

**BOARD OF HEALTH AGENDA
TUESDAY, OCTUBER 14, 2014
CITY-COUNTY COMPLEX/EAST ROOM**

1. CALL TO ORDER AT **5:30 P.M.**
2. ROLL CALL –
 - A. INTRO NEW MEMBERS
3. APPROVAL OF 07/08/14 MINUTES
4. CODE ENFORCER'S REPORT
5. NURSE'S REPORT
6. SANITARIAN'S REPORT
7. NEW/OLD BUSINESS –
 - A. HEMINWAY VARIANCE REQUEST
 - B. UPDATE ON WATER POLICY
 - C. PIGEON UPDATE
8. PUBLIC COMMENT
9. ADJOURN

NOTE: Please call the Environmental Health Dept. at 222-4145 if you are unable to attend the meeting. If a quorum is not possible, we can then cancel and reschedule the meeting.

**SANITARIAN'S 3rd QUARTER REPORT
OCTOBER 14, 2014**

INSPECTIONS 3RD QUARTER

Park County:	Food Establishments	62	Public Accommodations	18
	Trailer Courts	1	Tattoo/Body Art	0
	Pools/Spas	8		
Sweet Grass County:	Total Inspections	17		

No ServSafe classes were held in the 3rd quarter.

CHICKENS/LIVESTOCK – 0 New Permits

SEPTIC SYSTEMS:

New	37
Modification/Replacement	31
Total through 3rd Quarter	68

SEPTIC INSTALLERS

46 installers have relicensed for 2014. No new installers were licensed 3rd quarter.

SITE EVALUATORS

13 site evaluators have relicensed for 2014. No new site evaluators were licensed 3rd quarter.

BUSINESSES-NEW, CHANGES & CLOSURES

FOOD:

- **Angry Buffalo Café**, Gardiner, is a new Food Purveyor owned by Avery Rogers.
- **Neptune's Brewery**, Livingston, has a new owner, J. B. & L. S. Inc., for both the Food and Bar License and the Beverage Manufacturing License.
- **The Buckhorn Yellowstone** is a new Livingston Bar owned by John Payne.
- **Katabatic Brewing Co.** is a new Livingston Bar owned by Brice and Lanette Jones.
- **Cutthroat Café**, Livingston, owned by Kelli Uhl, applied for licensing and did not open.

PUBLIC ACCOMMODATIONS:

- **2 New Tourist Homes and 1 New Hostel** opened during the 3rd quarter.
- **1 Tourist Home** closed in the 3rd quarter.

TRAILER COURTS:

- No changes.

POOLS/SPAS:

- No changes.

BODY ART/TATTOOING:

- No changes.

Karen Harrison

From: Liz Kearney <communitynews@livent.net>
Sent: Wednesday, October 08, 2014 10:48 AM
To: Karen Harrison
Subject: Re: Board of Health Mtg. Oct. '14

Friday, October 10, 2014

BRIEFS

Thanks.

Liz Kearney
Community and Entertainment News
The Livingston Enterprise
P.O. Box 2000
401 S. Main St.
Livingston, MT 59047
Tel. (406) 222-2000; 1-800-345-8412
Fax (406) 222-8580
e-mail: communitynews@livent.net
Web: www.livingstonenterprise.com

• The Park County Board of Health will hold its quarterly meeting at 5:30 p.m. on Tuesday, Oct. 14, in the East Room of the City-County Complex, 414 E. Callender St. The meeting is open to the public. For more information, call the department at 222-4145.

Monday, October 13, 2014

BRIEFS

• ~~The trustees for Park County Rural Fire District No. 1 will hold a regular monthly meeting at 7 p.m. on Monday, Oct. 13, at the station, 304 E. Park St. An agenda will be available at the station by Friday, Oct. 10. Call 222-0562 for more information.~~

• The Park County Board of Health will hold its quarterly meeting at 5:30 p.m. on Tuesday, Oct. 14, in the East Room of the City-County Complex, 414 E. Callender St. The meeting is open to the public. For more information, call the department at 222-4145.

On Oct 8, 2014, at 10:29 AM, Karen Harrison wrote:

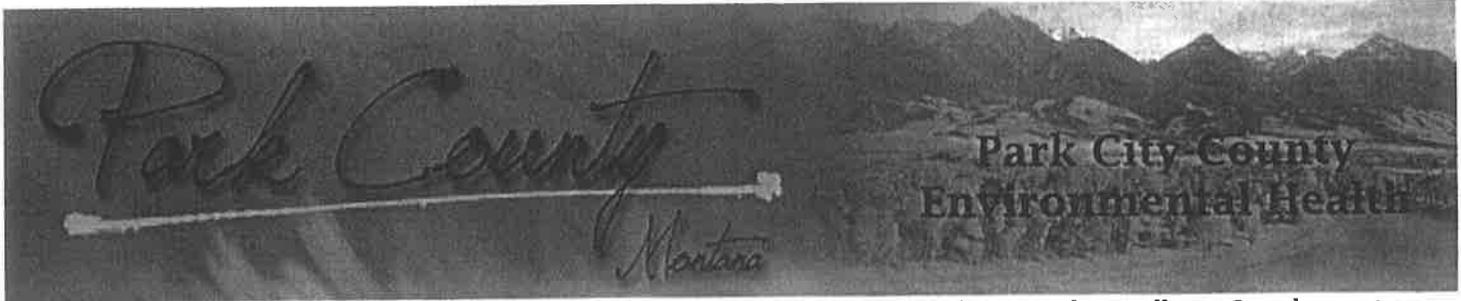
Hi Liz,

Would you please put the following notice in the BRIEFS on Friday, October 10th and/or Monday, October 13th, 2014:

The Park County Board of Health will hold their quarterly meeting on Tuesday, October 14, 2014 at 5:30 P.M. in the East Room of the City- County Complex. The meeting is open to the Public. For more information, call 222-4145.

Thank you, Karen

Karen Harrison, Admin. Assist.
Park Co. Environmental Health Dept.
406-222-4145, Ext. 3



414 E. Callender St. Livingston, MT 59047

406-222-4145(ext. 1)

bwoodbury@parkcounty.org

October 3, 2014

To: Park City-County Board of Health
From: Barbara Woodbury, R.S., M.P.H.
RE: Variance request from John Heminway

Dear Board of Health Members:

In August I was contacted about a property described as Tract 5 of COS 658-A, Sections 17,18,19,20 & 30, Township 3 South, Range 12 East, Park County. MT. Figure A, in the enclosed Engineer's Report, shows the site with an aerial photo. The proposed sites investigated for use as drainfield sites are indicated in this figure. The regulatory floodplain is indicated by the green along the creek. Setbacks of 100 feet are required between the drainfield and the floodplain.

On Sept. 25, 2014 I met on site with Mr. Branif Scott, a realtor with Faye Ranches, and Mike Welch. P.E., an engineer with C & H Engineering at Mr. Heminway's request. The engineer had test holes dug in the two locations indicated in Figure A. As the soils report indicates, neither site met the state's criteria for having a minimum of 4 feet of natural ground above seasonally high ground water. This finding was in line with the NRCS soils data for this area.

Mr. John Heminway is requesting a variance from Section 8.21 of the Park County Onsite Wastewater Treatment Regulations "*8.21 Holding Tanks: As defined in Subsection 3.19, this system collects sewage; no effluent is discharged. This type of system will not be Permitted to be used or installed in Park County without a variance granted by the Park County Board of Health.*" This local regulation is more restrictive than state standards. The criteria for holding tanks from the circular "Montana Standards for Subsurface Wastewater Treatment Systems" (DEQ4) is shown in Figure C.

The enclosed Engineer's report accurately describes the limited options on this parcel due to slopes, rock outcrops, floodplain and high ground water. Our site visit of Sept. 25, 2014 test holes were dug in two locations on the property. These sites are indicated on the aerial view in the packet. These sites were chosen as the highest ground in the buildable area of this parcel. As the engineer stated, we were unable to find a location with the required minimum 4 feet of natural ground separation to ground water.

The area where is property is located is known as the West Boulder Reserve. The majority of the homes in this area are seasonally used residences. We are proposing the holding tank be restricted to seasonal use only, defined as being used less than 120 days of the year. The site is accessible for pumping by a bridge over the West Boulder River.

8. MISCELLANEOUS

8.1. HOLDING TANKS

8.1.1. General

Holding tanks are used to hold wastewater until pumping occurs by a licensed septic tank pumping service and wastewater is disposed at an approved location. They are used for storage and do not, as part of their normal operation, dispose of or treat the wastewater.

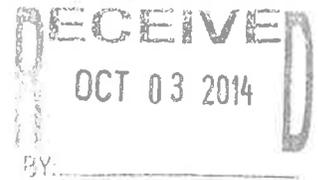
- 8.1.2. Holding tanks are septic tanks that have no standard outlets and are modified to provide full time access for pumping.
- 8.1.3. Holding tanks must have a minimum capacity of 1,000 gallons. Larger tank capacity may be required by the reviewing authority.
- 8.1.4. Holding tanks must meet the construction standards for septic tanks in Chapter 5, except that no outlet opening shall be cast in the tank walls.
- 8.1.5. Holding tanks must have an audible or visual warning alarm that signals when the tank level has reached 75 percent of capacity. The tank must be pumped as soon as possible after the alarm is triggered and before the tank reaches 100 percent capacity.
- 8.1.6. Holding tanks installed where the seasonal ground water table may reach any portion of the tank must be evaluated for buoyancy by a qualified individual and flotation prevented. The tanks must be a single pour (seamless) tank design, and must be waterproofed against infiltration.
- 8.1.7. Holding tanks must meet the separation distances and other applicable requirements in ARM Title 17, Chapter 36, subchapter 3 or 9, as applicable.

Figure C---Circular DEQ 4 Holding Tank requirements.



Engineering and Surveying Inc.

1091 Stoneridge Drive • Bozeman, Montana • Phone (406) 587-1115 • Fax (406) 587-9768
www.chengineers.com • E-Mail: info@chengineers.com



October 2, 2014

Park County Environmental Health
Park County Board of Health
414 E. Callender Street 85

Livingston, MT 59047

RE: Variance Request – Heminway Property, Tract 5, Certificate of Survey 658A, Park County, Montana (14600.2)

Dear Sir or Madam,

On Behalf of Mr. John Heminway, C&H Engineering and Surveying, Inc. (C&H Engineering) is requesting a variance from **Section 8.21 of the Park County Onsite Wastewater Treatment Regulations** pursuant to **Section 6.7 (D) of the Park County Onsite Wastewater Treatment Regulations**. Section 8.21 of the Park County Onsite Wastewater Treatment Regulations states that holding tanks are not be Permitted to be used or installed in Park County without a variance granted by the Park County Board of Health. It is the Opinion of C&H Engineering that granting of the requested variance to the allow the installation of a holding tank for a seasonal use residence on the subject property will not cause pollution or be a public health hazard.

The subject property is a 17.002 acre tract of land located in the Southwest Quarter of Section 17 and the Southeast Quarter of Section 18, Township 3 South, Range 12 East, in Park County, Montana. The property is situated along the West Boulder River and access is provided from Grouse Creek Road. The eastern third of the property consists of low lying land located adjacent to the West Boulder River and the western two thirds of the property consists of steeply sloping hillside.

C&H Engineering has made a total of two sites visits to the subject property. The first site visit was made on August 21, 2014. The purpose of this site visit was to review the site and see if there were any locations that were potentially suitable for an onsite subsurface wastewater treatment system. During this site visit it was noted that many conditions were present that severely limited potential locations for a subsurface wastewater treatment system. The western two thirds of the property was ruled out due to the steeply sloping terrain (slopes >25%) and also the presence of rock out crops, suggesting the hillside has very little soil cover and that bedrock is likely located at shallow depth. In the eastern third of the property suitable locations were severely limited by the presence of the West Boulder River and its floodplain, and also surface water that was observed to be accumulating along the base of the steeply sloping hillside. Although the property is severely limited, two locations were identified during this site visit that

were potentially suitable for a subsurface wastewater treatment system. These locations were found to meet the required offsets to surface water and the 100-year floodplain of the West Boulder River, as was shown on a floodplain map provided to C&H Engineering by the Park County Director of Environmental Health. At that time it was recommended that an excavator or backhoe be mobilized to the site to dig test pits to determine if groundwater conditions would allow for the installation of a subsurface wastewater treatment system; Montana regulations require that 4 feet of natural soil separate the bottom of a subsurface wastewater treatment system from a limiting layer such as groundwater or bedrock.

C&H Engineering made a second site visit to the subject property on September 25, 2014. During this site visit a test hole was excavated in both potentially suitable locations that were identified during the previous site visit. The test holes encountered groundwater at depths ranging from 2.5 to 3.2 feet below grounds surface (bgs). The seasonally high groundwater elevations were estimated to be 1.5 feet bgs and 2.0 feet bgs. Due to the high groundwater elevations, these areas were ruled out as suitable locations for subsurface wastewater treatment system.

At that time the possibility of utilizing a holding tank was discussed with Barbara Woodbury the Park County Director of Environmental Health, who was present during this site visit. She agreed with our assessment that no other option was available that would meet all regulatory requirements and said she would support a variance request to allow the use of a holding tank on the property. She was also in agreement that the area proposed to install the holding tank, as shown on the attached site plan, was located a sufficient distance from the floodplain of the West Boulder River.

It is the opinion of C&H Engineering that there is not a suitable location on the subject property that will meet all applicable regulatory requirements for the installation of a onsite subsurface wastewater treatment system. This is further reinforced by the Natural Resource Conservation Service (NRCS) Soil Map of the area which indicates steep slopes are located on the western two thirds of the subject property and that shallow groundwater is present across the eastern third, see the included NRCS Soils Map. Because there is no suitable location for a subsurface wastewater treatment system on the subject property, we are requesting that the Board of Health grant a variance to allow the installation of a holding tank on the property. The current property owner understands and accepts the fact that utilizing a holding tank would limit any residence constructed on the property to seasonal use, where seasonal use is defined as being occupied for 120 days or less during a calendar year. The current property owner also understands and accepts the fact that regular pumping of the holding tank will be required during periods when the structure is occupied for an extended period of time.

We are proposing the installation of a 1,500 gallon holding tank on the subject property. The average single family home produces 200 gallons of wastewater per day (Montana Department of Environmental Quality Public Water and Subdivisions Bureau, 2009). This would require that the 1,500 gallon tank be pumped on weekly basis when being used full time and generating the estimated amount of wastewater of 200 gallons per day. We feel this is acceptable provided that any residence constructed on the site would be allowed for seasonal use only and would not be a

primary residence. It is our opinion that on average less than 200 gallons of wastewater would be generated per day of occupation due to the recreational nature of the area.

The tank will be located as shown on the included site plan and will meet all the requirements specified in Montana Circular DEQ-4 Section 8.1, which outlines the requirements for holding tanks used in the State of Montana. The location we have chosen for the holding tank is the highest relative elevation in the vicinity of where the proposed structure will be constructed that meets all applicable offsets, such as those to surface water and the 100-year floodplain.

We have also addressed the effects buoyancy will have on the holding tank based on the information obtained from the test pit excavated in the area where the holding tank is proposed to be installed. Our calculations indicate that the holding tank has a factor of safety of 1.17 against flotation when completely empty. Because the factor of safety is greater than 1, flotation of the septic tank will not occur, even if the tank is fully pumped when the groundwater elevation is at its highest point during the year.

Pursuant to Section 6.7 (D) of the Park County Onsite Wastewater Treatment Regulations, the Board of Health has three specific criteria to evaluate when making a decision on the granting of a variance. Each of the three criteria are addressed below in the order in which they appear in the Park County Onsite Wastewater Treatment Regulation Section 6.7 (D).

- (1) ~~The first criteria is that the strict application of the regulations would result in extreme difficulty or undue hardship for the Applicant. Strict application of the regulations would result in the subject property not being able to be developed for residential use. This would greatly diminish the nominal value of the property and likely result in legal action because the property cannot be used as it was intended. This parcel of land was created with the intention that a potential purchaser of the property would someday construct a residence on it.~~

It is our opinion that the reduction in value of the property that would result from strict application of the regulations constitutes an undue hardship upon Mr. John Heminway.

- (2) The second criteria is that the applicant must provide sufficient evidence demonstrating that granting of the variance would not be detrimental to the purposes of these regulations. In other words, granting of the variance would not cause pollution or be a public health hazard. The holding tank is essentially a septic tank that collects and temporarily stores wastewater until it can be pumped out and transported to an approved treatment facility. The holding tank is required to be equipped with an audible or visible alarm. The alarm is necessary to let the homeowners know when the tank has been filled to 75 percent of its full capacity. This will allow them to arrange for a septic tank pumper to come out to the site and pump the tank if one has not already been arranged. All system components will be required to be watertight so no overflow is possible. If the tank is to be used beyond its capacity, sewage will backup into the residence as opposed to leaking onto the ground surface and contaminating the soils and groundwater in the area. Buoyancy effects from high groundwater were assessed and it was determined that if installed as specified the tank will have a factor of safety against flotation of 1.17 when completely empty.

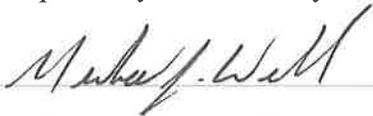
It is our opinion that granting of the variance to allow the use of a holding tank on the subject property will not cause pollution or be a public health hazard.

- (3) The third criteria is that the variance proposed is the minimum variation which would alleviate the specified practical difficulty. The granting of a variance for the installation of a holding tank is the minimum variation from the regulations that will alleviate the difficulty of allowing a structure that will generate wastewater to be constructed on the subject property. We are not aware of any other possibilities that would have such minimal impact on the natural environment of the area.

It is our opinion that the variance request that is being put forth is the minimum variation from the regulations that will alleviate the undue hardship that is being imposed upon Mr. John Heminway.

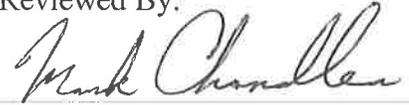
Please review all enclosed documents, and if you need any further information please contact the undersigned.

Respectfully submitted by:



Michael J. Welch, P.E.
Project Engineer

Reviewed By:



Mark Chandler, P.E., P.L.S.
Senior Engineer

Enc. Site Plan
Holding Tank Details
NRCS Soils Data
Test Pit Logs
Buoyancy Calculations
Park County Floodplain Map
Aerial Map

cc. File #14600.2

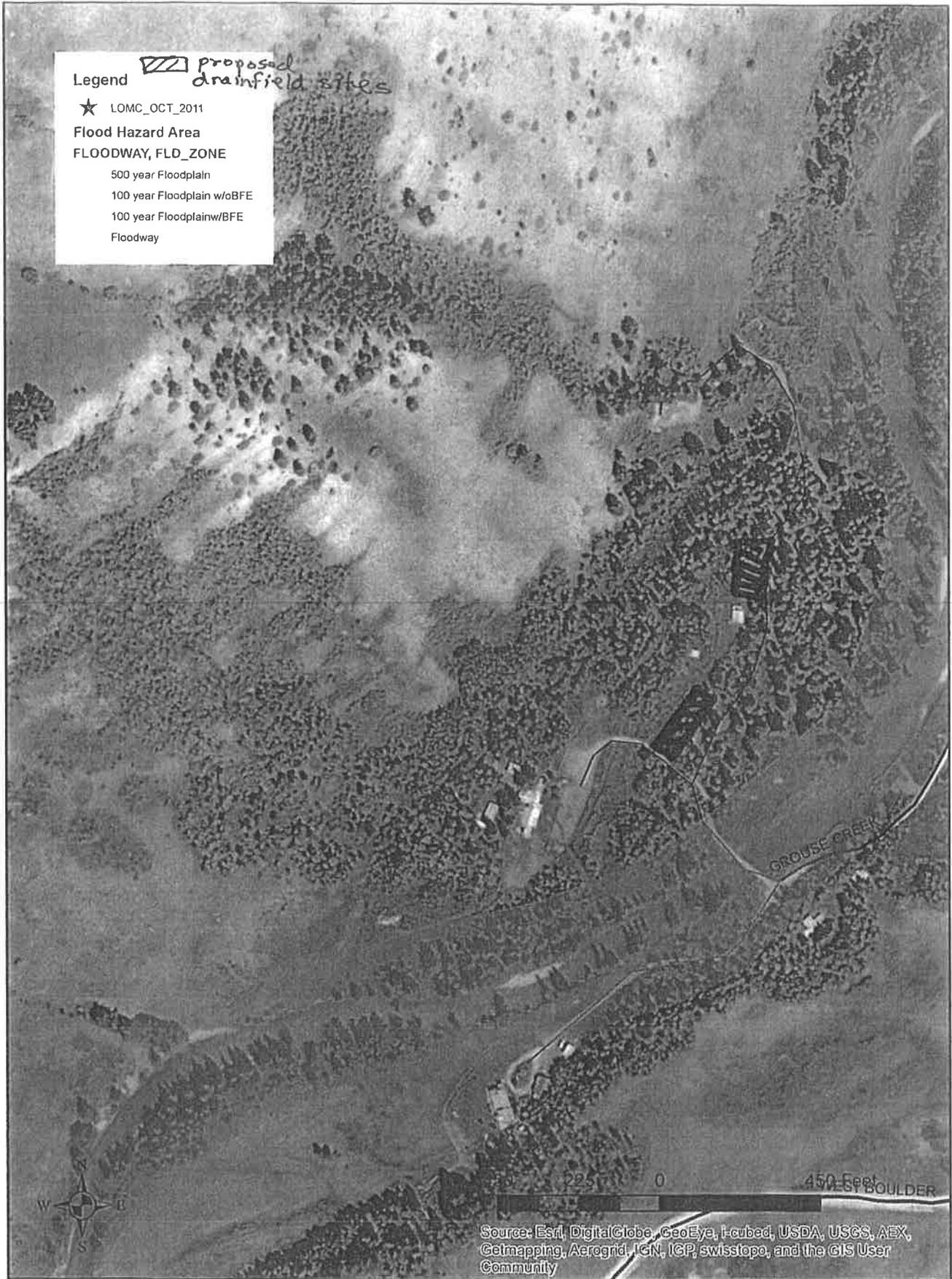
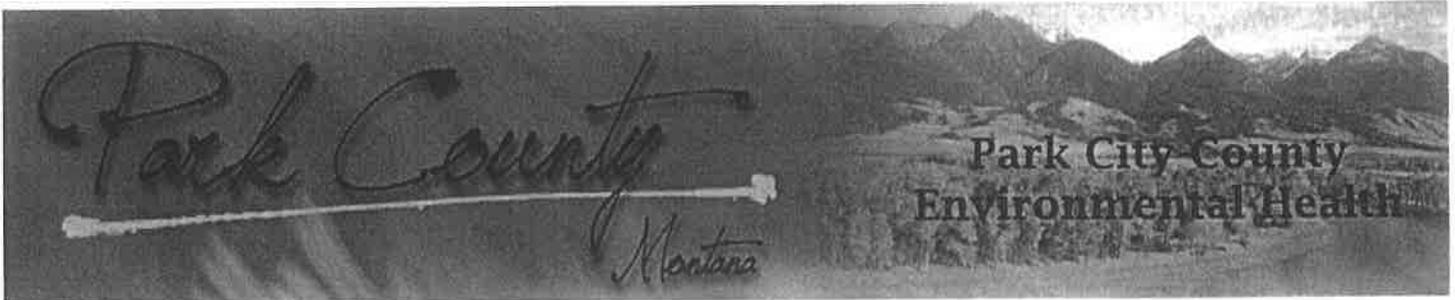


Figure A



414 E. Callender St. Livingston, MT 59047

406-222-4145(ext. 1)

bwoodbury@parkcounty.org

October 3, 2014

To: Park City-County Board of Health
From: Barbara Woodbury, R.S., M.P.H.
RE: Variance request from John Heminway

Dear Board of Health Members:

Expand
a Bit

Mr. Heminway is requesting a variance from Section 8.21 of the Park County Onsite Wastewater Treatment Regulations "8.21 Holding Tanks: As defined in Subsection 3.19, this system collects sewage; no effluent is discharged. This type of system will not be Permitted to be used or installed in Park County without a variance granted by the Park County Board of Health."

As the Board is aware, this ^{local} regulation is more restrictive than state standards. In the circular "Montana Standards for Subsurface Wastewater Treatment Systems" (DEQ4) states:

Circular DEQ 4
Page 116 of 159

8. MISCELLANEOUS

8.1. HOLDING TANKS

8.1.1. General

Holding tanks are used to hold wastewater until pumping occurs by a licensed septic tank pumping service and wastewater is disposed at an approved location. They are used for storage and do not, as part of their normal operation, dispose of or treat the wastewater.

- 8.1.2. Holding tanks are septic tanks that have no standard outlets and are modified to provide full time access for pumping.
- 8.1.3. Holding tanks must have a minimum capacity of 1,000 gallons. Larger tank capacity may be required by the reviewing authority.
- 8.1.4. Holding tanks must meet the construction standards for septic tanks in Chapter 5, except that no outlet opening shall be cast in the tank walls.
- 8.1.5. Holding tanks must have an audible or visual warning alarm that signals when the tank level has reached 75 percent of capacity. The tank must be pumped as soon as possible after the alarm is triggered and before the tank reaches 100 percent capacity.
- 8.1.6. Holding tanks installed where the seasonal ground water table may reach any portion of the tank must be evaluated for buoyancy by a qualified individual and flotation prevented. The tanks must be a single pour (seamless) tank design, and must be waterproofed against infiltration.
- 8.1.7. Holding tanks must meet the separation distances and other applicable requirements in ARM Title 17, Chapter 36, subchapter 3 or 9, as applicable.

attached/enclosed

The Engineer's report accurately describes the limited options on this parcel due to slopes, rock outcrops, floodplain and high ground water. Our site visit of Sept. 25, 2014 test holes were dug

ON Sept 25 I met on site with Mike from C & H and realtor Braniff Scott at Mr. Heminway's request.

in two locations on the property. These sites are indicated on the aerial view in the packet. These sites were chosen as the highest ground in the buildable area of this parcel. As the engineer stated, we were unable to find a location with the required minimum 4 feet of natural ground separation to ground water.

The area where ^{this} property is located is known as the West Boulder Preserve. The majority of the homes in this area are seasonally used residences. We are proposing the holding tank be restricted to seasonal use only, defined as being used less than 120 days of the year. The site is accessible for pumping by a bridge over the West Boulder River. *and a road to the proposed building site.*

Staff recommendations:

There is no other option for a septic system for this property than a holding tank. While I do not like the idea of holding tanks for full-time residences, homes in this area are typically seasonally used. A holding tank would work very well for a seasonally used home in this area, and I support the variance request.

If the variance is denied, this lot would be undevelopable and that would greatly diminish the value of the property. Granting the variance would not cause any environmental damage or public health concerns because a holding tank does not discharge effluent to the site. A holding tank is the minimum variance ^{from} ~~from~~ the regulations that will meet the needs of any residence built on the site and meet the intent of the wastewater treatment regulations. No other regulations will be impacted by this variance.

Criteria the Board must use when considering the variance request:

Re word } Since this variance is from Park County Regulations, the following criteria must be considered in accordance with Section 6.7 (D) (2) "*A variance may be Approved only in the event that all of the following circumstances are found to exist:*

1. *The strict application of the regulations would result in extreme difficulty or undue hardship for the Applicant;*
2. *The Applicant provides sufficient evidence demonstrating that the proposal for a variance would not be detrimental to the purposes of these regulations; and*
3. *The variance proposed is the minimum variation which would alleviate the specified practical difficulty as found by the Park County Board of Health;"*



◇ Hawkwood Stage Stop on the West Boulder



Map not to be used for survey purposes.
Not guaranteed for accuracy.
Data courtesy of ESRI &
Natural Resource Information System of Montana
August, 2013

FAY
RANCHES

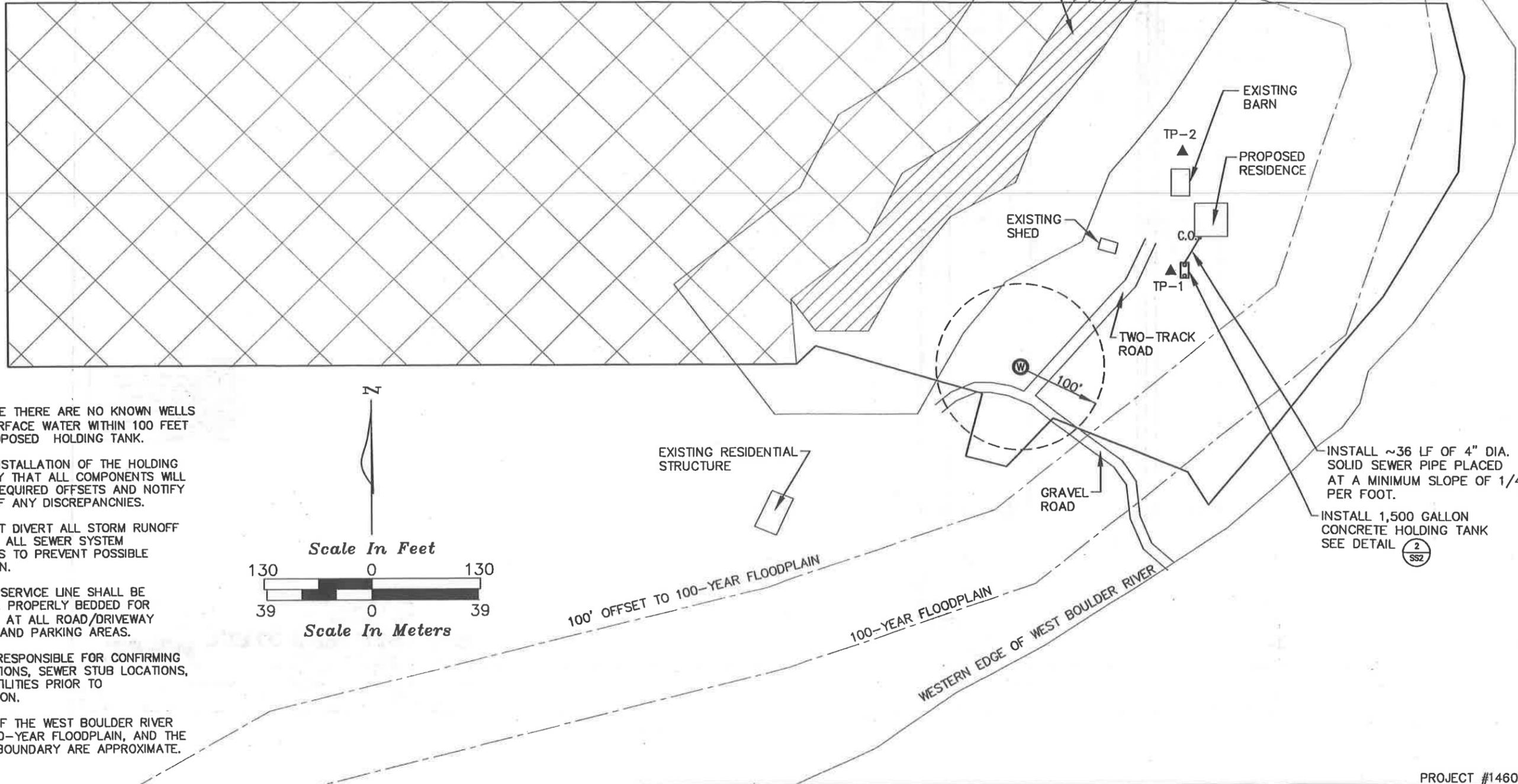
Figure B

Dedicated to the Conservation of the West's River Corridors and Agricultural Lands

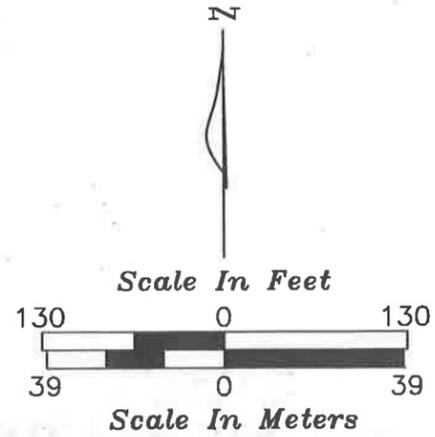
LEGEND

- PROPERTY BOUNDARY
- ⊙ C.O. SANITARY SEWER CLEANOUT
- ⊙ W PROPOSED WELL LOCATION
- ▨ SLOPES >25% AND ROCK OUTCROPPINGS

LEGAL DESCRIPTION:
 TRACT 5, C.O.S. 658A
 WEST BOULDER TRACTS
 SEC. 17 & 18, T. 3S., R. 12E., P.M.M.
 PARK COUNTY, MONTANA



- NOTES:**
- AT THIS TIME THERE ARE NO KNOWN WELLS AND/OR SURFACE WATER WITHIN 100 FEET OF THE PROPOSED HOLDING TANK.
 - PRIOR TO INSTALLATION OF THE HOLDING TANK VERIFY THAT ALL COMPONENTS WILL MEET ALL REQUIRED OFFSETS AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
 - OWNER MUST DIVERT ALL STORM RUNOFF AWAY FROM ALL SEWER SYSTEM COMPONENTS TO PREVENT POSSIBLE MALFUNCTION.
 - ALL SEWER SERVICE LINE SHALL BE SLEEVED OR PROPERLY BEDDED FOR PROTECTION AT ALL ROAD/DRIVEWAY CROSSINGS AND PARKING AREAS.
 - INSTALLER RESPONSIBLE FOR CONFIRMING SITE CONDITIONS, SEWER STUB LOCATIONS, AND ALL UTILITIES PRIOR TO CONSTRUCTION.
 - LOCATION OF THE WEST BOULDER RIVER AND ITS 100-YEAR FLOODPLAIN, AND THE PROPERTY BOUNDARY ARE APPROXIMATE.



INSTALL ~36 LF OF 4" DIA. SOLID SEWER PIPE PLACED AT A MINIMUM SLOPE OF 1/4" PER FOOT.
 INSTALL 1,500 GALLON CONCRETE HOLDING TANK SEE DETAIL



REVISION: 0 10/2/2014
 ENGINEER: JMT
 DRAWN: JMT

SITE PLAN
TRACT 5, C.O.S. 658A
PARK COUNTY, MONTANA

Drawing Date: 10/2/2014

SS1

Natural Resources Conservation Service Web Soil Survey

Tract 5, Certificate of Survey 658A, Park County, Montana

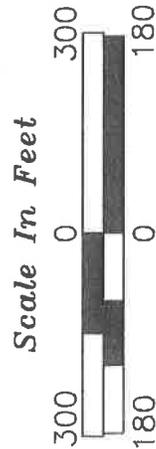
LEGEND

 Approx. Site Location



1203D — Beehive, extremely bouldery-Bearmouth, very bouldery, complex. This soil unit is described as having groundwater present at a depth of approximately 24 to 42 inches below the ground surface. This correlates well with the subsurface investigation performed by C&H Engineering. The shallow depth to groundwater rules out the installation of a subsurface wastewater treatment system.

54-3A — Typic Argiborolls-Pachic Argiborolls-Rock outcrop complex. This soil unit is described as having 45 to 70 percent slopes. This correlates well with observations made of the slopes in this area by C&H Engineering. The steep slopes rule out the installation of a subsurface wastewater treatment system.



Engineering and Surveying Inc.

Aerial Photo Date = July 28, 2011 - August 10, 2011
Source: Natural Resources Conservation Service, "Web Soil Survey - Version 7," December 10, 2013, United States Department of Agriculture, <<http://websoilsurvey.nrcs.usda.gov/app>>

#14600.2



Engineering and Surveying Inc.

TEST PIT LOG

PAGE 1 OF 1

PROJECT: JOHN HEMINWAY - VARIANCE REQUEST

PROJECT #: 14600.2

PROJECT LOCATION: TRACT 5, C.O.S. 658A, PARK COUNTY, MONTANA

DATE: 9.25.2014

TEST PIT LOCATION: SEE SITE PLAN

START: NR

FINISH: NR

DRILL TYPE: JOHN DEERE TRACTOR

DRILLER: NR

LOGGED BY: MICHAEL J. WELCH, P.E.

TEST PIT ID: TP-1

ELEVATION:

TOTAL DEPTH: 38"

DEPTH TO GW: 38"

DEPTH (ft)	GRAPHIC LOG	SOIL DESCRIPTION	USDA SOIL DESCRIPTION	MUNSELL SOIL COLOR
1		(0"-17") Grayish Brown; no dominant structure; organics present; trace gravels and cobbles.	SANDY CLAY LOAM	
2 3 4		(17"-38") Brown; no dominant structure; approximately 60 percent rounded and subrounded cobbles and gravels; approximately 40 percent coarse to fine grained sand; moist soil and minor rusting observed starting at a depth of approximately 2.0 feet. Organics abruptly end at a depth of approximately 2.0 feet.	COBBLY VERY GRAVELLY LOAMY SAND	
5 6 7 8 9 10 11 12 13 14 15		End of Excavation, Groundwater Encountered.		

REMARKS: Seasonally high groundwater elevation estimated at a depth of 2.0 feet. This estimate is based on root depth, moist soil, and minor rusting being present.



Engineering and Surveying Inc.

TEST PIT LOG

PAGE 1 OF 1

PROJECT: JOHN HEMINWAY - VARIANCE REQUEST

PROJECT #: 14600.2

PROJECT LOCATION: TRACT 5, C.O.S. 858A, PARK COUNTY, MONTANA

DATE: 9.25.2014

TEST PIT LOCATION: SEE SITE PLAN

START: NR

FINISH: NR

DRILL TYPE: JOHN DEERE TRACTOR

DRILLER: NR

LOGGED BY: MICHAEL J. WELCH, P.E.

TEST PIT ID: TP-2

ELEVATION:

TOTAL DEPTH: 31"

DEPTH TO GW: 31"

DEPTH (ft)	GRAPHIC LOG	SOIL DESCRIPTION	USDA SOIL DESCRIPTION	MUNSELL SOIL COLOR
1		(0"-12") Grayish Brown; no dominant structure; organics present; trace gravels and cobbles.	SANDY CLAY LOAM	
2		(12"-31") Brown; no dominant structure; approximately 60 percent rounded and subrounded cobbles and gravels; approximately 40 percent coarse to fine grained sand; moist soil and minor rusting observed starting at a depth of approximately 1.5 feet. Organics abruptly end at a depth of approximately 1.5 feet.	COBBLY VERY GRAVELLY LOAMY SAND	
5		End of Excavation, Groundwater Encountered.		
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

REMARKS: Seasonally high groundwater elevation estimated at a depth of 1.5 feet. This estimate is based on root depth, moist soil, and minor rusting being present.



1,500 gallon Concrete Holding Tank Dimensions:

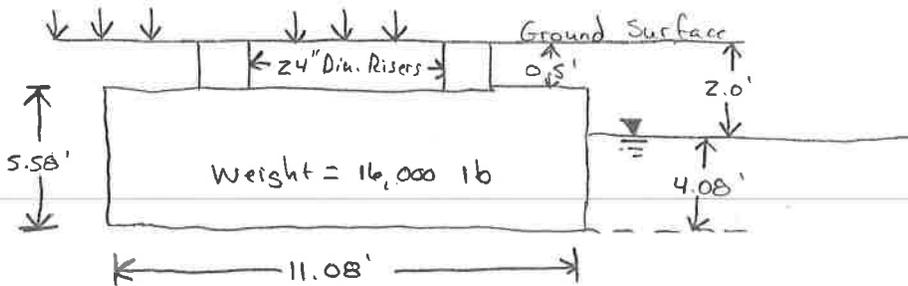
Length = 11.08 Ft

Width = 5.67 Ft

Height = 5.58 Ft

Weight = 16,000 lb

Soil and Groundwater Conditions:



Weight of Soil above Holding Tank:

$$\text{Area of Individual Riser} = \pi (1\text{ft})^2 = 3.1415 \text{ ft}^2$$

$$(11.08\text{ft})(5.67\text{ft})(0.5\text{ft})(100 \text{ lb}/\text{ft}^3) - (2)(3.1415 \text{ ft}^2)(0.5\text{ft})(100 \text{ lb}/\text{ft}^3) = 2827.03 \text{ lb}$$

Total Weight of Holding Tank and Soil Cover:

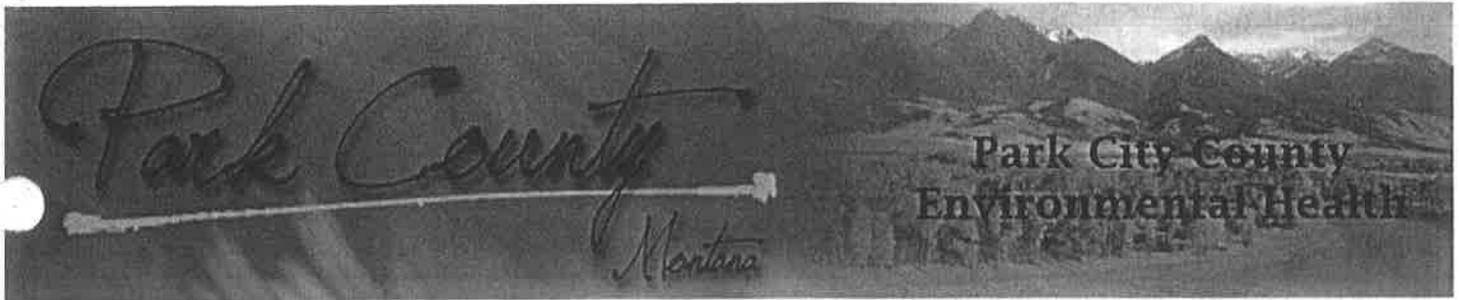
$$16,000 \text{ lb} + 2827 \text{ lb} = 18,827 \text{ lb}$$

Weight of Water Displaced by Holding Tank:

$$(4.08\text{ft})(11.08\text{ft})(5.67\text{ft})(62.4 \text{ lb}/\text{ft}^3) = 15,994.38 \text{ lb}$$

Factor of Safety against uplift:

$$18,827 \div 15,994.38 = 1.177 \Rightarrow \text{value} > 1 \text{ therefore flotation will not occur}$$



414 E. Callender St. Livingston, MT 59047

406-222-4145(ext. 1)

bwoodbury@parkcounty.org

August 11, 2014

To: All licensed establishments with water testing requirements in Park County
From: Park County Board of Health and Environmental Health Department
RE: **A Special Board of Health meeting to discuss a proposed policy in regards to water quality testing**

When, Where: **August 18, 2014 in the Community Room, 414 E. Callender St., Livingston, MT at 5:30-7:30pm**

Dear License Holder,

Many licensed establishments in Park County are required to test their water supply for specific parameters on a regular basis. The testing is required by the Montana Department of Environmental Quality (DEQ) and/or the Department of Public Health and Human Services— Food and Consumer Safety Section (FCSS) to ensure drinking water being served to the public is safe. Most of the facilities comply with the testing requirements. As is typical, a few facilities consistently neglect sampling as required. The Park City-County Board of Health feels failing to properly test water quality is a serious threat to public health and has chosen to develop a formal policy for facilities that fail to comply with water quality testing requirements.

Enclosed is a ROUGH DRAFT of the proposed policy. On August 18, 2014 the Board is inviting comment on the proposed policy. At this meeting we will gather comments and answer questions about the proposed policy. We are asking that you review the enclosed policy and join the conversation August 18th so we can work together to ensure the citizens and visitors to Park County have safe water supplies. If you cannot attend the meeting, written comments may be sent in to Park County Environmental Health, 414 E. Callender, Livingston, MT 59047 or email to bwoodbury@parkcounty.org.

After the August meeting, the Board will formalize the policy and hold public hearings this fall. It is the Board's goal to have the policy approved by the end of 2014 and the policy would take effect by the 2015 license year. Comments will be accepted through the public hearing process.

Please contact Barbara Woodbury at 406-222-4145 if you have special needs or need special accommodation to attend this meeting.

Sincerely,

A handwritten signature in cursive script that reads "Barbara Woodbury, R.S.".

Barbara Woodbury, R.S., M.P.H.
Director of Environmental Health
Park County

ROUGH DRAFT

Policy of the Park City-County Board of Health

Water Quality Testing of Licensed Establishments

The Park City-County Board of Health is required to validate licenses¹ issued by the Montana Department of Public Health and Human Services (DPHHS) Food and Consumer Safety (FCS) section. The types of licenses include: Retail Food Establishments; Public Accommodations including hotels, motels, bed & breakfasts, tourist homes; body art and tattooists; Camp Grounds and Trailer Courts. When located outside of communities with public water supplies² these facilities rely on water from onsite wells. State laws and rules require regular testing of these water supplies because the water is served to the public³. Regular monitoring of water quality is critical to protecting public health and ensures water supplies are not contaminated.

When the sanitarian validates a license, their validation certifies the facility is in compliance with the statutes and rules governing that type of facility. Copies of water quality reports and sanitary surveys⁴ conducted by the Department of Environmental Quality (DEQ) are sent to the sanitarian's office.

Authority:

Sections 50-50-214 MCA, 50-50-215 MCA; ARM 37.110.217, ARM 37.111.110, ARM 37.111.215, ARM 37.115.522

Policy:

Facilities serving water to the public have an obligation to document the quality of the water they are serving.

- Facilities with water quality parameters out of compliance (e.g. positive bacteriological test, nitrates in excess of 10 mg/L) must:
 1. follow all notice requirements for their water system, and submit copies of required documentation to the sanitarian's office, and

¹ The Board of Health has designated the Park County Sanitarian to validate licenses.

² The communities of Wilsall, Clyde Park, Livingston, Gardiner, Silver Gate, and Cooke City have central public water supplies.

³ Section 75-6-102 (14), MCA, states "Public water supply system" means a system for the provision of water for human consumption from a community well, water hauler for cisterns, water bottling plant, water dispenser, or other water supply that has at least 15 service connections or that regularly serves at least 25 persons daily for any 60 or more days in a calendar year. Some licensed facilities may not meet this definition but FCS has adopted "Circular FCS 1-2012: Montana Standards for Non-public Water Supplies Serving Licensed Establishments" that specify the water quality testing requirements for these facilities. Examples of these types of facilities would be tourist homes.

⁴ The Department of Environmental Quality conducts regular sanitary surveys of all public water supplies in Montana. These reports note any deficiencies observed during the survey of the system, and, typically, specify a plan of correcting any deficiencies. The recommendations in these reports have little enforcement action ensuring the corrections are made.

license can be validated. The facility would have to go through a plan review process. Any “grandfathering” of existing facilities would be lost and the facility would have to be brought into compliance with all current applicable building codes and requirements applicable to the type of facility before licensing.

4. Failure to comply: If a facility fails to come into compliance and continues to operate, in accordance with Section 50-50-107 MCA, the sanitarian will furnish all evidence to the county attorney, and the county attorney shall prosecute any person, firm, or corporation violating these requirements.
 - B. **Repeat violations**: A facility that shows a pattern of non-compliance over a number of years may not be able to get a license approved in Park County. If a license is not validated in any calendar year the facility would have to go through a plan review process before a new license could be validated. Any “grandfathering” of existing facilities would be lost and the facility would have to be brought into compliance with all current applicable building codes and requirements applicable to the type of facility being licensed.
 - C. **Appeals**: In accordance with Section 50-50-215 MCA states, “*The applicant or any person aggrieved by the decision of the local health officer not to validate the license may appeal the decision to the local board of health within 30 days of receiving written notice of the local health officer’s decision. The hearing before the local board of health must be held pursuant to the contested case provisions of the Montana Administrative Procedure Act.*”

DRAFT