

OFFICE OF STATE ENGINEER

PIERRE, SOUTH DAKOTA

RECORD OF PROCEEDINGS

Application No. 82-1

Water Div. No. 1 Moreau Water Dist.

Application Received September 15, 1909

Maps Received September 15, 1909

Acknowledgment September 17, 1909

Specs for Pub. Matl. September 17, 1909

Receipt from Newspaper September 20, 1909

Copy of Newspaper Rec'd October 23, 1909

Notice of Correction October 13, 1909

Proof of Pub. Rec'd November 12, 1909

Hearing November 16, 1909

Approved November 16, 1909

Recorded and Filed December 7, 1909

REMARKS

Notice of fees sent November 16,
1909, and fees received December 7,
1909.

No. 02-1

Water Division No. 1 Moreau Water District.
(Blanks to be filled by the State Engineer.)

COPY

APPLICATION FOR A PERMIT To appropriate Water Within the State of South Dakota

[NOTE—Draw lines through items not applicable. Where not otherwise stated all items refer to the proposed enlargement or extension.]

1. Name of applicant Dairy A. DavisPostoffice address Harding, County Harding, State South Dakota

I. If a corporation:

(a) Name of same

(b) Date and place of incorporation

(c) Amount of capital stock

(d) Amount paid in

(e) Names and addresses of directors

[NOTE—A certified copy of articles of incorporation must accompany the application.]

II. Method of accomplishing the work and financial resources of the applicant:

(a) Method of accomplishing the work: (Whether by contract, employment of others, or by personal labor) Contract

(b) Cash on hand, \$

(c) Treasury stock, \$

(d) Bonds to be issued, \$

(e) Other resources, \$

2. Name of existing diversion works Soft Water Reservoir & Davis Ditches Location 14158 Notice 18388Name of enlargement or extension South Side Extension-Davis Highline Ditch3. Quantity of water claimed by enlargement or extension 1.5 cubic feet per second.4. Source of water supply Softwater Draw, a dry water-course, drainage area 24 sq. miles5. Location of point of commencement of extension a point on Davis Highline Ditch
N. 20° 00' W. 1071 ft. from the 1/4 sec. cor. bet. Secs. 26 & 35, T. 16 N.,
R. 5 E. B.H.M.6. Annual periods during which water is to be used May 1 to October 1st

7. To be used for:

I. Irrigation or domestic use:

(a) Number of acres to be irrigated 104.35 acres.(b) Legal subdivisions to be irrigated S. 1 SW 1/4 Sec. 26 & S. 1 SE 1/4 Sec. 20, T. 13
R. 5 E. B.H.M.

[NOTE—A list of lands to be irrigated, giving each subdivision and fraction with acreage thereof, should be written here, or may be appended as a part of this application. Same must also be shown on accompanying map.]

(c) Statement as to domestic use (giving location, etc.)

II. Mining, power, manufacturing, transportation, or other purposes:

(a) Nature of use

(b) Amount of power to be generated horse power.

(c) Location of plant

(d) Method of developing power

(e) Point where water will be returned to stream

8. Estimated cost of works:

(a) Head gates, \$ Now built. (b) Pumping plant \$
 (c) Siphon \$ 112.00 (d) Canal—earth, \$ 198.00 rock, \$
 Extension
 (e) Other structures Dam. Raising \$ 207.50 Total, \$ 737.50
 Riprap 180.00

9. Description of diversion works:

I. Nature of works: (Reservoir, dams, ditch, flume, pumping plant, etc.)

Storage reservoir for storm waters and distributing channels.

II. Dimensions of works:

(a) Dam: Height Max. 20.5 feet; length at bottom feet; length at top 421.5 feet; thickness at bottom max. 102.5 feet; thickness at top 10.0 feet; slope of front (water) face 3:1; slope of back face 1 1/2:1; material used in construction light clay

(b) Reservoir; Capacity when filled 325.55 acre feet. Surface area at highwater mark 37.23 acres.

DEPTH AT OUTLET—FEET	SURFACE AREA AT EACH DEPTH AT OUTLET—ACRES	FEET OF AVAILABLE CAPACITY—ACRE-Feet
10.1	H.W.I. above lower outlet	237.65
5.1	" " " " upper outlet	150.4

(c) Head gate: Width 1.0 feet; height 1.0 feet

Material Cement concrete conduit, wooden flash boards

(d) Canal: Total length 1.72 miles South side extension

LOCATION BELOW HEADGATE	DEPTH	BOTTOM WIDTH	WIDTH AT WATER LINE	GR. CUT PER MILE
At flume mile	1.5 feet	6.0 feet	7.5 feet	5.28 feet
A:B ext. mile	1.0 feet	3.0 feet	5.0 feet	5.28 feet
At mile	feet	feet	feet	feet
At mile	feet	feet	feet	feet
At mile	feet	feet	feet	feet

(Give dimensions when reductions in size are made.)

10. Time required for completion of work _____ years.

11. Time required for complete application of water to the proposed beneficial use 1 1/2 years.

12. Choice of newspaper for publication of notice of intention to appropriate

The Belle Fourche Bee, published at Belle Fourche, S. Dakota

STATE OF SOUTH DAKOTA

County of Butte ss

I, Daisy A. Davis, being first duly sworn on my oath depose and say: That my relation to the above described undertaking is that of Owner

(Owner, manager or engineer)

foregoing statement, and examined the map accompanying the same, and that I know of my own personal knowledge that the matters therein stated and shown are true.

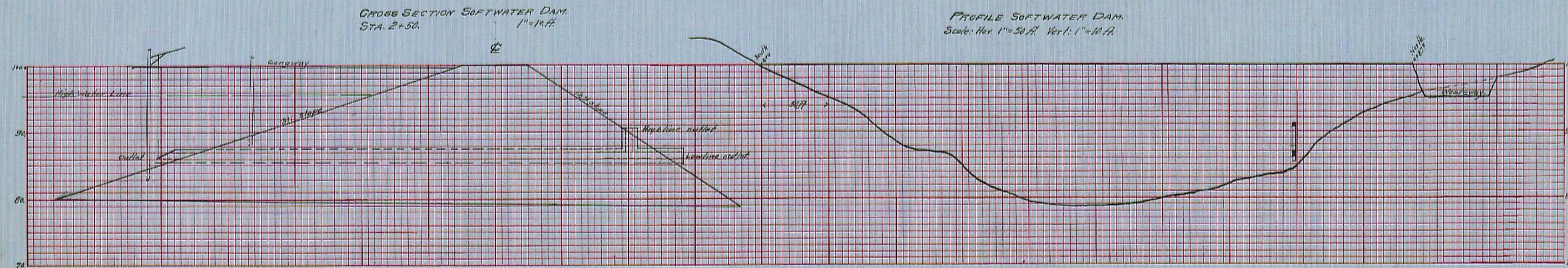
Signed Daisy A. Davis

Subscribed and sworn to before me this 17th day of April 1908

(SEAL)

Tyler S. Overpack
 Notary Public (or other qualified officer).

MAP
OF
SOUTH HIGHLINE EXTENSION DITCH
SOFT WATER RESERVOIR AND DAVIS DITCHES
SECTIONS 25, 26 AND 27, T.16 N. R. 5 E. B.H.M. HARDING COUNTY, SOUTH DAKOTA
Scale: 1 inch = 500 ft. April 20, 1909.
Comprising the Irrigation System on the Desert Land Entry of
DAISY A. DAVIS, HARDING, S. D. AHOA.



Soft Water Draw is a dry watercourse, drainage area 24.0 sq. miles of rolling prairie, sandy soil. Maximum runoff point of damming is 430. sec. feet.
Soft Water Reservoir has an area on high water line of 37.20 acres, capacity 385.55 acre feet. The dam was built in 1905 by William J. Davis under authority of original location notice N. 14158 and 18268, for the irrigation of desert lands. The reservoir has been enlarged from a capacity of 295.5 acre feet to its present capacity by raising the waterline 2.7 feet. This required 3783.0 cu. yds. of earth and 200 wagon loads of stone to raise and widen the dam and protect the front slope.
The outlet is a concrete conduit one ft. square inside extending through dam with wooden headgate on upper end and penstock rising from lower end to elevation of North Highline ditch. This ditch is 6 ft. wide on bottom, 7.5 ft. wide on waterline, water flows 15 ft. deep, grade 5.20 ft. per mile. Water is supplied from this ditch by a flume, 2 ft. wide x 1 ft. deep to the South Highline Extension Ditch, which is 3 ft. wide on bottom, 5 ft. wide on top and 1 ft. deep. Grade 5.20 ft. per mile. The additional 90.5 acre feet of water stored in the enlarged reservoir is used to irrigate 104.50 acres on the desert land entry of Daisy A. Davis, Harding, S. Dak. through the South Highline Extension Ditch and Davis Lowline Ditch. Enlargement application is being made for 15 sec. feet of flow during irrigation period, May 1st to October 1st. Cultivated area = 25.79 acres.

State of South Dakota ss:
County of Butte

I, Carl C. Adams, being duly sworn, upon my oath say: that I am the engineer of the Soft Water Reservoir and Davis Ditches and the South Highline Extension Ditch; that the survey and map thereof were made by me and that I have read the accompanying application and know of my own knowledge that the statements therein made are true.

Carl C. Adams -
Deputy State Surveyor, S.D.

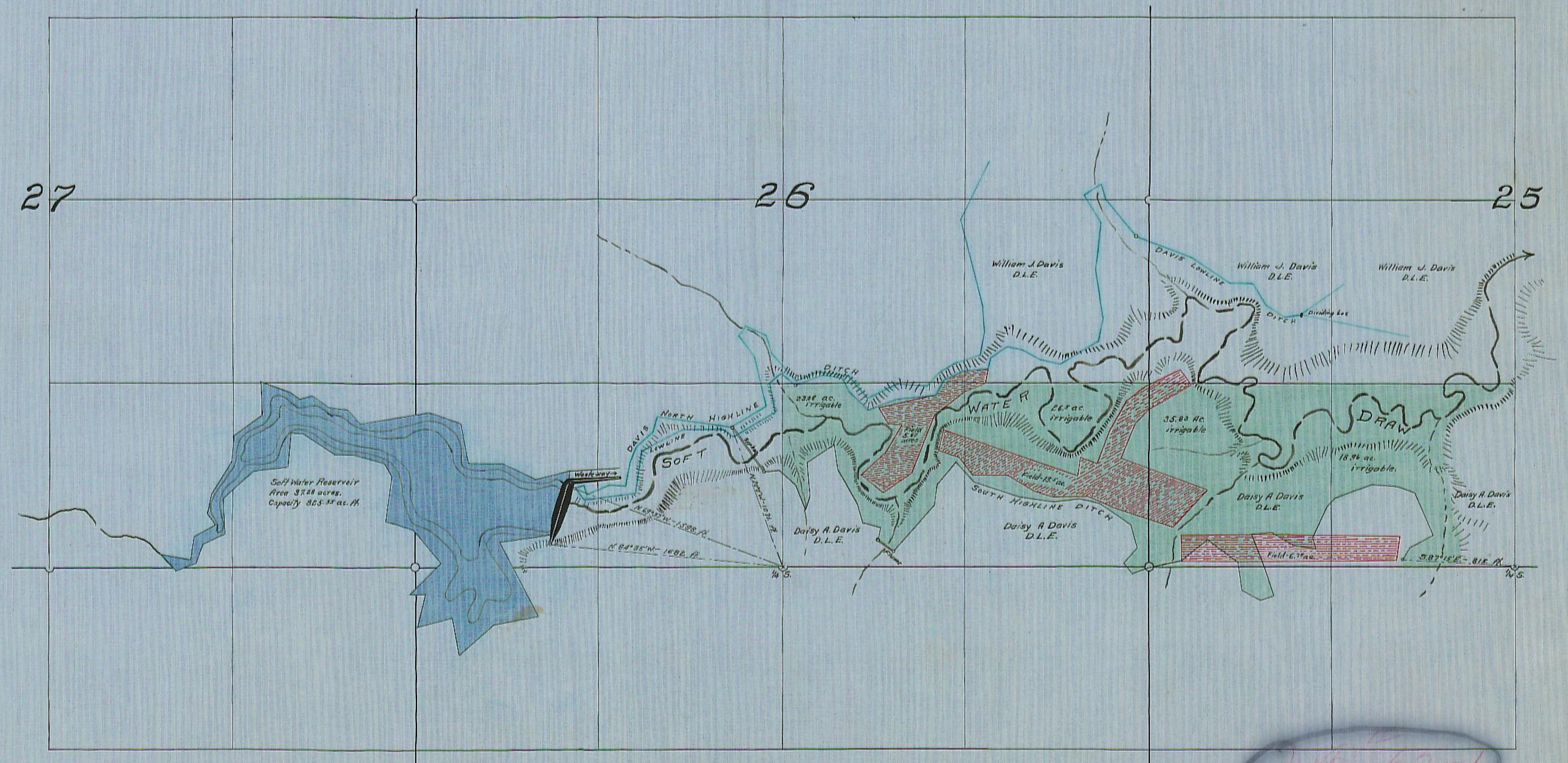
Subscribed and sworn to before me this 26th day of April, A.D. 1909.

Ed. C. C. Adams
Notary Public.

My commission expires March 20, 1910.

RECEIVED
SEP 16 1909
OFFICE OF STATE ENGINEER,
PIERRE, S. DAK.

APPROVED
Samuel H. Lea
State Engineer



62-1
62-1

Remarks by State Engineer:

This application is for the right to store and appropriate for irrigation purposes 1.5 second-foot of the waters of Softwater Draw, Harding County, the diversion works to comprise an enlargement or extension of existing works.

STATE OF SOUTH DAKOTA }
County of Hughes } ss

Pierre, South Dakota, December 8, 1909

This is to certify that the foregoing application was received at this office at nine o'clock a.m. upon the 15th day of September 1909 and that after examination it was found to comply with the provisions of the Water Code of South Dakota. Notice of intention to appropriate was published, proof of publication was duly filed and a hearing was held in this office on November 16, 1909.

Samuel H. Lee
State Engineer.

By B. B. Lee Deputy

Number of permit 62-1

Date of first receipt of application September 15, 1909

Date of return to applicant for correction - - - - - 1909

Date of receipt of corrected application - - - - - 1909

Date from which application may claim right September 15, 1909

Approved November 16, 1909, Recorded in Book 1- Page 143

This is to certify that I have examined the foregoing application for a permit to appropriate water of the State of South Dakota, and I hereby grant the same as stated herein, subject, however, to the following limitations and conditions.

1st. The equivalent of at least one-fifth of the work above specified is to be completed on or before

1910. Work has been completed

2d. The whole of said work is to be completed on or before 1910.

3d. The limit of time for proof of beneficial use of water appropriated in accordance herewith is May 16, 1911.

4th. The water appropriated shall be used for the purpose of irrigation.

5th. The prior right of all persons who, by compliance with the laws of the State of South Dakota, have acquired a right to the use of water must not be injuriously affected by this appropriation.

6th. The amount of the appropriation herein granted shall not exceed 1.5 cubic feet of water per second of time; neither shall it exceed the capacity of the above described system of diversion works, nor the least amount of water that experience may hereafter indicate as necessary for the production of crops in the exercise of the best husbandry; and further, said appropriated must be limited to not more than one-seventieth (1/70) of one cubic foot of water per second of time for each acre of land to which water is actually and beneficially applied on or before May 16, 1911; said water to be used during the following described annual periods.

May 1 to October 1.

Witness my hand this 8th day of December 1909.

Samuel H. Lee
State Engineer.

By B. B. Lee Deputy

COPY

No. 03-1
Division No. 1 Moreau Wat District

PERMIT

to appropriate water from
Softwater Draw
Harding County, South Dakota

Name of applicant

Daisy A. Davis

Name of diversion works South Side
Extension-Davis Highline Ditch

Date of first receipt at office of State
Engineer September 15, 1909

Returned to applicant for correction
- - - - - 190 - - - - -

Corrected application received

- - - - - 190 - - - - -

Date of water right

September 15, 1909

Recorded in Book - 1 - Page 143

One fifth of work to be completed
Work has been completed 10

Whole work to be completed

19 -

Final proof of use of water

May 10, 1911

Approved November 16, 1909

Samuel H. Lee
State Engineer

By B. B. Lee
Deputy

STATE OF SOUTH DAKOTA
COUNTY OF HUGHES

I hereby certify that the within and
foregoing instrument is a true, correct and
complete transcript of the instrument which
it purports to be, as the same was filed for
record in the office of the State Engineer.

Witness my hand and official seal, done
at my office in Pierre, State of South Dakota

this 9 day of December 1909

Samuel H. Lee
State Engineer

By B. B. Lee
Deputy

WATER LICENSE NO. 62-1

DAIRY A. DAVIS

WHEREAS, On the 11 day of December 1900

WHEREAS, On the _____ day of _____ A. D. 19____

WHEELER, On the second day of November A. D. 19 00

For irrigation upon the S $\frac{1}{2}$ of NW $\frac{1}{4}$, Section 25, S $\frac{1}{2}$ of NE $\frac{1}{4}$, Section 20, Township 14 N., Range 6 E. B. H. U.

NOW, THEREFORE, By virtue of the authority vested in me by the laws of the State of South Dakota, I hereby grant and confirm to Daisy A. Davis of Harding the holder and owner of said permit No. 98-1 a water right, dating from September 15, 1909 to the use of 1.5 cubic feet per second of the waters of Softwater Draw in the County of Harding and State of South Dakota, or so much thereof as may be necessary for the purposes hereinbelow mentioned, to be diverted at N. 20° 00' W. 1071 feet from quarter section corner between Sections 20 and 25, Township 10 N., Range 5 E., B.M.M. and conducted to and upon 3 1/2 of SW 1/4, Section 25; 3 1/2 of SE 1/4, Section 20; Town- ship 10 N., Range 5 E. B.M.M. for the purpose of irrigation

subject, however, to the laws of the State of South Dakota applicable to a license for the use of the waters of the State, and subject, also, to the local or community customs, rules and regulations which have been or may be adopted from time to time by a majority of the users from a common source of supply, canal or lateral from which such water may be taken, when such rules and regulations have for their object the economical use of such water.

WITNESS, My hand and the seal of my office at Pierre, South Dakota,

this 25th day of October A. D. Nineteen
Hundred and Eleven.

By _____ State Engineer.
Deputy.

STATE OF SOUTH DAKOTA

Water License No. 82-1

To DAINY A. DAVIS

Source of Supply Duffwater Draw.

Harding County

Am't 1.5 Sec. Feet

Point of Diversion N. 20° 00' from
Sec. cor. bot. Secs. 20 & 35, T
10 N., R. 5 E. D.H.M.

Place of Use S. 1/4 Sec. 25:34
Sec. 20, T. 10 N., R. 5 E. D.H.M.

Purpose Irrigation

Date of Priority September 15, 1900.

Recorded December 8, 1900.

In Book -1- of Record Page 143.

Deputy.

Permit No. 62-1..

Water Division No. 1.....

Moreau.....

Water District

Notice of Completion of Works

(This blank must be filled out by the holder of permit and forwarded to the State Engineer at least 60 days before the time set for completion of works.)

(P. O.) Harding, S. Dakota.

(Date) October 28, 1909.

TO THE STATE ENGINEER OF SOUTH DAKOTA, PIERRE:

DEAR SIR: Notice is hereby given of the completion of the works for the diversion of 1.5 second feet of the waters of the state from Softwater Draw through the Softwater reservoir and Davis Ditches, South side extension of Davis Highline Ditch. for Irrigation purpose.

to enlarge in accordance with the terms and conditions of a certain permit heretofore issued by the State Engineer of the State of South Dakota.

1. The name of the person or corporation holding said permit is Daisy A. Davis.
2. The postoffice address of such person or the place of business of such corporation is Harding County of Harding State of S. Dakota
3. The number of such permit is 62-1 and the date set for the completion of such work is Completed at time of filing application to enlarge.
4. Said water to be used for irrigation purposes.
5. Said works of diversion will be fully completed on the date set for such completion, and the amount of water which said works are capable of conducting to the place of intended use, in accordance with the plans accompanying the application for such permit, is 4.5 cubic feet per second.
6. The amount of land for which said water is available is 104.35 acres, particularly described as follows: S $\frac{1}{2}$ SW $\frac{1}{4}$ Sec. 25 & S $\frac{1}{2}$ SE $\frac{1}{4}$ Sec. 26, T. 16 N. R. 5 E. B. H. M.

(In case of all canals or other works designed to divert and carry more than 50 cubic feet of water per second, the following certificate must be signed by a well known and competent engineer.)

I hereby certify that the facts set forth in the above notice are true.

Carl C. Adams
Engineer.

(Signature.)

Daisy A. Davis

NO. 82-1

Water Div. No. 1 Morgan Water Dist.

Notice of Completion of Works.

CC-1

RECEIVED

Harding, S. Dakota

Received November 2, 1909.

Date of Proof October 28, 1909.

Place Harding, South Dakota.

Notice sent to Carl C. Adams

RECEIVED

NOV 2 1909

OFFICE OF STATE ENGINEER,
PIERRE, S. DAK.

Harding

S. Dakota

Harding

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA

County of Cutter } ss

J. Smith being duly sworn, deposes and says the annexed printed copy of Notice

Intention to appropriate water was taken from the _____

Belle Fourche Bee a newspaper which

during the whole time of publication of said notice herein-

after stated, has been and is, printed and published in the

City of Belle Fourche County of _____

T. Butte and State of South Dakota.

and State of Solid Disko,

That the said notice was published in said newspaper on the

following dates:

Sept 23, Sept 30, Oct 7,

Oct 14 Oct 21

100-443887-1000

in each and every issue of the full number thereof, the first

publication being made on the 23 day of Sept

19. and the last publication on the 2/07

and the last publication on the _____ day of _____

..... 19th, upon which days or times

of publication aforesaid the newspaper was regularly pub-

1. The first step is to identify the problem. In this case, the problem is that the company is not meeting its sales targets. The second step is to analyze the data. The third step is to develop a plan. The fourth step is to implement the plan. The fifth step is to evaluate the results.

lished, and that during the whole time of said publication

he was..... the printer.....and publisher.....of

[illegible]

RECEIVED

NOV 15 1909

OFFICE OF STATE ENGINEER,
PIERRE, S. DAK.

CARL C. ADAMS
IRRIGATION ENGINEER
CAMP CROOK, S. D.

Consent to enlargement of works and additional appropriation of water.

-----0000000000000000-----

State of South Dakota) ss:
County of Butte)

I, William J. Davis, of Harding, Harding
County, State of South Dakota, sole owner of the Soft Water Reservoir
and Davis Ditches, storing the waters of Soft Water Draw for
irrigation purposes under authority of original location notices
Numbers 14158 and 14268 do hereby give my free and voluntary
consent to the enlargement and extension of the above works and
to the use of water therefrom by Daisy A. Davis, according to the
terms and in the manner designated in her application to enlarge.

William J. Davis
Owner.

Subscribed and sworn to before me this 30th day of June, 1909.

Tyler S. Overholt

Notary Public.

My Commission expires April 15-1913.

RECEIVED

OCT 19 1909

OFFICE OF STATE ENGINEER
PIERRE, S. DAK.

Harding, S. D.

Oct 8, 1909

St. Engineer

Samuel M. Lee,
Pierre, S. D.

Dear Sir,

In regards to my
desert land entry No. 521
will say that Deputy
states surveyor Earl
Adams, surveyed the
land covered by the
water, conveyed by
two irrigating ditches.
But I have not recd
the map with field
notes, which must be
in your possession. I
make final proof Oct. 6
1909.

I do solemnly affirm and
swear that the two witnesses
that the right of water
from W. J. Davis reservoir
was not detrimental to
myself and the Public
welfare.

There seems to be
a mistake in regards
to ditches as the Act
only mentions the high
line ditch. There is
a lower ditch, that
covers quite a number
of acres which the field
notes ought to show
on the north side of
the dry water course
known as soft water
draw. Yours Truly
Daisy A. Davis

STATE OF SOUTH DAKOTA)
COUNTY OF HARDING) ss.

A F F I D A V I T.

Daisy A. Davis, of Harding, South Dakota, being first duly sworn, upon her oath deposes and says, viz: That she is the identical person who made application in accordance with the provisions of the irrigation laws of South Dakota for a permit to appropriate, for beneficial use 1.5 cubic feet of water per second of time, from Spft Water Draw through the Davis Highland Ditch ^{and Howland Ditch}, the point of diversion of which is to be located in the SE¹ of SW¹ of Section 26, Twp. 16N. R.5 EBHM. Said water to be used for the purpose of irrigation on the S¹ SW¹, Sec. 25, and S¹ SE¹ Sec. 26, Twp. 16N. R.5 EBHM. all in Harding County, South Dakota. That no rights prior to this of any person or persons whomsoever will be injuriously effected thereby. Further that the allowance of the within mentioned permit will not in any way be detrimental to the public welfare but that this application is made for the benefit of this affiant for the purpose of irrigating the last above mentioned tracts of land.

Daisy A. Davis

Subscribed and sworn to before me this 7th. day of October, A.D. 1909.

M. A. [Signature]
Clerk of Courts.

Corroborating Affidavit.

W. J. Davis and John Bessett each being duly and severally sworn, upon oath each for himself deposes and says that he has read the foregoing affidavit is well acquainted with all premises therein mentioned and all facts there in contained and of his own personal knowledge knows the same to be true.

W. J. Davis
John Bessett

Subscribed and sworn to before me this 7th. day of October A.D. 1909.

M. A. [Signature]
Clerk of Courts.

State of South Dakota

OFFICE OF STATE ENGINEER

SAMUEL H. LEA, STATE ENGINEER
RALPH VANDERBROOK, ASSISTANT

PIERRE

October 13, 1909.

Editor Bee,

Bellevue, South Dakota

Dear Sir:-

I desire to call your attention to the fact that in the advertisement of Daisy A. Davis of her intention to appropriate water in this state, the name of the ditch is given as "Highland" instead of "Highline" as given in the advertisement sent from this office. A copy of the correct advertisement is enclosed herewith. Please make this correction at once in order that the corrected advertisement may be run the required number of times, four, before the date set for the hearing, November 16, 1909.

Yours very truly,

State Engineer.

Enclosure:
Copy of advertisement.

State of South Dakota

OFFICE OF STATE ENGINEER

SAMUEL H. LEA, STATE ENGINEER
RALPH VANDERBROOK, ASSISTANT

PIERRE

October 15, 1909.

Daisy H. Davis,
Harding, South Dakota.
Madam:-

In reply to your letter of the 5th instant in which you state that the advertisement of your notice of intention to appropriate water, No. 62-1, only mentions the Highline Ditch, and that there is a lower ditch that covers a considerable area and through which you intend to use water, you are informed that this information is all shown upon the map accompanying your application. The application states that the water supply is taken from Softwater Draw and that the diversion works are to be an extension of the Davis Highline Ditch and this is plainly shown upon your map which was made by Mr. Adams. Upon the approval of your application, the duplicate map now in this office will also be approved and forwarded to you. This map plainly shows the two ditches referred to by you and since it will form part of your permit, there will be no doubt about the validity of same. You need have no uneasiness concerning the matter for your permit when issued will cover the situation properly.

Since the diversion works for which a permit has been asked have been completed, it will be necessary for you to furnish this office proof of completion of these works and also proof of the application of the water to beneficial use. I presume Mr. Adams will attend to this matter in due time, since he is fully informed as to the requirements of this department in such cases.

Yours very truly,

State Engineer

State of South Dakota

HAMUEL H. LEA, STATE ENGINEER
RALPH VANDERBROOK, ASSISTANT

OFFICE OF STATE ENGINEER

PIERRE

C E R T I F I C A T E

November 2, 1906.

State of South Dakota () ss
County of Hughes ()

This certifies that Daisy A. Davis, whose postoffice address is Harding, Harding County, South Dakota, under the provisions of the Water Code of 1907 of the State of South Dakota, has filed in this office an application for the right to enlarge the Soft Water Reservoir and Davis Ditches, the point of commencement or extension of which is located at a point on Davis Highline Ditch N. 26°00' E. 1071 ft. with the $\frac{1}{4}$ sec. corner between Sections 33 and 35, Township 18 N., Range 5 E. E.R.M.; the lands to be irrigated comprise 104.36 acres, situated in the S $\frac{1}{2}$ of the SE $\frac{1}{4}$ of Section 35 and S $\frac{1}{2}$ of the SE $\frac{1}{4}$ of Section 33, Township 18 N., Range 5 E. E.R.M., as designated in her application; and that said enlargement application is on file in this office.

Witness my hand and official seal, this 2nd day of November, 1906.

State Engineer.