

■ **ON-SITE WASTE DISPOSAL PERMIT** ■
COUNTY OF JOHNSON - STATE OF WYOMING

PERMIT NO. 756 AMOUNT \$ 50.00

This is to certify that the individual sewage disposal system located at 22 Antelope Drive
Subdivision
Lot #16 Red Hills Ranch. NE 1/4 Block Sec. 27 T50 N R81 W Constructed for

Gordon Burchfield
installed by Pehringer Const. date 8/18/05

has been designed, constructed, and installed in compliance with the minimum requirements of Johnson County Regulations. These regulations meet minimum requirements of D.E.Q. and this certificate does not warrant or otherwise guarantee the continued performance of this system.

Rich J. Jansen Johnson County Sanitarian
[Signature] Johnson County Health Officer

Dated this 20 day of Dec., 2005.



NELSON
ENGINEERING

dba GRIZZLY ENGINEERING
Consulting Engineers & Land Surveyors

P.O. Box 1004 • 381 N. Main • Buffalo, WY 82834
(307) 684-7029 • Fax (307) 684-0109
E-Mail: grizzly@vcn.com

August 12, 2005

Rick Durfee
Johnson County Sanitarian
76 North Main Street
Buffalo, WY 82834

Rick:

Attached is the application with appropriate drawings for the proposed septic system to be located at 22 Antelope Drive (Lot 16 of the Red Hill Ranches Subdivision).

The system is designed for a three (3) bedroom home, or 450 gallons per day.

Three percolation tests were conducted with the slowest of 41.7 minutes per inch used for design. Using an absorption system loading rate of 0.343 gallons per day per square foot, the minimum absorption area is 1312 square feet.

Conventional trench systems using either 6" or 12" washed rock below the invert and an Infiltrator Chamber Unit trench system have been designed. Any of the systems may be installed – Owners option.

If you have any questions, please contact me.

Sincerely,

Keith A. Neustel, PE

xc: Gordon Burchfield

Reed
8/16/05

Inspected
8/16/05

Perkins

APPLICATION FOR INDIVIDUAL SEWAGE DISPOSAL SYSTEM
JOHNSON COUNTY, WYOMING

TO: JOHNSON COUNTY SANITARIAN
76 NORTH MAIN
BUFFALO, WY 82834 PH: 307/684-7102

Applicant: Gordon Burchfield

Mailing Address: 22 Antelope Drive Buffalo WY 82834
Street Town State Zip Code

Phone #: 865-776-5879

Location of Facility: NE 1/4 SW 1/4 Section: 27, T 50N R 81W

Address at site: 22 Antelope Drive

Subdivision: Red Hills Ranches, Block N/A, Lot 16

~ ~ ~ ~ ~

*Single Family Home: Number of Bedrooms: 3

Multiple Family Dwelling: _____ Number of Bedrooms: _____

Other Non-Commercial Use: _____

Water Supply: Municipal: _____ Private Well:

~ ~ ~ ~ ~

Lot Size and/or Area: 5 acres

Ground Slope in Disposal Field Area: 5% ± southwesterly

Soil Type: clay-loam

Percolation Test Results (min./inch): _____

1 20.8 ; 2 41.7 ; 3 27.8

Depth to Seasonal High Water Table: over 15'

Depth to Bedrock or Impervious Layer: over 15'

How were these determined: well logs

~ ~ ~ ~ ~

Septic Tank Capacity and Material: 1000 gallon fiberglass

* Approx. Dimensions: (W) _____ (L) _____ (D) _____

Type of Inlet: PVC ; Type of Outlet: PVC

* Shall meet DEQ requirements ~ ~ ~ ~ ~

Disposal System: Bed _____ ; Trench ; Other _____

Description of other: Both Conventional and Infiltrator Chamber Unit trench systems have been designed (Owners option).

Bed Dimensions: (W) _____ (L) _____

* Trench Dimensions: (No.) _____ (W) _____ (L) _____

See appropriate drawings attached for dimensions.

Depth of Washed Rock Below Invert: 6" or 12" (Conventional)

Total Infiltrative Surface Provided (sq. ft.): 1312

Depth from Bottom of Bed/Trench to Ground Surface: 3'-5'

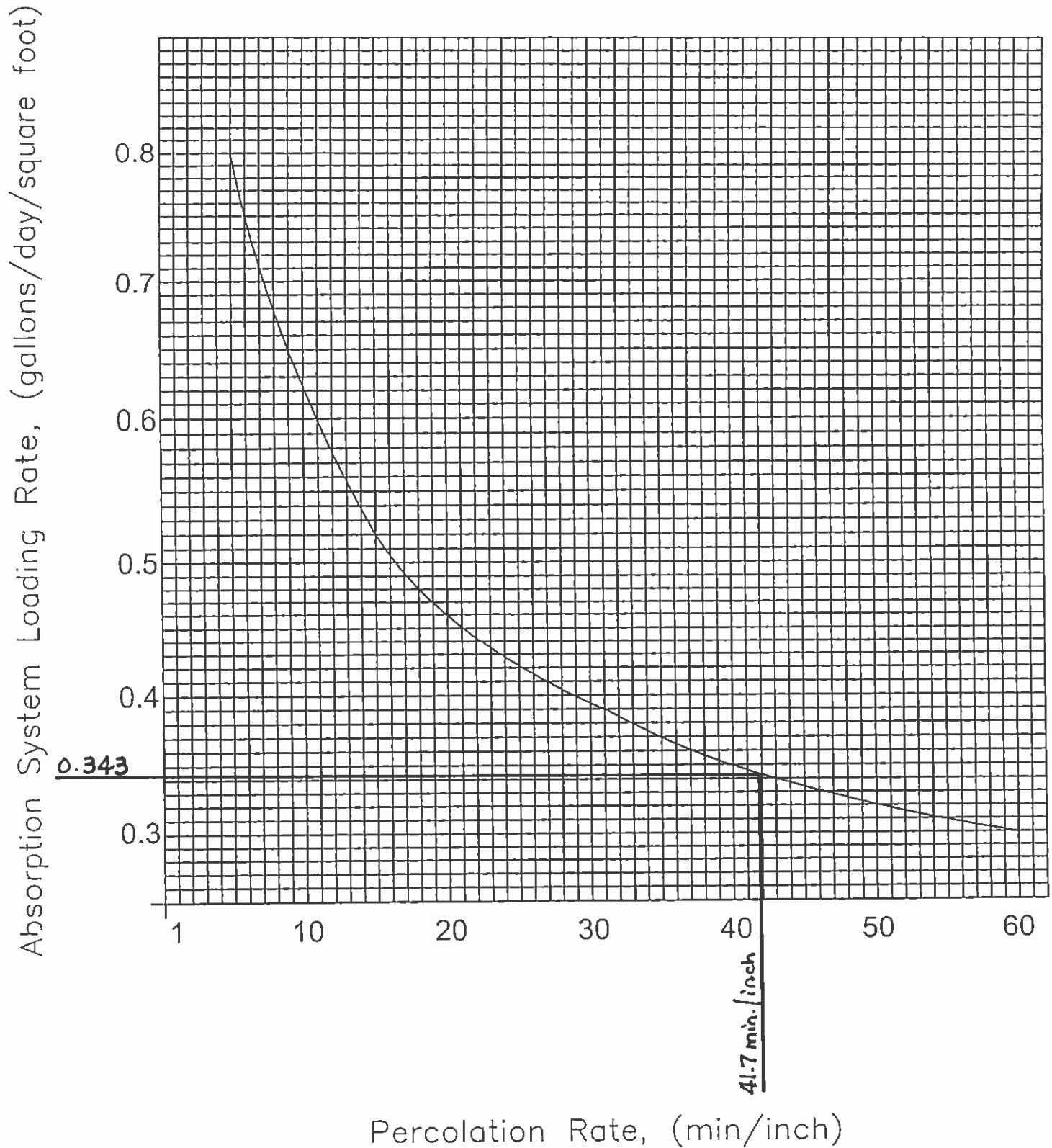
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Registered Engineer: Keith A. Neustel, WY PE&LS 2085
Engineering Firm: Grizzly Engineering
PO Box 1004
Buffalo, WY 82834
PH: 307/684-7029

Gordon J. Burchfield
Applicant:

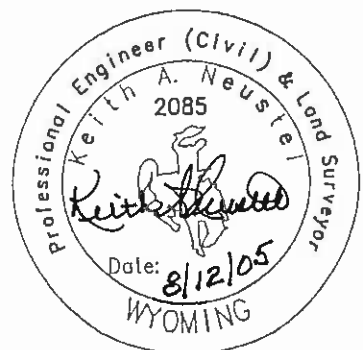
8/15/05
Date:

ABSORPTION SYSTEM LOADING RATE TABLE
For
Soil Absorption System Sizing



APPLICANT

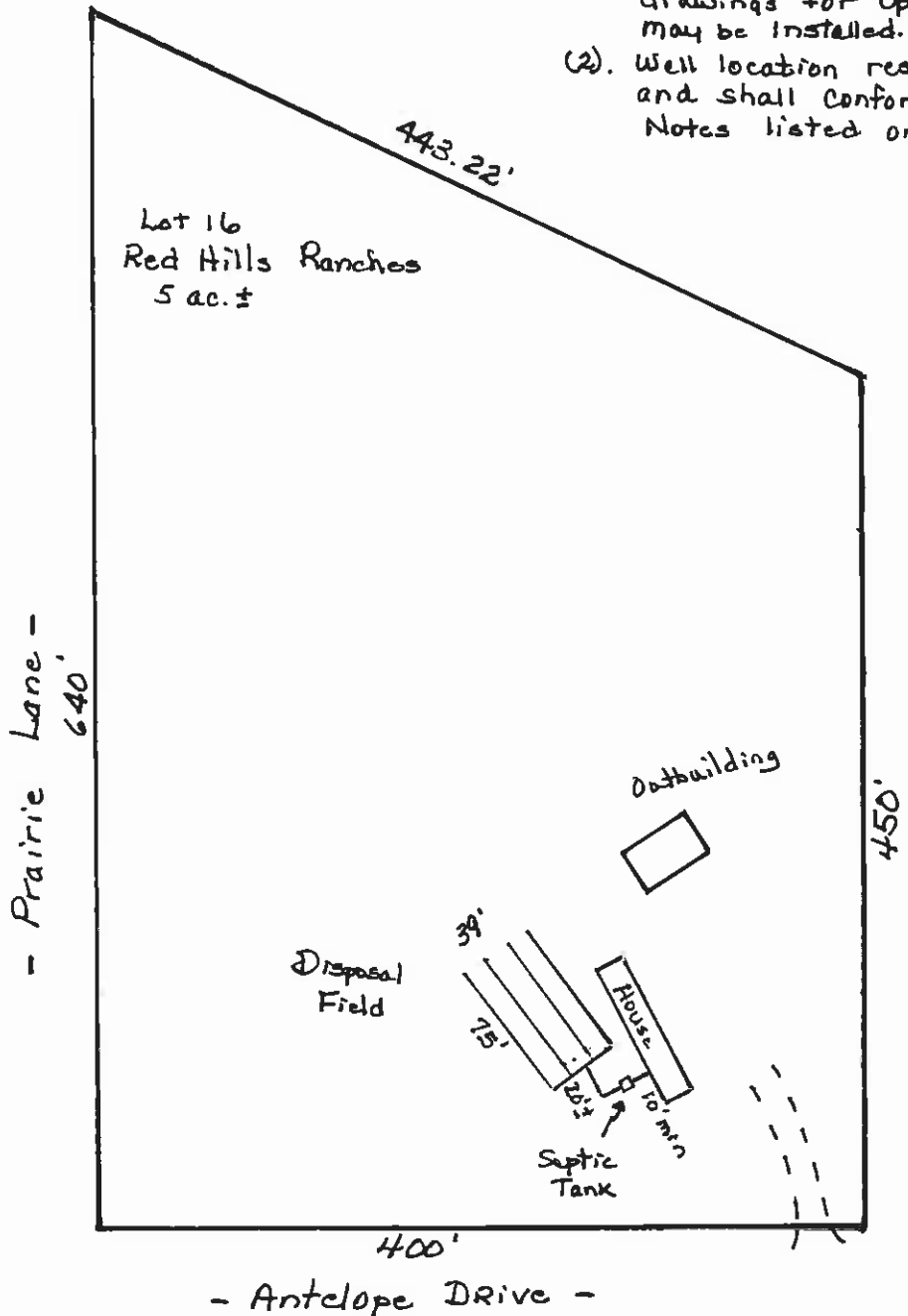
Gordon Burchfield
22 Antelope Drive
Johnson Co., Wyo.





NORTH

Scale: 1" = 100'



Notes: (1). System shown is for a Conventional trench system using 6" washed rock below the invert. See appropriate drawings for optional system that may be installed.

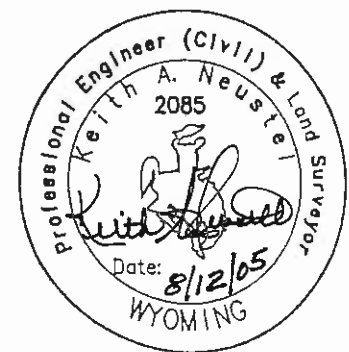
(2). Well location responsibility of Owner and shall conform to General Notes listed on this sheet.

APPLICANT

Gordon Buechfield
 22 Antelope Drive
 Johnson Co., Wyo.

GENERAL NOTES

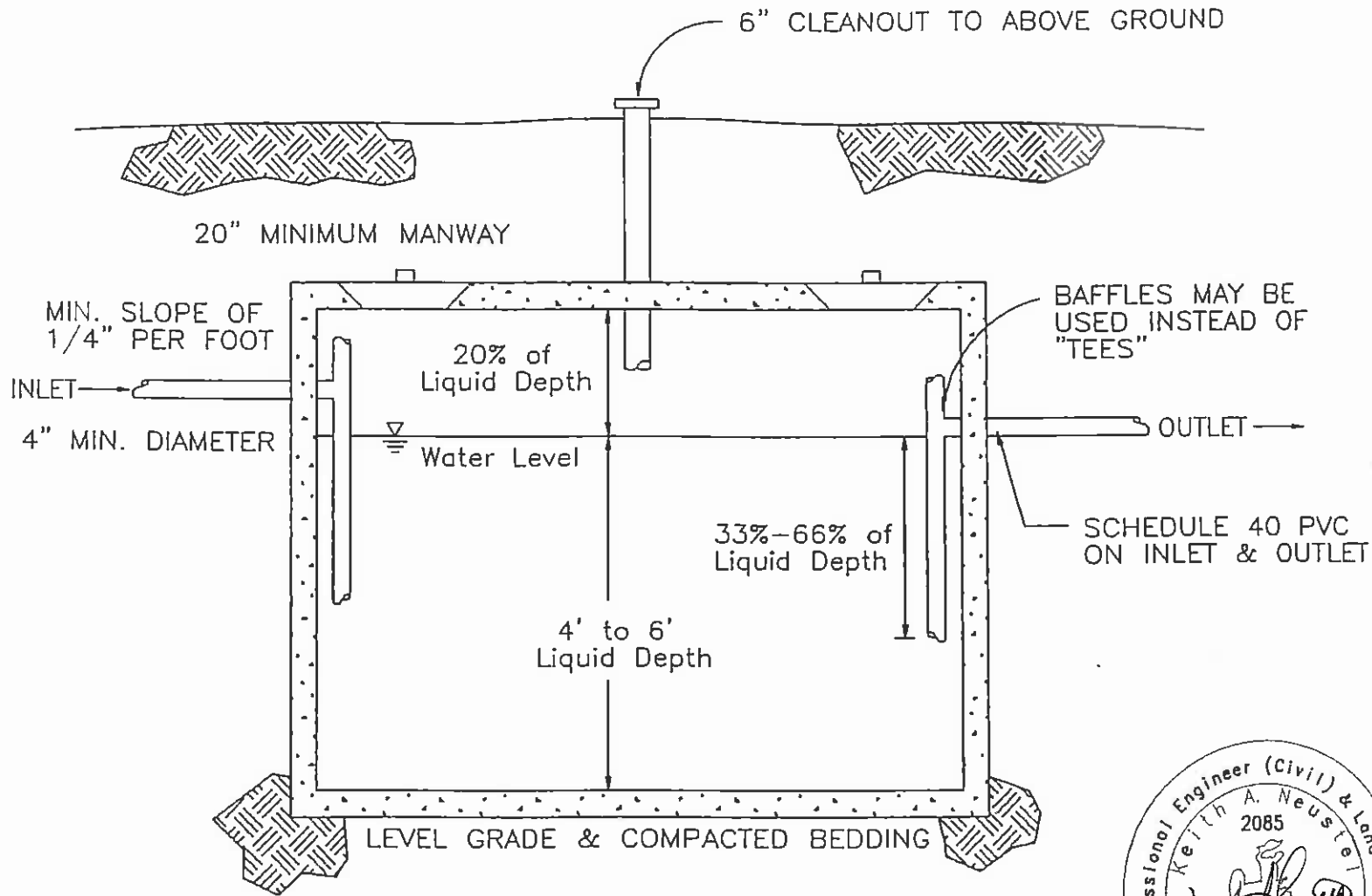
1. Septic tanks shall have the following minimum separation distances:
 5 ft. from dwelling
 50 ft. from any water well
 50 ft. from waterways
 25 ft. from water lines
 10 ft. from property lines
2. Disposal field must meet the following minimum separation distances:
 100 ft. from any water well
 50 ft. from waterways
 25 ft. from drinking water lines
 10 ft. from dwelling or building
 10 ft. from septic tank
 10 ft. from property lines
3. All methods and materials used in septic system construction shall conform to the Wyoming Department of Environmental Quality, Water Quality Rules and Regulations, Chapter XI.



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PLAN SHEET

DATE OF AUTHORIZATION:

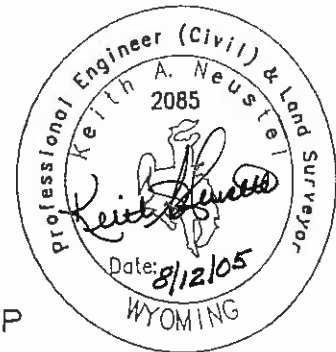


PROFILE VIEW

APPROXIMATE DIMENSIONS OF CONCRETE TANKS ARE
8 FT. LONG BY 4.5 FT. WIDE BY 6.5 FT. DEEP
 WITH A LIQUID DEPTH OF 5.5 FT.
 MINIMUM CAPACITY = 1000 GAL

NOTE: TANKS CONSTRUCTED OF MATERIAL OTHER THAN CONCRETE
 MAY BE USED AS LONG AS THEY ADHERE TO ALL CONDITIONS
 CONTAINED WITHIN THE GENERAL NOTES LISTED ON THIS SHEET.

A Fiberglass Tank is proposed - See General Notes.



APPLICANT
 Gordon Burchfield
 22 Antelope Drive
 Johnson Co., Wyo.

GENERAL NOTES

1. The septic tank shall be constructed of durable material not subject to excessive corrosion or decay and structurally capable of supporting the loads to which it will be subjected.
2. The septic tank shall be watertight.
3. Minimum liquid volume of septic tanks shall be 1000 gallons for residences up through four bedrooms. Additional capacity of 250 gallons per bedroom shall be provided for each bedroom over four.
4. The septic tank shall have length to width ratio of not less than two to one, or be partitioned to protect against short circuiting. If partitioned, the volume of the first compartment must be at least 50% of the total required volume.
5. A manway access shall be provided to each compartment. Inlet and outlet devices must be accessible. A cleanout shall also be provided to each compartment and must extend to the ground surface and be capped.
6. Septic tank supplier and/or manufacturer shall be DEQ approved.

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STANDARD SEPTIC TANK
 DETAIL SHEET

DATE OF AUTHORIZATION:

Option #1

12" Washed Rock
below Invert.

CROSS - SECTION

BUILDING PAPER
STRAW, FILTER CLOTH

12" MIN
COVER

2" MIN

4" PERF. PIPE

6" MIN DEPTH OF
1/2" - 2 1/2"
CLEAN STONE

16" MIN

SLIGHT MOUND
FOR DRAINAGE

EARTH
BACKFILL

2'-4"

2"

4"

12"

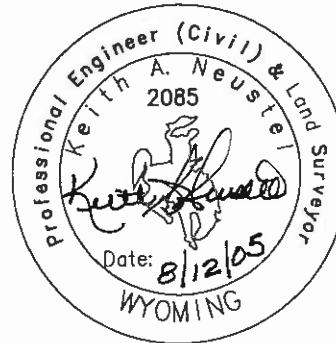
BOTTOM OF TRENCH MUST BE
LEVEL IN ALL DIRECTIONS

SEPTIC
TANK

10' MIN

PERF.
PIPE

TRENCH
WIDTH = 3'
TYP.



PLAN VIEW TYPICAL LAYOUT

APPLICANT

Gordon Burchfield
22 Antelope Drive
Johnson Co., WY.

GENERAL NOTES

1. All plastic gravity perforated pipe must conform to ASTM Standard D2729.
2. A minimum 4 foot separation shall be maintained between the bottom of the trench to the seasonal high groundwater level, bedrock, and clay layer.
3. All methods and materials used in septic system construction shall conform to the Wyoming Department of Environmental Quality, Water Quality Rules and Regulations, Chapter XI.



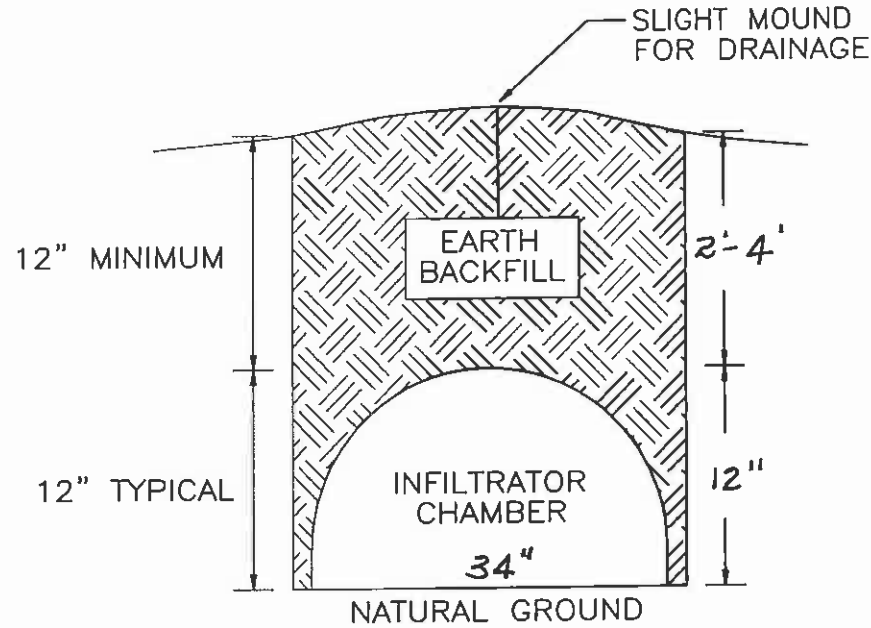
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STANDARD TRENCH TYPE SOIL ABSORPTION SYSTEM DETAIL SHEET

DATE OF AUTHORIZATION:

Option # 2

CROSS - SECTION

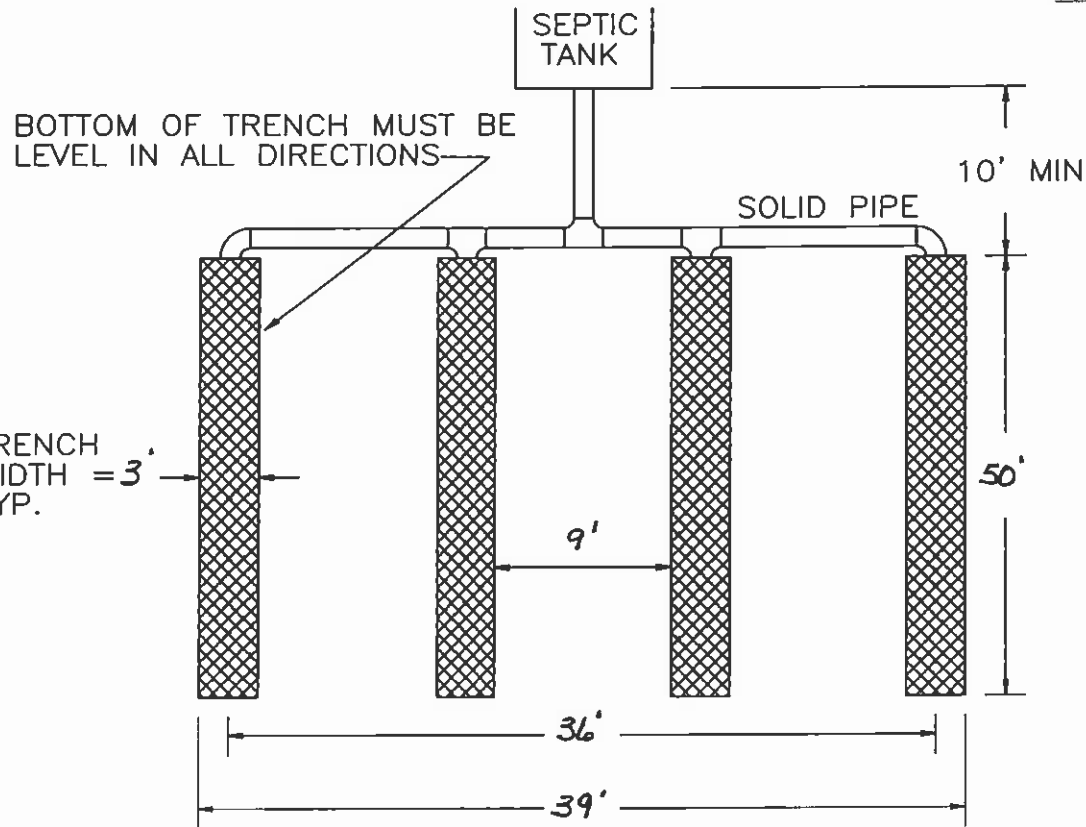
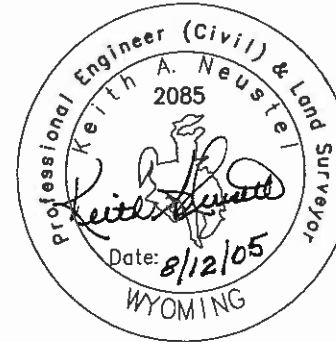


APPLICANT

Gordon Buechfield
 22 Antelope Drive
 Johnson Co., WY.

GENERAL NOTES

1. A minimum 4 foot separation shall be maintained between the bottom of the trench to the seasonal high groundwater level, bedrock, and clay layer.
2. All methods and materials used in septic system construction shall conform to the Wyoming Department of Environmental Quality, Water Quality Rules and Regulations, Chapter XI.



(8 units/trench)

PLAN VIEW TYPICAL LAYOUT



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STANDARD INFILTRATOR CHAMBER TRENCH TYPE SOIL ABSORPTION SYSTEM

DATE OF AUTHORIZATION:

