
1980	2	729.00	110.00
1981	4	1,469.00	45.00
1982	5	1,420.52	33.23
1983	5	1,834.76	64.39
1984	4	1,405.76	0.00
1985	5	1,554.26	8.10
1986	5	1,834.76	238.85
1987	5	1,900.52	1.30
1988	4	1,471.52	452.80
1989	4	1,471.52	265.40
1990	4	1,471.52	234.00
1991	5	1,481.52	165.42
1992	5	1,501.52	40.40
1993	7	1,521.52	112.40
1994	7	1,455.76	51.89
1995	8	1,051.76	30.83
1996	8	1,117.52	34.38
1997	9	1,127.52	48.00
1998	9	637.52	175.80
1999	10	703.52	101.57
2000	10	703.52	172.81
2001	11	777.52	160.85
2002	10	763.52	178.87
2003	10	763.52	205.02
2004	10	763.52	153.97
2005	12	1,003.52	146.51
2006	13	1,211.52	232.32
2007	14	1,238.52	199.98
2008	14	1,238.52	196.39
2009	15	1,298.52	130.76
2010	17	1,950.52	171.66
2011	18	2,158.52	174.57
2012	18	2,158.52	298.33
2013	18	2,158.52	256.52
2014	17	2,354.52	162.86
2015	17	2,576.32	236.10
2016	16	2,368.32	195.95
2017	16	2,368.32	229.07
2018	16	2,368.32	156.71
2019	15	2,057.12	107.52
2020	16	2,183.12	245.61
Min	2	637.52	0.00
Max	18	2,576.32	452.80
Avg (1979 to 2020)	10	1,484.63	149.15
Avg (2010 to 2020)	17	2,245.65	203.17

There are 18 irrigation water rights/permits appropriating water from the Dakota aquifer (Water Rights, 2021a). Since 1979, irrigation water rights/permits report to the DANR-Water Rights Program through annual irrigation questionnaires. Between 2005 and 2010, there was a significant increase in irrigation permits and irrigated acres which suggests that the historical average pumpage of 149.14 ac-ft/yr is not representative of current average pumpage. Therefore, the average irrigation use of 203.17 ac-ft/yr (from 2010 through 2020) is considered more representative of current average use for this aquifer. There are two water rights/permits, Water Right Nos. 394-3 and 762-3, that are not required to submit an irrigation questionnaire (Water Rights, 1979-2020b). Annually in eastern South Dakota, center pivot crop irrigators usually apply less than one foot of water per acre. However, to account for the fluctuation in wet and dry cycles, the application rate of one foot of water per acre will be utilized to estimate the annual withdrawal rate for these irrigation water rights. Together, Water Right Nos. 394-3 and 762-3 are authorized to irrigate 31.2 acres and, after applying the 1-foot application rate, yields a withdrawal rate for these two permits of approximately 31.2 ac-ft/yr per year. Water Permit No. 8423-3 (approved in 2020 and yet to be constructed) authorizes the irrigation of 42 acres of golf course turf (Water Rights, 2021a). Because turf irrigation typically requires more water than crop irrigation, an annual application rate of two feet of water per acre will be used to estimate the annual withdrawal rate for this irrigation water permit. When applying two feet of water over the 42 acres, the estimated annual withdrawal rate for Water Permit No. 8423-3 is approximately 84 acre-feet per year (Water Rights, 2021a). By combining the 2010-2020 average from Table 3 with Water Right Nos. 394-3, 762-3, and 8423-3, a total current estimated use of 318.17 ac-ft/yr is being used for irrigation from the Dakota aquifer.

There are seven future use permits reserving water from the Dakota aquifer (Water Rights, 2021a). The amount reserved by 5 of these permits are shown in Table 4. It should be noted that the City of Lennox maintains two permits (Nos. 5101-3 and 5101A-3) however, the water reserved under these has been allocated for use.

Table 4: Future use permits with remaining water reserved from the Dakota aquifer (Water Rights, 2021a)

PERMIT NO.	NAME	RESERVED WATER (ac-ft)
4817-3	SOUTH LINCOLN RURAL WATER SYSTEM	1,448
5155-3	LINCOLN COUNTY RURAL WATER SYSTEM	440
5219-3	CITY OF CANTON	1,175
1262C-3	CITY OF CANTON	674
8400-3	CITY OF HARRISBURG	500
TOTAL:		4,237
Note: the City of Lennox maintains Future Use Permit Nos. 5101-3 and 5101A-3 however, the water reserved has been allocated		

There are numerous domestic wells completed into the Dakota aquifer (Water Rights, 2021b). Domestic users are not required to report their annual water usage so annual usage by domestic users is not known. However, since the introduction of rural water systems, many domestic wells are likely no longer in use or are not being used as primary water sources. Due to their relatively low diversion rates and the availability of rural water, withdrawals from domestic wells are not considered to be a significant portion of the hydrologic budget.

Water Balance:

Without a reliable recharge rate, it is not possible to compare the recharge and discharge rates. The Dakota aquifer estimated average annual withdrawal rate is 25,022 ac-ft/yr (non-irrigation: 20,467; irrigation: 318; future use: 4,237). This application seeks to supplement the irrigation of 30 acres of turf on the golf course. By applying the 2 feet of water per acre, this application will average approximately 60 ac-ft/yr. If approved, the expected use of 60 ac-ft/yr by this application results in a total of approximately 25,082 ac-ft/yr of water withdrawn from the Dakota aquifer.

Observation Well Data

Administrative Rule of South Dakota Section 74:02:05:07 requires that the Water Management Board rely upon the record of observation well measurements in addition to other data to determine that the quantity of water withdrawn annually from the aquifer does not exceed the estimated average annual recharge of the aquifer.

The DANR-Water Rights Program maintains 46 observation wells completed into the Dakota aquifer (Water Rights, 2021c). The hydrographs for the closest two observation wells to this application (UN-98A at approximately 4.1 miles to the northwest and UN-77E at approximately 28.1 miles northwest) are shown in Figures 1 and 2 with their locations, in relation to the application location, is shown in Figure 3.

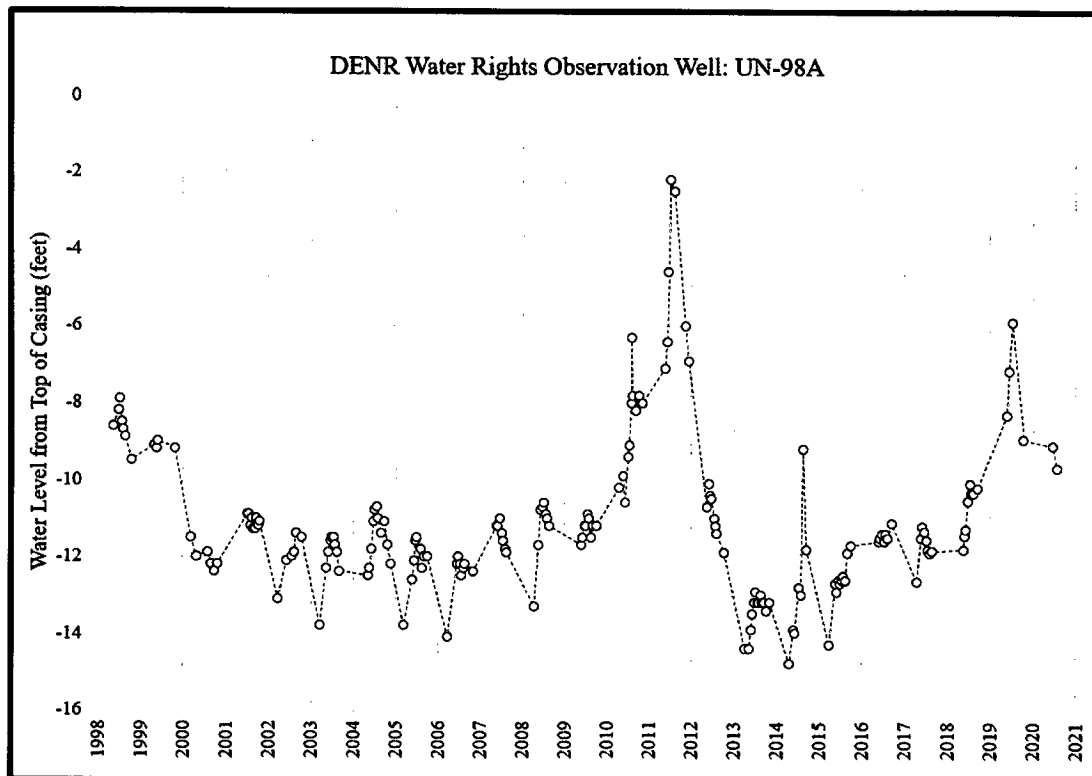


Figure 1. Hydrographs for observation well UN-98A located approximately 4.1 miles northwest of the proposed well location for Water Permit Application No. 8510-3 (Water Rights, 2021c).

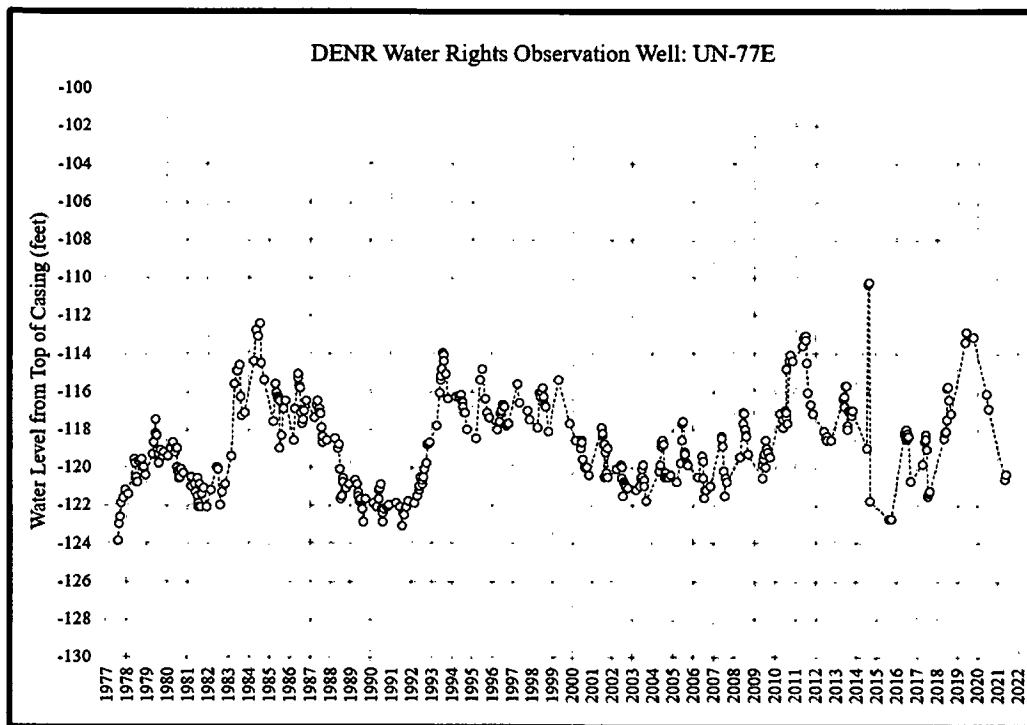


Figure 2. Hydrograph for observation well UN-77E located approximately 28.1 miles northwest of the proposed well location for Water Permit Application No. 8510-3 (Water Rights, 2021c).

The hydrographs shown in Figures 1 and 2 are representative of other Dakota aquifer observation wells completed in the southeast corner of South Dakota. The hydrographs show the water level of the aquifer is relatively stable over the period of record. The hydrographs indicate that the aquifer responds well to climatic conditions with rising water levels during wet periods and declining water levels during drier periods. They also demonstrate that any drawdowns from pumping are temporary because the water levels typically recover to pre-pumping levels during the primary recharge season of the late winter through spring. This recovery indicates that climatic conditions (the natural effects of recharge to and discharge from the aquifer) generally govern the long-term fluctuations in water level of the aquifer rather than the impacts of pumping from the Dakota aquifer. Recognizing that recharge to and natural discharge from the aquifer can be captured for pumping, the observation well data shows there is a reasonable probability there is unappropriated water available for this proposed appropriation.

Numerous hydrographs for observation wells completed into the Dakota aquifer, located in areas outside of southeast South Dakota, that display a declining trend. A decline in water levels in a confined aquifer does not necessarily indicate a significant decrease in water stored in the aquifer, as water levels above the top of the aquifer materials are representative of the hydraulic head (water pressure) inside the aquifer. Additionally, there are uncontrolled, flowing wells discharging water from the Dakota aquifer at ground surface. Water from the aquifer is also presumed to be discharging to other aquifers if wells completed into the Dakota aquifer have experienced casing failure. Concerns have developed over time about the decline in artesian head pressure of the Dakota aquifer. The Water Management Board has found that declines of the potentiometric surface do not automatically constitute that withdrawals have exceeded recharge (Water Rights, 1987). Consequently, the Board has concluded that withdrawals exceeding the average annual

recharge cannot be determined based solely upon a decline in head pressure, and in theory the Dakota aquifer head pressure is stabilizing relative to withdrawals and discharges (Water Rights, 1987). The decreasing trend is likely due to the uncontrolled flowing wells which the Water Management Board determined is not a beneficial use of water and does not constitute withdrawal pursuant to SDCL 46-6-3.1 (Water Rights, 1987). By continuing to authorize pumping for further development, the amount of pressure is reducing in the uncontrolled flowing wells, which is reducing the amount of water being discharged to waste.

POTENTIAL FOR UNLAWFUL IMPAIRMENT OF EXISTING WATER RIGHTS

Currently, there are 256 water rights/permits (non-irrigation: 231; irrigation: 18; future use: 7) authorized to appropriate water from the Dakota aquifer (Water Rights, 2021a). There are eighteen water rights/permits within five miles of this application as shown in Figure 3. The closest being Water Right No. 7161-3 located approximately 0.3 miles to the north and maintained by BPI Technology, Inc. Table 5 lists the Dakota aquifer water rights/permits shown in Figure 3 near the proposed well location for Application No. 8510-3. The nearest domestic well on file that appears to be completed into the Dakota aquifer is approximately 0.7 miles north of the proposed well location (Water Rights, 2021b).

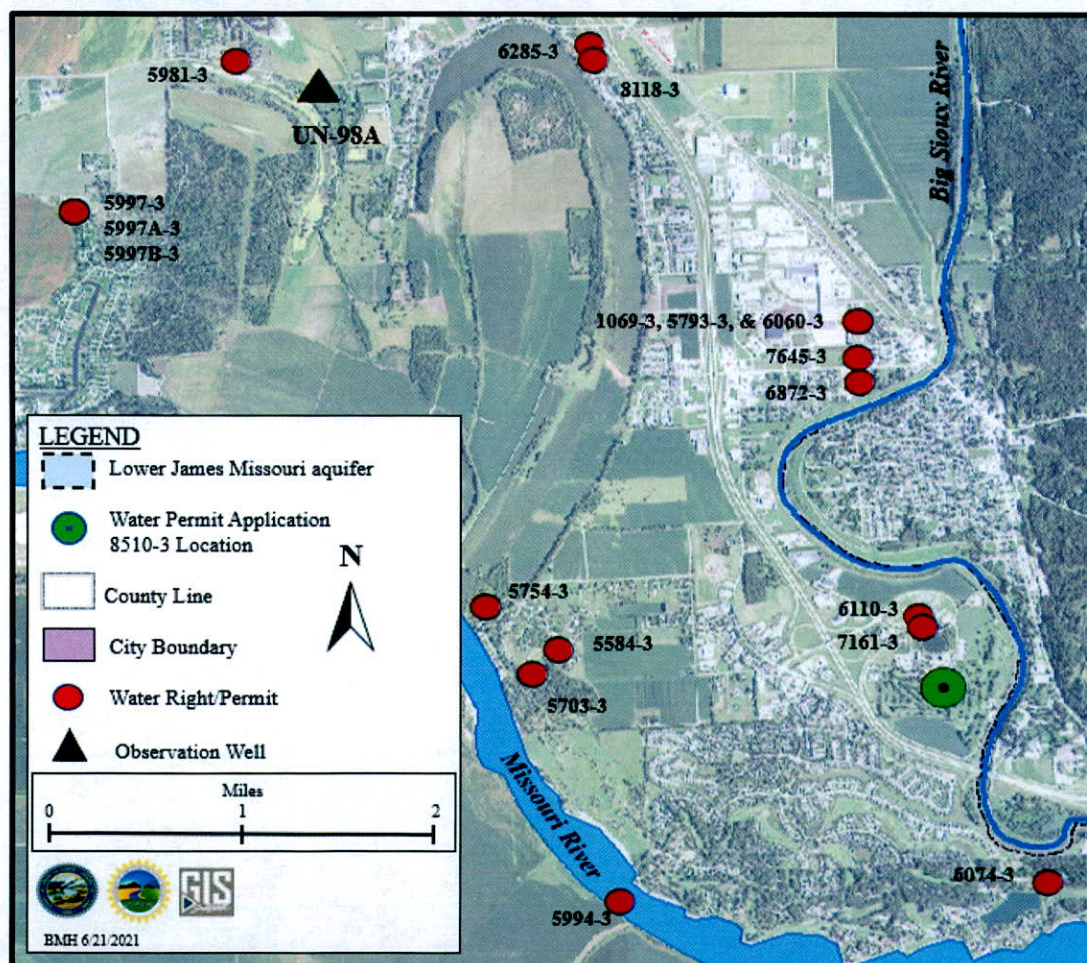


Figure 3. Existing Dakota aquifer water rights/permits and observation wells in the vicinity of Water Permit Application No. 8510-3 (Water Rights 2021a & 2021c).

Table 5. Water rights/permits shown in Figure 3 (Water Rights, 2021a).

Permit Number	Name	Rate (cfs)	Acres	Use ^a	Status ^a
1069-3	CITY OF NORTH SIOUX CITY	0.55	0	MUN	LC
5584-3	SANDY MEAD HOMEOWNERS	0.37	0	SHD	LC
5703-3	CHARLES A LONG	0.06	2	IRR	LC
5754-3	RIV-R-LAND ESTATES INC	0.40	0	SHD	LC
5793-3	CITY OF NORTH SIOUX CITY	1.22	0	MUN	LC
5981-3	DEER RUN HOME OWNERS ASSN	1.22	0	SHD	LC
5994-3	ROBERT L PETERSON	0.05	3	IRR	LC
6060-3	CITY OF NORTH SIOUX CITY	2.22	0	MUN	LC
6074-3	DAKOTA DUNES COMM IMPROVEMENT DISTRICT	3.34	0	MUN	LC
6110-3	DAKOTA DUNES COMM IMPROVEMENT DISTRICT	0.12	11	IRR	LC
6285-3	CITY OF NORTH SIOUX CITY	0.89	0	MUN	LC
6872-3	CITY OF NORTH SIOUX CITY	0.89	0	MUN	LC
5997-3	CLAY RURAL WATER SYSTEM INC	1.11	0	SHD	PE
5997A-3	CLAY RURAL WATER SYSTEM INC	0.00	0	SHD	PE
5997B-3	CLAY RURAL WATER SYSTEM INC	0.00	0	RWS	PE
7161-3	BPI TECHNOLOGY INC	0.01	0	COM	PE
7645-3	CITY OF NORTH SIOUX CITY	1.33	0	MUN	PE
8118-3	CITY OF NORTH SIOUX CITY	1.34	0	MUN	PE
a - IRR: Irrigation; COM: Commercial; IND: Industrial; IRR: Irrigation; MUN: Municipal; RWS: Rural Water System; SHD: Suburban Housing Development; LC: Licensed Water Right; PE: Permitted Water Right					

There are numerous domestic wells on file with the Water Rights Program within the vicinity of the proposed well site (Water Rights 2021b). To protect a domestic user with an adequate well, the Water Management Board defined an “adversely impacted domestic well” in ARSD 74:02:04:20(7) as:

“a well in which the pump intake was set at least 20 feet below the top of the aquifer at the time of construction or, if the aquifer is less than 20 feet thick, is as near to the bottom of the aquifer as is practical and the water level of the aquifer has declined to a level that the pump will no longer deliver sufficient water for the well owner’s needs.”

The Water Management Board considered the delivery of water by artesian head pressure versus maximum beneficial use during the issuance of Water Right No. 2313-2 for Coca-Cola Bottling Company of the Black Hills. The Board adopted Findings of Facts and Conclusions of Law that noted the reservation of artesian head pressure for delivery of water is inconsistent with SDCL 46-1-4 which states, “general welfare requires that the water resources of the state be put to beneficial use to the fullest extent of which they are capable...” (Water Rights, 1995). Furthermore, the Water Management Board found if increased cost or decreased production because of impacts on artesian head pressure by legitimate users is considered as an unlawful impairment, it conflicts with SDCL 46-1-4 (Water Rights, 1995). Consequently, some existing well owners may need to lower their pumps due to deeper water levels depending on the specific characteristics of the Dakota aquifer at their location; particularly since the aquifer is under confined conditions near the proposed diversion point for this application. However, many domestic wells may no longer be the primary water source since rural water systems have been introduced to the area. Additionally, there are several high capacity appropriative users in the area of this application and there is no history of well interference complaints in Union County involving the Dakota aquifer (Water Rights, 2021d).

Nearby adequate wells are not expected to be adversely impacted as defined in ARSD 74:02:04:20(7).

When considering the large amount of artesian head pressure (200 feet), saturated thickness of the aquifer in this area, the hydrographs of nearby observation wells not showing detrimental impact of pumping and, the lack of well interference complaints due to pumping from this aquifer, there is reasonable probability that the proposed diversion can be developed without unlawfully impairing existing appropriative or domestic water users with adequate wells.

Special Consideration: Declining Hydraulic Head

As the Dakota aquifer is a confined aquifer, the hydraulic head causes the water within the aquifer to rise above the top of the aquifer. In the late 1800s, wells began being completed into the Dakota aquifer, and a decline in the aquifer's hydraulic head occurred whenever a flowing well was drilled and not properly controlled. These uncontrolled wells create a release of pressure contained within the aquifer. This decline has caused some concern on whether the Dakota aquifer withdrawals have exceeded the recharge to the aquifer. The Water Management Board has previously and carefully considered the declining hydraulic head in the Dakota aquifer. In the deliberation and approval of Water Permit No. 5136-3, for Farmland Industries Inc, the Water Management Board approved the findings of facts and conclusions of law containing the following summarized points (Water Rights, 1987):

- The estimated average annual recharge to the Dakota aquifer is not likely to be quantified in the near future.
- Determination of whether the withdrawals exceed the estimated average annual recharge cannot be determined solely by a decline in the hydraulic head.
- SDCL 46-6-6.1 does not require the artesian head to be protected; however, the Board must consider the effect of a limitation or loss of artesian head as one of the factors under the public interest determination.
- The decline in the hydraulic head in the Dakota aquifer has been primarily due to water being discharged through uncontrolled flowing wells.
- "Water discharged from uncontrollable flowing wells does not constitute withdrawal (appropriation) pursuant to SDCL 46-6-3.1."
- That it is in the public interest to appropriate water rather than allow the water to be discharged by uncontrollable flowing wells.
- That it is not in the public interest to deny a water permit application when the effects of the withdrawal will not be measurable and will not have a significant effect upon the decline or stabilization of the hydraulic head in the Dakota aquifer.

Special Consideration: Well Construction

The alternative well construction method for certain Dakota aquifer wells (ARSD 74:02:04:35) is not permitted for any well with uses other than reasonable domestic use and non-commercial livestock use. The proposed use for this application is neither a reasonable domestic use nor non-commercial livestock use. If this application is approved, any new well construction must meet the definition of an adequate well as set forth in ARSD 74:02:04:20(6) and using the construction method required by ARSD 74:02:04:28.

SDCL 46-5-6

Pursuant to SDCL 46-5-6, the diversion rate for an irrigation appropriation cannot be in excess of one cfs for every 70 acres, or “the equivalent thereof.” The statute does provide that: “The Water Management Board may allow a greater diversion, in volume or rate or both, if the method of irrigation, any time constraints on diversion of water, or the type of soil so requires. However, no annual volume may be greater than three acre-feet per acre delivered to the land.” Water Permit Application No. 8510-3 proposes to divert water at a maximum instantaneous diversion rate of 1.11 cfs for the irrigation of 30 acres or at a rate of 2.59 cfs per 70 acres. The request for a greater diversion rate was made due to the irrigation system requirements, short term application intervals, and the high water demand for turf irrigation. This type of reason has been accepted by the Water Management Board in past.

CONCLUSIONS:

1. Water Permit Application No. 8510-3 proposes to add an additional well to supplement Water Permit No. 8354-3. Water Permit No. 8354-3 appropriates water at 1.11 cubic feet per second (cfs) from one well into the Missouri: Elk Point aquifer, located in the NW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 26, for the irrigation of 30 acres located in portions of the NW $\frac{1}{4}$, Gov’t Lot 1 and 2, Section 26 and Gov’t Lot 3 Section 23; all in T89N-R48W. This application requests an additional well to be completed into the Dakota aquifer (approximately 320 feet deep) located in Gov’t Lot 1, the NE $\frac{1}{4}$ NW $\frac{1}{4}$, Section 26-T89N-R48W, to appropriate 1.11 cfs to supplement the golf course irrigation with no increase in irrigated acres.
2. Based on the hydrologic budget and the observation well data, there is a reasonable probability unappropriated water is available for this proposed application.
3. There is a reasonable probability the diversions proposed by this application can be made without unlawfully impairing existing appropriative or domestic users with adequate wells.
4. Application Nos. 8510-3 has requested a diversion rate in excess of the statutory limit of one cfs per 70 acres. The request for a greater diversion rate was made due to the irrigation system requirements, short term application intervals, and the high water demand for turf irrigation. This reason has been accepted by the Water Management Board in the past.



Blaise Hansen
SD DANR – Water Rights Program

Reviewed By:



Adam Mathiowetz, PE
SD DANR-Water Rights Program

REFERENCES:

- Bredehoeft, J.D., Neuzil, C.E., and Milly, P.C., 1983. *Regional Flow in the Dakota Aquifer: A Study of the Role of Confining Layers*. Alexandria, Virginia: U.S. Geological Survey, 1983. Water-Supply Paper 2237.
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Water Rights. 2021c. *Observation Well Files*. SD DANR-Water Rights Program, Joe Foss Building, Pierre, South Dakota.

Water Rights. 2021d. *Union County Files*. SD DANR-Water Rights Program, Joe Foss Building, Pierre, South Dakota.

AFFIDAVIT OF PUBLICATION

State of South Dakota)
:ss
County of Union)

Bruce Odson,
the publisher of the Dakota Dunes / North Sioux City Times,
deposes and says that

The Dakota Dunes / North Sioux City Times

is a legal weekly newspaper of a general circulation, printed and published in North Sioux City, County of Union, State of South Dakota, and has been such legal newspaper during the time hereinafter mentioned, and that affiant is and was during all the time hereinafter mentioned in charge of the advertising department thereof, and has personal knowledge of all the facts stated in this affidavit: and that the notice and advertisement headed:

Notice of Application No. 8510-3

to Appropriate Water

a printed copy of which is hereunto attached and made a part hereof, was printed and published in the said newspaper at least once in

each week for 1 successive weeks; that said newspaper at the time of the first publication of said notice hereinafter stated, had, and still has, a bona fide circulation of over two hundred paid copies weekly, and had been published in the said County of Union for more than one year immediately prior to the date of the said publication of said notice, and that said newspaper during said times, was, and is, printed in part in an office maintained at said city of North Sioux City, the said place of publication; that the first publication of said notice in said newspaper was

on Thursday, the 1 day of July, 2021

and that the succeeding publications were

on Thursday, the _____ day of _____, _____

on Thursday, the _____ day of _____, _____

on Thursday, the _____ day of _____, _____

that the fees for the printing and publishing of said notice and advertisement in said newspaper as aforesaid were

\$ 31.55, that the full amount of the fee charged insures to the benefit of the publisher of the said newspaper, that no agreement or understanding for the division thereof has been made with any other person and that no part thereof has been agreed to be paid to any other person whomsoever.

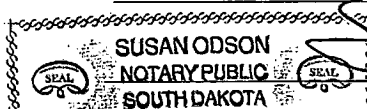


Subscribed and sworn to before me

this 1 day of July, 2021

My commission expires 7-12-23

SUSAN ODSON
NOTARY PUBLIC
SOUTH DAKOTA



Notary Public

NOTICE OF APPLICATION NO. 8510-3 TO APPROPRIATE WATER

Notice is given that TR Golf, LLC c/o Bart Connelly, Mgr, 150 S Oak Tree Lane, Dakota Dunes SD 57049 has filed an application for a water permit to supplement Water Permit No. 8354-3. Water Permit No. 8354-3 appropriates 1.11 cubic feet of water per second (cfs) from one well completed into the Missouri-Elk Point Aquifer located in the NW1/4 NW 1/4 Section 26 for irrigation of 30 acres located in the portions of the NW 1/4, Gov't Lot 1 & 2 Section 26 and Gov't Lot 3 Section 23; all in T89N-R48W. This application requests an additional well to be completed into the Dakota Aquifer (approximately 320 feet deep) located in the NE 1/4 NW 1/4 (Gov't Lot 1) Section 26-T89N-R48W appropriating 1.11 cfs to supplement irrigation of the golf course with no increase in irrigated acres. The additional well, which is a better quality of water, will be used to irrigate the greens, two fairways and supply ornamental ponds. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres. This site is located east side of Dakota Dunes SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8510-3 with qualifications 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. The Chief Engineer's recommendation with qualifications, the application, and staff

report are available at <http://denr.sd.gov/public> or contact Ron Duvall for this information, or other information, at the Water Rights Program address provided below.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by July 12, 2021.

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.

If the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose the application is received, the Chief Engineer shall act on the application pursuant to the recommendation with no hearing held before the Water Management Board. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled, and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition. Publish once July 1, 2021. Published once at the total approximate cost of \$31.55 T26-B-111

RECEIVED

JUL 06 2021

WATER RIGHTS
PROGRAM

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YANKTON DAILY PRESS AND DAKOTAN

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JUL 06 2021

WATER RIGHTS
PROGRAM

TR GOLF LLC
150 S OAK TREE LANE
DAKOTA DUNES SD 57049

STATE OF SOUTH DAKOTA
COUNTY OF YANKTON

KELLY HERTZ, BEING FIRST DULY SWORN ON OATH DEPOSES
AND SAYS THAT (S)HE IS THE MANAGING EDITOR OF YANKTON
MEDIA INC, A CORPORATION, THE PRINTER AND THE PUBLISHER OF THE
YANKTON DAILY PRESS AND DAKOTAN, A LEGAL DAILY NEWSPAPER
PUBLISHED AND CIRCULATED IN THE CITY OF YANKTON, SAID COUNTY
AND STATE, AND ONE OF THE OFFICIAL NEWSPAPERS OF THE SAID
COUNTY OF FACTS STATED IN THIS AFFIDAVIT; THAT THE ANNEXED
7+1 NOTICE OF APPLICATION

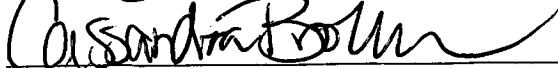
TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 1st DAY OF July, 2021
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$28.96 ENSURES TO THE
BENEFITS OF THE PUBLISHER OF SAID NEWSPAPER AND THAT NO
AGREEMENT AND UNDERSTANDING FOR THE DIVISION THEREOF HAS
BEEN MADE WITH ANY OTHER PERSON, AND THAT NO PART THEREOF
HAS BEEN AGREED TO BE PAID TO ANY PERSON WHOMSOEVER.

PUBLISHED ON: 07/01/2021

FILED ON: 07/01/2021



SUBSCRIBED AND SWORN TO BEFORE ME THIS 1st DAY OF July, 2021



NOTARY PUBLIC, SOUTH DAKOTA
MY COMMISSION EXPIRES 07/04/2026

Ad text : 7 + 1

NOTICE OF APPLICATION

NO. 8510-3 to Appropriate Water

Notice is given that TR Golf, LLC c/o Bart Connelly, Mgr, 150 S Oak Tree Lane, Dakota Dunes SD 57049 has filed an application for a water permit to supplement Water Permit No. 8354-3. Water Permit No. 8354-3 appropriates 1.11 cubic feet of water per second (cfs) from one well completed into the Missouri:Elk Point Aquifer located in the NW1/4 NW 1/4 Section 26 for irrigation of 30 acres located in the portions of the NW 1/4, Govt Lot 1 & 2 Section 26 and Govt Lot 3 Section 23; all in T89N-R48W. This application requests an additional well to be completed into the Dakota Aquifer (approximately 320 feet deep) located in the NE 1/4 NW 1/4 (Govt Lot 1) Section 26-T89N-R48W appropriating 1.11 cfs to supplement irrigation of the golf course with no increase in irrigated acres. The additional well, which is a better quality of water, will be used to irrigate the greens, two fairways and supply ornamental ponds. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres. This site is located east side of Dakota Dunes SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8510-3 with qualifications 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. The Chief Engineers recommendation with qualifications, the application, and staff report are available at <http://denr.sd.gov/public> or contact Ron Duvall for this information, or other information, at the Water Rights Program address provided below.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352) and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by July 12, 2021.

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.

If the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose the application is received, the Chief Engineer shall act on the application pursuant to the recommendation with no hearing held before the Water Management Board. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled, and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Published once at the total approximate cost of \$28.96

Schlaak, Karen

From: Schlaak, Karen
Sent: Monday, June 28, 2021 8:56 AM
To: Jackie Lammers (jackie.lammers@yankton.net)
Subject: FW: 8510-3, TR Golf LLC
Attachments: 8510-3public.short.docx; FORM8.FRM.doc

Attached is a notice to be published on July 1, 2021.

TR Golf LLC, 150 S Oak Tree Lane, Dakota Dunes SD 57049 (712 253-9124) has been notified to contact you to authorize publication and arrange for payment.

Please send the affidavit or return the attached Proof of Publication form ASAP to the Water Rights Program, 523 E Capitol, Pierre SD 57501.

Let me know if you have questions. Please acknowledge receipt of this email.

Karen Schlaak

DANR - Water Rights Program
(605) 773-3352
Website: <https://danr.sd.gov>



Schlaak, Karen

From: Schlaak, Karen
Sent: Monday, June 28, 2021 9:09 AM
To: G5 (leader1@iw.net)
Subject: FW: 8510-3, TR Golf LLC
Attachments: 8510-3public.short.docx; FORM8.FRM.doc

Forgot to say this notice should go in the Dakota Dunes North Sioux City Times.

From: Schlaak, Karen
Sent: Monday, June 28, 2021 8:53 AM
To: G5 (leader1@iw.net) <leader1@iw.net>
Subject: 8510-3, TR Golf LLC

Attached is a notice to be published on July 1, 2021.

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Karen Schlaak

DANR - Water Rights Program
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**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

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

June 28, 2021

TR Golf LLC
Bart Connelly, Mgr
150 S Oak Tree Lane
Dakota Dunes SD 57049

Dear Mr. Connelly:

Water Permit Application No. 8510-3 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 Dakota Dunes North Sioux City Times printed at North Sioux City SD (Ph # 605 232-3539) and the Press & Dakotan printed at Yankton SD (Ph # 605 665-7811). You will need to contact the newspapers and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspapers to authorize publication of your Notice and to arrange for payment. Early contact with the papers can eliminate delays. Upon receiving authorization from you, the publishers have been instructed to publish your notice. The newspapers have 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,

Karen Schlaak

Karen Schlaak
Water Rights Program
(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.

NOTICE OF APPLICATION NO. 8510-3 to Appropriate Water

Notice is given that TR Golf, LLC c/o Bart Connelly, Mgr, 150 S Oak Tree Lane, Dakota Dunes SD 57049 has filed an application for a water permit to supplement Water Permit No. 8354-3. Water Permit No. 8354-3 appropriates 1.11 cubic feet of water per second (cfs) from one well completed into the Missouri:Elk Point Aquifer located in the NW1/4 NW 1/4 Section 26 for irrigation of 30 acres located in the portions of the NW 1/4, Gov't Lot 1 & 2 Section 26 and Gov't Lot 3 Section 23; all in T89N-R48W. This application requests an additional well to be completed into the Dakota Aquifer (approximately 320 feet deep) located in the NE 1/4 NW 1/4 (Gov't Lot 1) Section 26-T89N-R48W appropriating 1.11 cfs to supplement irrigation of the golf course with no increase in irrigated acres. The additional well, which is a better quality of water, will be used to irrigate the greens, two fairways and supply ornamental ponds. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres. This site is located east side of Dakota Dunes SD.

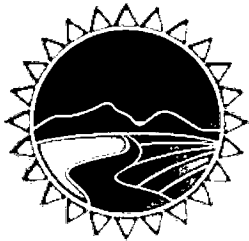
Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8510-3 with qualifications because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <http://denr.sd.gov/public> or contact Ron Duvall for this information, or other information, at the Water Rights Program address provided below.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by July 12, 2021.

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.

If the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose the application is received, the Chief Engineer shall act on the application pursuant to the recommendation with no hearing held before the Water Management Board. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled, and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Published once at the total approximate cost of_



DENR
SOUTH DAKOTA

RECEIVED

APR 26 2021

WATER RIGHTS
PROGRAM

DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

March 26, 2021

TR Golf LLC
150 S Oak Tree Lane
Dakota Dunes SD 57049

Dear Sir:

Thank you for submitting the *Application for a Permit to Appropriate Water* for irrigation of the golf course. In order to complete the application, the following is required.

Regarding the signature on the application, a review of the Secretary of State's corporation website finds TR Golf LLC listed. DENR will need the application to be signed by a listed partner or a statement of authority that the person signing the application has the authority to act on behalf of TR Golf LLC on all matters involving the water permit application.

If you have any questions, please contact me.

Sincerely,

Karen Schlaak

Karen Schlaak
Water Rights Program
605 773-3352
karen.schlaak@state.sd.us

enclosure



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

JUL 21 2021

TR Golf LLC
c/o Bart Connelly, Manager
150 S Oak Tree Lane
Dakota Dunes SD 57049

Dear Mr. Connelly:

Enclosed is Water Permit No. 8510-3 authorizing construction of the 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,

Eric Gronlund, Chief Engineer
Water Rights Program
(605) 773-3352

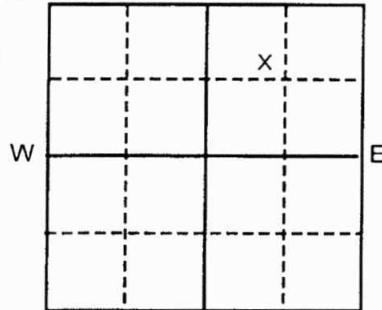
enclosures

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location NW 1/4 NE 1/4 Sec 26 Twp 89N Rg 48WCounty UNION

North

Please mark well
location with an "X"

Well Completion Date

11-11-2020

Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?
160.0 ft. from SEPTIC TANK (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

MUD ROTARY

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>LB/FT</u>	<u>5.00</u> IN	<u>0.0</u> FT	<u>85.0</u> FT	<u>8.75</u> IN
<u>LB/FT</u>	<u>IN</u>	<u>FT</u>	<u>FT</u>	<u>IN</u>
<u>LB/FT</u>	<u>IN</u>	<u>FT</u>	<u>FT</u>	<u>IN</u>

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
<u>GROUT WEL</u>	<u>7</u>	<u>9.5</u> Lb/gal	<u>6.0</u> Ft	<u>85.0</u> Ft
		<u>Lb/gal</u>	<u>Ft</u>	<u>Ft</u>

Describe grouting procedure

TREMIE METHOD

SCREEN:

☐ Perforated pipe ☒ Manufactured
Diameter 5.00 Inches Length 20.0 FeetMaterial PVCSlot Size .040 Set From 85.0 Feet to 105.0 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? HTH TABLETS
☐ No, Why Not?
Lab to which water
quality sample sent for analysisWell Owner: TWO RIVERS GOLF CLUB

Business Name:

Address: 150 OAK TREE LANECity, State, Zip: DAKOTA DUNES SD 57049

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
TOP SOIL	0	3
GRAY CLAY	3	17
FINE GRAY SAND	17	47
FINE BROWN SAND	47	62
SMALL-MEDIUM GRAVEL SAND	62	105

STATIC WATER LEVEL 24.0 FEET

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced flow rate _____ GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped Describe:☐ Bailed☐ Other

Pumping Level Below Land Surface

3.0 Ft. After 0.5 Hrs. pumped 52.0 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

LATITUDE: 42.500711LONGITUDE: -96.476214ELEVATION: 1190This well was drilled under license # 810 and this
report is true and accurate.Drilling firm: HEINE ELECTRIC & IRRIGATION, INC.

Signature of License Representative:

RECEIVED

Signature of Well Owner or Equitable Property Owner: DEC 18 2020WATER RIGHTS
PROGRAMDate: 12-15-2020