Omaha City Planning Department

APPLICATION

SUBDIVISION PLAT

Name of Addition  Aloy's Acres  SID #  -

☐ Preliminary  ☐ Revised Preliminary  ✗ Final

Property Owner(s)  Kanne Korp LP  P.O. Box 729 Carroll, IA  51401
Name  Orchard Valley, Inc.
Address  Address
Zip  Zip

Applicant  c/o Melvin Sudbeck  16255 Woodland Drive Omaha, NE  68136
Name  Donald O. Heine, P.E.
Address  Address
Zip  Zip

Contact  Thompson, Dreessen & Dorner, Inc.  10836 Old Mill Road Omaha, NE  68164
Name  dheine@td2co.com
Address  Address
Zip  Zip

E-Mail Address

General Location/Address  66th Street and Garvin Street  (Attach Legal Description)

*************************************************************
Total Area  21.900  (Acres)  Total Lots  15
Existing Zoning  DR-ED  Projected Total Taxable Valuation  $ 4,900,000

Development Plans:

<table>
<thead>
<tr>
<th>Lot#s</th>
<th>Zoning</th>
<th>Total Lots</th>
<th>Acres</th>
<th>Residential (No. of Units)</th>
<th>Office/Commercial (Square Feet)</th>
<th>Value/Price (w/Improvements)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-14</td>
<td>DR-ED</td>
<td>14</td>
<td>18.183</td>
<td>14</td>
<td>0</td>
<td>$4,900,000</td>
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<tr>
<td>Outlot A</td>
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<td>$0</td>
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<tr>
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<td>15</td>
<td>21.900</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Yes  ☒  No  ☐
A property owners' association is to be formed. If yes, attach copies of covenants.

☒  ☐ Exceptions to the standard form subdivision agreement are proposed. If yes, attach a statement of changes.

☒  ☐ Waivers to design standards, improvements or plat certifications are proposed. If yes, attach a request letter.
This subdivision will be processed as a series of phased final plats. If yes, include phase boundaries on the preliminary plat. Changes in boundaries will require a revised preliminary.

If you have any questions about this application form or submission dates, please contact the Current Planning Division at 444-5150.

Owner’s Signature

Applicant Signature (If not the property owner, the applicant certifies with this signature to be the authorized agent of the property owner.)

May 6, 2019
Date Submitted

Melvin Sudbeck
Print or Type Name of Applicant
Onsite Wastewater Treatment Program
Application for Onsite Wastewater Subdivision Review and Approval

<table>
<thead>
<tr>
<th>For NDEQ Use Only</th>
<th>NDEQ ID:</th>
<th>Program ID:</th>
</tr>
</thead>
</table>

Print or Type

Meilvin J. Sudbeck
Owner/Authorized Representative First Name Initial Last Name
Orchard Valley, Inc.
Owner Business or Legal Entity Name (if applicable)

<table>
<thead>
<tr>
<th>16255 Woodland Drive</th>
<th>Omaha</th>
<th>NE</th>
<th>68136</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner Address</td>
<td>City</td>
<td>State</td>
<td>Zip</td>
</tr>
</tbody>
</table>

Phone Number 402-895-3288 Email sudbeckhomes@gmail.com

☐ Check here if authorized representative and include a description of the representative’s authority to sign on behalf of the owner.

Professional Engineer, Certified Professional, or Registered Environmental Health Specialist
Print or Type

Donald O. Heine E-8243
First Name Initial Last Name Certification/License Number
Thompson, Dreessen & Dorner, Inc.
Company Name

<table>
<thead>
<tr>
<th>10836 Old Mill Rd.</th>
<th>Omaha</th>
<th>NE</th>
<th>68154</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mailing Address</td>
<td>City</td>
<td>State</td>
<td>Zip</td>
</tr>
</tbody>
</table>

Phone Number 402-330-8860 Email dheine@td2co.com

Planned Development Area

<table>
<thead>
<tr>
<th>Legal description</th>
<th>OR Geographical coordinates to 4 decimal points</th>
</tr>
</thead>
</table>

SEE ATTACHED Douglas

⅓ ⅓ Section Township Range County Latitude Longitude

Southeast of 66th Street and Garvin Street, Omaha, Nebraska
Physical address of system if different than owner’s mailing address

Subdivision name Aloy’s Acres

Lot numbers 1-14 Total number of subject lots 14

☐ Lots are < ¼ Acre ☑ ⅘ Lots are > ¼ but < ⅘ Acres ☐ Lots are > ⅘ Acres but < 3 acres

I swear or affirm that the application information and documentation submitted are true, complete and accurate.

Owner/Authorized Representative Signature Date

4-19-19

NOTICE: Failure to complete the form or include the appropriate fee(s) will delay the application. NDEQ approval is required prior to any construction in the development area.

Version 5-2012
May 2, 2019

Douglas County Environmental Services
c/o Mike Reed, Weed Superintendent
15335 West Maple Road Suite 201
Omaha, NE 68116

RE: Noxious Weed Control Plan
Aloy's Acres
Final Plat Submittal
TD2 File No. 1056-188.7

Mr. Mike Reed:

Herewith is the Noxious Weed Control Plan for the above referenced project. The project is located to the southeast of 66th Street and Garvin Street within part of Tax Lot 1 and Tax Lot 2, NW ¼ of the SE 1/4 of Section 24, T16N, R12E, Douglas County, Nebraska.

1) According to DCNWC there is not a history of noxious weed infestations on the subject property.

2) The subject property is located within the Northern Hills Environmental Overlay and will have minimal grading to accommodate the new roadway and proposed home sites. Existing vegetation will be maintained to the greatest extent possible. Areas being graded will be replanted with native vegetation and fescue and will be replanted when grading is completed. Additional site grading may be required in the future; all future grades will be designed at a maximum grade of 3:1 to allow access for mowing and other equipment.

3) The new and existing vegetation will be maintained at a level that allows for observation of weed growth and necessary treatment of noxious weeds observed.

4) Any area that is disturbed by construction of utilities or streets will be reseeded within 14 days of completed construction, weather conditions allowing.

5) The new and existing vegetation will be maintained until each lots is sold or built upon. At that time, maintenance of the vegetation on the privately owned lot will become the responsibility of the new home owner. Maintenance of the outlot shall be the responsibility of the Home Owners Association. The subdivision agreement will contain language referring to the control of noxious weeds.

6) The following are the contacts for this project

   Landowner: Duty288, LLC c/o Thomas Heimes
   9144 S. 144th Street
   Omaha, NE 68138
   402-333-8100

   Developer: Orchard Valley, Inc. c/o Melvin Sudbeck
   16255 Woodland Drive
   Omaha, NE 68136
   402-895-3288
This plan approved by the Douglas County Noxious Weed Control Authority:

[Signature]  [Title]  [Date]

5-3-19
April 22, 2019

Nebraska Department of Environmental Quality
Onsite Wastewater Unit
1200 N Street, Suite 400
P.O. Box 98922
Lincoln, NE 68509-8922

RE: Orchard Valley, Inc.
Application for Onsite Wastewater Subdivision Review and Approval
Proposed Aloy's Acres, Lots 1-14
Douglas County, Nebraska
TD2 File No. 1056-188.6

Attached please find the following documentation:

- Application for Onsite Wastewater Subdivision Review and Approval
- Subdivision Review and Approval Fee (14 Lots at $450.00 per Lot = $6,300.00)
- Three sets of our Preliminary Percolation Test Worksheets and Calculations
- Individual or Sole Proprietor U.S. Citizenship Attestation Form

Please process this application at your earliest opportunity and address any questions that you may have to the undersigned.

Respectfully submitted,

THOMPSON, DREESSEN & DORNER, INC.

Donald O. Heine, P.E.

DOH/tjp
Preliminary Percolation Test Summary
Aloy's Acres Lot 1
Douglas County, NE
1056-188

After averaging the percolation rates for the 3 tests taken on this lot, the average rate was 15.0 minutes per inch. This will be used for design purposes.

We assume that the house will have 3 bedrooms and 3 baths per information provided by the developer.

Using Table 14.2 of Title 124, 3 bedrooms, or 400 gpd, with a percolation rate of 15.0 mpi, or in the 10 to 20 mpi range, requires 630 square feet of absorption area.

We also assume that 5 foot wide absorption trenches will be constructed.

The area to be reserved is determined as follows.

For 3 trenches, each would need to be 42 feet long.

For 2 trenches, each would need to be 63 feet long.

Trench spacing, according to Douglas County Health Department regulations, is 7 feet of undisturbed soil between trench walls.

<table>
<thead>
<tr>
<th>For 3 trenches, each 42' long: spacing feet</th>
<th>OR</th>
<th>For 2 trenches, each 63' long: spacing feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 lateral</td>
<td></td>
<td>5 lateral</td>
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<tr>
<td>7 between walls</td>
<td></td>
<td>7 between walls</td>
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<td>5 lateral</td>
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<td>5 lateral</td>
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<td>7 between walls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 lateral</td>
<td>29 Total width</td>
<td>17 Total width</td>
</tr>
</tbody>
</table>

need area roughly 42'x29'
also same for reserve

need area roughly 63'x17'
also same for reserve
## Percolation Test Worksheet

**Client:** Sudbeck Construction  
**Location:** Lot 1 Aloy's Acres  
N 66th and Garvin Street, Omaha, NE  
**Job No.:** 1056-188  
**Weather during Testing:**  

<table>
<thead>
<tr>
<th>Date Drilled: 4/12/19</th>
<th>Test Hole # 1</th>
<th>Test Hole # 2</th>
<th>Test Hole # 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Presoak: 4/12/19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date Tested: 4/13/19</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Change in Time (min)</th>
<th>Change in Reading (inches)</th>
<th>Change in Water Level (inches)</th>
<th>Time</th>
<th>Change in Time (min)</th>
<th>Change in Reading (inches)</th>
<th>Change in Water Level (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:15</td>
<td>30</td>
<td>6</td>
<td>5</td>
<td>10:17</td>
<td>30</td>
<td>6</td>
<td>4 1/4</td>
</tr>
<tr>
<td>10:45</td>
<td></td>
<td></td>
<td></td>
<td>10:47</td>
<td>30</td>
<td>6</td>
<td>3 3/4</td>
</tr>
<tr>
<td>11:15</td>
<td>30</td>
<td>2</td>
<td>6</td>
<td>11:17</td>
<td>30</td>
<td>6</td>
<td>3</td>
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<tr>
<td>11:45</td>
<td>30</td>
<td>2 1/2</td>
<td>6</td>
<td>11:47</td>
<td>30</td>
<td>6</td>
<td>2 1/2</td>
</tr>
<tr>
<td>12:15</td>
<td>30</td>
<td>2 3/4</td>
<td>6</td>
<td>12:17</td>
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<td>6</td>
<td>2</td>
<td>2:17</td>
<td>30</td>
<td>3 3/4</td>
<td>2</td>
</tr>
</tbody>
</table>

**Percolation Rate:** 15.0 min./in.  
(last 30 min)  

**Soil Description in 10' Deep Boring:**  
0-10 Light yellow brown, Lean Clay, Silty, loess  
No free water encountered. No bed rock encountered.
Preliminary Percolation Test Summary
Aloy's Acres  Lot 2
Douglas County, NE
1056-188

After averaging the percolation rates for the 3 tests taken on this lot, the average rate was 18.0 minutes per inch. This will be used for design purposes.

We assume that the house will have 3 bedrooms and 3 baths per information provided by the developer.

Using Table 14.2 of Title 124, 3 bedrooms, or 400 gpd, with a percolation rate of 18.0 mpi, or in the 10 to 20 mpi range, requires 630 square feet of absorption area.

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<th>For 2 trenches, each 63' long: spacing feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 lateral</td>
<td></td>
<td>5 lateral</td>
</tr>
<tr>
<td>7 between walls</td>
<td></td>
<td>7 between walls</td>
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<td>5 lateral</td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>29 Total width</strong></td>
<td></td>
<td><strong>17 Total width</strong></td>
</tr>
</tbody>
</table>

need area roughly 42'x29'
also same for reserve

need area roughly 63'x17'
also same for reserve
## PERCOLATION TEST WORKSHEET

**Client:** Sudbeck Construction  
**Owner:** Aloy's Acres Development  
**Location:** Lot 2 Aloy's Acres  
**Address:** N 66th and Garvin Street, Omaha, NE

*Sketch the test hole location on the back of this worksheet.*

<table>
<thead>
<tr>
<th>Date Drilled: 4/15/19</th>
<th>Test Hole # 1</th>
<th>Date Presoak: 4/15/19</th>
<th>Depth = 48 in (in)</th>
<th>Test Hole # 2</th>
<th>Date Tested: 4/16/19</th>
<th>Dia. = 6 in (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>Change in Time (min)</td>
<td>Reading (inches)</td>
<td>Change in Water Level (inches)</td>
<td>Time</td>
<td>Change in Time (min)</td>
<td>Reading (inches)</td>
</tr>
<tr>
<td>8:00</td>
<td>30</td>
<td>6</td>
<td>5</td>
<td>8:02</td>
<td>30</td>
<td>6</td>
</tr>
<tr>
<td>8:30</td>
<td>30</td>
<td>1</td>
<td>4 1/2</td>
<td>8:32</td>
<td>30</td>
<td>1 1/2</td>
</tr>
<tr>
<td>9:00</td>
<td>30</td>
<td>1 1/2</td>
<td>6</td>
<td>9:02</td>
<td>30</td>
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<td>6</td>
<td>9:32</td>
<td>30</td>
<td>2 1/2</td>
</tr>
<tr>
<td>10:00</td>
<td>30</td>
<td>2 3/4</td>
<td>6</td>
<td>10:02</td>
<td>30</td>
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<td>30</td>
<td>3 3/4</td>
<td>6</td>
<td>12:02</td>
<td>30</td>
<td>4</td>
</tr>
</tbody>
</table>

**Percolation Rate:** 24.0 min./in.  
(last 30 min)  
15.0 min./in.  
15.0 min./in.  

**Average Site Rate:** 18.0 min./in.

**Soil Description in 10' Deep Boring:**  
0-10 Light yellow brown, Lean Clay, Silty, loess  
No free water encountered. No bed rock encountered.
Preliminary Percolation Test Summary
Aloy's Acres Lot 3
Douglas County, NE
1056-188

After averaging the percolation rates for the 3 tests taken on this lot, the average rate was 18.3 minutes per inch. This will be used for design purposes.

We assume that the house will have 3 bedrooms and 3 baths per information provided by the developer.

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<table>
<thead>
<tr>
<th>spacing</th>
<th>feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 lateral</td>
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<tr>
<td>7 between walls</td>
<td></td>
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<tr>
<td>5 lateral</td>
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<td>5 lateral</td>
<td></td>
</tr>
</tbody>
</table>

29 Total width

need area roughly 42'X29'
also same for reserve

OR

For 2 trenches, each 63' long:

<table>
<thead>
<tr>
<th>spacing</th>
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<tr>
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</tr>
<tr>
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<td></td>
</tr>
</tbody>
</table>

17 Total width

need area roughly 63'X17'
also same for reserve
### PERCOLATION TEST WORKSHEET

**Client:** Sudbeck Construction  
**Owner:** Aloy's Acres Development  
**Location:** Lot 3 Aloy's Acres  
N 66th and Garvin Street, Omaha, NE

**Date Drilled:** 4/12/19  
**Date Presoak:** 4/12/19  
**Date Tested:** 4/13/19  
**Depth:** 48 in

<table>
<thead>
<tr>
<th>Time</th>
<th>Change in Time (min)</th>
<th>Change in Reading (inches)</th>
<th>Change in Water Level (inches)</th>
<th>Time</th>
<th>Change in Time (min)</th>
<th>Change in Reading (inches)</th>
<th>Change in Water Level (inches)</th>
<th>Time</th>
<th>Change in Time (min)</th>
<th>Change in Reading (inches)</th>
<th>Change in Water Level (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:40</td>
<td>30</td>
<td>6</td>
<td>3 1/4</td>
<td>9:42</td>
<td>30</td>
<td>6</td>
<td>3</td>
<td>9:44</td>
<td>30</td>
<td>2 1/2</td>
<td>6</td>
</tr>
<tr>
<td>10:10</td>
<td>30</td>
<td>6</td>
<td>3 3/4</td>
<td>10:12</td>
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<td>6</td>
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</tbody>
</table>

**Percolation Rate:**  
(last 30 minutes)  
- Test Hole #1: 20.0 min./in.  
- Test Hole #2: 15.0 min./in.  
- Test Hole #3: 20.0 min./in.

**Average Site Rate:** 18.3 min./in.

**Soil Description in 10' Deep Boring:**  
- 0-1 Dark brown Lean Clay, topsoil  
- 1-6 Light brown Lean Clay, Silty, loess  
- 6-10 Gray brown Lean Clay, Silty, loess. No free water encountered. No bed rock encountered.
Preliminary Percolation Test Summary
Aloy's Acres Lot 4
Douglas County, NE 1056-188

After averaging the percolation rates for the 3 tests taken on this lot, the average rate was 40.8 minutes per inch. This will be used for design purposes.

We assume that the house will have 3 bedrooms and 3 baths per information provided by the developer.

Using Table 14.2 of Title 124, 3 bedrooms, or 400 gpd, with a percolation rate of 40.8 mpi, or in the 40 to 50 mpi range, requires 990 square feet of absorption area.

We also assume that 5 foot wide absorption trenches will be constructed.

The area to be reserved is determined as follows.

For 3 trenches, each would need to be 66 feet long.

For 2 trenches, each would need to be 99 feet long.

Trench spacing, according to Douglas County Health Department regulations, is 7 feet of undisturbed soil between trench walls.

For 3 trenches, each 66' long: OR For 2 trenches, each 99' long:
spacing feet
5 lateral
7 between walls
5 lateral
7 between walls
5 lateral

29 Total width

17 Total width

need area roughly 66'X29'
also same for reserve

need area roughly 99'X17'
also same for reserve
## PERCOLATION TEST WORKSHEET

**Client:** Sudbeck Construction  
**Location:** Lot 4 Aloy's Acres  
**N 66th and Garvin Street, Omaha, NE**  
**Weather during Testing:**

<table>
<thead>
<tr>
<th>Date Drilled: 4/12/19</th>
<th>Test Hole # 1</th>
<th>Test Hole # 2</th>
<th>Test Hole # 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Presoak: 4/12/19</td>
<td>Depth = 48 (in)</td>
<td>Depth = 48 (in)</td>
<td>Depth = 48 (in)</td>
</tr>
<tr>
<td>Date Tested: 4/13/19</td>
<td>Dia. = 6 (in)</td>
<td>Dia. = 6 (in)</td>
<td>Dia. = 6 (in)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Change in Time (min)</th>
<th>Change in Water Level (inches)</th>
<th>Time</th>
<th>Change in Time (min)</th>
<th>Change in Water Level (inches)</th>
<th>Time</th>
<th>Change in Time (min)</th>
<th>Change in Water Level (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:50</td>
<td>30</td>
<td>6</td>
<td>9:52</td>
<td>30</td>
<td>6</td>
<td>9:54</td>
<td>30</td>
<td>4</td>
</tr>
<tr>
<td>10:20</td>
<td>30</td>
<td>4 6</td>
<td>10:22</td>
<td>30</td>
<td>3 3/4 6</td>
<td>10:24</td>
<td>30</td>
<td>4 6</td>
</tr>
<tr>
<td>10:50</td>
<td>30</td>
<td>4 1/4 6</td>
<td>10:52</td>
<td>30</td>
<td>3 3/4 6</td>
<td>10:04</td>
<td>30</td>
<td>4 3/4 6</td>
</tr>
<tr>
<td>11:20</td>
<td>30</td>
<td>4 1/4 6</td>
<td>11:22</td>
<td>30</td>
<td>4 6</td>
<td>11:24</td>
<td>30</td>
<td>4 3/4 6</td>
</tr>
<tr>
<td>11:50</td>
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<td>4 3/4 6</td>
<td>11:52</td>
<td>30</td>
<td>4 1/2 6</td>
<td>11:54</td>
<td>30</td>
<td>5 1/4 6</td>
</tr>
<tr>
<td>12:20</td>
<td>30</td>
<td>5 6</td>
<td>12:22</td>
<td>30</td>
<td>5 6</td>
<td>12:24</td>
<td>30</td>
<td>5 1/4 6</td>
</tr>
<tr>
<td>12:50</td>
<td>30</td>
<td>5 1/4 6</td>
<td>12:52</td>
<td>30</td>
<td>5 1/4 6</td>
<td>12:54</td>
<td>30</td>
<td>5 1/4 6</td>
</tr>
<tr>
<td>1:20</td>
<td>30</td>
<td>5 1/8 6</td>
<td>1:22</td>
<td>30</td>
<td>5 6</td>
<td>1:24</td>
<td>30</td>
<td>5 1/4 6</td>
</tr>
<tr>
<td>1:50</td>
<td>30</td>
<td>5 6</td>
<td>1:52</td>
<td>30</td>
<td>5 1/4 6</td>
<td>1:54</td>
<td>30</td>
<td>5 3/8 6</td>
</tr>
</tbody>
</table>

**Percolation Rate:** 34.3 min./in.  
(last 30 min)  
48.0 min./in.  
**Average Site Rate:** 40.8 min./in.

**Soil Description in 10' Deep Boring:**  
0-7 Dark brown Lean Clay, Silty colluvium  
7-10 Yellow brown Lean Clay, Silt, Peoria loess  
No free water encountered. No bed rock encountered.
Preliminary Percolation Test Summary  
Aloy's Acres Lot 5  
Douglas County, NE  
1056-188  

After averaging the percolation rates for the 3 tests taken on this lot, the average rate was 25.0 minutes per inch. This will be used for design purposes.

We assume that the house will have 3 bedrooms and 3 baths per information provided by the developer.

Using Table 14.2 of Title 124, 3 bedrooms, or 400 gpd, with a percolation rate of 25.0 mpi, or in the 20 to 30 mpi range, requires 750 square feet of absorption area.

We also assume that 5 foot wide absorption trenches will be constructed.

The area to be reserved is determined as follows.

For 3 trenches, each would need to be 50 feet long.

For 2 trenches, each would need to be 75 feet long.

Trench spacing, according to Douglas County Health Department regulations, is 7 feet of undisturbed soil between trench walls.

<table>
<thead>
<tr>
<th>For 3 trenches, each 50' long:-spacing feet</th>
<th>OR</th>
<th>For 2 trenches, each 75' long:-spacing feet</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 lateral</td>
<td>5 lateral</td>
<td>7 between walls</td>
</tr>
<tr>
<td>7 between walls</td>
<td>5 lateral</td>
<td>7 between walls</td>
</tr>
<tr>
<td>5 lateral</td>
<td>7 between walls</td>
<td></td>
</tr>
<tr>
<td>7 between walls</td>
<td>5 lateral</td>
<td></td>
</tr>
<tr>
<td>5 lateral</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>29 Total width</td>
<td></td>
</tr>
<tr>
<td></td>
<td>17 Total width</td>
<td></td>
</tr>
</tbody>
</table>

need area roughly 50'X29'  
also same for reserve

need area roughly 75'X17''  
also same for reserve
PERCOLATION TEST WORKSHEET

Client: Sudbeck Construction
Owner: Aloy's Acres Development
Location: Lot 5 Aloy's Acres
N 66th and Garvin Street, Omaha, NE

Date Drilled: 4/12/19
Date Presoak: 4/12/19
Date Tested: 4/13/19

Test Hole # 1
Depth = 48 in
Dia. = 6 in

Test Hole # 2
Depth = 48 in
Dia. = 6 in

Test Hole # 3
Depth = 48 in
Dia. = 6 in

<table>
<thead>
<tr>
<th>Time</th>
<th>Change in Time (min)</th>
<th>Change in Water Level (inches)</th>
<th>Time</th>
<th>Change in Time (min)</th>
<th>Change in Water Level (inches)</th>
<th>Time</th>
<th>Change in Time (min)</th>
<th>Change in Water Level (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:00</td>
<td>30</td>
<td>6</td>
<td>10:02</td>
<td>30</td>
<td>6</td>
<td>10:14</td>
<td>30</td>
<td>4</td>
</tr>
<tr>
<td>10:40</td>
<td>30</td>
<td>3 1/2</td>
<td>10:42</td>
<td>30</td>
<td>3</td>
<td>10:44</td>
<td>30</td>
<td>4</td>
</tr>
<tr>
<td>11:10</td>
<td>30</td>
<td>4</td>
<td>11:12</td>
<td>30</td>
<td>3 1/2</td>
<td>11:14</td>
<td>30</td>
<td>4 1/4</td>
</tr>
<tr>
<td>11:40</td>
<td>30</td>
<td>4 1/4</td>
<td>11:42</td>
<td>30</td>
<td>3 3/4</td>
<td>11:44</td>
<td>30</td>
<td>4 1/4</td>
</tr>
<tr>
<td>12:10</td>
<td>30</td>
<td>4 1/4</td>
<td>12:12</td>
<td>30</td>
<td>4 1/4</td>
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<td>4</td>
</tr>
<tr>
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<td>4</td>
<td>12:42</td>
<td>30</td>
<td>4 3/4</td>
<td>12:44</td>
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<td>4 3/4</td>
</tr>
<tr>
<td>1:10</td>
<td>30</td>
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<td>6</td>
<td>1:14</td>
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<td>1:40</td>
<td>30</td>
<td>6</td>
<td>1:42</td>
<td>30</td>
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<td>1:44</td>
<td>30</td>
<td>6</td>
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<td>2:12</td>
<td>30</td>
<td>5</td>
<td>2:14</td>
<td>30</td>
<td>5</td>
</tr>
</tbody>
</table>

Percolation Rate: 40.0 min./in. (last 30 min)
30.0 min./in.
30.0 min./in.

Average Site Rate: 25.0 min./in.

Soil Description in 10' Deep Boring
0-4 Dark brown Lean Clay, Silty, colluvium
4-6 Brown Lean Clay, Silty, loess
6-10 Red Brown Lean Clay, Loveland loess. No free water encountered. No bed rock encountered.
Preliminary Percolation Test Summary  
Aloy's Acres Lot 6  
Douglas County, NE  
1056-188

After averaging the percolation rates for the 3 tests taken on this lot, the average rate was 24.7 minutes per inch. This will be used for design purposes.

We assume that the house will have 3 bedrooms and 3 baths per information provided by the developer.

Using Table 14.2 of Title 124, 3 bedrooms, or 400 gpd, with a percolation rate of 24.7 mpi, or in the 20 to 30 mpi range, requires 750 square feet of absorption area.

We also assume that 5 foot wide absorption trenches will be constructed.

The area to be reserved is determined as follows.

For 3 trenches, each would need to be 50 feet long.

For 2 trenches, each would need to be 75 feet long.

Trench spacing, according to Douglas County Health Department regulations, is 7 feet of undisturbed soil between trench walls.

<table>
<thead>
<tr>
<th>For 3 trenches, each 50' long: spacing feet</th>
<th>OR</th>
<th>For 2 trenches, each 75' long: spacing feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 lateral</td>
<td></td>
<td>5 lateral</td>
</tr>
<tr>
<td>7 between walls</td>
<td></td>
<td>7 between walls</td>
</tr>
<tr>
<td>5 lateral</td>
<td></td>
<td>5 lateral</td>
</tr>
<tr>
<td>7 between walls</td>
<td></td>
<td>7 between walls</td>
</tr>
<tr>
<td>5 lateral</td>
<td></td>
<td>5 lateral</td>
</tr>
<tr>
<td><strong>29 Total width</strong></td>
<td></td>
<td><strong>17 Total width</strong></td>
</tr>
</tbody>
</table>

need area roughly 50'X29'  
also same for reserve

need area roughly 75'X17'  
also same for reserve
## PERCOLATION TEST WORKSHEET

**Date Reported:** 4/17/2019

**Tested By:** T. Eggert

**Certificate No.:** C-1832

**Client:** Sudbeck Construction

**Owner:** Aloy's Acres Development

**Location:** Lot 6 Aloy's Acres

**N 66th and Garvin Street, Omaha, NE**

**Job No.:** 1056-188

**Weather during Testing:**

<table>
<thead>
<tr>
<th>Test Hole #</th>
<th>Time</th>
<th>Change in Time (min)</th>
<th>Change in Reading (inches)</th>
<th>Change in Water Level (inches)</th>
<th>Time</th>
<th>Change in Time (min)</th>
<th>Change in Reading (inches)</th>
<th>Change in Water Level (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7:45</td>
<td>30</td>
<td>6</td>
<td>5</td>
<td>7:47</td>
<td>30</td>
<td>6</td>
<td>4 1/4</td>
</tr>
<tr>
<td></td>
<td>8:15</td>
<td>30</td>
<td>6</td>
<td>4</td>
<td>8:17</td>
<td>30</td>
<td>6</td>
<td>2 1/2</td>
</tr>
<tr>
<td></td>
<td>8:45</td>
<td>30</td>
<td>2 1/2</td>
<td>6</td>
<td>8:47</td>
<td>30</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>9:15</td>
<td>30</td>
<td>2 1/2</td>
<td>6</td>
<td>9:17</td>
<td>30</td>
<td>3</td>
<td>2 1/2</td>
</tr>
<tr>
<td></td>
<td>9:45</td>
<td>30</td>
<td>3</td>
<td>6</td>
<td>9:47</td>
<td>30</td>
<td>3</td>
<td>2 1/4</td>
</tr>
<tr>
<td></td>
<td>10:15</td>
<td>30</td>
<td>3 1/2</td>
<td>6</td>
<td>10:17</td>
<td>30</td>
<td>3 1/2</td>
<td>2</td>
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<td>10:45</td>
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<td>3 1/2</td>
<td>6</td>
<td>10:47</td>
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<td>4</td>
</tr>
<tr>
<td></td>
<td>11:15</td>
<td>30</td>
<td>4</td>
<td>6</td>
<td>11:17</td>
<td>30</td>
<td>4</td>
<td>1 1/2</td>
</tr>
<tr>
<td></td>
<td>11:45</td>
<td>4 1/2</td>
<td>6</td>
<td>1 1/2</td>
<td>11:47</td>
<td>5</td>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>

**Percolation Rate:**

- Test Hole #1: 20.0 min./in. (last 30 min)
- Test Hole #2: 30.0 min./in.
- Test Hole #3: 24.0 min./in.

**Average Site Rate:** 24.7 min./in.

**Soil Description in 10' Deep Boring**

- 0-1 Dark brown, Lean Clay, Topsoil
- 1-5 Dark brown, Lean Clay, colluvium
- 5-10 Light brown, Lean Clay, Silty, loess. No free water encountered. No bed rock encountered.
Preliminary Percolation Test Summary
Aloy's AcresLot 7
Douglas County, NE
1056-188

After averaging the percolation rates for the 3 tests taken on this lot, the
average rate was 19.7 minutes per inch. This will be used for design purposes.

We assume that the house will have 3 bedrooms and 3 baths per information provided by the developer.

Using Table 14.2 of Title 124, 3 bedrooms, or 400 gpd, with a percolation rate of 19.7 mpi,
or in the 10 to 20 mpi range, requires 630 square feet of absorption area.

We also assume that 5 foot wide absorption trenches will be constructed.

The area to be reserved is determined as follows.

For 3 trenches, each would need to be 42 feet long.

For 2 trenches, each would need to be 63 feet long.

Trench spacing, according to Douglas County Health Department regulations, is 7 feet of undisturbed soil
between trench walls.

For 3 trenches, each 42' long: OR For 2 trenches, each 63' long:

<table>
<thead>
<tr>
<th>spacing</th>
<th>feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 lateral</td>
<td></td>
</tr>
<tr>
<td>7 between walls</td>
<td></td>
</tr>
<tr>
<td>5 lateral</td>
<td></td>
</tr>
<tr>
<td>7 between walls</td>
<td>7 between walls</td>
</tr>
<tr>
<td>5 lateral</td>
<td>5 lateral</td>
</tr>
</tbody>
</table>

29 Total width

17 Total width

need area roughly 42'X29'
also same for reserve

need area roughly 63'X17'
also same for reserve
<table>
<thead>
<tr>
<th>Time</th>
<th>Change in Time (min)</th>
<th>Reading (inches)</th>
<th>Change in Water Level (inches)</th>
<th>Time</th>
<th>Change in Time (min)</th>
<th>Reading (inches)</th>
<th>Change in Water Level (inches)</th>
<th>Time</th>
<th>Change in Time (min)</th>
<th>Reading (inches)</th>
<th>Change in Water Level (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30</td>
<td>30</td>
<td>6</td>
<td>3 3/4</td>
<td>8:32</td>
<td>30</td>
<td>6</td>
<td>6</td>
<td>8:34</td>
<td>30</td>
<td>6</td>
<td>3 1/2</td>
</tr>
<tr>
<td>9:00</td>
<td>30</td>
<td>2 1/4</td>
<td>3</td>
<td>9:02</td>
<td>30</td>
<td>6</td>
<td>3 1/2</td>
<td>9:04</td>
<td>30</td>
<td>2 1/2</td>
<td>6</td>
</tr>
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<td>3</td>
<td>2 3/4</td>
<td>9:32</td>
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<td>3</td>
<td>9:34</td>
<td>30</td>
<td>3 1/4</td>
<td>6</td>
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<tr>
<td>10:00</td>
<td>30</td>
<td>3 1/4</td>
<td>2 1/4</td>
<td>10:02</td>
<td>30</td>
<td>6</td>
<td>2 1/2</td>
<td>10:04</td>
<td>30</td>
<td>3 1/2</td>
<td>6</td>
</tr>
<tr>
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<td>30</td>
<td>3 3/4</td>
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<td>6</td>
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<td>3 1/4</td>
<td>6</td>
</tr>
<tr>
<td>11:00</td>
<td>30</td>
<td>4</td>
<td>1 3/4</td>
<td>11:02</td>
<td>30</td>
<td>6</td>
<td>1 3/4</td>
<td>11:04</td>
<td>30</td>
<td>3 3/4</td>
<td>6</td>
</tr>
<tr>
<td>11:30</td>
<td>30</td>
<td>4 1/4</td>
<td>1 1/2</td>
<td>11:32</td>
<td>30</td>
<td>6</td>
<td>1 1/2</td>
<td>11:34</td>
<td>30</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>12:00</td>
<td>30</td>
<td>4 1/2</td>
<td>1 1/4</td>
<td>12:02</td>
<td>30</td>
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<td>12:04</td>
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<td>6</td>
</tr>
<tr>
<td>12:30</td>
<td>30</td>
<td>4 3/4</td>
<td>1 1/4</td>
<td>12:32</td>
<td>30</td>
<td>6</td>
<td>1 1/2</td>
<td>12:34</td>
<td>30</td>
<td>4</td>
<td>6</td>
</tr>
</tbody>
</table>

Percolation Rate: 24.0 min./in. (last 30 min)  
20.0 min./in.  
15.0 min./in.  

Average Site Rate: 19.7 min./in.

Soil Description in 10' Deep Boring:
0-5 Brown, Lean Clay, Silty, colluvium
5-10 Yellow brown, Lean Clay, Silty, loess
No free water encountered. No bed rock encountered.
Preliminary Percolation Test Summary
Aloy's Acres Lot 8
Douglas County, NE
1056-188

After averaging the percolation rates for the 3 tests taken on this lot, the average rate was 17.4 minutes per inch. This will be used for design purposes.

We assume that the house will have 3 bedrooms and 3 baths per information provided by the developer.

Using Table 14.2 of Title 124, 3 bedrooms, or 400 gpd, with a percolation rate of 17.4 mpi, or in the 10 to 20 mpi range, requires 630 square feet of absorption area.

We also assume that 5 foot wide absorption trenches will be constructed.

The area to be reserved is determined as follows.

For 3 trenches, each would need to be 42 feet long.

For 2 trenches, each would need to be 63 feet long.

Trench spacing, according to Douglas County Health Department regulations, is 7 feet of undisturbed soil between trench walls.

<table>
<thead>
<tr>
<th>For 3 trenches, each 42' long: spacing feet</th>
<th>OR</th>
<th>For 2 trenches, each 63' long: spacing feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 lateral</td>
<td></td>
<td>5 lateral</td>
</tr>
<tr>
<td>7 between walls</td>
<td></td>
<td>7 between walls</td>
</tr>
<tr>
<td>5 lateral</td>
<td></td>
<td>5 lateral</td>
</tr>
<tr>
<td>7 between walls</td>
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<tr>
<td>5 lateral</td>
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<tr>
<td>29 Total width</td>
<td></td>
<td>17 Total width</td>
</tr>
</tbody>
</table>

Need area roughly 42'x29'
also same for reserve

Need area roughly 63'x17'
also same for reserve
## PERCOLATION TEST WORKSHEET

**Date Reported:** 4/15/2019

**Tested By:** T. Eggert
**Certificate No.:** C-1832

**Client:** Sudbeck Construction

**Owner:** Aloy's Acres Development

**Location:** Lot 8 Aloy's Acres
N 66th and Garvin Street, Omaha, NE

**Job No.:** 1056-188

**Weather during Testing:**

### Test Data

<table>
<thead>
<tr>
<th>Date Drilled: 4/11/19</th>
<th>Test Hole # 1</th>
<th>Test Hole # 2</th>
<th>Test Hole # 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Tested: 4/12/19</td>
<td>Dia. = 6 in.</td>
<td>Dia. = 6 in.</td>
<td>Dia. = 6 in.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Change in Time (min)</th>
<th>Reading (inches)</th>
<th>Change in Water Level (inches)</th>
<th>Time</th>
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<tr>
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<td>12:44</td>
<td>30</td>
<td>4 1/4</td>
<td>1 3/4</td>
</tr>
</tbody>
</table>

### Percolation Calculations

- **Percolation Rate:**
  - (last 30 min) 20.0 min./in.
  - 15.0 min./in.
  - 17.1 min./in.

### Soil Description

- Description: 10' Deep Boring
- In 0-10 Yellow brown, Lean Clay, Silty, loess
- No free water encountered. No bed rock encountered.

**Average Site Rate:** 17.4 min./in.
Preliminary Percolation Test Summary
Aloy's Acres Lot 9
Douglas County, NE 1066-188

After averaging the percolation rates for the 3 tests taken on this lot, the average rate was 23.3 minutes per inch. This will be used for design purposes.

We assume that the house will have 3 bedrooms and 3 baths per information provided by the developer.

Using Table 14.2 of Title 124, 3 bedrooms, or 400 gpd, with a percolation rate of 23.3 mpi, or in the 20 to 30 mpi range, requires 750 square feet of absorption area.

We also assume that 5 foot wide absorption trenches will be constructed.

The area to be reserved is determined as follows.

For 3 trenches, each would need to be 50 feet long.

For 2 trenches, each would need to be 75 feet long.

Trench spacing, according to Douglas County Health Department regulations, is 7 feet of undisturbed soil between trench walls.

For 3 trenches, each 50' long:

<table>
<thead>
<tr>
<th>spacing feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 lateral</td>
</tr>
<tr>
<td>7 between walls</td>
</tr>
<tr>
<td>5 lateral</td>
</tr>
<tr>
<td>7 between walls</td>
</tr>
<tr>
<td>5 lateral</td>
</tr>
<tr>
<td>29 Total width</td>
</tr>
</tbody>
</table>

OR

For 2 trenches, each 75' long:

<table>
<thead>
<tr>
<th>spacing feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 lateral</td>
</tr>
<tr>
<td>7 between walls</td>
</tr>
<tr>
<td>5 lateral</td>
</tr>
<tr>
<td>17 Total width</td>
</tr>
</tbody>
</table>

need area roughly 50'X29'
also same for reserve

need area roughly 75'X17'
also same for reserve
## PERCOLATION TEST WORKSHEET

**Client:** Sudbeck Construction  
**Owner:** Aloy’s Acres Development  
**Location:** Lot 9 Aloy’s Acres  
**Address:** N 66th and Garvin Street, Omaha, NE  
**Job No.:** 1056-188  

**Date Drilled:** 4/11/19  
**Depth =** 48 (in)  
**Date Presoak:** 4/11/19  
**Date Tested:** 4/12/19  
**Dia. =** 6 (in)

<table>
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<tr>
<th>Time</th>
<th>Change in Time (min)</th>
<th>Change in Reading (inches)</th>
<th>Change in Water Level (inches)</th>
<th>Time</th>
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<td>1 3/4</td>
<td>12:49</td>
<td>30</td>
<td>6</td>
<td>2</td>
</tr>
</tbody>
</table>

### Percolation Rate:

- **Last 30 min:** 20.0 min./in.  
- **Average Site Rate:** 23.3 min./in.

**Soil Description in 10’ Deep Boring:**

- 0-10 Yellow brown, Lean Clay, loess  
- No free water encountered. No bed rock encountered.
Preliminary Percolation Test Summary
Aloy's Acres Lot 10
Douglas County, NE 1056-188

After averaging the percolation rates for the 3 tests taken on this lot, the average rate was 15.7 minutes per inch. This will be used for design purposes.

We assume that the house will have 3 bedrooms and 3 baths per information provided by the developer.

Using Table 14.2 of Title 124, 3 bedrooms, or 400 gpd, with a percolation rate of 15.7 mpi, or in the 10 to 20 mpi range, requires 630 square feet of absorption area.

We also assume that 5 foot wide absorption trenches will be constructed.

The area to be reserved is determined as follows.

For 3 trenches, each would need to be 42 feet long.

For 2 trenches, each would need to be 63 feet long.

Trench spacing, according to Douglas County Health Department regulations, is 7 feet of undisturbed soil between trench walls.

For 3 trenches, each 42' long:  OR  For 2 trenches, each 63' long:
 spacing  spacing
 feet     feet
 5 lateral  5 lateral
 7 between walls  7 between walls
 5 lateral  5 lateral
 7 between walls  
 5 lateral  

29 Total width  17 Total width

need area roughly 42'X29'
also same for reserve  need area roughly 63'X17'
also same for reserve
**PERCOLATION TEST WORKSHEET**

**GEOTECTHICAL ENGINEERING DIVISION**

**Client:** Sudbeck Construction  
**Owner:** Aloy's Acres Development  
(If known):

**Location:** Lot 10 Aloy's Acres  
**N 66th and Garvin Street, Omaha, NE**

**Date Drilled:** 4/10/19  
**Date Presoak:** 4/10/19  
**Date Tested:** 4/11/19

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<thead>
<tr>
<th>Time</th>
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<th>Change in Water Level (inches)</th>
<th>Time</th>
<th>Change in Time (min)</th>
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<td>1 3/4</td>
<td>1:19</td>
<td>4</td>
<td>6</td>
<td>2</td>
</tr>
</tbody>
</table>

**Percolation Rate:**  
(last 30 min) **15.0 min./in.**  
**(last 30 min)** **17.1 min./in.**  
**(last 30 min)** **15.0 min./in.**

**Average Site Rate:** **15.7 min./in.**

**Soil Description in 10' Deep Boring**  
0-10 Light yellow brown, Lean Clay, Silty, loess  
No free water encountered. No bed rock encountered.
Preliminary Percolation Test Summary
Aloy's Acres Lot 11
Douglas County, NE 1056-188

After averaging the percolation rates for the 3 tests taken on this lot, the average rate was 28.0 minutes per inch. This will be used for design purposes.

We assume that the house will have 3 bedrooms and 3 baths per information provided by the developer.

Using Table 14.2 of Title 124, 3 bedrooms, or 400 gpd, with a percolation rate of 28.0 mpi, or in the 20 to 30 mpi range, requires 750 square feet of absorption area.

We also assume that 5 foot wide absorption trenches will be constructed.

The area to be reserved is determined as follows.

For 3 trenches, each would need to be 50 feet long.

For 2 trenches, each would need to be 75 feet long.

Trench spacing, according to Douglas County Health Department regulations, is 7 feet of undisturbed soil between trench walls.

<table>
<thead>
<tr>
<th>For 3 trenches, each 50' long:</th>
<th>OR</th>
<th>For 2 trenches, each 75' long:</th>
</tr>
</thead>
<tbody>
<tr>
<td>spacing feet</td>
<td></td>
<td>spacing feet</td>
</tr>
<tr>
<td>5 lateral</td>
<td></td>
<td>5 lateral</td>
</tr>
<tr>
<td>7 between walls</td>
<td></td>
<td>7 between walls</td>
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<tr>
<td>5 lateral</td>
<td></td>
<td>5 lateral</td>
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</tr>
<tr>
<td>5 lateral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29 Total width</td>
<td></td>
<td>17 Total width</td>
</tr>
</tbody>
</table>

need area roughly 50'x29'
also same for reserve

need area roughly 75'x17'
also same for reserve
# Percolation Test Worksheet

**Client:** Sudbeck Construction  
**Owner:** Aloy's Acres  
**Location:** Lot 11 Aloy's Acres  
**N 66th and Garvin Street, Omaha, NE**

**Date Drilled:** 4/11/19  
**Date Presoak:** 4/11/19  
**Date Tested:** 4/12/19

**Tested By:** T. Eggert  
**Certificate No.:** C-1832  
**Job No.:** 1056-188  
**Weather during Testing:**

---

### Test Hole #1
- **Time:** 8:20  
- **Change in Time (min):** 30  
- **Reading (inches):** 6  
- **Change in Water Level (inches):** 2

### Test Hole #2
- **Time:** 8:22  
- **Change in Time (min):** 30  
- **Reading (inches):** 6  
- **Change in Water Level (inches):** 2 1/2

### Test Hole #3
- **Time:** 8:24  
- **Change in Time (min):** 30  
- **Reading (inches):** 6  
- **Change in Water Level (inches):** 2 1/4

### Soil Description in 10' Deep Boring
- 0-6 brown, Lean Clay, Silty, colluvium
- 6-10 Red brown, Lean Clay, Loveland loess
- No free water encountered. No bed rock encountered.

**Percolation Rate:** 30.0 min./in.  
(last 30 min)  
**Average Site Rate:** 28.0 min./in.
Preliminary Percolation Test Summary  
Aloy's Acres Lot 12  
Douglas County, NE  
1056-188

After averaging the percolation rates for the 3 tests taken on this lot, the average rate was 31.3 minutes per inch. This will be used for design purposes.

We assume that the house will have 3 bedrooms and 3 baths per information provided by the developer.

Using Table 14.2 of Title 124, 3 bedrooms, or 400 gpd, with a percolation rate of 31.3 mpi, or in the 30 to 40 mpi range, requires 825 square feet of absorption area.

We also assume that 5 foot wide absorption trenches will be constructed.

The area to be reserved is determined as follows.

For 3 trenches, each would need to be 66 feet long.

For 2 trenches, each would need to be 83 feet long.

Trench spacing, according to Douglas County Health Department regulations, is 7 feet of undisturbed soil between trench walls.

<table>
<thead>
<tr>
<th>For 3 trenches, each 55' long: spacing feet</th>
<th>OR</th>
<th>For 2 trenches, each 83' long: spacing feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 lateral</td>
<td></td>
<td>5 lateral</td>
</tr>
<tr>
<td>7 between walls</td>
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<td>7 between walls</td>
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<tr>
<td>5 lateral</td>
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<td>5 lateral</td>
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<tr>
<td>5 lateral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29 Total width</td>
<td></td>
<td>17 Total width</td>
</tr>
</tbody>
</table>

need area roughly 55'X29' also same for reserve  
need area roughly 83'X17' also same for reserve
## PERCOLATION TEST WORKSHEET

**GEOTECHNICAL ENGINEERING DIVISION**

**Client:** Sudbeck Construction  
**Owner:** Aloy's Acres Development  
**Location:** Lot 12 Aloy's Acres  
**Date Drilled:** 4/10/19  
**Date Presoak:** 4/10/19  
**Date Tested:** 4/11/19  

**Test Hole #1**  
**Depth:** 48 in  
**Diameter:** 6 in  

**Test Hole #2**  
**Depth:** 48 in  
**Diameter:** 6 in  

**Test Hole #3**  
**Depth:** 48 in  
**Diameter:** 6 in  

<table>
<thead>
<tr>
<th>Time</th>
<th>Change in Time (min)</th>
<th>Reading (inches)</th>
<th>Change in Water Level (inches)</th>
<th>Time</th>
<th>Change in Time (min)</th>
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</thead>
<tbody>
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<td>3 3/4</td>
</tr>
<tr>
<td>9:40</td>
<td>30</td>
<td>6</td>
<td>2 3/4</td>
<td>9:42</td>
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<td>6</td>
<td>2 1/2</td>
<td>9:44</td>
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<td>6</td>
<td>2 1/2</td>
</tr>
<tr>
<td>10:10</td>
<td>30</td>
<td>6</td>
<td>2</td>
<td>10:12</td>
<td>30</td>
<td>6</td>
<td>1 3/4</td>
<td>10:14</td>
<td>30</td>
<td>6</td>
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<tr>
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<td>30</td>
<td>6</td>
<td>1 3/4</td>
<td>10:42</td>
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<td>11:10</td>
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<td>1 1/2</td>
<td>11:12</td>
<td>30</td>
<td>6</td>
<td>1 1/2</td>
<td>11:14</td>
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<td>6</td>
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</tr>
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<td>11:40</td>
<td>30</td>
<td>6</td>
<td>1 1/2</td>
<td>11:42</td>
<td>30</td>
<td>6</td>
<td>1 1/2</td>
<td>11:44</td>
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<td>6</td>
<td>3/4</td>
</tr>
<tr>
<td>12:10</td>
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<td>6</td>
<td>1</td>
<td>12:12</td>
<td>30</td>
<td>6</td>
<td>1 1/4</td>
<td>12:14</td>
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<td>6</td>
<td>3/4</td>
</tr>
<tr>
<td>12:40</td>
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<td>1</td>
<td>12:42</td>
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<td>6</td>
<td></td>
<td>12:44</td>
<td>5</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

**Percolation Rate:**  
- **30.0** min./in. (last 30 min)  
- **24.0** min./in.  
- **40.0** min./in.  

**Soil Description:** in 10' Deep Boring  
0-2 Light brown, Lean Clay, Silty, loess  
2-4 Light brown Lean Clay, Very Silty, loess  
4-10 Red brown, Lean Clay, Loveland loess. No free water encountered. No bed rock encountered.  
**Average Site Rate:** **31.3** min./in.
Preliminary Percolation Test Summary
Aloy’s Acres Lot 13
Douglas County, NE
1056-188

After averaging the percolation rates for the 3 tests taken on this lot, the average rate was 28.0 minutes per inch. This will be used for design purposes.

We assume that the house will have 3 bedrooms and 3 baths per information provided by the developer.

Using Table 14.2 of Title 124, 3 bedrooms, or 400 gpd, with a percolation rate of 28.0 mpi, or in the 20 to 30 mpi range, requires 750 square feet of absorption area.

We also assume that 5 foot wide absorption trenches will be constructed.

The area to be reserved is determined as follows.

For 3 trenches, each would need to be 50 foot long.

For 2 trenches, each would need to be 75 feet long.

Trench spacing, according to Douglas County Health Department regulations, is 7 feet of undisturbed soil between trench walls.

<table>
<thead>
<tr>
<th>For 3 trenches, each 50' long:</th>
<th>OR</th>
<th>For 2 trenches, each 75' long:</th>
</tr>
</thead>
<tbody>
<tr>
<td>spacing feet</td>
<td></td>
<td>spacing feet</td>
</tr>
<tr>
<td>5 lateral</td>
<td></td>
<td>5 lateral</td>
</tr>
<tr>
<td>7 between walls</td>
<td></td>
<td>7 between walls</td>
</tr>
<tr>
<td>5 lateral</td>
<td></td>
<td>5 lateral</td>
</tr>
<tr>
<td>7 between walls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 lateral</td>
<td></td>
<td>7 Total width</td>
</tr>
<tr>
<td>29 Total width</td>
<td></td>
<td>17 Total width</td>
</tr>
</tbody>
</table>

need area roughly 50'x29'
also same for reserve

need area roughly 75'x17'
also same for reserve
**PERCOLATION TEST WORKSHEET**

**Location:** Lot 13 Aloy's Acres  
N 66th and Garvin Street, Omaha, NE

**Date Reported:** 4/15/2019

**Tested By:** T. Eggert  
**Certificate No.:** C-1832

**Job No.:** 1056-188  
**Weather during Testing:**

**Client:** Sudbeck Construction  
**Owner:** Aloy's Acres Development

**(if known):**

<table>
<thead>
<tr>
<th>Date Drilled: 4/10/19</th>
<th>Test Hole #1</th>
<th>Test Hole #2</th>
<th>Test Hole #3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Presoak: 4/10/19</td>
<td>Depth = 48 in</td>
<td>Depth = 48 in</td>
<td>Depth = 48 in</td>
</tr>
<tr>
<td>Date Tested: 4/11/19</td>
<td>Dia. = 6 in</td>
<td>Dia. = 6 in</td>
<td>Dia. = 6 in</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Change in Time (min)</th>
<th>Reading (inches)</th>
<th>Change in Water Level (inches)</th>
<th>Time</th>
<th>Change in Time (min)</th>
<th>Reading (inches)</th>
<th>Change in Water Level (inches)</th>
<th>Time</th>
<th>Change in Time (min)</th>
<th>Reading (inches)</th>
<th>Change in Water Level (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00</td>
<td></td>
<td>30</td>
<td>6</td>
<td>9:02</td>
<td></td>
<td>30</td>
<td>6</td>
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<td></td>
<td>30</td>
<td>6</td>
</tr>
<tr>
<td>9:30</td>
<td></td>
<td>30</td>
<td>2 3/4</td>
<td>9:32</td>
<td></td>
<td>30</td>
<td>21/2</td>
<td>9:34</td>
<td></td>
<td>30</td>
<td>21/2</td>
</tr>
<tr>
<td>10:00</td>
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<td>30</td>
<td>3 1/4</td>
<td>10:02</td>
<td></td>
<td>30</td>
<td>3 1/4</td>
<td>10:04</td>
<td></td>
<td>30</td>
<td>3 1/4</td>
</tr>
<tr>
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<td>10:32</td>
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<td>4</td>
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<tr>
<td>11:00</td>
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<td>4 1/4</td>
<td>11:02</td>
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<td>30</td>
<td>4 1/4</td>
</tr>
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<td>12:02</td>
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<tr>
<td>12:30</td>
<td></td>
<td>30</td>
<td>5 1/4</td>
<td>12:32</td>
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<td>5 1/4</td>
<td>12:34</td>
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<td>5 1/4</td>
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<td>1:00</td>
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<td>30</td>
<td>4 3/4</td>
<td>1:02</td>
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<td>30</td>
<td>4 3/4</td>
<td>1:04</td>
<td></td>
<td>30</td>
<td>4 3/4</td>
</tr>
</tbody>
</table>

**Percolation Rate:** 30.0 min./in.  
(last 30 min)  
24.0 min./in.  
30.0 min./in.

**Average Site Rate:** 28.0 min./in.

**Soil Description in 10' Deep Boring:**
0-1 Dark brown, Lean Clay, topsoil
1-2 Light brown Lean Clay, Silty, loess
2-10 Red brown Lean Clay, Loveland loess. No free water encountered. No bed rock encountered.
Preliminary Percolation Test Summary
Aloy's Acres Lot 14
Douglas County, NE
1056-188

After averaging the percolation rates for the 3 tests taken on this lot, the average rate was 40.0 minutes per inch. This will be used for design purposes.

We assume that the house will have 3 bedrooms and 3 baths per information provided by the developer.

Using Table 14.2 of Title 124, 3 bedrooms, or 400 gpd, with a percolation rate of 40.0 mpi, or in the 40 to 50 mpi range, requires 990 square feet of absorption area.

We also assume that 5 foot wide absorption trenches will be constructed.

The area to be reserved is determined as follows.

For 3 trenches, each would need to be 66 feet long.

For 2 trenches, each would need to be 99 feet long.

Trench spacing, according to Douglas County Health Department regulations, is 7 feet of undisturbed soil between trench walls.

For 3 trenches, each 66' long: OR For 2 trenches, each 99' long:
 spacing spacing
 feet
 5 lateral 5 lateral
 7 between walls 7 between walls
 5 lateral 5 lateral
 7 between walls 7 between walls
 5 lateral 5 lateral
 29 Total width 17 Total width

need area roughly 66'X29'
also same for reserve need area roughly 99'X17'
also same for reserve
## PERCOLATION TEST WORKSHEET

**Client:** Sudbeck Construction

**Location:** Lot 14 Aloy's Acres
N 56th and Garvin Street, Omaha, NE

**Date Reported:** 4/15/2019

**Tested By:** T. Eggert

**Certificate No.:** C-1832

**Job No.:** 1056-188

**Weather during Testing:**

<table>
<thead>
<tr>
<th>Date Drilled: 4/10/19</th>
<th>Test Hole # 1</th>
<th>Test Hole # 2</th>
<th>Test Hole # 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Presoak: 4/10/19</td>
<td>Depth = 48 ___ (in)</td>
<td>Depth = 48 ___ (in)</td>
<td>Depth = 48 ___ (in)</td>
</tr>
<tr>
<td>Date Tested: 4/11/19</td>
<td>Dia. = 6 ___ (in)</td>
<td>Dia. = 6 ___ (in)</td>
<td>Dia. = 6 ___ (in)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Change in Time (min)</th>
<th>Change in Reading (inches)</th>
<th>Change in Water Level (inches)</th>
<th>Time</th>
<th>Change in Time (min)</th>
<th>Change in Reading (inches)</th>
<th>Change in Water Level (inches)</th>
<th>Time</th>
<th>Change in Time (min)</th>
<th>Change in Reading (inches)</th>
<th>Change in Water Level (inches)</th>
</tr>
</thead>
<tbody>
<tr>
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<td>2</td>
<td>8:52</td>
<td>30</td>
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<td>9:50</td>
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<td>4 1/2</td>
<td>6</td>
<td>9:52</td>
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<td>4 1/2</td>
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<td>10:20</td>
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<td>4 3/4</td>
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<td>11:20</td>
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<td>5 1/8</td>
<td>6</td>
<td>11:22</td>
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<td>5 1/4</td>
<td>6</td>
<td>12:54</td>
<td>30</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

**Percolation Rate:** 40.0 min./in. (last 30 min)

**Soil Description in 10" Deep Boring**
- 0-8 Dark brown, Lean Clay, colluvium
- 8-10 Yellow brown, Fat Clay, glacial till

**No free water encountered. No bed rock encountered.**

**Average Site Rate:** 40.0 min./in.
May 6, 2019

Mr. Michael Carter  
City of Omaha  
Urban Planning  
1819 Farnam Street, Suite 1100  
Omaha, NE  68183-1100

RE:  Aloy’s Acres Final Plat and Special Use Permit  
TD2 File No. 1056-188.7

Dear Mr. Carter:

Enclosed, please find the documents for the above platting.

Additionally, we are officially requesting a waiver of following:

- Partial waiver of Section 53-9(9), Sidewalks. The partial waiver request would only require sidewalks to be installed along the Howell Street and 64th Street frontages of Lots 5 through 10, inclusive and Outlot A. In addition, a provision will be included in the Subdivision Agreement that waives the right to protest the creation of a future sidewalk improvement districts for the lots and outlot abutting 66th Street and Garvin Street.

- Partial waiver of Section 53-9(11), Streetscape Standards. The partial waiver request would not require street lights to be installed on Howell Street and 64th Street. Additionally, the waiver would only require the installation of one street light at the intersection of 66th Street and Howell Street, one street light at intersection of 64th Street and Garvin Street and one street light where 66th Street curves into Garvin Street.

Please let me know if you have any questions or comments.

Respectfully submitted,

[Signature]

Donald O. Heine, P.E.  
THOMPSON, DREESSEN & DORNER, INC.

Enclosures
Aloy's Acres
LOTS 1 THROUGH 14 AND OUTLOT A
DOUGLAS COUNTY, NEBRASKA

Grading Plan

LEGEND

- Legend item

PROJECT SITE

VICINITY MAP

Sudbeck Homes

Aloy's Acres

Sudbeck Homes

16255 Woodland Drive
Omaha, NE 68136
p 402.856.3338
www.sudbeckhomes.com

thompson, dreessen & dorn, inc.
10836 Old Mill Rd Omaha, NE 68154
402.330.8860 www.td2co.com

Grading Plan

TBD DRAWING # 1056-188

1056-188

05-06-2019

BAD

DOH

Aloy's Acres
LOT S 1 THROUGH 14 AND OUTLOT A
DOUGLAS COUNTY, NEBRASKA

LEGEND

- Legend item

PROJECT SITE

VICINITY MAP

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Aloy's Acres

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Grading Plan

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1056-188

05-06-2019

BAD

DOH