

WATER PERMIT NO. 8012-3

Name of Applicant: City of Aurora

Address: PO Box 335, Aurora SD 57002 Phone: 605 693-3548

Amount of Water Claimed: 0.10 cfs Total Acres: 5.07 acres

Source of Water Supply: groundwater (one well)

Water to be used for: irrigation County: Brookings

Type of Waste Disposal System:

Location: within city limits

PRIORITY Date Received: 4-30-14 Application/License Fee: \$ 300

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

Remarks:

Diversion Point: SE 1/4 SE 1/4 Sec 34 and SE 1/4
SW 1/4 Sec 35; all in T110N-R49W

Land to be Irrigated: SE 1/4 SW 1/4 Sec 35 and
SE 1/4 SE 1/4 Sec 34; all in T110N-R49W

Depth of Well: 30 feet deep

Well Driller: Kaiser Well Drilling Inc.

Remarks:

Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 5-1-14

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____

	34				35
					

Mail to:
PMB 2020
DENR - Water Rights
523 E Capitol Ave
Pierre, SD 57501-3182
ph. (605) 773-3352

No. 8012-3 (office use only)
Hydrologic Unit 10170202
Basin Sioux River
Newspaper Brookings Register Box 177
57006-605-692-6271

RECEIVED
APR 30 2014
WATER RIGHTS
PROGRAM

Application For Permit To Appropriate Water For Irrigation

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

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

1. Name to Appear on Irrigation Permit City of Aurora
(check one) ☒ Owner ☐ Tenant/lessee ☐ Owner's Legal Agent
(name and complete address if different than above name)

Mailing Address PO Box 335 Aurora SD 57002
(Address) (City) (State) (Zip Code)

Home Phone 605 693 3548 Cell _____ Email _____

2. Amount of water claimed 0.10 *CFS or 30/15 **GPM ***AF Total Acreage 5.07
(*Cubic Feet per Second) (**Gallons per Minute) (***) Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply Big Sioux Aquifer

4. Location of point of diversion 1 well in SE 1/4 of SE 1/4 of Sec. 34 + 1 well in SE 1/4 of SW 1/4 of Sec. 35 of T110N - R49W
(example - 3 wells in SW 1/4 NE 1/4 section 12-T104N-R53W) County Brookings

5. County or counties where water will be used Brookings

6. Annual period during which water is to be used Summer May 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
<u>Milpark S. Add. Lot 8 Block 2</u>	<u>.7</u>	<u>Outlots, OL c SE 1/4 in City of Aurora</u>	<u>4.37</u>
<u>in City of Aurora, Parcel # 311850020000800</u>		<u>Parcel # 312500000000100</u>	
<u>SE 1/4 SW 1/4 Sec 35-T110N-R49W</u>		<u>SE 1/4 SE 1/4 Sec 34-T110N-R49W</u>	

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

Low level wells for Grass + Tree watering so not to use City water

I, Andy Stulen, 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. 8012-3

Date of first receipt of application April 30, 2014.

Date of return to applicant for corrections, amendments or changes April 30, 2014.

Date of receipt of corrected application May 9, 2014.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8012-3 to City of Aurora, PO Box 335, Aurora SD 57002 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. 8012-3 appropriates 0.10 cubic feet of water per second from two wells completed into the Big Sioux:Aurora Aquifer (30 feet deep) located in the SE 1/4 SE 1/4 Section 34 and the SE 1/4 SW 1/4 Section 35 for irrigation of 5.07 acres (city park and ball field) located in the SE 1/4 SE 1/4 section 34 and SE 1/4 SW 1/4 Section 35; all in T110N-R49W.
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: May 1 – September 30.
3. The date from which applicant may claim right is April 30, 2014.
4. The date of approval of Permit No. 8012-3 is July 14, 2014.
5. One-fifth of the construction is to be completed on or before January 14, 2017.
6. All construction is to be completed on or before July 14, 2019.
7. Water is to be put to beneficial use on or before July 14, 2023.
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. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

By: *Jeanne Goodman*

Jeanne Goodman, Chief Engineer

Water Rights Program

Department of Environment and Natural Resources

AUG 18 2014

date



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 2 Have test holes been drilled ☐ Yes ☒ No Drilled by Kiasser Well Drilling
(if yes, please provide copies of logs)
- b) If existing wells, how many Provide copy of log(s), if available. Drilled by
- c) Well Depth 30' Depth to Top of Water Bearing Material 32' Depth to Water from Surface 12'
- d) Distance to nearest existing domestic well:

On applicant's property On property owned by others 450'

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

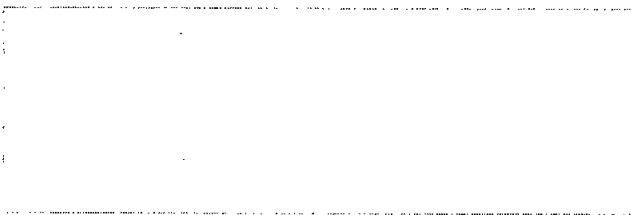
3. Dugout Information

- 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

Sec 27
T110N
R49W

Sec 26
T110N
R49W

Sec 25
T110N
R49W

Sec 34
T110N
R49W

Sec 35
T110N
R49W

Sec 36
T110N
R49W



Sec 3
T109N
R49W

Sec 2
T109N
R49W

Sec 1
T109N
R49W

Sec 10
T109N
R49W

Sec 11
T109N
R49W

Sec 12
T109N
R49W

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APR 30 2014

**WATER RIGHTS
PROGRAM**

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 5/9, 20 14

RECEIVED OF City of Aurora PO Box 335 Aurora SD 57002

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

Fee for Application for Permit No. <u>8012-3</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. <u>8012-3</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	300 00

No. **06853**

By J. Anne Goodman
Chief Engineer



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

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



March 26, 2014

City of Aurora
c/o Danita Fischer, Finance Officer
PO Box 335
Aurora SD 57002

Dear Ms. Fischer:

I am writing in regard to two well driller's reports filed by Kaiser Well Drilling Inc. The reports show two new wells were completed for the city on November 6 & 7, 2013.

A review of our files indicates that the City of Aurora holds Water Right No. 1952-3 for 90 gallons per minute from a well located in the SE 1/4 Section 34-T110N-R45W. The last correspondence in the file indicates the city receives water from the City of Brookings and the well was used as a backup supply and firefighting use.

What is the city's intention regarding these two new wells? Once we know this information we can determine what additional action, if any, needs to be taken to ensure the city's water rights accurately reflect the its use.

Please contact Eric Gronlund or me regarding the status of these two wells or if you have any questions.

Sincerely,

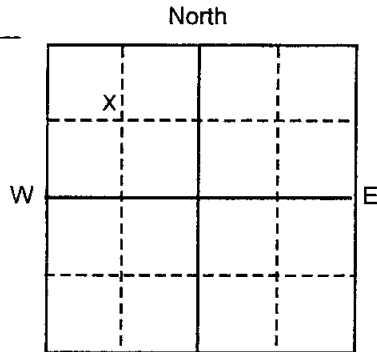
Karen Schlaak
Water Rights Program
605 773-3352
karen.schlaak@state.sd.us

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11- 02

Location NW ¼ NW ¼ Sec 2 Twp 109N Rg 49W

County BROOKINGS

Please mark well
location with an "X"

Well Completion Date

11-7-2013

1 Mile

Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?
5,000.0 ft. from WELL (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

DRD

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
40.0 LB/FT	5.00 IN	0.0 FT	30.0 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
GWDF	7	54.0 Lb/gal	0.0 Ft	30.0 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure

TREMIE/ PPM

SCREEN:

☐ Perforated pipe ☒ Manufactured

Diameter 5.00 Inches Length 10.0 Feet

Material PLASTIC

Slot Size .035 Set From 30.0 Feet to 40.0 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?

☐ No, Why Not?
Lab to which water
quality sample sent for analysis

NO PUMP INSTALLED

Well Owner: CITY OF AURORA

Business Name:

Address: PO BOX 335

City, State, Zip: AURORA SD 57002

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
TOP SOIL	0	2
YELLOW MIX GRAVEL	2	17
FINE-MED-	17	30
MED-COURSE	30	40

STATIC WATER LEVEL 10.0 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

25.0 Ft. After 4.0 Hrs. pumped 75.0 GPM

Ft. After Hrs. pumped GPM

If pump installed, pump rate: GPM

REMARKS

RECEIVED

JAN 31 2014

WATER RIGHTS
PROGRAMThis well was drilled under license # 689 and this
report is true and accurate.

Drilling firm: KAISER WELL DRILLING INC

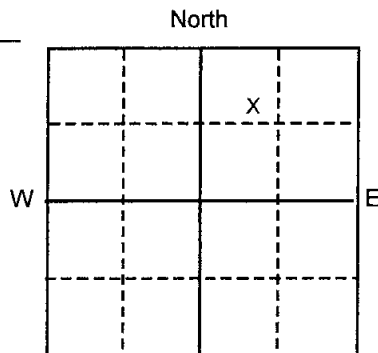
Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date:

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location NW 1/4 NE 1/4 Sec 2 Twp 109N Rg 49WCounty BROOKINGSPlease mark well
location with an "X"

Well Completion Date

11-6-2013

1 Mile

Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?
5,000.0 ft. from WELL (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

DRD

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
40.0 LB/FT	3.00 IN	0.0 FT	21.0 FT	6.00 IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
GWDF	2	54.0 Lb/gal	0.0 Ft	21.0 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure

TREMIE/ PPM

SCREEN:

☐ Perforated pipe ☒ Manufactured
Diameter 3.00 Inches Length 6.0 FeetMaterial PLASTICSlot Size .035 Set From 21.0 Feet to 27.0 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?☐ No, Why Not?Lab to which water
quality sample sent for analysis

NO PUMP INSTALLED

Well Owner: CITY OF AURORA

Business Name:

Address: PO BOX 335City, State, Zip: AURORA SD 57002

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
TOP SOIL	0	1
YELLOW FINE SAND	1	15
MED YELLOW GRAVEL	15	27

STATIC WATER LEVEL 9.0 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

AIR LIFT 30+

Pumping Level Below Land Surface

_____ Ft. After _____ Hrs. pumped _____ GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

RECEIVED

JAN 31 2014

WATER RIGHTS
PROGRAMThis well was drilled under license # 689 and this
report is true and accurate.Drilling firm: KAISER WELL DRILLING INC

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date:



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

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



April 9, 2014

City of Aurora
c/o Andy Studer
PO Box 335
Aurora SD 57002

Dear Mr. Studer:

Regarding our phone conversation last week, it will be necessary for the city to submit an *Application for a Permit to Appropriate Water* for irrigation of the city parks and baseball fields from the two recently completed wells. The well authorized by Water Right No. 1952-3 remains as a backup supply for the city.

Enclosed is an application form and instructions. Both wells can be included on one application. I have enclosed an aerial map for the City. Please mark the well locations with an "X" and outline the areas to be irrigated.

If you have any questions regarding completion of the application, map or fee, please contact Eric Gronlund or me. As previously stated, we want ensure the city's water rights accurately reflect its actual use.

Sincerely,

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

enclosures



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

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



April 30, 2014

City of Aurora
c/o Andy Struder
PO Box 335
Aurora SD 57002

Dear Mr. Struder:

Thank you for submitting the *Application for a Permit to Appropriate Water* for irrigation of the city park and baseball field. In order to complete the application, the following is required.

- The application/license fee is \$300.00. Please submit this amount.

If you have any questions, please contact me.

Sincerely,

Karen Schlaak

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



**DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES**

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denr.sd.gov



**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 8012-3, City of Aurora**

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. 8012-3, City of Aurora, c/o Andy Struder, PO Box 335, Aurora SD 57002.

The Chief Engineer is recommending APPROVAL of Application No. 8012-3 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. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Jeanne Goodman, Chief Engineer
June 25, 2014

**REPORT TO THE CHIEF ENGINEER
WATER PERMIT APPLICATION NO. 8012-3
City of Aurora
June 26, 2014**

Water Permit Application No. 8012-3 proposes to appropriate water at a maximum diversion rate of 0.10 cubic feet per second (cfs) from two wells to be completed into the Aurora Management Unit of the Big Sioux aquifer. The wells are expected to be approximately 30 feet deep and will be located in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 34, and the SE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 35, T110N-R49W in Brookings County. The water will be used to irrigate a city park and ball field of 5.07 acres.

AQUIFER: Aurora management unit of the Big Sioux aquifer (BS: A)

GEOLOGY AND AQUIFER CHARACTERISTICS:

The Big Sioux aquifer is an alluvium mantled outwash consisting of silt and fine to coarse sand and gravel that is generally under unconfined conditions near the Big Sioux River but can be confined elsewhere. The aquifer is hydraulically connected to the Big Sioux River and water in the aquifer generally moves from north to south and locally towards the Big Sioux River (Hamilton, 1989). The Aurora management unit of the Big Sioux aquifer underlies approximately 83,000 acres in Brookings and Moody Counties in South Dakota and Lincoln and Pipestone Counties in Minnesota. In the center of T109N-R47W, groundwater flow in the aquifer divides: flowing west-northwest in the northern portion and flowing southwest in the southern portion, essentially creating subunits of the Aurora management unit. The northern subunit, where this application proposes to divert water, underlies approximately 63,000 acres all in Brookings County (Buhler, 2012).

In Brookings and Kingsbury Counties the aquifer has an average thickness of 30 feet and, where present, is encountered at depths ranging from ground surface to 212 feet with the depth to water ranging from zero to 120 feet below ground surface (Hamilton, 1989). Given the lithological records submitted with this application, the aquifer appears to be present at ground surface in the area of interest and extends at least 30 feet below ground surface with a static water level of approximately 10 feet below ground surface.

SDCL 46-2A-9:

Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued only if there is a 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 aquifer that are pertinent to this application.

WATER AVAILABILITY:

The probability of unappropriated water 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 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 public water system has applied for a permit, the Board need not consider the recharge/withdrawal issue. Here, a public water system is not involved. Therefore, the withdrawal/recharge issue must be considered.

Hydrologic Budget:

Recharge:

Recharge to the Big Sioux: Aurora aquifer occurs through infiltration of precipitation in areas where the aquifer is at or near land surface, seepage through till, lake deposits, and underlying aquifers, and inflow from the Big Sioux River at times of relative high stage (Hamilton, 1989).

Hedges and others (1985) determined the average recharge to the entire Big Sioux aquifer system by base flow analysis to be 6.5 inches per year (in/yr). Koch (1980) estimated average recharge to the Big Sioux aquifer in Brookings, Deuel, and Hamlin Counties by modeling to be 6.57 in/yr in the unconfined portions. Hansen (1988) estimated recharge to the Big Sioux aquifer in Moody County by modeling to be on average 4.85 in/yr. Hedges and others (1985) estimated recharge specifically of the Aurora management unit by observation well analysis to be 5.0 in/yr. For the purpose of this report the last recharge estimate of 5.0 in/yr (Hedges et al., 1985) will be used because of its focus on the Aurora Management Unit. However, it is likely that pumping could exceed recharge in the Big Sioux: Aurora without depleting the aquifer because of induced recharge from the Big Sioux River (Koch, 1980).

Given a recharge rate of 5.0 in/yr for the Aurora Management Unit (Hedges et al., 1985) and an area of 63,000 acres for the northern subunit, recharge to this subunit was calculated to be 26,250 ac-ft/yr.

Discharge:

Discharge from the Big Sioux: Aurora aquifer occurs through evapotranspiration in areas where the aquifer is at or near land surface, outflow to streams during dry years, and well withdrawals. There are a total of 52 water rights and permits appropriating water, and one future use permit reserving water from the northern subunit of the Big Sioux: Aurora aquifer (Water Rights, 2014b).

The City of Brookings reports an annual average use for the past 10 years of 2,103 ac-ft/yr. Non-irrigation water rights/permits that do not report annual use currently authorize a total maximum diversion rate of 2.78 cfs and an annual volume of 1,945 ac-ft. Future Use Permit No. 1598-3 for the City of Brookings currently reserves 2,426 ac-ft/yr. The City of Aurora no longer regularly uses their water system and instead relies on Brookings Municipal Utilities. However, the City of Aurora maintains Water Right No. 1952-3 for standby (Water Rights, 2014b).

The amount of water that can be expected to be withdrawn by non-irrigation water rights/permits is estimated by assuming the maximum diversion rate is pumped 60 percent of the time. Assuming that future use permits will be fully developed, the amount of water appropriated from the Big Sioux: Aurora aquifer by non-irrigation sources is estimated to be 7,682 ac-ft/yr (Water Rights, 2014b).

Although there are numerous domestic wells on file, their relatively small withdrawals compared to water rights/permits in the area mean that they are an infinitesimal part of the overall water budget and are not taken into consideration when estimating overall discharge.

Historic withdrawals for irrigation from the northern subunit of the Big Sioux: Aurora aquifer during the period of record are shown in Figure 1. Average water use over this time period is 2,221 ac-ft/yr with a minimum of 208 ac-ft/yr and a maximum of 4,275 ac-ft/yr. This wide range of annual use can be attributed primarily to varying climatic conditions. Expected use is assumed to be equal to average use.

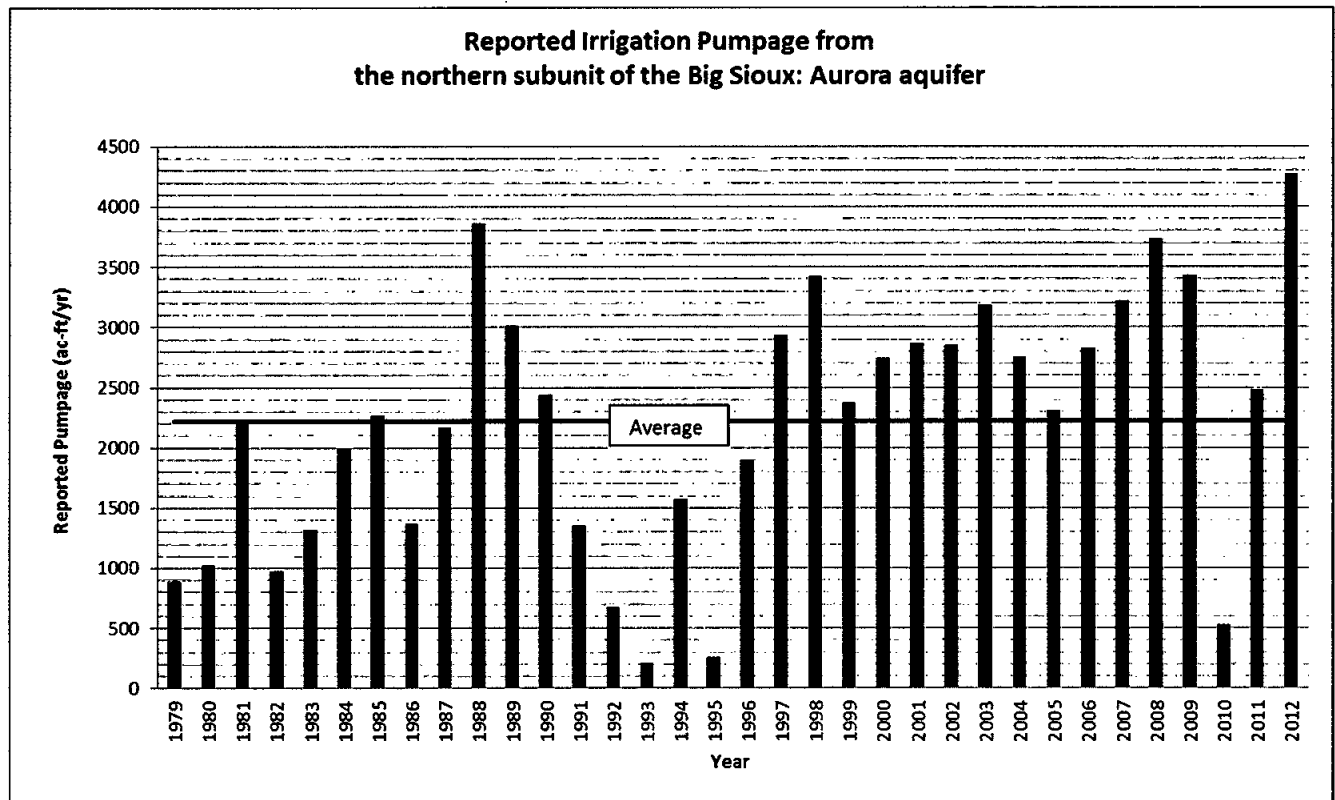


Figure 1: Historic irrigation water use in the subunit of the Big Sioux: Aurora aquifer (Water Rights, 1980-2013).

Hydrologic Budget:

The sum of the average or expected use from all water permits/rights appropriating water from the Big Sioux: Aurora aquifer is estimated to be 9,903 ac-ft/yr. Comparing this rate to the estimated annual recharge of 26,250 ac-ft/yr shows unappropriated water is available from the aquifer for the proposed use.

Observation Well Data:

The SD DENR Water Rights Program currently monitors 14 observation wells completed into the northern subunit of the Big Sioux: Aurora aquifer. The closest of these observation wells with a continuous record through the present is BG-89A (Water Rights, 2014a). BG-89A is located approximately one mile to the north of the proposed well sites. Water levels in BG-89A

have been recorded since 1958 and vary between seven and 20 feet below ground surface (see Figure 2). The water table has shown small temporal effects but has been primarily controlled by climatic conditions, rising in wet years and falling in dry years. Because the aquifer is controlled primarily by climatic conditions, recharge to and natural discharge from the aquifer far exceeds well withdrawal. Therefore, unappropriated water is available for capture for the proposed use.

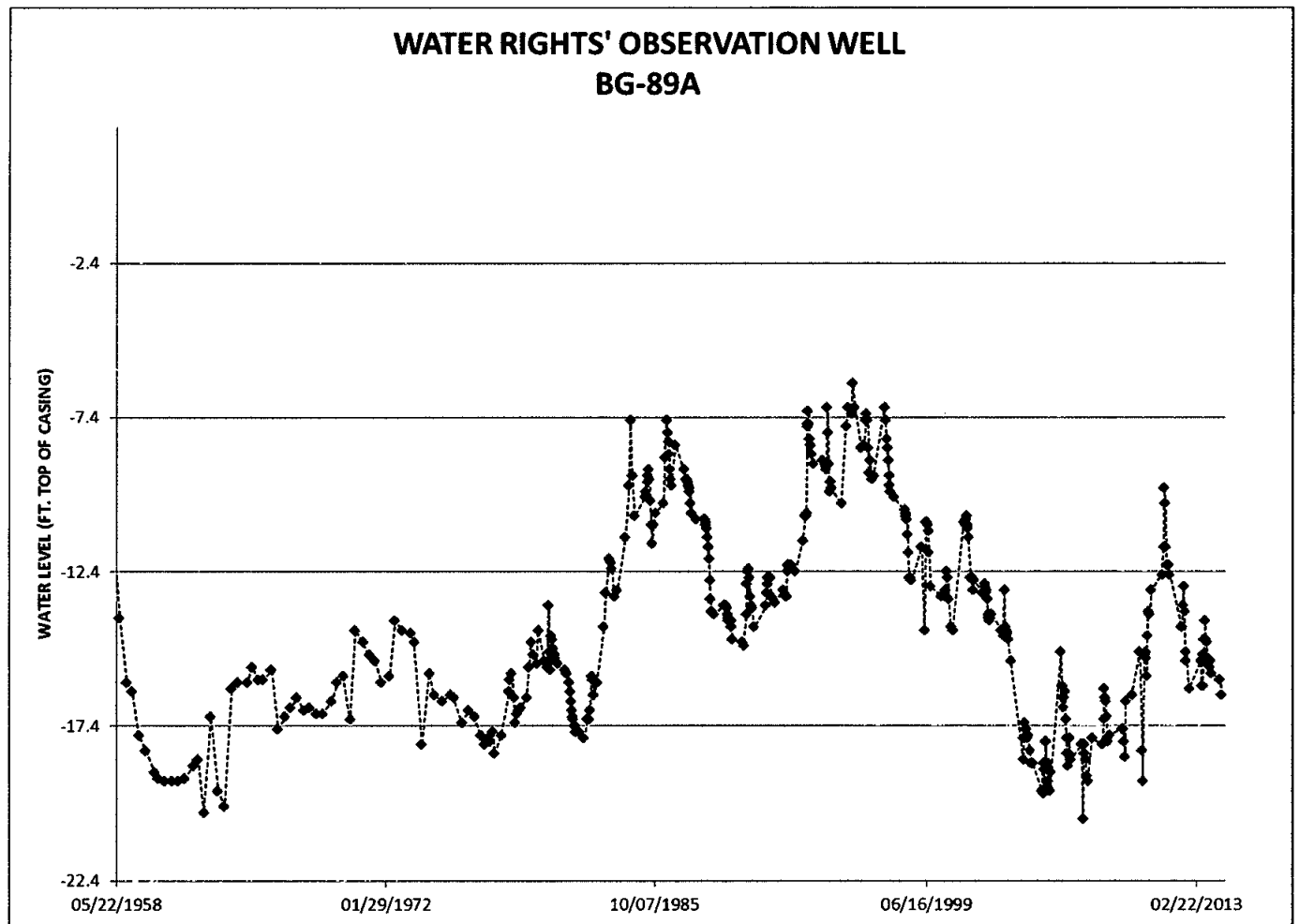


Figure 2: Historic water levels in Observation Well BG-89A (Water Rights, 2014a).

EXISTING WATER RIGHTS:

The Water Rights Program data base was reviewed for nearby water rights/permits and domestic wells that have the potential to experience interference if this application is approved. The nearest water rights/permits not held by the City of Aurora are 7182-3 (located approximately 2,600 feet to the southeast of the eastern well site) and 2161-3 (located approximately 1,700 feet to the southwest of the western well site). Given the small amount of water that the City of Aurora proposes to pump from these wells (15 gpm and 30 gpm, respectively) and the distances between their respective wells and the proposed wells, interference is not expected to be a concern. For the same reasons, the nearest domestic wells (each located approximately 1,000 feet to the northwest of the wells) are not expected to experience interference if this application is approved.

CONCLUSIONS:

- 1) This water permit application proposes to appropriate water at a maximum diversion rate of 0.10 cfs from two wells to be completed into the Big Sioux: Aurora aquifer for the irrigation of 5.07 acres in the City of Aurora. The wells are expected to be approximately 30 feet deep.
- 2) Unappropriated water is available in the northern subunit of the Big Sioux: Aurora aquifer for the proposed use.
- 3) The proposed wells are not expected to adversely or unlawfully impair existing nearby wells.



Bracken Capen
SD DENR-Water Rights Program

Approved by,



Ken Buhler
SD DENR-Water Rights Program

REFERENCES:

- Buhler, K. 2012. Report on Water Permit Application Nos. 7392-3 and 7393-3 for Lincoln Pipestone Rural Water: SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- 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.
- Hansen, H.S. 1988. Appraisal of the Water Resources of the Big Sioux Aquifer, Moody County, South Dakota. Water-Resources Investigations Report 87-4057. USGS, Huron, South Dakota.
- Hedges, L.S., Allen, J., and 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 80-100, 46 p.
- Water Rights. 1980-2013. "Annual Irrigation Summary by Aquifer": SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2013a. Observation Well Files, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2013b. Water Right/Permit Files, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2013c. Water Well Completion Reports, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

RECEIVED

JUL 17 2014

WATER RIGHTS
PROGRAM

Affidavit of Publication

State of South Dakota

ss

County of Brookings

Jennifer Milligan 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

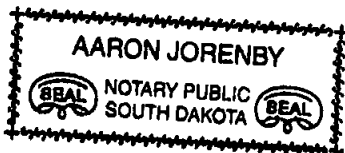
Leg#578 Notice on Application No. 8012-3

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

July 3, 2014

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-three dollars and seventy cents \$23.70



7th day of

July

2014

Notary Public in and for the County of Brookings, South Dakota.
My Commission expires February 22, 2020.

E

Legal 578, 1x, 7/3
NOTICE OF APPLICA-
TION NO. 8012-3 to

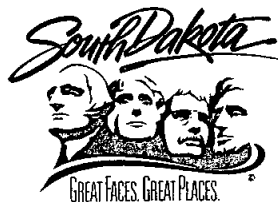
Appropriate Water
Notice is given that the City of Aurora, c/o Andy Struder, PO Box 335, Aurora SD 57002 has filed an application for a water permit to appropriate 0.10 cubic feet of water per second from two wells completed into the Big Sioux: Aurora Aquifer (30 feet deep) located in the SE 1/4 SE 1/4 Section 34 and the SE 1/4 SW 1/4 Section 35 for irrigation of 5.07 acres (city park and ball field) located in the SE 1/4 SE 1/4 Section 34 and SE 1/4 SW 1/4 Section 35; all in T110N-R49W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8012-3 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 this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the

applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by July 14, 2014.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Steven M. Pirner, Secretary, Department of Environment and Natural Resources. Published once at the total approximate cost of \$23.70.



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

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



June 25, 2014

Brookings Register
PO Box 177
Brookings SD 57006

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 8012-3 to Appropriate Water. Please publish the notice once on July 3, 2014. 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 City of Aurora, c/o Andy Struder, PO Box 335, Aurora SD 57002 (Ph # 605-693-3548).

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**

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



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

June 25, 2014

City of Aurora
Andy Struder
PO Box 335
Aurora SD 57002

Dear Mr. Struder:

Water Permit Application No. 8012-3 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 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 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 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 has also been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the application.

Sincerely,

Eric Gronlund
Natural Resources Engineer
(605) 773-3352
enclosures

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

Instruction to Newspaper - Publish the Notice on July 3, 2014. 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 NO. 8012-3 to Appropriate Water

Notice is given that the City of Aurora, c/o Andy Struder, PO Box 335, Aurora SD 57002 has filed an application for a water permit to appropriate 0.10 cubic feet of water per second from two wells completed into the Big Sioux:Aurora Aquifer (30 feet deep) located in the SE 1/4 SE 1/4 Section 34 and the SE 1/4 SW 1/4 Section 35 for irrigation of 5.07 acres (city park and ball field) located in the SE 1/4 SE 1/4 section 34 and SE 1/4 SW 1/4 Section 35; all in T110N-R49W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8012-3 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 this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by July 14, 2014.

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Published once at the total approximate cost of_____.



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

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PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov



AUG 18 2014

City of Aurora
Andy Struder
PO Box 335
Aurora SD 57002

Dear Mr. Struder:

Enclosed is Water Permit No. 8012-3 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

Form 10, *Notice of Completion of Works and Application of Water to Beneficial Use*, is enclosed. Please return this completed form after you have finished the system and have put the water to beneficial use. An investigation can then be scheduled so the water license may be issued, thus completing the acquisition of a water right.

An informational sheet *Common Water Right Questions?* is also enclosed. This sheet is intended to answer some of the questions associated with obtaining and keeping a water right.

Sincerely,

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

enclosures

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

RECEIVED

JAN 02 2015

WATER RIGHTS
PROGRAMDate 12/30/14

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

FROM: City of Aurora
(name)
PO Box 335
(address)
Aurora SD 57002 693 3548
(city, state, zip) (phone)

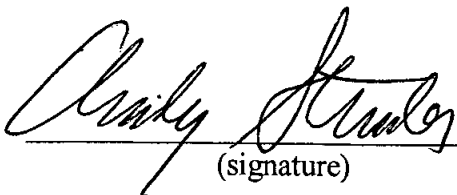
I have completed the construction of the water use system and I have put the water to beneficial use to the maximum extent it is going to be used.

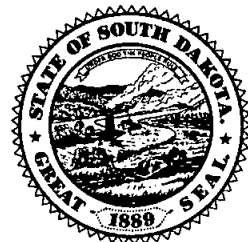
Water Permit No. 8012-3 states that the water use system is to be constructed by July 14 2017, and water is to be put to beneficial use by July 14, 2023.
(date) (date)

The water use system was completed on Aug. 1 2014.
(date)

Applying the water to beneficial use was completed on Aug 1 2014.
(date)

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


(signature)





**DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES**

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



January 5, 2015

8012-3

Andy Struder
City of Aurora
PO Box 335
Aurora SD 57002 0335

Dear Mr. Struder:

I am writing to acknowledge receipt of the "Notice of Completion of Works" form that you sent in to let us know that you are completed with the water use system for the city park and ball field.

The system is 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 your project and the staff inspection has no bearing on your water permit.

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,

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



DENR
SOUTH DAKOTA

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

January 22, 2021

NOTICE

TO: CITY OF AURORA, ANDY STRUDER, PO BOX 335, AURORA, SD 57002 0335

FROM: Ron Duvall, Natural Resources Engineer
for Jeanne Goodman, Chief Engineer
Water Rights Program

SUBJECT: Reporting Requirement for 2020 Irrigation Questionnaire(s)

Our records indicate your 2020 Irrigation Questionnaire(s) has not been submitted for Permit No(s) 8012-3. The request for the Questionnaire was dated October 23, 2020. The Water Management Board has directed that owners of water permits who have not submitted the 2020 Irrigation Questionnaire(s) be given notice of permit violation and a hearing to be held by the Board. The hearing is to determine what action is to be taken for violation of Water Permit No(s) 8012-3 qualification:

"This permit is approved subject to the Irrigation Water Use Questionnaire being submitted each year."

The hearing will be held at **Wednesday, March 3, 2021 at 10:00 am (Central Time)** in the Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol Avenue, Pierre, SD and will be conducted pursuant to SDCL 46-1-12, 46-1-14, 46-2-9, 46-2-11 and 46-2-17. These are contested case hearings pursuant to Chapter 1-26. According to SDCL 46-1-12, the Board may suspend a permit for a period of up to one year for the first violation of a permit qualification or up to three years for a second violation, or cancel a permit for a third violation. Following the hearing, the Water Management Board can:

1. Suspend or cancel Permit No(s) 8012-3 in accordance with applicable provisions of SDCL 46-1-12;
2. Postpone any action; or
3. Take no action.

The hearing is an adversary proceeding. The permit owner has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.

If the questionnaire(s) is (are) received in this office before the **March 3, 2021** hearing you will no longer be in violation of your permit and your name will be removed from the Board agenda. Enclosed are additional questionnaire(s) for your use. If you have questions or need assistance, please contact Genny McMath at (605) 773-3352 or email at genny.mcmath@state.sd.us. **If you prefer, you can complete the questionnaire online at the following link: <https://denr.sd.gov/ig> using this password: SSPISU**

NOTE: Please contact the Water Rights Program, Joe Foss Building, 523 E Capitol, Pierre, SD (605-773-3352) to assure access to the meeting room for the handicapped or to obtain an interpreter for the hearing impaired.



DENR
SOUTH DAKOTA

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

February 23, 2021

8012-3

Shannon Freng, Finance Officer
City of Aurora
PO Box 335
Aurora SD 57002-0335

Dear Ms. Freng:

I am writing to acknowledge receipt of the 2020 irrigation questionnaire pertaining to Water Permit No. 8012-3.

You may disregard the January 22, 2021, "Notice" concerning reporting requirements for the water permit. The information was received in our office prior to the Water Management Board meeting and the issue has been deleted from the agenda.

If you have any questions, please contact me.

Sincerely,

A handwritten signature in blue ink that reads "Genny McMath". The signature is written in a cursive, flowing style.

Genny McMath
Water Rights Program
605 773-3352
Genny.mcmath@state.sd.us

Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 8012-3

I have this day, May 14, 2021, made a thorough examination of the water use system constructed by City of Aurora, PO Box 335, Aurora, SD 57002 of Permit No. 8012-3, bearing the priority of April 30, 2014 authorizing the diversion of 0.10 cu. ft. per second of the waters of Big Sioux: Aurora Aquifer for irrigation purposes, in Brookings County.

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Kaiser Well Drilling
- 2) No. of Wells 2
- 3) Depth(s) 40 & 27 feet
- 4) Well log is available Y If no, explain in comments

Casing:

- 1) Diameter 5 inches
- 2) Length 30 & 21 feet
- 3) Type Plastic

Screen:

- 1) Type Manufactured
- 2) Length 10 & 6 feet
- 3) Static water level 10 & 9 feet

Pump:

- 1) Make NA
- 2) Model Submersibles
- 3) Size NA
- 4) Capacity NA GPM

Motor:

- 1) Make NA
- 2) Model No. NA
- 3) Horsepower rating NA hp

C. Works used to apply water to beneficial use:

See Comments Section

Chemigation Equipment: None

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by Y
- 2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period Y
- 3) Exceptions to compliance are: NONE

E. Condition and Location:

The system is in good condition with the points of diversion located as follows:

BALL FIELD WELL From the SE corner of Sec 34 T110N-R49W, 665 ft N & 680 ft W Lat 44.28397 Long -96.69020 (SE ¼ SE ¼ of Sec 34) irrigating 4.3 acres in the SE ¼ SE ¼ Section 34, T110N, R49W

PARK WELL From the SW corner of Sec 35 T110N-R49W, 1010 ft N & 2230 ft E Lat 44.28490 Long -96.67901 (SE ¼ SW ¼ of Sec 35) irrigating 0.7 acres in the SE ¼ SW ¼ Section 35, T110N, R49W

License should be issued for 5.0 acres and 0.10 cfs.

All structures, wells and lands on map Y

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

A visit with "Joe" (via telephone), the person who manages the irrigation for the city, indicated that he uses a garden hose-lawn type sprinkler system as irrigation equipment. He primarily only waters the infield grass of the ballpark because there has been little need for more areas to be irrigated due to adequate rainfall in recent years. The approximately 5.0 acres (0.7 Park & 4.3 Ball park) of potential irrigated areas seems to be a reasonable maximum value for consideration.



Darrell W DeBoer
Water Rights Inspector
DANR, Water Rights Program

Date report completed: May 19, 2021

per inspection km

8012-3

SD EForm - 1621LD V1

SOUTH DAKOTA WATER WELL COMPLETION REPORT

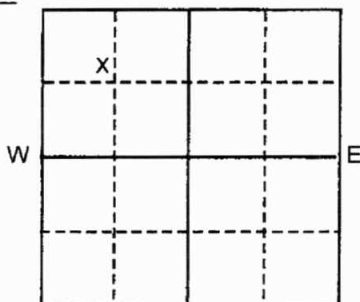
11-02

Location NW 1/4 NW 1/4 Sec 2 Twp 109N Rg 49W

County BROOKINGS

North

Please mark well location with an "X"



Well Completion Date

11-7-2013

1 Mile

Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?

5,000.0 ft. from WELL (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

DRD

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
40.0 LB/FT	5.00 IN	0.0 FT	30.0 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
GWDF	7	54.0 Lb/gal	0.0 Ft	30.0 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure
TREMIE/ PPM

SCREEN:

☐ Perforated pipe ☒ Manufactured

Diameter 5.00 Inches Length 10.0 Feet

Material PLASTIC

Slot Size .035 Set From 30.0 Feet to 40.0 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?

☐ No, Why Not?

Lab to which water quality sample sent for analysis

NO PUMP INSTALLED

Well Owner: CITY OF AURORA

Business Name:

Address: PO BOX 335

City, State, Zip: AURORA SD 57002

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
TOP SOIL	0	2
YELLOW MIX GRAVEL	2	17
FINE-MED-	17	30
MED-COURSE	30	40

STATIC WATER LEVEL 10.0 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

25.0 Ft. After 4.0 Hrs. pumped 75.0 GPM

Ft. After Hrs. pumped GPM

If pump installed, pump rate: GPM

REMARKS

RECEIVED

JAN 31 2014

WATER RIGHTS PROGRAM

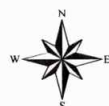
This well was drilled under license # 689 and this report is true and accurate.

Drilling firm: KAISER WELL DRILLING INC

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date:



0 0.075 0.15 0.3 0.45 0.6 Miles



Darrell DeBoer
Water Right Inspector
DANR-Water Rights Program



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**
JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

8012-3

AUG 09 2021

Shannon Freng, Finance Officer
City of Aurora
PO Box 335
Aurora SD 57002-0335

Dear Ms. Freng:

Enclosed is Water License No. 8012-3. 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 in the future, the owner of an existing well, 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, State Water Laws provide that you have a continuing right to use the water. If you have any questions, please contact our office.

Sincerely,

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

enclosures

**STATE OF SOUTH DAKOTA
WATER LICENSE NO. 8012-3**

(1) The City of Aurora, PO Box 335, Aurora SD 57002 made Application No. 8012-3, April 30, 2014 for a water permit to divert 0.10 cubic feet of water per second from ground water, two wells (Big Sioux Aurora Aquifer), Brookings County, South Dakota for irrigation purposes. Permit No. 8012-3, with a priority date of April 30, 2014 was approved July 14, 2014 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before July 14, 2019 and for the application to beneficial use of said water on or before July 14, 2023.

(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 0.10 cubic feet of water per second for beneficial use. The location of the diversion points are as follows:

Ball Field Well: 665'N and 680'W of the SE corner of Section 34, T110N, R49W (SE ¼ SE ¼)
Latitude 44.28397, Longitude -96.69020

City Park Well: 1,010'N and 2,230'E of the SW corner of Section 35, T110N, R49W (SE ¼ SW ¼)
Latitude 44.28490, Longitude -96.67901

(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 a total of 5.0 acres located as follows:

- 4.3 acres - SE ¼ SE ¼ Section 34, T110N, R49W (ball field)
- 0.7 acres - SE ¼ SW ¼ Section 35, T110N, R49W (city park)

(4) Pursuant to South Dakota Water Law 46-5-30.1 City of Aurora, PO Box 335, Aurora SD 57002 the holder and/or owner of Water Right No. 8012-3 is issued a license to appropriate water, the right to use 0.10 cubic feet of water per second from ground water, two wells (Big Sioux Aurora Aquifer) with a priority date of April 30, 2014 from the locations specified in (2) of this license for irrigation purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 8012-3 and subject to the following qualifications:

- The wells approved under this water right will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this water right 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.
- This Water Right is approved subject to the irrigation water use questionnaire being submitted each year.


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

AUG 09 2021

date

