Lincoln-Lancaster County Health Department
Environmental Public Health Division
3131 O Street • Lincoln NE 68510-1514
Phone: 402-441-8643

A

Permit Number 4S002529

Onsite Wastewater Treatment System Permit Application

Include Form B and C. Submit correct fee with this Application

☐ Septic System ☐ Lagoon ☑ Other (Refer to Form C)

PLEASE PRINT OR TYPE

A. Onsite System Location

Address* 14300 NW 98th St (no rural route) City Raymond, NE Zip 68428

Legal Description SW (1/4) NW (1/4) 3 (Section) 11N (Township) 5E (Range) ____ (Subdivison) ____ (Addition) ____ (Block) 1 (Lot)

PID 05-03-100-002-000 *Approx. Address (If to be determined) ____

B. Owner

Name Matthew N Anderson Signature [signature]

Address 14300 NW 98th St City/State/Zip Raymond, NE 68428

Home Phone 402-480-5515 Work Phone ____

C. Certified Installer

Name: Terri Jakoubek Signature [signature]

Address 13800 NW 70th St City/State/Zip Raymond, NE 68428

Work Phone 402-783-2663

D. Engineer

☐ Check and complete if engineer designed system P.E. License Number: ____

Designer Name ____ Firm ____ Work Phone ____

E. This system will serve a

☐ Residential Dwelling Number of Bedrooms ____ Whirlpool Bathtub? ☐ Yes ☐ No Total Acres 5.28

Garbage Grinder? ☐ Yes ☐ No

☑ Commercial Establishment/Other Facility Specify Assembly Hall/Class Room type Facility With restrooms, no food services. Design flow in gallons per day 750

Type of Wastewater ☐ Domestic ☐ Non-Domestic

DO NOT WRITE BELOW THIS LINE

Approval Process

1. Health Department

Site visits ____ Date rec'd ____ ACTION ☐ Approved ☐ Disapproved

Date frwd ____ Signature ____

Comments ____

2. Supt. Bldg. Insp. or Village Clerk

Comments ____ Date rec'd ____ ACTION ☐ Approved ☐ Disapproved

Date frwd ____ Signature ____

3. City or County Engineer

Comments ____ Date rec'd ____ ACTION ☐ Approved ☐ Disapproved

Date frwd ____ Signature ____

Installation Final Written Approval

By ____

Date ____

Business Office Use Only

Date Received 4-20-22 Amount Paid $460

Received By JAV Cash/Check No. 005040

White - Health Department Yellow - Engineer Pink - Building & Safety

Form A Updated: 2/18

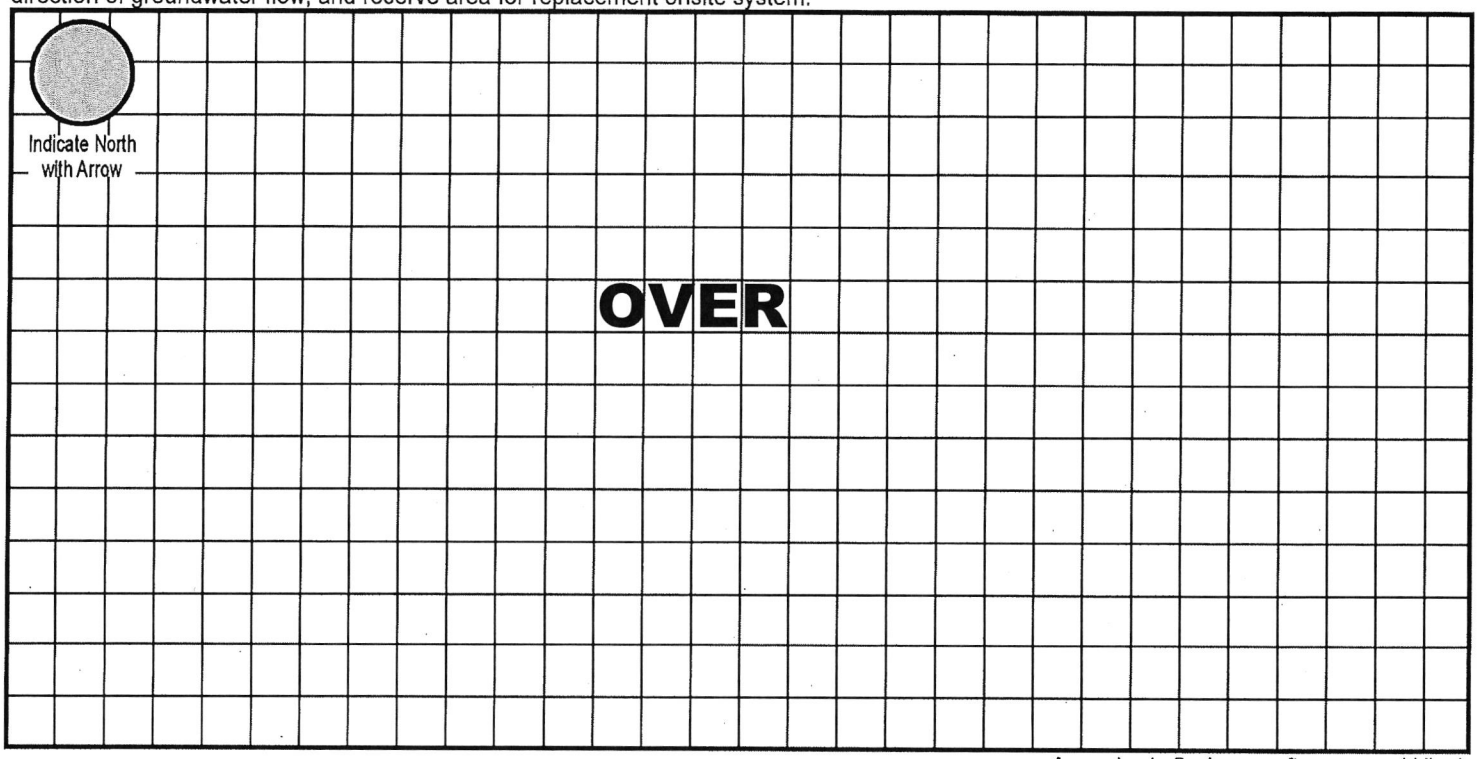
Lincoln-Lancaster County Health Department
Environmental Public Health Division
3131 O Street • Lincoln NE 68510-1514
Phone: 402-441-8643

C

Permit Number

Onsite Wastewater Treatment System
Preliminary Plan Specification

Draw a plot plan showing onsite system sewer lines, tank, drop or distribution boxes, drainfields, percolation test holes, well, residence, direction of groundwater flow, and reserve area for replacement onsite system.



Approximate Scale:_____ft. = _____grid line/s

A. Onsite System Location

Address (no rural route) 14300 NW 98th St (Holding) City Raymond NE, Zip 68428

B. Proposed ~~Septic~~ Tank/s

Septic Tank Cap. 8,000 gals Tank Material: ☐ Concrete ☐ Plastic ☐ Other _____ ☐ Lagoon (Max. Seepage 1/8"/day)
(4 - 2,000 gallon holding tank in series)

C. Reserve Area for Replacement Onsite System

☐ Drainfield Absorption Area (percolation test required) ☐ Lagoon

D. Drainfield Absorption System

Percolation Rate_____(min/inch = mpi) No. of Bedrooms_____ Soil Type _____ Land Slope _____ %

☐ Trench ☐ Bed ☐ Non-standard (engineer-designed and NDEQ approved) Total square feet of drainfield _____ Sq. Ft.

Total length of laterals _____ Type of Distribution: ☐ Perforated Pipe ☐ Half-Round ☐ Chambers ☐ Other _____

No. of Absorption Trenches _____ Width _____ No. of Drop Boxes _____ Distribution Box _____

No. of Absorption Beds _____ Width _____ No. of Distribution Lines per Bed _____

Installer Neil L. Jahnke Date: 4/19/23

Updated 2/18

BRANCHED OAK OBSERVATORY - MULTI PURPOSE BUILDING

14300 NW 98TH ST, RAYMOND, NE 68428

PERMTI SET - 8.10.2022

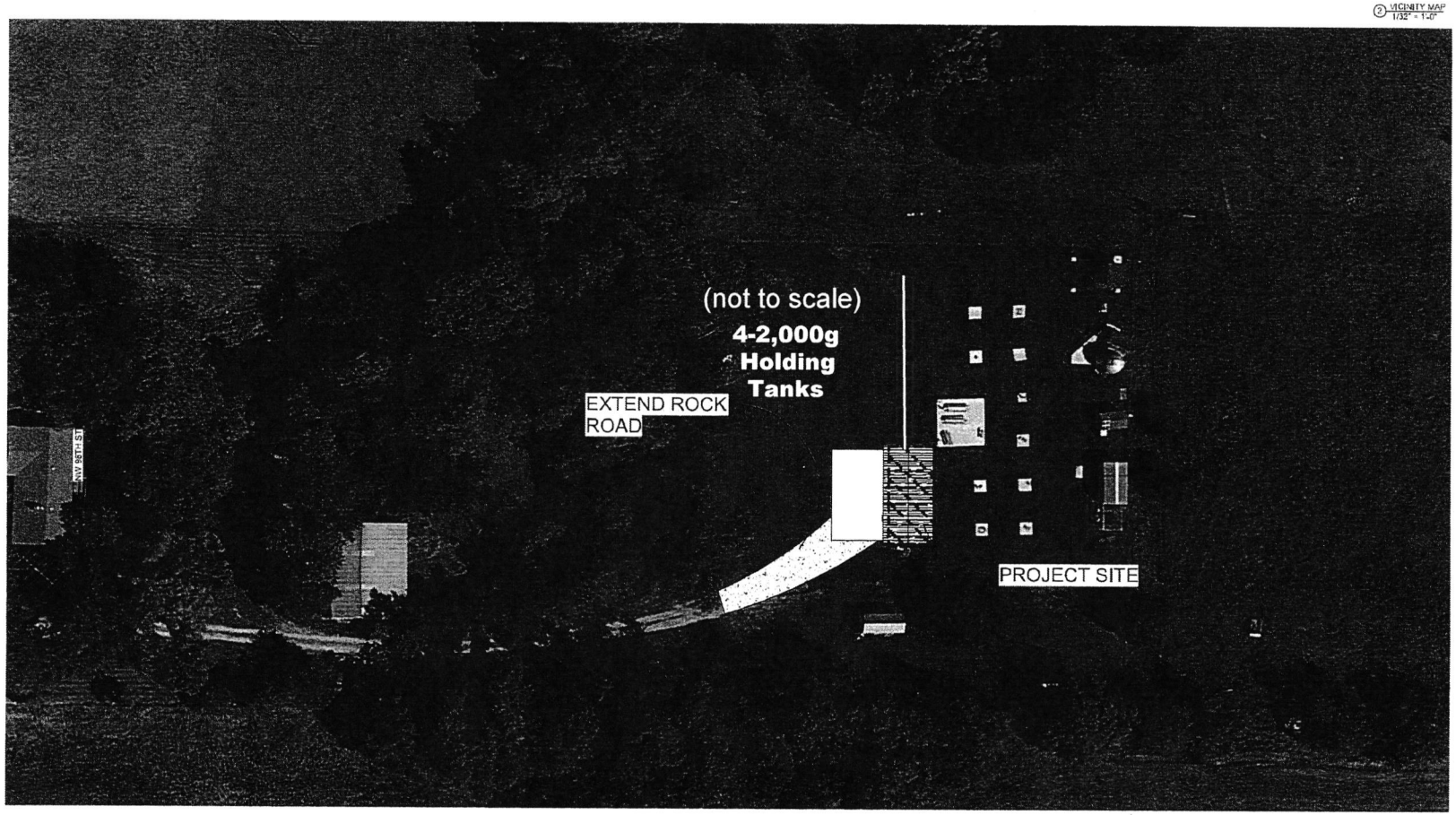
LEGAL DESCRIPTION: S3, T11, R5, 6TH PRINCIPAL MERIDIAN, LOT 1 NW W/4SEC.
PARCEL ID: 0503100002000

G001 COVER SHEET
G002 CODE PLAN
G003 NOTES

S000 GENERAL NOTES AND TYPICAL DETAILS
S100 FOUNDATION PLAN

A100 SITE PLAN
A103 FLOOR PLAN
A104 REFLECTED CEILING PLAN
A105 ROOF PLAN
A106 EXTERIOR ELEVATIONS
A107 SECTIONS
A108 INTERIOR ELEVATIONS

② VICINITY MAP
1/32" = 1'-0"



ACRE DESIGN+

BRANCHED OAK OBSERVATORY

6101 South 58th Street, Suite B
Lincoln, NE, 68516
402-437-1745

BRANCHED OAK OBSERVATORY
-
14300 NW 98TH
RAYMOND, NE
68402

PERMIT PLAN

No.	Description	Date

COVER SHEET

Project Number	A22-110
Date	8.10.22
Drawn By	MRC
Checked By	JWW

G001

Scale: 1/32" = 1'-0"

Branched Oak Observatory Visitor Information
(as provided by Co-Founder, CEO Matthew Anderson)

	People		5gpd per person	
Daily Usage	Min	Max	Min	Max
Wednesday thru Thursday	20	40	100	200
Friday	60	80	300	400
Saturday	60	150	300	750
Sunday	60	80	300	400
School Visits - Twice Weekly (2 hours in duration)	20	60	100	300
Summer Camps, Day (4 hours)		60	0	300
Summer Camps, Weekend (4 hours)		60	0	300
Summer Camps, Week Long (4 hours)		30	0	150
Staff - Weekends 3 people (8 hours)		33	0	165

Large Events - Augmented with Porta-Potties gallons per event
1000 to 1200 visitors, 15 staff
Building restroom usage for large events 999
(Historical data from the Observatory, 4 porta-potties handled wastewater for these large events)

Gallons per day guidance obtained from EPA OWTS Manual
Using Assembly Hall numbers, estimating usage on the high side @ 5gpd per person

Raymond Contracting Inc
Terri Jakoubek, 1198
13800 NW 70th St, Raymond, NE 68428
402-783-2663 or 402-890-3870
jakoubek63@windstream.net
4/20/2023

Capacity

From : Matthew Anderson <matthew@branchedoakobservatory.com> Wed, Apr 19, 2023 12:29 PM
Subject : Capacity
To : Terri Jakoubek <jakoubek63@windstream.net>

The need to increase the capacity from 4,000 to 8,000 gallons. There will be 2 manual gauges on tanks 2 and 3 with an electronic one on the final tank. For our larger event the annual StarBQ and any other large events that may reach 1,000 people or more we will supplement with additional porta potties to accommodate unforeseen spike in usage.

Our anticipated daily on a Wed-Thursday is 20-40 people. Friday-Sunday during the summer time we may max out at 150 people on a Saturday. Fridays and Sundays may reach between 60-80. As we grow, we will have a history to look back upon historical trends based upon events that have been done. School groups will begin in the fall and thru the spring time. Anticipated class size will be between 20-60 students once or twice a week. This may eventually become a bi-weekly event or more in the future. It most likely won't be this year depending upon completion of the building, but during the summer we are looking at holding day camps, weekend camps and week long camps (we will have week long camps capped at 30). All camps will be 4 hours in duration. Capping attendance to 30 kids. Staffing will be 3 individuals on the weekends for 8 hours a day beginning Memorial Day weekend thru Labor Day.

The annual StarBQ with anticipated attendance of 1,000-1,200 will have additional staff of 12-15 people.

We will also be contracting with a primary vendor for septic removal and have a back up. Several vendors were mentioned and we will reach out to both of them for contractual obligations. For all major events we will have the tanks drawn down to as close as empty as possible.

If there is anything else you need, please let me know.

Here's to Dark & Clear Skies,

Matthew N. Anderson
Co-Founder\Chief Executive Officer
Branched Oak Observatory
14300 NW 98th Street
Raymond, NE. 68428
cell 402-480-5515
Branched Oak Observatory is a 501(c)3

"Bringing the Night Sky Down to Earth"

BRANCHED OAK OBSERVATORY

Like and follow us on Facebook
Twitter - branchedoakobs
www.branchedoakobservatory.com
www.theboo.org
Instagram - https://www.instagram.com/branchedoakobs/

Construction of a Multipurpose Center for Branched Oak Observatory

BRANCHED OAK OBSERVATORY

For nearly a decade now, Branched Oak Observatory has been "Bringing the Night Sky Down to Earth" for the people of Lincoln and Lancaster County Nebraska. Our mission is to inform and inspire the public about astronomy by sharing the wonders of the night sky in an entertaining and educational way. Further, it is our mission to encourage the next generation of professional astronomers, scientists, and engineers. The next Robert H. Goddard, Katherine Johnson, or even Nebraska Astronaut Clayton Anderson might be right here in our community, and we want to help them discover their passion.

Branched Oak Observatory, the Midwest's premier destination for space-science education is breaking ground on our most exciting venture yet, a state-of-the-art Multi-Purpose Center. This outstanding facility will not only house modern classrooms and restrooms, but a "multipurpose space" that can be used for exhibits, science demonstrations, and even sleeping quarters for scouts and overnight Summer camps.

Branched Oak Observatory has been working with ACRE-Design and Stonebrook Exterior, both of Lincoln, Nebraska, to create this 1,500 sq/ft Multi-Purpose Center that will allow us to take our educational programming to the next level. We are so grateful and honored that both companies have pledged a significant amount of product and services to see through with the construction of this facility. Further, they will work with their extensive team of general contractors and manufacturers to obtain quality materials at complimentary or discounted rates. The structural engineer with ACRE-Design (dba N3C) provided a cost estimate for the construction of the Multi-Purpose Center at $233,886 not including special allowances. The balance of the construction costs will come from community partners, funding already raised, and special grant opportunities should we be fortunate enough to be awarded.

With the proposed construction of the new Multi-Purpose Center, Branched Oak Observatory will be able to realize the challenging programming goals we have slated for 2023 including Robotics Summer Camps and Earth-Moon-Earth communication demonstrations. These unique offerings added to our current complement of space-science programs will provide the community with opportunities found **nowhere** else in the country. While we deliver amazing experiences for a wide audience, our hope is to inspire an all-new generation, and to do that, we need to cater to groups from area school-districts. This Multi-Purpose Center will not only provide the classroom space, but the much-needed modern bathroom facilities necessary to accommodate these students.

Our impact on the community is tremendous, from rekindling a childhood interest in the stars to introducing students to a universe of career opportunities. Like any endeavor of this magnitude, a great number of partners need to come together to lend a hand. We appreciate anything that **you** might be able to contribute, and look forward to seeing this project take to the stars.

Michael Sibbernsen

Michael Sibbernsen
CEO - Branched Oak Observatory
NASA Solar System Ambassador

Bringing the Night Sky Down to Earth

BRANCHED OAK OBSERVATORY

PRESS RELEASE

FOR IMMEDIATE RELEASE
JANUARY 10, 2023

MULTIPURPOSE CENTER FOR BRANCHED OAK OBSERVATORY

Branched Oak Observatory is excited to announce we will be breaking ground for our new multipurpose center facility. Established in 2015, the Branched Oak Observatory is an astronomy park located just southeast of the Branched Oak Recreation Area 20 miles outside of Lincoln, Nebraska. We offer a wide variety of experiences, including classroom activities, solar viewing, nighttime viewing, space communications with satellites and the ISS and newly installed Earth Moon Earth.

The addition of the multipurpose building will significantly increase the classroom capabilities, astronomy library, and new restrooms to serve the visitors of the observatory. This building will allow us to serve Lincoln Public Schools as a hands-on outreach featuring STEM education along with serving those who are underserved in our community through organizations such as the Boys and Girls Club, Cedars Home and others, by providing an educational experience to help these children to set their course for amazing careers.

We have compiled a powerhouse team of professionals from ACRE Design+, BluCor Construction Group, and Stonebrook Exterior, to oversee the design and construction of the new facility. The multi-purpose center was designed by the incredible team of architects and design professionals at ACRE Design+, located in Lincoln, NE. BluCor Construction Group, also located in Lincoln, Ne, will serve as the General Contractor for the project, and Stonebrook Exterior will serve as the building envelope construction team, bringing extensive construction experience to the table from both public and private projects throughout the United States.

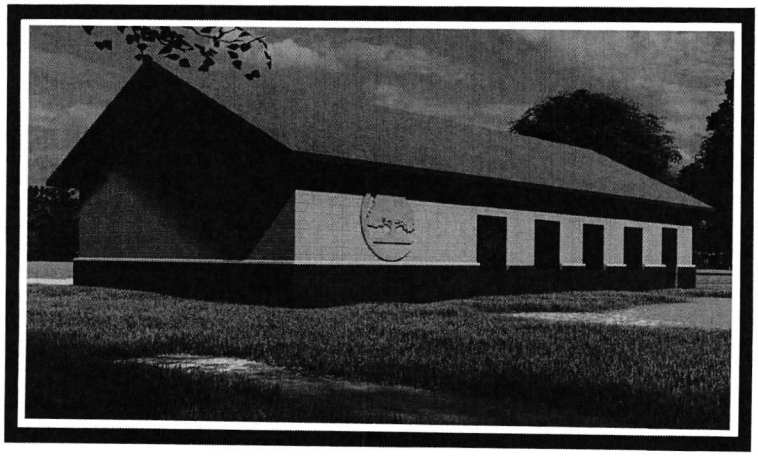
The public is invited and encouraged to join us to celebrate the start of the construction process during a groundbreaking ceremony that will be held on **Tuesday, January 17th at 3:00p.m.,** at 14300 NW 98th St., Raymond, NE 68428. There will be an exciting and EXPLOSIVE Ceremony followed by a reception. You won't want to miss it!

Here's to Dark & Clear Skies,

Matthew N. Anderson
Co-Founder\Chief Executive Officer

Branched Oak Observatory
14300 NW 98th Street
Raymond, NE 68428
Cell: (402) 480-5515

Branched Oak Observatory is a 501(c)3



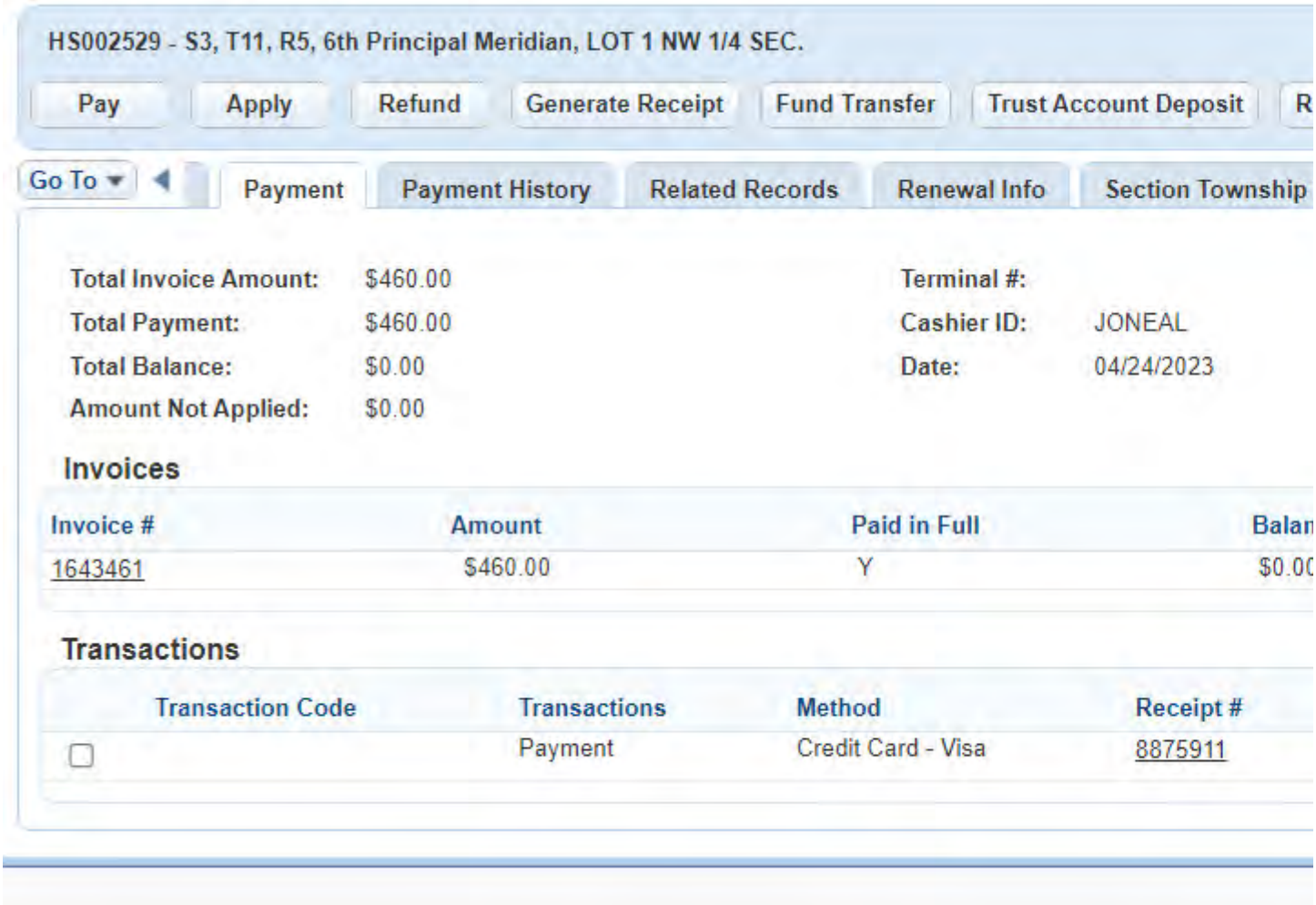
Robin G. Bouma

From: Chris M. Schroeder
Sent: Monday, April 24, 2023 10:52 AM
To: Janet O'Neal; Jeffrey A. Eggerss; Robin G. Bouma
Subject: RE: ACCELA PLEASE DELETE

Approved.

From: Janet O'Neal <JONeal@lincoln.ne.gov>
Sent: Monday, April 24, 2023 9:54 AM
To: Chris M. Schroeder <cschroeder@lincoln.ne.gov>; Jeffrey A. Eggerss <JEggerss@lincoln.ne.gov>; Robin G. Bouma <RBouma@lincoln.ne.gov>
Subject: ACCELA PLEASE DELETE

Chris, please approve deleting the payment for HS002529 as it is a duplicate of HS002519. Thank you!



Janet A. O'Neal
Senior Office Assistant
Lincoln-Lancaster County Health Dept.
Environmental Public Health

3131 O Street, Lincoln, NE 68510
Phone: 402-441-8002
Fax: 402-441-3890
Email: joneal@lincoln.ne.gov

Lincoln-Lancaster County Health Department
Environmental Public Health Division
3140 N Street • Lincoln NE 68510-1514
Phone: 402-441-8643

A

Permit Number HS002529

Onsite Wastewater Treatment System Permit Application

Include Form B and C. Submit correct fee with this Application

☐ Septic System ☒ Lagoon ☐ Other (Refer to Form C)

PLEASE PRINT OR TYPE

A. Onsite System Location

Address* 7600 PANAMA RD City HICKMAN, NE Zip 68372
(no rural route)

Legal Description 3 7 7 6TH PRINCIPAL MERIDIAN 37NE
1/4 1/4 Section Township Range Subdivison Addition Block Lot

PID 14-03-400-009-000 *Approx. Address (If to be determined)

B. Owner

Name SEVEN WILLOWS Signature
Address 7600 PANAMA RD City/State/Zip HICKMAN, NE 68372
Home Phone Work Phone

C. Certified Installer

Name: JAIME KIRK Signature
Address P.O. BOX 191 City/State/Zip HICKMAN, NE 68372
Work Phone 402-475-2462

D. Engineer

☐ **Check and complete if engineer designed system** P.E. License Number:

Designer Name Firm Work Phone

E. This system will serve a

☒ Residential Dwelling Number of Bedrooms Whirlpool Bathtub? ☐ Yes ☐ No Total Acres 29.54
Garbage Grinder? ☐ Yes ☐ No

☒ Commercial Establishment/Other Facility Specify WEDDING VENUE Design flow in gallons per day Type of Wastewater ☒ Domestic ☐ Non-Domestic 325 GPD

DO NOT WRITE BELOW THIS LINE

Approval Process

1. Health Department
Site visits
Comments
Date rec'd
Date frwd
ACTION ☐ Approved ☐ Disapproved
Signature

2. Supt. Bldg. Insp. or Village Clerk
Comments
Date rec'd
Date frwd
ACTION ☐ Approved ☐ Disapproved
Signature

3. City or County Engineer
Comments
Date rec'd
Date frwd
ACTION ☐ Approved ☐ Disapproved
Signature

Installation Final Written Approval
By
Date

Business Office Use Only
Date Received 4-24-23 Amount Paid $460
Received By JMO Cash/Check No. 9055

White - Health Department Yellow - Engineer Pink - Building & Safety

Form A Updated: 4/15

Lincoln-Lancaster County Health Department
Environmental Public Health Division (402) 441-8027
3131 O Street Lincoln, Nebraska 68510-1514

ON-SITE WASTE WATER SYSTEM
CONSTRUCTION - INSTALLATION PERMIT
No. HS002529

System Type: Lagoon

Situs: No Site Address Specified

Issued: 4/24/2023

Expires: 4/24/2024

Description: S3, T11, R5, 6th Principal Meridian, LOT 1 NW 1/4 SEC.

Owner: WUBBELS, AARON & HEIDI
7600 PANAMA RD
HICKMAN, NE 68372

Patricia D. Lopez

Patricia D. Lopez, RN, MSN, Health Director

Dear Applicant:

The above document is your permit to construct a new On-site Waste Water System at the location listed. Please contact this office once the sytem is complete in order to schedule a final inspection before use.

Patricia D. Lopez

Patricia D. Lopez, RN, MSN
Health Director

RAYMOND CONTRACTING INC
13800 NW 70TH ST
RAYMOND, NE 68428

Lincoln-Lancaster County Health Department
Environmental Public Health Division (402) 441-8027
3131 O Street Lincoln, Nebraska 68510-1514

ON-SITE WASTE WATER SYSTEM
CONSTRUCTION - INSTALLATION PERMIT
No. HS002529

System Type: Lagoon

Situs: No Site Address Specified

Issued: 4/24/2023

Expires: 4/24/2024

Description: S3, T11, R5, 6th Principal Meridian, LOT 1 NW 1/4 SEC.

Owner: WUBBELS, AARON & HEIDI
7600 PANAMA RD
HICKMAN, NE 68372

Patricia D. Lopez

Patricia D. Lopez, RN, MSN, Health Director

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Patricia D. Lopez

Patricia D. Lopez, RN, MSN
Health Director

AARON WUBBELS
7600 PANAMA RD
HICKMAN, NE 68372

Lincoln-Lancaster County Health Department
Environmental Public Health Division (402) 441-8027
3131 O Street Lincoln, Nebraska 68510-1514

ON-SITE WASTE WATER SYSTEM
CONSTRUCTION - INSTALLATION PERMIT
No. HS002529

System Type: Lagoon

Situs: No Site Address Specified

Issued: 4/24/2023

Expires: 4/24/2024

Description: S3, T7, R7, 6th Principal Meridian, LOT 37 NE

Owner: WUBBELS, AARON & HEIDI
7600 PANAMA RD
HICKMAN, NE 68372

Patricia D. Lopez

Patricia D. Lopez, RN, MSN, Health Director

Dear Applicant:

The above document is your permit to construct a new On-site Waste Water System at the location listed. Please contact this office once the sytem is complete in order to schedule a final inspection before use.

Patricia D. Lopez

Patricia D. Lopez, RN, MSN
Health Director

AARON WUBBELS
7600 PANAMA RD
HICKMAN, NE 68372

Lincoln-Lancaster County Health Department
Environmental Public Health Division
3140 N Street • Lincoln NE 68510-1514
Phone: 402-441-8643

SCANNED

A

Permit Number
HS002529

Onsite Wastewater Treatment System Permit Application

Include Form B and C. Submit correct fee with this Application

☐ Septic System ☒ Lagoon ☐ Other (Refer to Form C)

PLEASE PRINT OR TYPE * Engineers drawing coming soon.

A. Onsite System Location

Address* 7600 PANAMA RD City HICKMAN, NE Zip 68372
(no rural route)

Legal Description 3 7 7 6TH PRINCIPAL MERIDIAN 37NE
1/4 1/4 Section Township Range Subdivison Addition Block Lot

PID 14-03-400-009-000 *Approx. Address (If to be determined)

B. Owner

Name SEVEN WILLOWS Signature
Address 7600 PANAMA RD City/State/Zip HICKMAN, NE 68372
Home Phone Work Phone

C. Certified Installer

Name: JAIME KUBIK Signature
Address P.O. Box 191 City/State/Zip HICKMAN, NE 68372
Work Phone 402-475-2462

D. Engineer

☐ **Check and complete if engineer designed system** P.E. License Number:
Designer Name Firm Work Phone

E. This system will serve a

☒ Residential Dwelling Number of Bedrooms Whirlpool Bathtub? ☐ Yes ☒ No Garbage Grinder? ☐ Yes ☒ No Total Acres 29.54

☒ Commercial Establishment/Other Facility Specify WEDDING VENUE Design flow in gallons per day 325 GPD 365

Type of Wastewater ☒ Domestic ☐ Non-Domestic

DO NOT WRITE BELOW THIS LINE

Approval Process

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Comments
Date rec'd 4/24/23
Date frwd 4/24/23
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Signature

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Comments
Date rec'd
Date frwd
ACTION ☐ Approved ☐ Disapproved
Signature

3. City or County Engineer
Comments
Date rec'd
Date frwd
ACTION ☐ Approved ☐ Disapproved
Signature

Installation Final Written Approval
By
Date 1/3/24

Business Office Use Only
Date Received 4-24-23 Amount Paid $460
Received By JMO Cash/Check No. CC-9855

See enclosures

White - Health Department Yellow - Engineer Pink - Building & Safety

Form A Updated: 4/15

Nate C. Hartman

From: Dana Peterson <dana@frontwater-eng.com>
Sent: Monday, April 24, 2023 10:10 AM
To: Nate C. Hartman
Subject: Wubbles Wedding Venue

Nate,

Do you need anything from me for the permit application or flow determination at this stage? The flow is about 360 gpd average to the pond.

Thanks,

Dana L. Peterson, P.E.
Frontwater Engineering, LLC
18 Merriweather Drive 11
Johnson Lake, NE 68937
308.746.2470

Virus-free.www.avg.com

Nate C. Hartman

From: Jason Kubik <southwicksewer@yahoo.com>
Sent: Friday, April 21, 2023 10:24 AM
To: Nate C. Hartman
Subject: Fw: Seven Willows grading plan
Attachments: 140-W2-001_2-3-SITE PLAN_Prelim.pdf

Jason and Jaime Kubik

Southwick Liquid Waste
Office: 402-475-2462
www.southwickliquidwaste.com

----- Forwarded Message -----
From: Dana Peterson <dana@frontwater-eng.com>
To: Aaron Wubbels <steeproofs@gmail.com>
Cc: Jason Kubik <southwicksewer@yahoo.com>
Sent: Friday, April 21, 2023, 07:49:48 AM CDT
Subject: Re: Seven Willows grading plan

Aaron,

I am working on the septic, treatment and pond layout and spoke with Jason Wednesday. He was at the site to get some info for me. We talked more about the pond and the liner to maintain water level and keep things looking cleaner. I would like to talk with you a little more about the pond size and liner as well as possibly another pond for the main pond to spill into. I am thinking the main pond would have a plastic liner and the spill over pond would not.

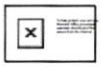
FYI - At 325 gpd avg flow into the pond from all sources, a soil lined pond (seepage of 1/8" per day max.) requires 3,100 s.f. of surface area at a water depth of 5 ft (max) and with a plastic liner (seepage of basically zero) requires a pond area of 4x that of the soil lined pond (10,700 s.f.). I am afraid we won't be able to keep the pond at a level you will be happy with, especially considering the water well supply. So I am thinking of a pond about the size that JEO showed on the grading plan (4450 s.f.) and make it plastic lined, then make a spill over pond to the NE that is about 1800 s.f. which will take the remaining flow if all the flow numbers are actually correct. Attached is a preliminary plan. The spill over pond needs to be adjusted and the exterior slope contours matched into the existing contours. I need to figure out how to modify the JEO drawing of their contours, but should be able to. Obviously there are no labels for the system yet, I want to make sure the layout is on track with your thoughts. I had to pull some of the contours closer to the edge of the patio area. The slopes are generally 3:1, which is fairly steep. Note the swale through and around each side of the pond.

What are your thoughts on the layout and the spill over pond? For this stage of your building permit, I am leaning towards removing the spill over pond completely until we settle on the size, location and layout (if at all).

I am out the rest of the day on projects, but will be ready to work on it again in the next few days. Thanks Aaron.

I cc'd Jason on the email.

Dana L. Peterson, P.E.
Frontwater Engineering, LLC
18 Merriweather Drive 11
Johnson Lake, NE 68937
308.746.2470



Virus-free.www.avg.com

On Wed, Apr 19, 2023 at 8:29 AM Aaron Wubbels <steeproofs@gmail.com> wrote:
I really need to get the drawing from you. It is the last thing my building permit is waiting on.

Aaron

Sent from my iPhone

> On Apr 17, 2023, at 12:30 PM, Aaron Wubbels <steeproofs@gmail.com> wrote:
>
> Good morning Dana. Checking in again on the polishing pond drawings.
>
> Aaron
>
> Sent from my iPhone
>
> > On Apr 10, 2023, at 3:53 PM, Aaron Wubbels <steeproofs@gmail.com> wrote:
> >
> > Thank you Dana
> >
> > Sent from my iPhone
> >
> > > On Apr 10, 2023, at 11:17 AM, Dana Peterson <dana@frontwater-eng.com> wrote:
> > >
> > > Hi Aaron,
> > >
> > > I'm in some meetings today. It's on the list for this week. I will be in touch with a preliminary drawing for you to review.
> > >
> > > Thanks,
> > >
> > > Dana L. Peterson, P.E.
> > > **Fro**ntwater Engineering, LLC
> > > 18 Merriweather Drive 11
> > > Johnson Lake, NE 68937
> > > 308.746.2470
> > >
> > > On Mon, Apr 10, 2023 at 11:11 AM Aaron Wubbels <steeproofs@gmail.com> wrote:
> > > Just checking in. How are you coming with the completed polishing pond plan? I really need it for my final building permit please.
> > >
> > > Aaron
> > >
> > > Sent from my iPhone

On Mar 20, 2023, at 9:40 AM, Dana Peterson <dana@frontwater-eng.com> wrote:

Hi Aaron,

I received a couple of grading plans from JEO, but haven't had a chance it look into these much yet.

Jason Kubik sent a sketch of a proposed septic tank location for your house addition that I want to discuss with him prior to moving forward.

I haven't received your signed agreement and deposit payment yet. Just drop those in the mail when you have time.

Thanks!!

Dana

On Mon, Mar 13, 2023 at 2:39 PM Dana Peterson <dana@frontwater-eng.com> wrote:

> Aaron,
>
> Could you see if JEO would provide this grading plan in AutoCAD (.dwg) format? If not, I can manage without it. Thanks!
>
> Dana L. Peterson, P.E.
> Frontwater Engineering, LLC
> 18 Merriweather Drive 11
> Johnson Lake, NE 68937
> 308.746.2470
>
> On Fri, Mar 10, 2023 at 2:13 PM Aaron Wubbels <steeproofs@gmail.com> wrote:
>
> > Sent from my iPhone

--
Dana L. Peterson, P.E.
Frontwater Engineering, LLC
18 Merriweather Drive 11
Johnson Lake, NE 68937
308.746.2470

Nate C. Hartman

From: Jarred Meyer <jmeyer@jeo.com>
Sent: Friday, April 21, 2023 6:08 AM
To: Nate C. Hartman
Subject: RE: BC230011 - Seven Willows

Nate -

I see you are queued to need to review this again. Please see the information below. Will this suffice for you let the foundation package go through?

Thanks

Jarred Meyer, Associate AIA, LEED AP BD+C

o: **402.474.8752** | m: **402.239.5383**
JEO Consulting Group

From: Corey Brodersen <cbrodersen@jeo.com>
Sent: Monday, March 6, 2023 11:54 AM
To: nhartman@lincoln.ne.gov
Cc: steeproofs@gmail.com; heidi@nebraskarealty.com; Jarred Meyer <jmeyer@jeo.com>; Eric Casper <ecasper@jeo.com>
Subject: BC230011 - Seven Willows

Nate,
Per our discussion this morning, the Seven Willows wedding venue will be utilizing the design services of Frontwater, Dana Peterson, and construction services of Southwick for the polishing pond. Currently we have submitted for a limited footing and foundation permit (BC230011) and your review indicates denial since there was no information regarding wastewater design. Please note, additional information will be provided on the wastewater design in the full permit application process in the near future. Based on this information, please visit with building and safety about your denial.

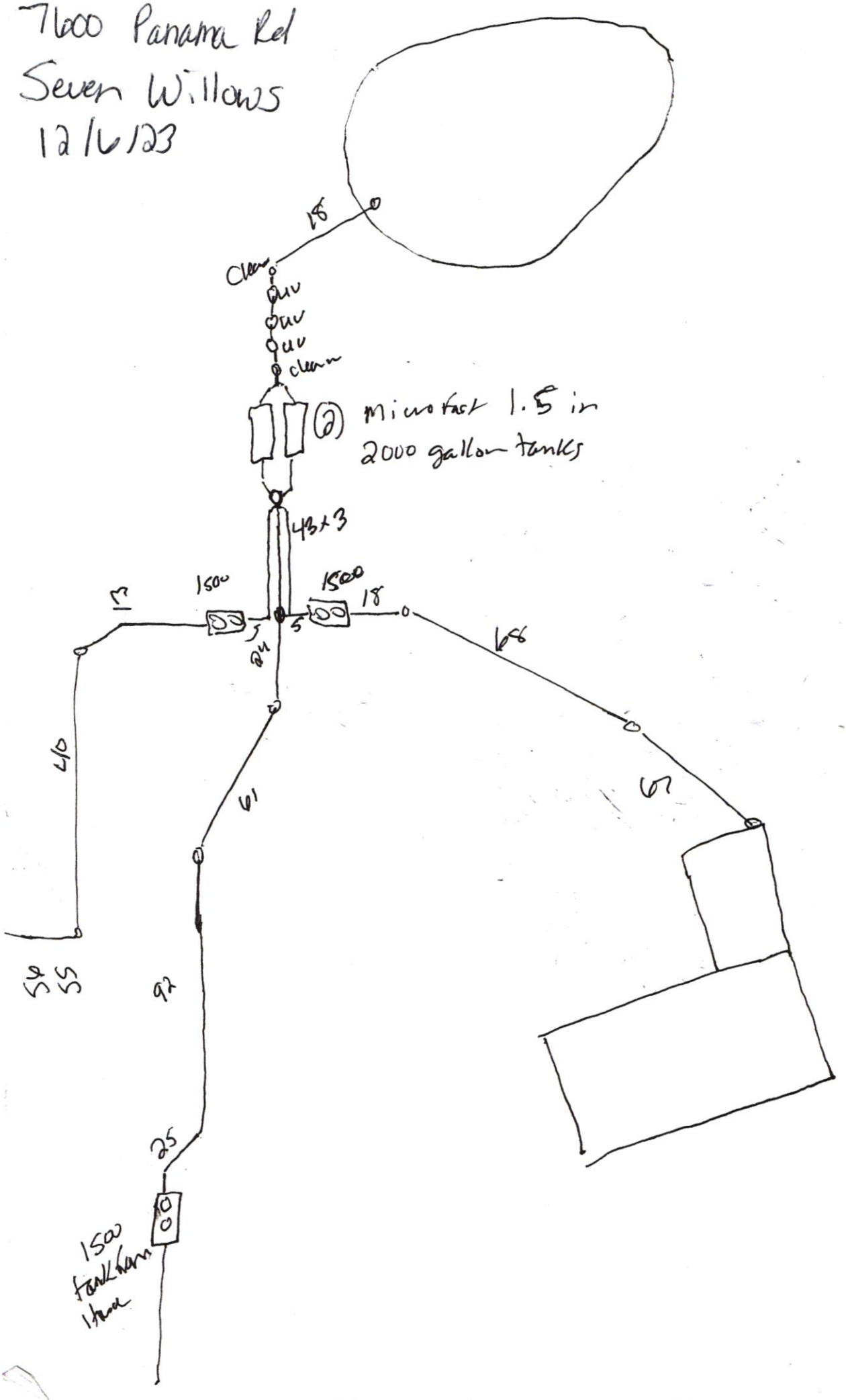
Thanks,

Corey Brodersen | *Architecture Department Leader*

o: **402.474.8746** | m: **402.560.7955** | e: **cbrodersen@jeo.com**
JEO Consulting Group | 2000 Q St Ste 500 | Lincoln, NE 68503

jeo.com

7600 Panama Rd
Seven Willows
12/6/23



18
43
43
43
18
68
67
5
5
13
40
55
56
24
61
92
25

676' pipe

Front Water Engineering LLC
18 Merriweather Dr. 11 • Johnson Lake, NE 68937 • 308.746.2470

June 29, 2023

Mr. Alan Aanerud
Onsite Wastewater Unit
Nebraska Dept. of Environment & Energy
245 Fallbrook Blvd.
Suite 100
Lincoln, NE 68521

RE: Application for Construction/Operating Permit, OWT – Septic System
SW1/4, SE1/4 S03, T07N, R07E of the 6th P.M.
Lot 37 SE, Lancaster County, Nebraska
7600 Panama Rd., Hickman, NE 68327
NDEE Facility ID:
NDEE Program: OWT
FWE Project No. 140-W2-001

Dear Mr. Aanerud:

The domestic onsite wastewater treatment system (OWT) proposed at the referenced location will receive wastewater from three sources: 1) an addition to the existing home consisting of the equivalent peak flow of 3 bedrooms, 2) an existing training quarters that is basically a three bedroom home used intermittently, and 3) a new wedding event venue.

Proposed OWT Design

The proposed onsite wastewater treatment (OWT) system will receive wastewater from the following sources:

- House Addition – 3 bedrooms, 2 bathrooms, auxiliary laundry room
- Training Quarters - 3 bedrooms, 2 bathrooms, laundry, full kitchen
- Wedding Venue – 400 people max. capacity, 8 events per month maximum

The OWT system will be consist of primary treatment in a septic tank for each of the sources with the septic tank effluent flowing to secondary treatment through two (2) aerobic treatment units (ATUs) in parallel, then flowing through UV units to a polishing pond for disposal. The design flow for the septic tanks, ATUs and UV was based upon the peak daily design flow, while the polishing pond size is based upon the average daily design flow. Lagoons or polishing ponds are typically oversized. The OWT purpose for the polishing pond for this project is disposal of the water and not treatment. Furthermore, irrigation of the pastures near the pond is an alternative and beneficial use of any additional water. It is important that the polishing pond be sized for average flows rather than peak flow. The average daily design flow for the House Addition and the Training Quarters were reduced to 30% for the pond sizing.

The average daily design flow from the Venue is based upon an average of 250 people per event and 4 gallons per person or 1,000 gallons per event. The facility is permitted to operate a maximum

of eight (8) events per month. It is anticipated that the facility will operate at this average for ten (10) months per year.

Table 1 summarizes the peak and average daily flow sizing for each component and provides the total.

Table 1 – Peak and Average Daily Design Flow Summary

	Flow Determination (gpd)	
Source of Wastewater	Treatment Primary & Secondary (Peak Daily Flow)	Polishing Pond (Average Daily Flow)
House Addition	400	120
Training Quarters	400	120
Venue	1,600	220
Total	2,400	460

Enclosed please find the following for the above referenced project:

- Completed Application for Construction/Operating Permit for the System
- Completed Citizen Attestation Form
- Application Fee in the amount of $450.00
- One set of Drawings

Please do not hesitate to contact me if you have any questions regarding this submittal, or require additional information.

Regards,
FRONTWATER ENGINEEERING, LLC

Dana L. Peterson, P.E.

Enclosures

cc: Aaron Wubbles, Owner (steeproofs@gmail.com)

2023

23OWT____
NDEE FACILITY ID _____

Seven Willows Venue

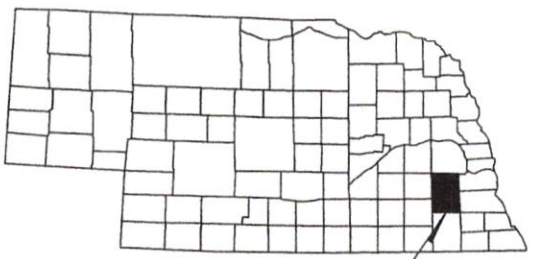
Onsite Wastewater Treatment System

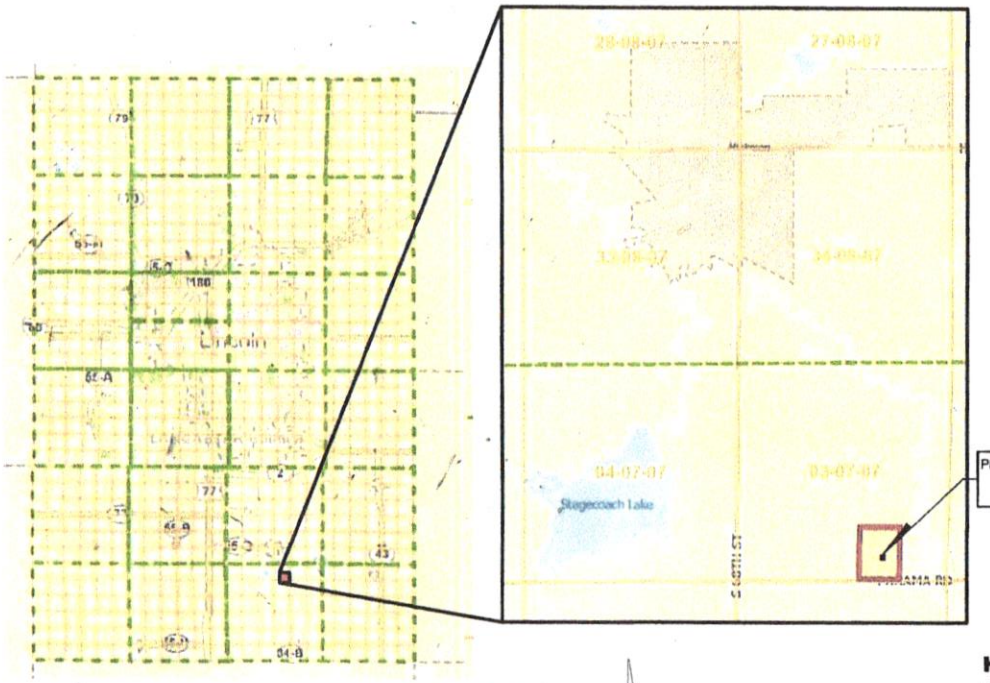
Lot 37 SE, 7600 Panama Rd, Hickman, NE 68372

SW 1/4 of the SE 1/4 of Section 03, Township 07 North, Range 07 East of the 6th P.M., Lancaster County, Nebraska

INDEX OF DRAWINGS

SHT. NO.	SHEET NAME
1	TITLE SHEET, LOCATION MAP & INDEX
2	OVERALL SITE PLAN, DESIGN DATA & NOTES
3	SITE PLAN - SEPTIC, ATU & UV
4	SITE PLAN - POLISHING POND & NOTES
5	DETAILS, SEPTIC TANK, ATU & UV





PROJECT LOCATION MAP
NOT TO SCALE

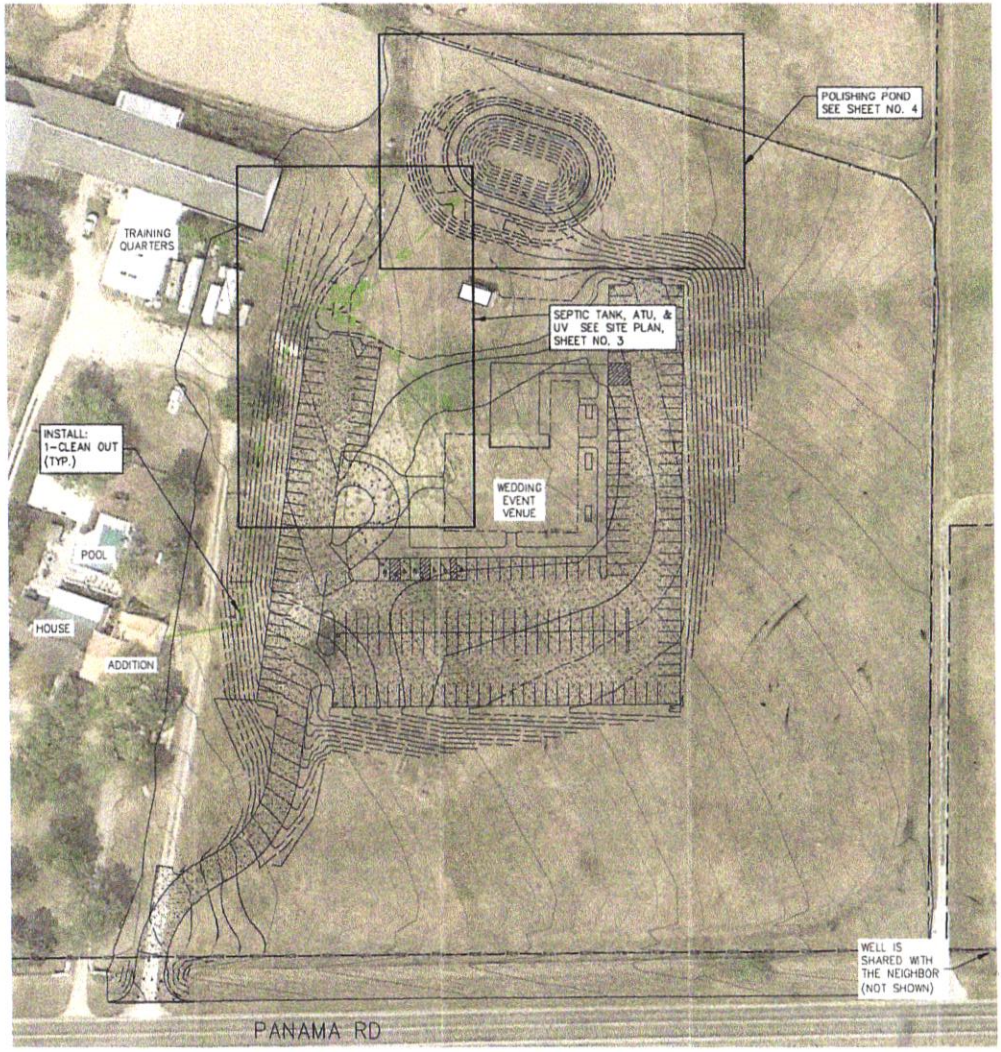
HALF SIZE
THIS DRAWING HAS BEEN REDUCED FROM ITS ORIGINAL SIZE BY HALF. ALL DIMENSIONS AND SCALES SHALL BE ADJUSTED ACCORDINGLY.

OWT - Seven Willows Venue - 7600 Panama Rd., Hickman, NE 68372

© 2023 Frontwater Engineering, LLC
NE CA3336 18 Merriweather Drive 11, Johnson Lake, Nebraska 68937 Phone: 308.746.2470
PROJECT NO. 140-W2-001
JUNE 2023

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CAUTION:
UNDERGROUND UTILITIES NOT SHOWN ON THIS PLAN. CONTRACTOR IS RESPONSIBLE FOR SUBMITTING LOCATE REQUEST AS REQUIRED BY STATE LAW. ENGINEER AND OWNER ARE NOT RESPONSIBLE FOR LOCATION OR DAMAGE OF UTILITIES AS A RESULT OF CONTRACTOR'S WORK.



50 40 30 20 10 0 50 100
SCALE: 1" = 50'

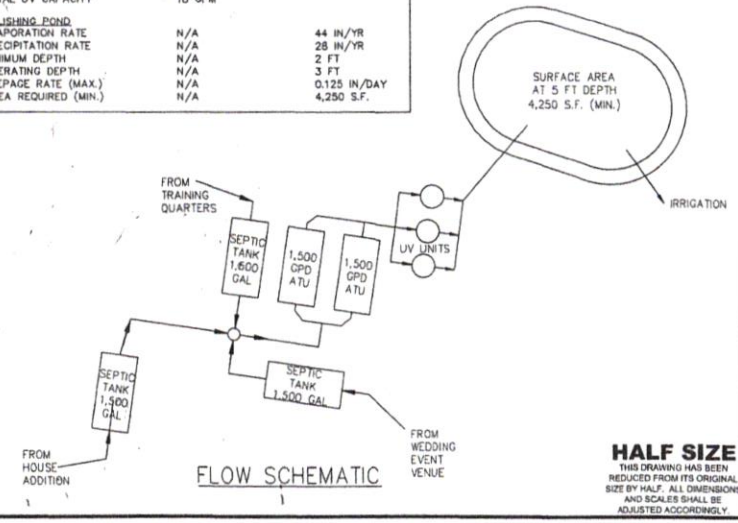
OVERALL SITE PLAN
SCALE: 1"=50'

GENERAL NOTES:

1. LOCATION OF PROPERTY LINES, UTILITIES, WATER LINES, WELLS AND BUILDINGS MAY NOT BE SHOWN. CONTRACTOR IS RESPONSIBLE FOR ONSITE MEASUREMENT AND VERIFICATION OF ALL REQUIRED DIMENSIONS.
2. CONTRACTOR IS RESPONSIBLE FOR UTILITY LOCATION NOTIFICATION BY CALLING 811.
3. ALL WORK SHALL BE IN ACCORDANCE WITH NDEE/NDEE TITLE 124 REGULATIONS INCLUDING, BUT NOT LIMITED TO, VERIFICATION OF SETBACK DISTANCES, LOCATIONS AND ELEVATIONS OF EXISTING FEATURES, CONSTRUCTION AND REGISTRATION OF THE SYSTEM.
4. ALL WORK SHALL BE PERFORMED BY NDEE/NDEE TITLE 124 CERTIFIED INDIVIDUALS AS REQUIRED BY REGULATION.
5. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY MAJOR CHANGES NECESSARY FOR THE CONSTRUCTION OF THE ON-SITE SYSTEM.
6. CONTRACTOR IS RESPONSIBLE FOR SETTING UP HORIZONTAL AND VERTICAL CONTROL FOR THE CONSTRUCTION OF THE ON-SITE SYSTEM.
7. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ACCURATE AS-RECORDED (AS-BUILT) DRAWINGS WITH DIMENSIONS AND ELEVATIONS TO ENGINEER FOR RECORDS.
8. RESTORATION OF THE SITE, INCLUDING BUT NOT LIMITED TO, GRADING, LANDSCAPING, SEEDING OR SODDING AND VEGETATING SHALL BE COMPLETED BY CONTRACTOR OR COORDINATED WITH OWNER.
9. CONTRACTOR SHALL PROVIDE CATALOG DATA SHEETS AND OPERATION & MAINTENANCE INFORMATION FOR ALL EQUIPMENT AND MATERIALS UTILIZED IN THE CONSTRUCTION OF THE PROJECT TO THE OWNER FOR RECORDS.
10. POWER SHALL BE PROVIDED AS REQUIRED TO TREATMENT UNIT AND UV SYSTEM IN ACCORDANCE WITH NEC, STATE AND LOCAL CODES. CONDUIT AND LOCATION NOT SHOWN.
11. ALL GRAVITY SEWER PIPE SHALL BE 4" DIAMETER SCH40 PVC. SLOPE OF PIPES TO TANKS SHALL BE AT 2% (1/4 IN/FT) MIN. SLOPE OF PIPES FROM TANKS SHALL BE AT 1% (1/8 IN/FT) MIN.

DESIGN PARAMETERS

DESIGN FLOW DATA	TREATMENT PRIMARY & SECONDARY (PEAK FLOW)	POLISHING POND (AVERAGE FLOW)
WASTEWATER SOURCE		
HOUSE ADDITION	400 GPD	120 GPD
TRAINING QUARTERS	400 GPD	120 GPD
WEDDING EVENT VENUE	1,600 GPD	220 GPD
TOTAL	2,400 GPD	460 GPD
SEPTIC TANK DATA		
HOUSE ADDITION	1,500 GAL.	N/A
TRAINING QUARTERS	1,500 GAL	N/A
WEDDING EVENT VENUE	1,500 GAL	N/A
TREATMENT SYSTEM		
MICROFAST 1.5	2-1,500 GPD IN PARALLEL	
SALCOR 3G UV SYSTEM	6 GPM EACH	
NO. OF UV UNITS	3	
TOTAL UV CAPACITY	18 GPM	
POLISHING POND		
EVAPORATION RATE	N/A	44 IN/YR
PRECIPITATION RATE	N/A	28 IN/YR
MINIMUM DEPTH	N/A	2 FT
OPERATING DEPTH	N/A	3 FT
SEEPAGE RATE (MAX.)	N/A	0.125 IN/DAY
AREA REQUIRED (MIN.)	N/A	4,250 S.F.



FLOW SCHEMATIC

HALF SIZE
THIS DRAWING HAS BEEN REDUCED FROM ITS ORIGINAL SIZE BY HALF. ALL DIMENSIONS AND SCALES SHALL BE ADJUSTED ACCORDINGLY.

06/29/2023

Front Water Engineering PLLC
18 Wentworth Dr. 11 • Johnson Lake, NE. 68937 • 308.746.2470

REVISIONS

NO.	DATE

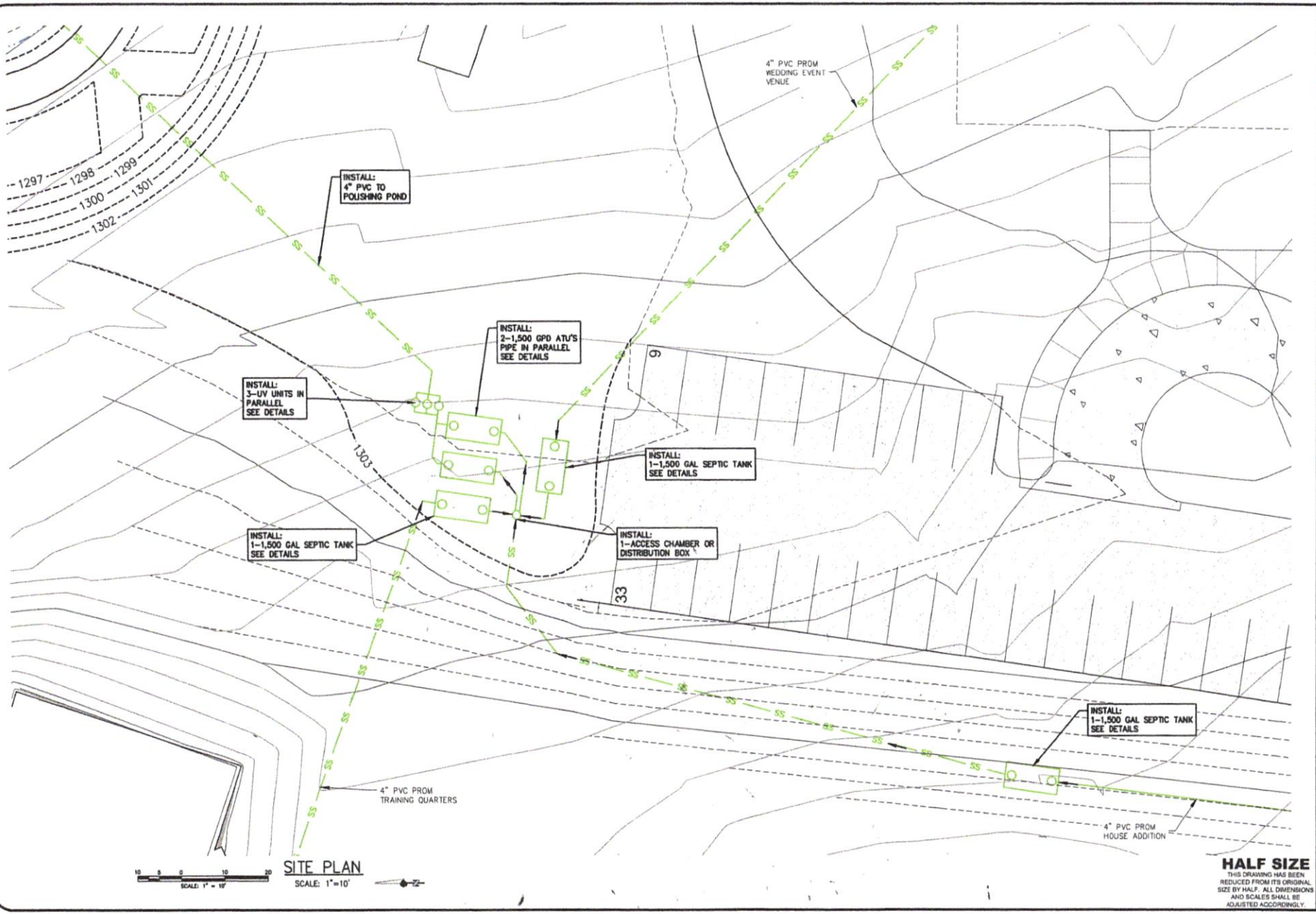
OWT - Seven Willows Venue

OVERALL SITE PLAN, DESIGN DATA & NOTES

7600 Panama Rd., Hickman, Lancaster County, Nebraska

SCALE: 1"=50' HORIZONTAL
None VERTICAL
PROJECT NO. 140-W2-001
DRAWN BY: CAD
CHECKED BY: DLP
DATE: June, 2023
SHEET 2 OF 5

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SITE PLAN
SCALE: 1"=10'

HALF SIZE
THIS DRAWING HAS BEEN REDUCED FROM ITS ORIGINAL SIZE BY HALF. ALL DIMENSIONS AND SCALES SHALL BE ADJUSTED ACCORDINGLY.

Front Water Engineering
18 Morningstar Dr. 11 • Johnson Lake, NE 68937 • 308.746.2470

REVISIONS	
NO.	DATE

OWT - Seven Willows Venue

SITE PLAN - SEPTIC TANK, ATU & UV

7600 Panama Rd., Hickman, Lancaster County, Nebraska

SCALE: 1"=20' HORIZONTAL
None VERTICAL
PROJECT NO. 140-W2-001
DRAWN BY: CAD
CHECKED BY: DLP
DATE: June, 2023
SHEET 3 OF 5

PLOTTED: 6/29/2023 2:13 PM SAVED: 6/29/2023 12:12 PM Q:\Projects\140 - Seven Willows Venue - Wubbels, Aaron Hickman (OWT)\Dwg\140-W2-001_REVISED.dwg

NEBRASKA

Good Life. Great Resources.

DEPT. OF ENVIRONMENT AND ENERGY

Construction Permit No. 23OWT034

is hereby issued to

Aaron Wubbles

for the

2,400 Gallon per Day Septic and Aerated Tank System, for Seven Willows Venue, 7600 Panama Rd, Hickman, NE 68372

Description:

A new wedding event center, training quarters, and house addition will each be serviced by a 1,500 gallon septic tank followed by a combined two 1,500 gallon per day Microfast aerated treatment tanks in parallel which will receive sanitary waste from all three buildings. The gravity flow from the aerated treatment tanks will be disinfected by three Salcor 3G UV systems in parallel before discharging to a 4,250 sq.ft. polishing pond. The polishing pond will be built in silty clay loam and will be limited to a maximum seepage rate of 1/8 inch per day. Distance to ground water is estimated at 28 ft by well records and the pond is not found in the floodplain. The minimun and maximum operating depth of the pond will be 2 and 5 ft. respectively and have 3 ft. of free board to top of dike in accordance with NDEE Title 124. Concerning operation and maintenance of the system, the tanks are to be pumped by a licensed septic pumping contractor for proper disposal, and the owner will be responsible for adequate public safety for the polishing pond. A maintenance agreement with a certified authorized installer and pumper is recommended for the life of the system.

located at

7600 Panama Road 10, Hickman, NE 68372
Latitude 40.5976, Longitude -96.6170

Pursuant to a Delegation Memorandum dated July 1, 2021, and signed by the Director, the undersigned hereby executes this document on behalf of the Director.

Signed August 14, 2023

Cyril Mastronardi PE for

Shelley Schneider PE, Permitting & Engineering Div. Administrator

245 Fallbrook Blvd., P. O. Box 98922, Lincoln, Nebraska, 68509-8922
Phone (402) 471-2186, Fax (402) 471-2909, e-mail: ndee.moreinfo@nebraska.gov