

WATER PERMIT NO. 7502-3

Name of Applicant: Howell Farms

Address: 21370 464th Ave, Volga SD 57071 Phone: 605 627-5104

Amount of Water Claimed: 1.78 cfs Total Acres: 240

Source of Water Supply: groundwater (two wells)

Water to be used for: irrigation County: Brookings

Type of Waste Disposal System:

Location: 2 miles south of Volga

PRIORITY Date Received: 10-31-12 Application/License Fee: \$ 1,150

Corrected Application Received: Period of Annual Use: June 1 – September 30

Remarks:

Diversion Point: SW 1/4 NE 1/4 Sec 34-T110N-R34W

Land to be Irrigated: E 1/2 Sec 34-T110N-R51W

Depth of Well: 34 feet deep

Well Driller: Lacey Well Drilling

Remarks:

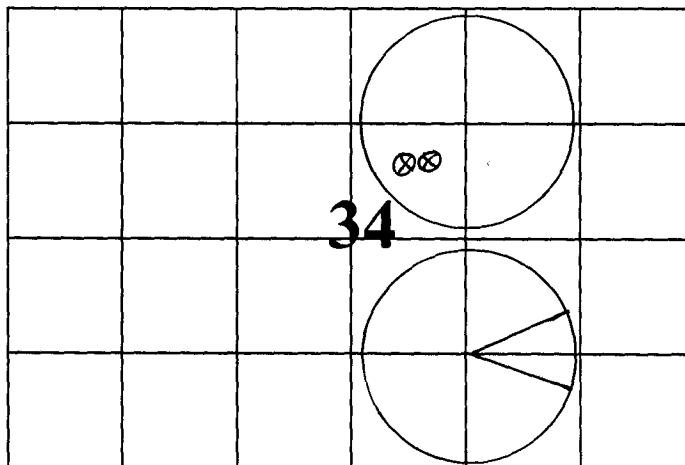
Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 11-6-12

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____



FORM 2: Application for irrigation in South Dakota

(type or print)

Mail to: PMB 2020 DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>7502-3</u> (office use only) Hydrologic Unit <u>10170202</u>
	Basin <u>Sioux River</u>
	Newspaper <u>Brookings Register</u>
	<u>605-692-6271</u> <u>PO Box 177 Brookings 57006</u>

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WATER RIGHTS
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Application For Permit To Appropriate Water For Irrigation

Type of Application: ☒ New ☐ Vested Right ☒ Amendment/Correction to Permit **APPLICATION**
(Use predates Mar 2, 1955) **F&R SEC 34-110-51**

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

**CHANGE APPLICATION FROM ONE PIVOT TO TWO PIVOTS ON ADJOINING
QUARTER SECTIONS TO RUN ALTERNATELY, FROM ONE SET OF WELLS.**

1. Name to Appear on Irrigation Permit HOWELL FARMS(check one) ☒ Owner ☐ Tenant/lessee ☐ Owner's Legal Agent

(name and complete address if different than above name)

Mailing Address 21370 464th Ave VOLGA SD 57071
(Address) (City) (State) (Zip Code)

Home Phone 627-5104 Cell 695-2673 Email howelle@q.com

2. Amount of water claimed 1.78 *CFS or 800 **GPM ***AF Total Acreage 240
(*Cubic Feet per Second) (**Gallons per Minute) (**Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply 2 WELLS (GROUND WATER)

4. Location of point of diversion 2 WELLS NE 1/4 SEC 34 T110N R51W
(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)

County BROOKINGS5. County or counties where water will be used BROOKINGS6. Annual period during which water is to be used JUNE 1 - SEPT 30

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
NE 1/4 NE 1/4 SEC 34-110-51	30	NE 1/4 SE 1/4 SEC 34-110-51	30
SE 1/4 NE 1/4 "	30	SE 1/4 SE 1/4 "	30
NW 1/4 NE 1/4 "	30	NW 1/4 SE 1/4 "	30
SW 1/4 NE 1/4 "	30	SW 1/4 SE 1/4 "	30

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

**TWO WELLS IN NE 1/4 SEC 34-110-51, 800 gpm TOTAL, SERVING
TWO PIVOTS ON ADJOINING 1/4 SECTIONS, TO BE RUN ONE AT
A TIME.**

I, Craig Howell, the applicant, certify that I have read this application,
have examined the attached map, and that the matters stated are true.

SOUTH DAKOTA
WATER PERMIT NO. 7502-3

Date of first receipt of application October 31, 2012.

Date of return to applicant for corrections, amendments or changes November 1, 2012.

Date of receipt of corrected application November 5, 2012.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7502-3 to Howell Farms Inc., c/o Craig Howell, 21370 464th Ave, Volga SD 57071 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. 7502-3 appropriates 1.78 cubic feet of water per second (cfs) from two wells to be completed into the Big Sioux:Brookings Aquifer (34 feet deep) located in SW 14/ NE 1/4 Section 34 for irrigation of 240 acres located in the E 1/2 Section 34; all in T110N-R51W.
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: June 1 – September 30.
3. The date from which applicant may claim right is October 31, 2012.
4. The date of approval of Permit No. 7502-3 is January 28, 2013.
5. One-fifth of the construction is to be completed on or before July 28, 2015.
6. All construction is to be completed on or before January 28, 2018.
7. Water is to be put to beneficial use on or before January 28, 2022.
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 wells 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 wells authorized by Permit No. 7502-3 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. 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

FEB 08 2013

date



(type or print)

(check one or both as applicable)

☐ Using existing well(s)

On property owned by others 4500'

j) Drainage Area Above Dam	Acres
----------------------------	-------

Sec 28
T110N
R51W

Sec 27
T110N
R51W

Sec 26
T110N
R51W

Sec 34
T110N
R51W

Sec 35
T110N
R51W

Sec 33
T110N
R51W

Sec 4
T109N
R51W

Sec 3
T109N
R51W

Sec 2
T109N
R51W



HOWELL FARMS

2 Pivot + Flex Point
 180.0 | ALL Span
 180.0 | ALL Span
 180.0 | ALL Span
 180.0 | ALL Span
 180.0 | ALL Span
 180.0 | ALL Span
 180.0 | ALL Span
 27.4 | 7K-8K Overhang
 Total : 1289.4 ft
 Irrigated Area : 117.8 ac
 110 | SR100 EndGun

0.00 mi

WELLS

2 Pivot + Flex Point
 204.9 | 7K-8K Span
 204.9 | 7K-8K Span
 204.9 | 7K-8K Span
 180.0 | ALL Span
 180.0 | ALL Span
 180.0 | ALL Span
 36.2 | 7K-8K Overhang
 110 | SR100 EndGun
 Total : 1192.9 ft
 Irrigated Area : 99.1 ac

Farmers
 Implement and Irrigation
 Brookings, SD

VALLEY

The Leader in Precision Irrigation

Scale 1 : 10,400



1" = 866.7 ft

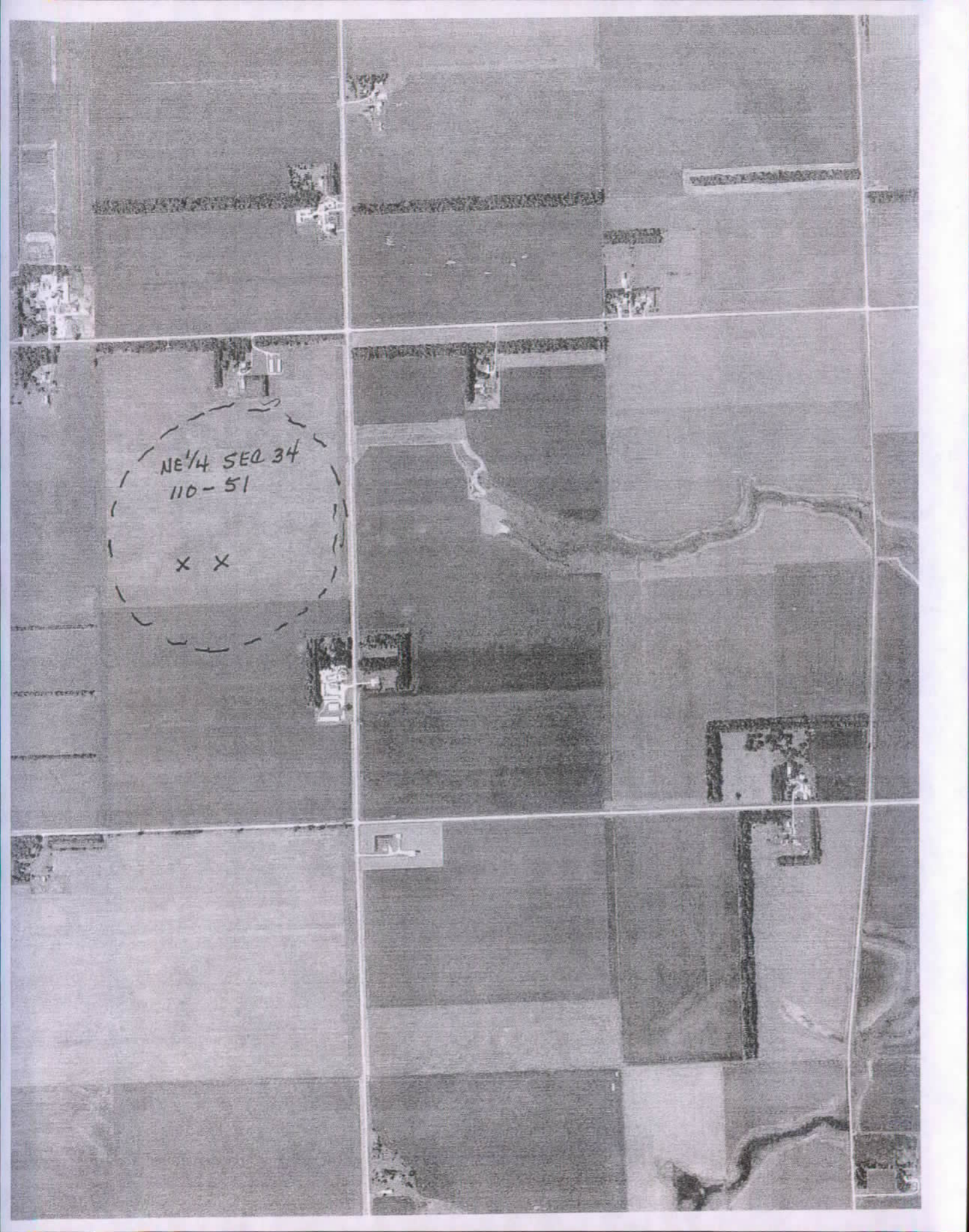
Data Zoom 14-3

Data use subject to license.

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www.delorme.com

NE 1/4 & SE 1/4 SEC 34 - T110 R51



NE 1/4 SEC 34
110-51

X X

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Irrigation Supplies

HEN + CRAIG

10-26-12

NE 4 SEC 34

TH #2, 0-17 till, 17-34 GRAVEL

TH #3, 0-15 till, 15-36' GRAVEL } gwl 16-17

TH #4, 0-18 till, 18-35 GRAVEL

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OCT 31 2012

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Jim Lacey
SD #111

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WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 11/1, 20 12

RECEIVED OF Howell Farms Inc 21370 464th Ave Volga SD 57071

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

Fee for Application for Permit No. <u>7502-3</u> to Appropriate Water, to construct and to put water to beneficial use	850	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>7502-3</u>	200	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	1050 00

No. **05668**

By

David Erbe
Chief Engineer

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WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

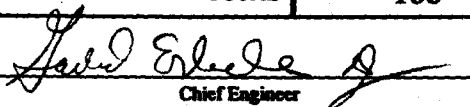
Date 11/6, 20 12

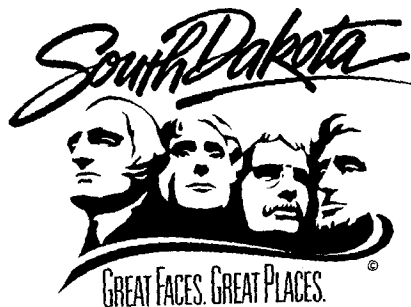
RECEIVED OF Howell Farms Inc 21370 464th Ave Volga SD 57071

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

Fee for Application for Permit No. <u>7502-3</u> to Appropriate Water, to construct and to put water to beneficial use	100	00
Fee for Application for Permit No. _____ to Appropriate Water for Future use		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____		
Fee for Filing Transfer Form _____		
Fee for _____		
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	100 00

No. **05681**

By 
Chief Engineer



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

November 1, 2012

Howell Farms, Inc.
c/o Craig Howell
21370 464th Ave
Volga SD 57071

Dear Mr. Howell:

Thank you for submitting the two *Applications for a Permit to Appropriate Water* for irrigation in Brookings County. In order to complete the applications, the following is required.

- Enclosed are the aerial photo map submitted with the applications. The maps need to reference a government section corner or quarter corner including section, township and range. For your use, I have enclosed maps with those designations for Section 34 and one for Section 35. Please outline the acres to be irrigated and mark the proposed well locations with an "X" on each map.

If you have any questions, please contact me.

Sincerely,

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

enclosures

PLEASE ADD THIS TO MY APPLICATION ON FILE.
ORIGINAL APPLICATION FEE : \$1050⁰⁰ (160 ACRES)
REVISED APPLICATION 217 ACRES : \$1,150⁰⁰

BALANCE ENCLOSED \$100⁰⁰

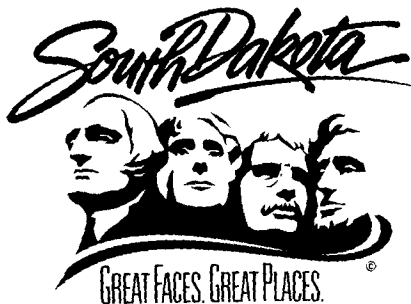
THIS IS FOR THE SECTION 34-110-51
APPLICATION.

PLEASE ALSO FIND ENCLOSED THE AERIAL MAPS
YOU SENT ME OF SECTIONS 34 & 35

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CRAIG HOWELL
CELL # 605-695-2673
HOWELL FARMS
21370 464th AVE
VOLGA, SD 57071

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**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 7502-3, Howell Farms**

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. 7502-3, Howell Farms, c/o Craig Howell, 21370 464th Avenue, Volga SD 57071.

The Chief Engineer is recommending APPROVAL of Application No. 7502-3 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 wells 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 wells authorized by Permit No. 7502-3 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. 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 4, 2013

REPORT TO THE CHIEF ENGINEER
ON
WATER PERMIT APPLICATION NOS. 7502-3 & 7503-3
HOWELL FARMS
DECEMBER 28, 2012

Water Permit Application No. 7502-3 proposes to appropriate up to 480 acre-feet annually (ac-ft/yr) at a maximum diversion rate of 1.78 cubic feet of water per second (cfs), from two wells completed into the Brookings management unit of the Big Sioux aquifer. The wells are expected to be 29 to 34 feet deep and will be located in the SW¼ NE¼ of Section 34, T110N-R51W. This application proposes to irrigate 240 acres located in the E½ of Section 34, T110N-R51W.

Water Permit Application No. 7503-3 proposes to appropriate up to 280 ac-ft/yr at a maximum diversion rate of 1.78 cfs, from two wells completed into the Brookings management unit of the Big Sioux aquifer. The wells are expected to be 34 feet deep and will be located in the SW¼ SW¼ of Section 35, T110N-R51W. This application proposes to irrigate 140 acres located in the SW¼ of Section 35, T110N-R51W.

AQUIFER: Brookings management unit of the Big Sioux aquifer (BS:B)

GEOLOGY AND AQUIFER CHARACTERISTICS:

The Big Sioux aquifer is an alluvium mantled glacial outwash deposit that consists of "well-sorted, very permeable glacial outwash sand and gravel, mostly medium to very coarse sand and very fine to medium gravel" (Hamilton, 1989). The aquifer is located primarily in the flood plain of the Big Sioux River and its tributaries. The Brookings management unit of the Big Sioux aquifer extends from near the center of Hamlin County where it is differentiated from the North management unit, south to northern Moody County where the management unit is distinguished from the Moody management unit. The Brookings management unit underlies parts of Hamlin, Deuel, Brookings, Kingsbury and Moody Counties. The Big Sioux: Brookings underlies approximately 245,850 acres of Brookings Counties alone and contains an estimated 245,850 acre-feet of recoverable water in storage in the county (Hedges and others, 1982). The thickness of the aquifer averages 30 feet in Brookings County (Hamilton, 1989). The average hydraulic conductivity of the Big Sioux aquifer, based on four aquifer tests, ranges from 500-1,000 feet per day (ft/d) (Koch, 1980). The test hole data submitted with Application No. 7503-3 identifies gravel beginning at a depth of 10-12 feet below grade, extending to 30-34 feet below grade. The driller reported an October 26, 2012, static water level of 10-12 feet below grade in the test holes.

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 the availability of unappropriated water and existing rights from the Big Sioux: Brookings aquifer.

WATER AVAILABILITY:

These applications propose to appropriate up to 760 acre-feet annually from the Big Sioux: Brookings aquifer. The actual water use if these applications are approved will likely be less than the appropriation. The probability of unappropriated water being available from the 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."

Recharge versus Discharge:**Recharge:**

Recharge to the Big Sioux: Brookings occurs through infiltration and percolation of precipitation falling on the surface of the outwash. Since the aquifer is hydraulically connected to some area lakes and the Big Sioux River, recharge is also provided to the aquifer during times of high runoff when surface water levels are higher than groundwater levels. Recharge rates calculated for the various management units of the Big Sioux aquifer range from "2.7 to 6.9 in/yr if flow-net analysis is ignored" (Hedges and others, 1985). Given the area of the management unit in Brookings County, the average annual recharge to the aquifer in Brookings County alone is estimated to be 16,762 – 42,838 acre-feet per year.

Discharge:

Discharge from the Big Sioux: Brookings aquifer is by evapotranspiration, discharge to streams and lakes, and withdrawal from wells. There are a number of completion reports on file with the DENR-Water Rights Program for domestic use wells completed into the Big Sioux: Brookings aquifer (Water Rights, 2012a) and there are currently 229 Water Rights/Permits appropriating water from the Big Sioux: Brookings aquifer (Water Rights, 2012b). In addition, there are nine future use permits reserving water from the aquifer. There are 104 Water Rights/Permits appropriating water from Brookings County alone (Water Rights, 2012c). Appropriations from Brookings County are for irrigation use (88 appropriations), municipal use (four appropriations), commercial use (four appropriations), industrial use (one appropriation), suburban housing development use (two appropriations), and rural water system use (five appropriations) (Water Rights, 2012c). Five of the future use permits reserving water from the aquifer are from Brookings County.

The amount of water that can be expected to be withdrawn through non-irrigation appropriative uses from the Big Sioux: Brookings aquifer can be estimated by assuming: 1) water rights/permits limited by an annual volume will pump the entire volume appropriated, 2) water rights/permits limited only by diversion rate will pump at the maximum permitted diversion rate 60 percent of the time, and 3) future use permits can be fully developed. Under current appropriations, given the assumptions listed above, the well withdrawals are estimated to be less than 10,000 ac-ft/yr. The reported water use from the entire Big Sioux: Brookings aquifer for irrigation is shown in Table 1.

YEAR	NO. OF PERMITS	APPROPRIATION (AC-FT/YR)	PUMPAGE REPORTED (AC-FT/YR)
2011	174	63494.4	8527.61
2010	172	62966.4	2713.39
2009	174	65098.4	9172.9
2008	166	62761.8	12505.85
2007	164	62374.8	14730.13
2006	161	61075.8	14325.04
2005	159	61435.8	11513.48
2004	156	60695.8	11809.91
2003	149	58970.8	11380.47
2002	149	59186.8	12410.94
2001	149	59312.8	8384.81
2000	153	60799.8	8933.72
1999	155	62181.3	7841.04
1998	157	63306.2	8109.71
1997	153	62281.7	5650
1996	154	62575.2	7220.95
1995	161	62961.2	3862.25
1994	160	64395.2	2854.62
1993	162	64963.7	1042.9
1992	162	64603.7	2331.6
1991	165	65534.97	7771.74
1990	175	71616.95	5862.92
1989	166	69391.27	13930.7
1988	167	74615.27	18521.4
1987	171	76624.07	10015
1986	179	80788.57	2854.7
1985	181	81385.57	4951.4
1984	188	84188.07	8177.6
1983	161	74854.57	8227.46
1982	155	77754.57	4551.86
1981	198	91361	9040
1980	187	87093	9837
1979	184	85701	6144
MIN	149	58970.8	1042.9
MAX	198	91361	18521.4
AVE	166	68677.29	8339.61

Table 1. Irrigation from the Big Sioux: Brookings aquifer (Water Rights, 1980-2012)

Comparison of the estimated average annual withdrawal from the entire Big Sioux: Brookings aquifer with the estimated average annual recharge for the aquifer in Brookings County indicated that in general the average annual withdrawals to the aquifer do not exceed the average annual recharge to the aquifer and unappropriated water is available from the Big Sioux: Brookings aquifer. Specifically, unappropriated water is available for the 760 acre-feet appropriation proposed by these applications.

Observation Well Data:

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

The DENR-Water Rights Program monitors 80 observation wells completed into the Brookings management unit of the Big Sioux aquifer. Observation well BG-77Q is located just to the east of the well sites proposed by these applications (see Figure 2). A hydrograph for the observation well is shown in figure 1.

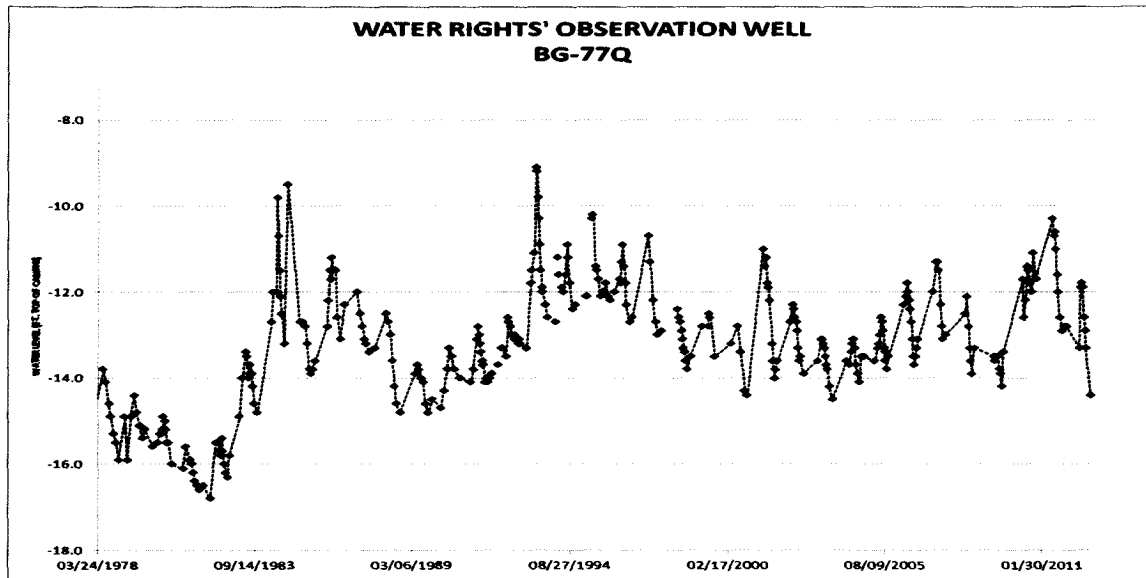


Figure 1. DENR-Water Rights' observation well completed into the Big Sioux: Brookings aquifer located just east of the well sites proposed by these applications (see figure 2).

The observation well data shows the aquifer responds well to climatic conditions with rising water levels during wet years and gradually declining water levels during dry years. The water level data verifies that over the period of record, withdrawals have not exceeded recharge. Most importantly, the observation well data shows that at the current level of development, climatic conditions greatly mask the temporal effects of well withdrawals. Therefore, recharge to and natural discharge from the Big Sioux: Brookings aquifer significantly exceeds pumping. Recognizing that natural discharge from the aquifer can be captured for pumping. The hydrographs document that there is unappropriated water available from the aquifer to support these appropriations.

EXISTING WATER RIGHTS:

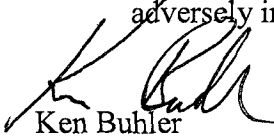
Existing water rights/permits in the vicinity of the well sites proposed by these applications are shown in Figure 2. Drawdown will occur as a result of pumping; however, given the distance to existing wells supplying water rights/permits, interference will not be significant and certainly will not be adverse. Observation well hydrographs document that drawdown from wells pumping from the Big Sioux: Brookings aquifer has not been a factor and water level fluctuations appear to be related to climatic conditions.



Figure 2. Vicinity map for Water Permit Application Nos. 7502-3 & 7503-3

CONCLUSIONS:

1. Water Permit Application Numbers 7502-3 and 7503-3 propose to appropriate up to 760 acre-feet annually from the Big Sioux: Brookings aquifer.
2. There is a reasonable probability that unappropriated water is available from the Big Sioux: Brookings aquifer to satisfy this proposed appropriation.
3. The Big Sioux: Brookings aquifer is under unconfined (water table) conditions in this area and drawdown from pumping is not expected to be significant very far from a production well.
4. Withdrawals from the Big Sioux: Brookings wells proposed by these applications will not adversely impair existing water rights.



Ken Buhler

SD DENR-Water Rights Program

REFERENCES:

- Hamilton, L.J. 1989, Water Resources of Brookings and Kingsbury Counties, South Dakota: U.S. Geological Survey Water-Resources Investigations Report 88-4185, 82 p.
- Hedges, L.S., Burch, S.L., Iles, D.L., Barari, R.A., Schoon, R.A., 1982, Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, Task 1: Bedrock Topography and Distribution, Task 2: Extent of Aquifers, Task 3: Ground-Water Storage, Task 4: Computerized Data Base, Final Report; U.S. Army Corps of Engineers Contract DACW 45-80-C-0185
- Hedges, L.S., Allen, J., Holly D.E., 1985, Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, Task 7: Ground Water Recharge; U.S. Army Corps of Engineers Contract DACW 45-80-C-0185
- Koch, N.C., 1980, Appraisal of the Water Resources of the Big Sioux aquifer, Brookings, Deuel, and Hamlin Counties, South Dakota: U.S. Geological Survey Water-Resources Investigations Report 80-100, 46 p.
- Water Rights, 1980-2011, Irrigation Questioner Summaries 1980-2011, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 2012a, Observation Well Files, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 2012b, Water Well Completion Reports, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 2012c, Water Right/Permit Files, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

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JAN 24 2013

Affidavit of Publication

WATER RIGHTS
PROGRAM

10/

State of South Dakota

ss

County of Brookings

Chaylee Duis of said county, first duly sworn, on oath, says: That she is the office clerk of THE BROOKINGS REGISTER, a daily newspaper, printed and published in the City of Brookings, in said County of Brookings, and State of South Dakota; that she has full and personal knowledge of the facts herein stated; that said newspaper is a legal newspaper and has a bona fide circulation of at least two hundred copies of each issue daily; that said newspaper has been published within the said County of Brookings and State of South Dakota, for more than one year prior to the first publication of Exhibit "A," hereto attached and herein mentioned, and was and is printed that the

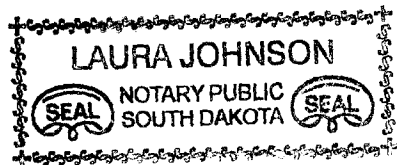
Leg#913 Notice of App - Craig Howell

same was published, is hereto attached marked Exhibit said newspaper for _____ 1 times, to-wit:

January 16, 2013

said Exhibit "A" inures to the sole benefit for the publishers of 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 person whomsoever; that the fees charged for the publication thereof are:

twenty-six dollars and seventy-eight cents \$26.78



Laura Johns

17th day of

January

2013

Chaylee Duis

Notary Public in and for the County of Brookings, South Dakota.
My Commission expires August 3, 2017.

Legal 913, 1x, 1/16
NOTICE OF APPLICATION NOS. 7502-3 and 7503-3 to Appropriate Water

Notice is given that Howell Farms, c/o Craig Howell, 21370 464th Ave, Volga SD 57071 has filed the following applications for a water permit.

Application No. 7502-3 proposes to appropriate 1.78 cubic feet of water per second (cfs) from two wells to be completed into the Big Sioux: Brookings Aquifer (34 feet deep) located in SW 14/ NE 1/4 Section 34 for irrigation of 240 acres located in the E 1/2 Section 34; all in T110N-R51W.

Application No. 7503-3 proposes to appropriate 1.78 cfs from two wells to be completed into the Big Sioux: Brookings Aquifer (34 feet deep) located in the SW 1/4 SW 1/4 Section 35 to irrigate 140 acres located in the SW 1/4 Section 35; all in T110N-R51W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 7502-5 and 7503-3 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 these applications, as recommended, unless a petition is filed opposing the applications or the applicant files a petition contesting the Chief Engineer's recommendations. If a petition opposing the applications or contesting the recommendations is filed, then a hearing will be scheduled and the Water Management Board will consider these applications. Notice of the hearing will be given to the applicant and any person filing a petition. Any person interested in

opposing or supporting these applications or recommendations must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendations. 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 January 28, 2013.

The petition may be informal, but must include a statement describing the petitioner's interest in the applications, the petitioner's reasons for opposing or supporting the applications, 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 these applications. Steven M. Pirner, Secretary, Department of Environment and Natural Resources. Published one time at the total approximate cost of \$26.78.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

January 7, 2013

Brookings Register
PO Box 177
Brookings SD 57006

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application Nos. 7502-3 and 7503-3 to Appropriate Water. Please publish the notice once on January 16, 2013. 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 and arrange for payment. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Howell Farms, c/o Craig Howell, 21370 464th Ave., Volga SD 57071 (Ph # 605-627-5104).

Please send the Water Rights Program an affidavit or the enclosed Proof of Publication form immediately.

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



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

NOTE: TO BE SURE OF PUBLICATION ON
THE CORRECT DATE, CONTACT
THE NEWSPAPER(S) RIGHT AWAY.

January 7, 2013

Howell Farms
Craig Howell
21370 464th Ave
Volga SD 57071

Dear Mr. Howell:

Water Permit Application Nos. 7502-3 and 7503-3 for irrigation use have been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Brookings Register printed at Brookings SD (Ph # 605-692-6271). You will need to contact the newspaper(s) and authorize publication of this notice. For your information, a copy of the notice, the recommendations of the Chief Engineer and reports on the applications are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspaper(s) to authorize publication of your Notice and to arrange for payment. Early contact with the paper(s) can eliminate delays. Upon receiving authorization from you, the publisher has been instructed to publish your notice. The newspaper(s) has also been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the applications.

Sincerely,

Eric Gronlund
Natural Resources Engineer
(605) 773-3352

enclosures

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

Instruction to Newspaper - Publish the Notice on January 16, 2013. The applicant is responsible for payment. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352 or email: Karen.schlaak@state.sd.us.

NOTICE OF APPLICATION NOS. 7502-3 and 7503-3 to Appropriate Water

Notice is given that Howell Farms, c/o Craig Howell, 21370 464th Ave, Volga SD 57071 has filed the following applications for a water permit.

Application No. 7502-3 proposes to appropriate 1.78 cubic feet of water per second (cfs) from two wells to be completed into the Big Sioux:Brookings Aquifer (34 feet deep) located in SW 14/ NE 1/4 Section 34 for irrigation of 240 acres located in the E 1/2 Section 34; all in T110N-R51W.

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Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 7502-5 and 7503-3 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 these applications, as recommended, unless a petition is filed opposing the applications or the applicant files a petition contesting the Chief Engineer's recommendations. If a petition opposing the applications or contesting the recommendations is filed, then a hearing will be scheduled and the Water Management Board will consider these applications. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting these applications or recommendations must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendations. 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 January 28, 2013.

The petition may be informal, but must include a statement describing the petitioner's interest in the applications, the petitioner's reasons for opposing or supporting the applications, 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 these applications. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.
Published once at the total approximate cost of _____.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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denr.sd.gov

FEB 08 2013

Howell Farms Inc
Craig Howell
21370 464th Ave
Veblen SD 57071

Dear Mr. Howell:

Enclosed are Water Permit Nos. 7502-3 and 7503-3 authorizing construction of your water diversion systems and beneficial use of the water, not exceeding the limits as specified in the Water Permits.

Form 10's, *Notice of Completion of Works and Application of Water to Beneficial Use*, are enclosed. Please return the completed forms after you have finished the systems and have put the water to beneficial use. An investigation can then be scheduled so the water licenses 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

Date:

SOUTH DAKOTA WATER WELL COMPLETION REPORT 7502-3 07-92

Location SE 1/4 NE 1/4 Sec 34 Twp 110-n Rg 51-W

County Brookings

North

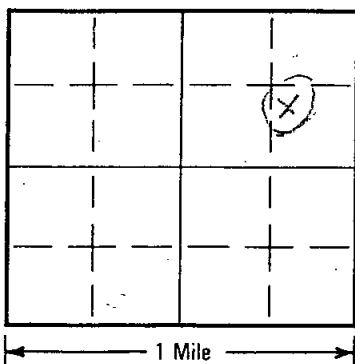
Please mark well location with an "X"

W

E

Well-Completion Date

4-5-13



LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? 1/4 ft. from _____ (identify source).

PROPOSED USE:

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

METHOD OF DRILLING:

Bucket Fake Casing

CASING DATA:

- ☐ Steel
 ☒ Plastic
 ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>Set 40</u> LB/FT	<u>14</u> IN	<u>+1 1/2</u> FT	<u>26</u> FT	<u>20</u> IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN

GROUTING DATA

Grout Type	No. of Sacks	Grout Weight	From	To
<u>Cement</u>	_____	_____ lb./gal	<u>0</u> ft	<u>10</u> ft
_____	_____	_____ lb./gal	_____ ft	_____ ft

Describe grouting procedure _____

SCREEN: ☐ Perforated pipe ☒ Manufactured

Diameter 14 IN Length 10 FEET

Material Set 40

Slot Size 100 Set From 26 Feet to 36 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? _____

Laboratory sent to for water quality analysis

NO-Info

Well Owner: _____

Business Name: Hawell Farm Inc.

Address: 21370 464th Ave.
Volga, So Dak. 57071

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
<u>Till - Topsoil</u>	<u>0</u>	<u>1</u>
<u>Clay</u>	<u>1</u>	<u>15</u>
<u>Coarse Gravel</u>	<u>15</u>	<u>28</u>
<u>Medium Gravel</u>	<u>28</u>	<u>36</u>

STATIC WATER LEVEL 14' Feet

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced Flowrate _____ GPM

Can well be completely shut in? _____

WELL TEST DATA:

☒ Pumped Describe: Sub

☐ Bailed _____

☐ Other _____

Pumping Level Below Land Surface

29' ft. After 1/2 Hrs. pumped 300 GPM

_____ ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate _____ GPM

REMARKS Good Well

RECEIVED

APR 11 2013

WATER RIGHTS PROGRAM

This well was drilled under license # 111

And this report is true and accurate.

Drilling firm Lacey Well Drilling Inc.

Signature of License Representative: _____

Signature of Well Owner or Equitable Property Holder: _____

Date: _____

RECEIVED

OCT 25 2013

WATER RIGHTS
PROGRAMNOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USEDate 10/22/2013TO: Water Rights Program, DENR
523 E. Capitol
Pierre, SD 57501-3181

FROM:

HOWELL FARMS

(name)

21370 464th AVE

(address)

VOLGA, SD 57071

(city, state, zip)

605-695-2673

(phone)

I have completed the construction of the water use system and I have put the water to beneficial use to the maximum extent it is going to be used.

Water Permit No. 7502-3 states that the water use system is to be constructed by1/28/2018

(date)

, and water is to be put to beneficial use by

1/28/2022

(date)

The water use system was completed on JULY 2013

(date)

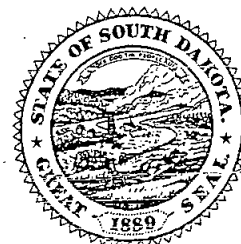
Applying the water to beneficial use was completed on 7/10/2013

(date)

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

Craig Howell

(signature)





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
PMB 2020
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
<http://denr.sd.gov>

October 28, 2013

7502-3

7503-3

Craig Howell
Howell Farms Inc
21370 464th Ave
Volga SD 57071

Dear Mr. Howell:

I am writing to acknowledge receipt of the "Notice of Completion of Works" forms that you sent in to let us know that you are completed with your irrigation systems.

The systems are now ready for inspection. Inspections are done on a county-by-county basis as staff time permits. You have done everything you need to do and the intervening time between the completion of the projects and the staff inspection has no bearing on your water permits.

Someone from our office will contact you prior to the inspection to set up a time that is convenient for you. If you have any questions, please contact me.

Sincerely,

A handwritten signature in black ink that reads "Genny McMath".

Genny McMath
Water Rights Program
(605) 773-3352
email: genny.mcmath@state.sd.us

Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 7502-3

I have this day, October 27, 2014, made a thorough examination of the water use system constructed by Howell Farms, Inc., c/o Craig Howell, of 21370 464th Ave., Volga, SD 57071 holder of Permit No. 7502-3, bearing the priority of October 31, 2012 authorizing the diversion of 1.78 cu. ft. per second of the waters of the Big Sioux: Brookings aquifer for irrigation purposes, in Brookings County.

Inspection contact:

Craig Howell

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Lacey Well Drilling Inc
- 2) No. of Wells two
- 3) Depth(s) 36 and 35'4" feet respectively
- 4) Well logs are available Y/N

WELL NO. 1 (EAST WELL)

Casing:

- 1) Diameter 14 inches
- 2) Length 26 feet
- 3) Type PVC

Screen:

- 1) Type PVC
- 2) Length 10 feet
- 3) Static water level 14 feet (4/5/13)

Pump:

- 1) Make Grundfos (submersible)
- 2) Model 300S-150-4AA
- 3) Horsepower rating 15 hp
- 4) Capacity 300 GPM

WELL NO. 2 (WEST WELL)

Casing:

- 1) Diameter 14 inches
- 2) Length 25 feet
- 3) Type PVC

Screen:

- 1) Type PVC
- 2) Length 11' 4" feet
- 3) Static water level 14 feet (4/3/13)

Pump:

- 1) Make Grundfos (submersible)
- 2) Model 300S-150-4AA
- 3) Horsepower rating 15 hp
- 4) Capacity 300 GPM

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

- | | | |
|--------------------|-------------------------|---------------------------|
| 1) Type <u>PIP</u> | 2) Size <u>6</u> inches | 3) Length <u>300</u> feet |
| 1) Type <u>PIP</u> | 2) Size <u>8</u> inches | 3) Length <u>450</u> feet |

Comments: 6-inch PIP from each well to Tee, 8-inch PIP from Tee to Pivot

C. Works used to apply water to beneficial use:

Center pivot:

- 1) Make Valley (Lat/Lon: 44.29183/-96.93373)
- 2) Overall length 1294 feet
- 3) Number of towers 7
- 4) End gun Nelson 100
- 5) Capacity 600 GPM

Chemigation Equipment:

- 1) Does not chemigate

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by Yes
- 2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period Yes

List any extended period of nonuse: na

- 3) Exceptions to compliance are: na

E. Condition and Location:

1. The system is in good, condition with the points of diversion located as follows:
Well No. 1: 2,220 feet south and 1,225 feet west of the NE corner of Sec. 34, T110N-R51W (Lat/Lon: 44.29107/ -96.93314)
Well No. 2: 2,220 feet south and 1,615 feet west of the NE corner of Sec. 34, T110N-R51W (Lat/Lon: 44.29109/ -96.93462)
2. The works are capable of diverting and conveying to the place of use 1.34 cu. ft. per second of water which is to be used for irrigation. Water has been put to beneficial use to the maximum extent as follows:

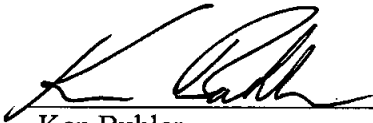
<u>NE$\frac{1}{4}$NE$\frac{1}{4}$ Sec.34, T110N-R51W: 14 acres</u>	<u>SW$\frac{1}{4}$NE$\frac{1}{4}$ Sec.34, T110N-R51W: 40 acres</u>
<u>NW$\frac{1}{4}$NE$\frac{1}{4}$ Sec.34, T110N-R51W: 10 acres</u>	<u>NE$\frac{1}{4}$SE$\frac{1}{4}$ Sec.34, T110N-R51W: 10 acres</u>
<u>SE$\frac{1}{4}$NE$\frac{1}{4}$ Sec.34, T110N-R51W: 38 acres</u>	<u>NW$\frac{1}{4}$SE$\frac{1}{4}$ Sec.34, T110N-R51W: 11 acres</u>

comprising a total of 123 acres of land and the license should be issued for 1.34 cfs.

3. All structures, wells and lands on map Yes

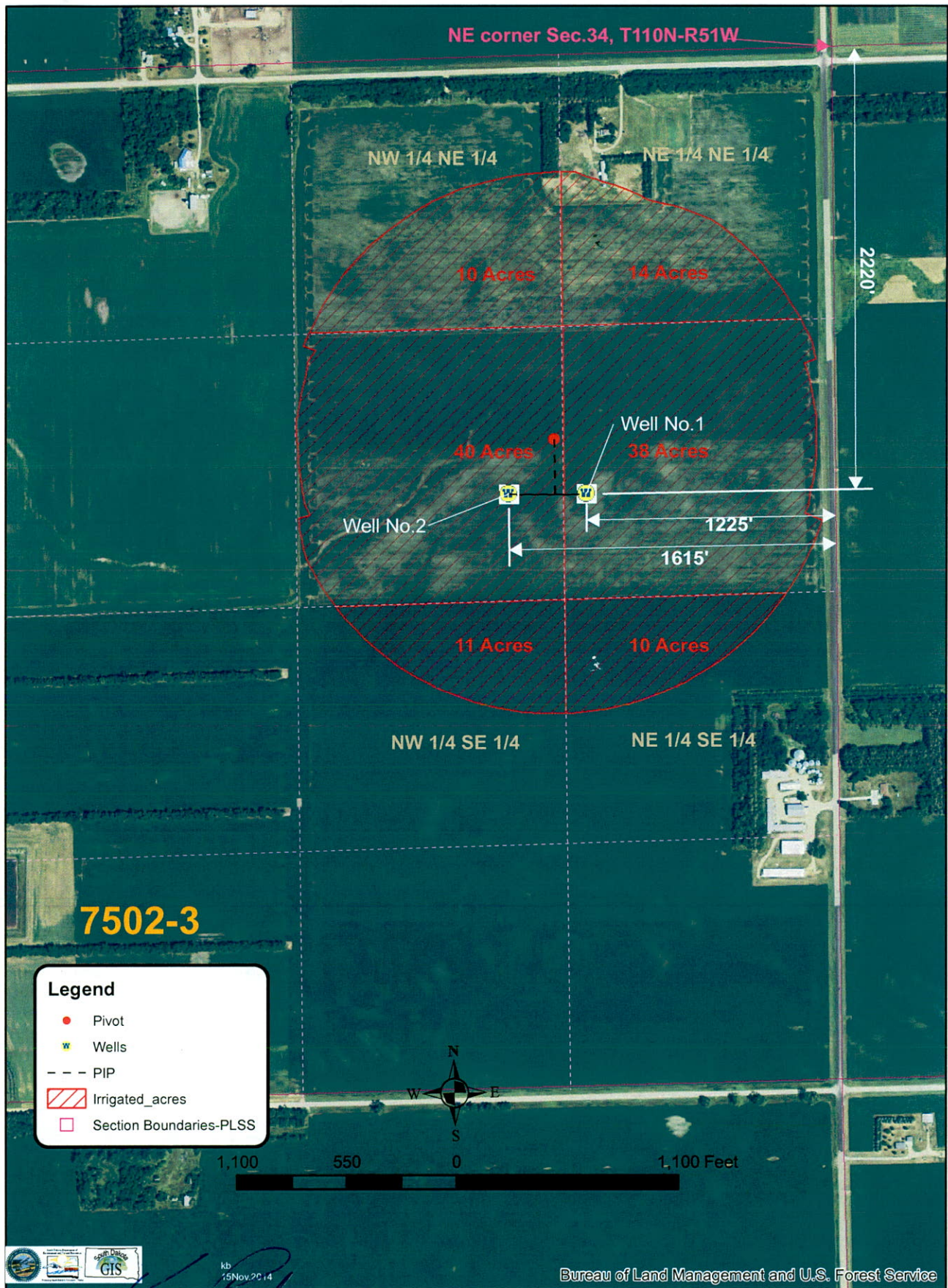
F. Comments or other permit(s) associated with the project:

Provide detailed explanation when multiple permits are involved or any discrepancy between what the permit was issued for and what was developed. Permit was issued for two center pivots covering the east half of Sec.34, T110N-R51W. Only the north pivot was developed. The pivot was set up off center so the distribution of the acres irrigated is different than was listed on the permit application. The acreage developed does meet the acreage described in the water permit and in the Notice to Appropriate Water published in the Brookings Register.



Ken Buhler
DENR, Water Rights Program

Date report completed: November 15, 2014



Approval of Location Change and/or Additional Diversion Point(s)

NAME: Craig Howell

ADDRESS: 21370 464th Ave., Volga, SD 57571

DATE: March 24, 2015

COUNTY: Brookings

TELEPHONE: 605.627.5104

AUTHORITY:

Pursuant to SDCL 46-5-13.1, the location of a diversion point may be changed or additional diversion points may be licensed provided the following conditions are met and the potential for interference with other existing diversions is not increased:

- **Developed water source same as permitted source and no additional water appropriated**

Water Permit No. 7502-3 authorized two wells to be located in the SW $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 34, T110N-R51W. Two wells were developed into the Big Sioux: Brookings aquifer for this system: Well No. 1 located in the SE $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 34, T110N-R51W; and Well No. 2 located in the SW $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 34, T110N-R51W. No additional diversion rate capacity was developed.

- **If irrigation, no new land is irrigated**

The acreage that is irrigated under this permit, locate in the NE $\frac{1}{4}$ and the SE $\frac{1}{4}$ of Sec. 34, T110N-R51W was included in the public notice for Water Permit Application No. 7502-3.

- **Review of Existing Diversions**

Approval of the change of location as proposed will not impair existing users.

RECOMMENDED ACTION

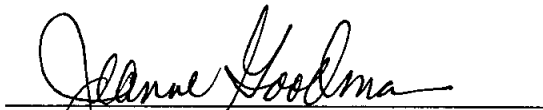
Based on the above criteria, it is recommended that the diversion point(s) be licensed as developed.



Ken Buhler,
Water Rights Program

The Chief Engineer makes a finding pursuant SDCL 46-5-13.1 and ARSD 74:02:01:14.01 that:

This change in location and/or additional diversion point(s) does not increase the potential for adverse effects to existing diversions.



Jeanne Goodman, Chief Engineer
Water Rights Program



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

APR 24 2015

7502-3

Craig Howell
Howell Farms Inc
21370 464th Ave
Volga SD 57071

Dear Mr. Howell:

Enclosed is Water License No. 7502-3. This is the final water right document completing your process of obtaining a Water Right. Included with your 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. 7502-3, 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. 7502-3**

(1) Howell Farms Inc., 21370 464th Ave., Volga SD 57071 made Application No. 7502-3, October 31, 2012 for a water permit to divert 1.78 cubic feet of water per second from ground water (two wells, Big Sioux Brookings Aquifer), Brookings County, South Dakota for irrigation purposes. Permit No. 7502-3, with a priority date of October 31, 2012 was approved January 28, 2013 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before January 28, 2018 and for the application to beneficial use of said water on or before January 28, 2022.

The Permit holder submitted a "*Notice of Completion of Works and Application of Water to Beneficial Use*" on October 25, 2013. The "*Notice*" stated the water use system was completed the water placed to beneficial use in July, 2013.

An inspection of the water use system found one of the wells had been constructed outside of the permitted area. Pursuant SDCL 46-5-13.1 and ARSD 74:02:01:14.01, the Chief Engineer made a finding the change in location of one of the diversion points does not increase the potential for adverse effects to existing diversions.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 1.34 cubic feet of water per second for beneficial use.

The location of the diversion points are:

- Well #1 – 2,220 feet S and 1,225 feet W of the NE corner of Section 34, T110N, R51W (SE $\frac{1}{4}$ NE $\frac{1}{4}$)
- Well #2 – 2,220 feet S and 1,615 feet W of the NE corner of Section 34, T110N, R51W (SW $\frac{1}{4}$ NE $\frac{1}{4}$)

(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 34, T110N, R51W			
NE $\frac{1}{4}$ NE $\frac{1}{4}$	14.0 acres	NE $\frac{1}{4}$ SE $\frac{1}{4}$	10.0 acres
NW $\frac{1}{4}$ NE $\frac{1}{4}$	10.0 acres	NW $\frac{1}{4}$ SE $\frac{1}{4}$	11.0 acres
SE $\frac{1}{4}$ NE $\frac{1}{4}$	38.0 acres		
SW $\frac{1}{4}$ NE $\frac{1}{4}$	40.0 acres	Total	123.0 acres

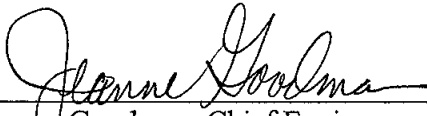
(4) Pursuant to South Dakota Water Law 46-5-30.1 Howell Farms Inc., 21370 464th Ave., Volga SD 57071 the holder and/or owner of Water Right No. 7502-3 is issued a license to appropriate water, the right to use 1.34 cubic feet of water per second from ground water (two wells, Big Sioux Brookings Aquifer) with a priority date of October 31, 2012 from the location 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. 7502-3 and subject to the following qualifications:

- The wells 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.

continued

- The wells authorized by Permit No. 7502-3 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) from the producing formation to the surface pursuant to Section 74:02:04:28. ***The wells were constructed by Lacey Well Drilling Inc. in April, 2013. Copies of the logs are on file with the Water Rights Program.***
- 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

APR 24 2015

date

