

WATER PERMIT NO. 2741-2

Name of Applicant: Tubbs Land and Cattle LLC

Address: PO Box 563, Edgemont SD 57735

Phone: 605 890-7633

Amount of Water Claimed: 3.33 cfs (65 AF storage capacity)

Total Acres: 567

Source of Water Supply: one well – Madison Aquifer

Water to be used for: irrigation

County: Fall River

Type of Waste Disposal System:

Location: 7 miles west and 7 miles north Edgemont

PRIORITY

Date Received: 9-18-17

Application/License Fee: \$ 1,750

Corrected Application Received: 8-²⁰-18

Period of Annual Use: March 1 – October 1

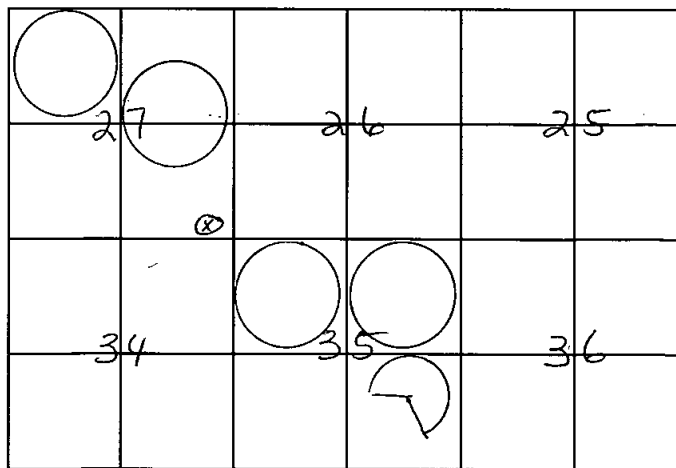
Remarks: Pump from well to storage dam

Diversion Point (well and dam): SE 1/4 SE 1/4 Sec

27-T7S-R1E

Land to be Irrigated: N 1/2, SE 1/4 Section 35 and

NW 1/4, E 1/2 Section 27; all in T7S-R1E



Depth of Well: 3150 feet deep

Well Driller:

Remarks:

Type of Map:

Prepared by:

Reviewed and the Number Assigned on: 8-20-18

By: Karen Schlaak

Notice of Hearing - date to intervene: _____

FORM 2: Application for irrigation in South Dakota
(type or print)

Mail to: DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>2741-2</u>	(office use only) Hydrologic Unit <u>10120106</u>
	Basin <u>Upper Cheyenne</u>	
	Newspaper <u>Edgemont Herald-Tribune Edgemont</u> <u>605 662-7201 (Wed)</u>	
	<u>Rapid City Journal 605 394-8300</u>	

RECEIVED

SEP 18 2017

WATER RIGHTS
PROGRAMAmendment received
8/20/2018

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 TUBBS LAND AND CATTLE, LLC

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

Mailing Address PO BOX 563 EDGEMONT SD 57735
(Address) (City) (State) (Zip Code)

Phone 605-662-7302 Mobile 605-890-7633 Email mtubbz@gwtc.net

2. Amount of water claimed 3.34 *CFS or 1500 **GPM 65 ***AF Total Acreage 551 567
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply Madison Formation

4. Location of point of diversion 1 well in SE 1/4 SE 1/4 35 T7S, R1E (dam site also)
(example - 3 wells in SW 1/4 NE 1/4 section 12-T104N-R35W)

Well: NW 1/4 NW 1/4 Section 35-T7S-R1E County Fall River

5. County or counties where water will be used Fall River

6. Annual period during which water is to be used Spring and Summer (March 1 - October 31)

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 SECT 35 T7S R1E	122	E 1/4 SECT 27 T7S R1E	136
NW 1/4 SECT 35 T7S R1E	137		
SE 1/4 SECT 35 T7S R1E	61		
NW 1/4 SECT 27 T7S R1E	111		

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

Drill well into the Madison Formation to allow the use of five pivots and winter storage and a cooling pond if water is too hot to apply immediately. The winter storage and cooling pond would be constructed as depicted in the attached maps in the E 1/4 of Sect 2 T8S R1E, south of the existing Moss Agate Dam.

Tubbs Land & Cattle LLC
by Mark K. Tubbs member
Name of Person Title (if applicable)

the applicant, certify under

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

SOUTH DAKOTA
WATER PERMIT NO. 2741-2

Date of first receipt of application September 18, 2017.

Date of receipt of corrected application August 20, 2018.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 2741-2 to Tubbs Land and Cattle LLC, c/o Mark Tubbs, PO Box 563, Edgemont SD 57735 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. 2741-2 appropriates 3.34 cubic feet of water per second from one well to be completed into the Madison Aquifer (3,150 feet deep) located in the NW 1/4 NW 1/4 Section 35 for irrigation of 567 acres located in the N 1/2, SE 1/4 Section 35 and the E 1/2, NW 1/4 Section 27; all in T7S-R1E. This permit authorizes impoundment of 65 acre-feet of water by constructing a dam and impounding water in the SW 1/4 SE 1/4 Section 27-T7S-R1E. Water is to be pumped from the well into the storage dam prior to being applied to the irrigated acres. This site is located approximately 7 miles west and 7 miles north of Edgemont SD.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: March 1 – October 1.
3. The date from which applicant may claim right is August 20, 2018.
4. The date of approval of Permit No. 2741-2 is December 31, 2018.
5. One-fifth of the construction is to be completed on or before June 30, 2021.
6. All construction is to be completed on or before December 31, 2023.
7. Water is to be put to beneficial use on or before December 31, 2027.
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. In accordance with SDCL 46-1-14 and 46-2A-20, Permit No. 2741-2 is issued for a twenty year term. Pursuant to SDCL 46-2A-21, the twenty year term may be deleted at any time during the twenty year period or following its expiration. If the twenty year term is not deleted at the end of the term, the permit may either be cancelled or amended with a new term limitation of up to twenty years. Permit No. 2741-2 may also be cancelled for nonconstruction, forfeiture, abandonment or three permit violations pursuant to SDCL 46-1-12, 46-5-37.1 and ARSD 74:02:01:37.
2. The well will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner, under these Permits shall control withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.

(continued)

3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.
4. Water Permit No. 2741-2 authorizes an impoundment with a storage capacity of 65 acre feet of water.
5. Final engineering plans and specifications for the dam pursuant to Administrative Rule of South Dakota 74:02:08:09 shall be submitted for review and approval. Construction of the dam cannot occur until the final plans and specifications are approved by the Chief Engineer.

WATER MANAGEMENT BOARD

By: _____

Jeanne Goodman
Jeanne Goodman, Chief Engineer
Water Rights Program

Department of Environment and Natural Resources

JAN 31 2019

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 1 Have test holes been drilled ☐ Yes ☒ No Drilled by _____
(if yes, please provide copies of logs)

b) If existing wells, how many 0 Provide copy of log(s), if available. Drilled by _____

For either Existing or Proposed Wells:

c) Well Depth (required) 3150 Depth to Top of Water Bearing Material 2850 Depth to Water from Surface 0

d) Distance to nearest domestic well on applicant's property Madison Formation $\frac{1}{4}$ mile not Property owned by others Madison Formation $1 \frac{1}{4}$ mile not

2. Wastewater Disposal System Information

a) Type of System (i.e. septic tank, drain field) N/A

b) System Capacity (gallons) _____ Year Constructed _____

c) Connected to the City of _____ Sanitary System

3. Dugout Information

a) Surface Dimensions N/A 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:

Roy E. Boschee, PE
414 E. Stumer Road, Ste 700
Rapid City, SD 57701
605-343-1643 ext 132
Roy.Boschee@sd.usda.gov

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)

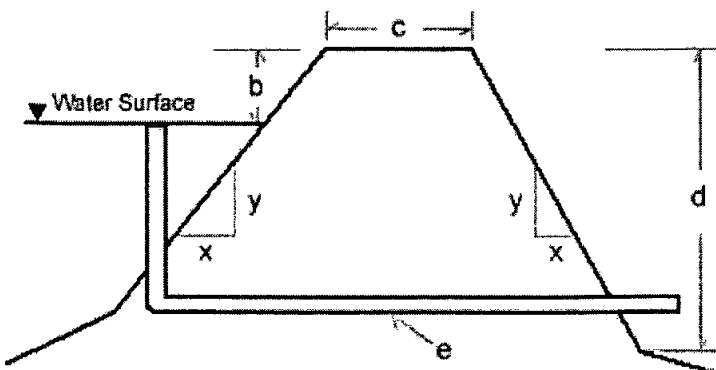
Upstream _____

Downstream _____

h) Surface Area of Impoundment _____

i) Storage _____ Acre Feet

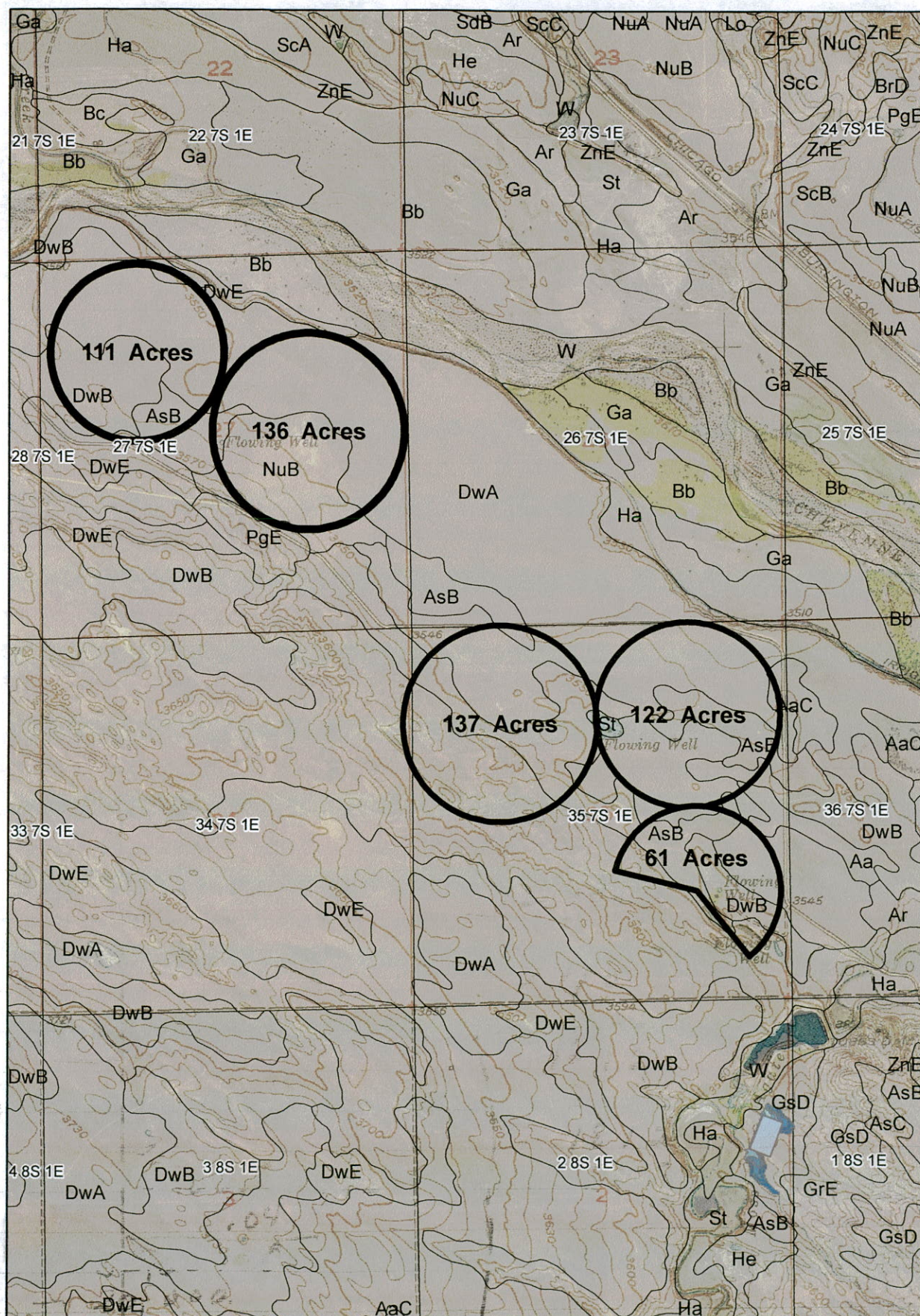
j) Drainage Area Above Dam _____ Acres



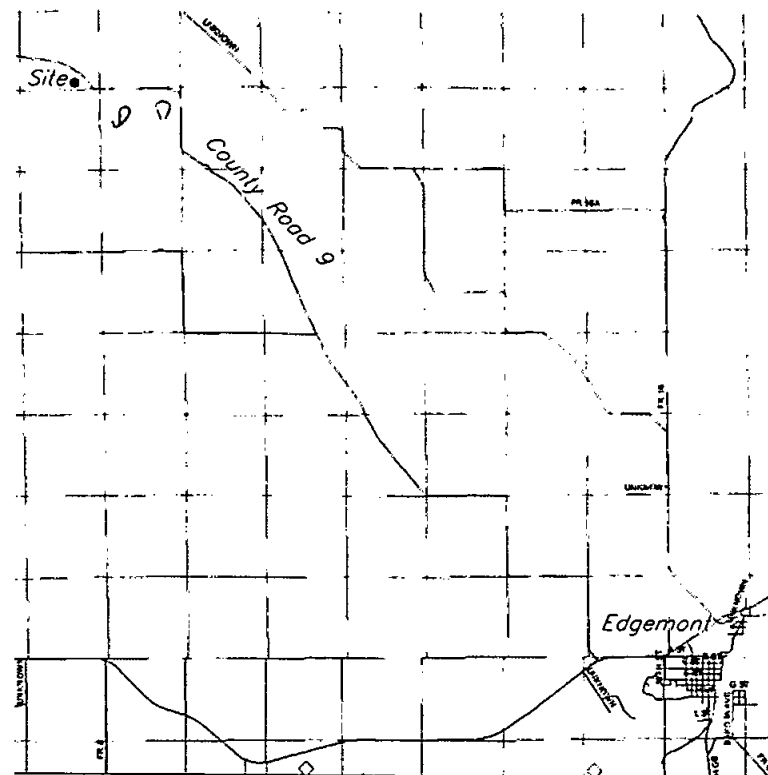
**TUBBS MADISON WELL
ESTIMATED WELL COST
TABLE 1**

Item	Description	Quantity	Unit	Unit Price	Total Amount
1	Mobilization & Demobilization	1	L.S.	\$21,500.00	\$21,500.00
2	Drilling Mud & Chemicals	1	L.S.	\$8,700.00	\$8,700.00
3	Drill for, Furnish, Install, & Cement 10-inch Surface Casing	120	L.F.	\$88.00	\$10,560.00
4	Drill Minimum 9 7/8-inch Diameter Hole	2,850	L.F.	\$63.00	\$179,550.00
5	Open Hole Geophysical Log	1	L.S.	\$7,900.00	\$7,900.00
6	Furnish & Install 7-inch O.D. 23#/Foot Steel Casing	2,850	L.F.	\$29.00	\$82,650.00
7	Furnish and Install Cement Seal	1	L.S.	\$33,840.00	\$33,840.00
8	Drill 6 1/4-inch Diameter Hole	300	L.F.	\$38.00	\$11,400.00
9	Well Development and Rig Time	12	Hours	\$375.00	\$4,500.00
10	8-Inch Gate Valve and Accessories	1	L.S.	\$2,450.00	\$2,450.00
11	On-site Geology	2	Day	\$850.00	\$1,700.00
12	Well Testing & Report	1	L.S.	\$3,200.00	\$3,200.00
TOTAL ESTIMATED COST					\$367,950.00

Note: Final billing to be based on actual quantities and hours completed.
Prices subject to applicable sales/use/excise tax.



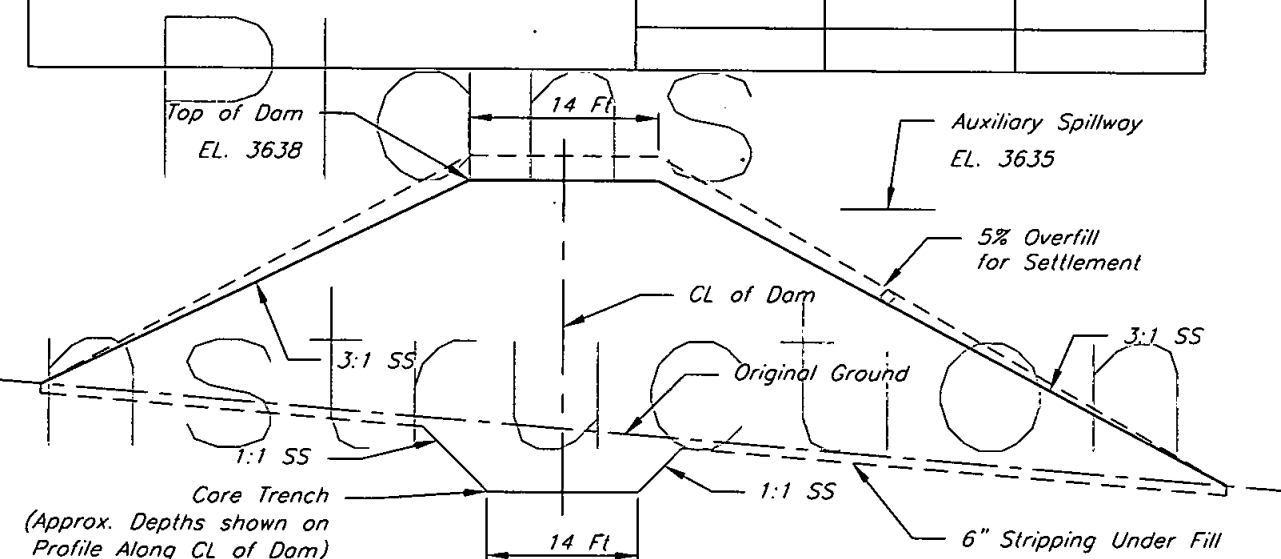
15,624



SW 1/4, Sec. 27, T. 7S, R. 1E
Fall River County, South Dakota
LOCATION MAP

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AUG 20 2018
WATER RIGHTS
PROGRAM

TABLE OF QUANTITIES			
ITEM	UNIT	QUANTITY	AS-BUILT
Earthfill Class A - Embankment	Cu. Yd.	59559	
Designated Borrow	Cu. Yd.	61620	
Earthfill Class A - Core Trench	Cu. Yd.	2624	
Bentonite Fill	Cu. Yd.	27	
Earthfill Class A - Stripping	Cu. Yd.	2224	
Total Earthfill	Cu. Yd.	67500	
Topsoil Auxiliary Spillway	Cu. Yd.	150	
Seeding (Earthfill and Auxiliary Spillway)	Acre	3.08	
15" Dia. PVC SDR 26 Pipe	Lin. Ft.	250	
36" Dia. 4' Tall Riser and Base	Each	1	
with Trash Rack and Baffle	Each	1	



TYPICAL CROSS SECTION OF DAM

INDEX OF DRAWINGS

- Cover Sheet
- Plan View and Design Data
- Watershed Plan View
- Profile of Dam and Auxiliary Spillway and Cross-Section of Auxiliary Spillway
- Profile of Principal Spillway and Maximum Cross-Section of Dam
- Concrete Riser Detail

STATEMENT OF COMPLIANCE

Construction (was) (was not) completed in accordance with approved construction plans and specifications.

JAA Date

GENERAL NOTES

- If cultural resources are discovered during construction, discontinue construction and notify the local Natural Resources Conservation Service office.
- The landowner is responsible for complying with all federal, state, and local laws.

CONSTRUCTION NOTES

- Clear and grub the entire area within the work limits.
- All fill material must not contain frozen material, sod, roots, or other perishable material, or rock larger than eight inches in diameter as described in SD Construction Specification SD-75.
- Any shale, gravel, or sand that is exposed during borrow operations shall be immediately backfilled with 2 feet of clay material.
- Six inches topsoil will be incorporated into the earthfill to meet the neat lines shown on the typical section.
- All areas top-dressed with topsoil and disturbed during construction will be seeded according to SD Construction Specification SD-28.
- Pool area will have 18" of compacted clay liner

NRCS HAZARD CLASS A
NRCS JOB CLASS ---

SD CONSTRUCTION AND
MATERIAL SPECIFICATIONS

- SD-4 Stripping
SD-5 Excavation
SD-75 Earthfill - Class A
SD-8 Rock Riprap And Bedding
SD-10 Salvaging And Spreading Topsoil
SD-12A Concrete (Class 3500)
SD-13 Steel Reinforcement
SD-14 Wood And Steel Structures
SD-28 Seeding
SD-55 Plastic Pipe
SD-592 Geotextile

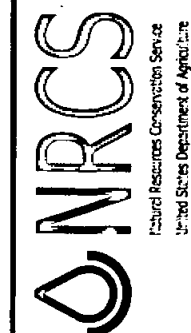
For A Full Text Version See
http://www.sd.usda.gov/technical/SD_Engineering.html

NO EXCAVATOR MAY BEGIN ANY EXCAVATION WITHOUT FIRST NOTIFYING THE ONE-CALL NOTIFICATION CENTER OF THE PROPOSED EXCAVATION AT 1-800-781-7474.

POND WITH PRINCIPAL SPILLWAY PIPE
JOB PLAN 1.0P REV. 1/2012

NAME: 378 POND
COVER SHEET
Date 7/19/2018
Designed SH
Drawn SH
Checked
Approved

SW 1/4, Sec. 27, T. 7S, R. 1E
Fall River County, South Dakota



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Drawing No.

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Sheet 1 of 6

HYDRAULIC DATA		
Drainage Area	18	Acres
Annual Runoff Yield (50% Chance)	0.09	Ac. Ft
Time of Concentration	0.19	Hours
Runoff Curve Number	61	
Auxiliary Spillway, 50 Year - 24 Hour Rainfall	4.20	Inches
Peak Runoff 50 Year - 24 Hour Rainfall	18	CFS
		CFS
		CFS
Auxiliary Spillway Discharge	4.70	CFS
Auxiliary Spillway Flow Depth	0.25	Feet

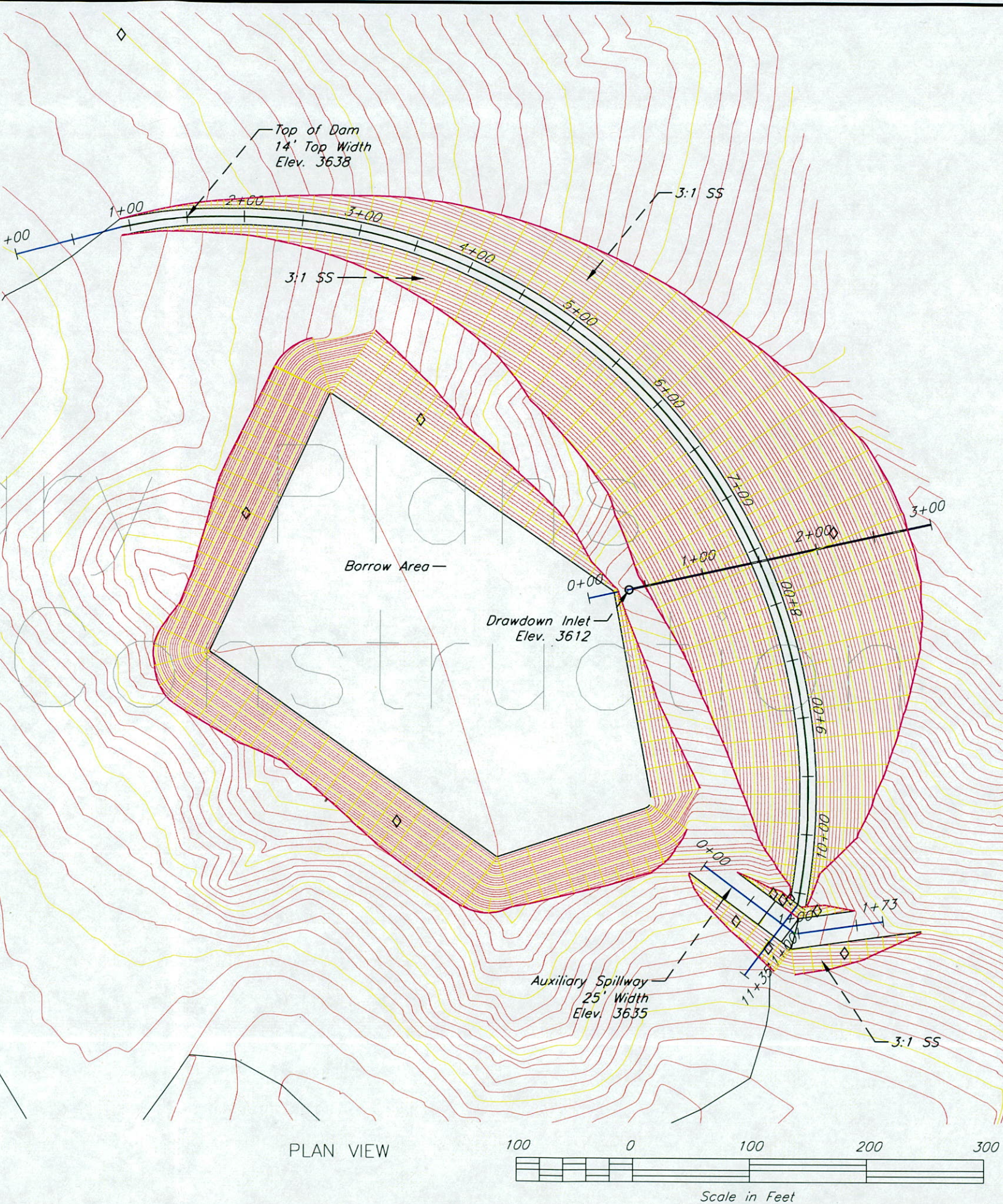
STRUCTURE DATA		
Length of Top of Dam	984	Feet
Height of Downstream Toe to Top of Dam	40.0	Feet
Effective Height	31.0	Feet
Product of Storage X Effective Height	1820	

POOL DATA			
	ELEV.	AREA	STORAGE
Crest of Auxiliary Spillway	3635	5.76 Ac.	65 Ac.-Ft
Top of Dam	3638	7.91 Ac.	84.9 Ac.-Ft

SEDIMENT YIELD					
Erodibility Area	Gross Rate (A.F./Ac./Yr.)	Drainage Area (Acres)	Delivery Rate (%)	Design Period (Years)	Required Sediment Volume (Ac.-Ft.)

CONSTRUCTION NOTES

- Pool area will have 18" of compacted clay liner

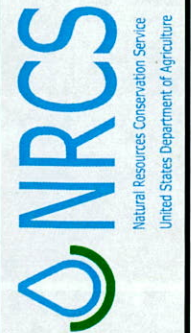


Date	7/19/2018	7/19/2018	
Designed	SH	SH	
Drawn	SH		
Checked			
Approved			

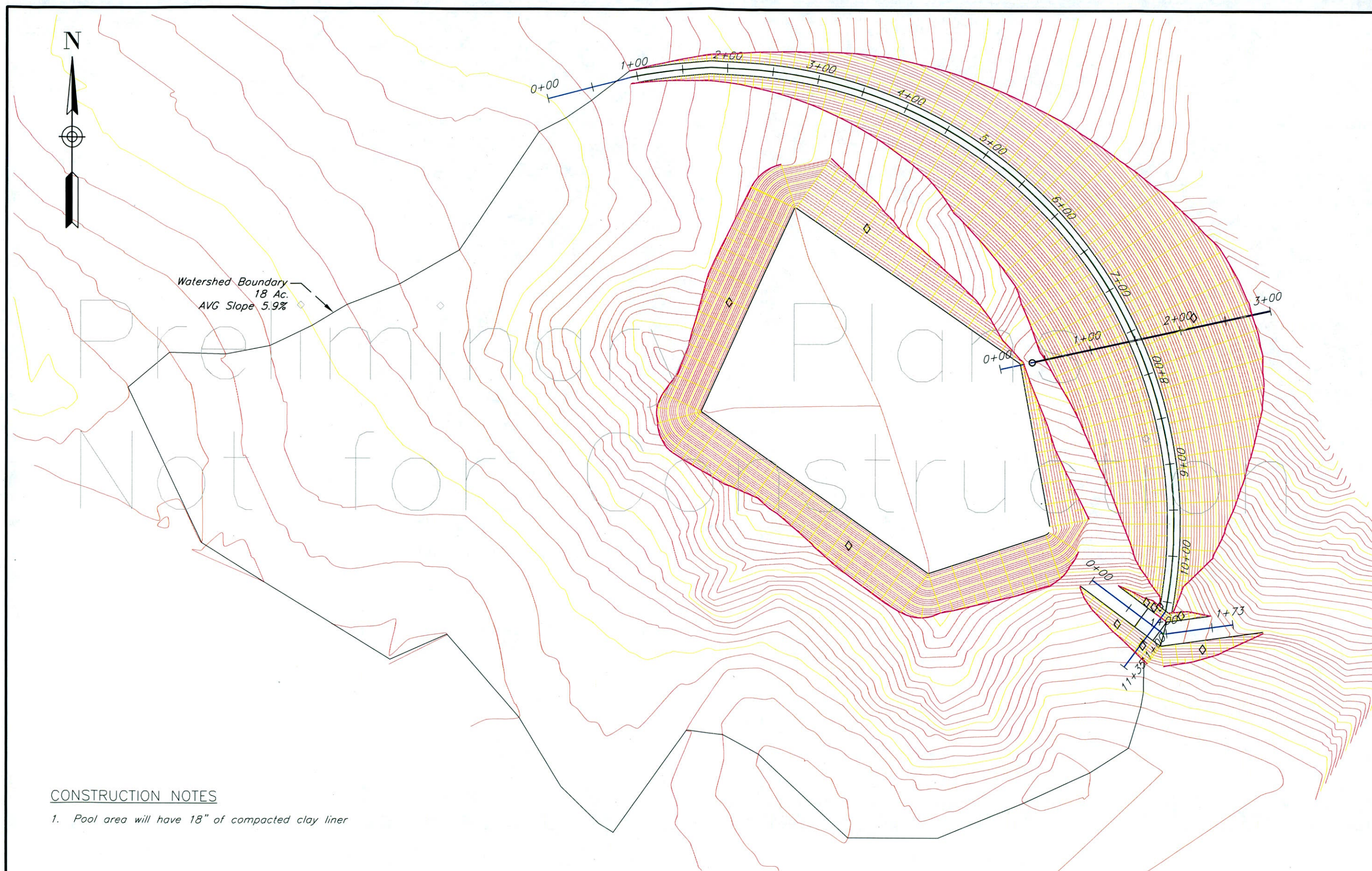
NAME: 378 POND

PLAN VIEW AND DESIGN DATA

SW 1/4, Sec. 27, T 7S, R 1E Fall River County, South Dakota



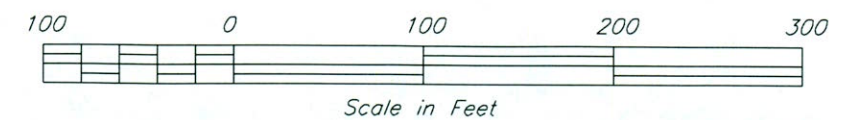
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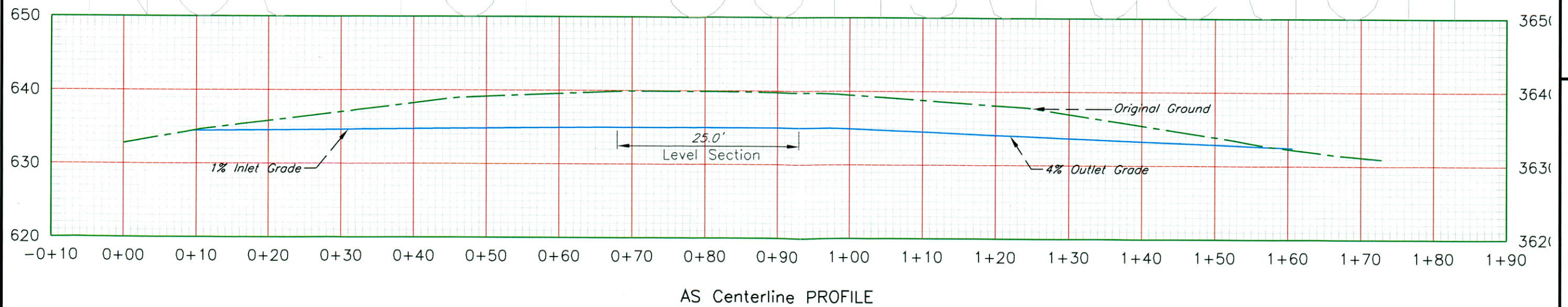
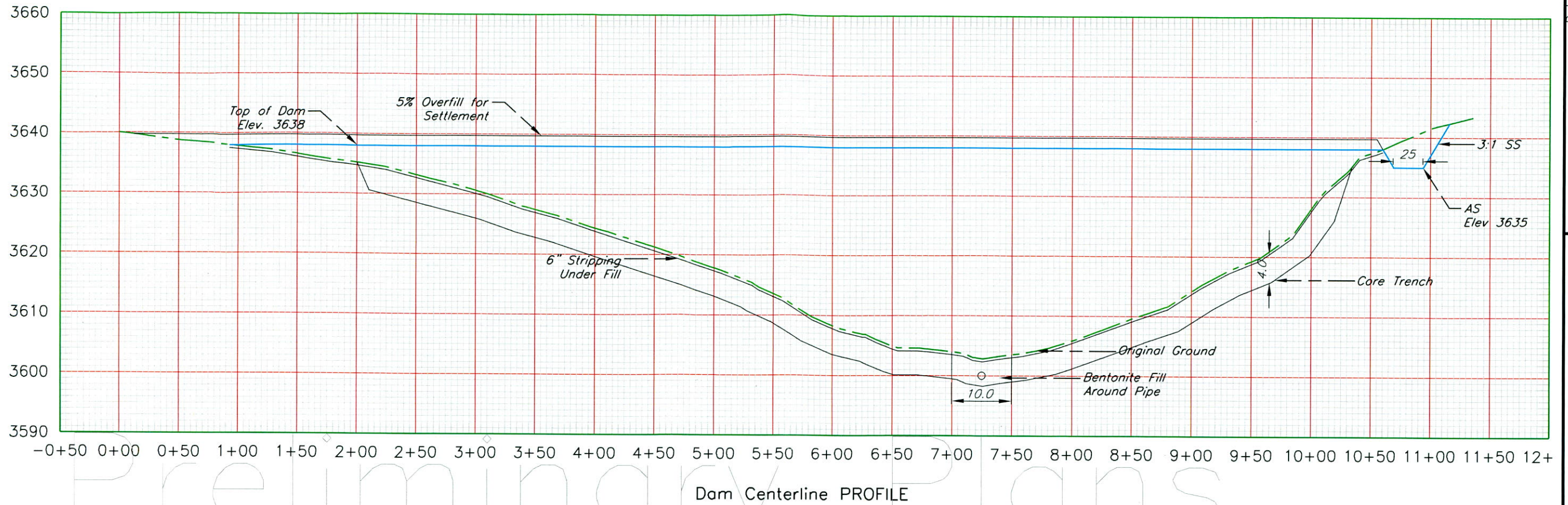
CONSTRUCTION NOTES

- 1. Pool area will have 18" of compacted clay liner

PLAN VIEW



 Natural Resources Conservation Service United States Department of Agriculture	NAME: 378 POND PLAN VIEW	Designed SH Drawn SH Checked Approved	Date 7/19/2018 7/19/2018
	SW 1/4, Sec. 27, T 7S, R 1E		
	File No. Tubbs.dwg		
	Drawing No. -		
	7/19/2018 3:11 Sheet 3M of 6		



Date	7/19/2018
Designed SH	SH
Drawn SH	SH
Checked	
Approved	

NAME: 378 POND

EARTH DAM PROFILES AND CROSS-SECTIONS

SW 1/4, Sec. 27, T 7S, R 1E Fall River County, South Dakota



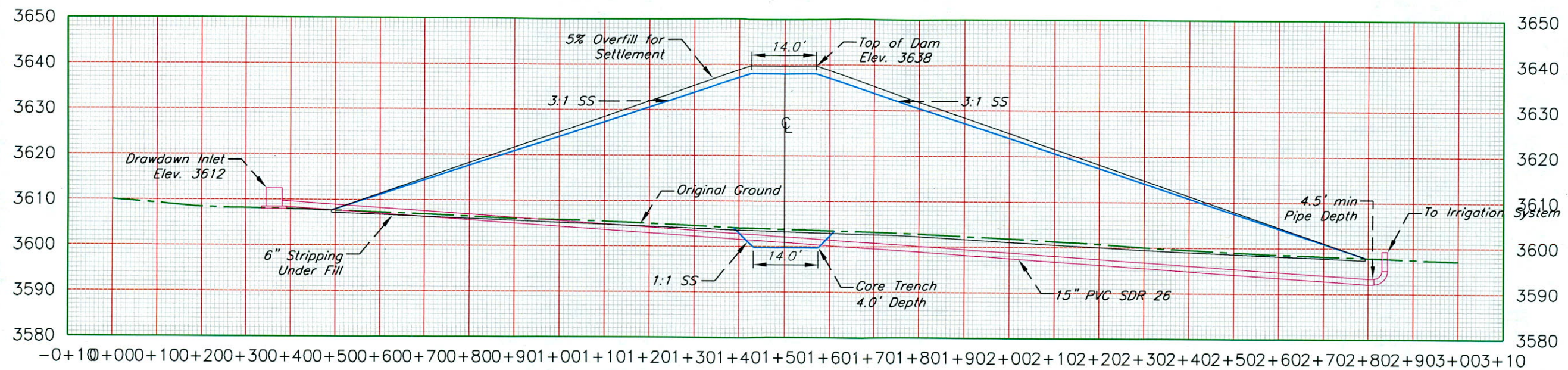
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Drawing No.
-

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Sheet 4 of 6

Preliminary Plans

Not for Construction



pipe PROFILE

CONSTRUCTION NOTES

1. The section of core trench surrounding the pipe will be filled with bentonite clay

TRENCH SAFETY NOTES

1. All trench work shall comply with the Occupational Safety and Health Administration (OSHA) regulations.
2. Any trench over four (4) feet deep shall have a means of egress from the trench by a ladder, ramp, or other means of egress; and
3. Any trench over five (5) feet deep shall be protected from cave-ins by a sloping, benching or shoring protection system. Benches must be constructed so the overall slope meets the slope required by OSHA regulations.

PRINCIPAL SPILLWAY AND MAXIMUM
CROSS-SECTION DAM PROFILES

Designed SH 7/19/2018
Drawn SH 7/19/2018
Checked
Approved

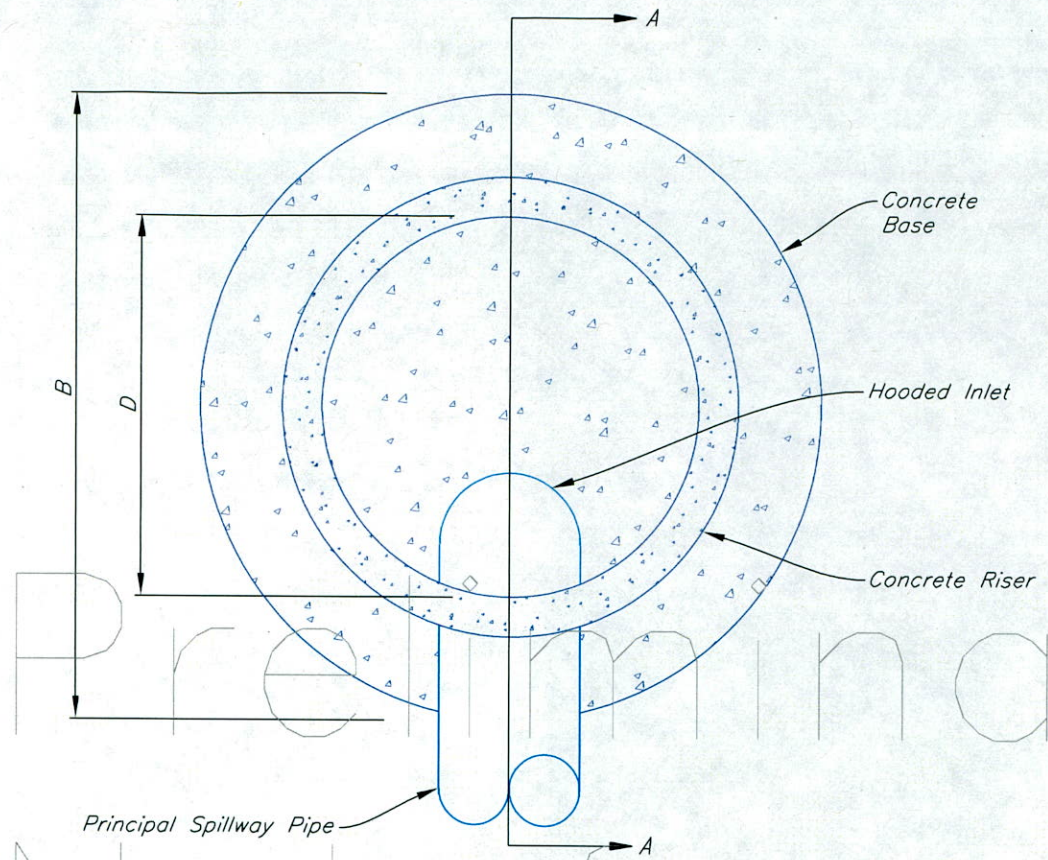
NAME: 378 POND
PROFILE OF PRINCIPAL SPILLWAY
SW 1/4, Sec. 27, T 7S, R 1E
Fall River County, South Dakota

NRCS
Natural Resources Conservation Service
United States Department of Agriculture

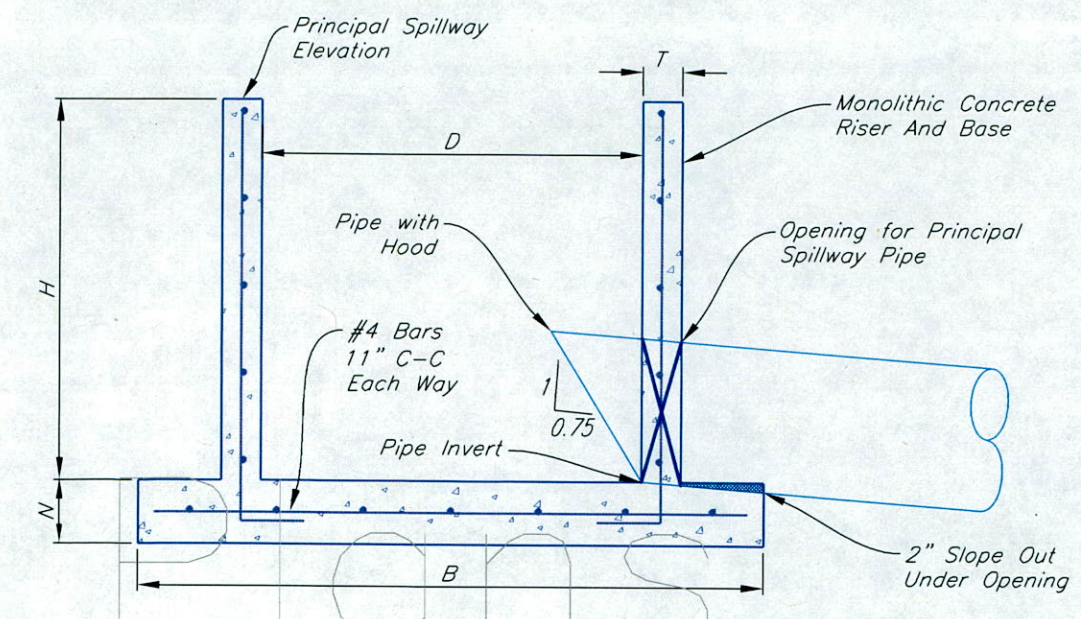
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Sheet 5 of 6



PLAN VIEW PRECAST RISER AND BASE



SECTION VIEW A-A

CONSTRUCTION NOTES

1. The riser and base is precast reinforced concrete and is manufactured according to ASTM C478 Standard Specification For Precast Reinforced Concrete Manhole Sections.
2. Provide a watertight joint between the precast concrete riser and the principal spillway pipe barrel.
3. Contact NRCS prior to installation for other options for the construction of the riser if a precast monolithic riser and base is not used.

GUIDE TABLE FOR PRECAST RISER AND BASE DIMENSIONS						
(D) RISER DIAMETER	(H) RISER HEIGHT	(T) WALL THICKNESS	(B) BASE DIAMETER	(N) BASE THICKNESS	ESTIMATED WEIGHT	DIA. PIPE BARREL
30"	4'	3.5"	51"	6"	2,600 LBS	10" to 18"
30"	4.5'	3.5"	51"	6"	2,790 LBS	10" to 18"
30"	5'	3.5"	51"	6"	2,980 LBS	10" to 18"
36"	4'	4"	64"	6"	3,770 LBS	10" to 24"
36"	4.5'	4"	64"	6"	4,030 LBS	10" to 24"
36"	5'	4"	64"	6"	4,290 LBS	10" to 24"
36"	5.5'	4"	64"	6"	4,550 LBS	10" to 24"
36"	6'	4"	64"	6"	4,815 LBS	10" to 24"
48"	4'	5"	79"	8"	6,870 LBS	10" to 30"
48"	4.5'	5"	79"	8"	7,300 LBS	10" to 36"
48"	5'	5"	79"	8"	7,740 LBS	10" to 36"
48"	5.5'	5"	79"	8"	8,170 LBS	10" to 36"
48"	6'	5"	79"	8"	8,600 LBS	10" to 36"

PRECAST CONCRETE RISER AND BASE
WITH HOODED INLET
REV. 1/2012

NAME: 378 POND

PRECAST CONCRETE RISER AND BASE WITH HOODED INLET

SW 1/4, Sec. 27, T 7S, R 1E

NRCS
Natural Resources Conservation Service
United States Department of Agriculture

File No.
Tubbs.dwg

Drawing No.
-

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Sheet 6 of 6

Designed SH 7/19/2018

Drawn SH 7/19/2018

Checked

Approved

Fall River County, South Dakota

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 6/29, 20 15

RECEIVED OF Tubbs Land & Cattle LLC PO Box 563 Edgemont SD 57735

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

Fee for Application for Permit No. <u>2741-2</u> to Appropriate Water, to construct and to put water to beneficial use	1050	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>2741-2</u>	280	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	1250 00

No. **0744U**

By Jeanne Goodman
Chief Engineer

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date September 18, 2007

RECEIVED OF Tabbs Land & Cattle, LLC PO Box 563 Edgemont, SD 57736

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

Fee for Application for Permit No. <u>27412</u> to Appropriate Water, to construct and to put water to beneficial use	500	00
Fee for Application for Permit No. _____ to Appropriate Water for Future use		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____		
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	500 00

No. **08332**

By Jeanne Goodman
Chief Engineer 642

Entity Detail File Annual Report Statement of Change Forms

Name **TUBBS LAND & CATTLE, L.L.C.** [Obtain a Certificate of Good Standing](#)
 Corporate ID **DA001090**
 Incorporation/Qualification Date **1/2/1997**

Home State **SOUTH DAKOTA**
 Status **Good Standing**
 Last Annual Report **2015**
 Corporation Type **Domestic LLC Farm**
 Stock Info

Registered Agent Documents Officers

Year	Director	Officer Type	First	Middle	Last	Address	City	State	Zip	Country
2015	☐	member	MARK	K	TUBBS	10891 RIVER ROAD	EDGEMONT	SD	57735	USA
2015	☐	member	VIRGINIA	R	TUBBS	404TH AVE	EDGEMONT	SD	57735	USA

**Application
No. 2741-2**

Water Rights Program - DENR
Conversation File Documentation

NAME OF PERSON OR FILE: Application No. 2741-2, Tubbs Land and Cattle LLC

ADDRESS: PO Box 563, Edgement SD 57735 COUNTY: Fall River

DATE: September 24, 2018 TELEPHONE: 605 890-7633

RE: Clarification of location of well and dam for Application No. 2741-2

Mark Tubbs called regarding the locations of the dam and well for his proposed irrigation project.

He indicated the dam will be located in the SW ¼ SE ¼ Section 27-T7S-R1E. They were out in the field today and measured the location with a range finder.

He also stated that the Madison aquifer well is to be located in the NW ¼ NW ¼ Section 35-T7S-R1E.

NAME: Eric Lundberg



1050 North 3rd Street, Suite E
Laramie, Wyoming
307.745.6118 phone / 307.745.6408 fax
email: laramieoffice@westonengineering.com

September 13, 2017

Mr. Mark Tubbs
HC 68, Box 21
Edgemont, SD 57735

RE: Madison Limestone Water Well in Section 35, Township 7 South, Range 1 East,
Fall River County, South Dakota

Dear Mr. Tubbs:

Thank you for contacting us in regards to a new Madison Limestone water supply well in Section 35, Township 7 South, Range 1 East. Per our recent telephone discussion, we are providing you with some information gathered from our previous investigations into well location, depth, and costs.

In our April 6, 2004 letter, we summarized the local geologic setting on property you own north-northeast of Edgemont, South Dakota, including lands near the reservoir just south of the southeast corner of Section 35. We also summarized local oil well data and findings from aerial photo analysis and a site visit. The mapping efforts and site visit did not reveal the presence of any geologic structures that could be targeted to increase the potential of encountering fractures or caverns in the Madison Limestone that would result in more certainty in high well yields. However, there is still potential to construct a high yield well into the Madison Limestone in an area without geologic structure because of the karst development along the flanks of the Black Hills.

At the proposed well location in the southeast corner of Section 35, the top of the Madison Limestone will be at a depth of approximately 2,850 feet. We suggest drilling the full thickness of the Madison Limestone, which is 300 feet. There is a lack of potentiometric (water pressure) data in the area, but it would appear that the shut-in pressure would be between 65 and 110 psi.

Table 1 provides a cost estimate for drilling, constructing and testing the well.

Thank you for the opportunity to assist you with this project. If there is anything else that we can do please don't hesitate to contact me at (307) 761-2291.

Respectfully Submitted,

Ben J. Jordan
Weston Engineering, Inc.

Gronlund, Eric

From: Gronlund, Eric
Sent: Friday, September 29, 2017 11:07 AM
To: Lance Russell (lance_russell@yahoo.com)
Cc: Schaal, Tim; Spangler, Albert
Subject: Mark Tubb's water permit application

Mr. Russell:

Writing to give you an update on Tim Schaal and my meeting with Roy Boschee on Tuesday. Mr. Boschee is the NRCS engineer that Mr. Tubbs is working with on the proposed storage pond component of his application. When I last talked with Mr. Tubbs, DENR was under the impression that there was a depression in the natural topography that with additional excavation could become a holding pond for the water diverted from the Madison aquifer prior to application for irrigation. Mr. Boschee explained that the soil at the location of the depression was sandy and the pond would not hold water. This necessitated looking at another alternative for the storage. The location for the proposed storage is now on two drainages just east of Moss Agate Creek (south of Moss Agate dam). Mr. Boschee explained this would entail construction of an 18 foot high berm. Given this information, this will be a dam in which plans and specifications will need to be submitted for review with the application. Mr. Boschee indicated it would be December before he would be able to work on plans for the dam. He planned to convey this information to Mr. Tubbs.

We did discuss the proximity of the proposed dam to Moss Agate Creek and possible overflow (discharge) during snow melt and/or storm events. Mr. Boschee indicated they had discussed routing the drainage area of the two drainages around the proposed storage dam so only water from well and direct precipitation would be impounded in the dam.

If there is a potential for discharge from the dam to Moss Agate Creek there may be discharge permitting necessary. At some point, Mr. Tubbs or yourself should contact Al Spangler with the Surface Water Quality Program of DENR to discuss. His number is (605) 773-3351.

Let me know if Mr. Tubbs or you have questions.

Eric Gronlund
Water Rights Program, DENR
605 773-3352
Eric.gronlund@state.sd.us



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 2741-2, Tubbs Land and Cattle LLC**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Environment and Natural Resources concerning Water Permit Application No. 2741-2, Tubbs Land and Cattle LLC, c/o Mark Tubbs, PO Box 563, Edgemont SD 57735.

The Chief Engineer is recommending APPROVAL of Application No. 2741-2 with a 20 year term pursuant to SDCL 46-1-14 and 46-2A-20 because 1) although evidence is not available to justify issuing this permit without a 20 year term limitation, 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. In accordance with SDCL 46-1-14 and 46-2A-20, Permit No. 2741-2 is issued for a twenty year term. Pursuant to SDCL 46-2A-21, the twenty year term may be deleted at any time during the twenty year period or following its expiration. If the twenty year term is not deleted at the end of the term, the permit may either be cancelled or amended with a new term limitation of up to twenty years. Permit No. 2741-2 may also be cancelled for nonconstruction, forfeiture, abandonment or three permit violations pursuant to SDCL 46-1-12, 46-5-37.1 and ARSD 74:02:01:37.
2. The well will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner, under these Permits shall control withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.
4. Water Permit No. 2741-2 authorizes an impoundment with a storage capacity of 65 acre feet of water.
5. Final engineering plans and specifications for the dam pursuant to Administrative Rule of South Dakota 74:02:08:09 shall be submitted for review and approval. Construction of the dam cannot occur until the final plans and specifications are approved by the Chief Engineer.

See report on application for additional information.

Jeanne Goodman, Chief Engineer
December 14, 2018

REPORT TO THE CHIEF ENGINEER

Water Permit Application No. 2741-2

Tubbs Land and Cattle LLC

December 13, 2018

Water Permit Application No. 2741-2 proposes to appropriate water for the irrigation of 567 acres at a maximum instantaneous diversion rate of 3.34 cubic feet per second (cfs). The diversion points for this application are to be one well (3,150 feet deep) to be completed into the Madison aquifer and a dam to be constructed for the impoundment of 65 acre-ft of water. If necessary, the Madison aquifer water will be diverted into the dam to allow for cooling prior to water being diverted out of the dam for irrigation. The well is to be located in the NW ¼ NW ¼ Sec. 35, and the dam is to be constructed in the SW ¼ SE ¼ Sec. 27; both in T7S-R1E. The proposed diversion point and dam are located approximately 10 miles northwest of Edgemont, SD in Fall River County.

AQUIFER: Madison (MDSN)

HYDROGEOLOGY

The Madison aquifer is a regional scale aquifer that underlies parts of South Dakota, North Dakota, Wyoming, Montana, and Canada (Peterson, 1984). In South Dakota, the aquifer underlies 35,231 square miles of the state, with 29,869 square miles in western South Dakota and 5,362 square miles in eastern South Dakota (Allen et al., 1985; Hedges et al., 1982).

The Madison aquifer occurs within the Mississippian aged Madison Limestone, known locally as the Pahasapa Limestone. The Madison Limestone is a gray to buff and lavender limestone that is locally dolomitic (Strobel et al., 1999). The Madison Limestone is estimated to be approximately 300 feet thick in this area (Carter and Redden, 1999a; Carter and Redden, 1999b). The Madison Limestone is underlain by the Englewood Formation and overlain by the Minnelusa Formation. The Madison aquifer is generally under confined conditions, except in areas where the Madison Limestone outcrops or near the outcrop.

The Madison aquifer is estimated to contain 644,827,000 acre-feet of recoverable water in western South Dakota (Allen et al., 1985). Eastern South Dakota has been estimated to contain 51,512,300 acre-feet of recoverable water in the Madison aquifer (Hedges et al., 1982), bringing the total estimated recoverable water from the Madison aquifer in South Dakota to 696,339,300 acre-feet.

On the southwest flank of the Black Hills uplift, the direction of groundwater flow within the Madison aquifer is generally towards the southwest near the outcrop and eventually curving around to the southeast (McKaskey, 2013). Within 1.5 miles of the proposed well, there are 4 flowing wells identified on the USGS topo map (U.S.G.S., 1950). The Water Rights Program does not have well completion information for these wells, so it is unknown which aquifer the water originates from. Information submitted with the application indicates that the shut-in pressure of the proposed well is estimated to be between 65 and 110 psi.

South Dakota Codified Law 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 within the Madison aquifer.

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 that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source." If the source of the water is older than or stratigraphically lower than the Greenhorn Formation and a water distribution system has applied for a permit, the Board need not take into consideration the balance of aquifer recharge and withdrawal. Here, the water source is older and lower than the Greenhorn Formation, however a water distribution system is not involved. Therefore, the balance of withdrawal and recharge must be considered.

Hydrologic Budget

Recharge

Recharge to the Madison aquifer occurs through streamflow losses and the direct infiltration of precipitation on the outcrop. One of the reports that quantified the recharge to the Madison aquifer was completed by Woodward-Clyde Consultants (1981) for a proposed coal-slurry pipeline that was to use water from the Madison aquifer. This report estimated an upper recharge volume of 400,000 ac-ft/yr by assuming that the recharge is equal to all precipitation that falls on the outcrop plus the gains made from streamflow losses, minus the amount of evapotranspiration and surface runoff. The lower recharge volume that was used in the Woodward-Clyde report was based upon Rahn and Gries (1973) report on large springs in the Black Hills. Rahn and Gries (1973) measured the discharge from 26 large springs that discharge from the Paleozoic carbonate aquifer in the Black Hills, and estimated the recharge to be at least 190.01 cfs (137,560 ac-ft/yr) to the Paleozoic carbonate aquifer. In Rahn and Gries' (1973) report, the Paleozoic carbonate aquifer consists of the Whitewood Formation, Englewood Formation, Pahasapa (Madison) Limestone, Minnelusa Formation, Opeche Formation, and the Minnekahta Limestone. Even though these estimates have been used in the past, the upper recharge value is based upon broad assumptions of the hydrologic cycle, and Rahn and Gries' estimate is not specific to the Madison aquifer.

As part of the Black Hills Hydrology Study, Carter et al (2001a) estimated the annual recharge to the Madison and Minnelusa aquifers from the infiltration of precipitation and from streamflow losses. For the years 1931-98, the estimated annual recharge to the Madison and Minnelusa aquifers from both sources of recharge averaged approximately 344 cfs. This estimate was noted as probably being conservative due to assumptions made in the estimation of how much water infiltrates past the root zone (Carter et al, 2001a). With the differences between stratigraphic location, surface area of the outcrop, and other variables, Carter et al (2001a) estimated that the Madison aquifer receives 55% of the combined average annual recharge and that the Minnelusa aquifer receives the other 45%. Using the 55% estimate, the Madison aquifer is estimated to receive 189.2 cfs of recharge, or an estimated average annual recharge of 137,000 ac-ft/yr.

Discharge

Discharge from the Madison aquifer occurs primarily through well withdrawals and discharge from springs. There are currently 152 water rights/permits that are licensed or permitted for appropriating water from the Madison aquifer (Water Rights, 2018a). Additionally, there are 7 future use permits reserving water from the Madison aquifer, 1 pending application (Application No. 1971-1 for D.C. Booth National Historic Fish Hatchery), 1 deferred application (Application No. 2585-2 for Southern Black Hills Water System), and 1 application held in abeyance (Application No. 2685-2 for Powertech (USA) Inc.) (Water Rights, 2018a).

The majority of water use from the Madison aquifer is for non-irrigation purposes, with 135 water rights/permits currently using water for purposes other than irrigation. The amount of water that can be expected to be withdrawn can be estimated by assuming water rights/permits limited by an annual volume will pump the entire volume appropriated annually and water rights/permits limited only by diversion rate will pump at the maximum permitted diversion rate 60 percent of the time. Estimated water use from appropriations limited by an annual volume total 18,992.5 ac-ft, and 22,474.12 ac-ft from appropriations limited by their diversion rate. The combined non-irrigation estimated average annual use from the Madison aquifer is 41,466.62 ac-ft/yr.

The estimated average annual use for future use permits is determined by assuming that the reserved amount will be fully developed in the future. The estimated average annual use for future use permits is 12,809 ac-ft/yr.

Table 1. Future Use Reservations from the Madison Aquifer (Water Rights, 2018a)

Permit No.	Name	Reservation Balance (ac-ft)
369-1	CITY OF BELLE FOURCHE	620
439-2	CITY OF RAPID CITY	3,367
1833-2	WESTON HEIGHTS HOME OWNERS	211
1872-1	CITY OF SPEARFISH	2,704
2086-2	CITY OF RAPID CITY	4,075
2560-2, 2560A-2, 2560B-2	FALL RIVER WATER USERS DISTRICT	358
2580-2	SOUTHERN BLACK HILLS WATER SYSTEM	1,474
Total	7 Reservations	12,809

The complexities of the location and accessibility of the Madison aquifer have made estimating the irrigation withdrawals difficult. Many of the water rights/permits that include irrigation as a use, also use the same Madison well for other permitted uses, or many different water sources are permitted for the same irrigation system. Irrigation use from the Madison aquifer does not make up a significant portion of the hydrologic budget; there are 29 water rights/permits that are permitted for irrigation use (Water Rights, 2018a). The total number of acres currently permitted for irrigation is 3,236.16 acres. Kilts (2017) estimated the average annual withdrawals for irrigation to be 980 ac-ft per year for rights/permits that have more than 10 years of submitted

irrigation questionnaires after their systems were constructed and then estimated the remaining rights/permits to use their appropriated amount (less than 2,342 ac-ft/yr). In the time since Kilts' (2017) analysis of the irrigation in the Madison aquifer there has been one additional permit approved for irrigation and is for the irrigation of 100 acres with a total appropriation of 200 ac-ft/yr. The current estimated average annual use from irrigation withdrawals is less than 3,522 ac-ft/yr.

Table 2. Permitted Acres for Irrigation from the Madison Aquifer (Water Rights, 2018a)

Permit No.	Status	Name/Business	Acres
419-2	LICENSE	WIND CAVE NATIONAL PARK	6.00
858-2*	LICENSE	JOHN & HEIDI MCBRIDE	655.75
1009-1	LICENSE	DONALD F/ANN J BRADY	53.73
1096-1	LICENSE	BAR BAR V LIVESTOCK LLC	69.00
1185-1	LICENSE	DONALD F/ANN J BRADY	22.52
1223-1	LICENSE	MONTANA DAKOTA LAND LLC	263.00
1363-1	LICENSE	SPEARFISH CANYON CNTRY CL	80.10
1452-1	LICENSE	BLACK HILLS STATE COLLEGE	25.44
1635-1	LICENSE	BLACK HILLS NATIONAL CEMETERY	54.50
1650-1	LICENSE	FOOTHILL LAND & CATTLE LLC	134.00
1670-1	LICENSE	BAR BAR V LIVESTOCK LLC	253.00
1707A-1	PERMIT	ELKHORN RIDGE @ FRAWLEY RANCHES LLC	100.00
1725-2	LICENSE	JANICE R CROWSER	75.10
1842-1	LICENSE	TOM C DAVIS	330.00
1858-1	LICENSE	GLENCOE CAMP RESORT II LLC	34.00
1885-1	LICENSE	JOHN T & VERONICA WIDDOSS	22.00
1899-1	LICENSE	DAVIS RANCHES INC	100.00
1911-2	LICENSE	HART RANCH DEVELOPMENT CO	124.00
1923-1	LICENSE	JIM MONTIETH	3.00
1931-1	PERMIT	ELKHORN RIDGE @ FRAWLEY RANCHES LLC	85.22
1945-1	PERMIT	FRAWLEY RANCHES LLC	265.00
1960-1	PERMIT	ONE DIAMOND INC	150.00
2106-2	LICENSE	STUART RICE	2.80
2286-2	LICENSE	DONALD KONECHNE	38.50
2313-2	LICENSE	COCA-COLA BOTTLING	3.00
2458-2	LICENSE	CITY OF RAPID CITY	107.00
2593-2	LICENSE	HART RANCH DEVELOPMENT	72.50
2673-2	LICENSE	DIOCESE OF RAPID CITY	7.00
2773-2	PERMIT	ARROWHEAD COUNTRY CLUB	100.00
Total	29		3,236.16
* This license also withdraws from the Cheyenne River			

There are a number of domestic wells on file that withdraw water from the Madison aquifer. Carter et al. (2001b) estimated that the well withdrawals attributed to domestic and livestock

watering amount to about 2.25% of the total well withdrawals. This estimation used data from the 1987 to 1996 water years, as the change in storage within the aquifer over that period was considered to be approximately zero (Carter et al., 2001b). The annual quantity of water withdrawn for domestic use is considered to be not significant to the hydrologic budget of the aquifer.

In addition to the above permitted uses, the pending application is for fish and wildlife propagation and is requesting 2,000 ac-ft/yr, the deferred application is for rural water system use and is requesting 1,600 ac-ft/yr with a priority date of 5/08/2006, and the application held in abeyance is requesting 888.8 ac-ft/yr for aquifer restoration following in-situ recovery (ISR) mining with a priority date of 6/12/2012. If successfully permitted, these three applications have a combined estimated average annual use of 4,488.8 ac-ft/yr.

This application, if approved, is for the irrigation of 567 acres. Assuming the full appropriation is used, the estimated average annual use from this application would be 1,134 ac-ft/yr.

Hydrologic Budget

The estimated appropriative withdrawals from the Madison aquifer are 41,466.62 ac-ft/yr from non-irrigation withdrawals, 12,809 ac-ft/yr from future use, and less than 3,522 ac-ft/yr from irrigation withdrawals. The three existing applications have an estimated withdrawal of 4,488.8 ac-ft/yr. Including an estimated 1,134 ac-ft/yr from this application, the estimated average annual withdrawal from the Madison aquifer is less than 63,500 ac-ft/yr. The estimated average annual recharge to the Madison aquifer is 137,000 ac-ft/yr.

The estimated annual withdrawals equate to less than half of the estimated annual recharge to the Madison aquifer and both of these are small percentages of the total available water in storage within the Madison aquifer. However, access to all of the recharge occurring to the Madison aquifer or access to all of the water stored within the Madison aquifer is not possible at any one location. This hydrologic budget for the entire aquifer is intended to demonstrate the Madison aquifer is a large water resource.

Localized Hydrologic Budget

As the general hydrologic budget does not describe water availability on a local scale, Carter et al. (2001b) analyzed the hydrologic budgets of the Madison and Minnelusa aquifers for the water years 1987 to 1996 and divided the Black Hills region into nine subareas, each with their own individual hydrologic budget. The subarea boundaries were placed as to minimize the flow of groundwater between subareas. This application is within the boundaries of Subarea 8. Recharge and discharge from Subarea 8 is documented in Table 3 and water rights/permits in Subarea 8 are listed in Table 4.

Table 3. Local Hydrologic Budget for Subarea 8 (modified from Carter et al., 2001b)

Recharge - Streamflow	Recharge - Precipitation	Groundwater Inflow - Minnelusa	Groundwater Inflow - Madison	Groundwater Outflow - Minnelusa	Groundwater Outflow - Madison	Discharge - Springflow	Discharge - Well Withdrawals
4.4 cfs	6.1 cfs	24.5 cfs	23.2 cfs	8 cfs	4 cfs	44.3 cfs	1.8 cfs
3,185 ac-ft/yr	4,416 ac-ft/yr	17,737 ac-ft/yr	16,796 ac-ft/yr	5,792 ac-ft/yr	1,738 ac-ft/yr	32,072 ac-ft/yr	1,303 ac-ft/yr

Table 4. Water Rights/Permits from the Madison Aquifer including Future Use located in Subarea 8 (Water Rights, 2018a; Carter et al., 2001b)

Permit No.	Name	Status	Use	CFS	Annual Volume [ac-ft]	Irrigation Acres
306-2	CITY OF EDMONT	LC	MUN	0.31	N/A	N/A
735-2	TENNESEE VALLEY AUTHORITY	LC	IND	0.66	N/A	N/A
761-2	CITY OF EDMONT	LC	MUN	0.41	N/A	N/A
858-2	JOHN & HEIDI MCBRIDE	LC	IRR	9.36	N/A	655.75
1850-2	PROVO TOWNSHIP	LC	MUN/RWS	0.45	N/A	N/A
2298-2	CITY OF EDMONT	LC	REC/MUN	1	N/A	N/A
2560-2	FALL RIVER WATER USERS DISTRICT	FU	RWS	N/A	358	N/A
2560A-2	FALL RIVER WATER USERS DISTRICT	FU	RWS	N/A	0	N/A
2560B-2	FALL RIVER WATER USERS DISTRICT	FU	RWS	N/A	0	N/A
2580-2	SOUTHERN BLACK HILLS WATER SYSTEM	FU	RWS	N/A	1474	N/A
2610-2	ISAAC S JEFFS, TRUSTEE	PE	SHD	0.21	N/A	N/A
2629-2	FALL RIVER WATER USERS DISTRICT	LC	RWS	0.72	524	N/A
2730-2	ISAAC S JEFFS, TRUSTEE	PE	DOM	0.236	60	N/A
LC = Licensed, PE = Permit, FU = Future Use, DOM = Domestic, IND = Industrial, IRR = Irrigation, MUN = Municipal, REC = Recreation, RWS = Rural Water System, SHD = Suburban Housing Development						

The estimated annual withdrawal from these water rights/permits in Subarea 8 is approximately 1,905 ac-ft for the non-irrigation water rights/permits and 1,832 ac-ft for the future use reservations if they are fully developed within Subarea 8. The lone irrigation right (No. 858-2) authorizes the irrigation of 655.75 acres from both the Madison aquifer and the Cheyenne River (Water Rights, 2018d). Although the reported irrigated acreage has historically been much less, the 2017 irrigation questionnaire indicates that the land has recently changed ownership and that the irrigation system is being repaired. Applying a very conservative estimate of irrigation usage for budgeting purposes of 2 ac-ft per acre, the irrigation right would use 1,311.5 ac-ft per year. The application held in abeyance, Application No. 2685-2, is also located in this subarea, and would be estimated to use 888.8 ac-ft/yr. The average annual withdrawals from Subarea 8 are estimated to be 5,937.3 ac-ft/yr. If this application is approved, an estimated 1,134 ac-ft/yr would be withdrawn, bringing the total estimated average annual withdrawal to 7,071.3 ac-ft/yr.

The estimated average annual recharge to the Madison aquifer portion of Subarea 8 is 55% of the total recharge from the surface (Carter et al., 2001a), or 4,181 ac-ft/yr, and the groundwater flow from adjacent subareas into Subarea 8, or 16,796 ac-ft/yr. The total estimated average annual recharge to the Madison aquifer in Subarea 8 is approximately 20,977 ac-ft/yr, and the estimated average annual withdrawals are estimated to be less than 7,071.3 ac-ft/yr.

The estimated average annual withdrawals are approximately one third of the estimated average annual recharge to Subarea 8. The groundwater outflow from this subarea and the natural discharge from springs can also be captured, although there are public interest concerns in maintaining the flow from springs. Based upon the information available, and the natural variation of the potentiometric surface, development of this application is not expected to impact the flow from the springs due to the distance and structural geology between this application and

the known large springs. Therefore, there is a reasonable probability unappropriated water is available for this proposed application.

Observation Well Data

In determining the availability of unappropriated water for a permit application Administrative Rule 74:02:05:07 requires the Water Management Board to rely on the record of observation well measurements, in addition to other data, to determine that the quantity of water withdrawn annually from the aquifer does not exceed the estimated annual recharge.

The Water Rights Program monitors 25 observation wells completed in the Madison aquifer (Water Rights, 2018c). The nearest observation well is CU-95A, located approximately 13.25 miles north-northeast of the proposed well location (Figure 1). The next nearest observation well, FR-92A, is located over 14 miles to the east. Observation well FR-95A is also located in Subarea 8 and is 24 miles east of the proposed well location. These observation wells are representative of the hydrographs for the other DENR observation wells completed into the Madison aquifer.

In general, the observation well data provides a qualitative means of assessing the aquifer and provides the best information reasonably available to evaluate the hydrologic budget of the aquifer. The observation wells for the Madison aquifer document that water levels in the aquifer are dominated by climactic conditions. Over the period of record, these observation wells show that the aquifer recharges during wetter periods of time and gradually declines during drier periods of time. This means that recharge to and natural discharge from the Madison aquifer greatly exceeds well withdrawals.

The observation well data indicates that there is a reasonable probability that there is unappropriated water available from the Madison aquifer and also supports the hydrologic budget data.

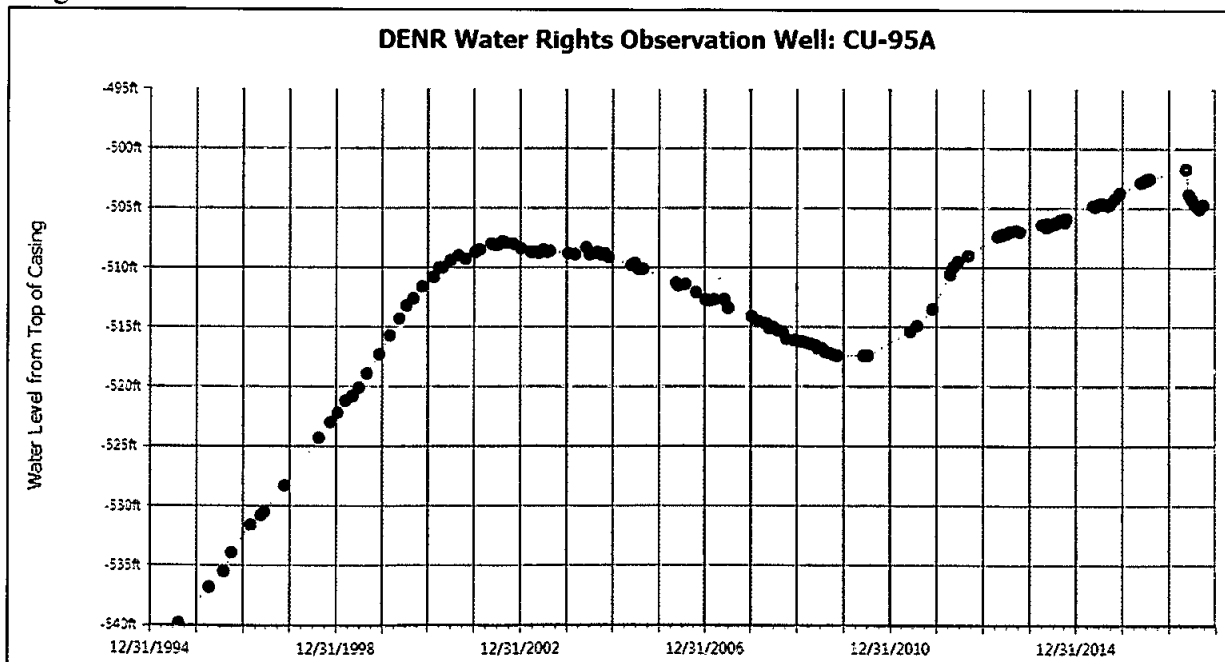


Figure 2: Hydrograph for Observation Well CU-95A (Water Rights, 2018c)

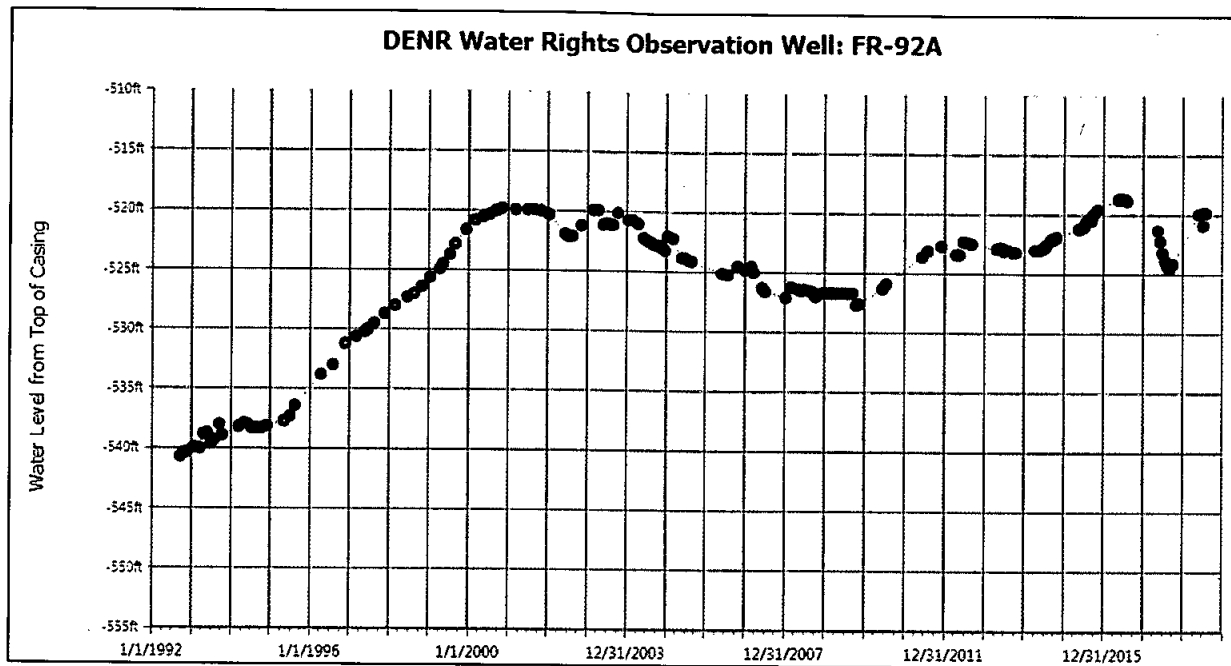


Figure 3: Hydrograph for Observation Well FR-92A (Water Rights, 2018c)

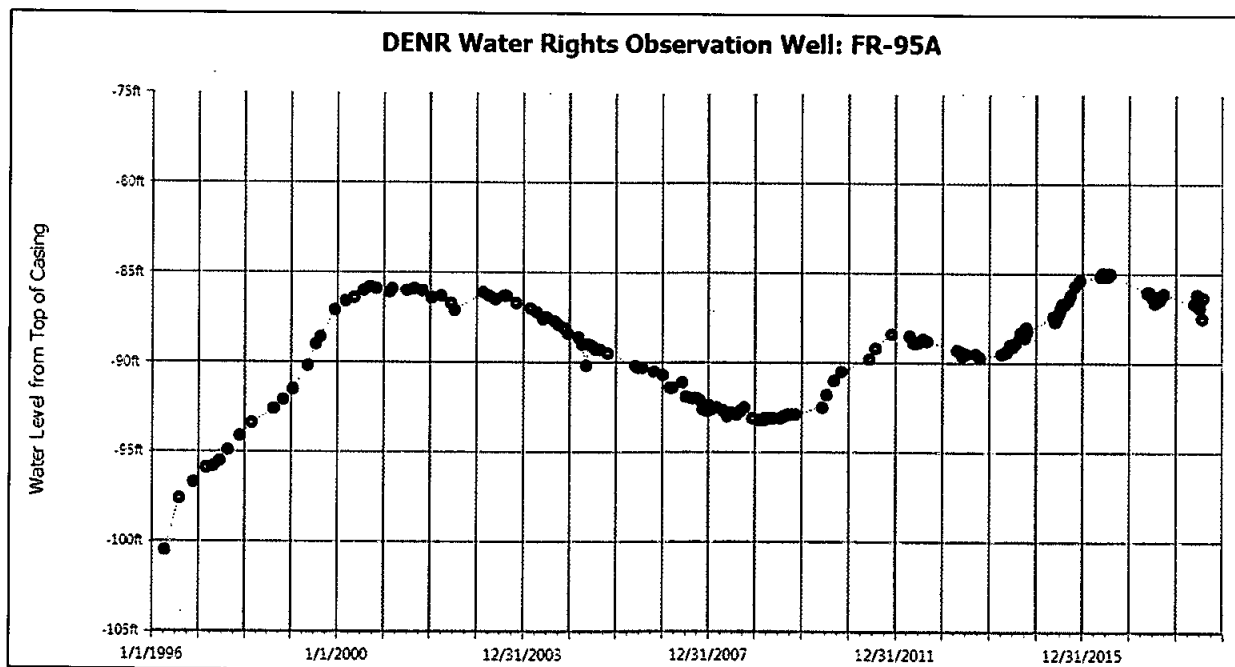


Figure 4: Hydrograph for Observation Well FR-95A (Water Rights, 2018c)

EXISTING WATER RIGHTS

Statewide, there are 152 Water Rights/Permits appropriating water from the Madison aquifer excluding 9 future use permits, 1 pending application, 1 deferred application and 1 application held in abeyance (Water Rights, 2018a). The location of the diversion points for water rights/permits authorized to withdraw water from the Madison aquifer in the vicinity of this application are shown in Figure 1. The areas reserved for the future use permits within the map boundaries are also shown.

The Madison aquifer is a confined aquifer in this area, with the lower Minnelusa Formation serving as the upper confining layer, and the lower Madison Formation serving as the lower confining layer. Drawdown in the Madison aquifer at this location is not expected to affect water levels in other aquifers that are stratigraphically above or below the Madison aquifer.

The nearest water well on record with the Water Rights program and completed into the Madison aquifer is for the City of Edgemont, SD, located just over 10 miles to the southeast of the proposed well location (Water Rights, 2018b). Water Permit Application No. 2685-2 is seeking to appropriate 888.8 ac-ft/yr from two wells; their proposed well locations are 4 miles north and 6.5 miles northwest of the proposed well location for this application. In the report submitted with Application No. 2685-2, the drawdown was estimated using the Theis method, which requires assumptions to be made that are not entirely valid to use for the Madison aquifer in this area. Carefully using the Theis method as an approximation, the drawdown at a distance of 5 miles was estimated to be less than 10 ft after pumping continuously for 20 years at 551 gallons per minute (gpm) (Powertech (USA), 2012). There is no way to accurately quantify aquifer properties or potential drawdown without conducting a proper aquifer pumping test at the location of the proposed diversion.

This application is for the irrigation of 567 acres, and with the allowed appropriation of 2 ac-ft/ac, could withdraw a maximum of 1,134 ac-ft/yr. If the pumping were spread out evenly over the entirety of the year, instead of just the irrigation season, the average pump rate would be 703 gpm. As this pump rate is only about 25% more than was used in the report for Application No. 2685-2, a drawdown of a similar magnitude would be expected if the irrigation proposed under this application is fully developed and used every irrigation season. Once again, there is no way to accurately quantify aquifer properties or potential drawdown without conducting a proper aquifer pumping test at the location of the proposed diversion.

The Madison aquifer in the area of this application has a potentiometric surface that occurs near or above the land surface, resulting in wells that could flow at the surface. Considering there is over 2,500 ft of artesian head pressure in this area and that the Water Management Board has recognized that to place water to the maximum beneficial use, a certain amount of drawdown may occur. The Water Management Board has promulgated rules that allow water to be placed to maximum beneficial use without the necessity of maintaining artesian head pressure.

This application, if approved, is not expected to adversely impact nearby adequate wells due to the large amount of head above the top of the Madison aquifer. An adequate well has been defined in Administrative Rule of South Dakota (ARSD) 74:02:04:20(6) as:

“a well constructed or rehabilitated to allow various withdrawal methods to be used, to allow the inlet to the pump to be placed not less than 20 feet into the saturated aquifer or formation material when the well is constructed, or to allow the pump to be placed as near to the bottom of the aquifer as is practical if the aquifer thickness is less than 20 feet”.

Madison Aquifer Term Limitation:

SDCL 46-2A-20 requires that “... no water permit for construction of works to withdraw water from the Madison Formation in Butte, Fall River, Custer, Lawrence, Meade and Pennington counties may be issued for a term of more than twenty years, unless the Water Management Board determines, based upon the evidence presented at a hearing that:

- (1) Sufficient information is available to determine whether any significant adverse hydrologic effects on the supply of water in the Madison Formation would result if the proposed withdrawal were approved; and
- (2) The information, whether provided by the applicant or by other means, shows that there is a reasonable probability that issuance of the proposed permit would not have a significant adverse effect on nearby Madison Formation wells and springs.”

Pursuant to SDCL 46-2A-21, “at the end of the twenty-year limitation, the board may cancel a permit or amend the permit with a new term limitation of up to twenty years, if the board is unable to make a finding after notice and hearing that sufficient information is available to delete the term limitation.”

Although the criteria for approval of a water permit established by SDCL 46-2A-9 are met, (i.e., there is a reasonable probability that unappropriated water is available for the applicant’s propose use, and this proposed diversion can be developed without unlawful impairment of existing rights); evidence is not available to justify issuing this permit without a term limitation of 20 years.

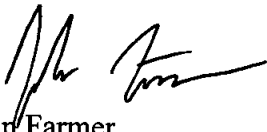
Safety of Dams review:

At the time of this report, final plans and specifications for the proposed dam have not been submitted for review. The preliminary plans and specifications that were submitted with the application indicate that the dam will most likely be a small size, category 3 dam. The minimum requirements for the plans and specifications are detailed in South Dakota Administrative Rule 74:02:08:09.

StreamStats shows that the area of the watershed above the preliminary dam location is 106 acres and the entire watershed has an area of 178 acres (USGS, 2018). This drainage empties directly into the Cheyenne River. There are no existing surface water rights in the proposed drainage. There are many surface water rights that rely on the Cheyenne River, however given the small drainage area above the dam, the dam will have little to no effect on the existing water rights/permits on the Cheyenne River.

CONCLUSIONS

1. Water Permit Application No. 2741-2 proposes to appropriate water for the irrigation of 567 acres at a maximum instantaneous diversion rate of 3.34 cubic feet per second (cfs) from one well to be completed into the Madison aquifer and one dam to be constructed in Fall River County.
2. Water Permit Application No. 2741-2 is proposing the construction of a dam for the impoundment of 65 ac-ft of water. This dam will be filled with water from the proposed well and is for the storage of water over the winter and for thermal cooling of the water prior to being used for irrigation.
3. The Madison aquifer is a major regional aquifer and a viable source of water for this proposed appropriation.
4. Based on observation well data and the hydrologic budget, there is a reasonable probability that unappropriated water is available from the Madison aquifer.
5. There is a reasonable probability that the diversion proposed by this application will not adversely impact adequate wells for existing water rights and domestic uses.
6. Evidence is not available to justify issuing this permit without the Madison aquifer 20 year term limit.
7. Final engineering plans and specifications of the dam pursuant to South Dakota Administrative Rule 74:02:08:09 have not been submitted yet.
8. Preliminary plans and specifications indicate that the proposed dam will most likely be a small size, category 3 dam.
9. Construction of the proposed dam cannot occur until the final plans and specifications are approved by the Chief Engineer.



John Farmer
SD DENR – Water Rights Program

REFERENCES

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Affidavit of Publication

RECEIVED

DEC 26 2018

WATER RIGHTS
PROGRAM

Dec 20 L21103129

NOTICE OF APPLICATION

NO. 2741-2 to Appropriate Water

Notice is given that Tubbs Land and Cattle LLC, c/o Mark Tubbs, PO Box 563, Edgemont SD 57735 has filed an application for a water permit to appropriate 3.34 cubic feet of water per second from one well to be completed into the Madison Aquifer (3,150 feet deep) located in the NW 1/4 NW 1/4 Section 35 for irrigation of 567 acres located in the N 1/2, SE 1/4 Section 35 and the E 1/2, NW 1/4 Section 27; all in T7S-R1E. This application also proposes to impound 65 acre-feet of water by constructing a dam and impounding water in the SW 1/4 SE 1/4 Section 27-T7S-R1E. Water is to be pumped from the well into the storage dam prior to being applied to the irrigated acres. This site is located approximately 7 miles west and 7 miles north of Edgemont SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2741-2 with qualifications because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <http://denr.sd.gov/public> or contact Eric Gronlund for this information, or other information, at the Water Rights Program address provided below.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)* and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by December 31, 2018.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained.

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

Steven M. Pirner
Secretary
Department of Environment and
Natural Resources

(Published once at an approximate cost
of \$44.97)

STATE OF SOUTH DAKOTA

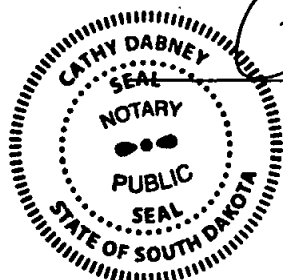
County of Pennington

SS:

Sheri Sponder being first duly sworn, upon his/her oath says: That he/she is now and was at all time hereinafter mentioned, an employee of the RAPID CITY JOURNAL, a corporation of Rapid City, South Dakota, the owner and publisher of the RAPID CITY JOURNAL, a legal and daily newspaper printed and published in Rapid City, in said County of Pennington, and has full and personal knowledge of all the facts herein stated as follows: that said newspaper is and at all of the times herein mentioned has been a legal and daily newspaper with a bonafide paid circulation of at least Two Hundred copies daily, and has been printed and published in the English language, at and within an office maintained by the owner and publisher thereof, at Rapid City, in said Pennington County, and has been admitted to the United States mail under the second class mailing privilege for at least one year prior to the publication herein mentioned; that the advertisement, a printed copy of which, taken from said Rapid City Journal, the paper in which the same was published, is attached to this sheet and made a part of this affidavit, was published in said paper once each day for one successive day, the first publication there of being on the 20th day of Dec 2018 that the fees charged for the publication there of are 44 dollars and 97 cents.

Sheri Sponder

Subscribed and sworn to before me this 20th
day of December, 2018.



Cathy Dabney
Notary public

4-16-2024

My commission expires

Affidavit of Publication

State of South Dakota

County of Fall River

RECEIVED

DEC 26 2018

WATER RIGHTS
PROGRAM

Taylor Risse, being, first duly sworn, on oath, says: That he/she is an employee of Scherer Publishing, LLC, and that the Fall River County Herald is, and during all the times hereinafter mentioned was, a weekly legal newspaper as defined in the SDCL 17-2-2.1 through the 17-2-2.4 inclusive; that said newspaper has been published within the said county of Fall River and State of South Dakota, for at least one year next prior to the first publication of the attached public notice, and that the printed copy of which, taken from the paper in which the same was published, and which is hereto attached and made a part of this affidavit, was published in said newspaper for 1 successive week(s) to wit:

December 20, 2018

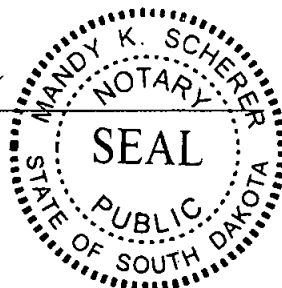
That the full amount of the fee charged for the publication of the attached public notice, \$35.88 insures to the sole benefit of the publisher or publishers; that no agreement or understanding for the division thereof has been made with any other person, and that no part thereof has been agreed to be paid to any person whomsoever; that the fees charged for the publication thereof are:

Signed: _____

Subscribed and sworn to before me this 20 day of December, 2018.

Notary Public

My Commission Expires
December 9, 2021



LEGALS

Public Notice of Intent

Roscoe Enterprises is renewing their permit #GIRU-97-23-160 to operate a Restricted Use Storage and Disposal Facility on land owned by Doug Roscoe. This site shall consist of 5 acres, more or less.

The general location is 4 miles North of Maverick Junction (18/395 & 79). Legal Description: SE1/4, NE1/4 of Section 11, Range 6E, Township 7 S of the Black Hills Meridian, Fall River County.

Waste to be accepted: household debris (no asbestos), trees and wood waste, furniture, mattresses, and similar wastes.

Landowner: Douglas Roscoe, 13503 MX Bar Trail, Hot Springs, SD 57747, 605-745-6802.

Operator: Roscoe Enterprises, 13503 MX Bar Trail, Hot Springs, SD 57747, 605-745-7730.

Published once at the total approximate cost of \$13.11

Published: Dec. 20, 2018

Resolution 2018-28

Resolution and Order vacating certain right-of-way in Fall River County, South Dakota.

WHEREAS, Michael T. Eichenberger and Regina R. Eichenberger, husband and wife, have heretofore presented to the Fall River County Commission, pursuant to SDCL 31-21-23, a petition for vacation of a portion of right-of-way described as follows:

dedicated right-of-way (368 acres, more or less) lying between Tract E in the Northeast Quarter of the Southeast Quarter of the Northeast Quarter (NE1/4SE1/4NE1/4) of Section 34, Township 7 South, Range 5 East of the Black Hills Meridian, Fall River County, South Dakota, as shown in Book XVII of Plats, page 32 and a parcel of land formerly known as Lot 11B of Country View Subdivision located in the Northeast Quarter of the Northeast Quarter (NE1/4NE1/4) of Section 34, Township 7 South, Range 5 East of the Black Hills Meridian, Fall River County, South Dakota as shown on Plat filed in Book XI of Plats, page 5, subject to any easements and right-of-way presently existing for public utility or drainage purposes.

Which petition made by the Owners of all the property adjoining both sides of the said right-of-way proposed to be vacated sets out that said right-of-way has not been constructed or used as a right-of-way or road at any time during the past 40 years and which petition was signed by the petitioners, and said right-of-way is less than 300 feet in total length and no public highway is part of the right-of-way to be vacated; and

WHEREAS, Petitioners acquired title to said right-of-way by Quit Claim Deeds from the adjoining land owners over 20 years ago and have paid the property taxes thereon for the past 40 years; and

WHEREAS, the Fall River County Commission at a meeting of said Commission held October 2, 2018, deemed it expedient that said matter should be proceeded with, ordered said petition filed with the Auditor of said County and a time for hearing on the petition at the regular meeting of the Commission on Thursday, November 8, 2018, at 10:00 a.m. and directed that notice of said hearing be published once a week for two consecutive weeks in the official newspapers of said County; and

WHEREAS, due and legal notice of the hearing on said petition has been given and the Commission has investigated and considered the matter and it being established that the right-of-way to be vacated has not been constructed or used as a right-of-way at any time during the last 40 years;

HE IT RESOLVED AND ORDERED by the Fall River County Commission, the right-of-way described as follows:

dedicated right-of-way (368 acres, more or less) lying between Tract E in the Northeast Quarter of the Southeast Quarter of the Northeast Quarter (NE1/4SE1/4NE1/4) of Section 34, Township 7 South, Range 5 East of the Black Hills Meridian, Fall River County, South Dakota, as shown in Book XVII of Plats, page 32 and a parcel of land formerly known as Lot 11B of Country View Subdivision located in the Northeast Quarter of the Northeast Quarter (NE1/4NE1/4) of Section 34, Township 7 South, Range 5 East of the Black Hills Meridian, Fall River County, South Dakota as shown on Plat filed in Book XI of Plats, page 5, subject to any easements and right-of-way presently existing for public utility or drainage purposes and that the public interest will be better served by said vacation, subject to petitioners granting a permanent walking access easement to Mick Irwin and his successors in interest.

Such vacation to take effect after the 30th day after the second publication of this Resolution unless the action has been appealed according to law.

Dated at Hot Springs, Fall River County, South Dakota, this 8th day of November, 2018.

Approved:

Joe Falkenberg, Chairman
Fall River County Commission
Sue Ganje, County Auditor

Published once at the total approximate cost of \$48.30

Published: Dec. 20, 2018

Oelrichs School District 23-3 Expenses November 2018

A&B Whiting, Supplies, 143.45; Ace Hardware, Supplies, 164.71; Ackerly, Deane, Midge, 253.36; Amazon, Supplies, 450.09; AT&T, Monthly, Cell Phones, 175.12; Bangs, McCallen, Butler, Fore And Shumate L.L.P., Legal Services, 172.25; Black Box, Equipment, Official, 685.00; Bob Chemical Co., Supplies, 147.36; Bob Electric Coop, Electricity, 1774.33; Brings Hilti Buck, Deane, Midge, 104.16; Cash-Us Discounting, Food Supplies, 344.16; CBH Cooperative, Propane, 874.61; C&R, Merch, 25.00; Cheyenne Stationery, Garbage, 373.46; Coleman, Sherr, Services, 70.66; Contreras, Miguel, Midge, 330.88; Culligan, Water And Softener Rent, 417.00; DCF, Deane, 422.55; Eagle Book, Clauses, Gasstation, 210.00; Eaglebrook, Jessica, Gasstation, 312.86; Elbauer, Charles, Reinburse, 59.49; Ent Fin Serv, Financial Service, 164.24; Evergreen, Supplies, 49.98; FR Auto, Supplies, 76.64; FR Herald, Publishing, 450.04; Frieden, Kate, Reinburse, 255.68; Ginsburgh, Jim, Supplies, 255.00; Golden West, Telephones, 935.89; Grady West, C&S, Supplies, 37.11; Haggers, Repair, 59.95; Hills Truck Service, Services, 225.00; Kagan P, Consultant, 749.00; Lym's, Supplies, 49.99; Meade, Ray, Reinburse, 0.37; Meyer, Karen, Pro Services, 4,500.00; MFC, Repair, 658.15; Paulsda Sales, Repair, 351.00; Patrons Coop, Supplies, 3,470.84; Print Mark-Et, Supplies, 29.75; Raunko, Travel, 190.00; Red Stone Education, Professional Services, 23,180.88; Savall, Laron, Serv, 564.49; Stachberg, Travel, 4,759.32; Stevens, Repair, 5.90; Tim McCowan, Consulting, 2,000.00; Town Of Oelrichs, Water, 377.50; US Postal, Postage, 100.00; CBS, Rental Equipment, 236.10; Leaf, Financial Service, 172.15; Amazon, Supplies, 8.99; Heaton, Lucretia, Professional Services, 1,261.62; Creative Kads, Consultant, 1,820.36; Jure For Kids S, Speech, 10,175.00; Amazon, Supplies, 39.66; Cash-Us Discounting, Supplies, 472.24; Dean Food North Central, Milk, 480.74; Lym's Dakota Mart, Supplies, 8.66; SD Dept Of Ed - Child & Adult Nutrition, Supplies, 119.42; Savall Towel & Laron, Laron, 16.77; Bernasole, Supplies, 55.37; Big Crow, J&H, Official, 210; Black Bear, Emmanuel, Supplies, 106.47; HUI Electric, Utility, 3,209.56; Blacksmith, Julie, Official, 250; Delta Air, Travel, 1,066.20; Dixon, Carter, Official, 278.88; Fluorolite Plastics, Supplies, 149.55; Grand Cab Computer, Travel, 18.92; Hildan Inn, Travel, 210.8; Janis, Roney, Official, 184.44; Killy Small, Krata, Official, 250; Knickrehm, Hugh, Official, 50; Dakota Mart, Supplies, 14.02; McDonalds, Travel, 10.43; NIS, Dues, 633; Pizzas Ruzeh, Travel, 43.77; Koolaid Airport, Travel, 60; Santa, Supplies, 314.52; SD Innovations, Supplies, 276.3; Slicks Garage, Travel, 135; Spearfish Valley Produce, Field Trip, 408; TMS, Services, 228.6; Times, Wyl, Official, 218.88; United Air, Travel, 30; US Postal S, Postage, 108.75; Wal-Mart, Supplies, 961.94; Child & Adult Nutrition, Supplies, 297.56;

Published once at the total approximate cost of \$35.19

Published: Dec. 20, 2018

Section 00100 Invitation to Bid

Notice is hereby given, that firm sealed bids for the construction of Structure Rehabilitation will be received in Fall River County, Hot Springs, South Dakota at the office of Fall River County Highway Department, 193 Box 939, 27518 Casade Road, Hot Springs, South Dakota, 57747 until 10:00 a.m., local time on January 17, 2019, and then publicly opened and read aloud.

The project consists of the work for Structure #24-029-014 located 0.3 mi north and 0.2 mi west of Burdock, SD consists of the replacement of the existing Double Tee Deck Units with new 30" Prestressed Concrete Double Tee Deck Units, minor grading and Paving Class E Rigway.

The complete set of Contract Documents, including drawings and specifications, is on file with the Owner at the Fall River County Highway Department and the office of Bruce Engineering, Inc., 3561 Whiteservice Road, Sturgis, SD 57771. Digital Contract Documents are also available from QuestCDN and can be accessed from the Bruce Engineering website at www.bruceeng.com under the "Bid Information" page. The cost for downloaded (electronic) plans is \$20. The official Plan Holders list can be viewed for the project on the QuestCDN website. Only electronic plan holders downloaded via QuestCDN will receive addendum notifications. Contractors using any other means for obtaining plans and specifications must periodically check the QuestCDN website for any addenda.

In addition, the Drawings and Project Manual may also be examined at the following locations: Construction Industry Center.

Each bid must contain a certified check, a Cashier's check or Draft for five percent (5 percent) of the amount of the bid; such check to be certified or issued by either a State or National Bank and payable to Fall River County or in lieu thereof a Bid Bond for Ten percent (10 percent) of the amount of this bid, such bond to be issued by a Surety company in compliance with the State of South Dakota and payable to Fall River County as a guarantee that such bidder will enter into a contract with said Fall River County, if the Commission thereof in accordance with the terms of such letting and bid in case such bidder is awarded the contract. The Certified Check or other guarantee, or bid bond of the successful bidder will be returned to him forthwith upon the execution of the contract and surety heretofore provided for.

At the time the successful bidder enters into a contract for the construction of public improvement or the furnishing of any material or labor thereon, the Contractor will be required, before commencing such work, to furnish surety in an amount not less than the contract price, for the faithful performance of such contract, with additional obligation that such performance of such contract will promptly pay all persons supplying him with labor or material in the prosecution of the work provided for in such contract. The Contractor shall also provide proof of liability insurance, and workman's compensation insurance, as per Article 5 of the General Conditions.

Fall River County reserves the right to reject any or all bids and waive any defects therein.

Dated at Fall River County, South Dakota 13th Day of November, 2018

Randy Seiler, Highway Superintendent
Fall River County
Hot Springs, South Dakota

Published twice at the total approximate cost of \$76.88

Published: Dec. 20, 2018

Notice of Application No. 2741-2 to Appropriate Water

Notice is given that Tibbs Land and Cattle LLC, c/o Mark Tibbs, PO Box 563, Edgemont SD 57735 has filed an application for a water permit to appropriate 3.34 cubic feet per second from our well to be completed into the Madison Aquifer (3,150 feet deep) located in the NW 1/4 NW 1/4 Section 35 for irrigation of 567 acres located in the N 1/2, SE 1/4 Section 35 and the E 1/2, NW 1/4 Section 27; all in T7S-R1E. This application also proposes to impound 65 acre-feet of water by constructing a dam and impounding water in the SW 1/4 SE 1/4 Section 27-T7S-R1E. Water is to be pumped from the well into the storage dam prior to being applied to the irrigated acres. This site is located approximately 7 miles west and 7 miles north of Edgemont SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2741-2 with qualifications because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <http://denrad.gov/public> or contact Eric Grunwald for this information, or other information, at the Water Rights Program address provided below.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Post Building, 523 E Capitol, Pierre SD 57501 (605) 773-3337 and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by December 31, 2018.

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.

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Steven M. Pinner, Secretary
Department of Environment and Natural Resources

Published once at the total approximate cost of \$35.88

Published: Dec. 20, 2018

Proceedings

Minutes of the Board of Education of the Oelrichs School District 23-3

Regular Board Meeting

November 12, 2018

Call to Order: The Board of Education of the Oelrichs School District 23-3 met in regular session on November 12, 2018 in the Superintendent's office. The meeting was called to order by Dave Osmotherly, Board President, at 3:30 p.m.

Pledge of Allegiance

Roll Call: Members Present: Dave Osmotherly, Dennis Quivey, Vince Logue, and Laura Thustos

Members Absent: Jennifer Her Many Horse

Officers Present: Dr. Mitchell Stute, Deane Castro, Valerie Sward, Ken Uptake and Heather Besco-Quivey

Motion by Quivey, seconded by Logue, to approve October 9, 2018 meeting minutes.

Motion by Thustos, seconded by Quivey, to approve the amended agenda, adding 2.1 Uniforms

"All actions recorded in these minutes were by unanimous vote unless otherwise noted"

Teacher Presentation: Ken Uptake presented to the board information about the classes he is currently teaching and the content of those classes.

Uniforms: Katie Heuser, Activity Director, requested that the district have a motion for purchasing new uniforms. Currently, she is requesting new jerseys for the basketball team. Quivey made a motion, seconded by Thustos, to purchase new jerseys for the basketball team in the amount of \$6,558.

Teacher Presentation: Deane Castro informed the board of the results from the Special Education review; the district received a score of 42/42 on all requirements

Dr. Stute shared information about the Title VI Grant; the Veterans Day Program; and the upcoming Thanksgiving Community Meal.

Financials: Valerie Sward presented claims and monthly financial reports. Money will be moved into a money market account with a higher interest bearing CD's. Funds were moved

Ad: \$20,000 to General Fund, \$50,000 to operations

and \$5,000 to Food Service. Motion by Logue, seconded by Thustos, to accept the financial reports and claims as presented.

Policy: No action was taken on Policy G1A - Support Staff Employment and Benefits.

The board held the second reading of the policy to pay board members for study sessions lasting longer than one hour.

Community Outreach: A draft of the community outreach brochure was presented to the board for feedback and recommendations for improvement.

Personnel/Contracts: Motion by Quivey, seconded by Thustos, to hire a girls basketball coach contingent on the interview of applicants and to hire Roy Merdianian as the assistant girls basketball coach.

Executive Session: Motion by Thustos, to enter Executive Session for personnel matters at 6:27 p.m.

Adjourned from Executive Session at 7:13 p.m.

Adjournment: Motion by Quivey to adjourn the meeting at 7:14 p.m.

Published once at the total approximate cost of \$37.80

Published: Dec. 20, 2018

Notice to Creditors

STATE OF SOUTH DAKOTA IN THE CIRCUIT COURT

COUNTY OF FALL RIVER) SS Seventh Judicial Circuit

In the matter of the estate of) 23 PRO. NO. 18-23

Richard Johnson)

Deceased)

Notice is given that on August 9, 2018, Jerry Moos, whose post office address is P.O. Box 307, Hudson, CO 80642, was appointed as Personal Representative of the Estate of Richard Johnson.

Creditors of decedent must file their claims within four months after the date of the first publication of this notice or their claims may be barred.

Claims may be filed with the personal representative or may be filed with the clerk and a copy of the claim mailed to the personal representative.

Dated August 9, 2018.

/s/Jerry Moos
Jerry Moos
P.O. Box 307
Hudson, CO 80642

Carol Foster
Fall River County Clerk of Courts
Fall River County Courthouse
906 N. River
Hot Springs, S.D. 57747
(605-745-5131)

Patrick M. Gimbach
Parrell, Parrell & Gimbach P.C.
Attorneys at Law
441 N. River St.
Hot Springs, S.D. 57747
(605-745-3161)

Published three times at the total approximate cost of \$75.18

Published: Dec. 20, 27, Jan. 3, 2019

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Schlaak, Karen

From: Schlaak, Karen
Sent: Friday, December 14, 2018 9:08 AM
To: tribune@gwtc.net
Subject: 2741-2, Tubbs Land and Cattle LLC
Attachments: 2741-2public.short.docx; FORM8.FRM.doc

Attached is a notice to be published on December 20, 2018.

Tubbs Land and Cattle LLC c/o Mark Tubbs, PO Box 563, Edgemont SD 57735 (605 890-7633) has been notified to contact you to authorize publication and arrange for payment.

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

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

Karen Schlaak

SD DENR, Water Rights Program
(605) 773-3352



Schlaak, Karen

From: Schlaak, Karen
Sent: Friday, December 14, 2018 9:09 AM
To: RCY Legals (legals@rapidcityjournal.com)
Subject: 2741-2, Tubbs Land and Cattle LLC
Attachments: 2741-2public.short.docx; FORM8.FRM.doc

Attached is a notice to be published on December 20, 2018.

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Karen Schlaak
SD DENR, Water Rights Program
(605) 773-3352





**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 NEWSPAPERS RIGHT AWAY.**

December 14, 2018

Tubbs Land and Cattle LLC
c/o Mark Tubbs
PO Box 563
Edgemont SD 57735

Dear Mr. Tubbs:

Water Permit Application No. 2741-2 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 Fall River County Herald printed at Edgemont SD (Ph # 605 662-7201) and the Rapid City Journal printed at Rapid City SD (Ph # 605 394-8300). You will need to contact the newspapers and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspapers to authorize publication of your Notice and to arrange for payment. Early contact with the papers can eliminate delays. Upon receiving authorization from you, the 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 December 20, 2018. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 2741-2 to Appropriate Water

Notice is given that Tubbs Land and Cattle LLC, c/o Mark Tubbs, PO Box 563, Edgemont SD 57735 has filed an application for a water permit to appropriate 3.34 cubic feet of water per second from one well to be completed into the Madison Aquifer (3,150 feet deep) located in the NW 1/4 NW 1/4 Section 35 for irrigation of 567 acres located in the N 1/2, SE 1/4 Section 35 and the E 1/2, NW 1/4 Section 27; all in T7S-R1E. This application also proposes to impound 65 acre-feet of water by constructing a dam and impounding water in the SW 1/4 SE 1/4 Section 27-T7S-R1E. Water is to be pumped from the well into the storage dam prior to being applied to the irrigated acres. This site is located approximately 7 miles west and 7 miles north of Edgemont SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2741-2 with qualifications because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <http://denr.sd.gov/public> or contact Eric Gronlund for this information, or other information, at the Water Rights Program address provided below.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by December 31, 2018.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained.

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

Steven M. Pirner, Secretary, Department of Environment and Natural Resources. Published once at the total approximate cost of _____.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

JAN 31 2019

Tubbs Land and Cattle LLC
c/o Mark Tubbs
PO Box 563
Edgemont SD 57735

Dear Mr. Tubbs:

Enclosed is Water Permit No. 2741-2 authorizing construction of the water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

The well authorized by this permit 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.

Final engineering plans and specifications for the dam pursuant to Administrative Rule of South Dakota 74:02:08:09 shall be submitted for review and approval. Construction of the dam cannot occur until the final plans and specifications are approved by the Chief Engineer.

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

2741-2

SD EForm - 1621LD V1

SOUTH DAKOTA WATER WELL COMPLETION REPORT

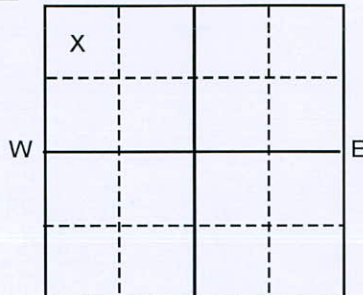
11-02

Location NW ¼ NW ¼ Sec 35 Twp 7S Rg 1E

County Fall River

North

Please mark well location with an "X"



Well Completion Date

09/28/2019

1 Mile

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

PROPOSED USE:

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

METHOD OF DRILLING: Rotary

CASING DATA:

☒ Steel ☐ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
54.5 LB/FT	13 3/8 IN	0 FT	618 FT	17 1/2 IN
36 LB/FT	9 5/8 IN	533 FT	2979 FT	12 1/4 IN
LB/FT	IN	FT	FT	IN

GROUTING DATA: See Remarks

Grout Type	No. of Sacks	Grout Weight	From	To
		Lb/gal	Ft	Ft
		Lb/gal	Ft	Ft

Describe grouting procedure

SCREEN:

☐ Perforated pipe ☐ Manufactured

Diameter _____ Inches Length _____ Feet

Material _____

Slot Size _____ Set From _____ Feet to _____ Feet

Other information Open hole - no screen installed.

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? Well Flowing

☒ No, Why Not?

Lab to which water quality sample sent for analysis

Well Owner: Mark Tubbs

Business Name: Tubbs Land and Cattle Company

Address: PO Box 563

City, State, Zip: Edgemont SD 57735

WELL LOG:

DEPTH

FORMATION	FROM	TO
No logs ran. Well drilled based on offset mud logs.		
Minnekahta Formation top	1715	AM per driller
Opeche Formation top	1752	8/12/2020
Minnelusa Formation top	1863	
Red Marker	2270	
1st Leo Sand	2335	
2nd Leo Sand	2989	
Madison	2989	3196

STATIC WATER LEVEL Surface FEET

If flowing: closed in pressure 70 PSI

GPM flow 400 through 9 5/8 Inch pipe

Controlled by ☒ Valve ☐ Reducers ☐ Other

Reduced flow rate _____ GPM

Can well be completely shut in?

WELL TEST DATA:

☐ Pumped Describe: Estimated flow rate.

☐ Bailed

☒ Other

Pumping Level Below Land Surface

0 Ft. After 0 Hrs. pumped 400 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

13 3/8 CMT - 230sx Extreme Lite 10 @ 12 ppg. 3% CaCl, 2% Sodium Metasilicate, 1/2 #/sx Flocele.
 107sx Class G @ 15.8 ppg. 3% CaCl, 1/2 #/sx Flocele
 9 5/8 CMT - 300sx Extreme Lite 10 @ 12.0 ppg. 3% CaCl, 2% Sodium Metasilicate, 1/2 #/sx Flocele.
 160sx Class G @ 14.8 ppg. 3% CaCl, 2% Gel, 1/2#/sx Flocele

This well was drilled under license # 831 and this report is true and accurate.

Drilling firm: Capstar Drilling

Signature of License Representative:

RECEIVED

Signature of Well Owner or Equitable Property Holder:

JAN 27 2020

WATER RIGHTS PROGRAM

Date: 1/27/20