Lincoln-Lancaster County Health Department
Environmental Public Health Division (402) 441-8027
3140 N Street Lincoln, NE 68510-1514

ON-SITE WASTE WATER SYSTEM CONSTRUCTION - INSTALLATION PERMIT

No. HS000380

System Type: STANDARD

Situs: 8300 SW 12 ST

Legal Description: T09N-R06E-S22-Lot 9

Owner: LINCOLN ELECTRIC SYSTEM

LINCOLN NE
68501-0869

Permit Fee:	$325.00
Variance Fee:	$0.00
Extension Fee:	$0.00
Total Fees:	$325.00
Issued:	07/20/2010
Expires:	07/20/2011

Bruce D. Dart, PhD, Health Director

On-site Waste System Permit Holder:

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.

Bruce D. Dart, PhD
Health Director

GAGNER CONST
4810 W CLAIRE AVE
LINCOLN NE 68523-9324

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

A

Permit Number
HS000380

Onsite Wastewater Treatment System
Request for Site Clearance and Permit

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

3 acres or more required for: ☒ Septic System ☐ Lagoon ☐ Other (Refer to Form C)

The undersigned hereby requests site clearance and permit to construct a Wastewater Treatment System in conformance with appropriate regulations.

PLEASE PRINT OR TYPE

A. Onsite System Location

Address SW 12th & E of W Burr Oaks Rd (no rural route) City Lincoln, NE Zip 68523

Legal Description ~~20~~ ½ of SW¼ 22 - T9N - R6E 9

1/4 | 1/4 | Section | Township | Range | Subdivison | Addition | Block | Lot

Geographical Location (if known): Lat/Long: _____ PID _____

B. Owner

Name LINCOLN ELECTRIC SYSTEM Signature _____

Address 2600 FAIRFIELD STREET City/State/Zip Lincoln NE 68521

Home Phone _____ Work Phone 402-467-7548

C. Certified Installer

Name: Mel Wagner Signature OS per Mike Hartman

Address _____ City/State/Zip _____

Work Phone _____

D. Engineer

☐ **Check and complete if engineer designed system** P.E. License Number: E-7954

Designer Name Frank Dolan Firm HWS Consulting Inc Work Phone 402-474-2412

E. This system will serve a

☐ Residential Dwelling Number of Bedrooms _____ Is there a Whirlpool Bathtub? ☐ Yes ☒ No Total Acres _____

☒ Commercial Establishment/Other Facility Specify LES DATA CENTER Design flow in gallons per day 600

Type of Wastewater ☐ Domestic ☒ Non-Domestic Well Permit Applied for ☐ Yes ☐ No ☐ Not Applicable

DO NOT WRITE BELOW THIS LINE

Approval Process ☐ Municipal Code 24.38 ☐ County Resolution No. 02-30

1. Health Department
Site visits _____
Date rec'd 7/16/10
Date frwd 7/16/10
ACTION ☒ Approved ☐ Disapproved
Signature _____

2. Supt. Bldg. Insp. or Village Clerk
Comments _____
Date rec'd 7-16-10
Date frwd 7-16-10
ACTION ☒ Approved ☐ Disapproved
Signature _____

3. City or County Engineer
Comments _____
Date rec'd 7-16-10
Date frwd 7-16-10
ACTION ☒ Approved ☐ Disapproved
Signature Jim Plough

Installation Final Written Approval
By _____
Date _____

Business Office Use Only
Date Received 7-19-10 Amount Paid $250.00
Received By 7-19-10 Cash/Check No. 6033

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

$5.50

081306

BLOCK

NEBRASKA DOCUMENTARY STAMP TAX

SEP 0 1 1998

$ X Z BY MA

Lincoln INST. NO 98

REGISTER OF DEEDS

1998 SEP -1 P 2:07 045384

COMP
F.V.
CHECKED
ENTERED
NOTED

WARRANTY DEED

ROGER N. BOWKER AND RUBY R. BOWKER, HUSBAND AND WIFE, GRANTOR, in consideration of One Dollar and other valuable consideration received from GRANTEE, **CITY OF LINCOLN d/b/a LINCOLN ELECTRIC SYSTEM,** conveys to GRANTEE, the following described real estate (as defined in Neb. Rev. Stat. 76-201):

LOT NINE (9), IRREGULAR TRACTS LOCATED IN THE SOUTHWEST QUARTER OF SECTION 22, TOWNSHIP 9 NORTH, RANGE 6 EAST OF THE 6TH P.M., LANCASTER COUNTY, NEBRASKA.

GRANTOR covenants (jointly and severally, if more than one) with GRANTEE that GRANTOR:

(1) is lawfully seized of such real estate and that it is free from encumbrances, except any easements and restrictions now of record;

(2) has legal power and lawful authority to convey the same;

(3) warrants and will defend title to the real estate against the lawful claims of all persons.

Executed on this 1st day of September, 1998.

Roger N. Bowker
ROGER N. BOWKER

Ruby R. Bowker
RUBY R. BOWKER

State of Nebraska)
) ss
County of Lancaster)

The foregoing instrument was acknowledged before me on September 1, 1998, by Roger N. Bowker and Ruby R. Bowker, Husband and Wife.

NOTARY PUBLIC

My Commission Expires: JULY 24 2000

GENERAL NOTARY-State of Nebraska
CHARLES S. WEBER
My Comm. Exp. July 24, 2000

NZ (MSW)

LLCHD-HS000380

Lincoln-Lancaster County Health Department (LLCHD)
Environmental Public Health Division
3140 "N" Street • Lincoln, NE 68510-1514
Phone: 402-441-8022

B

Permit Number:

Onsite Wastewater Treatment System

Soil Evaluation Report

PLEASE PRINT OR TYPE

Onsite System Location

Address SW 12th St & West Sun Oaks Dr (no rural route) City [illegible] NE, Zip 8523

Owner [illegible] Address 1040 [illegible] Lincoln, NE 6[illegible]

Date of Tests 5/6/2010 to 5/25/2010 Weather: Precipitation Dry Temperature 7[illegible]

Percolation Test Data Table

A.	B.	C. D. E. F. Saturation/Swelling Time				G. H. I. J. K. Water Level Drop Last 30 mins of 4 hr or last 10 mins of 1 hr					L. M. N. Results		
		Start		End		Start		Initial	End				
Hole No.	Hole Depth (in)	Date (Mo/Da)	Time (Hr/Min)	Date (Mo/Da)	Time (Hr/Min)	Date (Mo/Da)	Time (Hr/Min)	Water Lev (in.)	Date (Mo/Da)	Time (Hr/Min)	Elapsed Time Interval	Water Level Drop (in)	Percolation Rates (Min/in = mpi)
1	[illegible]	5/17	16:17	5/18	12:[illegible]	[illegible]	[illegible]	6	[illegible]	[illegible]	30	1/2	[illegible]
2	[illegible]	[illegible]	[illegible]	5/18	12:49	[illegible]	16:[illegible]	6	[illegible]	[illegible]	[illegible]	15/16	32
3		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	5/24	[illegible]	5/25	12:45	[illegible]	16:45	6	5/25	16:45	30	5/8	48
6	[illegible]	5/24	[illegible]	5/25	12:[illegible]	[illegible]	16:47	6	5/25	16:47	30	15/16	32
								6					
								6					

Person Conducting Percolation Test

Name: Raymond [illegible] C2041

Phone: 402-479-2234

Address [illegible] (no rural route)

[illegible] Lincoln, NE [illegible]

Sum of Percolation Rates: 316

Average of Rates: [illegible]

Rate Used for Calculation: [illegible]

Soil type (NRCS Maps/Other) Silty Clay [illegible]

Groundwater Depth Not encountered in 90" [illegible] 25' test.

DO NOT WRITE BELOW THIS LINE

Reviewing Action

Comments (Soil type, groundwater, floodplain, etc.) _____

Signature of Reviewing Official _____ Date _____

Onsite Form B 12_06

LLCHD HS000380

Lincoln-Lancaster County Health Department
Environmental Public Health Division
3140 "N" Street • Lincoln, NE 68510-1514
Phone: 402-441-8022

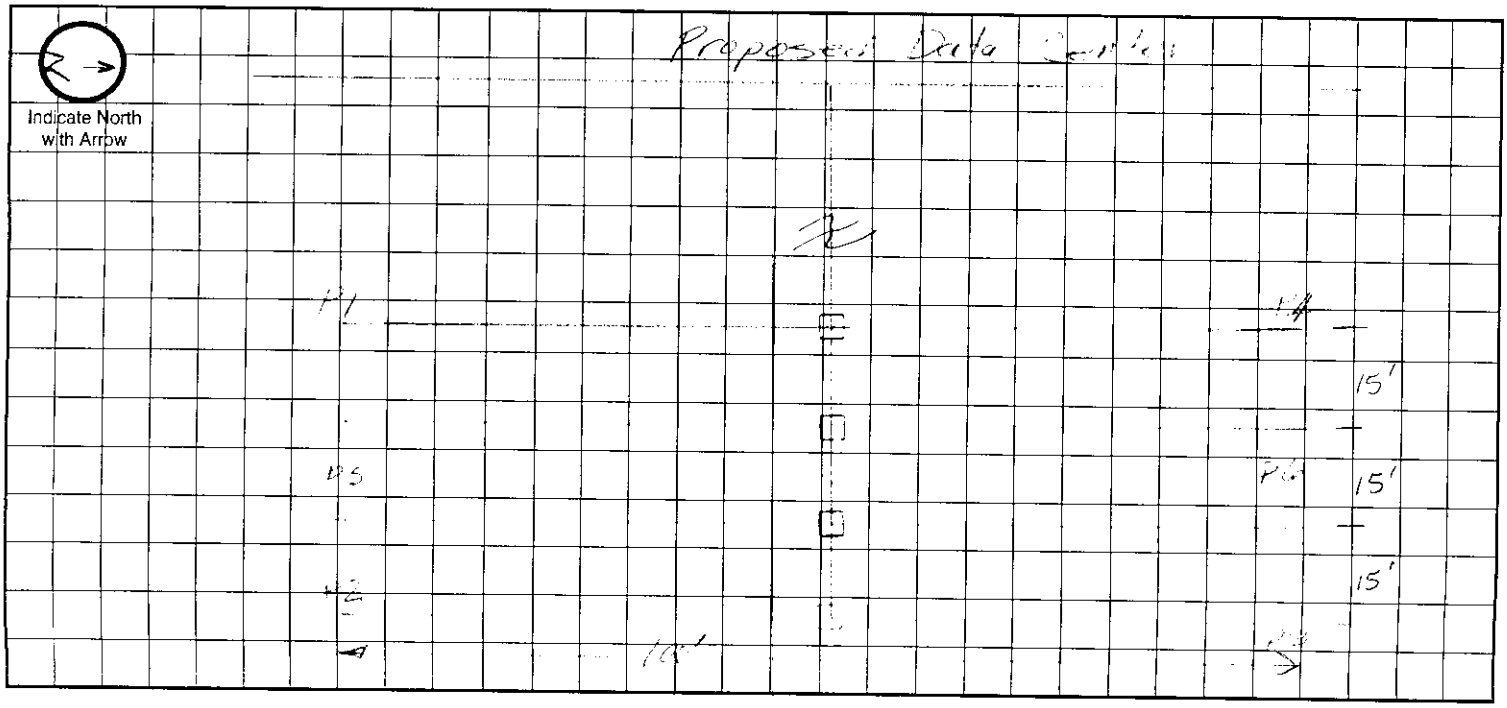
C

Permit Number:

Onsite Wastewater Treatment System

Preliminary Plan Specifications

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



Approximate Scale: 5 ft. = 1 grid line/s

A. Onsite System Location

Address (no rural route) SW 12th & Existing W Burr Oaks Rd City Lincoln NE, Zip 68523

B. Proposed Septic Tank/s

Septic Tank Cap. 1500 gals Tank Material: ☒ Concrete ☐ Plastic ☐ Other_____ ☐ Lagoon(Max. seepage 1/8" per day)

C. Reserve Area for Replacement Onsite System

☐ Drainfield Absorption Area (percoloation test required) ☐ Lagoon

D. Drainfield Absorption System

Percolation Rate 53 (min/inch = mpi) No. of Bedrooms_____ Soil Type_____ Land Slope_____%

☒ Trench ☐ Bed ☐ Non-Standard (engineer designed and NDEQ approved Total Square feet of drainfield 4500 sq.ft.

Total length of laterals 400' Type of distribution: ☒ Perforated pipe ☐ Half-Round ☐ Chamber ☐ Other

No. of absorption trenches 4' Width 36" No. of drop boxes_____ Distrubtion Box 4

No. of absorption beds_____ Width_____ No of Distribution lines per bed_____

E. Setbacks Check the Boxes Below if the Required Setback has been Satisfied

Distance From	Private Well	Public Well	Surface Water	Gound Water	Pressure Water Lines	Property Lines	Foundations Yours	Foundations Neighbors	All Other Setbacks
Tank (ft)	50 ☑	500 ☑	50 ☑	NA ☑	25 ☐	20 ☑	15 ☑	25 ☐	☑
Field (ft)	100 ☑	500 ☑	50 ☑	4 ☐	30 ☐	20 ☑	30 ☑	40 ☐	☐
Lagoon (ft)	100 ☐	500 ☐	50 ☐	N/A ☐	30 ☐	50 ☐	100 ☐	200 ☐	☐

F. Required Signatures

Home Building Contractor_____ Date_____

Installer_____ Date_____

John J. Chess

From: Nate C. Hartman
Sent: Tuesday, July 13, 2010 8:54 AM
To: 'Delka, Ray'
Subject: RE: design parameters for LES site trench sizing.

Ray:

As per our conversation, highlights:

1. At the flow rate that you propose below (600gpd @ 60mpi), the septic system would require 1750 square ft of lateral. This would equate to having to use 583.3 ft of perforated pipe using a 3 ft trench, or 437.5 ft of chamberless system using a 3 ft trench. It is up to the design engineer which he/she plans to use.

2. The maximum length of trench is 100' unless an "instrument to ensure that the trench is level (Title 124)" is used in which case the maximum can be bumped to 150'.

3. There must be at least 6 percolation holes faster than 60mpi but slower that 5 mpi submitted prior to approval.

I also forgot to mention that any changes that HWS proposes must be submitted by a P.E.

If I missed any additional details or you have any questions, please call me asap.

Thanks!!

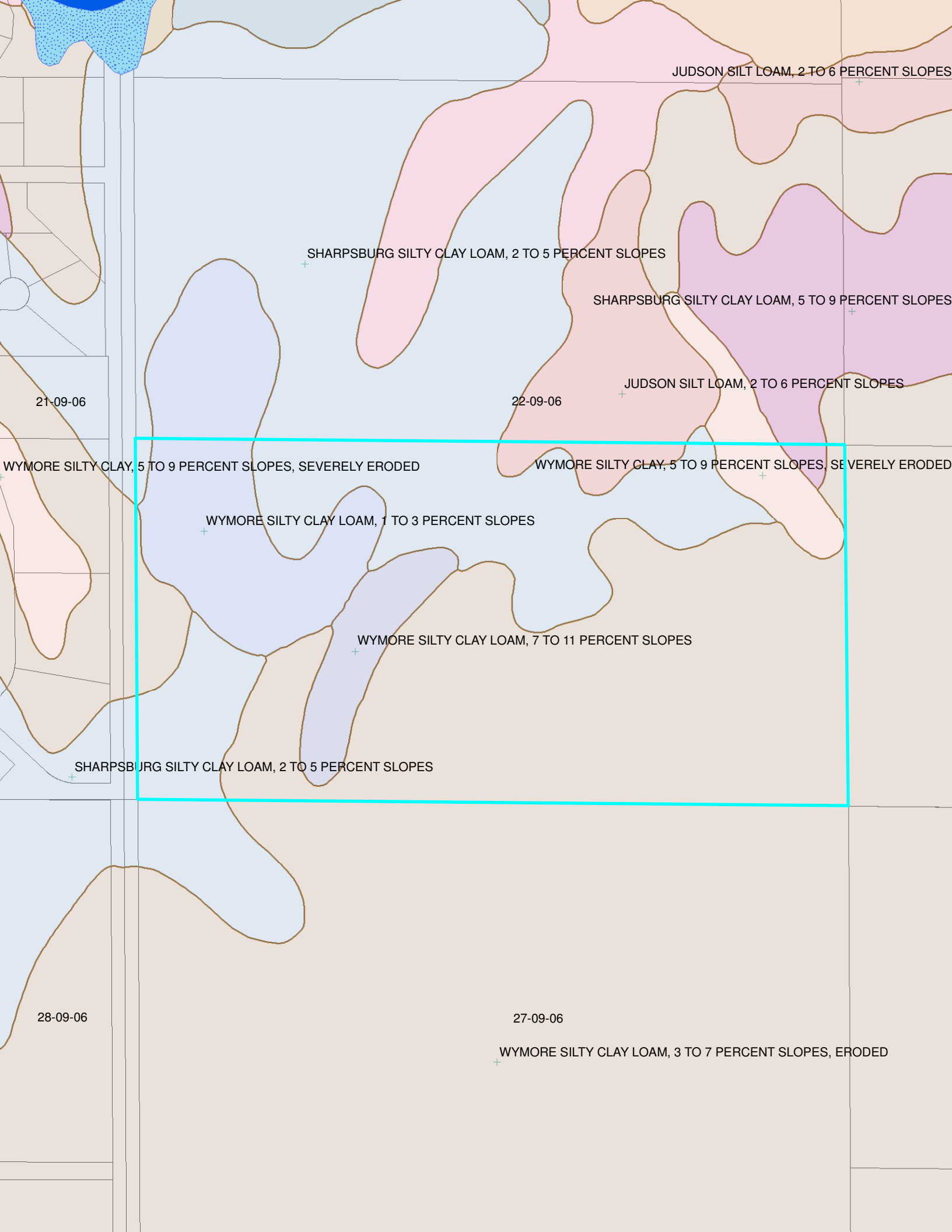
Nate Hartman REHS, CCIS
NPDES Program Specialist
Water Quality Section
Lincoln-Lancaster County Health Department

From: Delka, Ray [mailto:RDelka@benesch.com]
Sent: Monday, July 12, 2010 5:28 PM
To: Nate C. Hartman
Cc: Delka, Ray
Subject: design parameters for LES site trench sizing.

Nate:
The design was based on an occupancy of 15 people at the building and 40 gallon per day, for a daily flow of 600 gallons. With that flow and a rate of 60 min/in, it would require 930 square feet of bed. With a 36" wide trench that would be 310' in length. The plan is to have 400' of trench. The permit fee should be coming from Sampson. Any further please let me know.

Sincerely
Ray Delka

Raymond Delka CET
Manager Material Laboratory


JUDSON SILT LOAM, 2 TO 6 PERCENT SLOPES
SHARPSBURG SILTY CLAY LOAM, 2 TO 5 PERCENT SLOPES
SHARPSBURG SILTY CLAY LOAM, 5 TO 9 PERCENT SLOPES
JUDSON SILT LOAM, 2 TO 6 PERCENT SLOPES
21-09-06
22-09-06
WYMORE SILTY CLAY, 5 TO 9 PERCENT SLOPES, SEVERELY ERODED
WYMORE SILTY CLAY, 5 TO 9 PERCENT SLOPES, SEVERELY ERODED
WYMORE SILTY CLAY LOAM, 1 TO 3 PERCENT SLOPES
WYMORE SILTY CLAY LOAM, 7 TO 11 PERCENT SLOPES
SHARPSBURG SILTY CLAY LOAM, 2 TO 5 PERCENT SLOPES
28-09-06
27-09-06
WYMORE SILTY CLAY LOAM, 3 TO 7 PERCENT SLOPES, ERODED

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

SCANNED

A

Permit Number
H5000380

Onsite Wastewater Treatment System
Request for Site Clearance and Permit

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

3 acres or more required for: ☒ Septic System ☐ Lagoon ☐ Other (Refer to Form C)

The undersigned hereby requests site clearance and permit to construct a Wastewater Treatment System in conformance with appropriate regulations.

PLEASE PRINT OR TYPE

A. Onsite System Location

8300 SW 12TH

Address SW 12th & E of W Burr Oaks Rd City Lincoln, NE Zip 68523
(no rural route)

Legal Description ~~SE~~ 1/4 of SW 1/4 22 - T9N - R6E 9
1/4 1/4 Section Township Range Subdivison Addition Block Lot

Geographical Location (if known): Lat/Long: PID

B. Owner

Name LINCOLN ELECTRIC SYSTEM Signature
Address 2620 FAIRFIELD STREET City/State/Zip LINCOLN NE 68521
Home Phone Work Phone 402-467-7548

C. Certified Installer

Name: Mel Wagner Signature As per Nate Hartman
Address City/State/Zip
Work Phone

D. Engineer

☐ **Check and complete if engineer designed system** P.E. License Number: E-7854

Designer Name FRANK DOLAND Firm HWS CONSULTING, INC Work Phone 402-479-2412

E. This system will serve a

☐ Residential Dwelling Number of Bedrooms Is there a Whirlpool Bathtub? ☐ Yes ☒ No Total Acres

☒ Commercial Establishment/Other Facility Specify LES DATA CENTER Design flow in gallons per day 600

Type of Wastewater ☐ Domestic ☒ Non-Domestic Well Permit Applied for ☐ Yes ☐ No ☐ Not Applicable

DO NOT WRITE BELOW THIS LINE

Approval Process ☐ Municipal Code 24.38 ☐ County Resolution No. 02-30

1. Health Department
Site visits
Date rec'd 7/16/10
Date frwd 7/16/10
ACTION ☒ Approved ☐ Disapproved
Signature

2. Supt. Bldg. Insp. or Village Clerk
Comments
Date rec'd 7-16-10
Date frwd 7-16-10
ACTION ☒ Approved ☐ Disapproved
Signature Gary W. Spin

3. City or County Engineer
Comments
Date rec'd 7-16-10
Date frwd 7-16-10
ACTION ☒ Approved ☐ Disapproved
Signature Jim Ploucek

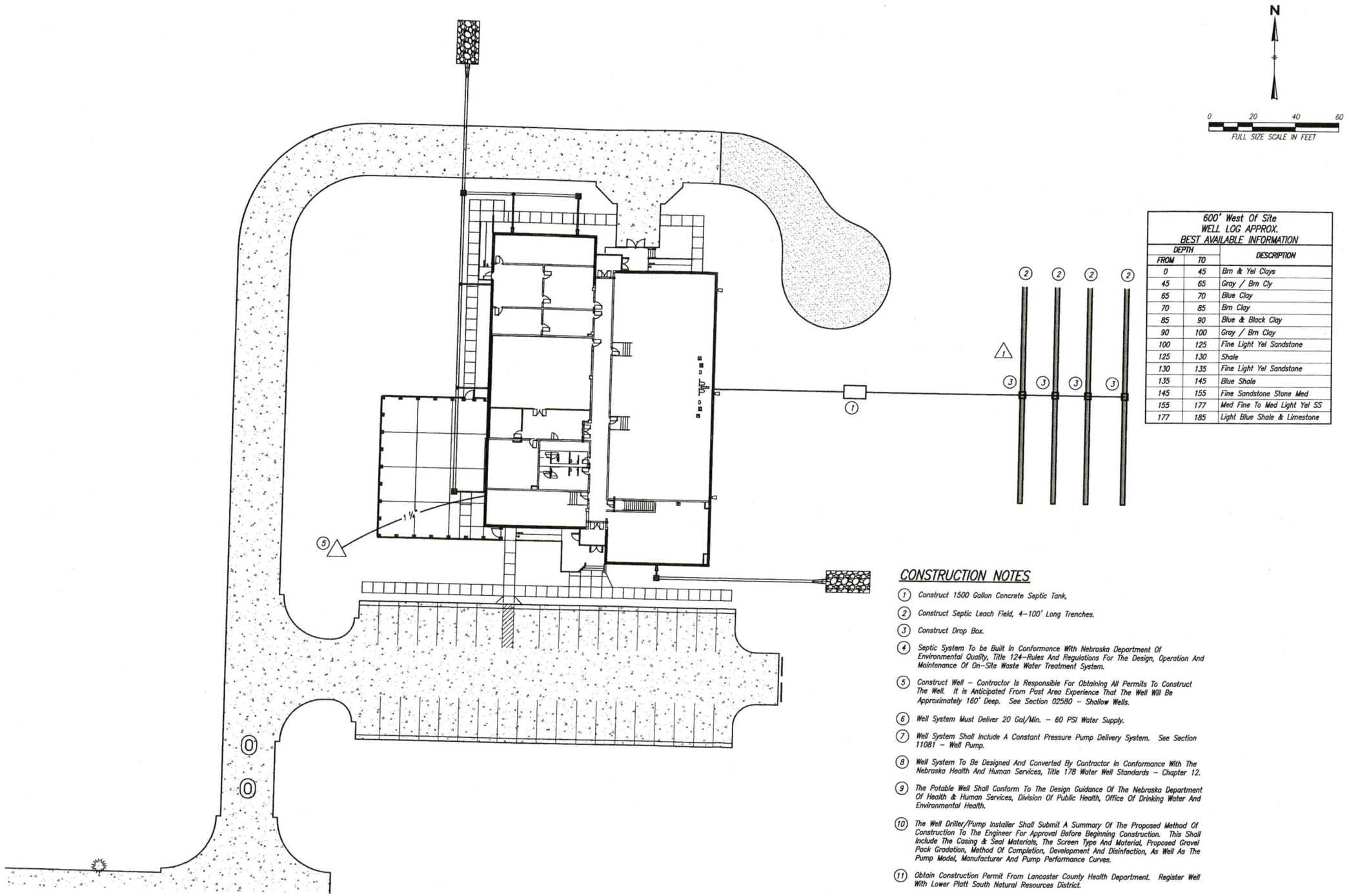
9/20/10 - line + partial on tank - D.S

Installation Final Written Approval
By Doug Mittel
Date 10/13/10

Business Office Use Only
Date Received RCPT. Amount Paid 325.00
Received By 7-19-10 Cash/Check No. 6008

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

Form A Updated: 5/10



600' West Of Site WELL LOG APPROX. BEST AVAILABLE INFORMATION		
DEPTH		
FROM	TO	DESCRIPTION
0	45	Brn & Yel Clays
45	65	Gray / Brn Cly
65	70	Blue Clay
70	85	Brn Clay
85	90	Blue & Black Clay
90	100	Gray / Brn Clay
100	125	Fine Light Yel Sandstone
125	130	Shale
130	135	Fine Light Yel Sandstone
135	145	Blue Shale
145	155	Fine Sandstone Stone Med
155	177	Med Fine To Med Light Yel SS
177	185	Light Blue Shale & Limestone

CONSTRUCTION NOTES

1. Construct 1500 Gallon Concrete Septic Tank.
2. Construct Septic Leach Field, 4–100' Long Trenches.
3. Construct Drop Box.
4. Septic System To be Built In Conformance With Nebraska Department Of Environmental Quality, Title 124–Rules And Regulations For The Design, Operation And Maintenance Of On–Site Waste Water Treatment System.
5. Construct Well – Contractor Is Responsible For Obtaining All Permits To Construct The Well. It Is Anticipated From Past Area Experience That The Well Will Be Approximately 160' Deep. See Section 02580 – Shallow Wells.
6. Well System Must Deliver 20 Gal/Min. – 60 PSI Water Supply.
7. Well System Shall Include A Constant Pressure Pump Delivery System. See Section 11081 – Well Pump.
8. Well System To Be Designed And Converted By Contractor In Conformance With The Nebraska Health And Human Services, Title 178 Water Well Standards – Chapter 12.
9. The Potable Well Shall Conform To The Design Guidance Of The Nebraska Department Of Health & Human Services, Division Of Public Health, Office Of Drinking Water And Environmental Health.
10. The Well Driller/Pump Installer Shall Submit A Summary Of The Proposed Method Of Construction To The Engineer For Approval Before Beginning Construction. This Shall Include The Casing & Seal Materials, The Screen Type And Material, Proposed Gravel Pack Gradation, Method Of Completion, Development And Disinfection, As Well As The Pump Model, Manufacturer And Pump Performance Curves.
11. Obtain Construction Permit From Lancaster County Health Department. Register Well With Lower Platt South Natural Resources District.

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morrissey engineering, inc.
mechanical - electrical engineers
telecommunications - commissioning
4940 north 118th street, omaha, ne 68164
t: 402.491.4144 f: 402.491.4146

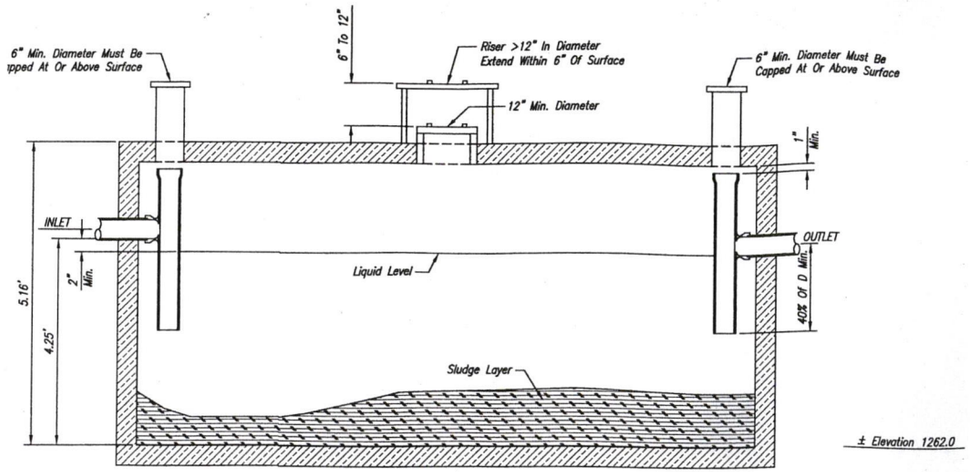
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WELL AND SEPTIC SYSTEM PLAN

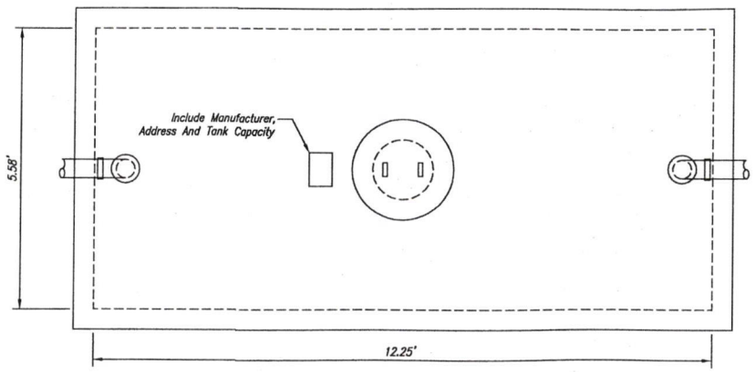
Lincoln Electric System
Data Center
Lincoln, NE

PROFESSIONAL CIVIL ENGINEER
FRANK J. DOLAND
E-7854
STATE OF NEBRASKA

date: 05–10–10
project number: 09222
designed by: X



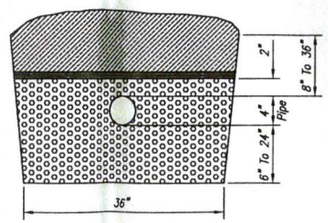
SEPTIC TANK, PROFILE VIEW
No Scale



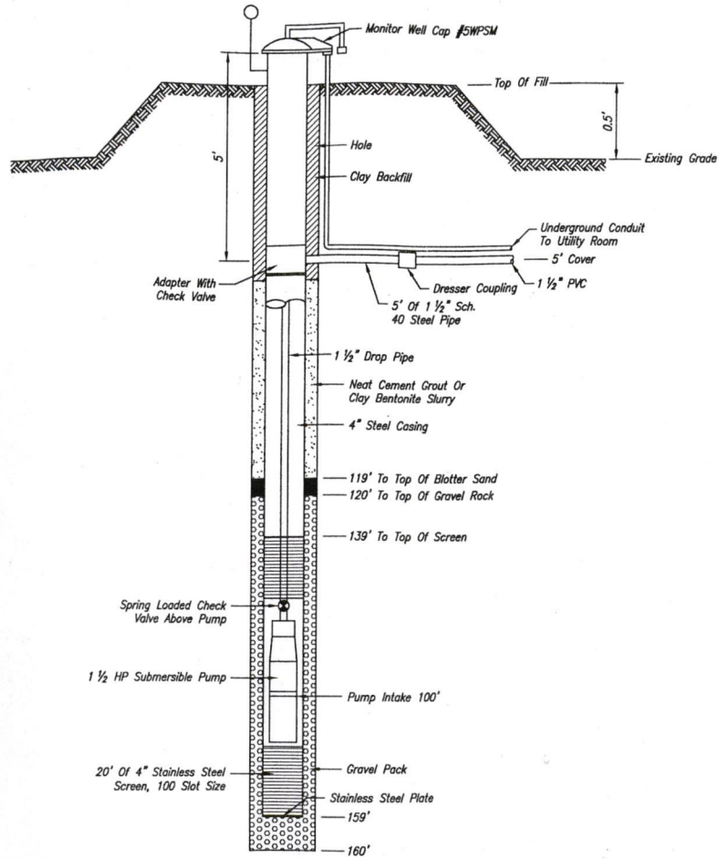
SEPTIC TANK, PLAN VIEW
No Scale

NOTE: The Filter Material Shall Be Covered With Untreated Building Paper Or A Two-Inch Layer Of Hay Or Straw Or Similar, Approved Permeable Materials.

The Absorption System Filter Material Shall Be Clean Gravel, ¼" (No 4 Sieve) Or Larger (Max 1 ½") With Less Than 5% Fines By Weight.

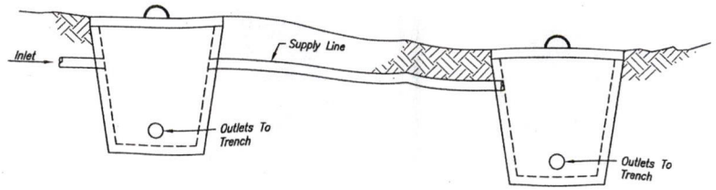


SEPTIC SYSTEM LEACH FIELD TRENCH DETAIL
No Scale



WELL SECTION
No Scale

NOTE: This Detail Illustrates What Is Anticipated To Be Encountered Based On Current Best Available Information. The Contractor Shall Drill A Test Well And From That Information This Detail May Be Modified.



DROP BOX ON A SLOPE PROFILE VIEW
No Scale

morrissey engineering, inc.
mechanical - electrical engineers
telecommunications - commissioning
4940 north 118th street, omaha, ne 68164
t: 402.491.4144 f: 402.491.4146

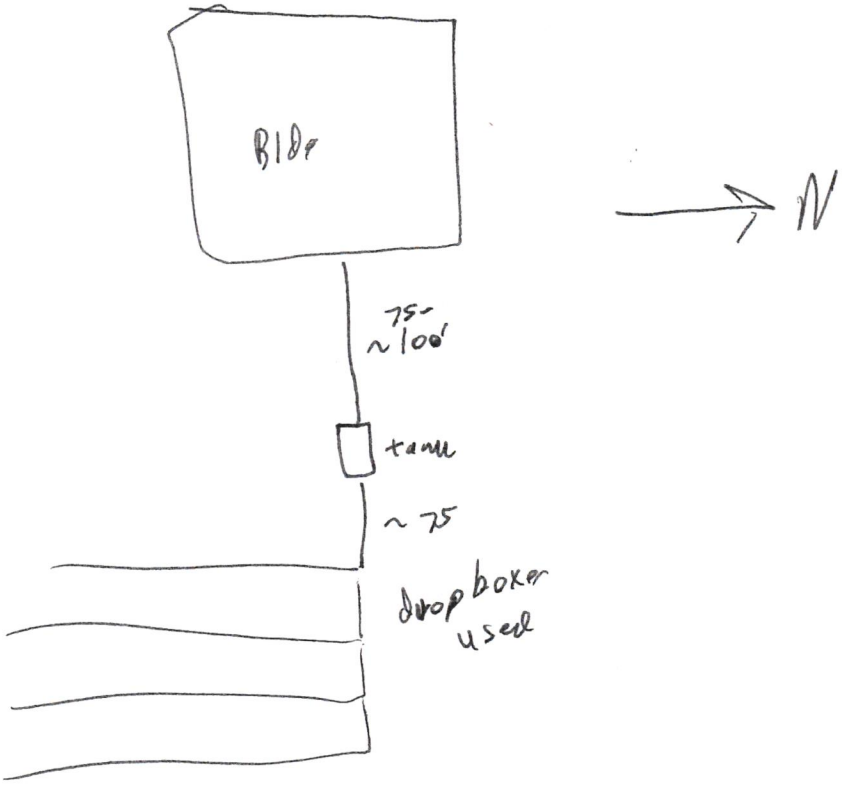
mark	revision	date

SEPTIC SYSTEM & WELL TYPICAL DETAILS

Lincoln Electric System
Data Center
Lincoln, NE

FRANK J. DOLAND E-7854 A PROFESSIONAL ENGINEER STATE OF NEBRASKA

date:	05-10-10
project number:	09222
designed by:	X


Bldg
N
75-
~100'
tank
~ 75
drop box
used