



LOWER PLATTE SOUTH natural resources district

3125 Portia Street | P.O. Box 83581 • Lincoln, Nebraska 68501-3581
P: 402.476.2729 • F: 402.476.6454 | www.lpsnrd.org

Agenda Item #11

Memorandum

Date: November 11, 2020
To: Each Director
From: Paul D. Zillig, General Manager
RE: Water Resources Subcommittee Meeting Minutes.

The Water Resources Subcommittee met via video/teleconference at 5:30 p.m. on Tuesday, November 10, 2020. Subcommittee members participating included Bob Andersen, Chelsea Johnson, Karen Amen, Vern Barrett, Greg Osborn, and Dan Steinkruger. Others accessing the meeting included Directors Larry Ruth and Gary Hellerich, Dave Hladik of Valparaiso, Doug Hansen from Farmers National, Steve Seglin & Corey Wasserburger, Tracy Zayac, Mike Murren, Steve Herdzina, Nathan Kuhlman, Jared Nelson, Maclane Scott, Dick Ehrman, Dan Schulz, David Potter, and myself.

Chair Andersen opened the meeting and welcomed those in attendance. The first item on the agenda was to consider the probable violation of 2020 irrigation pumping in the Dwight-Valparaiso-Brainard Special Management Area for the Beverly Ragusa Trust well near Valparaiso. Andersen called on Doug Hansen to present their information to the Subcommittee, Hansen reported that he is the farm manager for the property and he reviewed the attached email & map and discussed the challenges of irrigating this farm. He reported that Dave Hladik has farmed this property many years and has done a good job as the tenant on this farm.

Dave Hladik reported that he had three items he wanted to bring up with the Subcommittee, they were:

1. Didn't understand exactly why the NRD established an allocation in the Dwight-Valparaiso-Brainard Special Management Area. Would like for the allocation to go away.
2. The farm has two wells that each irrigates a part of the farm, would like to combine the allocation and be able to apply it on any of the certified irrigated acres on the entire farm.
3. Initially the allocation was more for gravity irrigation, but that was reduced after last year. He would like his allocation restored to the previous limits.

Herdzina then reviewed his attached November 2nd memo and October 23rd Report of Investigation. The Subcommittee discussed the situation and the report. I reported that staff will provide Hansen and Hladik some background information concerning the purpose for the Special Management Area. Discussion centered around the effort and work to establish rules that would reduce the likelihood of groundwater problems, that this well was in violation a few years ago, the need to follow the rules & regulations, and the that this item is scheduled for Board consideration in December.

It was moved by Steinkruger, seconded by Osborn, and unanimously approved by the Subcommittee to recommend the Water Resources Subcommittee determine that a probable violation of the Dwight-Valparaiso-Brainard Special Management Area Rules & Regulations has occurred for Well G-069699 on the Beverly Ragusa Trust property as reported in the October 23, 2020 Report of Investigation and direct staff to notify the landowner as per the NRD Ground Water Rules & Regulations. The landowner has the option of requesting a public hearing prior to the Board taking any action on this item in December.

The next item on the agenda was to consider entering into a professional services agreement with the Phoenix Web Group for modifications to the NRD's groundwater database. Herdzina reviewed the attached memo and it was discussed by the Subcommittee. It was moved by Steinkruger, seconded by Amen, and unanimously approved by the Subcommittee to recommend the Board of Directors approve the professional services agreement for database improvements with the Phoenix Web Group in the amount not to exceed \$30,800.

The next item on the agenda was to consider a claim for damages from Stan and Bonnie Litty concerning the construction delays for the Oak-Middle 82-B project. Potter reviewed the attached map and the different impacts the delayed work is having on primarily the landowners ability to maintain fences and graze their pastureland. This summer we worked with the other two landowners on fencing solutions needed to keep cattle out of the construction site, staff feels the claim by the Litty's is fair and staff recommends we approve the claim.

It was moved by Osborn, seconded by Barrett, and unanimously approved by the Subcommittee to recommend the Board of Directors approve a claim submitted by Stan and Bonnie Litty in the amount of \$1,800 due to delays in construction of the Oak Middle Creek 82-B Rehabilitation Project, dependent upon Littys agreement to a Release of All Claims, and authorize the GM to approve a Release of All Claims, pending legal counsel review.

The next item on the agenda was a report by Hellerich on his concerns about the increased waste being produced by livestock in the NRD (primarily poultry) and his concern that other governmental entities are requiring incorporation of the waste/fertilizer which dries out the cropland and thus additional irrigation is needed where the NRD has established a groundwater allocation. He feels the NRD needs to review this situation and consider changes.

The next item were reports by Murren on construction at Oak-Middle 82-B and Upper Salt 3-A. Zayac then reported that the next step for the Irrigation Agreement from NRD dams is that staff is preparing maps that will assist with our efforts to review the status of the existing irrigation arrangements.

There being no additional business the meeting adjourned at 7:10 pm.

PDZ/pz

Encl. 4

cc: Steve Seglin & Corey Wasserburger

Please see the information below and the included attachment. I received these items from Doug Hansen who is the farm manager for the Beverly Ragusa Trust on whose property the alleged allocation violation occurred. He asked that I provide these for consideration prior to the Water Resources Subcommittee Meeting tonight.

Thank you.

Steve Herdzina

Water Resources Compliance Specialist

Lower Platte South NRD

402.476.2729

Steve,

I plan on attending the meeting by Zoom or Phone tomorrow. I have attached a map of the farm that shows how the pipe is laid out and the direction for the flow of the irrigation water.

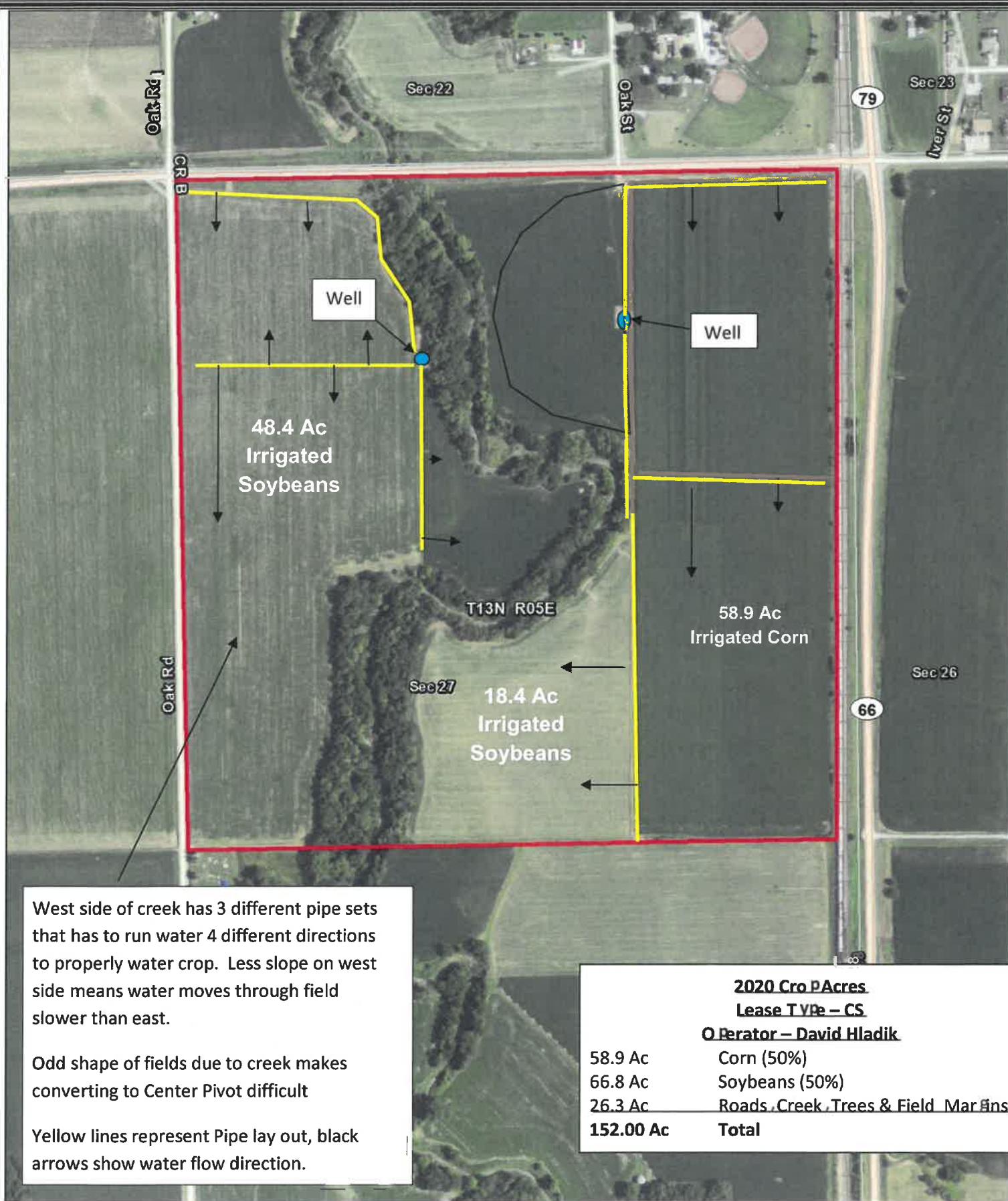
I request if possible for you to provide a copy to the committee members to help Dave explain how he irrigates the farm. Dave and his family have operated this farm for more than 2 generations and know it better than any one, in regards to soils, topography and how the farm responds to irrigation.

A few other points I would like you to consider in discussing the irrigation of the farm with Dave

- I would also like to point out that I have managed this farm from 2006 to present and have always found Dave to be very conservative and very conscientiousness on his use of all crop inputs, including irrigation water on the farm.
-
- Over the years I have not ever witnessed any over use of irrigation, I have not ever seen any water running off any of the fields during irrigation, my experience has been he only puts on what was needed for the crop.
- I do not have a running total for the farm, but I am certain over the time we have irrigated under the regulations we are well under the total levels provided for on a whole farm basis, there has been more than a few years the west side was not irrigated at all during years with good rainfall, as in 2019. I know you only are looking at 3 years at a time in your current regulations, but feel this is a relevant point to consider regarding overall use of ground water on the farm.

Thank you for your assistance in this matter,

Doug Hansen, AFM
Licensed Real Estate Agent in Nebraska and Iowa
Farmers National Company
P.O. Box 540659
Omaha NE 68154
402-496-4197 Office
402-290-9521 Cell
402-496-4207 Fax



West side of creek has 3 different pipe sets that has to run water 4 different directions to properly water crop. Less slope on west side means water moves through field slower than east.

Odd shape of fields due to creek makes converting to Center Pivot difficult

Yellow lines represent Pipe lay out, black arrows show water flow direction.

2020 Cro P Acres	
Lease Type – CS	
Operator – David Hladik	
58.9 Ac	Corn (50%)
66.8 Ac	Soybeans (50%)
26.3 Ac	Roads, Creek, Trees & Field Mar #ns
152.00 Ac	Total



Farm # – 17055 RAGUSA
FSA #2143
NE ¼ Sec 27-13N-5E
Saunders County NE

Doug Hansen, Farm Manager
 Imagery Source: USDA NAIP
 Maps Are For Visual Aid Only
 Boundaries Are Approximate
 Date: 01/17/2014



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Memorandum

Date: November 2, 2020
To: Water Resources Subcommittee
From: Steve Herdzina, Water Resources Compliance Specialist
Subject: LPSNRD Ground Water Rules & Regulations Alleged Violation Report

Beginning in 2014, the District revised the Ground Water Rules and Regulations to add the Dwight-Valparaiso-Brainard Special Management Area (DVB SMA). With the revised Rules and Regulations, the District established an initial three year allocation of 21 acre-inches per irrigated acre not to exceed nine acre-inch annual maximum for sprinkler irrigation and thirty acre-inches per irrigated acre not to exceed a twelve acre-inch maximum for gravity irrigation, beginning in calendar year 2014. On January 15, 2020, new Rules and Regulations went in to effect for the District that changed the allocation amount to a three year total of 21 inches for all types of irrigation systems with a nine inch one year maximum and changed from a fixed three year allocation to an ongoing three year rolling allocation. The DVB SMA advisory group and Water Resources Subcommittee recommended the changes be incorporated into the revised Rules and Regulations which were presented at a public hearing and were then approved by the NRD Board. This information was provided to all residents of the DVB SMA in a letter (Attachment 1). Additionally, a separate mailing was sent to each DVB SMA well owner and tenant (if known) that reiterated this information as well as provided them with a maximum meter reading for their well (Attachment 2).

On September 19, 2020, the Water Resources Compliance Specialist conducted a spot check of well G-069699 owned by Beverly Ragusa Trust, managed by Doug Hansen of Farmers National Company, and operated by Dave Hladik. The results of this spot check showed that the well had pumped an excess of 4.01 inches of the one year maximum amount of nine inches. Due to this overuse of allocation, a penalty of 8.02 inches needs to be applied and served in the subsequent years. Attached is a Report of Investigation by the Water Resources Compliance Specialist, which reviews all information and calculations collected for the alleged irrigation violation (Attachment 3). A map showing the location of the violation is provided in the report. The associated section of the LPSNRD Groundwater Rules and Regulations that refers to the violation process is provided as Attachment 4.

At the October 19, 2020 Water Resources Subcommittee meeting, staff presented a timeline for this alleged violation and provided a brief update. The Subcommittee concluded by inviting the alleged violators to provide additional information and for staff to present the investigation report at the November Water Resources Subcommittee meeting.

In reviewing all available information, staff believes that a probable violation has occurred. If the Water Resources Subcommittee determines that the alleged violation should be a probable violation, the District will send a Notice of Violation to the owner and operator informing them of the probable violation designation and provide them an opportunity to attend a hearing at the December Board of Director's meeting. If the owner/operator agrees to the penalty and does not attend, the Board of Directors will take action based on the evidence presented at that time.



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March 28, 2020

Dear Sir/Madam:

As you are aware, the District has designated the Dwight-Valparaiso-Brainard Special Management Area (DVB SMA) for the protection of ground water quantity in a portion of the District where additional controls are necessary for the protection of ground water quantity in that area. The DVB SMA (see map included with this letter) was established in 2014 in response to static ground water level declines of more than 100 feet due to intense pumping during hot, dry summer months. It also included prohibiting increases in acres irrigated with groundwater and establishing a limit on the amount of irrigation water that can be applied from each well.

Recently, the District has adopted new rules and regulations pertaining to this area.

Here is a summary of the new rules and how they differ from the previous ones:

- The fixed 3-year allocation previously in place for the designated area is being replaced by a three year rolling allocation. The area will maintain an allocation of twenty-one (21.0) acre-inches per irrigated acre not to exceed a nine (9.0) acre-inch annual maximum. 2020 will be the starting year of the rolling allocation.
- Gravity irrigation water use has been modified to match those of sprinkler irrigation, meaning gravity irrigators will be allocated twenty-one (21.0) acre-inches per irrigated acre not to exceed a nine (9.0) acre-inch annual maximum.

The following rules remain in place and are unchanged:

- If a ground water user has exceeded the annual maximum allocation during year one or two of the three (3) year allocation period, any remaining allocation for such period shall be reduced by an amount equal to two (2) times the amount in excess of such annual maximum allocation.
- If at the end of such three (3) year allocation period, any ground water user has used more than the total allocation for such three (3) year allocation period, or more than the maximum annual allocation in the third year, the excess amount shall be multiplied by two (2) and carried over as a reduction and subtracted from any subsequent allocation period.

over

- There shall be no new ground water irrigated acres from any water well located in the Special Management Area beyond those acres certified by the District on March 1, 2014 as irrigated acres by ground water.
- The District shall require educational certification in irrigation management for those persons making the management decisions for using a well to irrigate agricultural land.
- All applications for wells in the Special Management Area for which permits are required shall be presented to the Board of Directors for consideration.

The District will provide calculation tables and water use history to all irrigators in the area annually. These tools should help irrigators recall their previous water use, the water use remaining for the current rolling allocation period, as well as what the maximum number their water meter can display without incurring a penalty for over use. This information will also be available on the producer-reporting website, which is located at maps.lpsgw.org.

LPSNRD staff will continue conducting onsite inspections on your well/wells to make sure that the water meter is properly installed and is working correctly, that readings correspond with reporting, and that you are irrigating only what you have certified as irrigated with the District.

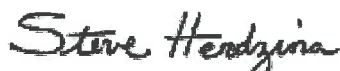
LPSNRD would like to recognize and thank the members of the Citizens Advisory Group for their ongoing contributions of time and effort. These efforts include representing the needs and concerns of the various stakeholders by attending meetings and offering insights and suggestions on ways to improve the rules and regulations for the area. We would also like to recognize the late Louis Tesinsky for the time and effort he provided as a domestic well owner representative.

The current members are:

Name	Representing	Name	Representing
Lee Quick	Domestic Well Owner	Jerry Maher	Pivot / Sprinkler Irrigator
Vince Tesinsky	Domestic Well Owner	Lawrence Stuchlik	Pivot / Sprinkler Irrigator
Jerome Kudlacek	Dryland Farmer	Lyle Jakub	Pivot / Sprinkler Irrigator
Vaden Hellerich	Gravity Irrigator	Elaine Fortik	Village of Brainard
Randy Komenda	Livestock Well Owner	Larry Urbanek	Village of Dwight
Leo Benes	Local Business Owner	Greg Bouc	Village of Valparaiso

If you have any questions, please give me a call at 402-476-2729. Thank you for your time and cooperation.

Sincerely,



Steve Herdzina
Water Resources Compliance Specialist



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May 26, 2020

Ragusa Trust
PO Box 540659
Omaha, NE 68154

Dear Sir/Madam

The purpose of this letter is to inform you of your water use for the previous allocation period as well as to provide some information regarding maximum pumping amounts for 2020. This will be the first year of the new 3 year rolling allocation for the Special Management Area. As a reminder, **no more than 9 inches can be pumped in any one year and going forward, no more than 21 inches can be pumped over any 3 year period (2020-2022, 2021-2023, etc.).** Please remember that gravity and sprinkler users are both now allocated to the same above mentioned limits. See hypothetical rolling allocation example below:

	<u>Year 1</u> 2020	<u>Year 2</u> 2021	<u>Year 3</u> 2022	<u>Year 4</u> 2023	<u>Year 5</u> 2024	<u>Year 6</u> 2025	<u>Year 7</u> 2026
					21 Total		
				21 Total			
			21 Total				
		21 Total					
	21 Total						
Annual Use:	5.00	7.00	9.00	5.00	7.00	9.00	5.00

DNR Well Registration Number: **G-069699**
Meter Serial Number: **GP11-3196**

Please review the following information and attachments. The calculations provided in Attachment 2 used all collected and provided data available and **all calculations should be made by the well owner and/or operator to verify accuracy.**

If you have any questions, please give me a call at 402-476-2729.

Sincerely,

Steve Herdzina
Water Resources Compliance Specialist

Enclosures

Cc: DVB SMA
Groundwater File

Year 1 of Rolling Allocation

2020

<u>Owner/Operator Name</u>	<u>Ragusa Trust</u>
<u>Well Reg. #</u>	<u>G-069699</u>
<u>Meter Serial #</u>	<u>GP11-3196</u>
<u>Units</u>	<u>Gallons x 100</u>
<u>End of 2019 Reading</u>	<u>307936</u>
<u>Certified Irrigated Acres</u>	<u>48.40</u>
Hypothetical 2020 Maximums	
<u>2020 End of Year Usage</u>	<u>9 inches used</u>
<u>Maximum water meter reading</u>	<u>426218</u>

Notes:

- *2020 is the first year of the rolling allocation
- *Sprinkler/Gravity Irrigation 3-year allocation of 21.0 acres inches
- *Maximum use of 9 inches in any one year

REPORT OF INVESTIGATION

**Alleged Violation of Groundwater Allocation in the Dwight Valparaiso Brainard Special
Management Area**

Beverly Ann Ragusa Trust, % Doug Hanson, Farmers National Company

Tenant: Dave Hladik

Well Registration: G-069699

NW ¼ of NE ¼, Sec. 27, T13N, R5E, Saunders County, Nebraska

Allocation Year: 2020

Investigator: Steve Herdzina, Water Resources Compliance Specialist

Report Date: October 23, 2020

BACKGROUND:

Beginning in 2014, the District revised the Ground Water Rules and Regulations to add the Dwight-Valparaiso-Brainard (DVB) Special Management Area (SMA). The District established an initial 3-year allocation of 21 acre-inches per irrigated acre not to exceed nine acre-inch annual maximum for sprinkler irrigation and thirty acre-inches per irrigated acre not to exceed a twelve acre-inch maximum for gravity irrigation, beginning in calendar year 2014. In late 2019, the allocation was altered to set a rolling 3-year allocation of 21 acre-inches per irrigated acre not to exceed nine acre-inch annual maximum for all irrigation distribution systems.

INVESTIGATION:

While ensuring compliance with water meter installation and reporting for wells in the DVB SMA, the Water Resources Compliance Specialist calculated that the well G-069699, owned by Beverly Ann Ragusa Trust, exceeded the one year maximum allocation for irrigation systems (9 inches). The meter showed that the well had been used to apply 13.01 inches of water.

Attached to this report is a Property Detail sheet from the Saunders County Assessor, which lists Beverly Ann Ragusa as the property owner. The farm manager for this property is Doug Hansen with Farmers National Company. Dave Hladik is the tenant for this property that operated the irrigation well. Also attached to the report is a map of the certified acres and the location of the irrigation well. Also attached to this report is a spreadsheet with the usage calculations for 2020.

After the end of the last allocation period, a letter was sent out to the DVB SMA well owners/operators informing them of their usage for the previous allocation period. Additionally, a letter was sent to them informing them of the maximum amount of water that could be used this year as well as what the maximum reading their water meter should display to stay within limits. A letter was sent to Dave Hladik and the Ragusa Trust % Farmers National on May 26th, 2020 informing them of this information, along with e-mails to both recipients on May 20th. On September 14, 2020, the compliance specialist conducted a compliance inspection to collect a meter reading. This reading (478886 gallons x 100) indicated that the owner/operator used 13.01 inches in 2020. A photo of the meter showing the serial number is attached as Figure 1 and a photo of the meter face showing the meter reading collected on September 14, 2020 is attached as Figure 2. The District contacted both the operator and owner on September 14, 2020 to update them on their water usage for the year. After collecting this meter reading (478886 gallons x 100) it was calculated that the well usage was 13.01 inches for 2020. This is 4.01 inches over the 9 inch annual maximum allocation.

According to the District's Ground Water Rules & Regulations Section R, Rule 2(c)(iii): If ground water use has exceeded the annual maximum allocation during any one (1) calendar year of the three (3) year rolling allocation period, the subsequent allocation shall be reduced by an amount equal to two (2) times the amount in excess of such annual allocation, and carried forward in each of the following calendar years until such penalty is reduced to zero (0). According to the rule, the penalty for exceeding the maximum annual allocation (9) by 4.01 inches would be a reduction of 8.02 inches (4.01 x 2) and subtracted from the next year(s) maximum allocation. The 2021 and 2022 year allocation amounts for the well G-069699 would be 0 inches due to the penalty exceeding the amount of available allocation (21 inches-13.01 inches = 7.99 inches). The penalty of 8.02 inches would reduce both 2021 and 2022 to 0 inches due to the 21 inch maximum over 3 years and would leave an additional allocation reduction of .03 for 2023 meaning a maximum of 8.97 inches could be pumped in 2023 (year 4 of the current rolling allocation period). See Table 1 below.

	<u>Year 1</u> 2020	<u>Year 2</u> 2021	<u>Year 3</u> 2022	<u>Year 4</u> 2023	<u>Year 5</u> 2024	<u>Year 6</u> 2025
				21 Total		
			21 Total			
		21 Total				
	21 Total					
Annual Pumping Use (max of 9 inches)	13.01	0	0	Up to 8.97	Up to 9.0	Remainder of 21 inch allocation
Penalty to be served:		7.99	0	.03		
Penalty Remaining:		.03	.03	0		

Table 1: Future water availability for Well Reg: G-069699



Figure 1: Photo of Meter Serial # on Well Reg: G-069699 (September 14, 2020)



Figure 2: Meter face of GP11-3196 on Well Reg: G-069699 (September 14, 2020)

SAUNDERS COUNTY ASSESSOR



Parcel Number: 000054000
Computer ID: 2987-27-1-00000-000-4000
Deed Holder: RAGUSA, BEVERLY ANN (TRUSTEE 17055)
Property Address:
Mailing Address: FARMERS NATIONAL COMPANY
 PO BOX 542016
 OMAHA, NE 68154-2016 USA
Status: UNIMPROVED
Use: AGRICULTURAL
Zoning: AGRICULTURAL
Location: SUBURBAN
City Size: N/A
Lot Size: 40.01 ACRES - 160 ACRES
Map Area: 00001-RURAL 1 WEST
Tax District: 029
Subdivision: [NONE]
Sec-Twp-Rng: -
Lot-Block: -
Assessor Location: NORTHWEST RURAL
Legal Description: NE 27-13-5 (152 ACRES)
 (NOT TO BE USED ON LEGAL DOCUMENTS)
Property Report: [PROPERTY REPORT \(PDF FILE\)](#)



No image to display

Taxing Districts

District	Description
Ag Society	AG SOCIETY
Airport Authority	NONE
City/Municipality	NONE
Community College	TECH COLLEGE SOUTHEAST
County	SAUNDERS COUNTY GENERAL
ESU	ESU #2
Fire	VALPARAISO FIRE 2
JPA	NONE
Law Enforcement	COUNTY-BONDS ONLY
NRD	LOWER PLATTE SOUTH
SID	NONE
School Bonds	RAYMOND CNTL 161 BD7-12 2009
School Bonds 2	NONE
School Bonds 3	NONE
School Districts	RAYMOND CENTRAL 161
TIF	NONE
Townships	OAK CREEK TWP
Master	OC-161-2PS

Tax Information

Taxable Value	Exempt Value	Net Taxable Value	Levy	Gross Tax	Homestead Loss	Ag Land Tax Credit	Used Tax Credit	Net Tax
\$745,590	\$0	\$745,590	1.686857	\$12,577.04	\$0.00	\$931.84	\$931.84	\$11,645.20

NOTE: Tax amounts do not necessarily reflect official values and are subject to change based on exemption and levy rate changes.
 Please click link below for accurate Tax Information
[Get Official Taxes](#)

Attachment 3

Year	Land	Dwelling Value	Improvement Value	Total Value
2020	\$745,590	\$0	\$0	\$745,590
2019	\$745,590	\$0	\$0	\$745,590

▼ More Years...

Prior Year Value Information

Agricultural Land Information

Soil	Soil Name	Land Use	LVG Code	Adjust	Spot LVG	# Acres	\$ per Acre	Assessed Value
7049	7049-KENRIDGE SILTY CLAY LOAM-OCCASIONALLY FLOODED	Dry	2D1	No		0.050	5,280	264
Dry Use Totals						0.050		264
7049	7049-KENRIDGE SILTY CLAY LOAM-OCCASIONALLY FLOODED	Irrigated	2A1	No		110.250	5,830	642,758
7750	7750-NODAWAY SILT LOAM-OCCASIONALLY FLOODED	Irrigated	2A1	No		16.860	5,830	98,294
7868	7868-NODAWAY SILT LOAM-CHANNELED-OCCASIONALLY FLOODED	Irrigated	4A	No		0.330	3,670	1,211
Irrigated Use Totals						127.440		742,263
WASTE	WASTE	Waste	WASTE	No		23.560	130	3,063
Waste Use Totals						23.560		3,063
ROAD	ROAD	Road	ROAD	No		0.950	0	0
Road Use Totals						0.950		0
Parcel Totals						152.000		745,590

Certified Irrigated Acres Application Data Review

Beverly Ann Ragusa Trust

NE1/4 Sec 27, T13N-R05E

Attachment 3



- Certified Acres
- Cert Acres Application - in review
- Irrigation
- Commercial
- Public Water Supply

**2020 Beverly Ragusa Trust Irrigated Usage Calculations
Operated by Dave Hladik**

West Well (G-069699)								
Year	Well Reg #	2019 Reading	2020 Reading	Usage	Gallons	Acre Inches	Inches Applied	Acres
2020	G-069699	307936	478886	170950	17095000	629.5573396	13.01	48.4

- (viii) Wells for emergency human consumption or public health and safety; or
- (ix) Wells permitted by the Nebraska Department of Natural Resources under the Municipal and Rural Domestic Transfers Permit Act prior to the stay imposed by the Nebraska Department of Natural Resources.

Rule 8 District to Claim Credit for Ground Water Pumped from Outside Hydrologically Connected Area

- (a) The District reserves the right to claim credit for future use the discharge from all municipal, community, or industrial water systems if such systems obtain their water from wells located outside the HCA and such discharge is returned to the Platte River Basin.

Rule 9 Enforcement and Variance

- (a) The District will enforce the rules and regulations adopted herein pursuant to and in accordance with the Enforcement Procedures provided in the Ground Water Rules and Regulations of the District, as may from time to time be amended.
- (b) Any requests for a variance from these rules and regulations will be governed by the Ground Water Rules and Regulations of the District, as may from time to time be amended.
- (c) If a landowner is not satisfied with any determination made pursuant to the rules and regulations adopted herein, he or she may request a formal hearing before the Board as provided in these rules and regulations.

Section R Special Management Area

Rule 1 The District may designate a Special Management Area for the protection of ground water quantity in a portion or portions of the District where additional controls are necessary for the protection of ground water quantity in that area. Such additional controls are in the public interest and for the promotion of the health and welfare of the District because they will minimize pumping conflicts and protect ground water supplies for all beneficial uses.

Rule 2 Dwight-Valparaiso-Brainard (DVB) Special Management Area.

- (a) The District hereby designates an area, which includes the Dwight-Valparaiso Ground Water Reservoir and portions of the Remaining Area, as a Special Management Area for additional ground water quantity controls to address short term problems, in response to the situation where the existing ground water quantity Phase Triggers for this Ground Water Reservoir are not responsive. This area includes the following land, to wit (see map in Appendix A):

Butler County, Nebraska

Township 14 North, Range 4 East
Sections: 1-5, 8-18, 20-29 and 32-36.

Township 13 North, Range 4 East
Sections: 1-5, 8-18, 20-30, and 32-36.

Saunders County, Nebraska

Township 14 North, Range 5 East
Sections: 4-9, 16-21, and 28-33.

Township 13 North, Range 5 East
Sections: 1-36.

Township 13 North, Range 6 East
Sections: 3-11, 14-23, and 26-35.

Seward County, Nebraska

Township 12 North, Range 4 East
Sections: 1-3.

Lancaster County, Nebraska

Township 12 North, Range 5 East
Sections: 1-6, and 10-12.

- (b) No New Irrigated Acres.
 - (i) There shall be no new ground water irrigated acres from any water well located in the Special Management Area beyond those acres certified by the District on March 1, 2014 as irrigated acres by ground water.

- (c) Allocation.
 - (i) The use of ground water from any water well for irrigation of certified acres in the Special Management Area shall be subject to an allocation. The District hereby establishes a three (3) year rolling allocation of twenty-one (21.0) acre-inches per irrigated acre not to exceed a nine (9.0) acre-inch annual maximum. The rolling allocation shall remain in effect until such time as the District modifies or removes it. The District shall also maintain a local advisory committee.
 - (A) There shall be no required allocation for that portion of the Special Management Area located in Township 13 North, Range 6 East, Saunders County.
 - (ii) If ground water use has exceeded the annual maximum allocation during any one (1) calendar year of the three (3) year rolling allocation period, the subsequent allocation shall be reduced by an amount equal to two (2) times the amount in excess of such annual allocation, and carried forward

- in each of the following calendar years until such penalty is reduced to zero (0).
- (iii) In addition to (ii) above, if ground water use exceeds the maximum three (3) year rolling allocation of 21.0 acre-inches, the subsequent allocation shall be reduced by an amount equal to two (2) times the amount in excess of such three (3) year rolling allocation, and carried forward in each of the following calendar years until such penalty is reduced to zero (0).
- (d) **Required Certification Programs.**
- (i) The District shall require educational certification in irrigation management for those persons making the management decisions for using a well to irrigate agricultural land. The irrigation management certification may be obtained by attending class, as a take home test, or on-line. After June 1, 2015, the name of each person so certified must be on file with the District for each ground water well irrigating agricultural lands in the Special Management Area. Irrigation certification will be required once every four years. The District will accept certification in irrigation management from other natural resources districts upon providing proof of certification.
- (e) **Establishment of Cost-Share Programs.**
- (i) The District will establish cost-share programs to implement Best Management Practices (BMP's) on the land designated in these rules and regulations, which may include but is not limited to, irrigation management practices.
- (f) **New or Replacement Wells.**
- (i) All new or replacement water wells to be used for domestic or other purposes, excluding monitoring and other non-consumptive wells, shall be constructed to such a depth that they are less likely to be affected by seasonal declines caused by other water wells in the same area.
 - (ii) Except for wells listed as exceptions to stays in *Neb. Rev. Stat. §46-714(3)*, all applications for wells in the Special Management Area for which permits are required shall be presented to the Board of Directors for consideration. The District may request an applicant to provide a hydrogeologic assessment from a qualified professional geologist or engineer with experience in such analysis showing the extent of any impact from this new or replacement well on existing wells. The Board may deny an application for a permit if it finds that the operation of a new or replacement well will adversely impact an existing well or wells or if such well is not in the public interest. Public interest shall include consideration of the economic, social, and environmental impacts of the proposed new or replacement well and whether and under what conditions other sources of water are available for use proposed for the new or replacement well.



LOWER PLATTE SOUTH

natural resources district

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Memorandum

Date: October 28, 2020
To: Water Resources Subcommittee
From: Steve Herdzina, Water Resources Compliance Specialist
Subject: Professional Services Contract for Groundwater Database

The LPSNRD Water Resources Staff has contacted Phoenix Web Group (PWG) to modify the existing SQL database to improve its capabilities and improve the accuracy of the database.

Some of the modifications and new functionality would include:

- Well owner comparison tool to update and improve accuracy of well owner information. Would also include comparisons of County Assessor data to DNR well information
- Combining multiple database tables to centralize photo storage and improve management of photo collection, storage, and upload
- New CSV files (a type of spreadsheet) for historical meter usage and improvements to water level information CSV
- Data entry adjustments specifically related to mobile data entry and input

The District received a Scope of Work from PWG on October 21 (Attachment 1).

Staff recommends that the LPSNRD Water Resources Subcommittee recommend Board approval for the professional services contract for the Water Resources database improvements through Phoenix Web Group, in the amount not to exceed \$30,800.

Enclosures



LOWER PLATTE SOUTH
natural resources district

Lower Platte South NRD

Management Site Additions and Modifications

October 16, 2020

Neil Johnson

CEO

njohnson@phoenixwebgroup.com

(w) 402.786.5111

Overview & Purpose

The Lower Platte South Natural Resources District would like to expand on their existing site in order to further streamline and optimize their current workflows.

The proposed changes would allow the LPSNRD to easily get in touch with producers to confirm district well owner data, better manage photographs of wells and meters. They would also ensure more consistent data entry around meter readings and static water level readings, and aid in the reporting of both datasets.

This document provides pricing for PWG to work with the LPSNRD to accomplish these goals.

Agreement Terms

By accepting this agreement, the customer will receive the following benefits in addition to deliverables enumerated within the Project Modules section.

Bug-Free Guarantee

Software bugs, discovered within 30 days following completion of the project, as confirmed by PWG, will be covered in full by this quote and fixed or corrected.

You Own the Code

PWG does not retain ownership of the solution developed for the customer. The customer is free to request a current copy of the source code at any time, and free to use it as they see fit. This is covered in greater detail the Software Development Agreement.

Continuing Support

When the solution has been deployed, the customer will be presented with options for continuing support of the product. In addition to continuing bug fixes, support plan options may include small changes, technical support, server monitoring/maintenance, and periodic reporting on key activities.

Change Requests

Changes to the scope, value, or deliverables in this agreement will be managed with a formal change request, to be signed off by both the customer and PWG. Either party may initiate a request.

Major Project Components

County Assessor Import: Well Comparison - \$13,675

The LPSNRD would like to use the current County Assessor data import to compare parcel owner data to well owner data and generate letters notifying producers of potential discrepancies in data. These changes include :

- Adjustments to the import to fully utilize shape-data and generate records comparing the County Assessor's parcel owner data with the district's well owner data
 - This is to use geospatial comparison of County Assessor parcel shapes and well locations
- Addition of customizable letter content for well owner discrepancies
- Grouping County Assessor discrepancy letters by owner

Photograph Management - \$4,575

The LPSNRD currently has the ability to manage photographs for wells through the private site. However, another dataset has been used to store meter photos over the past several years through a GIS Workshop mobile application. The LPSNRD would like to integrate support for this dataset into the private site directly. These changes include:

- Addition of Meter Photo management to the site
- The ability to upload multiple photos from the field map without the need to submit one at a time
- The display of monitoring well photos on the public-facing website

Data Entry Changes - \$7,225

In order to streamline and optimize data entry around meter readings and static water levels, the LPSNRD would like to make the following adjustments to the site:

- The ability to set a meter's location from the field map
- Changing Crop inputs to a dropdown to keep entry consistent when submitting meter readings and SWL measurements
- Changing Irrigation Type and Measured By to dropdowns to keep entry consistent when submitting SWL measurements
- Prefilling Measure Point from previous entries when submitting SWL measurements
- Modifying the Sample Map's search to be more generally inclusive, allowing a user to search for a well by typing a portion of the registration number
- Investigation and correction of strange behavior that can occur when clicking "View on map" from the Well Edit page

Additional CSVs - \$5,325

The LPSNRD would like to simplify its reporting process by implementing new CSVs that allow for easier data collection. These changes include:

- The ability to select several wells and generate a CSV containing all readings for the selected wells
- The ability to generate a CSV that would show a well's year-to-year static water level measurements.
 - This CSV would have columns for the previous year, previous season, and current season's SWL measurements, as well as columns for differences between them.
 - This CSV would also allow the LPSNRD to see where measurements are missing and more effectively calculate averages

Project Timeline

The Project Manager will work with the customer to establish realistic expectations of project deadlines that meet customer needs.

Changes will be pushed to a beta environment for review on a weekly basis. With this deployment, the LPSNRD will be notified of what changes were pushed out and will have a week to review them. Adjustments made after this review period may trigger an additional change order fee.

Pricing

County Assessor Well Comparison – \$13,675

Photograph Management – \$4,575

Data Entry Changes – \$7,225

Additional CSVs – \$5,325

Total for Project – \$30,800

Payment Terms

An initial deposit of 50% will be due at signing. 50% of the amount will be invoiced upon code completion, after the project is deployed to production following final review.

Sample Fee Schedule

Beginning of Project – \$15,400

Project Completion – \$15,400

Phoenix Web Group

We're a group of engineering-minded individuals from all walks of life, brought together by our passion for creative problem solving. The inner math-and-puzzle-loving geek within each of us thrives on developing innovative solutions to tackle your toughest challenges. We feel fortunate that we can honestly say we love what we do, and it's what we'd be doing for fun anyway.

Beginning in 1987, when we made our start in the Equities and Agriculture verticals, we've expanded PWG to broad-range of industries including Commodities, Finance, Transportation, Telecommunications, Retail, Education, and more. Clients from the smallest start-ups to the largest Fortune 500 companies rely on our solutions to simplify their tasks and give them an edge on igniting their potential.

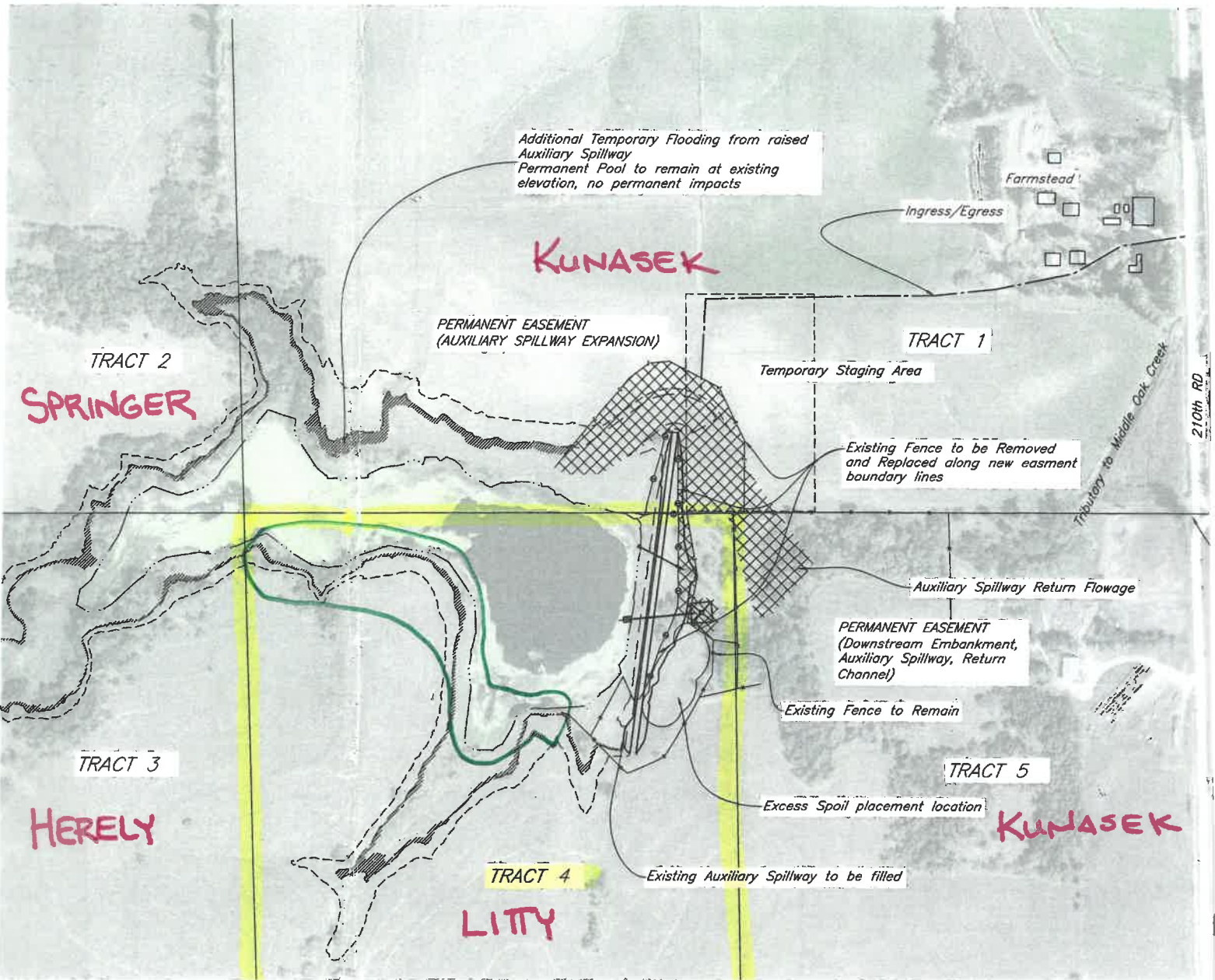
Notes

Work will begin upon receipt of first payment. Payment is due upon receipt of invoice; past due invoices will trigger the halt of work and are subject to interest.

The prices listed in this document are reflective of the cost of each set of components as a part of a whole project. As such, if modifications are made to the scope of the project, prices will be recalculated.

The customer is responsible for paying applicable taxes in addition to the prices above.

This quote will expire after a time period of 30 days from the date printed on the cover sheet.



PLAN VIEW - AERIAL PLAN MAP/STAGING AREA
 1" = 200'-0"

STRUCTURE 82-B REHABILITATION OAK MIDDLE CREEK WATERSHED	Designed	J. Robison	Date 01/2017
	Drawn	J. Robison	01/2017
	Checked	V. Slowik	04/2017
	Approved	_____	_____
Oak Middle Creek, 82B		Seward County, Nebraska	